# Broadcast and Entertainment Products

14th Edition

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# Introduction
## The ADC Difference

For more than 50 years, ADC has led the industry as a premier developer of audio, video, and data patching products. This tradition continues today in our state-of-the-art manufacturing facilities, where virtually all of our own components are designed, engineered and manufactured.

All of ADC's products are designed for outstanding performance in demanding, real world situations. Our engineers understand the many different applications that are possible in the industry, and as a result, they create products that can solve difficult problems other manufacturers tend to overlook.

**View onto screw-machine area at Shakopee, MN facility**

Once you've found the ADC product that fits your needs, requesting it is simple with our easy-to-follow ordering information charts. The charts display all available options, and you simply select the catalog number for the specific product and feature set you want. If you don't see the specific configuration you need, contact ADC for information about custom designed products. Our Technical Assistance Center (TAC) is available 24 hours a day, seven days a week.

For an even faster and more convenient source of additional information about ADC's high-quality products, visit www.adc.com. From our website, you can search for a desired catalog number, or browse our online products and services area for specific part numbers.

**ADC's state-of-the-art facility in Shakopee, MN**

From durable patchbays and jackfields to precision jacks and connectors, consistent quality is the hallmark of everything ADC produces. Everything at ADC is built to last, from the corrosion-resistant nickel plating on our patch plugs, to the tough steel chassis of our patch panels. ADC anticipates common failure points and overcomes them using the best available materials. Our strict adherence to quality standards and careful manufacturing assures dependable, long-lasting products.

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# Introduction

Products to meet your needs…

ADC continues to lead in innovative patching and connector products. As a result of listening to our customers, the following new and exciting products have been developed to enhance the performance and durability of your broadcast infrastructure:

## ProPatch® Miniature (PPM) Series Patching System

The ProPatch® Miniature (PPM) Series is an all new Super High-Density Coax (SHDC) patching system designed for High Definition (HD), SDI, AES audio, 5.1 and 7.1 audio applications where coax medium is preferred but space is at a premium. The system is available in both 1 and 1.5 rack unit configurations.

The 1 rack unit panel features a patent-pending pullout designation strip that dramatically increases space for text, and a high-density 2x48 circuit configuration of ports. The 1.5 rack unit panel features 4x48 ports.

## ProPatch® Programmable (PPP) Series Patching System

The ultimate audio patch panel is now a reality. The new ProPatch® Programmable patching system (patent number 6,875,060) combines the ruggedness and reliability of true WECO-compliant jacks with a precision DIP switch, enabling users to change normalling and grounds quickly and easily. Specifically designed for tough mobile environments, the ultra-lightweight ProPatch Programmable panel weighs about six pounds and is only five-inches deep. It is available in both bantam and longframe styles. The ProPatch® Programmable modular system offers unprecedented reliability and flexibility in a convenient, space-saving size and lightweight package. Specifically engineered for everyday use in demanding mobile trucks, the ProPatch Programmable system is the only product in its class that passes stringent MIL-STD-202F standards for vibration and environmental requirements.



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# Introduction

Products to meet your needs…

## UniPatch® GigE Patching System

ADC has designed a professional broadcast-quality Gigabit (1000 baseT) patching system for demanding professional environments where frequent patching and higher density is required. The system features a high-density 32-port normal-through card frame system to ADC Direct-Edge LSA-PLUS® termination system. Now you can patch Ethernet data properly using reliable durable military-grade jacks rated for 30,000 insertion/withdrawal cycles. The Cat 6 rated patch cords are keyed to ensure proper patching.

## ProPatch® Fiber (PPF) Series Patching System

ADC leads the fiber patching market with the ProPatch® Fiber (PPF) patching system, the industry's first true broadcast fiber solution. ADC's ProPatch® Fiber (PPF) Patching system is designed by broadcast professionals for broadcast professionals. ADC combines its proven innovation and quality in broadcast patching design and manufacturing with its industry leading proficiency in fiber connectivity. The result is a true broadcast fiber connectivity product offering. PPF is a compliment to the proven copper connectivity product line. Solutions range from Fiber Bulkhead Panels (FL2000 Series) and Fiber Management Trays (FMT Series) to High-Density Patching Solutions (OMX600® Series). The portfolio also includes Specialty Fiber Optic Cable, Fiber Cable Management Solutions (FiberGuide® and RiserGuide), Patch Cords and Accessories in all popular connector styles.

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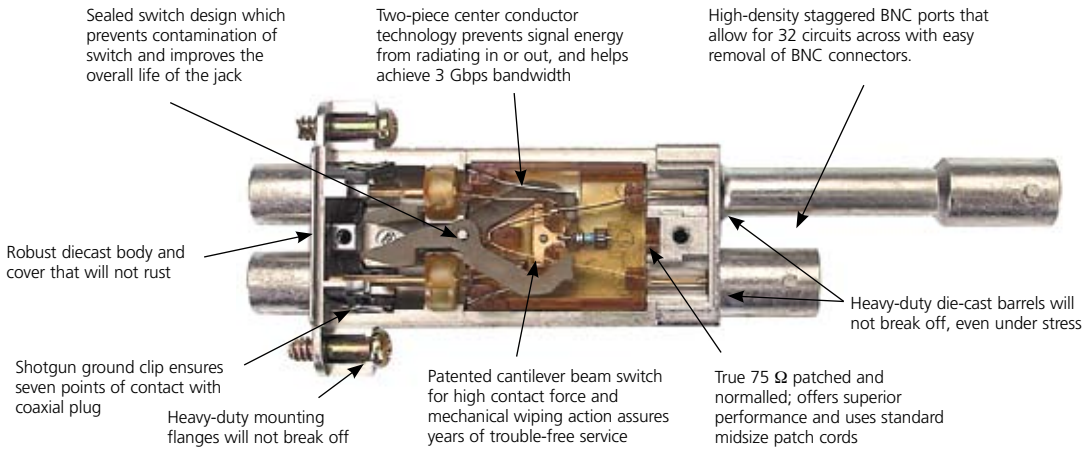
# Introduction
## Video Patching

ADC video jacks are the industry's preferred and premier jacks. Mechanical reliability and superior electrical performance make the ADC jackfields the highest quality patching solution in the market. ADC connectivity solutions, such as the MVJ and ADC BNC, are the patching solutions of choice for 1080p High Definition (SMPTE 424M) installations worldwide.

True 75 Ω jacks for today's high bandwidth services.




**MVJ-3 Midsize Super Video Jack Interior View**

### Features

- True 75 Ω for excellent digital performance when normalled or patched with ADC high-performance patch cords
- Gold-plated components assure signal quality and tarnish resistance, minimum 50µ inch
- Sealed switch prevents external contamination
- All-solderless construction eliminates solder-related failures
- Long-beam bifurcated springs provide firm contact and prevent spring fatigue
- Closed-entry BNC center conductor prevents damage and provides reliable contact
- Two-piece center conductor prevents RFI radiation leakage
- Shotgun ground clip contacts plug at multiple points
- Tough diecast body will not rust or flex
- Captive mounting screws will not fall out
- Precision-tooled parts for consistent quality
- Meet MIL-STD-202F for environmental and mechanical reliability
- Patch plug never touches normal switch, dramatically increasing reliability

**Midsize Video Jack**
(MVJ-3/MVJ-3T)

**Standard Size Super Video Jack**
(SVJ-2/SVJ-2T)

| Video Jacks | Designation | Catalog Number | Standard | Application | Normalled | Terminated (75 Ω) | Jacks per Row | Panel Type* | Panel Color | Page |
|---|---|---|---|---|---|---|---|---|---|---|
| | MVJ | MVJ-3 | WECO Midsize | Analog, Serial Digital, HDTV, SMPTE 424M, 1080p | Yes | No | 32 | PPE/PPI | Black/Gray | 19 |
| | MVJT | MVJ-3T | WECO Midsize | Analog, Serial Digital, HDTV, SMPTE 424M, 1080p | Yes | Yes | 32 | PPE/PPI | Black/Gray | 19 |
| | CJM | CJ3014N/CJ4014N | WECO Midsize | Analog, Serial Digital, HDTV, L-Band, S-Band | No | No | 32 | PPE/PPI | Black/Gray | 22 |
| | CJMT | CJ3014N-75/CJ4014N-75 | WECO Midsize | Analog, Serial Digital, HDTV, L-Band, S-Band | No | Yes | 32 | PPE/PPI | Black/Gray | 22 |
| | SVJ | SVJ-2 | WECO Standard Size | Analog, Serial Digital, HDTV, SMPTE 424M, 1080p | Yes | No | 24/26 | PPE/PPI | Black/Gray | 24 |
| | SVJT | SVJ-2T | WECO Standard Size | Analog, Serial Digital, HDTV, SMPTE 424M, 1080p | Yes | Yes | 24/26 | PPE/PPI | Black/Gray | 24 |
| | CJ | CJ2014N | WECO Standard Size | Analog, Serial Digital, L-Band, S-Band HDTV, SMPTE 424M, 1080p | No | No | 24/26 | PPE/PPI | Black/Gray | 27 |
| | CJT | CJ2014N-75 | WECO Standard Size | Analog, Serial Digital, L-Band, S-Band HDTV, SMPTE 424M, 1080p | No | Yes | 24/26 | PPE/PPI | Black/Gray | 27 |
| | SMJ | SMJ-2100N | MUSA Standard | Analog, Serial Digital, L-Band, S-Band HDTV, SMPTE 424M, 1080p | No | No | 24/26 | PPE/PPI | Black/Gray | 29 |
| | N | SJ2000 | WECO Standard Size | AES Audio, Analog | Yes | No | 24/26 | PPE/PPI | Black/Gray | 27 |
| | 75N | SJ2000N-75 | WECO Standard Size | AES Audio, Analog | Yes | Yes | 24/26 | PPE/PPI | Black/Gray | 27 |
| | SHDC-LCC-HP | SHDC-LCC-HP | High Density Coax LCC | Analog, Serial Digital, HDTV, SMPTE 424M, 1080p | Yes | Configurable | 48 | PPM | Black | 14 |
| | SHDC-LCC-NN | SHDC-LCC-NN | High Density Coax LCC | Analog, Serial Digital, L-Band, S-Band HDTV, SMPTE 424M, 1080p | No | No | 48 | PPM | Black | 14 |
| | SHDC-LCC | SHDC-LCC | High Density Coax LCC | AES Audio, Analog | Yes | Configurable | 48 | PPM | Black | 14 |
| | SHDC-1023-HP | SHDC-1023-HP | High Density Coax 1.0/2.3 | Analog, Serial digital, HDTV | Yes | Configurable | 48 | PPM | Black | 14 |
| | SHDC-1023-NN | SHDC-1023-NN | High Density Coax 1.0/2.3 | Analog, Serial digital, HDTV, L-Band, S-Band | No | No | 48 | PPM | Black | 14 |
| | SHDC-1023 | SHDC-1023 | High Density Coax 1.0/2.3 | AES Audio, Analog | Yes | Configurable | 48 | PPM | Black | 14 |

* All panes are 19" wide

(PPI) ProPatch Integrated – *Integrated Cable Bar*

(PPE) ProPatch Economical – *No Cable Bar*

(PPM) ProPatch Miniature

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# Introduction
## Audio Patching

### Legendary Jacks

When it comes to audio and video jack design, ADC makes them perform better, last longer and connect more reliably than anyone else. Our jacks and all of their working components are designed and manufactured in our own facilities under the strictest quality control. Every jack is identical and exceptional in quality and performance.

### Audio Jacks

ADC audio jacks are built to perform and to last.

**Longframe Audio Jack**
(Exclusively used in prewired ADC ProPatch® Audio)

**Bantam Audio Jack**
(Shown with plug inserted)

**Features**

- All ADC jacks are WECO-standard and military grade
- Reliable WECO Alloy #1 gold self-cleaning crossbar contacts wipe away debris with each use
- Solder-free wire-wrap tails prevent intermittents from cold solder joints or flux migration (prewired only)
- Solder-style jacks provide the option of do-it-yourself installation
- Tested to withstand tough applications, including vibration, temperature, moisture, and salt air corrosion
- Extended spring beams, computer-torqued screws, and precision-molded insulators ensure consistent quality, long life, and reliability
- Durable precision diecast (bantam) or stamped steel (longframe) frames

### Audio Panels

| | Description | Panel Type* | Standard | Normalling | Application | Jacks per Row | Page |
|---|---|---|---|---|---|---|---|
| | ProPatch® Programmable | PPP | Longframe | Programmable jacks, Factory Pre-Configured | Analog/ Digital | 24/32 | 51 |
| | | PPP | Bantam | Programmable jacks, Factory Pre-Configured | Analog/ Digital | 48 | 51 |
| | ProPatch® Professional | PPA | Longframe | Factory Configured | Analog/ Digital | 24/26 | 58 |
| | | PPB | Bantam | Factory Configured | Analog/ Digital | 48 | 58 |
| | ProPatch® Umbilical | BJF1 BJF2 | Longframe | Factory Configured, with Umbilical | Analog/ Digital | 24/26 | 65 |
| | | BJF3 BJF4 | Bantam | Factory Configured with Umbilical | Analog/ Digital | 48 | 65 |
| | ProPatch® Lite | PPA | Longframe | Solder | Analog/ Digital | 24/26 | 69 |
| | | PPB | Bantam | Solder | Analog/ Digital | 48 | 69 |

* All panels are 19" wide and black

# Introduction
Audio Patching

## Understanding Audio Normalling

Normalling creates a default circuit through the patch panel to connect equipment together in the arrangement you normally or most frequently use. When you plug in a patch cord, you break this "normal" circuit and create a temporary new circuit. ProPatch® lets you select from a variety of normalling options.

**Programmable Normals (ProPatch® Programmable and UniPatch® only)**
Selectable normals allow the user to select any typical normal configuration by setting switches on an impedance-matched dip switch located on the individual audio card.

**Normals Strapped (fully normalled)**
In a fully normalled configuration, the normals of each jack in the top row are internally strapped to the normals of the jack below it with the tip (T), ring (R), and sleeve (S) contacts brought out to the rear panel terminations. At the rear panel, equipment is wired to the two jacks, creating a normal circuit. To break this normal connection, you insert a patch cord into either jack.

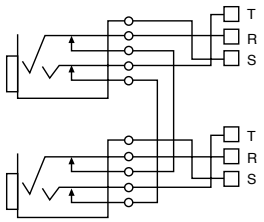
**Half-Normalled**
In a half-normalled configuration, the normals of the bottom jack are internally wired to the tip (T) and ring (R) connections of the top jack, and the tip, ring, and sleeve of both jacks are brought out to the rear terminations. Equipment is wired to the two jacks at the rear terminations, creating a normal circuit. Inserting a plug into the top jack monitors the circuit without breaking it, and inserting a plug into the bottom jack breaks the circuit.

**No Normals**
A panel without normals has jacks that are open (no normal connection) until patched. When the patch cord is inserted, the signal flows through the cord and jack to or from the equipment connected to the jack at the rear terminations. No normal patch panels require looping plugs (u-links) or patch cords to complete the circuit.

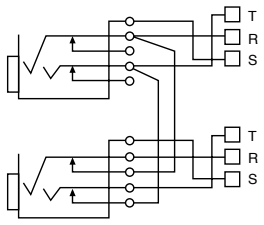
**Normals Out**
In this configuration normals are brought out to the rear terminations where you can strap them as you want them. Note that you cannot change the normalling on panels with internal normals because normalling is done at the jacks. Select the normals out option if you need the ability to change normals.

**Sleeve Normals Out**
Sleeve normals out are the same as normals out except that a sleeve normal is switched inside the jack in addition to tip and ring normals. The sleeve normal is also brought out and is typically used for a ground connection. Making it switchable allows grounds for different functions to be separated to prevent ground loops that produce audio hum.

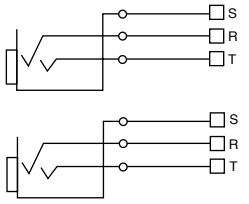
**Bussed Grounds**
In a bussed-grounds configuration the ground connections of all jacks are brought out to the rear terminations and connected together. This provides a common ground for all jacks.



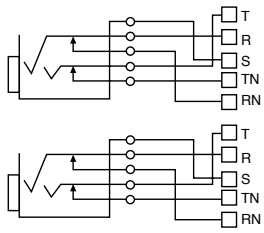

**Normals Strapped**



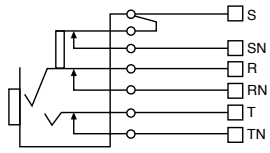

**Half-Normalled**




**No Normals**




**Normals Out**




**Sleeve Normals Out**

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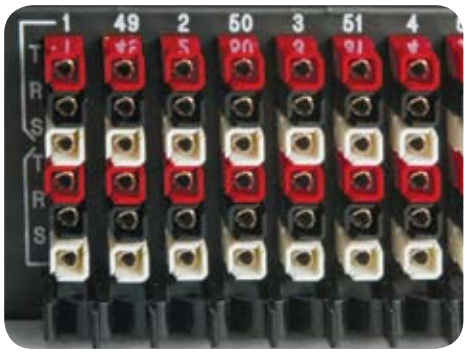
# Introduction
Termination Systems

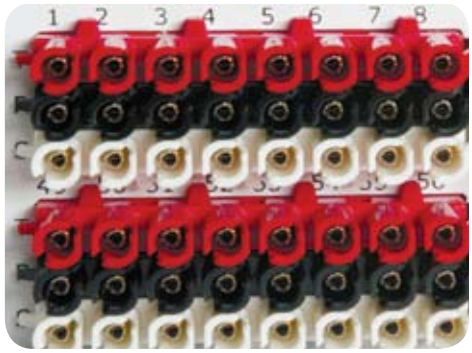
## Quick Connect Punch (QCP)

The original twisted pair QCP termination system set a new standard, making punchdown wiring fast and reliable. The QCP IV system is an even faster, more robust punchdown system compatible with existing QCP tools. The new connectors come in 1x8 blocks insulated on both sides of the panel for better short protection. Because the connectors do not require the tool to be oriented before punching, the QCP IV system punches down instantly, saving you the laborious prewiring, soldering, and crimping required for connectorized panels.

Many ADC products come with a choice of QCP II or QCP IV. Both are a tremendous improvement over solder or crimped connectorized systems, but each has its advantages. QCP II allows greater density and individual replacement. QCP IV is a more durable connector and does not require orienting the tool before punching.

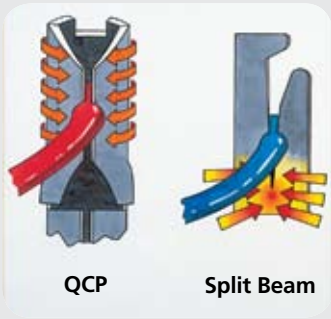



**QCP II**




**QCP IV**

### Features




- ADC's exclusive, patented QCP II and QCP IV split-cylinder punchdown termination system is faster and easier to install and more reliable than any other termination system, including solder.
- Dependable, durable, split-cylinder design holds up to three stranded or solid wires, 22 to 26 gauge (0.32 mm to 0.128 mm)
- No intermittents with gastight connections. Uniform split channel width holds each wire firmly, unlike telco punchdowns with V-shaped channels or soldered connections that use flux and may have unreliable solder joints
- Easy pre-lacing makes installation faster. Color-coding prevents wiring mistakes
- Labor-saving punch terminates and cuts wire in one simple motion. New QCP IV installs even faster because you don't have to orient the tool before punching
- Faster and easier changes in circuits or normals than soldered connector systems. Rated for up to 200 insertion/withdrawal cycles
- QCP II terminations are individually mounted and insulated for easy repair or replacement
- QCP IV terminations are mounted in 1x8 blocks insulated on both sides of the panel. This design, plus the recessed conductors, eliminates shorts

# Introduction
Termination Systems



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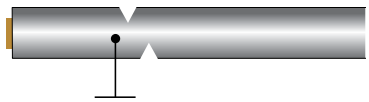
## LSA-PLUS®

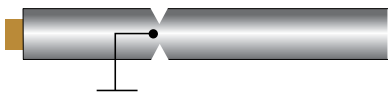
LSA-PLUS technology has been used in billions of connections worldwide, and continues to set the pace for others to follow.

- Accepts 26-22 AWG insulated conductors
- Accepts solid or stranded insulated conductors
- Accepts two insulated conductors of the same type (solid or stranded) and size (26-22 AWG)
- Can be re-terminated 200 or more times

**LSA-PLUS**

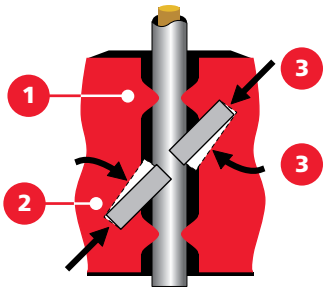


ADC leaves more wire between contact points; provides a more reliable stress resistant connection.



Typical primary wire after being punched into a 110 IDC; positioning contacts at a 90-degree angle results in a weak connection, which is prone to breakage.

**LSA-PLUS IDC vs. 110 and 66 Block IDCs**




**Silver-plated angled contacts are the most secure available, anywhere.**

1. Insulation clamping ribs hold the wire securely—isolating the contact area from vibration and mechanical stress.
2. Silver-plated contact tags at 45-degree angles across the wire's axis make a solid, gas-tight connection.
3. Axial and torsional restoring forces make a solid, gas-tight connection.

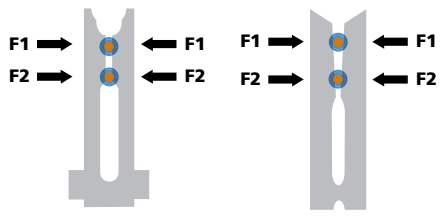
### Features

**LSA-PLUS Contacts**

- Split beam technology
- (F1=F2) = no movement
- Balancing of forces eliminates the tendency for a conductor to be forced out of the contact over time

**110 and 66 Type Contacts**

- Wedge technology
- (F2>F1) = wire movement
- Unequal forces at top and bottom cause conductor movement over time




*LSA-PLUS Contact* *110 and 66 Type Contact*

# ProPatch® Video Patching Systems

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# Video Patching Systems

ProPatch® Miniature (PPM) Series

## Super High-Density Coax Patching System

The ProPatch® Miniature (PPM) Series is an all new Super High-Density Coax (SHDC) patching system designed for High Definition (HD), SDI, AES audio, 5.1 and 7.1 audio applications where coax medium is preferred but space is at a premium. The system is available in both 1 and 1.5 rack unit configurations. The 1 rack unit panel features a patent-pending pullout designation strip that dramatically increases space for text, and a high-density 2x48 circuit configuration of ports. The 1.5 rack unit panel features 4x48 ports.

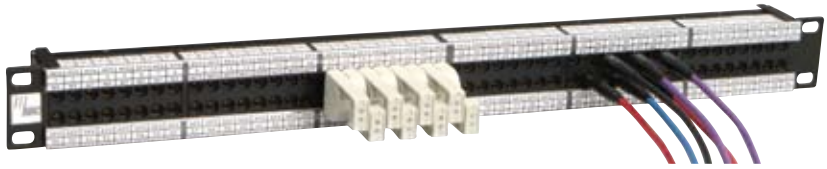
The new SHDC jack features a unique patent-pending switchable termination system that allows the user to select terminating and non-terminating 75 Ω functions on each circuit pair. The normal-through system is also available in a straight-through configuration for tie-line panels and applications where normals are not required. The SHDC high-performance normalling and straight-through LCC jacks are rated to SMPTE 424M HD standard. The SHDC AES jacks are rated for AES digital audio and analog video transmission. Both versions feature modular screwless mounting, circuit identification icons on the rear of the jack, 10,000 insertion/withdrawal cycles and are fully qualified to MIL-STD 202 for the ultimate in durability.

The system features two options. ADC's patented push-pull LCC connector technology on the backplane, or standard 1.0/2.3 connectors and ADC's patented LCC and LCP connectors terminate like a BNC using standard tooling.

# Video Patching Systems

ProPatch® Miniature (PPM) Series

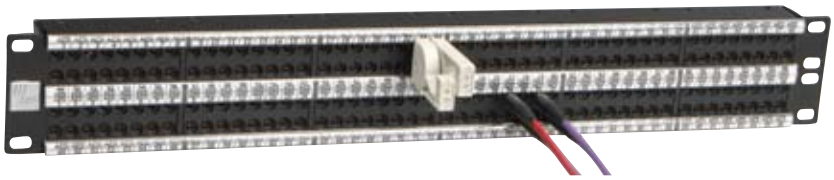
## 1 Rack Unit Super High-Density Coax Patch Panel



**Features:**

- High-density: 48 total jacks (2x48)
- Large designation strips: .440" wide designation on top and bottom; plus a 1" slide out designation
- Lightweight: Less then 1 Kg (2 lbs) total panel weight

## 1.5 Rack Unit Super High-Density Coax Patch Panel



**Features:**

- High-density: 96 total jacks (4x48)
- Large designation strips: .440" wide middle designation, .289" on top and bottom
- Lightweight: Less then 1.8 Kg (3.8 lbs) total panel weight

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# Video Patching Systems

ProPatch® Miniature (PPM) Series

## 1.5 Rack Unit Super High-Density Coax Patch Panel

**Features:**

- High-density: 48 total jacks (2x48)
- Large designation strips: .680" designation on top and bottom
- Lightweight: Less then 1.4 Kg (3 lbs) total panel weight

## SHDC Jack

**Features:**

- Switchable between terminating and non-terminating normalled-through
- Non-normalled jack offered in same jack housing, looping plug available for circuit patching

| | Normalling AES | Straight-Through HD | Normalling HD |
|---|---|---|---|
| **LCC** | SHDC-LCC | SHDC-LCC-NN | SHDC-LCC-HP |
| | | | |
| **1.0/2.3** | SHDC-1023 | SHDC-1023-NN | SHDC-1023-HP |
| | | | |

# Video Patching Systems

ProPatch® Miniature (PPM) Series



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## Specifications

**ELECTRICAL**

| | |
|---|---|
| **Characteristic impedance:** | 75 Ω |
| **Voltage rating:** | 600 Volts RMS |
| **Bandwidth** | |
| **HD LCC:** | Up to 3 GHz |
| **HD 1.0/2.3:** | Up to 1.0 GHz |
| **Straight-through LCC:** | Up to 3 GHz |
| **Straight-through 1.0/2.3:** | Up to 1.0 GHz |
| **AES:** | Up to 500 MHz |
| **Contact resistance:** | .030 Ω max change post environmental |
| **Insulation resistance:** | 200 MΩ min change |

**MECHANICAL**

| | |
|---|---|
| **Mechanical durability:** | 10,000 cycles min (Front port: LCP)<br>500 cycles min (Back port: LCC) |
| **Center contact retention:** | 6 lbs min |
| **SHDC jack panel retention:** | 20 lbs min |
| **Patch cord cable bend and twist:** | 500 cycles min |

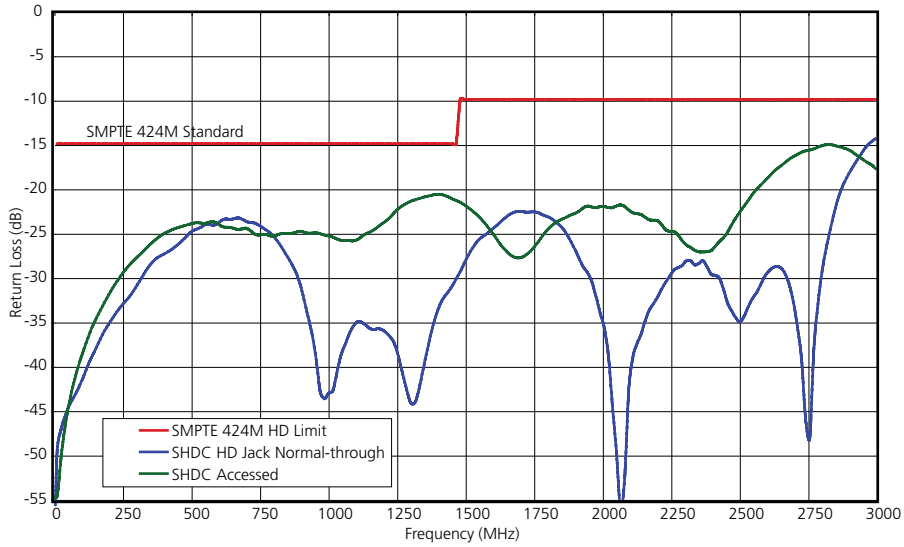
**ENVIRONMENTAL**

| | |
|---|---|
| **Thermal shock:** | -40°C to 65°C, operating; -55°C to 85°C, non-operating |
| **Moisture resistance:** | 0% to 95%; MIL-STD-202 Method 106 |
| **Corrosion (salt spray):** | MIL-STD-202 Method 101, test condition B |
| **Flammability:** | UL 94-VO rated (center conductor insulator) |
| **Vibration:** | MIL-STD-202 Method 201 |
| **Solvent resistance:** | MIL-STD-202 Method 215 |

**FINISH**

| | |
|---|---|
| **Sheet metal panel:** | .060 CRS with protective black finish |
| **Jack plastic housing:** | 30% Glass Filled Valox |
| **Nickel coax housings:** | Tarnish-resistant electroless nickel plating |
| **Springs:** | Beryllium copper with 50 millionths inch gold plating |
| **Center conductors:** | 50 millionths inch gold plating |

**Gated Return Loss**
**High-Performance SHDC LCC Jack**



# Video Patching Systems

## ProPatch® Miniature (PPM) Series

### Ordering Information

| Description | | | | | Catalog Number |
|---|---|---|---|---|---|
| **ProPatch® Miniature (PPM) Panels** | | | | | |
| 2x48 | 1 RU | LCC | Normalling | AES and Analog Video | PPM1248-LCC-BK |
| | | | | High-Performance, HD | PPM1248-LCCHP-BK |
| | | | Non-Normalling | High-Performance | PPM1248-LCCNN-BK |
| | | 1.0/2.3 jack | Normalling | AES and Analog Video | PPM1248-1023-BK |
| | | | | High-Performance, HD | PPM1248-1023HP-BK |
| | | | Non-Normalling | High-Performance | PPM1248-1023NN-BK |
| | 1.5 RU | LCC | Normalling | AES and Analog Video | PPM15248-LCC-BK |
| | | | | High-Performance | PPM15248-LCCHP-BK |
| | | | Non-Normalling | High-Performance | PPM15248-LCCNN-BK |
| | | 1.0/2.3 jack | Normalling | AES and Analog Video | PPM15248-1023-BK |
| | | | | High-Performance | PPM15248-1023HP-BK |
| | | | Non-Normalling | High-Performance | PPM15248-1023NN-BK |
| 4x48 | 1.5 RU | LCC | Normalling | AES and Analog Video | PPM15448-LCC-BK |
| | | | | High-Performance | PPM15448-LCCHP-BK |
| | | | Non-Normalling | High-Performance | PPM15448-LCCNN-BK |
| | | 1.0/2.3 jack | Normalling | AES and Analog Video | PPM15448-1023-BK |
| | | | | High-Performance | PPM15448-1023HP-BK |
| | | | Non-Normalling | High-Performance | PPM15448-1023NN-BK |

**1 RU 2x48 PPM Panel**

**1.5 RU 2x48 PPM Panel**

**1.5 RU 4x48 PPM Panel**

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# Video Patching Systems

## ProPatch® Miniature (PPM) Series

**LCC Jack**

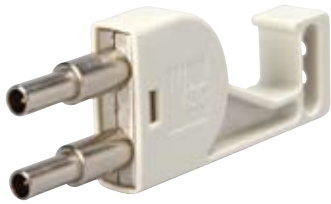
### Ordering Information

| Description | | | Catalog Number |
|---|---|---|---|
| **Super High-Density Coax Jacks** | | | |
| LCC | Normalling | AES and Analog Video | SHDC-LCC |
| | | High-Performance, HD | SHDC-LCC-HP |
| | Straight-Through | High-Performance, HD | SHDC-LCC-NN |
| 1.0/2.3 Connectors | Normalling | AES and Analog Video | SHDC-1023 |
| | | High-Performance | SHDC-1023-HP |
| | Straight-Through | High-Performance | SHDC-1023-NN |

**LCP Patch Cords**

### Ordering Information

| Description | Catalog Number |
|---|---|
| **LCP High-Performance Patch Cords** | |
| 2 feet | BK2VXM-LCP-LCP |
| 3 feet | BK3VXM-LCP-LCP |
| 4 feet | BK4VXM-LCP-LCP |
| 6 feet | BK6VXM-LCP-LCP |



**LCP Looping Plug**

### Ordering Information

| Description | Catalog Number |
|---|---|
| **Looping plug;** LCP .48" Centers | LP-SHDC-480 |

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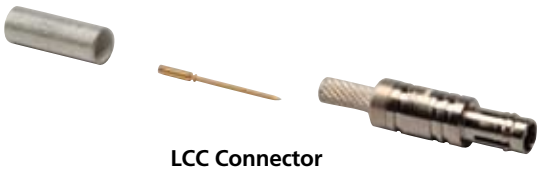
# Video Patching Systems

## ProPatch® Miniature (PPM) Series



LCC Connector

LCC Connectors Bulk Pack

### Ordering Information

| Description | Catalog Number<br>Cable Type (or equivalent to)<br>1505, 9259 9100, VPM2000 | 1855 VDM230 VDM250 | 0.6/2.8 Image360 SDV-25 | 179DT |
|---|---|---|---|---|
| **LCC Connectors** | | | | |
| 1 each | LCC-1-BE | LCC-13-BE | LCC-26-BE | LCC-31-BE |
| Bulk (100 pack) | LCC-1B-BE | LCC-13B-BE | LCC-26B-BE | LCC-31B-BE |
| **Crimp Tools** | | | | |
| Features Ergonomic Handle for ADC Die Sets | WT-2 | | | |
| Features Long Ergonomic Handle for ADC Die Sets | WT-3 | | | |
| **Crimp Die Sets** | WD-1 | WD-2 | WD-3 | WD-2 |
| | WD-2 | | WD-4 | |
| | WD-3 | | | |
| | WD-5 | | | |
| **Manual Stripper Tool**<br>Includes One Stripper Replacement Cassette | STC-12B | STC-13B | STC-13B | STC-13B |
| **Manual Stripper Replacement Cassette** | CCS-BLK | | | |
| **Automatic Cable Stripper Tool** | BNC-S1 | | | |
| **Cutter Head** For Automatic Cable Stripper Tool | BNC-H2 | BNC-H5 | BNC-H5 | BNC-H5 |
| **Insertion/Withdrawl Tool** | LCA-400004 | | | |
| **Replacement Tips**<br>For Insertion/Withdrawal Tool (12-Pack) | LCA-400005-12 | | | |
| **LCC Tester** | LCA-414001 | | | |

Insertion/Withdrawal Tool

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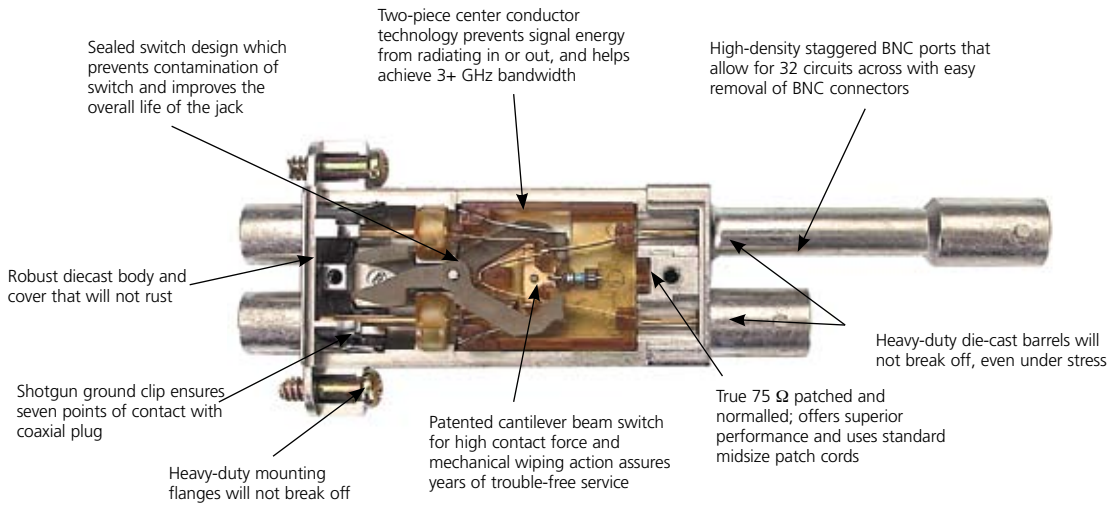
## WECO HD Midsize Video Jacks

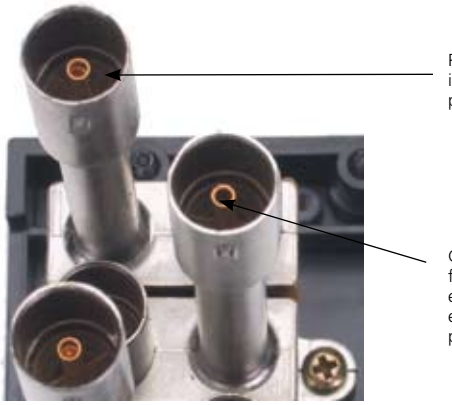
Midsize video jacks have several advantages over standard size jacks in performance and size. All standard size video jacks observing WECO standards are, by definition, not 75 Ω in the patched state (with the exception of ADC's SVJ-2 standard size Super Video Jack). The physical relationship of the center conductor diameter and the coaxial port diameter creates an impedance violation that causes the video impedance to drop to 58 Ω in the patched state. In midsize video jacks, the physical relationship has been optimized, providing a constant impedance of 75 Ω in either the normalled-through mode or the patched mode. This impedance advantage can make a considerable difference in the elimination of bit errors in digital signals especially if the circuit is routed through several patches. The midsize offers 33 percent higher density than standard size for 2x32 configurations, which match typical router decades.




**MVJ-3 Midsize Video Jack Interior View**

## Outstanding Performance Features

ADC video jacks feature precision geometric-molded insulators for true 75 Ω performance. Closed-entry center contacts are designed to resist damage from damaged plugs or test probes.



# Video Patching Systems
Jacks

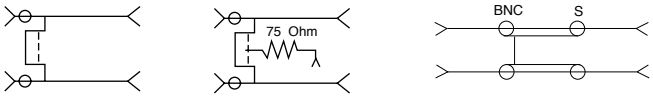
## WECO HD Midsize Video Jack MVJ-3

The MVJ-3 midsize to BNC self-normalling video jack is performance matched for data rates up to and including HDTV in the full uncompressed 1.485 and 3 Gbps rates. This premium jack includes a host of outstanding features highlighted in the interior view shown on the previous page.

### Features

- 3.0+ GHz bandwidth
- Sealed switch
- 75 Ω performance
- RFI shielding
- 2x32 mounting in one rack space
- Unique captive mounting screws
- Meets MIL-STD-202F for environmental and mechanical reliability

**MVJ-3 Terminated**
**MVJ-3T Non-terminated**
**MVJ-3NN Non-normalled, non-terminated**




MVJ-3 MVJ-3T MVJ-3NN

**HD Midsize Video Jack**

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# Video Patching Systems
Jacks

## MVJ-3
## WECO HD Midsize Video Jack Specifications

The MVJ-3 Family is rated to handle digital video data rates up to and including uncompressed HDTV SMPTE 292M 1.485 Gbps and SMPTE 424M 3 Gbps.

**ELECTRICAL**

| | |
|---|---|
| **Rated bandwidth:** | 1 MHz to 3 GHz |
| **Return loss:** | Better than -17 dB; 1 MHz to 3 GHz |
| **Characteristic impedance:** | 75 Ω |
| **Insertion loss:** | 0.3 dB Loss to 3 GHz |
| **Center conductor Diameter:** | 0.048 (.12cm) |
| **Contact resistance:** | 0.01 W maximum change |
| **Termination resistor:** | 75 Ω, MVJ-3T only |

**MECHANICAL**

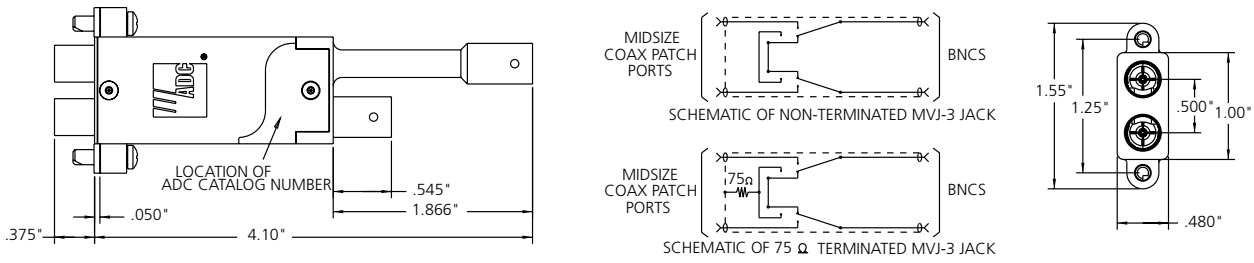
| | |
|---|---|
| **Mechanical shock:** | Per MIL-STD-202, Method 213 |
| **Vibration:** | Per MIL-STD-202, Method 201 |
| **Insertion force:** | 7 lbs (3.17 Kg) maximum |
| **Withdrawal force:** | 1 lb (.452 Kg) minimum |
| **Life cycles:** | 20,000 |

**MATERIAL**

| | |
|---|---|
| **Body and cover:** | Zinc alloy per ASTM B86 |
| **Front and rear center conductors:** | Beryllium copper per ASTM B196 |
| **Insulators:** | Unreinforced polyetherimide resin rated UL94-VO for flammability |
| **Switching springs:** | Beryllium copper per ASTM B196 |

**ENVIRONMENTAL**

| | |
|---|---|
| **Operating temperature:** | -40°C to 65°C |
| **Storage temperature:** | -40°C to 65°C |
| **Thermal shock:** | Per MIL-STD-202, Method 107 |
| **Operating humidity:** | 0% to 95%, non-condensing |
| **Storage humidity:** | 0% to 95%, non-condensing |
| **Salt spray:** | Per MIL-STD-202, Method 101 |
| **Moisture resistance:** | Per MIL-STD-202, Method 106 |
| **Dust resistance:** | Per MIL-STD-202, Method 110 |




**MVJ-3 Midsize Video Jack**

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# Video Patching Systems

Jacks

## WECO HD Midsize Straight-Through Video Jacks

For applications requiring independent ground such as tie line panels, the new straight-through CJ3014N and CJ4014N are the logical choice. These jacks have a rated bandwidth up to 2.4 GHz for analog, serial digital, and HDTV video applications. For applications requiring self-terminating jacks, the CJ3014N-75 and the CJ4014N-75 are available.

The short body CJ3014N/3014N-75 and long body CJ4014N/4014-N75 are designed to be mounted in 32-across configurations. The jacks slide into a patented insulated holder with a dovetail joint, which provides outstanding durability and electronic isolation from adjacent jacks. The short and long bodies allow a staggered mounting pattern to provide access to the BNC connectors. A BNC insertion tool such as the BT2000 is recommended for BNC installation.

**CJ3014N-75/CJ4014N-75 Terminated**

A patented "dovetail" mounting device provides electrical isolation and outstanding durability as compared to tab-and-barrel mounting systems.

**CJ3014N/CJ4014N Non-terminated**

Jacks shown partially assembled to reveal the dovetail joint.

# Video Patching Systems
Jacks

## WECO HD Midsize Straight-Through Video Jack Specifications

The CJ midsize jacks are rated to handle digital video data rates up to and including uncompressed HDTV SMPTE 292 M 1.485 Gbps. They are also rated for L-Band and S-Band use.

**ELECTRICAL**

| | |
|---|---|
| **Characteristic impedance:** | 75 Ω nominal |
| **Return loss:** | > 19 dB; 300 Khz to 2.4 GHz |
| **Contact resistance:** | 10 mΩ typical |
| **Termination resistance (3014N-75/4014N-75):** | 75 Ω commercial, 1/8 watt 5% |

**MECHANICAL**

| | |
|---|---|
| **Mechanical shock:** | Per MIL-STD-202, Method 213 |
| **Vibration:** | Per MIL-STD-202, Method 201 |
| **Insertion force:** | 7 lbs max |
| **Withdrawal force:** | 1.5 lbs min |

**ENVIRONMENTAL**

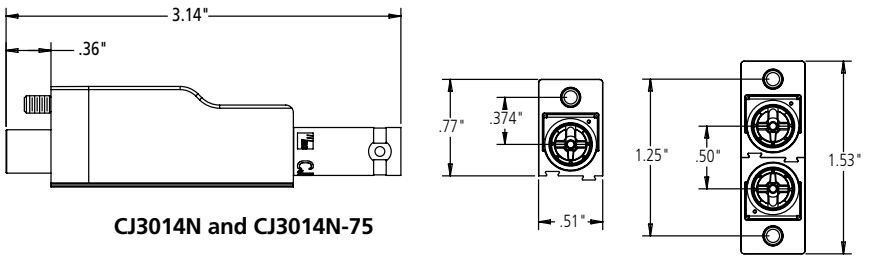
| | |
|---|---|
| **Operating temp:** | -40°C to 65°C |
| **Storage temp:** | -55°C to 85°C |
| **Thermal Shock:** | Per MIL-STD-202, Method 107 |
| **Humidity:** | 0% to 95% non-condensing, operating and non-operating |
| **Salt spray:** | Per MIL-STD-202, Method 101 |
| **Moisture resistance:** | Per MIL-STD-202, Method 106 |

**MATERIAL**

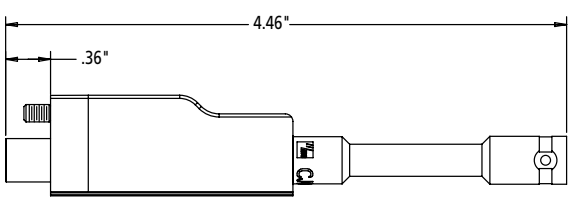
| | |
|---|---|
| **Jack sleeve and frame: per QQ-N-290** | CDA 360 brass rod per ASTM B16 with electro-deposit nickel plating |
| **Center conductors: per MIL-G-45204** | Phosphor bronze per ASTM B139 with electro-deposited gold plating |
| **Insulators:** | TFE-Fluorocarbon per ASTM D1710 |

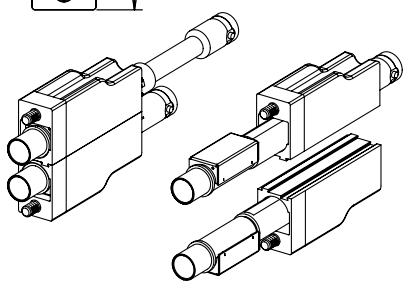
**OTHER**

| | |
|---|---|
| **Interface dimensions: pin diameter of .048" (.12 cm)** | Outside diameter of mating plugs must be .298" (.75 cm) with |
| **Mounting details: (zinc chromate plated)** | Jacks supplied with a 6-32 UNC-2A 5/16" Phillips head screws |




**CJ3014N and CJ3014N-75**



**CJ4014N and CJ4014N-75**

# Video Patching Systems

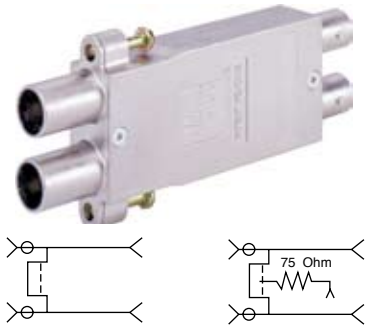
Jacks

## WECO HD Standard Size Super Video Jacks

The SVJ-2 standard size to BNC self-normalling Super Video Jack family features performance matched for data rates up to and including HDTV in the full uncompressed 1.485 and 3 Gbits/second rate. The SVJ-2 combines the unique features of:

- 2.4 GHz bandwidth for the demanding HD data rates
- Sealed switch prevents internal contamination
- True 75 Ω performance for a zero bit-error rate
- RFI shielding prevents ingress/egress
- 2x26 or 2x24 mounting in one rack space
- Unique captive mounting screws

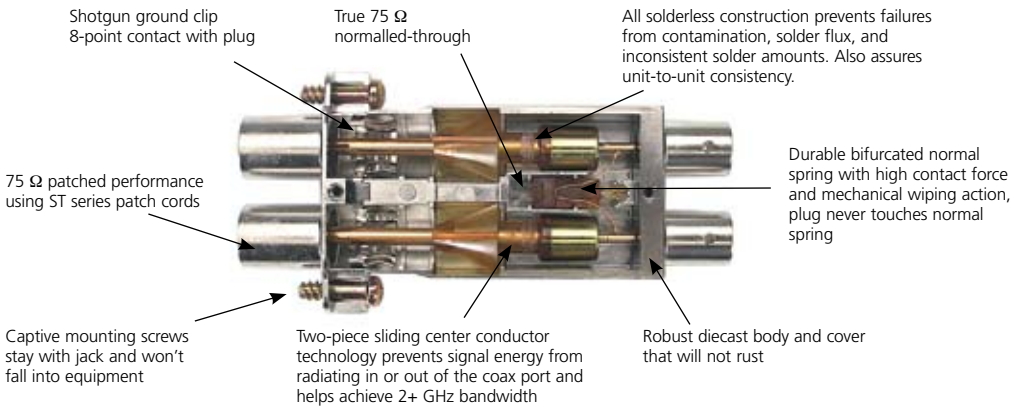
The SVJ-2 family is designed for use in high data rate applications including uncompressed HDTV, D1 digital video and all lower data rate video transmission methods.




**Standard Size Super Video Jack**
(SVJ-2/SVJ-2T)

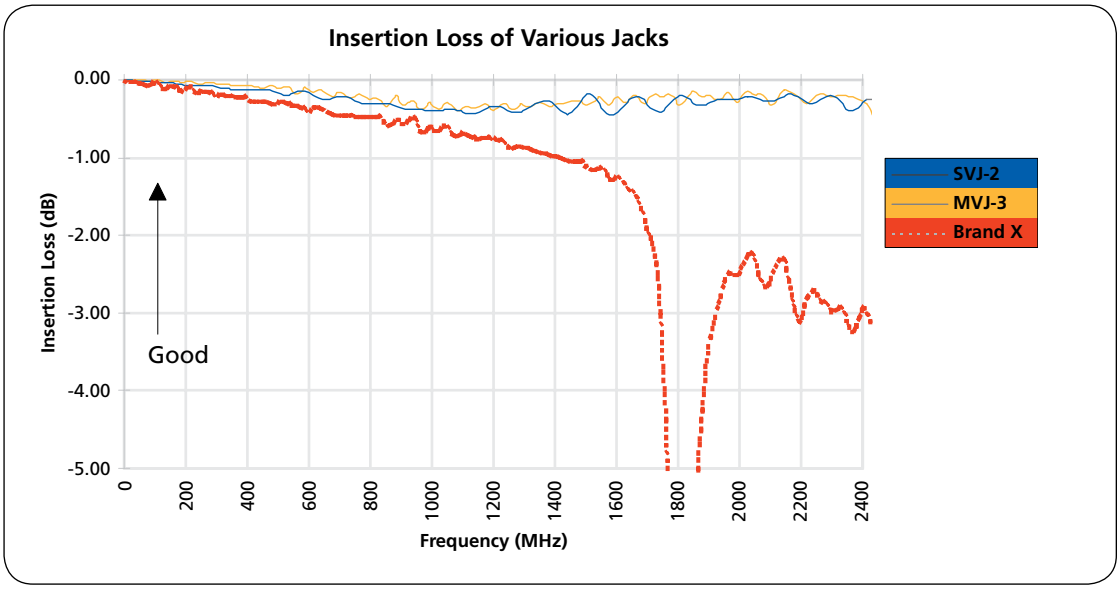
### Features

- True 75 Ω for excellent digital performance when normalled or patched with ADC ST series patch cords
- Gold-plated components assure signal quality and tarnish resistance, minimum 50µ inch
- Sealed switch prevents external contamination
- All-solderless construction eliminates solder-related failures
- Long-beam bifurcated springs provide firm contact and prevent spring fatigue
- Closed-entry BNC center conductor prevents damage and provides reliable contact
- Two-piece center conductor prevents RFI radiation leakage
- Shotgun ground clip contacts plug at multiple points
- Tough diecast body will not rust or flex
- Captive mounting screws will not fall out
- Precision-tooled parts for consistent quality
- Meet MIL-STD-202F for environmental and mechanical reliability
- Patch plug never touches normal switch, dramatically increasing reliability

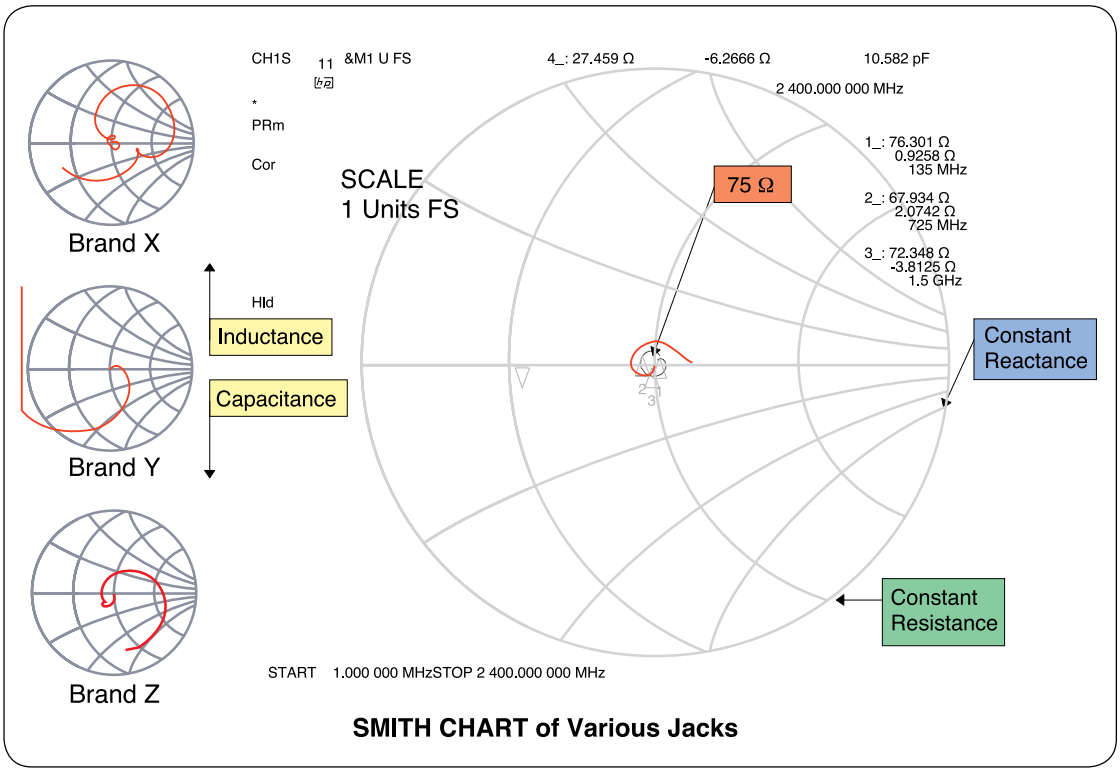



**SVJ-2T**
**Standard Size Super Video Jack**
(Interior View)

## Insertion and SMITH Chart




**Insertion loss for ADC's Super Video Jacks stays less than .5 dB to 2.4 GHz.**




**ADC's Super Video Jacks maintain 75 Ω impedance throughout the band. Competitive jacks spiral out of control.**

# Video Patching Systems

Jacks

## SVJ-2
## Standard Size Super Video Jack Specifications

The SVJ-2 family is rated to handle digital video data rates up to and including uncompressed HDTV SMPTE 292M 1.485 Gbps and SMPTE 424M 3 Gbps.

**ELECTRICAL**

| | |
|---|---|
| **Rated bandwidth:** | 2.4 GHz |
| **Return loss:** | Better than -20 dB to 2.4 GHz |
| **Characteristic impedance:** | 75 Ω |
| **Insertion loss:** | <.5 dB Loss to 2.4 GHz |
| **Center conductor diameter:** | Accepts .09 center conductor |
| **Contact resistance:** | Less than 20 mΩ |
| **Termination resistor:** | 75 Ω, ± 1% |

**MECHANICAL**

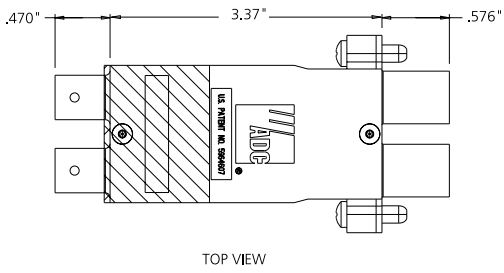
| | |
|---|---|
| **Mechanical shock:** | Per MIL-STD-202, Method 213 test condition G |
| **Vibration:** | Per MIL-STD-202, Method 201 |
| **Insertion force:** | 12 lbs max |
| **Withdrawal force:** | 3 lbs min |
| **Life cycles:** | 20,000 insertion/withdrawal cycles min |

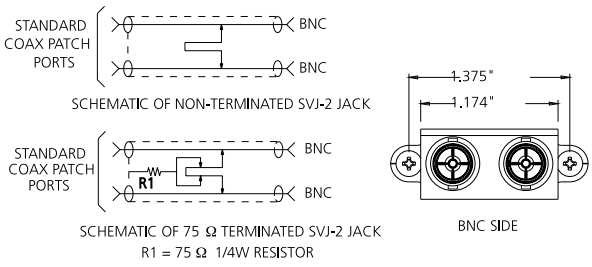
**MATERIAL**

| | |
|---|---|
| **Body and cover:** | Zinc diecast per ASTM B86 |
| **Front and rear** | |
| **Center conductors:** | Phosphor bronze per ASTM B139 |
| **Insulators:** | Polyethermide resin rated UL 94V-0 |
| **Switching springs:** | Beryllium copper per ASTM B196 |

**ENVIRONMENTAL**

| | |
|---|---|
| **Temperature** | |
| **Operating:** | -40°C to 65°C |
| **Storage:** | -55°C to 85°C |
| **Thermal shock:** | Per MIL-STD-202, Method 107 |
| **Humidity** | |
| **Operating:** | 0% to 95%, non-condensing |
| **Storage:** | 0% to 95%, non-condensing |
| **Salt spray:** | Per MIL-STD-202, Method 101 |
| **Moisture resistance:** | Per MIL-STD-202, Method 106 |
| **Dust resistance:** | Per MIL-STD-202, Method 110A |



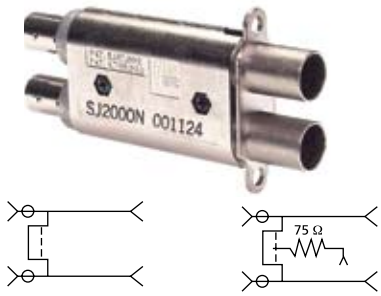




**SVJ-2 Standard Size Super Video Jack**

# Video Patching Systems
Jacks

## WECO Standard Size Analog/SD Video Jacks

For analog and serial digital video applications at 270/360 Mbits, ADC's venerable SJ2000 is a logical choice. With a frequency response to 750 MHz, the SJ2000 has proven improved reliability for systems that do not require the advanced performance of ADC's super jacks.

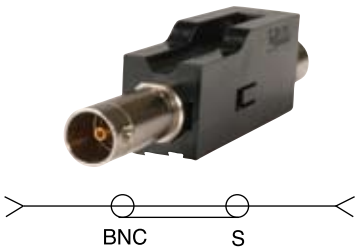



**Standard Size Video Jack**
(SJ2000/SJ2000N-75)

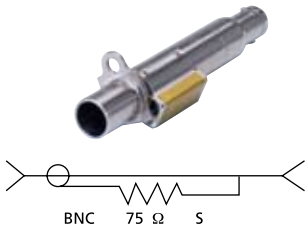
## WECO Standard Size Straight-Through Video Jacks

For applications requiring independent ground such as tie line panels, the straight-through CJ2014N and the self-terminating CJ2020N-75 jacks are the logical choice. These jacks mount on standard .625" centers and have a rated bandwidth up to 2.4 GHz for analog HDTV, L-Band and S-Band applications.

**NOTE:** The single terminating jacks cannot be installed directly adjacent to switching jacks due to interference with the terminating resistor housing. Leave one empty space between the CJ2020N-75 and switching jacks.




**Straight-Through Standard Size Video Jack**
(CJ2014N)




**Straight-Through Standard Size Video Jack with 75 Ω Termination**
(CJ2020N-75)

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# Video Patching Systems

Jacks

## CJ2014N and CJ2020N-75 (terminated)
## WECO Standard Size Straight-Through Video Jack Specifications

The CJ standard size jacks are rated to handle digital video data rates up to and including uncompressed HDTV 292M 1.485 Gpbs and SMPTE 424M 3 Gbps. They are also rated for L-Band and S-Band use.

**ELECTRICAL**

| | |
|---|---|
| **Characteristic impedance:** | 62.5 Ω nominal |
| **Return loss:** | > -20 dB; 1 MHz to 2 GHz |
| **Contact resistance:** | 0.030 Ω max change post environment |

**MECHANICAL**

| | |
|---|---|
| **Mechanical shock:** | Per MIL-STD-202, Method 213 |
| **Vibration:** | Per MIL-STD-202, Method 201 |
| **Insertion force:** | 7 lbs (3.17 kg) min |
| **Withdrawal force:** | 1.5 lbs (0.675 kg) min |
| **Life:** | 10,000 insertion/withdrawal cycles min |

**ENVIRONMENTAL**

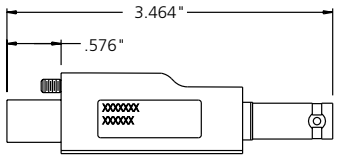
| | |
|---|---|
| **Operating temperature:** | -40°C to +65°C |
| **Non-operating temperature:** | -55°C to +85°C non-operating |
| **Thermal shock:** | Per MIL-STD-202, Method 107 |
| **Humidity:** | 0% to 95% non-condensing, operating and non-operating |
| **Salt spray:** | Per MIL-STD-202, Method 101 |
| **Moisture resistance:** | Per MIL-STD-202, Method 106 |

**MATERIAL**

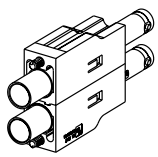
| | |
|---|---|
| **Jack sleeve and frame:** | Brass per ASTM B16 with electro-deposited nickel plating per QQ-N-290 or electro-deposited gold plating per MIL-G-45204 |
| **Center conductors .090" (.23 cm):** | Beryllium copper per QQ-C-533 with electro-deposited gold plating per MIL-G-45204 on contact areas only |
| **Outer conductor contacts:** | Phosphor bronze QQ-B-746 with electro-deposited gold plating per MIL-G-45204 or electro-deposited nickel plating per QQ-N-290 |
| **Insulators:** | Rated UL 94V-0 for flammability |
| **Crimping sleeves:** | Brass per ASTM B16 with tin plating per MIL-T-10727 |

**OTHER**

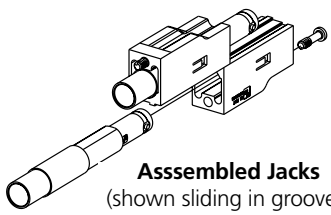
| | |
|---|---|
| **Interface dimensions:** | Outer diameter of mating plugs must be .375" (.95 cm) with pin diameter of .090" (.23 cm) or .070" (.18 cm) |
| **Mounting information:** | All jacks are supplied with 6-32, 5/16" Phillips head screws |



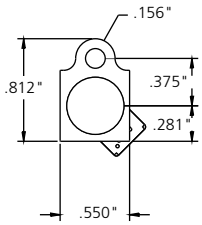

**CJ2014N**



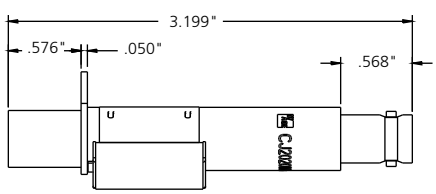
**Asssembled Jacks**
(shown assembled)



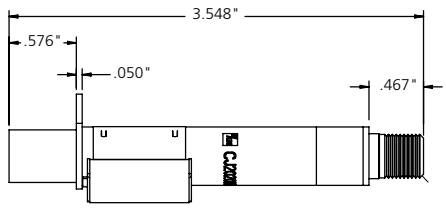
**Asssembled Jacks**
(shown sliding in grooves)




**CJ2020-N75**
**CJ2020-N75FF**




**Dimensions for CJ2020N-75 and CJ2011N**
**(CJ2011N has no termination can)**




**Dimensions for CJ2020-N75FF**

# Video Patching Systems
Jacks



## MUSA Standard Video Jacks

ADC is the first company worldwide to offer both MUSA standard and WECO standard mid-sized and standard-sized coaxial video jacks offering a complete portfolio of MUSA standard panels and accessories including jacks, U-links, accessories, panels and patch cords. The new line of 75 Ω HDTV-ready coaxial jacks and accessories offers superior electrical and mechanical performance as well as easier mounting options compared with current industry products.

### Jack Features

- HDTV Super Video Jacks rated to 2.3+ GHz
- Return loss of -17db at 2.3 GHz
- Insertion loss of -.07db to 2.3 GHz
- Jacks rated to 10,000 insertion/withdrawl cycles
- Patented dovetail mounting system provides secure and easy jack replacement
- Exclusive captivated mounting screw
- Molded jack holder provides outstanding durability and isolation between adjacent jacks
- Compatible with BPO MUSA standard products

**MUSA U-Link**
(UL-SM1625)

**SMJ-2100N Jack**

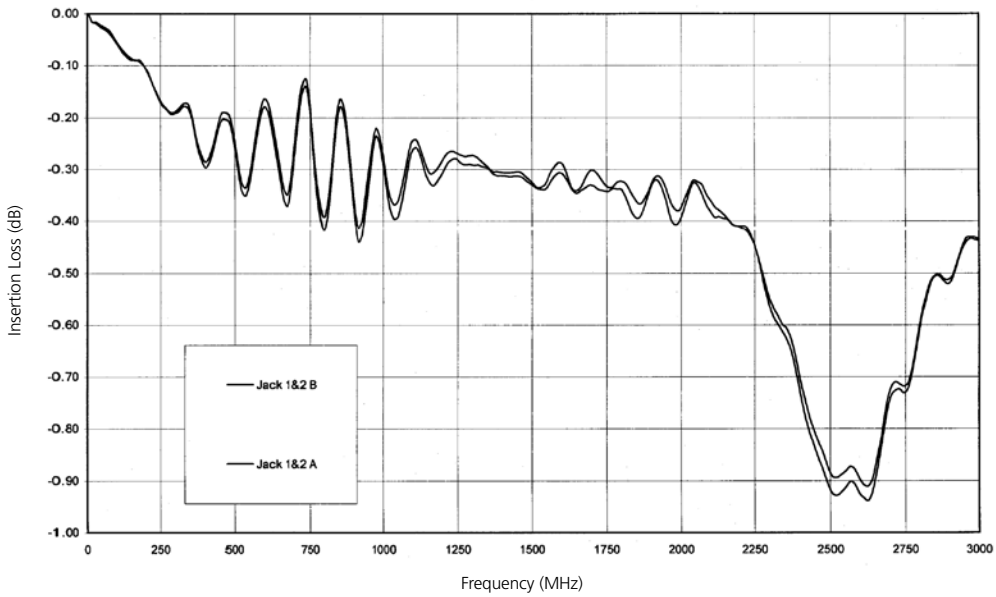
### U-Link Features

- Ergonomically designed handle makes insertion/withdrawal easier, hole for pull chain
- Solderless construction—Weee and Rohs compliant
- High-performance U-Link matched for uncompressed HDTV signals (1.485 Gbps)
- Precision-molded insulators for true impedance match and greater unit-to-unit consistency compared to machined plastic
- Unique closed-entry center conductor prevents damage and intermitance from misaligned male pins
- One-piece gold-plated center conductor
- Robust diecast body with insulated molded outer shell
- Transparent icon allows designation label underneath
- Plug-in color coded circuit icon available

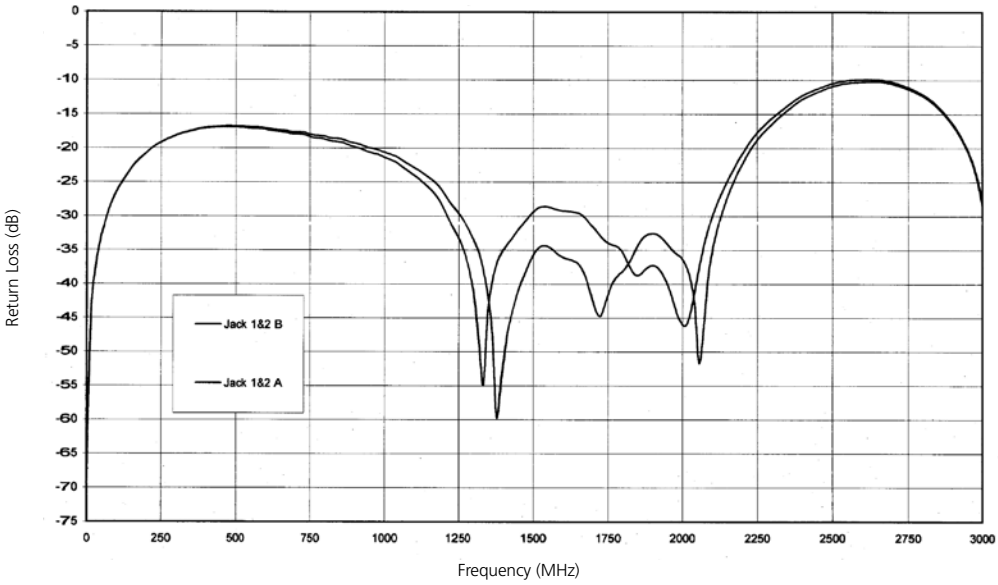
# Video Patching Systems

## Jacks

### MUSA Standard Video Jacks Insertion and Return Loss




**Insertion Loss**
**MUSA Video Connectors (SMJ-2100N) with Looping Plug**




**Return Loss**
**MUSA Video Connectors (SMJ-2100N) with Looping Plug**

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## SMJ-2100N
## MUSA Straight-Through Video Jack Specifications

The SMJ family is rated to handle analog and digital video data rates up to and including HDTV SMPTE 242M 1.485 Gbps and SMPTE 424M 3 Gbps. They are also rated for L-Band and S-Band use.

**ELECTRICAL**

| | |
|---|---|
| **Characteristic impedance:** | 75 Ω nominal |
| **Return loss:** | > 17 dB; 300 KHz to 2.4 GHz |
| **Contact resistance:** | 10 mΩ typical |

**MECHANICAL**

| | |
|---|---|
| **Mechanical shock:** | Per MIL-STD-202, Method 213 |
| **Vibration:** | Per MIL-STD-202, Method 201 |
| **Insertion force:** | 7 lbs maximum |
| **Withdrawal force:** | 1.5 lbs minimum |

**ENVIRONMENTAL**

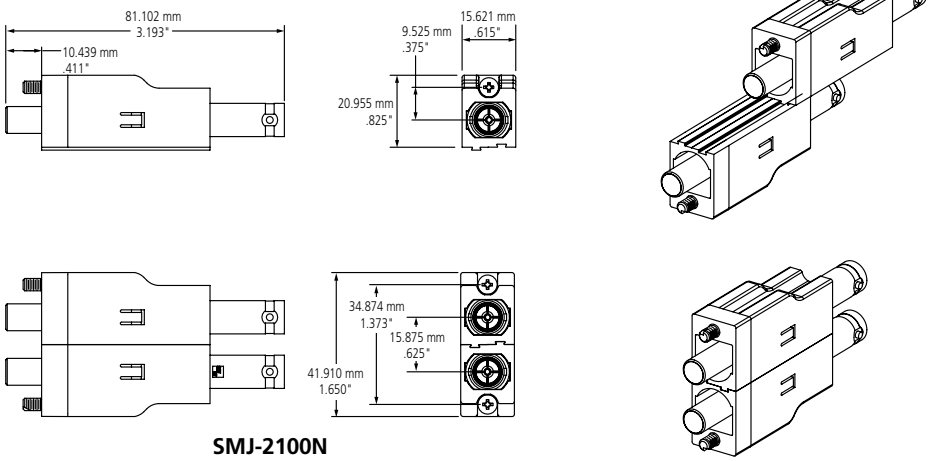
| | |
|---|---|
| **Operating temp:** | -40°C to 65°C |
| **Storage temp:** | -55°C to 85°C |
| **Thermal shock:** | Per MIL-STD-202, Method 107 |
| **Humidity:** | 0% to 95% non-condensing, operating and non-operating |
| **Salt spray:** | Per MIL-STD-202, Method 101 |
| **Moisture resistance:** | Per MIL-STD-202, Method 106 |

**MATERIAL**

| | |
|---|---|
| **Jack sleeve and frame:** | CDA 360 brass rod per ASTM B16 with electro-deposit nickel plating per QQ-N-290 |
| **Center conductors:** | Phosphor bronze per ASTM B139 with electro-deposited gold plating per MIL-G-45204 |
| **Insulators:** | Unreinforced polyetherimide resin rated UL94-V0 for flammability |

**OTHER**

| | |
|---|---|
| **Interface dimensions:** | Outside diameter of mating plugs must be .298" (.75 cm) with pin diameter of .048" (.12 cm) |
| **Mounting details:** | Jacks supplied with a 6-32 UNC-2A 5/16" Phillips head screws (zinc chromate plated) |




**SMJ-2100N**

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# Video Patching Systems

## Jacks and Accessories

### Ordering Information

| Description | Catalog Number |
|---|---|
| **Midsize Video Jacks** | |
| Dual self-normalling video jack, non-terminated, HD | MVJ-3 |
| Dual self-normalling video jack, 75 Ω terminated, HD | MVJ-3T |
| Dual non-normalled video jack, non-terminated, HD | MVJ-3NN |
| Single straight-through video Jack, short body, non-terminated, HD | CJ3014N |
| Single straight-through video Jack, short body, 75 Ω terminated, HD | CJ3014N-75 |
| Single straight-through video jack, long body, non-terminated, HD | CJ4014N |
| Single straight-through, video Jack, long body, 75 Ω terminated, HD | CJ4014N-75 |
| **Standard Size Super Video Jacks** | |
| Dual self-normalling super video jack, non-terminated, HD | SVJ-2-X |
| Dual self-normalling super video jack, 75 Ω terminated, HD | SVJ-2T-X |
| **Standard Size Video Jacks** | |
| Single straight-through video jack, non-terminated, HD | CJ2014N |
| Single straight-through video jack, terminated, HD | CJ2020N-75 |
| Single straight-through video jack, terminated with F connector, HD | CJ2020N-75F |
| Dual self-normalling video jack, non-terminated, analog/SD | SJ2000N |
| Dual self-normalling video jack, 75 Ω terminated, analog/SD | SJ2000N-75 |
| **MUSA Standard Video Jacks** | |
| Single video jack, MUSA standard, HD | SMJ-2100N |
| **Conversion Plugs and Adapters** | |
| Standard size plug to BNC adapter | CP1051N |
| Standard size plug to BNC adapter, gold | CP1051G |
| Midsize plug to BNC adapter, short body | MBNC-3 |
| Midsize plug to BNC adapter, long body | MBNC-3L |
| Standard size receptacle to midsize receptacle adapter | CAXADPT-1 |
| Midsize plug to standard size receptacle adapter | CAXADPT-2 |
| Standard size plug to midsize receptacle adapter | CAXADPT-3 |
| Coax adapter MUSA plug to BNC | CAXADPT-MU/BNC |
| Coax adapter MUSA plug to standard receptacle | CAXADPT-MU/CPSTD |
| Coax adapter MUSA plug to midsized receptacle | CAXADPT-MU/CPMID |

**Standard Size Conversion Plug**
(CP1051N)

**Midsize Plug to BNC Adapter**
(MBNC-3)

**Standard to Midsize Conversion Adapter**
(CAXADPT-1)

**Midsize to Standard Conversion Plug**
(CAXADPT-2)

**Standard to Midsize Conversion Plug**
(CAXADPT-3)

**MUSA to BNC Adapter**
(CAXADPT-MU/BNC)

**MUSA to Standard Size Adapter**
(CAXADPT-MU/CPSTD)

**MUSA to Midsize Adapter**
(CAXADPT-MU/CPMID)

# Video Patching Systems

## Jacks and Accessories

### Ordering Information

| Description | Catalog Number |
|---|---|
| **Coaxial Patch Plugs** | |
| Standard size solder plug for 734 | PGS-100016 |
| Standard size solder plug for RG59 | CP1041N |
| Standard size solder plug for RG59 gold | CP1041G |
| Midsize solder plug for RG59 | CP1540N |
| Midsize crimp plug for RG59 | CP1540N-CRIMP |
| Midsize crimp plug for RG59, gold | CP1540G-CRIMP |
| Midsize solder plug for 735 | PGS-100018 |
| Standard size HD crimp plug for Belden 1505F | CP-1045 |
| Midsize HD crimp plug for Belden 1505F | CP-1545 |
| MUSA HD crimp plug and boot for Belden 1505F, bulk 50 units | CP-1-MU-B50 |
| **Termination and Looping Plugs** | |
| Standard size 75 Ω termination plug, nickel | CPSTD-TP2 |
| Midsize 75 Ω termination plug, nickel | CPMID-TP2 |
| MUSA 75 Ω termination plug | MUSA-TP2 |
| Standard size HD looping plug, nickel | LP-S1625 |
| Midsize HD looping plug, nickel | LP-M1500 |
| MUSA HD-U-link, nickel | UL-SM1625 |
| Looping plug colored identification icon, 25 pack | ADCICBXX* |
| **Circuit Guard Plugs,** sold in bags of 25 | |
| Standard size | CJP-S-*X* |
| Midsize | CJP-M-*X* |
| **Humbucker Humbucking Coil** | HUM-1 |

*** XX Icon Colors:**

01 Office White
02 Black
03 Red
04 Green
05 Blue
06 Gray
07 Snow White
08 Orange
09 Yellow
10 Purple
11 Brown
12 Clear
13 Putty White

**Midsize Plug**
(CP1540N)

**WECO Looping Plugs**
(LP-S1625/LP-M1500)

**MUSA U-Link**
(UL-SM1625)

**Humbucker**
(HUM-1)

## Humbucker

Common mode hum caused by differences in ground potential is often found in long video cables, incoming and outgoing lines, and separate power distribution systems. The ADC Humbucker eliminates 99.6 percent of a 10 Volt p-p 50/60 Hz ground-induced hum in a 200-foot (61 m) RG59 coaxial cable run. The actual amount of hum reduction depends on cable length, cable type, ground loop potential, and ground loop frequency.

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# Video Patching Systems

## ProPatch® Integrated (PPI) Series

**ProPatch® PPI Series Panels** are the ideal solution when you need a rugged, full-featured panel that will stand up to the most demanding professional applications. These tough, attractive panels feature a rugged epoxy powder-coated steel weldment chassis with a durable molded ABS jack insert. The panels feature rear silk screening for port identification and an adjustable rear cable support bar for superior strain relief, and ADC's exclusive snap-over designation system that prevents cards and windows from coming loose from the panel as is common with other systems. The durable steel frame ensures against bent, cracked or broken rack ears, and the molded ABS inserts prevent stripped screws and cracked inserts common with phenolic panel inserts. The molded inserts are also available in a variety of colors to help segregate signal types such as AES audio, SDI video and HD video within a common facility. Panels are available in black or gray. PPI series panels are covered by an industry-exclusive 15 year* warranty against defects.

*SVJ, MVJ, CJ, CJMID, and SMJ jacks

### Features

- Tough professional construction
- Welded steel chassis with high-impact ABS plastic-molded inserts
- Adjustable steel strain relief cable bar with holes for cable ties
- Highest quality, widest bandwidth, longest lasting jacks available. True 75 Ω impedance
- Molded jack inserts come in a variety of colors and are much more durable than phenolic inserts; screws don't strip out
- Snap-on designation windows for labeling jacks
- All jack styles available
- 15 year waranty
- ProPatch® PPI series unloaded video panels come in 1 RU and 2 RU models. They feature a tough steel weldment chassis with molded ABS jack insert and a strong, adjustable steel cable support bar with holes for cable ties.
- Panels are available for standard size jacks in 2x24, 2x26, and 3x26 arrays. For midsize jacks, panels are available in 2x32 and 3x32 arrays. When ordering jacks, alternating short and long jacks to ease cabling.

**Colored molded jack inserts available as an option**

**1 RU Midsize 2x32 Panel**

**1.5 RU Midsize 2x32 Panel**

**2 RU Midsize 2x32 Panel**
(rear view)

# Video Patching Systems

## ProPatch® Integrated (PPI) Series



The information below explains the catalog numbers contained in the charts on this page and the next. Custom configurations are available; please contact ADC.

**Catalog Number**

**PPI** ___ ___ ___ - ___ - ___ ___

**Panel Height**

| | |
|---|---|
| 1 | 1 RU |
| 15 | 1.5 RU |
| 2 | 2 RU |
| | Specify |

**Number of Jack Rows**

| | |
|---|---|
| 1 | 1 Row |
| 2 | 2 Rows |
| 3 | 3 Rows |

**Number of Jacks per Row**

| | |
|---|---|
| 24 | 24 per row standard WECO and MUSA |
| 26 | 26 per row standard WECO and MUSA |
| 32 | 32 per row midsize only |

**Insert Color**

| | |
|---|---|
| LEAVE BLANK | Same as panel color |
| R | Red* |
| GN | Green* |
| BL | Blue* |
| Y | Yellow* |
| O | Orange* |
| V | Violet* |
| W | White* |

*Non-standard

**Panel Color**

| | |
|---|---|
| LEAVE BLANK | Gray |
| BK | Black |

**Video Jack Type**

| | |
|---|---|
| N | SJ2000N WECO standard size normalling jacks |
| 75N | SJ200N-75 WECO standard size normalling jacks with 75 Ω termination |
| SVJ | SVJ-2 HD WECO standard size normalling jacks |
| SVJT | SVJ-2T HD WECO standard size normalling jacks wtih 75 Ω termination |
| CJ | CJ-2014N WECO standard size single straight-through jacks |
| CJT | CJ-2020N-75 WECO standard size single straight-through jacks with 75 Ω termination |
| MVJ | MVJ-3 WECO midsize normalling jacks |
| MVJT | MVJ-3T WECO midsize normalling jacks with 75 Ω termination |
| CJM | CJ3014N/CJ4014N WECO midsize single straight-through jacks |
| CJMT | CJ3014N-75/CJ4014N-75 WECO midsize single straight-through jacks with 75 Ω termination |
| SMJ | SMJ-2100N MUSA standard jacks |

*For information on this and other custom configurations, please contact ADC.

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# Video Patching Systems

ProPatch® Integrated (PPI) Series



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## Ordering Information

| Description | | | | | Catalog Number | | |
|---|---|---|---|---|---|---|---|
| | | Jack Type | Color | | 1 RU (1.75") | 1.5 RU (2.63") | 2 RU (3.50") |
| **Midsize** | Normalling Jacks | MVJ-3 | Gray | 2x32 | PPI1232-MVJ | PPI15232-MVJ | PPI2232-MVJ |
| | | | Black | 2x32 | PPI1232-MVJ-BK | PPI15232-MVJ-BK | PPI2232-MVJ-BK |
| | | MVJ-3Tx Terminated | Gray | 2x32 | PPI1232-MVJT | PPI15232-MVJT | PPI2232-MVJT |
| | | | Black | 2x32 | PPI1232-MVJT-BK | PPI15232-MVJT-BK | PPI2232-MVJT-BK |
| | Straight-Through Jacks | CJM | Gray | 2x32 | PPI1232-CJM | PPI15232-CJM | PPI2232-CJM |
| | | | Black | 2x32 | PPI1232-CJM-BK | PPI15232-CJM-BK | PPI2232-CJM-BK |
| | | CJMT Terminated | Gray | 2x32 | PPI1232-CJMT | PPI15232-CJMT | PPI2232-CJMT |
| | | | Black | 2x32 | PPI1232-CJMT-BK | PPI15232-CJMT-BK | PPI2232-CJMT-BK |
| | Monitoring Panels | MVJ-3 | Black | 3x32 | - | - | PPI2332-MVJ-MON-BK |
| | | MVJ-3T Terminated | Black | 3x32 | - | - | PPI2332-MVJT-MONT-BK |
| | Empty | None | Gray | 2x32 | PPI1232 | PPI15232 | PPI2232 |
| | | | Black | 2x32 | PPI1232-BK | PPI15232-BK | PPI2232-BK |
| **Standard Size** | Normalling Jacks | SVJ-2 | Gray | 2x24 | PPI1224-SVJ | PPI15224-SVJ | PPI2224-SVJ |
| | | | | 2x26 | PPI1226-SVJ | PPI15226-SVJ | PPI2226-SVJ |
| | | | Black | 2x24 | PPI1224-SVJ-BK | PPI15224-SVJ-BK | PPI2224-SVJ-BK |
| | | | | 2x26 | PPI1226-SVJ-BK | PPI15226-SVJ-BK | PPI2226-SVJ-BK |
| | | SVJ-2T Terminated | Gray | 2x24 | PPI1224-SVJT | PPI15224-SVJT | PPI2224-SVJT |
| | | | | 2x26 | PPI1226-SVJT | PPI15226-SVJT | PPI2226-SVJT |
| | | | Black | 2x24 | PPI1224-SVJT-BK | PPI15224-SVJT-BK | PPI2224-SVJT-BK |
| | | | | 2x26 | PPI1226-SVJT-BK | PPI15226-SVJT-BK | PPI2226-SVJT-BK |
| | Straight-Through Jacks | CJ2014N | Gray | 2x24 | PPI1224-CJ48 | PPI15224-CJ48 | PPI2224-CJ48 |
| | | | | 2x26 | PPI1226-CJ52 | PPI15226-CJ52 | PPI2226-CJ52 |
| | | | Black | 2x24 | PPI1224-CJ48-BK | PPI15224-CJ48-BK | PPI2224-CJ48-BK |
| | | | | 2x26 | PPI1226-CJ52-BK | PPI15226-CJ52-BK | PPI2226-CJ52-BK |
| | | CJ2020N-75 Terminated | Gray | 2x24 | PPI1224-CJ48T | PPI15224-CJ48T | PPI2224-CJ48T |
| | | | | 2x26 | PPI1226-CJ52T | PPI15226-CJ52T | PPI2226-CJ52T |
| | | | Black | 2x24 | PPI1224-CJ48T-BK | PPI15224-CJ48T-BK | PPI2224-CJ48T-BK |
| | | | | 2x26 | PPI1226-CJ52T-BK | PPI15226-CJ52T-BK | PPI2226-CJ52T-BK |
| | Monitoring Panels | SVJ-2 | Gray | 3x24 | - | - | PPI2324-SVJ-MON |
| | | | | 3x26 | - | - | PPI2326-SVJ-MON |
| | | | Black | 3x24 | - | - | PPI2324-SVJ-MON-BK |
| | | | | 3x26 | - | - | PPI2326-SVJ-MON-BK |
| | | SVJ-2T Terminated | Gray | 3x24 | - | - | PPI2324-SVJT-MONT |
| | | | | 3x26 | - | - | PPI2326-SVJT-MONT |
| | | | Black | 3x24 | - | -- | PPI2324-SVJT-MONT-BK |
| | | | | 3x26 | - | - | PPI2326-SVJT-MONT-BK |

# Video Patching Systems

## ProPatch® Integrated (PPI) Series

### Ordering Information

| Description | | | | | Catalog Number | | |
|---|---|---|---|---|---|---|---|
| | | Jack Type | Color | | 1 RU (1.75") | 1.5 RU (2.63") | 2 RU (3.50") |
| **MUSA Standard** | Straight-Through Jacks | SMJ-2100 | Gray | 2x24 | PPI1224-SMJ | PPI15224-SMJ | PPI2224-SMJ |
| | | | | 2x26 | PPI1226-SMJ | PPI15226-SMJ | PPI2226-SMJ |
| | | | Black | 2x24 | PPI1224-SMJ-BK | PPI15224-SMJ-BK | PPI2224-SMJ-BK |
| | | | | 2x26 | PPI1226-SMJ-BK | PPI15226-SMJ-BK | PPI2226-SMJ-BK |
| **Standard Size and MUSA** | Empty | None | Gray | 2x24 | PPI1224 | PPI15224 | PPI2224 |
| | | | | 2x26 | PPI1226 | PPI15226 | PPI2226 |
| | | | Black | 2x24 | PPI1224-BK | PPI15224-BK | PPI2224-BK |
| | | | | 2x26 | PPI1226-BK | PPI15226-BK | PPI2226-BK |

**2 RU Midsize 2x32 Panel**

**2 RU Midsize 3x32 Monitoring Panel**

**2 RU Standard Size 2x26 Panel**

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# Video Patching Systems

## ProPatch® Economical (PPE) Series

**ProPatch® PPE Series Panels** are designed to offer ADC performance on a modest budget. The tough, attractive panels feature a rugged epoxy powder-coated steel faceplate with a durable molded ABS jack insert. The PPE series panels do not provide any rear silk screening for port identification or cable support bars, but are available with the same jack options as the full-featured PPI series panels. Designation strips are provided with clear slide-in acetate windows, upgradeable to ADC's exclusive snap-over designation system. The durable steel faceplate ensures against bent, cracked or broken rack ears, and the molded ABS inserts prevent stripped screws and cracked inserts common with phenolic panel inserts. PPE panels are covered by a one-year warranty against defects, upgradeable to 15 years (contact ADC for details).

### Features

- Steel chassis with high-impact ABS plastic-molded inserts
- Highest quality, widest bandwidth, longest lasting jacks available. True 75 Ω impedance
- Acetate slide-in style designation windows
- Optional snap-over window available
- Available in all jack types
- 1 year warranty, upgradable to 15 years
- ProPatch® PPE Series unloaded video panels come in 1, 2, 3 and 4 RU models. They feature a rugged steel faceplate with molded ABS jack inserts.
- Panels are available for standard size jacks in 2x24, 2x26, and 3x26 arrays. For midsize jacks, panels are available in 2x32 and 3x32 arrays. When ordering jacks, alternating short and long jacks to ease cabling.

**1 RU Midsize 2x32 Panel**
(rear view)

**1 RU Standard Size/MUSA 2x24 Panel**

**1.5 RU Standard Size/MUSA 2x24 Panel**

**2 RU Midsize 2x32 Panel**

**4 RU Midsize 6x32 Panel**

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# Video Patching Systems

## ProPatch® Economical (PPE) Series

The information below explains the catalog numbers contained in the charts on this page and the next. Custom configurations are available; please contact ADC.

**Catalog Number**

PPE ___ ___ ___ - ___ - ___

**Panel Height**

| | |
|---|---|
| 1 | 1 RU |
| 15 | 1.5 RU |
| 2 | 2 RU |
| 3 | 3 RU |
| 4 | 4 RU |

**Number of Jack Rows**

| | |
|---|---|
| 1 | 1 row |
| 2 | 2 rows |
| 3 | 3 rows |
| 4 | 4 rows |
| 6 | 6 rows |

**Number of Jacks per Row**

| | |
|---|---|
| 24 | 24 per row standard WECO and MUSA |
| 26 | 26 per row standard WECO and MUSA |
| 32 | 32 per row midsize only |

**Panel Color**

| | |
|---|---|
| LEAVE BLANK | Gray |
| BK | Black |

**Video Jack Type**

| | |
|---|---|
| N | SJ2000N WECO standard size normalling jacks |
| 75N | SJ200N-75 WECO standard size normalling jacks with 75 Ω termination |
| SVJ | SVJ-2 HD WECO standard size normalling jacks |
| SVJT | SVJ-2T HD WECO standard size normalling jacks with 75 Ω termination |
| CJ | CJ-2014N WECO standard size single straight-through jacks |
| CJT | CJ-2020N-75 WECO standard size single straight-through jacks with 75 Ω termination |
| MVJ | MVJ-3 WECO midsize normalling jacks |
| MVJT | MVJ-3T WECO midsize normalling jacks with 75 Ω termination |
| CJM | CJ3014N/CJ4014N WECO midsize single straight-through jacks midsize |
| CJMT | CJ3014N-75/CJ4014N-75 WECO midsize single straight-through jacks with 75 Ω termination midsize |
| SMJ | SMJ-2100 MUSA standard jacks |

## Ordering Information

| Description | | | | | Catalog Number | | |
|---|---|---|---|---|---|---|---|
| | | Jack Type | Color | | 1 RU (1.75") | 1.5 RU (2.63") | 2 RU (3.50") |
| **Midsize** | Normalling Jacks | MVJ-3 | Gray | 2x32 | PPE1232-MVJ | PPE15232-MVJ | PPE2232-MVJ |
| | | | Black | 2x32 | PPE1232-MVJ-BK | PPE15232-MVJ-BK | PPE2232-MVJ-BK |
| | | MVJ-3T Terminated | Gray | 2x32 | PPE1232-MVJT | PPE15232-MVJT | PPE2232-MVJT |
| | | | Black | 2x32 | PPE1232-MVJT-BK | PPE15232-MVJT-BK | PPE2232-MVJT-BK |
| | Straight-Through Jacks | CJM | Gray | 2x32 | PPE1232-CJM | PPE15232-CJM | PPE2232-CJM |
| | | | Black | 2x32 | PPE1232-CJM-BK | PPE15232-CJM-BK | PPE2232-CJM-BK |
| | | CJMT Terminated | Gray | 2x32 | PPE1232-CJMT | PPE15232-CJMT | PPE2232-CJMT |
| | | | Black | 2x32 | PPE1232-CJMT-BK | PPE15232-CJMT-BK | PPE2232-CJMT-BK |
| | Monitoring Panels | MVJ-3 | Black | 3x32 | - | - | PPE2332-MVJ-MON-BK |
| | | MVJ-3T Terminated | Black | 3x32 | - | - | PPE2332-MVJT-MONT-BK |
| | Empty | None | Gray | 2x32 | PPE1232 | PPE15232 | PPE2232 |
| | | | Black | 2x32 | PPE1232-BK | PPE15232-BK | PPE2232-BK |

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# Video Patching Systems

## ProPatch® Economical (PPE) Series

### Ordering Information

| Description | | | | | Catalog Number | | |
|---|---|---|---|---|---|---|---|
| | | Jack Type | Color | | 1 RU (1.75") | 1.5 RU (2.63") | 2 RU (3.50") |
| **Standard Size** | Normalling Jacks | SVJ-2 | Gray | 2x24 | PPE1224-SVJ | PPE15224-SVJ | PPE2224-SVJ |
| | | | | 2x26 | PPE1226-SVJ | PPE15226-SVJ | PPE2226-SVJ |
| | | | Black | 2x24 | PPE1224-SVJ-BK | PPE15224-SVJ-BK | PPE2224-SVJ-BK |
| | | | | 2x26 | PPE1226-SVJ-BK | PPE15226-SVJ-BK | PPE2226-SVJ-BK |
| | | SVJ-2T Terminated | Gray | 2x24 | PPE1224-SVJT | PPE15224-SVJT | PPE2224-SVJT |
| | | | | 2x26 | PPE1226-SVJT | PPE15226-SVJT | PPE2226-SVJT |
| | | | Black | 2x24 | PPE1224-SVJT-BK | PPE15224-SVJT-BK | PPE2224-SVJT-BK |
| | | | | 2x26 | PPE1226-SVJT-BK | PPE15226-SVJT-BK | PPE2226-SVJT-BK |
| | Straight-Through Jacks | CJ2014N | Gray | 2x24 | PPE1224-CJ48 | PPE15224-CJ48 | PPE2224-CJ48 |
| | | | | 2x26 | PPE1226-CJ52 | PPE15226-CJ52 | PPE2226-CJ52 |
| | | | Black | 2x24 | PPE1224-CJ48-BK | PPE15224-CJ48-BK | PPE2224-CJ48-BK |
| | | | | 2x26 | PPE1226-CJ52-BK | PPE15226-CJ52-BK | PPE2226-CJ52-BK |
| | | CJ2020N-75 Terminated | Gray | 2x24 | PPE1224-CJ48T | PPE15224-CJ48T | PPE2224-CJ48T |
| | | | | 2x26 | PPE1226-CJ52T | PPE15226-CJ52T | PPE2226-CJ52T |
| | | | Black | 2x24 | PPE1224-CJ48T-BK | PPE15224-CJ48T-BK | PPE2224-CJ48T-BK |
| | | | | 2x26 | PPE1226-CJ52T-BK | PPE15226-CJ52T-BK | PPE2226-CJ52T-BK |
| | Monitoring Panel | SVJ-2 | Gray | 3x24 | - | - | PPE2324-SVJ-MON |
| | | | | 3x26 | - | - | PPE2326-SVJ-MON |
| | | | Black | 3x24 | - | - | PPE2324-SVJ-MON-BK |
| | | | | 3x26 | - | - | PPE2326-SVJ-MON-BK |
| | | SVJ-2T Terminated | Gray | 3x24 | - | - | PPE2324-SVJT-MONT |
| | | | | 3x26 | - | - | PPE2326-SVJT-MONT |
| | | | Black | 3x24 | - | - | PPE2324-SVJT-MONT-BK |
| | | | | 3x26 | - | - | PPE2326-SVJT-MONT-BK |
| **MUSA Standard** | Straight-Through Jacks | SMJ-2100 | Gray | 2x24 | PPE1224-SMJ | PPE15224-SMJ | PPE2224-SMJ |
| | | | | 2x26 | PPE1226-SMJ | PPE15226-SMJ | PPE2226-SMJ |
| | | | Black | 2x24 | PPE1224-SMJ-BK | PPE15224-SMJ-BK | PPE2224-SMJ-BK |
| | | | | 2x26 | PPE1226-SMJ-BK | PPE15226-SMJ-BK | PPE2226-SMJ-BK |
| **Standard Size and MUSA** | Empty | None | Gray | 2x24 | PPE1224 | PPE15224 | PPE2224 |
| | | | | 2x26 | PPE1226 | PPE15226 | PPE2226 |
| | | | Black | 2x24 | PPE1224-BK | PPE15224-BK | PPE2224-BK |
| | | | | 2x26 | PPE1226-BK | PPE15226-BK | PPE2226-BK |

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# Video Patching Systems

ProPatch® Economical (PPE) Series

## Ordering Information

| Description | | | | | Catalog Number |
|---|---|---|---|---|---|
| | | Jack Type | Color | | 4 RU (7.00") |
| **Midsize** | Normalling Jacks | MVJ-3 | Gray | 6x32 | PPE4632-MVJ |
| | | | Black | 6x32 | PPE4632-MVJ-BK |
| | | MVJ-3T Terminated | Gray | 6x32 | PPE4632-MVJT |
| | | | Black | 6x32 | PPE4632-MVJT-BK |
| | Straight-Through Jacks | CJM | Gray | 6x32 | PPE4632-CJM |
| | | | Black | 6x32 | PPE4632-CJM-BK |
| | | CJMT Terminated | Gray | 6x32 | PPE4632-CJMT |
| | | | Black | 6x32 | PPE4632-CJMT-BK |
| | Empty | None | Gray | 6x32 | PPE4632 |
| | | | Black | 6x32 | PPE4632-BK |
| **Standard Size** | Normalling Jacks | SVJ-2 | Gray | 6x24 | PPE4624-SVJ |
| | | | | 6x26 | PPE4626-SVJ |
| | | | Black | 6x24 | PPE4624-SVJ-BK |
| | | | | 6x26 | PPE4626-SVJ-BK |
| | | SVJ-2T Terminated | Gray | 6x24 | PPE4624-SVJT |
| | | | | 6x26 | PPE4626-SVJT |
| | | | Black | 6x24 | PPE4624-SVJT-BK |
| | | | | 6x26 | PPE4626-SVJT-BK |
| | Straight-Through Jacks | CJ2014N | Gray | 6x24 | PPE4624-CJ48 |
| | | | | 6x26 | PPE4626-CJ52 |
| | | | Black | 6x24 | PPE4624-CJ48-BK |
| | | | | 6x26 | PPE4626-CJ52-BK |
| | | CJ2020N-75 Terminated | Gray | 6x24 | PPE4624-CJ48T |
| | | | | 6x26 | PPE4626-CJ52T |
| | | | Black | 6x24 | PPE4624-CJ48T-BK |
| | | | | 6x26 | PPE4626-CJ52T-BK |
| **MUSA Standard** | Straight-Through Jacks | SMJ-2100 | Gray | 6x24 | PPE4624-SMJ |
| | | | | 6x26 | PPE4626-SMJ |
| | | | Black | 6x24 | PPE4624-SMJ-BK |
| | | | | 6x26 | PPE4626-SMJ-BK |
| **Standard Size and MUSA** | Empty | None | Gray | 6x24 | PPE4624 |
| | | | | 6x26 | PPE4626 |
| | | | Black | 6x24 | PPE4624-BK |
| | | | | 6x26 | PPE4626-BK |
| **Snap-Over Window Kits** | | | | | |
| Window for all 1-rack unit standard WECO and MUSA 1.75" panels, 2 windows | | | | | VP-DES-279-A |
| Window for all 1-rack unit midsize WECO 1.75" panels, 2 windows | | | | | VP-DES-343-A |
| Window for all 1.5-rack unit and larger standard, midsize and MUSA, 1 window | | | | | HDW-101115 |

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# Video Patching Systems

## Component Patching System (CAPS)

The CAPS Component Patching System for analog or digital component video provides the ideal combination of modular flexibility, durability, and preconfigurability all in one system. The steel 2 RU modular panel with cable tray can be preconfigured with a full complement of jacks, or you can order an empty panel and add easily installed jack modules as needed. Modules and preconfigured panels are available in a variety of configurations. Also, see the UniPatch® modular system beginning on page 86.

**RGB Module**
(CV-M-N)

**8 RGB Group Patchbay**
(CV-8-N )

(rear view)

**6 RGB + Horizontal and Vertical Sync Patchbay**
(CV-6-MHV-3T)

### Features

- 2 RU epoxy powder-coated steel panel, including top cover and cable wrap holes for superior strain relief
- Order panel preconfigured, or order an empty panel and add modules as needed
- Jack groups for RGB, P$_B$P$_R$Y, RGB + Sync, or RGB + horizontal and vertical sync
- Standard and midsize jacks of all kinds: dual self-normal, straight-through singles, straight with termination, and super (high-definition) dual self-normal
- Horizontal and vertical designation strip holders included

# Video Patching Systems

## Component Patching System (CAPS)

### Ordering Information

| Description | Catalog Number |
|---|---|
| **Loaded Patchbays** | |
| 8 RGB, $P_r$ $P_B$ Y group panel | |
| SJ2000N jacks | CV-8-N |
| SJ2000N-75 jacks | CV-8-N75 |
| CJ2014N single jacks | CV-8-CJ48 |
| 10 RGB + sync group panel (jacks grouped vertically) | |
| SVJ-2T jacks | CV-10-S-SVJT |
| 6 RGB + horizontal and vertical sync | |
| MVJ-3T midsize jacks | CV-6MHV-3T |
| **Modular Patchbays** | |
| Chassis - 3.5" x 19" (8.89 x 48.26 cm); accommodates up to 8 RGB group modules | CV-CM |
| One RGB, $P_r$ $P_B$ Y group module; SJ2000N jacks | CV-M-N |
| Blank module | CPPV-B |
| **Panels without Jacks** | |
| 8 RGB, $P_r$ $P_B$ Y group panel | CV-8-NJ |
| 6 RGB + sync group panel | CV-6-NJ |
| **RGB, $P_r$ $P_B$ Y Video Patch Cords;** Black, three-conductor cable, standard size plugs | |
| 2 ft/.61 m | CVPC-2 |
| 3 ft/.93 m | CVPC-3 |
| 4 ft/1.2 m | CVPC-4 |
| 6 ft/1.83 m | CVPC-6 |
| **Time Delayed Patchbay**<br>For patching of timed analog video circuits; requires use of 3' patch cord only 2x24, delayed compensated patchbay, 3.5" x 19" (8.89 x 48.26 cm), utilizes SJ1000N-75 | PPV-24MKII |

Custom panel configurations are available; please contact ADC.



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# Video Patching Systems

## Coax Patch Cords

ADC offers high-quality video patch cords capable of handling uncompressed high-definition digital video, serial digital video, and analog as well as AES audio. ADC patch cords feature a patented True 75 Ω design that virtually eliminates bit errors, are made of the highest quality materials and provide excellent mechanical durability.

The digital television revolution is stretching the limits of the physical plant technology designed for analog video copper. Cable and connectors not optimized for the digital environment can seriously degrade the digital signal being transported. The problem is that all WECO-standard jacks and patch cords exhibit an impedance violation of between 58 and 62 Ω in the patched state. This becomes a major source of attenuation and bit errors in serial digital and high-definition video signals.

### Patented HD Patch Cords

ADC's ST series standard-size patch cords feature a patented design that provides a true 75 Ω interface in the patched state when used with ADC's SVJ-2 super video jack family. ST series maintains the WECO interface for maximum industry compatibility and provides a true 75 Ω interface.

### HD Rated VX™ Series

ADC's VX™ standard, midsize and MUSA standard video patch cords feature a unique plug design that optimizes impedance performance during the patched state. The unique plug design is optimized for HD video applications for WECO midsize and MUSA formats. For WECO standard size HD patching, the ST series is recommended.

Both designs reduce or eliminate attenuation and bit errors in serial digital and high-definition video signals, especially in the uncompressed mode.

### Features

- Patented design provides a 75 Ω interface in the patched state
- Standard size compatible with all WECO .090 standard video jacks
- Performance matched for uncompressed HDTV signals (1.485 Gbit/s)
- Gastight crimp design. 100 percent solderless construction assures quality
- Precision-molded insulators for true impedance match and greater unit-to-unit consistency compared to machined plastic
- HD-rated 1505F cable with matte finish
- Full-molded strain relief defeats abuse
- Gold-plated center conductors
- Available in red, green, blue, black, orange, yellow, violet, and white in 2-foot (.6 m) to 6-foot (1.8 m) lengths
- MUSA format features unique closed-entry center pin to prevent breakage

# Video Patching Systems

## Coax Patch Cords

### Ordering Information

| Description | Catalog Number | | | | |
|---|---|---|---|---|---|
| **For all WECO Standard Size 2x24 and 2x26 Panels** | **1 ft/.3 m** | **2 ft/.61 m** | **3 ft/.93m** | **4 ft/1.22 m** | **6 ft/1.83 m** |
| **WECO Standard Size VX to Standard Size VX Plug** | | | | | |
| Black | BK1VX | BK2VX | BK3VX | BK4VX | BK6VX |
| Red | R1VX | R2VX | R3VX | R4VX | R6VX |
| Orange | O1VX | O2VX | O3VX | O4VX | O6VX |
| Yellow | Y1VX | Y2VX | Y3VX | Y4VX | Y6VX |
| Green | G1VX | G2VX | G3VX | G4VX | G6VX |
| Blue | B1VX | B2VX | B3VX | B4VX | B6VX |
| Violet | V1VX | V2VX | V3VX | V4VX | V6VX |
| White | W1VX | W2VX | W3VX | W4VX | W6VX |
| **WECO ST Standard Size ST HD to Standard Size Plug** | | | | | |
| Black | BK1V-STS | BK2V-STS | BK3V-STS | BK4V-STS | BK6V-STS |
| Red | R1V-STS | R2V-STS | R3V-STS | R4V-STS | R6V-STS |
| Orange | O1V-STS | O2V-STS | O3V-STS | O4V-STS | O6V-STS |
| Yellow | - | Y2V-STS | Y3V-STS | Y4V-STS | Y6V-STS |
| Green | - | G2V-STS | G3V-STS | G4V-STS | G6V-STS |
| Blue | - | B2V-STS | B3V-STS | B4V-STS | B6V-STS |
| Violet | - | V2V-STS | V3V-STS | V4V-STS | V6V-STS |
| White | - | W2V-STS | W3V-STS | W4V-STS | W6V-STS |
| **WECO Standard Size VX to BNC** | | | | | |
| Black | BK1VX-B | BK2VX-B | BK3VX-B | BK4VX-B | BK6VX-B |
| Red | R1VX-B | R2VX-B | R3VX-B | R4VX-B | R6VX-B |
| Orange | O1VX-B | O2VX-B | O3VX-B | O4VX-B | O6VX-B |
| Yellow | Y1VX-B | Y2VX-B | Y3VX-B | Y4VX-B | Y6VX-B |
| Blue | B1VX-B | B2VX-B | B3VX-B | B4VX-B | B6VX-B |
| Violet | V1VX-B | V2VX-B | V3VX-B | V4VX-B | V6VX-B |
| **WECO Standard Size ST HD to BNC** | | | | | |
| Black | BK1V-STS-B | BK2V-STS-B | BK3V-STS-B | BK4V-STS-B | BK6V-STS-B |
| Red | R1V-STS-B | R2V-STS-B | R3V-STS-B | R4V-STS-B | R6V-STS-B |
| Orange | O1V-STS-B | O2V-STS-B | O3V-STS-B | O4V-STS-B | O6V-STS-B |
| Yellow | Y1V-STS-B | Y2V-STS-B | Y3V-STS-B | Y4V-STS-B | Y6V-STS-B |
| Green | G1V-STS-B | G2V-STS-B | G3V-STS-B | G4V-STS-B | G6V-STS-B |
| Blue | B1V-STS-B | B2V-STS-B | B3V-STS-B | B4V-STS-B | B6V-STS-B |
| Violet | V1V-STS-B | V2V-STS-B | V3V-STS-B | V4V-STS-B | V6V-STS-B |

**Note:** Standard patch cord colors are black, red, orange, yellow, green, blue, violet and white. These color cords are available in the standard lengths shown above; please contact ADC for additional custom lengths and leadtime.

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# Video Patching Systems

## Coax Patch Cords

### Ordering Information

| Description | Catalog Number | | | | |
|---|---|---|---|---|---|
| **For all WECO Midsize 2x32 Panels** | **1 ft/.3 m** | **2 ft/.61m** | **3 ft/.93 m** | **4 ft/1.22 m** | **6 ft/1.83 m** |
| **WECO Midsize Plug to Midsize Plug** | | | | | |
| Black | BK1V-STM | BK2V-STM | BK3V-STM | BK4V-STM | BK6V-STM |
| Red | R1V-STM | R2V-STM | R3V-STM | R4V-STM | R6V-STM |
| Orange | O1V-STM | O2V-STM | O3V-STM | O4V-STM | O6V-STM |
| Yellow | Y1V-STM | Y2V-STM | Y3V-STM | Y4V-STM | Y6V-STM |
| Green | G1V-STM | G2V-STM | G3V-STM | G4V-STM | G6V-STM |
| Blue | B1V-STM | B2V-STM | B3V-STM | B4V-STM | B6V-STM |
| Violet | V1V-STM | V2V-STM | V3V-STM | V4V-STM | V6V-STM |
| White | W1V-STM | W2V-STM | W3V-STM | W4V-STM | W6V-STM |
| **WECO Midsize Plug to BNC** | | | | | |
| Black | BK1V-STM-B | BK2V-STM-B | BK3V-STM-B | BK4V-STM-B | BK6V-STM-B |
| Red | R1V-STM-B | R2V-STM-B | R3V-STM-B | R4V-STM-B | R6V-STM-B |
| Orange | O1V-STM-B | O2V-STM-B | O3V-STM-B | O4V-STM-B | O6V-STM-B |
| Yellow | Y1V-STM-B | Y2V-STM-B | Y3V-STM-B | Y4V-STM-B | Y6V-STM-B |
| Green | G1V-STM-B | G2V-STM-B | G3V-STM-B | G4V-STM-B | G6V-STM-B |
| Blue | B1V-STM-B | B2V-STM-B | B3V-STM-B | B4V-STM-B | B6V-STM-B |
| Violet | V1V-STM-B | V2V-STM-B | V3V-STM-B | V4V-STM-B | V6V-STM-B |
| White | W1V-STM-B | W2V-STM-B | W3V-STM-B | W4V-STM-B | W6V-STM-B |
| **WECO Midsize Plug to Standard Size Plug** | | | | | |
| Black | BK1V-M-S | BK2V-M-S | BK3V-M-S | BK4V-M-S | BK6V-M-S |
| Red | R1V-M-S | R2V-M-S | R3V-M-S | R4V-M-S | R6V-M-S |
| Orange | O1V-M-S | O2V-M-S | O3V-M-S | O4V-M-S | O6V-M-S |
| Yellow | Y1V-M-S | Y2V-M-S | Y3V-M-S | Y4V-M-S | Y6V-M-S |
| Green | G1V-M-S | G2V-M-S | G3V-M-S | G4V-M-S | G6V-M-S |
| Blue | B1V-M-S | B2V-M-S | B3V-M-S | B4V-M-S | B6V-M-S |
| Violet | V1V-M-S | V2V-M-S | V3V-M-S | V4V-M-S | V6V-M-S |
| White | W1V-M-S | W2V-M-S | W3V-M-S | W4V-M-S | W6V-M-S |

**Note:** Standard patch cord colors are black, red, orange, yellow, green, blue, violet and white. These color cords are available in the standard lengths shown above; please contact ADC for additional custom lengths and leadtime.

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# Video Patching Systems

## Coax Patch Cords

### Ordering Information

| Description | Catalog Number | | | | |
|---|---|---|---|---|---|
| **For all MUSA Standard 2x24 and 2x26 Panels** | **1 ft/.3 m** | **2 ft/.61 m** | **3 ft/.93 m** | **4 ft/1.22 m** | **6 ft/1.83 m** |
| **MUSA to MUSA (HD)** | | | | | |
| Black | BK300V-MU | BK600V-MU | BK900V-MU | BK1200V-MU | BK1800V-MU |
| Red | R300V-MU | R600V-MU | R900V-MU | R1200V-MU | R1800V-MU |
| Orange | O300V-MU | O600V-MU | O900V-MU | O1200V-MU | O1800V-MU |
| Yellow | Y300V-MU | Y600V-MU | Y900V-MU | Y1200V-MU | Y1800V-MU |
| Green | G300V-MU | G600V-MU | G900V-MU | G1200V-MU | G1800V-MU |
| Blue | B300V-MU | B600V-MU | B900V-MU | B1200V-MU | B1800V-MU |
| Violet | V300V-MU | V600V-MU | V900V-MU | V1200V-MU | V1800V-MU |
| White | W300V-MU | W600V-MU | W900V-MU | W1200V-MU | W1800V-MU |
| **MUSA to BNC** | | | | | |
| Black | BK300V-MU-B | BK600V-MU-B | BK900V-MU-B | BK1200V-MU-B | BK1800V-MU-B |
| Red | R300V-MU-B | R600V-MU-B | R900V-MU-B | R1200V-MU-B | R1800V-MU-B |
| Orange | O300V-MU-B | O600V-MU-B | O900V-MU-B | O1200V-MU-B | O1800V-MU-B |
| Yellow | Y300V-MU-B | Y600V-MU-B | Y900V-MU-B | Y1200V-MU-B | Y1800V-MU-B |
| Green | G300V-MU-B | G600V-MU-B | G900V-MU-B | G1200V-MU-B | G1800V-MU-B |
| Blue | B300V-MU-B | B600V-MU-B | B900V-MU-B | B1200V-MU-B | B1800V-MU-B |
| Violet | V300V-MU-B | V600V-MU-B | V900V-MU-B | V1200V-MU-B | V1800V-MU-B |
| White | W300V-MU-B | W600V-MU-B | W900V-MU-B | W1200V-MU-B | W1800V-MU-B |
| **MUSA to F** | | | | | |
| Black | BK300V-MU-F | BK600V-MU-F | BK900V-MU-F | BK1200V-MU-F | BK1800V-MU-F |
| Red | R300V-MU-F | R600V-MU-F | R900V-MU-F | R1200V-MU-F | R1800V-MU-F |
| Orange | O300V-MU-F | O600V-MU-F | O900V-MU-F | O1200V-MU-F | O1800V-MU-F |
| Yellow | Y300V-MU-F | Y600V-MU-F | Y900V-MU-F | Y1200V-MU-F | Y1800V-MU-F |
| Green | G300V-MU-F | G600V-MU-F | G900V-MU-F | G1200V-MU-F | G1800V-MU-F |
| Blue | B300V-MU-F | B600V-MU-F | B900V-MU-F | B1200V-MU-F | B1800V-MU-F |
| Violet | V300V-MU-F | V600V-MU-F | V900V-MU-F | V1200V-MU-F | V1800V-MU-F |
| White | W300V-MU-F | W600V-MU-F | W900V-MU-F | W1200V-MU-F | W1800V-MU-F |
| **MUSA to RCA** | | | | | |
| Black | BK300V-MU-R | BK600V-MU-R | BK900V-MU-R | BK1200V-MU-R | BK1800V-MU-R |
| Red | R300V-MU-R | R600V-MU-R | R900V-MU-R | R1200V-MU-R | R1800V-MU-R |
| Orange | O300V-MU-R | O600V-MU-R | O900V-MU-R | O1200V-MU-R | O1800V-MU-R |
| Yellow | Y300V-MU-R | Y600V-MU-R | Y900V-MU-R | Y1200V-MU-R | Y1800V-MU-R |
| Green | G300V-MU-R | G600V-MU-R | G900V-MU-R | G1200V-MU-R | G1800V-MU-R |
| Blue | B300V-MU-R | B600V-MU-R | B900V-MU-R | B1200V-MU-R | B1800V-MU-R |
| Violet | V300V-MU-R | V600V-MU-R | V900V-MU-R | V1200V-MU-R | V1800V-MU-R |
| White | W300V-MU-R | W600V-MU-R | W900V-MU-R | W1200V-MU-R | W1800V-MU-R |
| **MUSA to WECO Standard ST HD** | | | | | |
| Black | BK300V-MU-STS | BK600V-MU-STS | BK900V-MU-STS | BK1200V-MU-STS | BK1800V-MU-STS |
| Red | R300V-MU-STS | R600V-MU-STS | R900V-MU-STS | R1200V-MU-STS | R1800V-MU-STS |
| Orange | O300V-MU-STS | O600V-MU-STS | O900V-MU-STS | O1200V-MU-STS | O1800V-MU-STS |
| Yellow | Y300V-MU-STS | Y600V-MU-STS | Y900V-MU-STS | Y1200V-MU-STS | Y1800V-MU-STS |
| Green | G300V-MU-STS | G600V-MU-STS | G900V-MU-STS | G1200V-MU-STS | G1800V-MU-STS |
| Blue | B300V-MU-STS | B600V-MU-STS | B900V-MU-STS | B1200V-MU-STS | B1800V-MU-STS |
| Violet | V300V-MU-STS | V600V-MU-STS | V900V-MU-STS | V1200V-MU-STS | V1800V-MU-STS |
| White | W300V-MU-STS | W600V-MU-STS | W900V-MU-STS | W1200V-MU-STS | W1800V-MU-STS |

**Note:** Standard patch cord colors are black, red, orange, yellow, green, blue, violet and white. These color cords are available in the standard lengths shown above; please contact ADC for additional custom lengths and leadtime.

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# Video Patching Systems

## Coax Patch Cords

### Ordering Information

| Description | Catalog Number | | | | |
|---|---|---|---|---|---|
| **Other Coax Patch Cords** | **1 ft/ .3m** | **2 ft/ .61m** | **3 ft/.93m** | **4 ft/1.22m** | **6 ft/1.83m** |
| **BNC to BNC** | | | | | |
| Black | BK1VX-B/B | BK2VX-B/B | BK3VX-B/B | BK4VX-B/B | BK6VX-B/B |
| Red | R1VX-B/B | R2VX-B/B | R3VX-B/B | R4VX-B/B | R6VX-B/B |
| Orange | O1VX-B/B | O2VX-B/B | O3VX-B/B | O4VX-B/B | O6VX-B/B |
| Yellow | Y1VX-B/B | Y2VX-B/B | Y3VX-B/B | Y4VX-B/B | Y6VX-B/B |
| Green | G1VX-B/B | G2VX-B/B | G3VX-B/B | G4VX-B/B | G6VX-B/B |
| Blue | B1VX-B/B | B2VX-B/B | B3VX-B/B | B4VX-B/B | B6VX-B/B |
| Violet | V1VX-B/B | V2VX-B/B | V3VX-B/B | V4VX-B/B | V6VX-B/B |
| White | W1VX-B/B | W2VX-B/B | W3VX-B/B | W4VX-B/B | W6VX-B/B |
| **F to F** | | | | | |
| Black | BK1V-F-F | BK2V-F-F | BK3V-F-F | BK4V-F-F | BK6V-F-F |
| Red | R1V-F-F | R2V-F-F | R3V-F-F | R4V-F-F | R6V-F-F |
| Orange | O1V-F-F | O2V-F-F | O3V-F-F | O4V-F-F | O6V-F-F |
| Yellow | Y1V-F-F | Y2V-F-F | Y3V-F-F | Y4V-F-F | Y6V-F-F |
| Green | G1V-F-F | G2V-F-F | G3V-F-F | G4V-F-F | G6V-F-F |
| Blue | B1V-F-F | B2V-F-F | B3V-F-F | B4V-F-F | B6V-F-F |
| Violet | V1V-F-F | V2V-F-F | V3V-F-F | V4V-F-F | V6V-F-F |
| White | W1V-F-F | W2V-F-F | W3V-F-F | W4V-F-F | W6V-F-F |
| **RCA to RCA** | | | | | |
| Black | BK1V-R-R | BK2V-R-R | BK3V-R-R | BK4V-R-R | BK6V-R-R |
| Red | R1V-R-R | R2V-R-R | R3V-R-R | R4V-R-R | R6V-R-R |
| Orange | O1V-R-R | O2V-R-R | O3V-R-R | O4V-R-R | O6V-R-R |
| Yellow | Y1V-R-R | Y2V-R-R | Y3V-R-R | Y4V-R-R | Y6V-R-R |
| Green | G1V-R-R | G2V-R-R | G3V-R-R | G4V-R-R | G6V-R-R |
| Blue | B1V-R-R | B2V-R-R | B3V-R-R | B4V-R-R | B6V-R-R |
| Violet | V1V-R-R | V2V-R-R | V3V-R-R | V4V-R-R | V6V-R-R |
| White | W1V-R-R | W2V-R-R | W3V-R-R | W4V-R-R | W6V-R-R |

**Note:** Standard patch cord colors are black, red, orange, yellow, green, blue, violet and white. These color cords are available in the standard lengths shown above; please contact ADC for additional custom lengths and leadtime.

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# ProPatch® Audio Patching Systems

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# Audio Patching Systems

## ProPatch® Programmable (PPP) Series

The ProPatch® Programmable modular system offers unprecedented reliability and flexibility in a convenient, space-saving size and lightweight package. Specifically engineered for everyday use in demanding mobile trucks, the ProPatch Programmable system is the only product in its class that passes stringent MIL-STD-202F standards for vibration and environmental requirements.

The ProPatch Programmable bantam system is a WECO-standard module in a high-density 2x48 one rack space panel. The longframe system is a WECO-standard module in either a 2x24 or high-density 2x32 one rack space configuration. The modular design allows individual front jack access for circuit and ground configurations without having to take the entire panel offline or removing it from the rack. Each modular jack features WECO gold crossbar contacts that provide self-cleaning action and maximize reliability. Jack modules are also individually sealed which prevents dust and contamination from convection plenum action common in rack mounted systems.

The ProPatch Programmable series is available with a variety of termination options including QCP punchdown, LSA-PLUS® punchdown, 3-pin, 56-pin, 90-pin, 120-pin EDAC/ELCO connectors, and 50-pin AMP "champ" connectors, in both an eight-connector version for audio and a four-connector version for RTS/ClearCom type intercom systems.

Only five inches deep and 6.2 pounds fully configured, the ProPatch Programmable series is unmatched in the marketplace. Using ADC's patent-pending escutcheon kit, the one rack unit panel can be converted to a 1.5 rack unit configuration. This allows the use of ADC's ultra-large designation strips, providing room for three lines of text, plus markers—the largest designations on the market.

# Audio Patching Systems

ProPatch® Programmable (PPP) Series





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## Individual Jack Access

Each ProPatch® Programmable panel features individual jack cards. Cards contain an individual circuit pair of jacks, front panel circuit status snap-in icon, and seven-position gold plated sealed DIP switch for normal and ground configuration. The gold-plated header card plugs and sockets contained in the chassis ensure maximum reliability.

To remove a jack, remove the top and bottom designation strips, push down the locking tab on the jack module and slide the module out from the front of the chassis. It is not necessary to remove the entire panel from the rack, or the cover from the chassis. Unauthorized circuit changes are eliminated because switches are hidden from front panel view.

The ProPatch Programmable system is the only product in its class that passes demanding MIL-202 environmental testing for thermal shock, resistance from moisture contamination, plating corrosion from salt fog, and vibration to simulate long-term fixed installation and over-the-road use.

**Bantam**

ProPatch Programmable panel allows individual front-panel jack access for normals and grounds without having to take the entire panel off-line. Special 7-position DIP switches allows configuration of the circuit normal and grounds without cumbersome jumpers or pins to lose. (See-through cover in photo is for demonstration purposes only.)

**Longframe**

### Features

- Industry's only bantam and longframe audio panel fully qualified to meet demanding military standards (MIL-STD 202F for ruggedness, and MIL-J-641E for jack compliance)
- Lightweight panels weigh only 6.2 pounds (2.8 kg)
- High-density bantam 2x48 WECO-compliant bantam jacks on 0.312-inch centers
- High-density 2x32 or 2x24 longframe jack on .500-inch centers
- Gold plated DIP switch selectable circuit normals and grounds
- Shallow depth chassis determined by connector style
- Fully AES/EBU 110 W digital and analog compliant
- Modular design allows individual jack access/ configuration without affecting other circuits
- Grounds can be configured on an individual circuit basis for lift, chassis, sleeve, and common ground
- Modules snap into place, tabs lock into chassis
- Circuit status icons allow users to identify circuit status with snap-in icons in eight colors
- Designation strips cover tabs to prevent unauthorized access to circuit configuration switches
- Converts to a 1.5 rack unit panel with a patent-pending escutcheon kit
- Largest designations on the market
  Bantam: .410" for 1 RU
  Longframe: .313" for 1 RU
  Bantam and Longframe: .680" for 1.5 RU

# Audio Patching Systems

ProPatch® Programmable (PPP) Series

## Bantam and Longframe Chassis and Module Specifications

**ELECTRICAL**

| | |
|---|---|
| **Contact resistance:** | 0.020 Ω max (initial)<br>0.020 Ω max (after life cycling)<br>0.10 Ω max (after salt spray) |
| **Insulation resistance:** | 10,000 MΩ min (initial)<br>1,000 MΩ min (after moisture resistance test) |
| **Dielectric withstanding:** | Voltage: 500 Vac |
| **Contact rating:** | Max: 100 mA + 130 Vdc; Min: -40 dBm |

**MECHANICAL**

| | |
|---|---|
| **Mechanical shock:** | Per MIL-STD-202F, Method 213B, test condition H |
| **Vibration:** | MIL-STD-1344, Method 2005, test condition I |
| **Insertion force:** | 7 lbs (3.17 kg) max |
| **Withdrawal force:** | 1.5 lbs (.679 kg) min |
| **Life:** | 20,000 insertion/withdrawal cycles min |

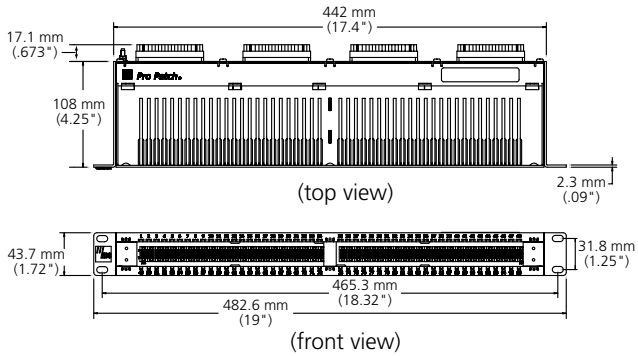
**ENVIRONMENTAL**

| | |
|---|---|
| **Operating temperature:** | -40° to 65°C (-40° to 149°F) |
| **Storage temperature:** | -55° to 85°C (-67° to 185°F) |
| **Thermal shock:** | Per MIL-STD-202F, Method 107G, test condition A |
| **Operating humidity:** | 0% to 95% (no condensation) |
| **Storage humidity:** | 0% to 95% (no condensation) |
| **Salt spray:** | Per MIL-STD-202F, Method 101D |
| **Moisture resistance:** | Per MIL-STD-202F, Method 106E |

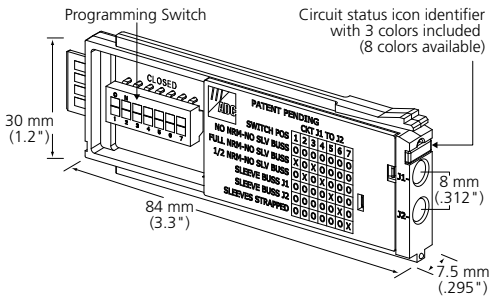
**MATERIALS**

| | |
|---|---|
| **Chassis frame:** | Steel, zinc plated with electroless nickel plating |
| **Jack frame:** | Unreinforced polyetherimide resin rated UL 94-V0 for flammability |
| **Springs:** | Nickel-silver |
| **Contacts:** | WECO No. 1 gold crossbar alloy welded to springs |
| **PC boards:** | FR-4 |
| **Sockets:** | Phosper bronze<br>30 micro inches gold on contact |
| **Switches:** | Copper alloy<br>10 micro inches min gold on contact |

## Bantam Chassis and Jack Dimensions

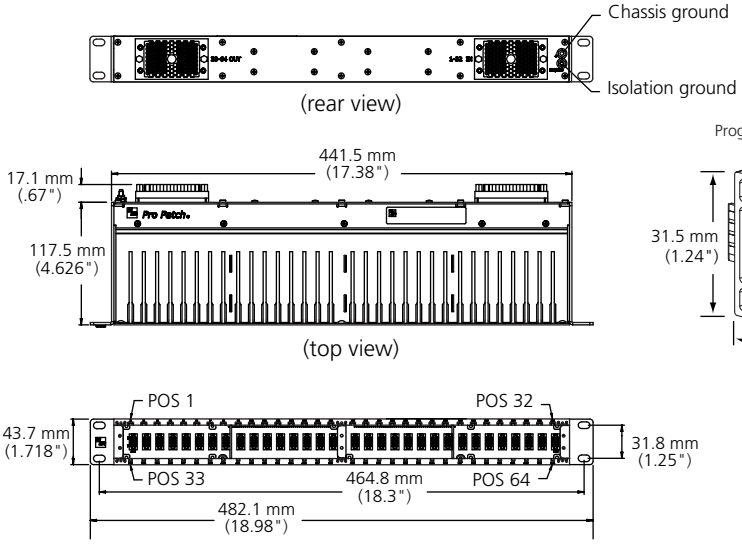



**Typical 1 RU 48-Position Panel**

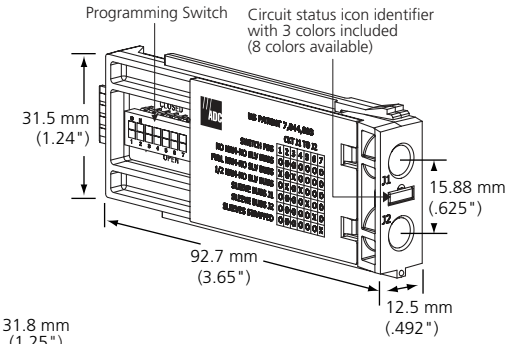



**Bantam Jack**

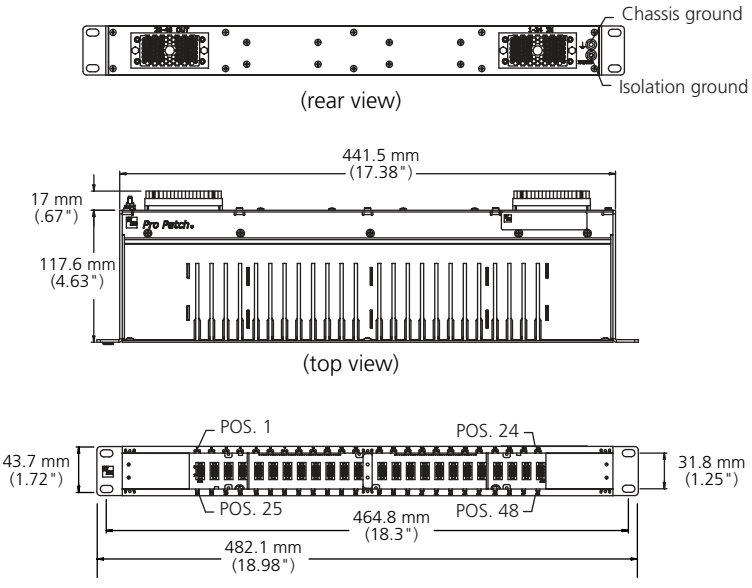
## Longframe Chassis and Jack Dimensions




**Typical 1 RU 32-Position Panel**




**Longframe Jack**




**Typical 1 RU 24-Position Panel**



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# Audio Patching Systems

## ProPatch® Programmable (PPP) Series

**2x48 Bantam Panel**
(shown with designation)

### Ordering Information

| Description | | Catalog Number |
|---|---|---|
| **2x48 Bantam Panels** | | |
| EDAC 3-Pin | Loaded chassis configured: | |
| | Half normalled | PPP1248-E3-HN |
| | Half normalled, with mating connector kit | PPP1248-E3-HN-S |
| | No normals | PPP1248-E3-NN |
| | No normals, with mating connector kit | PPP1248-E3-NN-S |
| | Normals strapped | PPP1248-E3-NS |
| | Normals strapped, with mating connector kit | PPP1248-E3-NS-S |
| | Empty chassis | PPP1248-E3 |
| | Empty chassis, with mating connector kit | PPP1248-E3-S |
| EDAC 56-Pin | Loaded chassis configured: | |
| | Half normalled | PPP1248-E56-HN |
| | Normals strapped | PPP1248-E56-NS |
| | Empty chassis | PPP1248-E56 |
| EDAC 90-Pin | Loaded chassis configured: | |
| | Half normalled | PPP1248-E90-HN |
| | Half normalled, with mating connector kit | PPP1248-E90-HN-S |
| | Normals strapped | PPP1248-E90-NS |
| | Normals strapped, with mating connector kit | PPP1248-E90-NS-S |
| | Empty chassis | PPP1248-E90 |
| AMP 50<br>8 connectors | Loaded chassis configured: Normals strapped | PPP1248-A50-NS |
| | Empty chassis | PPP1248-A50 |
| AMP 50 (Intercom)<br>4 connectors | Loaded chassis configured: | |
| | Half normalled | PPP1248-ICA50-HN |
| | Normals strapped | PPP1248-ICA50-NS |
| | Empty chassis | PPP1248-ICA50 |
| QCP MKII | Loaded chassis configured: | |
| | Half normalled | PPP1248-QCP-HN |
| | Normals strapped | PPP1248-QCP-NS |
| | Empty chassis | PPP1248-QCP |

**EDAC 3-pin Chassis**
PPP1248-E3-NS (rear view)

**EDAC 56-pin Chassis**
PPP1248-E56-NS (rear view)

**EDAC 90-pin Chassis**
PPP1248-E90-NS (rear view)

# Audio Patching Systems
ProPatch® Programmable (PPP) Series





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**2x32 Longframe Panel**
(front view)

## Ordering Information

| Description | | Catalog Number |
|---|---|---|
| **2x32 Longframe Panels** | | |
| EDAC 3-Pin | Loaded chassis configured: | |
| | Half normalled | PPP1232-E3-HN |
| | Half normalled, with mating connector kit | PPP1232-E3-HN-S |
| | Empty chassis | PPP1232-E3 |
| | No normals | PPP1232-E3-NN |
| | No normals, with mating connector kit | PPP1232-E3-NN-S |
| | Normals strapped | PPP1232-E3-NS |
| | Normals strapped, with mating connector kit | PPP1232-E3-NS-S |
| EDAC 56-Pin | Loaded chassis configured: | |
| | Half normalled | PPP1232-E56-HN |
| | Half normalled, with mating connector kit | PPP1232-E56-HN-S |
| | Normals strapped | PPP1232-E56-NS |
| | Normals strapped, with mating connector kit | PPP1232-E56-NS-S |
| | Empty chassis | PPP1232-E56 |
| EDAC 120-Pin | Loaded chassis configured: | |
| | Half normalled | PPP1232-E120-HN |
| | Half normalled, with mating connector kit | PPP1232-E120-HN-S |
| | Normals strapped | PPP1232-E120-NS |
| | Normals strapped, with mating connector kit | PPP1232-E120-NS-S |
| | Empty chassis | PPP1232-E120 |
| LSA-PLUS® | Loaded chassis configured: | |
| | Half normalled | PPP1232-LSA-HN |
| | Normals strapped | PPP1232-LSA-NS |
| | Empty chassis | PPP1232-LSA |
| QCP MKII | Loaded chassis configured: | |
| | Half normalled | PPP1232-QCP-HN |
| | Normals strapped | PPP1232-QCP-NS |
| | Empty chassis | PPP1232-QCP |

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# Audio Patching Systems

## ProPatch® Programmable (PPP) Series

**2x24 Longframe Panel**
(front view)

### Ordering Information

| Description | | Catalog Number |
|---|---|---|
| **2x24 Longframe Panels** | | |
| EDAC 90-Pin | Loaded chassis configured: | |
| | Half normalled | PPP1224-E90-HN |
| | Half normalled, with mating connector kit | PPP1224-E90-HN-S |
| | Normals strapped | PPP1224-E90-NS |
| | Normals strapped, with mating connector kit | PPP1224-E90-NS-S |
| | Empty chassis | PPP1224-E90 |
| LSA-PLUS® | Loaded chassis configured: | |
| | Half normalled | PPP1224-LSA-HN |
| | Normals strapped | PPP1224-LSA-NS |
| | Empty chassis | PPP1224-LSA |
| QCP MKIV | Loaded chassis configured: | |
| | Half normalled | PPP1224-MKIV-HN |
| | Normals strapped | PPP1224-MKIV-NS |
| | Empty chassis | PPP1224-MKIV |
| QCP MKII | Loaded chassis configured: | |
| | Half normalled | PPP1224-QCP-HN |
| | Normals strapped | PPP1224-QCP-NS |
| | Empty chassis | PPP1224-QCP |

**QCP MKII Chassis**
(rear view)

**LSA-PLUS Chassis**
(rear view)

# Audio Patching Systems

ProPatch® Programmable (PPP) Series

## Jacks and Accessories

**Bantam Jack**
(AM1-BAN)

**Longframe Jack**
(AM-LF1)

**1.5 RU Chassis Conversion Kit**
(PPP-15-CHAS-KIT)

### Ordering Information

| Description | Catalog Number |
|---|---|
| **Programmable Audio Jacks** | |
| Bantam | AM1-BAN |
| Longframe | AM-LF1 |
| **1.5 RU Chassis Conversion Kit for Bantam and Longframe** | PPP-15-CHAS-KIT |
| **Designation Kits** | |
| 11.2 mm (.44") | VP-DES-440 |
| 17.3 mm (.68") | VP-DES-680-B |
| 35.6 mm (1.4") | VP-DES-1400-B |

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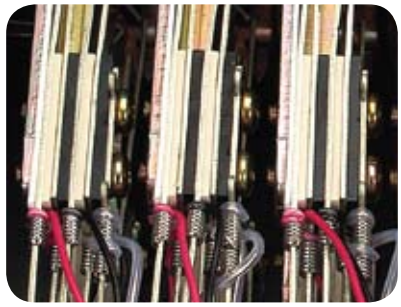
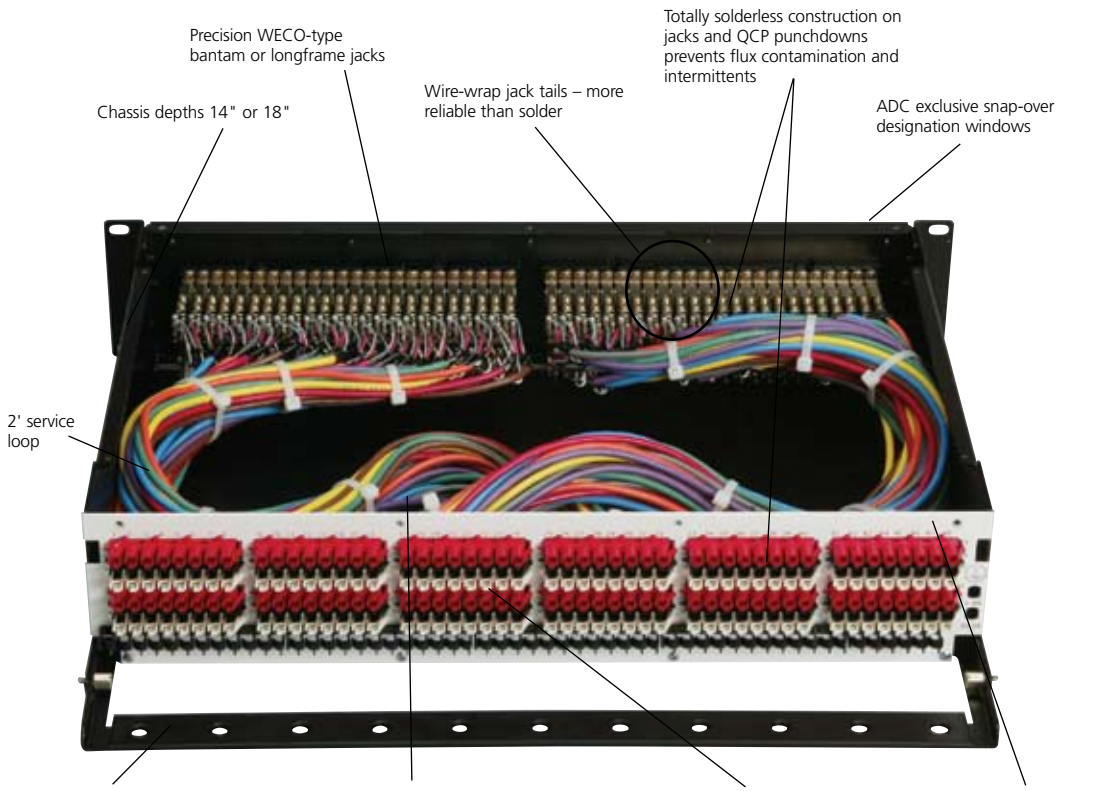
# Audio Patching Systems

ProPatch® Professional (PPA and PPB) Series

## Patchbays and Jackfields

ProPatch® professional audio patchbays and broadcast jackfields feature an extensive selection of jacks, panel sizes, normalling options, and rear terminations. Each panel contains ADC's high-quality, WECO-standard, frame-type jacks and includes a tough powder-coated chassis with built-in cable support and designation strips. Solderless internal wiring and terminations ensure completely dependable performance without intermittents. Termination options include the extremely reliable and quick-to-wire QCP II or QCP IV punchdown system as well as EDAC, AMP, and Molex connector options.





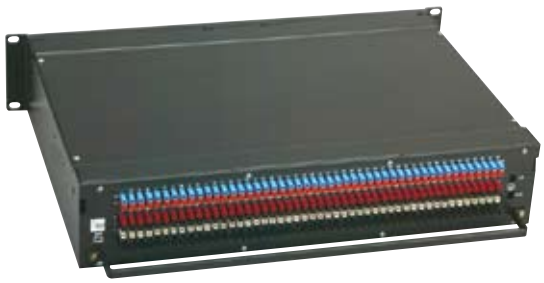
# Audio Patching Systems

## ProPatch® Professional (PPA and PPB) Series

Ready to meet any analog or digital audio patching requirement, ProPatch professional audio patchbays offer an extensive selection of options. Models are available with standard or stereo-spaced longframe jacks, bantam jacks, and a variety of backplane connector types. MKII models come with QCP II, EDAC, or AMP backplane connectors and fixed cable support bars. MKIV models include QCP IV, EDAC, or AMP backplane connectors, adjustable cable support bars and a white backplane for easier circuit visibility. All models offer a wide choice of normals, a tough powder-coated chassis, and solderless internal wiring for outstanding reliability.

**1 RU Longframe Evenly Spaced 2x24**
**(front view)**
(PPA1-14MKIVNS)

**2 RU Bantam Evenly Spaced 2x48**
**(front view)**
(PPB3-14MKIVNS)



**2 RU Bantam Evenly-Spaced 2x24**
**(rear view)**
(PPB3-14MKIINO)



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# Audio Patching Systems

## ProPatch® Professional (PPA and PPB) Series

### Features

**Next Generation ProPatch Audio Jackfields**

- Analog and digital compatible — all wired with precision 110 low capacitance cable for extended analog frequency response and extended distance digital transmission (no need to specify type)
- Uniform faceplate design with standardized designation strip lengths provides a seamless appearance when matched with video panels (over and under designation)
- New lighter one-piece chassis design
- Adjustable cable strain relief bar — tilts out of way for installation access
- High impact plastic injected molded jack inserts — more durable than phenolic materials
- Standard Bantam jackfields come with regular (even) spaced inserts — stereo (group) spacing available

**Longframe or Bantam Jacks**

- Longframe jacks in 2x24 or 2x26 array stereo or regular spaced
- Bantam jacks in 2x48 array stereo or regular spaced

**Digital Audio Cable Wiring**

- Precision 110 Ω digital audio cable meets and exceeds stringent AES requirements

**Variety of Jack Options**

- Standard longframe jacks (evenly spaced)
- High-density bantam jacks, regular or spaced (stereo-spaced option available)
- Stereo-spacing option places jacks in pairs

**Standard or Custom Sizes**

- 1 RU (1.75"/44.5 mm)
- 2 RU (3.5"/88 mm)
- Depths of 14 inches (350 mm) or 18 inches (450 mm)
- Custom panel sizes available

**Wide Selection of Terminations**

- Patented QCP II or QCP IV punchdown connectors
- EDAC/ELCO 90-, 56-, 38- and 3-pin plugs
- AMP 50-pin receptacle
- Molex 3-pin plug

**Full Range of Normalling Options**

- No normals (requires looping plugs or cords for patch)
- Normals strapped (fully normalled)
- Half-normalled (monitor top row)
- Normals brought out
- Sleeve normals brought out
- Sleeves strapped
- Bussed grounds

**2 RU Longframe 2x24 EDAC 3-Pin (rear view)**
(PPA3-14MKIV3ENS)

**2 RU Bantam EDAC 2x48 (rear view)**
(PPB3-14MKIVEN0)

**1 RU Longframe Evenly Spaced 2x24 QCPII (rear view)**
(PPA1-14MKIINS)

# Audio Patching Systems

ProPatch® Professional (PPA and PPB) Series

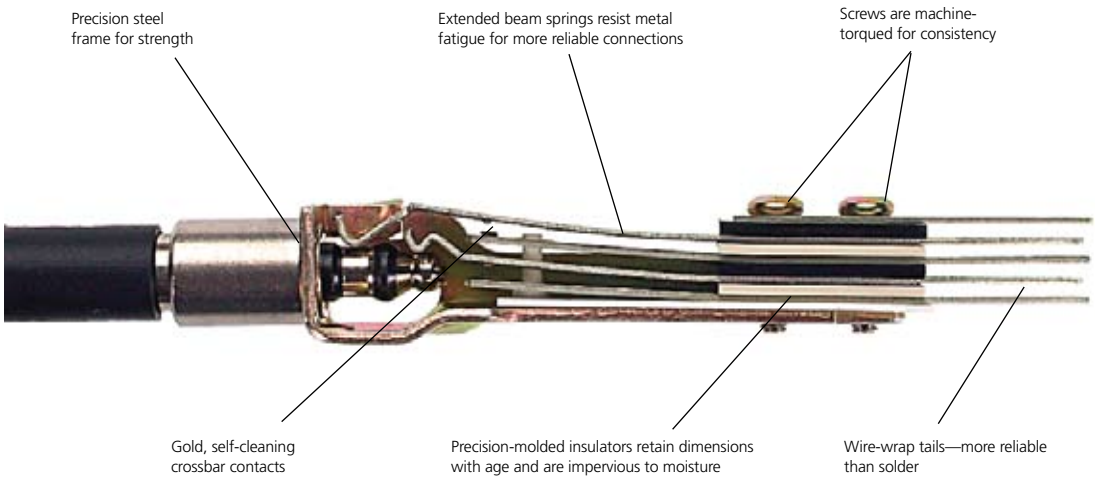


## Jacks

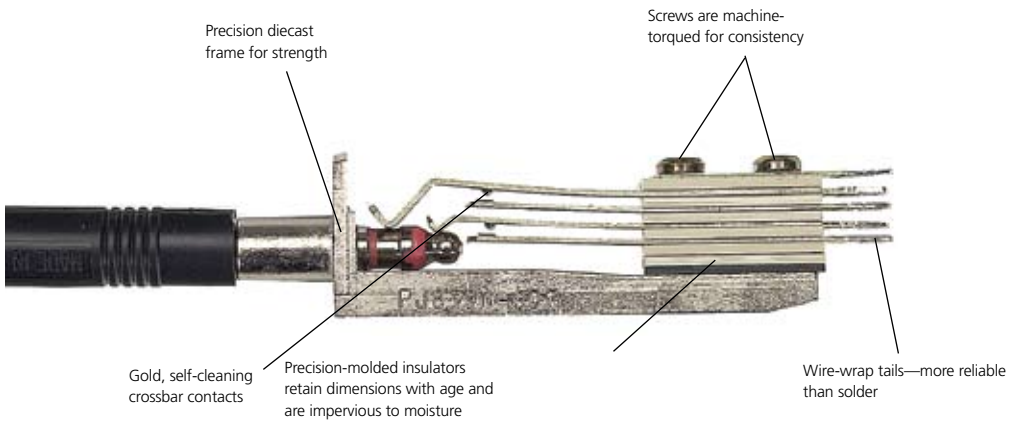
The quality of an audio jack is visible in the details. For example, inside ADC's jacks, the gold, self-cleaning crossbar contacts are designed to wipe across each other at an angle that removes debris with every plug insertion. Extended spring beams provide greater resilience for long life and firm contact force. Precision-molded insulators do not change dimensions even in tough environments, ensuring consistent spring torque and reliable performance.

### Features

- Jacks used in all patch cords are WECO-standard jacks that adhere to MIL-STD-202F specifications
- Absolutely reliable WECO alloy #1 gold, self-cleaning crossbar contacts wipe away debris with every insertion
- Solder-free wire-wrap tails prevent intermittents from cold solder joints or flux migration. Far more reliable than solder
- Tested to withstand tough mobile applications, including vibration, temperature (-55°C to 85°C), moisture, and salt air




**Longframe Audio Jack**
(PJ339W)




**Bantam Audio Jack**
(PJ839W)

# Audio Patching Systems

## ProPatch® Professional (PPA and PPB) Series

### Time-saving QCP II and QCP IV Termination Systems

Innovative QCP connectors can really speed up an installation. No need to spend time prepping wires and laboriously soldering and crimping connector pins. Just insert the wire and punch. In one motion you have a reliable gastight connection, even with multiple wires. The unique patented design holds wire far more securely than telco-type punchdowns, preventing intermittents.

MKII panels use QCP II individual terminal insulators, which allow greater density and can be replaced individually. MKIV panels use QCP IV 1x8 terminal blocks insulated on both the front and back of the panel to prevent shorts.

**QCP IV Connections**

**Features**

- ADC's exclusive, patented QCP II and QCP IV split-cylinder punchdown termination system is faster and easier to install and more reliable than any other termination system, including solder.
- Dependable, durable, split-cylinder design holds up to three stranded or solid wires, 22 to 26 gauge (0.32 mm to 0.128 mm)
- No intermittents with gastight connections. Uniform split channel width holds each wire firmly, unlike telco punchdowns with V-shaped channels or soldered connections that use flux and may have unreliable solder joints
- Easy prelacing makes installation faster. Color-coding prevents wiring mistakes
- Labor-saving punch terminates and cuts wire in one simple motion. QCP IV installs even faster because you don't have to orient the tool before punching
- Faster and easier changes in circuits or normals than soldered connector systems. Rated for up to 200 insertion/withdrawal cycles
- QCP II terminations are individually mounted and insulated for easy repair or replacement
- QCP IV terminations are mounted in 1x8 blocks insulated on both sides of the panel. This design, plus the recessed conductors, eliminates shorts

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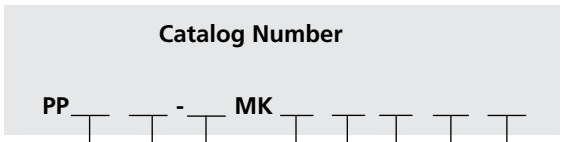
# Audio Patching Systems

ProPatch® Professional (PPA and PPB) Series

## Patchbays Ordering Information




**Jack Type**

| | |
|---|---|
| A | Longframe regular spaced audio jacks |
| S | Stereo-spaced longframe jacks |
| B | Bantam audio regular spaced jacks |
| BS | Stereo-spaced bantam audio jacks* |

**Panel Height**

| | |
|---|---|
| 1 | 1 RU 1.75" (44 mm) |
| 3 | 2 RU 3.5" (88 mm) |

**Chassis Depth**

| | |
|---|---|
| 14 | 14" (350 mm) |
| 18 | 18" (450 mm) |

**Panel Series**

| | |
|---|---|
| II | MKII panel series |
| IV | MKIV panel series (2x24 and 2x48 only) |

**Number of Jacks**

| | |
|---|---|
| LEAVE BLANK | 2x24 longframe or 2x48 bantam jacks |
| 26 | 2x26 longframe jacks |

**Ground Options**

| | |
|---|---|
| BG | Bussed grounds |
| LEAVE BLANK | Non-bussed grounds |

**Normal Options**

| | |
|---|---|
| NS | Normals strapped |
| NO | Normals out |
| HN | Half-normalled |
| SN | Sleeve normals out |

**Connector Type**

| | |
|---|---|
| LEAVE BLANK | QCP |
| E | EDAC/ELCO 90-pin plug |
| A | AMP 50-pin receptacle |
| 3E | EDAC 3-pin plug |
| E8 | EDAC/ELCO 38-pin plug |
| E56 | EDAC/ELCO 56-pin plug |
| M | Molex 3-pin plug |
| E90 | EDAC 90 |
| E120 | EDAC 120 |

**Example:** PPA3-14MKII26NOBG — ProPatch 2 RU panel, 14" deep with QCP II punchdowns, 2x26 array of longframe jacks, normals out audio normalling, and bussed grounds.

**Note:** For mobile applications rear chassis support is recommended. (Catalog number: SBK-1 and SBK-2)

**Digital Audio**
Precision 110 Ω digital audio patch cords are listed on page 71.
Use 110 Ω 1% resistors on normals of unstrapped jacks (normals out version only).

* For information on this and other custom configurations, please contact ADC.

Connectorized panels are not supplied with mating shell kits (see Accessories, page 76)



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# Audio Patching Systems

ProPatch® Professional (PPA and PPB) Series





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## Ordering Information

| Description | Catalog Number |
|---|---|
| **Patchbays** | |
| **Normals Out** | |
| 1.75" 2x24 longframe, QCP II, 14" chassis * | PPA1-14MKIINO |
| 3.50" 2x24 longframe, QCP IV, 14" chassis | PPA3-14MKIVNO |
| 3.50" 2x26 longframe, QCP II, bussed grounds, 14" chassis** | PPA3-14MKII26NO |
| 3.50" 2x26 longframe, QCP II, 18" chassis** | PPA3-18MKII26NO |
| 3.50" 2x24 longframe, QCP IV, 18" chassis | PPA3-18MKIVNO |
| 3.50" 2x48 bantam, QCP II, 14" chassis | PPB3-14MKIINO |
| 3.50" 2x48 bantam, QCP II, 18" chassis | PPB3-18MKIINO |
| 3.50" 2x48 bantam, QCP II, bussed grounds, 14" chassis | PPB3-14MKIINOBG |
| **Normals Strapped (Fully Normalled)** | |
| 1.75" 2x24 longframe, QCP IV, 14" chassis | PPA1-14MKIVNS |
| 1.75" 2x26 longframe, EDAC 90-pin plug, 14" chassis | PPA1-14MKII26ENS |
| 3.50" 2x24 longframe, QCP IV, 14" chassis | PPA3-14MKIVNS |
| 3.50" 2x24 longframe, QCP IV, 18" chassis | PPA3-18MKIVNS |
| 3.50" 2x26 longframe, QCP II, 14" chassis** | PPA3-14MKII26NS |
| 3.50" 2x26 longframe, EDAC 90-pin plug, 14" chassis | PPA3-14MKII26ENS |
| 3.50" 2x48 bantam, QCP IV, 14" chassis | PPB3-14MKIVNS |
| 1.75" 2x48 bantam, EDAC 90-pin plug, 14" chassis | PPB1-14MKIIENS |
| 3.50" 2x48 bantam, EDAC 90-pin plug, 14" chassis | PPB3-14MKIIENS |
| **Half-Normals (Monitor top row)** | |
| 1.75" 2x24 longframe, QCP IV, 14" chassis | PPA1-14MKIVHN |
| 1.75" 2x26 longframe, QCP II, 14" chassis** | PPA1-14MKII26HN |
| 1.75" 2x24 longframe, EDAC 90-pin plug, 14" chassis | PPA1-14MKII24EHN |
| 3.50" 2x24 longframe, QCP IV, 14" chassis | PPA3-14MKIVHN |
| 3.50" 2x24 longframe, QCP IV, 18" chassis | PPA3-18MKIVHN |
| 3.50" 2x26 longframe, EDAC 90-pin plug, 14" MKII style chassis** | PPA3-14MKII26EHN |
| 1.75" 2x48 bantam, EDAC 90-pin plug, 14" MKII style chassis | PPB1-14MKIIEHN |
| 3.50" 2x48 bantam, QCP IV, 14" chassis | PPB3-14MKIVHN |
| 3.50" 2x48 bantam, EDAC 90-pin plug, 14" chassis | PPB3-14MKIIEHN |
| **No Normals (Requires looping plug or patch cord)** | |
| 1.75" 2x24 longframe, QCP IV, 14" chassis | PPA1-14MKIVNN |
| 3.50" 2x48 bantam, QCP IV, 14" chassis | PPB3-14MKIVNN |
| **Sleeve Normals Brought Out** | |
| 3.50" 2x24 longframe, QCP IV, 14" chassis | PPA3-14MKIVSN |
| 3.50" 2x26 longframe, QCP II, 14" chassis** | PPA3-14MKII26SN |

* 1 RU 2x24 normals out panel only available in QCP MKII version.
** 2x26 panels only available in QCP MKII versions.

**Note:** For mobile applications, rear chassis support is recommended. Order ProPatch support bar kit (Catalog Number: SBK-1 or SBK-2); mounts on rear rack rails to support rear of panel.

**Note:** Bussed ground option available on all panels; please contact ADC for details.

# Audio Patching Systems

ProPatch® Umbilical (BJF) Series





## Jackfields

ADC broadcast jackfields simplify the task of wiring rack-mounted panels by separating the jacks from the backplane. The jack panel mounts on the front of the rack, and the Ultra Patch termination panel mounts on the rear with an umbilical connecting the two. This arrangement makes the termination wiring more accessible so you don't have to reach into the rack to make connections. In addition, the totally solderless wiring of both panels provides more reliable connections than solder, ensuring dependable service.

Options available include panel sizes, longframe or bantam jacks, choice of normalling, standard or custom umbilical length, and QCP II, QCP IV, or EDAC rear panel connectors. All BJF series panels now feature AES digital/audio with precision 110 Ω low capacitance shielded twisted pair cable. MKII panels include fixed cable trays. MKIV panels have adjustable cable bars and white backplanes for better visibility.

### Features

**Choice of Panel and Umbilical Sizes**

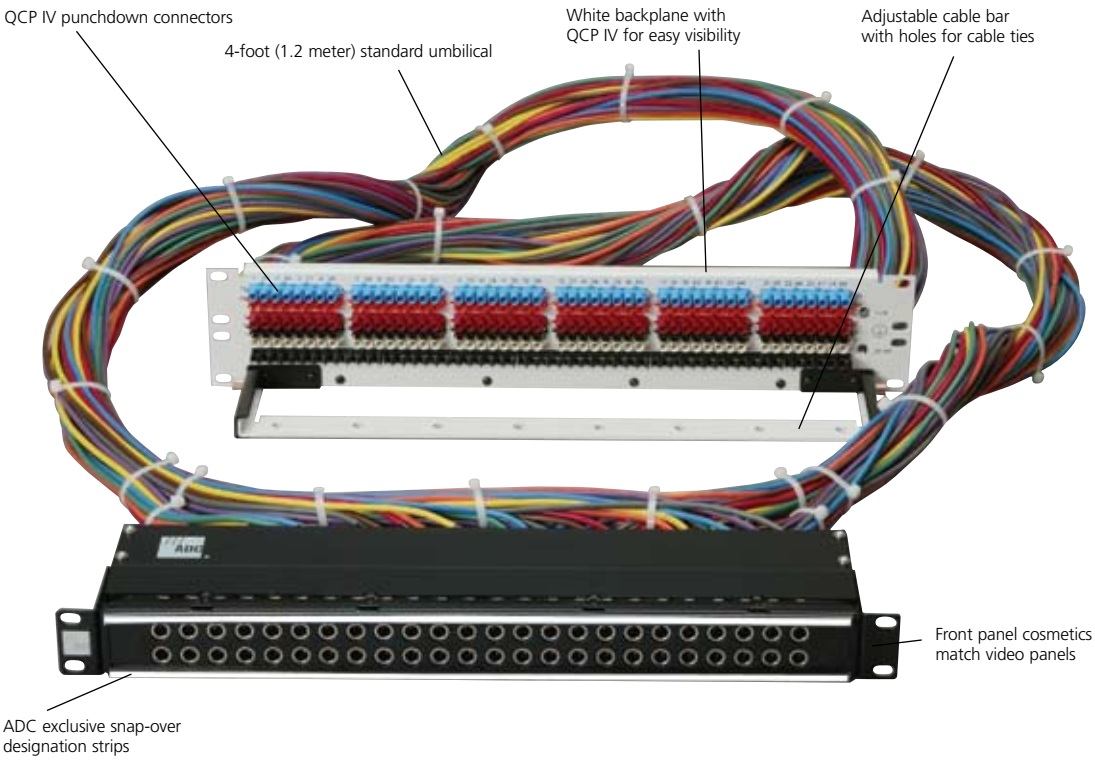
- 1 RU jack panel (1.75"/44 mm) with 2 RU (3.5"/88 mm) or 3 RU (5.25"/132 mm) Ultra Patch termination panel
- 2 RU jack panel (3.5"/88 mm) with 3 RU (5.25"/132 mm) Ultra Patch termination panel
- Standard 4-foot (1.2 meter) umbilical or custom lengths available

**Longframe or Bantam Jacks**

- Longframe jacks in 2x24 or 2x26 array evenly spaced
- Bantam jacks in 2x48 array evenly spaced

**Digital Audio Cable**

- Precision 110 Ω digital audio cable meets and exceeds stringent AES requirements




**1 RU Longframe/QCP IV Jackfield**
(BJF103-4MKIV)

# Audio Patching Systems

## ProPatch® Umbilical (BJF) Series





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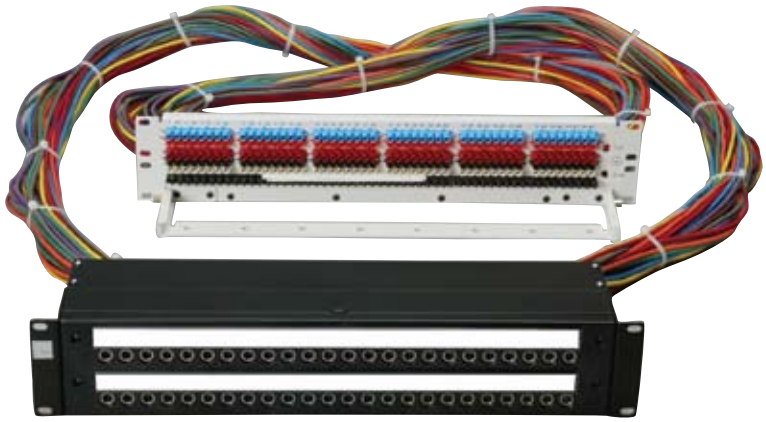


**2 RU Longframe/QCPII Ultra Patch**
(BJF203-4MKIV)

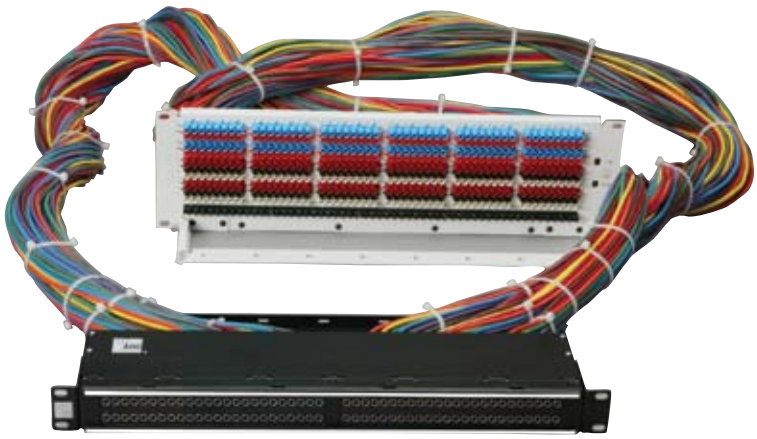
### Options

**Choice of Terminations**

- QCP II or QCP IV punchdown connectors
- Stub end cut to length
- Adjustable strain relief cable bar included standard on Ultra Patch MKIV. Fixed tray on MKII

**Full Range of Normalling Options**

- No normals
- Normals strapped (fully normalled)
- Half-normalled (monitor top row)
- Normals brought out
- Sleeve normals brought out
- Sleeves strapped
- Bussed grounds



**1 RU Bantam/QCPIV Ultra Patch**
(BJF303-4MKIV)

# Audio Patching Systems

ProPatch® Umbilical (BJF) Series

## Jackfields Ordering Information

**Catalog Number**

**BJF__ __ - __ MK __ __ __ __**

**Panel Height**

| | |
|---|---|
| 1 | 1 RU 1.75" (44 mm)<br>Longframe jacks, evenly spaced |
| 2 | 2 RU 3.5" (88 mm)<br>Longframe jacks, evenly spaced |
| 3 | 1 RU 1.75" (44 mm)<br>Bantam jacks, evenly spaced* |
| 4 | 2 RU 3.5" (88 mm)<br>Bantam jacks, evenly spaced** |

**Circuit Configuration**

| | |
|---|---|
| 03 | Normals brought out to Ultra Patch panel |
| 07 | Normals strapped or half-normalled at jacks to Ultra Patch panel |
| 00 | Normals brought out to stub end |
| 04 | Normals strapped at jacks to stub end |

**Normal Options**

| | |
|---|---|
| BG | Bussed grounds |
| HN | Half-normalled |
| SN | Sleeve normals out |
| NN | No normals |

**Connector Type**

| | |
|---|---|
| LEAVE BLANK | QCP |
| 3E | EDAC 3-pin plug |

**Number of Jacks**

| | |
|---|---|
| LEAVE BLANK | 2x24 longframe or 2x48 bantam jacks |
| 26 | 2x26 longframe jacks |

**Panel Series**

| | |
|---|---|
| II | MKII panel series, black back panel |
| IV | MKIV panel series (not available in 2x26), white back panel |

**Length of Umbilical**

| | |
|---|---|
| 4 | 4' (1.2 m) standard length |
| | Specify custom length |

*For stereo-spaced, add "S" to the catalog number (For example, BJF**S**XXX-)
** For information on these and other custom configurations, please contact ADC.

**Note:** Use 110 Ω 1% resistors on normals of unstrapped jacks. (Normals out versions only)



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# Audio Patching Systems

## ProPatch® Umbilical (BJF) Series



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### Ordering Information

| Description | Catalog Number |
|---|---|
| **Jackfields*** | |
| **Normals Out** | |
| 1.75" 2x24 longframe, 4' umbilical, 3.5" QCP IV Ultra Patch | BJF103-4MKIV |
| 1.75" 2x26 longframe, 4' umbilical, 3.5" QCP II Ultra Patch* | BJF103-4MKII26 |
| 3.50" 2x24 longframe, 4' umbilical, 3.5" QCP IV Ultra Patch | BJF203-4MKIV |
| 3.50" 2x26 longframe, 4' umbilical, 3.5" QCP II Ultra Patch* | BJF203-4MKII26 |
| 1.75" 2x48 bantam, 4' umbilical, 5.25" QCP IV Ultra Patch | BJF303-4MKIV |
| 3.50" 2x48 bantam, 4' umbilical, 5.25" QCP IV Ultra Patch | BJF403-4MKIV |
| **Normals Strapped (Fully normalled)** | |
| 1.75" 2x24 longframe, 4' umbilical, 3.5" QCP IV Ultra Patch | BJF107-4MKIV |
| 1.75" 2x26 longframe, 4' umbilical, 3.5" QCP II Ultra Patch* | BJF107-4MKII26 |
| 3.50" 2x24 longframe, 4' umbilical, 3.5" QCP IV Ultra Patch | BJF207-4MKIV |
| 3.50" 2x26 longframe, 4' umbilical, 3.5" QCP II Ultra Patch* | BJF207-4MKII26 |
| 1.75" 2x48 bantam, 4' umbilical, 3.5" QCP IV Ultra Patch | BJF307-4MKIV |
| 3.50" 2x48 bantam, 4' umbilical, 3.5" QCP IV Ultra Patch | BJF407-4MKIV |
| **Half-Normals (Monitor top row)** | |
| 3.50" 2x24 longframe, 4' umbilical, 3.5" QCP IV Ultra Patch | BJF207-4MKIVHN |
| 3.50" 2x26 longframe, 4' umbilical, 3.5" QCP II Ultra Patch* | BJF207-4MKII26HN |
| 1.75" 2x24 longframe, 4' umbilical, 3.5" QCP IV Ultra Patch | BJF107-4MKIVHN |
| 1.75" 2x26 longframe, 4' umbilical, 3.5" QCP II Ultra Patch* | BJF107-4MKII26HN |
| 1.75" 2x48 bantam, 4' umbilical, 3.5" QCP IV Ultra Patch | BJF307-4MKIVHN |
| 3.50" 2x48 bantam, 4' umbilical, 3.5" QCP IV Ultra Patch | BJF407-4MKIVHN |
| **No Normals (Requires looping plug or patch cord)** | |
| 3.50" 2x48 bantam, 4' umbilical, 3.5" QCP IV Ultra Patch | BJF407-4MKIVNN |
| **Sleeve Normals Brought Out** | |
| 3.50" 2x24 longframe, 4' umbilical, 3.5" QCP IV Ultra Patch* | BJF203-4MKIVSN |
| 3.50" 2x48 bantam, 4' umbilical, 5.25" QCP IV Ultra Patch | BJF403-4MKIVSN |

* 2x26 panels only available in QCP MKII versions.
Custom panel configurations are available; please contact ADC.

# Audio Patching Systems

ProPatch® Lite (PPA and PPB) Series

## Low-Cost Solder-Style Panels

ProPatch® Lite is ADC's line of low-cost, do-it-yourself audio patchbays. For ADC quality on a budget, this is the answer. Features include a steel frame with sturdy molded insert for holding jacks, a removable steel strain relief cable bar, ADC's outstanding quality WECO-standard bantam or longframe jacks with solder tails ready to wire, and choice of normalling configurations. Models are available in one and two rack unit heights with designation strips and standard jack spacing.

### Features

**Sturdy Construction**

- Steel frame with durable molded insert for holding jacks
- Removable steel cable bar

**Two Panel Sizes**

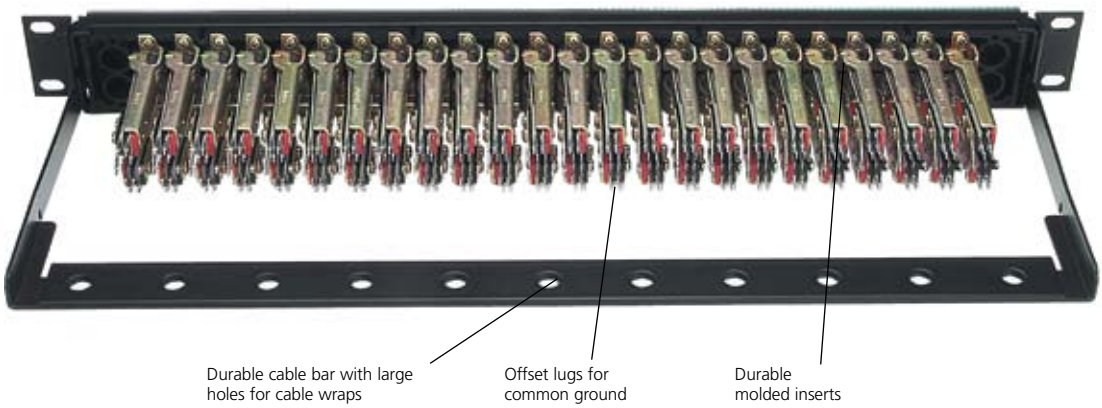
- 1 RU (1.75"/44 mm)
- 2 RU (3.5"/88 mm)

**Longframe or Bantam Jacks**

- Longframe jacks, 2x24 or 2x26 array, WECO-standard with solder tails ready for wiring
- Bantam jacks, 2x48 array, WECO-standard with solder tails ready for wiring
- Several ground lug styles

**Choice of Normals**

- Normals out
- Pre-half-normalled, common ground
- Pre-normals strapped, common ground
- Sleeve normal




**1RU Stereo-Spaced Longframe 2x24 Panel (rear view)**
(PPA1)



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# Audio Patching Systems

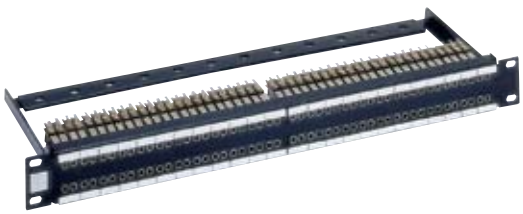
ProPatch® Lite (PPA and PPB) Series

## Low-Cost Solder-Style Panels

### Ordering Information

| Description | Catalog Number |
|---|---|
| **Longframe Panels** | |
| 1.75" 2x24 longframe jacks with solder lugs, loaded with 48 PJ339 jacks (see page 61) | PPA1 |
| Half-normalled, common ground | PPA1-HN-CG |
| Normals strapped, common ground | PPA1-NS-CG |
| 1.75" 2x26 longframe jacks with solder lugs, loaded with 52 PJ339 jacks (see page 61) | PPA1-26 |
| Half-normalled, common ground | PPA1-26-HN-CG |
| Normals strapped, common ground | PPA1-26-NS-CG |
| 1.75" 2x24 longframe solder jacks with offset ground lugs | PPA1-L204 |
| 3.5" 2x24 longframe jacks with solder lugs, loaded with 48 PJ339 jacks (see page 61) | PPA3 |
| Half-normalled, common ground | PPA3-HN-CG |
| Normals strapped, common ground | PPA3-NS-CG |
| 3.5" 2x26 longframe solder jacks sleeve normal,loaded with 52 PJ242 jacks | PPA3-26-SN |
| **Bantam Panels** | |
| 1.75" 2x48 bantam jacks with solder lugs, loaded with 96 PJ839 jacks (see page 61) | PPB1 |
| Half-normalled, common ground | PPB1-HN-CG |
| Normals strapped, common ground | PPB1-NS-CG |
| 3.5" 2x48 bantam jacks with solder lugs, loaded with 96 PJ839 jacks (see page 61) | PPB3 |
| Half-normalled, common ground | PPB3-HN-CG |
| Normals strapped, common ground | PPB3-NS-CG |
| 3.5" 2x48 bantam jacks with solder lugs, sleeve normals, loaded with 96 PJ824 jacks | PPB3-SN |

For information on this and other custom configurations, please contact ADC.



**1 RU Stereo-Spaced Bantam 2x48 Panel**
(PPB1)

**1 RU Longframe 2x24 Panel**
(PPA1-24-NS-CG)

# Audio Patching Systems
Accessories

Whatever the accessory you need for your audio patchbay, the quality source is ADC. Products available include patch cords, connectors and jacks, designation strip kits, and more.

## High-Performance Audio Patch Cords

ProPatch® audio patch cords are engineered for flawless performance and durability. Nickel plating protects plugs against corrosion and ensures smooth insertion, and the exclusive dielectric compound between conductors provides low capacitance for the best signal performance. The flexible cord drapes neatly without kinking, and the plug is molded directly onto the cord for outstanding strain relief.

All ADC patch cords are designed to meet MIL-P642 and are machined after molding for perfect concentricity, ensuring consistent, reliable jack operation.

### Features

- Meets demanding MIL-J641 and MIL-P642 standards for plug compliance
- Precision WECO 310 (longframe) and bantam plugs assure proper jack performance
- Quad-star construction for low noise performance
- Models for analog or digital audio
- Standard lengths from .6 m (2 feet) to 1.8 m (6 feet). Other lengths available on request
- Colors include red, green, blue, or black. Some cords also available in yellow or gray
- Conversion patch cords for RS-422 to RJ45. (Conversion patch cords for longframe to bantam, single to dual, are also available. Please contact ADC.)

**Catalog Number**

**Color**

| | |
|---|---|
| R | Red |
| G | Green |
| B | Blue |
| Y | Yellow* |
| BK | Black |
| GY | Gray* |
| DA | Digital audio (black only) |

* Non-standard colors. Please contact ADC for these and other non-standard colors.

**Cable Length**

| | |
|---|---|
| LEAVE BLANK | Longframe plug |
| B | Bantam plug |

**Cable Length**

| | |
|---|---|
| 2 | .6 m (2') |
| 3 | .9 m (3') |
| 4 | 1.2 m (4') |
| 6 | 1.8 m (6') |

Dual patch cords are available. Add a "2" after length. For example,
R22 = Red (2') dual longframe
R22B = Red (2') dual bantam

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# Audio Patching Systems

## Accessories

Individual longframe and bantam plugs are available featuring low capacitance injection-molded insulators and precision-machined brass or nickel-plated conductors for smooth insertion and best signal performance. Wire connections are made via miniature screw terminals. These plugs provide the best fit and performance to match ADC patch panels.

### Longframe Audio Plugs

**Ordering Information**

| Description | Color | Catalog Number |
|---|---|---|
| **Three-Conductor Longframe Plugs (field installable)** | | |
| Single | Red | PJ051R |
| Single | Black | PJ051B |
| Single, nickel-plated | Black | PJ051B-MN |
| **Looping Plugs –** internal connections tie together corresponding tip, ring and sleeve conductors to allow looping of jack circuits | Black | PJ4 |
| **Hole Plugs –** for longframe panels to fill unused jack positions | Black | PJ29 |

### Bantam Audio Plugs

**Ordering Information**

| Description | Color | Catalog Number |
|---|---|---|
| **Three-Conductor Bantam Plugs** | | |
| Single plug; attachable plug; two lugs, shell mounting screw and two lug attachment screws supplied | Red | PJ777R |
| | Black | PJ777B |
| Dual plug; attachable plug; four lugs, two shell mounting screws and four lug attachment screws supplied | Black | PJ778B |
| **Looping Plugs –** Used to "loop" or patch adjacent jack circuits; plug conductors strapped internally; wired tip to tip, ring to ring and sleeve to sleeve | Black | PJ746 |
| **Hole Plugs –** For bantam panels to fill unused jack positions | Red | PJ729R |
| | Black | PJ729B |
| **Single Bantam Circuit Guard Plugs –** To identify or block entry to critical circuits; does not actuate circuit | Red | PJ925R |
| | White | PJ925W |
| | Black | PJ925B |

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## Longframe and Bantam Audio Jacks

If anything differentiates ADC patching products from the competition it is the outstanding quality of our jacks. Consistent quality and durability are built into every jack we make. Our jacks meet WECO and MIL-STD-202F standards and include gold, self-cleaning contacts, extended spring beams to prevent metal fatigue and poor contact, and precision-molded insulators. For a closer look at the outstanding design of our audio jacks, see the overview on page 6.

### PJ339 Single Longframe Jack (2 normally closed contacts)

The PJ339 is a three-conductor, single, longframe jack with two normally closed contacts and solder tails. PJ339L has offset solder tails, and PJ339W is the wire-wrap version.

**Longframe Audio Jack**
(PJ339W)

### PJ242 Single Longframe Jack (3 normally closed contacts)

The PJ242 is a three-conductor, single, longframe jack with three normally closed contacts and solder tails. PJ242W is the wire-wrap version.

### PJ839 Single Bantam Jack (2 normally closed contacts)

The PJ839 is a three-conductor, single, bantam jack with two normally closed contacts. The PJ839N-SDR comes with solder tails, and the PJ839WN is the wire-wrap version.

**Bantam Audio Jack**
**Shown with Plug Inserted**
(PJ839W)

### PJ824 Single Bantam Jack (3 normally closed contacts)

The PJ824 is a three-conductor, single, bantam jack with three normally closed contacts. The PJ824N comes with solder tails, and the PJ824WN is the wire-wrap version. (Note that these jacks extend beyond the periphery of a 1.75" 1 RU panel.)

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## Longframe and Bantam Audio Jacks

### Ordering Information

| Description | Catalog Number |
|---|---|
| **Longframe Jacks** | |
| **3-conductor –** 2 normally closed contacts, solder tails, frame style A, stack height .531" (13.49 mm), WECO 239A equivalent | PJ339 |
| **3-conductor –** 2 normally closed contacts, solder offset lug, frame style A, stack height .531" (13.49 mm) | PJ339L |
| **3-conductor –** 2 normally closed contacts, wire-wrap, frame style A, stack height .578" (14.68 mm) | PJ339W |
| **3-conductor –** 3 normally closed contacts, solder tails, frame style C, stack height .687" (17.45 mm), WECO 242C equivalent | PJ242 |
| **3-conductor –** 3 normally closed contacts, wire-wrap, frame style C, stack height .687" (17.45 mm), WECO 242C equivalent | PJ242W |
| **Bantam Jacks** | |
| **3-conductor –** Rear-mount bantam jack, 2 normally closed contacts, solder tails, stack height .602" (15.29 mm) | PJ839N-SDR |
| **3-conductor –** Rear-mount bantam jack, 3 normally closed contacts, solder tails, stack height .756" (19.20 mm) | PJ824N |
| **3-conductor –** Rear-mount bantam jack, 3 normally closed contacts, wire-wrap, stack height .750" (19.05 mm) | PJ824WN |

For printed circuit board jacks, see page 76.

# Audio Patching Systems
Accessories

## Audio Baluns (also see page 76)

High-quality audio baluns are available for 110 Ω twisted pair to 75 Ω coaxial matching. Matches BNC to male or female XLR connectors.

**Shown: BAL-XLR-BNC-F**
**BAL-XLR-BNC-M**

## Designation Strip Kits

ADC produces designation strip kits for all of our patch panels. For details about kits available for your particular model, please contact the Technical Assistance Center.

## QCP and EDAC Tools and Accessories

(Genuine EDAC, manufactured in North America)

Individual punchdown tools and complete tool kits are available for both QCP II and QCP IV connections. The same punchdown tool works for both types, but the tips are different. EDAC connector kits are also available for E120, E90, E56, E38 and E3 connectors—genuine EDAC parts.

**LSA PLUS® Punchdown Tool**

**EDAC**
**90-shell Kit**

**EDAC**
**38-shell Kit**

**EDAC**
**Crimp Tool**

**Q150**

**Q-115**

**QB-2**

**SLVG-1**

**QRK-25**

## ProPatch® Cord Holder

The ProPatch cord holder accepts up to 75 video or audio patch cords and mounts on the wall or in a rack. (Note: does not hold CVPC-type patch cords.)

**Patch Cord Holder**
(PPH)

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# Audio Patching Systems
## Accessories



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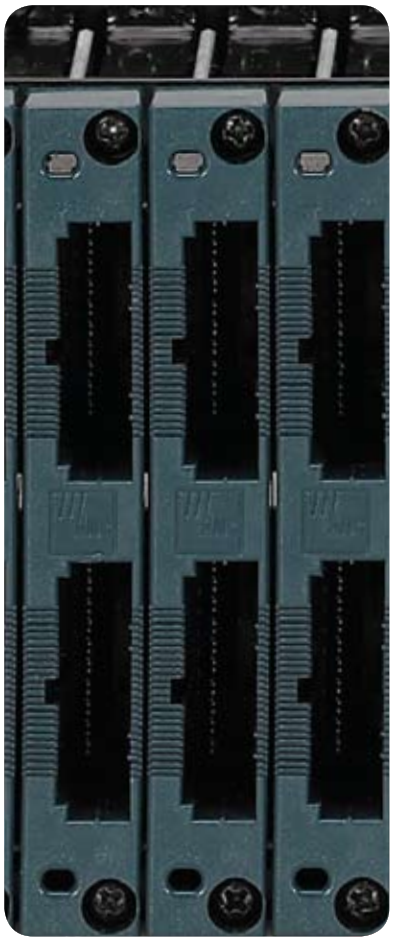
### Ordering Information

| Description | Catalog Number |
|---|---|
| **Audio Baluns, 110 Ω to 75 Ω** | |
| BNC to female XLR | BAL-XLR-BNC-F |
| BNC to male XLR | BAL-XLR-BNC-M |
| **LSA Punchdown Tool** | DM-GIGE-TOOL-KIT |
| **QCP Tools** | |
| Impact tool for MKII panels, with tip* | QB-2 |
| Tool for MKIV panels, with tip* | QB-4 |
| Replacement tip for QB-2 | QB-2T |
| Longer replacement tip for QB-2 | QB-2LT |
| Replacement tip for QB-4 | QB-4T |
| Replacement tip for QB4, long | QB-4LT |
| Manual tool for MKII panels | Q115 |
| QCP tool holder | Q150 |
| **QCP Mark II Replacement Kit;** Kit includes instructions and the following: 99 QCP contacts, 25 red, black and white insulators, 12 blue and orange insulators | QRK-25 |
| **QCP Mark IV Replacement Kit;** 2 red, white, black, blue and orange QCP IV (8x1) punchdown assemblies | QRK-25-MKIV |
| **Sleeving Kit;** Kit includes 100 pieces of 2.5" (6.35 cm) clear PVC | SLVG-1 |
| **EDAC Tools** (Manufactured by Paladin) | |
| Tool for crimping EDAC connector pins | EDAC-CRIMP-TOOL |
| EDAC pin removal tool | EDAC-EXTRACTION-TOOL |
| **Receptacle Connector Kits** (Manufactured by EDAC) | |
| Kit for EDAC 90-pin, includes 1 shell, 90 crimp-type pins, and hood | EDAC-90P-SHELL |
| Kit for EDAC 56-pin, includes 1 shell, 56 crimp-type pins, and hood | EDAC-56P-SHELL |
| Kit for EDAC 38-pin, includes 1 shell, 38 crimp-type pins, and hood | EDAC-38P-SHELL |
| Kit for EDAC 3-pin, includes 1 shell and 3 crimp-type pins | EDAC-3P-SHELL |
| Kit for EDAC 3-pin, complete for 2x24 panel | EDAC-3PIN-2X24-KIT |
| Kit for EDAC 3-pin, complete for 2x26 panel | EDAC-3PIN-2X26-KIT |
| Kit for EDAC 3-pin, complete for 2x32 panel | EDAC-3PIN-2X32-KIT |
| Kit for EDAC 3-pin, complete for 2x48 panel | EDAC-3PIN-2X48-KIT |
| **Molex Kits** | |
| Molex kit, 3-pin receptacle | MOLEX-3F-SHELL |
| Molex kit, 3-pin plug | MOLEX-3P-SHELL |
| **ProPatch® Cord Holder;** Holds up to 75 video or audio patch cords (bantam or longframe); mounts on a wall or in a rack; 14"W x 3"D (35.56 x 7.62 cm). Note: does not hold CVPC-type patch cords | PPH |
| **Printed Circuit Board Audio Jacks** | |
| PCB longframe jack, 3-conductor standard | AJ238-1 |
| PCB threaded longframe jack, 3-conductor with nut and washer | AJ238-1T |
| PCB longframe right angle jack, 3-conductor | AJ339-1 |
| PCB threaded longframe right angle jack, 3-conductor with nut and washer | AJ339-1T |

* QCP II and QCP IV tools are identical but the replaceable tips are different.

# Data Connectivity Patching Systems

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# Data Connectivity Patching Systems

UniPatch® GigE Series

## Gigabit Ethernet Patch Panel

ADC has designed a professional broadcast-quality Gigabit (1000 baseT) patching system for demanding professional environments where frequent patching and higher density is required. The system features a high-density 32-port normal-through card frame system to ADC Direct-Edge LSA-PLUS® termination system. Now you can patch Ethernet data properly using reliable durable military-grade jacks rated for 30,000 insertion/withdrawal cycles. The Category 6 rated patch cords are keyed to ensure proper patching.

Compared to other systems employing light duty RJ45 connectors rated at fewer than 500 insertion/withdrawal cycles or bantam jacks that do not switch all signal lines, the UniPatch® GigE module is a significant advance in Ethernet and machine control patching.

The GigE system is a dense pack digital control interface patching system that provides test access, patch, cross-connect and monitor functions in 100 Ω balanced transmission systems. It has a common signal format, bit rate, and operation up to Gigabit Ethernet (1,000 Mbps). The UniPatch GigE system is the choice for carrier-class Ethernet patching where reliability is critical.

**Features:**

- Category 5e channel compliant
- High-density modular design, 32 circuits per panel
- Available with normal-through (patch by exception) or straight-through modules
- Modular LSA-PLUS® punch down backplane
- Keyed and highly reliable military-grade patch cords, rated to 30,000 cycles
- Available with an easily removable wire management bar
- Cable agnostic (works with any Cat 5e/Cat 6 cable)

**VP2232-GIGE**



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# Data Connectivity Patching Systems

UniPatch® GigE Series

## Gigabit Ethernet Jack Module

**Features:**

- Dense pack patching
- Minimum of 30,000 patch cycles
- Normal-through patch by exception
- Modular design (can be removed without disturbing adjacent circuits)
- Gold plated contacts on switches and card edge connectors
- Keyed opening for proper patch cord orientation

**DM-GIGE**

## LSA-PLUS® 8-Circuit Backplane Module

**Features:**

- Patented LSA-PLUS® termination system modules can be removed individually for easier wiring
- Number designation labels included
- Designation strip and window included for custom labeling
- Designed for solid or stranded wire
- Eliminates the need for additional connectors and connector labor

**VPRM-GIGE-LSA**
(rear view)



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# Data Connectivity Patching Systems

UniPatch® GigE Series

## Specifications

**ELECTRICAL**

| | |
|---|---|
| **Characteristic impedance:** | 100 Ω typical |
| **Voltage rating:** | 500 Volts AC @ 60 Hz with a trip current of 1 mA for 1 minute |
| **NEXT:** | Category 5e channel compliant |
| **FEXT:** | Category 5e channel compliant |
| **Contact resistance:** | .02 Ω max change post environmental |
| **Insulation resistance:** | 5000 MΩ min initial |

**MECHANICAL**

| | |
|---|---|
| **Mechanical durability:** | 30,000 cycles min (front port: dense pack); 50 cycles min (LSA slot) |
| **Insertion force:** | 7 lbs max |
| **Withdrawal force:** | 2 lbs min |
| **Patch cord cable bend and twist:** | 500 cycles min |
| **Dimensions:** | 2 rack unit |

**ENVIRONMENTAL**

| | |
|---|---|
| **Thermal shock:** | -40°C to 65°C operating; -55°C to 85°C non-operating |
| **Moisture resistance:** | 0% to 95%; MIL-STD-202 Method 106 |
| **Corrosion (salt spray):** | MIL-STD-202 Method 101, test condition B |
| **Flammability:** | UL 94-VO rated |
| **Vibration:** | MIL-STD-202 Method 201 |
| **Solvent resistance:** | MIL-STD-202 Method 215 |

**FINISH**

| | |
|---|---|
| **Sheetmetal panel:** | .075 CRS w/ protective black finish |
| **Plastic housings:** | ABS/PC, deep blue color |
| **Contact springs:** | 50 microinch gold plating MIL-G-45204 Type 1 |
| **PC board:** | FR-4 with gold-plated contacts |
| **Card edge connector:** | LSA-PLUS®: 17-position termination block |

# Data Connectivity Patching Systems

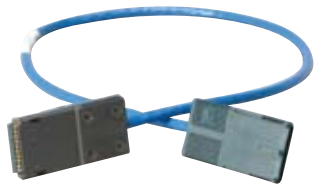
UniPatch® GigE Series

## Ordering Information

| Description | Catalog Number |
|---|---|
| **Gigabit Ethernet Panel** | |
| 32-port GigE normalling patch panel | VP2232-GIGE |
| 32-port GigE non-normalling patch panel | VP2232-GIGE-NN |
| **Gigabit Ethernet Jack Module** | |
| 2-port GigE normalling jack module: PCB with green masking | DM-GIGE |
| 2-port GigE non-normalling jack module: PCB with black masking | DM-GIGE-NN |
| **Gigabit Ethernet LSA-PLUS® Backplane Module** | |
| Gigabit Ethernet LSA-PLUS® 8-circuit backplane module | VPRM-GIGE-LSA |
| **Gigabit Ethernet and RS422 Cat 6 Patch Cords** | |
| 0.6 m (2 ft) | PC-GIGE-2 |
| 0.9 m (3 ft) | PC-GIGE-3 |
| 1.2 m (4 ft) | PC-GIGE-4 |
| 1.8 m (6 ft) | PC-GIGE-6 |
| **Chassis** | |
| Empty UniPatch® chassis; color: black | VP2232-BK |
| Empty UniPatch® chassis; color: gray | VP2232-G |
| **Accessories** | |
| LSA insertion tool and handheld LSA block holder | DM-GIGE-TOOL-KIT |
| Handheld/rack mountable LSA block holder | DM-GIGE-TOOL |
| Cable bar | ADCCMR-A |

**ADCCMR-A**

**DM-GIGE-TOOL-KIT**



**PC-GIGE-*X***



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# Data Connectivity Patching Systems

## Category 5e and 6 RJ Panels

Category 5e and Category 6 solutions are a fully integrated family of precisely tuned components each designed to operate at optimum performance with the other. These solutions are unmatched in data throughput and are supported by the most comprehensive and thorough warranty in the industy: the TrueNet® Zero Bit-Error warranty. The warranty guarantees that the structured cabling system will remain error free for a full 5 years and includes a 20-year electrical performance and free of defect warranty. The result is a remarkable advanced and high performing end-to-end channel guaranteed beyond the typical industry requirements to maximize network throughput and minimize downtime. Numerous component options are available for versatility and flexible adaptation to meet any infrastructure requirement.

### Features

**Coupler Panels**

- Provides feed-through data and voice connectivity on the front and rear
- Extra heavy-duty frames
- .480" designation strips

**RJ to IDC Panels**

- 1 RU 24-port design provides high-density and flexibility. Available in 2 RU 48-port
- Wire can be terminated with either a LSA-PLUS® or 110 tool
- Rear wire manager included
- Designed to support gigabit Ethernet transmission speeds

**RJ to IDC Dynamic Right/Left Angle Panels**

- Patented right/left angle eases stress on patch cords allowing for easy cable management
- 45-degree silver-plated IDCs provide secure reliable gas-tight connections
- Wire can be terminated with either a LSA-PLUS® or 110 tool
- Universal A/B wiring label

**Shielded Coupler Panels**

- High-density 24 ports in 1 rack space
- Standard RJ patch panel interface
- Screened twisted pair connector interfaces and metal shielded panel design
- Gigabit Ethernet (1000 Base-T), T1/E1

**Patch Cords**

- Impedance matched patch cord for maximum throughput
- Patented AirES® technology
- Up to 28% smaller outer diameter than other patch cords
- UL 1863 listed and Category 5e and Category 6 performance verified

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# Data Connectivity Patching Systems

## Category 5e and 6 RJ Panels

### Ordering Information

| Description | Catalog Number | Catalog Number |
|---|---|---|
| **Coupler Panels** | **Category 5e** | **Category 6** |
| 1 RU 24-port patch panel; with designation strips | ADCPP24505-DES | ADCPP24606-DES |
| **RJ to IDC Panels** | | |
| 1 RU 24-port patch panel; silkscreen | 6653 1 585-24 | 6653 1 677-24 |
| 2 RU 48-port patch panel; silkscreen | 6653 1 585-48 | 6653 1 677-48 |
| 1 RU 24-port patch panel; fascia | 6653 1 587-24 | 6653 1 679-24 |
| 2 RU 48-port patch panel; fascia | 6653 1 587-48 | 6653 1 679-48 |
| **RJ to IDC Dynamic Right/Left Angle Panels** | | |
| 1 RU 24-port right/left angle patch panel | PP24AC5ET | PP24AC6T |
| 2 RU 48-port right/left angle patch panel | PP48AC5ET | PP48AC6T |
| Cable bar manager; black | ADCCMR-A | ADCCMR-A |
| **Shielded Coupler Panels** | | |
| 24-port ScTP (Screened Twisted Pair) RJ to RJ | ADCPP24RJ5E-S | ADCPP24RJ6-S |
| **Patch Cords** | | |
| RJ45-RJ45 plug UTP T568B PVC patch cord | TP5ETA-XXYY | 6645-2-78X-YY |
| RJ45-RJ45 plug UTP T568A PVC patch cord | TP5ETA0XXYY | 6645-2-77X-YY |
| RJ45-RJ45 plug UTP crossover PVC patch cord | TP5ETACXXYY | 6645-2-79X-YY |

X = Color: 0 = White, 1 = Blue, 2 = Red, 3 = Yellow, 4 = Green, 7 = Gray
YY = Length: 04 = 4 ft; 07 = 7 ft, 10 = 10 ft, 15 = 15 ft, 25 = 25ft, 50 = 50ft
Contact ADC for custom lengths and colors.



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# Data Connectivity Patching Systems

## FireWire® Panels

ADC continues its leadership role in broadcast connectivity with the development of the 1394a FireWire® patch panel. The panel accommodates 24 ports in one rack unit and mounts in standard 19-inch racks. The panel offers customers a passive interconnection solution for their digital video editing needs. Industry-compatible six-pin IEEE 1394a connectors on both the front and rear of the panel allow customers to interconnect cameras, servers, workstations, and non-linear editing suites via FireWire at 400 Mbps bandwidth. The result is increased flexibility and productivity without sacrificing performance and reliability.

### Features

**IEEE 1394a FireWire Panels**

- IEEE 1394a compatible six-pin connectors
- 400 Mbps bandwidth
- High-density, 24 ports in one rack unit
- Plated panel housing to facilitate superior shielding and grounding
- Designation and port numbering

**VI-124-1394**

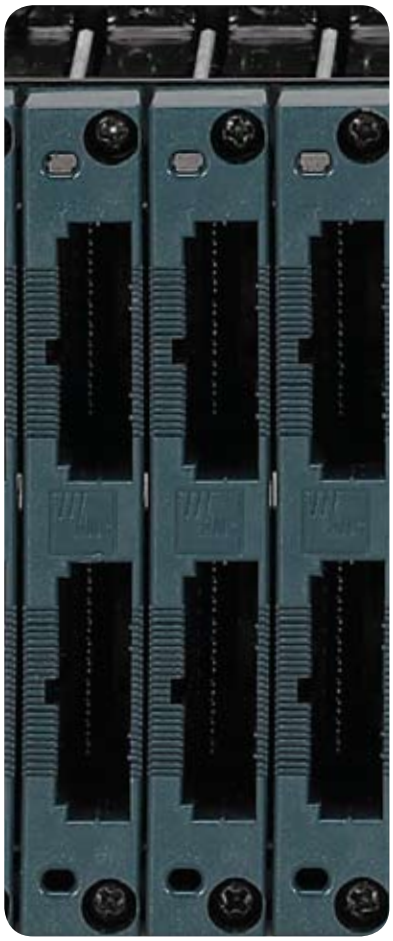
**VI-112-SB-1394**

### Ordering Information

| Description | Catalog Number |
|---|---|
| **IEEE 1394a FireWire Panels** | |
| 1 RU 24-port 1394a compatible FireWire patch panel | VI-124-1394 |
| 1 RU 12-port 1394a compatible Firewire patch panel | VI-112-SB-1394 |

**Note:** FireWire® is a registered trademark of the 1394 Trade Association

# UniPatch® Modular System

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# UniPatch® Modular System

Overview

**Loaded UniPatch Chassis**

The UniPatch® modular patching system with universal chassis allows you to combine data, audio, and video patching modules in a single two-rack-unit modular panel. Order a mix of jack and backplane modules to create a totally custom patching system, or order a preconfigured panel RS-422 data jacks. You can start with only a few modules and add or change modules as needed. The universal chassis with mix-and-match jack and backplane modules provides the ultimate in flexibility.

## Modular Chassis for Unprecedented Flexibility

### Features

- Jacks and backplanes have a modular design and fit into the rugged high-density card cage chassis. Just plug in a module to add more jacks or backplane connectors
- Modularity lets you start small and add modules and cards as needed
- Individual circuits are easily replaced without disturbing other circuits
- Backplanes available in high-density 64-circuit bantam audio, high-density 32-port data, standard-density 24-port data, and video options
- Gold-plated card edge connectors tested to withstand heavy use and vibration
- Shallow 7" deep chassis is perfect for mobile applications

## Mix-and-Match Plug-in Jack Modules

The following modules (details on following pages) may be assembled on site in mix and match combinations. Data and bantam modules may be ordered in a fully loaded preconfigured chassis.

### Features

- Category 3 compliant RS-422 modules for demanding professional data patching applications
- Bantam audio modules in user-selectable normalled configurations
- Video modules for analog, SD, HD, and analog component
- AES 110 Ω to 75 Ω coaxial baluns
- BNC bulkhead feedthroughs
- Category 5, 5e and 6 data patching



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# UniPatch® Modular System

## Backplane Options (mix-and-match)

Ten different backplane connector types are available, and because they come in modular units, they can be mixed and matched like the jack modules. Each backplane supports up to eight jack modules.

### Features

- Available modules:
  - Dsub9 connectors
  - AMP Champ 50-pin receptacle
  - EDAC 3-pin plug
  - EDAC 90-pin plug
  - QCP MKII for data 20x8
  - QCP MKII for audio 12x8

**Dsub9, RS-422**
**Rear Module**
**(for data)**
(VPRM-D9-W)

**AMP 50-Pin Receptacle**
**Rear Module**
**(for data)**
(VPRM-A50-W)

**EDAC 3-pin**
**Rear Module**
**(for audio)**
(VPRM-BAN-E3)

**EDAC 90-Pin**
**Rear Module**
**(for data)**
(VPRM-E90-W EDAC)

**QCP MKII**
**Rear Module**
**(for data)**
(VPRM-MKII-W)

**QCP MKII**
**Rear Module**
**(for audio)**
(VPRM-BAN-MKII)

# Unipatch Modular Systems

GigE Modules

## Gigabit Ethernet Jack Module

**Features:**

- Dense pack patching
- Minimum of 30,000 patch cycles
- Normal-through patch by exception
- Modular design (can be removed without disturbing adjacent circuits)
- Gold-plated contacts on switches and card edge connectors
- Keyed opening for proper patch cord orientation

**DM-GIGE**

## LSA-PLUS® 8-Circuit Backplane Module

**Features:**

- Patented LSA-PLUS® termination system modules can be removed individually for easier wiring
- Number designation labels included
- Designation strip and window included for custom labeling
- Designed for solid or stranded wire
- Eliminates the need for additional connectors and connector labor

**VPRM-GIGE-LSA**
(rear view)

**Note:** For complete configuration and ordering information, please refer to Data Section.

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# UniPatch® Modular System

## RS-422 Modules

The UniPatch® Category 3 compliant RS-422 module raises the standard in machine control patching with its quality and robust design. Now you can patch machine control data properly using reliable, durable, military-grade jacks rated for 30,000 insertion/withdrawal cycles. Each circuit switches all ten pins, making the module fully SMPTE 207M compliant. Compared to other systems employing light-duty RJ45 connectors rated at fewer than 500 insertion/withdrawal cycles or bantam jacks that do not switch all signal lines, the UniPatch RS-422 module is a significant advance in machine control patching.

### Features

- The standard in professional data patching
- Durable military-grade switch system rated for 30,000 insertion/withdrawal cycles. Unlike RJ45 systems, suitable for heavy daily professional use.
- Fully SMPTE 207M compliant circuits switch all ten pins, unlike bantam systems, which do not switch all ground pins, potentially causing problems
- Tough military-grade, gold-plated switch with long cantilever beam springs and unique self-wiping contacts ensures against premature wear and provides positive contact force
- RS-422 cards offer the highest density available. Up to 32 modules in two rack units for 33 percent greater density
- Normalled or non-normalled cards available
- Modular termination options: Dsub9, DB-25, EDAC 90-pin plug, QCP II, Ultra Patch, standard-density, 24 per frame, or Dsub9 high-density, 32 per frame (requires thin shell strain relief)
- Keyed for proper patch cord orientation
- Category 3 compliant for 10 Base-T data



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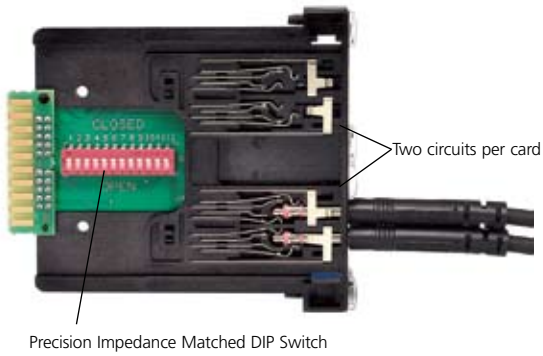
# UniPatch® Modular System

## Bantam Audio Modules

The bantam audio jack modules for the UniPatch® system are perfectly designed for professional digital and analog audio applications. Up to 32 modules plug into the UniPatch chassis to provide a 64-circuit (128 jacks) configuration when fully loaded, matching typical router configurations. Each module contains two circuits and four WECO-standard precision bantam jacks designed for long life. High-performance switches allow flexible normalling and grounds for each circuit. Large .440" x .325" designations provide enough room for three lines of text.




### Features

- High-density, selectable normals, and excellent reliability
- 33 percent higher density than conventional frame-type bantam bays. Up to 32 cards in a frame with 2 circuits (4 jacks) per card for a total of 64 circuits (128 jacks)
- 32-across spacing exactly matches typical router configurations and provides larger designation area
- Switch-selectable normals and grounds for each circuit: normals strapped (NS), half-normal (HN), bussed ground (BG), or no normals (NN)
- WECO-standard jacks meet or exceed MIL-STD-202 for mechanical durability as well as corrosion, salt spray, thermal shock, moisture resistance, and vibration
- Precision-molded housing and sturdy, integrated all metal springs rated for 10,000 insertion/withdrawal cycles. Gold crossbar, self-cleaning contacts ensure a positive connection
- Modular termination options: QCP II, EDAC 3-pin plug, EDAC 90-pin plug, DB-25, AMP Champ 50-pin receptacle, or QCP IV with 4-foot umbilical Ultra Patch panel
- Snap-on designation holders accept individual labels without tools; conventional chassis-wide designation strips are also available. Large designations provide enough room for three lines of text
- Fully compliant 110 Ω circuit board meets demanding AES specifications



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# UniPatch® Modular System

## Video Modules

ADC offers a full line of UniPatch® video patching modules, making it easy to assemble a custom video patch panel for any application. Modules are available for analog, SD, HD, or component video. Included in the selection of jacks are the standard size SVJ, midsize MVJ, and MUSA SMJ-series HD jacks for outstanding performance at high-definition data rates and beyond.

### Features

- Standard jacks mount 24 across, midsize jacks mount 32 across
- Standard-size, HD video modules contain SVJ-2 normalled-through Super Video Jacks with or without termination
- Standard size straight-through modules contain CJ2014N jacks without termination or CJ2020N-75 jacks with termination
- Midsize HD video modules contain MVJ-3 normalled-through Super Video Jacks with or without termination
- Midsize straight-through modules contain CJ3014/4014 jacks without termination or CJ3014N-75/4014N-75 jacks with termination
- MUSA modules contain SMJ-2100 HD-rated MUSA standard jacks.
- Modules are available for analog component video in the following configurations: RGB, $P_rP_BY$, RGBS, and RGBHV
- Large designations snap on without tools providing enough space for four rows of text

**Standard Size Video Module also available with CJ2020N75 terminated single jacks**
(VM-2014-BK)

**Standard Size HD Video Module**
(VM-SVJ-BK)

**RGBHV Video Module**
(VM-RGBHV-MVJ-BK)

**Midsize HD Video Module**
(VM-MVJ-BK)

**RGB, $P_rP_BY$ HD Video Module**
(VM-RGB-MVJ-BK)

All modules provided with colored inserts to allow the user to customize for any use.



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# UniPatch® Modular System

## AES Balun Modules



The patented AES 110 Ω to 75 Ω balun modules provide precision impedance matching for interfacing balanced twisted pair AES audio to unbalanced coaxial audio. Eliminate the nuisance of XLR soldering and the mess of baluns hanging from equipment. Replace them with this clean, simple solution.

### Features

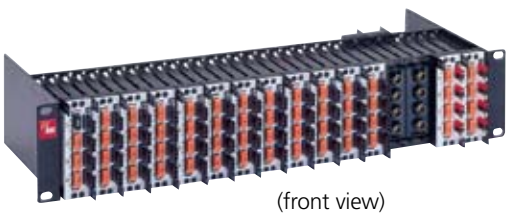
- Mounts on side of equipment rack with velcro or can be rack mounted
- Modules contain four circuits for up to 64 circuits per 2 RU chassis
- Works with quick-to-install QCP punchdown termination modules or EDAC 3-pin plug
- 1 Vp-p plug-in pad is available for equipment that cannot accept high-input voltages. Plug-in pad feature allows each circuit to be tailored for 1 Vp-p operation in 1dB increments to -20dB
- New splitter module provides 2-in/4-out passive split/110 Ω to 75 Ω converter

**AES 110 Ω to 75 Ω Converter**
(AM-411075-E3-FF)

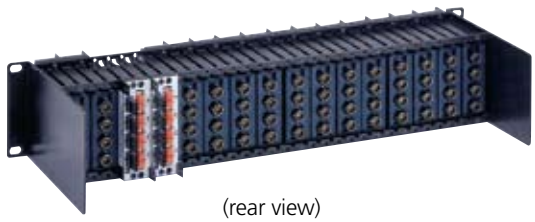
**AES 110 Ω to 75 Ω Converter**
(AM-411075-MKII)

**AES 2:4 Splitter**
(AM-2110-475-E3)

**Precision Transformers, Glass Epoxy Circuit Board, True 75 Ω BNC Connectors**



(front view)



(rear view)

**UniPatch System fully loaded with 16 AES balun modules for 64 110-75 Ω circuits**
(allows modules to be mounted either way)
For in-line baluns, see page 75

# UniPatch® Modular System



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## Ordering Information

| Description | Catalog Number |
|---|---|
| **Empty Chassis** | |
| Empty UniPatch® chassis, black, supplied with VP-DES-343-32 kit | VP2232-BK |
| Empty UniPatch chassis, gray, supplied with VP-DES-343-32 kit | VP2232-G |
| **Bantam Audio Fully Loaded Chassis** | |
| 64-circuit loaded system QCP II, black* | VP2232-BANQCP-BK |
| 64-circuit loaded system EDAC 3-pin plug, black* | VP2232-BANE3-BK |
| **RS-422 Data Fully Loaded Chassis - normalled**** | |
| 24-circuit Dsub9 normalled, gray, no backshell kits | VP2224-D9-G |
| 24-circuit Dsub9 normalled, black, no backshell kits | VP2224-D9-BK |
| 32-circuit Dsub9 normalled, gray, no backshell kits | VP2232-D9-G |
| 32-circuit Dsub9 normalled, black, no backshell kits | VP2232-D9-BK |
| 32-circuit Dsub9 normalled, black, with backshell kits | VP2232-D9-BK-S |
| 32-circuit Dsub9 normalled, gray, with backshell kits | VP2232-D9-G-S |
| **RS-422 Data Fully Loaded Systems - non-normalled**** | |
| 24-circuit Dsub9 non-normalled, black, no backshell kits | VP2224-NND9-BK |
| 32-circuit Dsub9 non-normalled, black, no backshell kits | VP2232-NND9-BK |
| 32-circuit Dsub9 non-normalled, gray, no backshell kits | VP2232-NND9-G |

* Normal configurations on bantam audio cards to be set by user. 32-circuit Dsub9 systems require the use of a thin backshell kit.

**The thin backshell Dsub9 provides strain relief for standard Dsub9 connectors. This shell kit is highly recommended on 32-circuit UniPatch RS-422 systems and is included where indicated.

The backshell kits are found on page 95.

**Dsub9 Thin Backshell Kit**
(Does not include Dsub9 connector, included wtih -S only.)

## Ordering Information

| Description | Catalog Number |
|---|---|
| **Traditional RS-422 Patch Panels** | |
| RS-422 2x12 non-normalled RJ45, black | PEM-9NCDA1-BK-NN |
| RS-422 2x24 dual bantam to Dsub9 normalled | PPB3-5R422D9NS |
| RS-422 2x12 dual bantam to Dsub9 normalled | PPB3-5R422D9NS-12 |

## Ordering Information

| Description | Required Chassis Space | Catalog Number |
|---|---|---|
| **AES Balun Modules** | | |
| AES 110 Ω to 75 Ω, 4-circuit BNC to QCP II | 2 spaces | AM-411075-MKII |
| AES 110 Ω to 75 Ω, 4-circuit BNC to EDAC 3-pin plug | 2 spaces | AM-411075-E3 |
| AES 110 Ω to 75 Ω, 4-circuit BNC to EDAC 3-pin plug, front facing | 2 spaces | AM-411075-E3-FF |
| 2:4 splitter balun module 110 Ω to 75 Ω | 2 spaces | AM-2110-475-E3 |
| Plug-in pad (replace "XX" with 01 to -20db) qty: 25 each | - | SCAP-XX |
| **Audio Modules** | | |
| Bantam audio, adjustable normals, 2-circuit (4 jacks), black | 1 space | AM-BAN-BK |
| **Data Modules** | | |
| 2-port GigE normalling jack module: PCB with green masking | 1 space | DM-GIGE |
| 2-port GigE non-normalling jack module: PCB with black masking | 1 space | DM-GIGE-NN |
| RS-422 data, 10-pin, normals through, black | 1 space | DM-422-BK |
| RS-422 data, 10-pin, normals through, gray | 1 space | DM-422-G |
| RS-422 data, 10-pin, non-normalled, black | 1 space | DM-422-NN-BK |
| RS-422 data, 10-pin, non-normalled, gray | 1 space | DM-422-NN-G |
| Ethernet data, Cat 5 RJ-RJ non normalled coupler, black | 1 space | DM-RJC5-BK |
| Ethernet data, blank adapter, black | 1 space | DM-6S-BK |
| **Universal Blank Modules** | | |
| Blank module, black | 4 spaces | DM-BLANK-BK |
| Blank module, gray | 4 spaces | DM-BLANK-G |
| **Video Modules†** | | |
| Standard, CJ2020N-75 terminated single, 3-circuit, black | 4 spaces | VM-2020-BK |
| Standard, Super Video Jack SVJ-2, 3-circuit, black | 4 spaces | VM-SVJ-BK |
| Standard, Super Video Jack SVJ-2T, terminated, 3-circuit, black | 4 spaces | VM-SVJT-BK |
| Midsize, Super Video Jack MVJ-3, 4-circuit, black | 4 spaces | VM-MVJ-BK |
| Midsize, Super Video Jack MVJ-3T, 4-circuit, terminated, black | 4 spaces | VM-MVJT-BK |
| Midsize, Super Video Jack MVJ-3, 4-circuit, gray | 4 spaces | VM-MVJ-G |
| Midsize, Super Video Jack MVJ-3T, 4-circuit, terminated, gray | 4 spaces | VM-MVJT-G |
| Midsize, MVJ-3, RGB+HV, black | 4 spaces | VM-RGBHV-MVJ-BK |
| Midsize, MVJ-3T, RGB+HV, terminated, black | 4 spaces | VM-RGBHV-MVJT-BK |
| Midsize, MVJ-3, RGB, $P_rP_bY$ HD module, black | 4 spaces | VM-RGB-MVJ-BK |
| Midsize, MVJ-3T, RGB, $P_rP_bY$ HD module, terminated, black | 4 spaces | VM-RGB-MVJT-BK |
| Midsize, CJ3014/4014N, 4-circuit, black | 4 spaces | VM-CJMID2-BK |
| Midsize, CJ3014/4014N-75, 4-circuit, terminated, black | 4 spaces | VM-CJMIDT2-BK |
| Midsize, CJ3014/4014N-75, 4-circuit, terminated, gray | 4 spaces | VM-CJMIDT2-G |

**Ordering information continues on next page.**

**Note:** Conventional XLR baluns listed on page 76.
†Video circuits are supplied with designations and circuit indications.

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## Ordering Information

| Description | Catalog Number |
|---|---|
| **Rear Modules for Audio and Data Applications** | |
| Audio QCP II, 8-circuit for bantam audio applications | VPRM-BAN-MKII |
| Audio EDAC 3-pin plug, 8-circuit for audio applications | VPRM-BAN-E3 |
| DB-9, 32-circuit Ultra Patch, 3-foot umbilical, white, for audio applications | VPRM-3DB9-W |
| Universal AMP 50-pin receptacle, 8-circuit, RS-422, white | VPRM-A50-W |
| Gigabit Ethernet LSA-PLUS® 8-circuit backplane module | VPRM-GIGE-LSA |
| Universal DB-9, 8-circuit, RS-422, white, for data applications | VPRM-D9-W |
| Universal EDAC 90-pin plug, 8-circuit, RS-422, white | VPRM-E90-W |
| Universal QCP II, 8x10 circuit, white, for data applications | VPRM-MKII-W |

## Ordering Information

| Description | Catalog Number |
|---|---|
| **Accessories** | |
| Dsub9 thin backshell connector kit, 1 count | DB9-TSHELL1-KIT |
| Dsub9 thin backshell connector kit, 16 count | DB9-TSHELL16-KIT |
| Dsub9 thin backshell connector kit, 64 count | DB9-TSHELL64-KIT |
| Patch cord kit with two RS-422 ends, 10-pin black, no cable | PC-422-KIT |
| Bantam audio module extraction tool | VP-BAN-TOOL |
| Rear cable management kit (mounts in rear rack rails), black | PPI-EXT-BAR-BK |
| Rear cable management kit (mounts in rear rack rails), gray | PPI-EXT-BAR-G |
| **Replacement Designation Strip Kits*** | |
| Kit of 2 pieces, 17" x .640" full-length designation strips (includes window and mounting screws) | VP-DES-680-32 |
| Kit of 128 windows, .440" x .343" designation windows for bantam modules | VP-DES-BAN |
| Kit of 16 windows, 2.01" x .343" designation windows for video modules | VP-DES-VIDEO |
| Kit of 4 pieces, 4.174" x .289" designation strips for bantam, video or data modules (includes windows and mounting screws) | VP-DES-343-4 |
| Kit of 2 pieces, 17" x .289" designation strips for loaded bantam or data chassis (includes windows and mounting screws. Order two kits for loaded bantam systems) | VP-DES-343-32 |

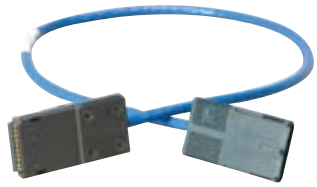
* See UniPatch® Installation Guide ADCP-75-009 for additional information on selecting the correct designation kit for your UniPatch system. Designations are supplied with chassis and system configurations; kits are for replacement only

# UniPatch® Modular System



## Ordering Information

| Description | Catalog Number |
|---|---|
| **Gigabit Ethernet and RS422 Cat 6 Patch Cords** | |
| 0.6 m (2 ft) | PC-GIGE-2 |
| 0.9 m (3 ft) | PC-GIGE-3 |
| 1.2 m (4 ft) | PC-GIGE-4 |
| 1.8 m (6 ft) | PC-GIGE-6 |
| **UniPatch® Data Patch Cords** | |
| UniPatch RS-422 10-pin black 2' | PC-422-2BK |
| UniPatch RS-422 10-pin black 3' | PC-422-3BK |
| UniPatch RS-422 10-pin black 4' | PC-422-4BK |
| UniPatch RS-422 10-pin black 6' | PC-422-6BK |
| UniPatch RS-422 10-pin to RJ45, black 2' | PC-422-RJ45-2BK |
| UniPatch RS-422 10-pin to RJ45, black 3' | PC-422-RJ45-3BK |
| UniPatch RS-422 10-pin to RJ45, black 4' | PC-422-RJ45-4BK |
| UniPatch RS-422 10-pin to RJ45, black 6' | PC-422-RJ45-6BK |
| **Traditional Data Patch Cords** | |
| RJ45-RJ45 1', blue | TP5ETA-BL01 |
| RJ45-RJ45 2', blue | TP5ETA-BL02 |
| RJ45-RJ45 3', blue | TP5ETA-BL03 |
| RJ45-RJ45 4', blue | TP5ETA-BL04 |
| Dual bantam to single RJ45, 72" | PAT-100904 |
| Dual bantam to dual RJ45, 72" | PAT-100900-006 |



**UniPatch Data Patch Cord**

# Integrated Cable Organization Network ICON®

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Wall-Mount System

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# ICON®
## Integrated Cable Organization Network



### ICON® Models for Every Application

Whether your facility has abundant floor space to accommodate a rack-based ICON system or you need to fit the system into tight spaces by mounting it on the wall, ADC makes a cable management system to meet your requirements:

- I-96 series audio rack-mount system for 19-inch equipment racks
- I-W series audio wall-mount system
- I-WS space-saving super high-density audio wall-mount system
- VI Video ICON rack-mount system for 19- and 23-inch equipment racks
- VIW Video ICON wall-mount system
- Cable management hardware, such as fanning panels and cable bars and rings, are available for each ICON system to ensure all cabling is routed neatly and securely

### Labor-saving QCP Audio Connections

ICON audio cable management systems feature ADC's proven punchdown cable termination system for fast, efficient, and secure interconnections. QCP offers these advantages:

- Reduced installation time with fast, easy punchdown terminals
- Reliable gastight connections because of patented QCP split-cylinder design
- Reusable contacts allow easy circuit changes without disturbing adjacent contacts
- Color-coded and numbered contacts prevent wiring mistakes

### Flexible and Reliable Video Connections

ICON video cable and panel management systems feature ADC's premier true 75 Ω BNC feed through connectors for HD/SDT applications or F Bulkheads for RF applications:

- Closed entry contact/center pin
- Resists damage
- Identification numbering for easy ciruit location

**Fully Loaded I-96 Rack-Mount System with Fanning Panels and Express Troughs. Handles 768 balanced audio pairs**

# ICON®

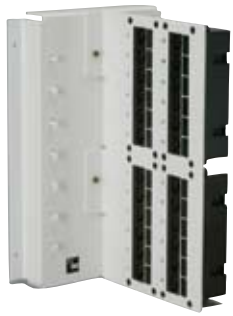
## Audio/Video/Data Modular Wall-Mount System

The ICON® I-W Wall-Mount System offers modularity in a convenient wall-mounted system. Subpanels are available for twisted pair, BNC, F, DB9 and Ethernet bulkhead panels. Subpanels purchased individually. The I-W frame holds up to 4 subpanels and has integrated cable rings for cable management.

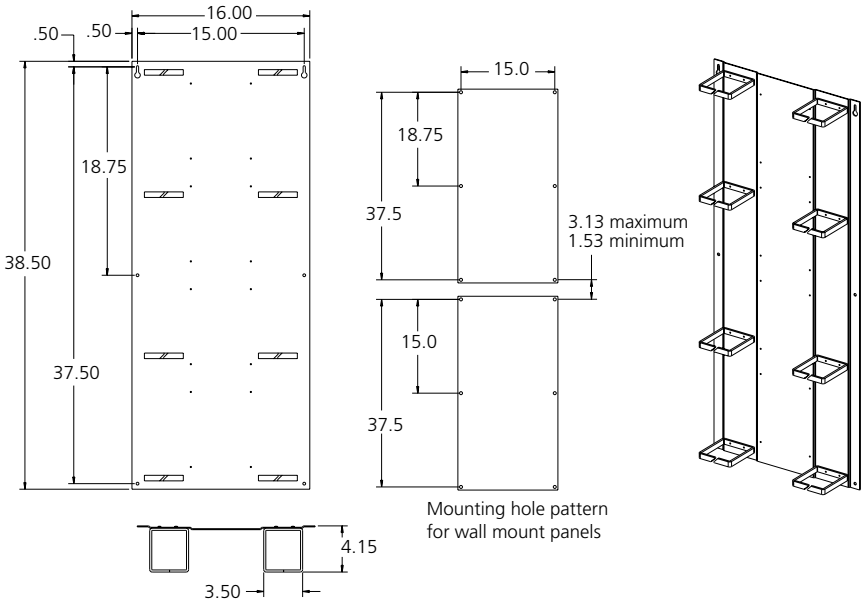
**Frame** (I-W-MKIV-PNL)
**with 24-position E3** (IW-24-AMP-E3)
**and 24-position E3-AMP** (IW-24-AMP-E3)

**24-position, BNC, Bulkhead Panel**
(IW-VI-24-MNT)

**24-position, DB9, Turnaround Panel**
(IW-24-D9)



**24-position, RJ45 OATSE/CAT6 Ethernet Bulkhead Panel**
(IW-5E-24)

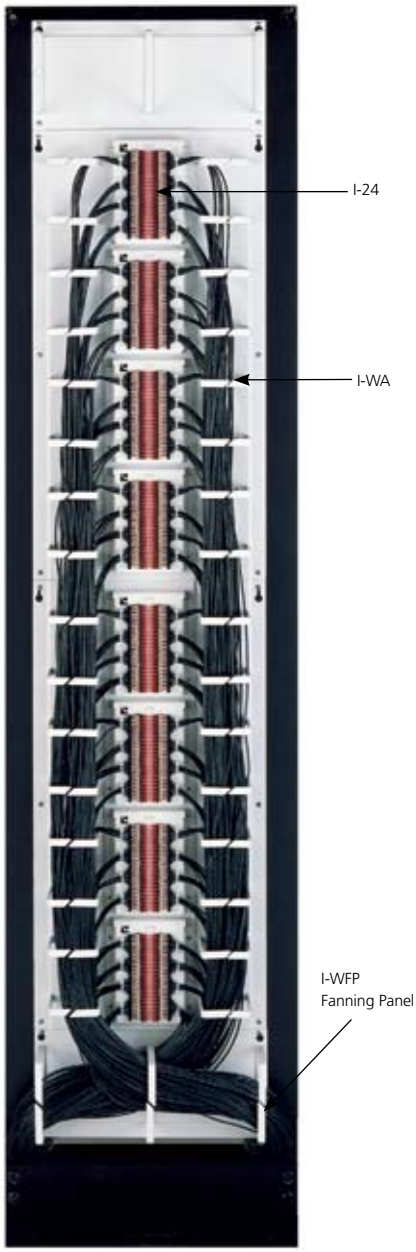



Mounting hole pattern for wall mount panels

# ICON®
## Audio Wall-Mount System



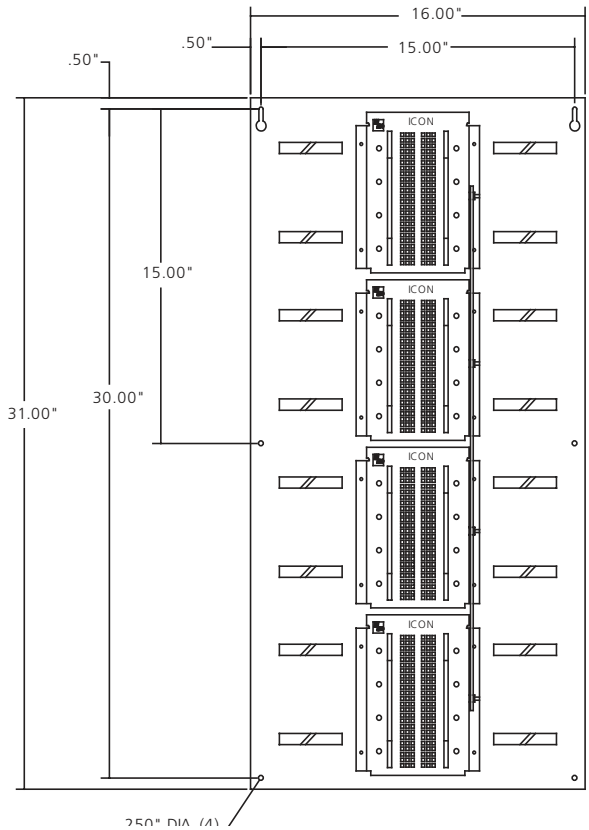
The ICON® I-W is a wall-mount audio cable management system ideally suited for use where floor space is at a premium but wall space is available. The convenient front-facing design mounts flat against the wall and provides two appearances of each circuit on the terminal blocks. Cabling to and from your equipment punches down on the right side array of contacts, and cross-connections to these circuits are made on the left side array of contacts. This makes it easy to change cross-connections without disturbing equipment wiring.




**I-W System**
(handles 192 balanced audio pairs in 16-inches by 5-feet)

An I-W system is assembled from the following components:

- I-WA (jumpered side to side with a bussed shield system) or I-WB (jumpered side to side with isolated shields) wall-mount frame holds four I-24 QCP terminal blocks
- I-24 QCP termination block terminates or cross-connects 24 balanced audio circuits




**Frame Dimensions**
**I-WA/I-WB**

Note: MKIV dimensions are different. Contact ADC for dimensions.

# ICON®

## Audio Super High-Density Wall-Mount System

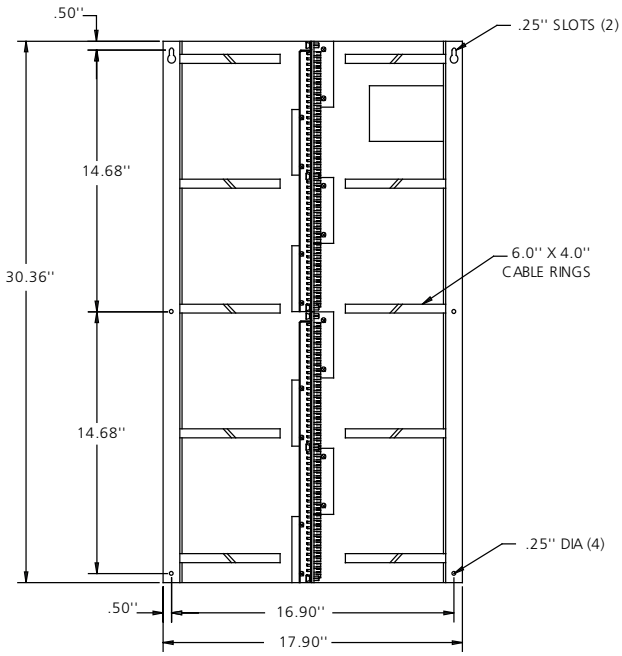


The ICON® I-WS is a super high-density wall-mount cable management system engineered for maximum space efficiency. The I-WS system terminates or cross-connects up to 192 balanced audio circuits in a 31.0 x 17.9-inch (79.0 x 45.5 cm) QCP II frame or in a 34.6 x 17.9-inch (87.9 x 45.5 cm) QCP IV frame. The I-WS frame holds two 96-circuit QCP II or QCP IV punchdown panels mounted on edge, 90 degrees relative to the wall to provide access to connections on both sides, an extremely space-efficient arrangement. Cabling from your equipment connects on the left side of the panel, and the feedthrough design allows cross-connect access to those circuits on the right side without affecting the equipment wiring. Two I-WS frames can be stacked to achieve 384 balanced audio pairs in only 62-inches of vertical wall space.

## I-WS System Components

The I-WS system consists of the following main components. You can start with a single frame and panels and expand to additional frames as needed.

- I-WS wall-mount frame holds two I-WS-PANEL assemblies and includes vertical cable rings and fanning strips terminating a total of 192 circuits
- QCP II or QCP IV 96-circuit punchdown terminal block panel mounts in the I-WS-PANEL
- I-WSET express trough mounts above or below I-WS frame and routes cables horizontally




**I-WS Frame Dimensions**

Note: MKIV dimensions are different. Contact ADC for dimensions.

**Two stacked I-WS frames**
(provides 384 balanced audio pairs in 62-inches of vertical wall space)

**Express Trough**
(I-WSET)
(see accessories)

# ICON®
## Audio Termination Blocks

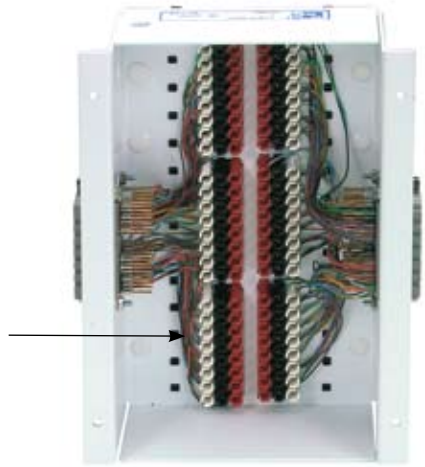


### Features

- Termination block sizes and connectors are available, including 12-, 24-, 32-, 48-, and 52-circuits as well as QCP II, QCP IV, AMP 50-pin receptacle, and EDAC 90-pin plug
- Rack-mounting kit holds two I-24 termination blocks as an alternative to wall-mounting

**QCP II Termination Block**
(I-24A)

**QCP IV to EDAC 90-Pin Plug Termination Block (front view)**
(I-24E90-MKIV)




**QCP IV to EDAC 90-Pin Plug Termination Block (rear view)**
(I-24E90-MKIV)

Contact ADC for additional connectorized versions.

# ICON®
## Video Wall-Mount System

For facilities where rack space is at a premium but wall space is readily available, ADC offers the VIW Video ICON® wall-mount video bulkhead panel series. These tough powder-coated steel panels mount on the wall and provide from eight to 96 video bulkhead connectors for managing cables between racks or between studios. Top-quality 3 GHz bulkhead connectors ensure the best video performance from analog to HDTV transmission rates.

- VIW-8 (1x8) and VIW-408 (4x8) for small applications
- VIW-424 (4x24), VIW-64 (2x32), and VIW-72 for intermediate size applications. The VIW-64 is ideal for managing cables for a 64-input router matrix
- VIW-96 (3x32) for larger uses, such as organizing inputs and outputs for a large router matrix
- Cable support bars or rings included on most models

**8-Connector Bulkhead Wall-Mount Panel**
(VIW-8)

**24-Connector Bulkhead Wall-Mount Panel**
(VIW-24)

**64-Connector Bulkhead Wall-Mount Panel**
(VIW-64)



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## Ordering Information

| Description | Dimensions | Catalog Number |
|---|---|---|
| **Audio/Video/Data Modular Wall-Mount System** (may be mounted individually or attached to an I-W frame) | | |
| Wall-mount empty frame with cable management. Allows up to 4-IW blocks | | I-W-MKIV-PNL |
| Wall-mount block, 24 position, E3-AMP | | IW-24-AMP-E3 |
| Wall-mount block, 24 position, DB-9 | | IW-24-D9 |
| Wall-mount block, 24 position, E3 | | IW-24-E3 |
| Wall-mount block, 24 position, RJ | | IW-5E-24 |
| Wall-mount block, 24 position, BNC | | IW-VI-24-MNT |
| **Audio Wall-Mount Systems** | | |
| Wall-mount frame with four I-24A QCP II blocks for terminating or cross-connecting 96 balanced audio circuits | 79 cm x 41 cm (31"x16") | I-WA |
| I-WA with QCP IV connectors | 97.8 x 40.70 cm (38.5" x 16") | I-WA-MKIV |
| I-WA with QCP IV to ELCO/EDAC 90-pin plugs | 97.8 x 40.70 cm (38.5" x 16") | I-WA-E90-MKIV |
| I-WA with I-24B QCP II blocks that have floating shield terminations | | I-WB |
| I-WB with QCP IV blocks | 97.8 x 40.70 cm (38.5" x 16") | I-WB-MKIV |
| I-WB with QCP II to AMP 50-pin receptacles | | I-WB-AMP |
| I-WS wall-mount frame includes I-WS-PANEL with QCP II or QCP IV connector blocks mounted 90° from the wall. Terminates or cross-connects 192 balanced audio circuits | 31" x 17.9" (79 cm x 45.5 cm) | I-WS |
| | 34.6" x 17.9" (87.9 x 45.5 cm) | I-WS-MKIV |
| **Audio QCP Termination Blocks** | | |
| Terminates and cross-connects 24 balanced audio circuits; each circuit appears on two arrays (left and right) of QCP II on each block and are jumpered on the rear of the block; shield terminals are multed together and brought out to an insulated terminal post on the side of the block to allow grounding of the system to a common point. | 17.78 x 15.24 x 2.54 cm (7" x 6" x 1") | I-24A |
| I-24A with with floating shield terminals, and no grounding terminal on side, strapped on jumpers | | I-24B |
| I-24A with no rear jumpers and no grounding terminal on side | | I-24C |
| Same as I-24A except 27 circuits | 19 cm x 15 cm x 2.54 cm (7.5" x 5.9" x 1") | I-27A |
| Same as I-24A except uses improved MKIV QCP termination. Terminates and cross-connects 24 balanced audio circuits on two arrays (left and right) on each block and is jumpered on rear of block; shield terminals are multed together and brought out to an insulated terminal post on side of block | 22.2 cm x 15 cm x 2.54 cm (8.75" x 5.9" x 1") | I-24A-MKIV |
| Same as I-24A-MKIV except with floating shield terminals and no grounding terminal on side | 22.2 cm x 15 cm x 2.54 cm (8.75" x 5.9" x 1") | I-24B-MKIV |
| Same as I-24A-MKIV except with no rear jumpers and no grounding terminal on side | 22.2 cm x 15 cm x 2.54 cm (8.75" x 5.9" x 1") | I-24C-MKIV |

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## Ordering Information

| Description | Number of Circuits | Catalog Number |
|---|---|---|
| **Video Wall-Mount Systems** | | |
| 1x8 wall mount bulkhead panel, fits on I-W Frame | 8 | VIW-8 |
| 3x8 wall mount bulkhead panel, fits on I-W Frame | 24 | VIW-24 |
| 24-circuit bulkhead panel | 24 | VIW-408 |
| 64-circuit bulkhead panel | 64 | VIW-64 |
| 72-circuit bulkhead panel | 72 | VIW-72 |
| 96-circuit bulkhead panel | 96 | VIW-424 |
| 96-circuit bulkhead panel | 96 | VIW-96 |

## Ordering Information

| Description | Dimensions | Catalog Number |
|---|---|---|
| **Audio Wall-Mount Accessories** | | |
| **Fanning Panels;** Mounts above, between or below I-WA or I-WB frames to route cabling between frames. | 19 cm x 41 cm (7.5"x16") | I-WFP |
| **Cable Ring;** Cable ring for use with I-WFP mounts on the wall above, between, or below frames or fanning panels. | 4.5"D x 5.5"W | I-WFP-RING |
| **Rack-Mounting Kit;** Holds two I-24s in a standard 48 cm (19") rack | | I-24R |
| **Icons empty panel** mounts on the I-WS frame and holds the QCP blocks. | | I-WS-PANEL |
| **Cable Management** express trough mounts above, between, or below I-WS and routes cabling horizontally between frames. | 7.5" x 17.9" (19 cm x 45 cm) | I-WSET |

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## Modular Rack-Mountable Components

The system is built around rack-mountable modular components that you can assemble in different combinations to create the system you require:

- The I-96 QCP II or QCP IV punchdown connection panel terminates and cross-connects 96 balanced audio circuits in 2 RU
- The I-FPB or I-FPD fanning panel dresses and provides strain relief for cables above or below the I-96 panel. Models are available in 1 RU and 2 RU
- Rack-mounted cable troughs and rings are available in various configurations to guide cables in the rack or along rack rails
- I-96 connectors available include QCP II, QCP IV, AMP 50-pin receptacle, and EDAC 90-pin plug

**I-96 System**
(rear view)

**2 RU QCP IV Panel**
(I-96B-MKIV)

(rear view showing jumpers)

**3 RU QCP II Hinged Termination Panel**
(I-96S)

# ICON®
## Audio Rack-Mount Systems

The ICON® I-96 high-density rack-mount audio cable management system installs in a standard 19-inch (48 cm) EIA equipment rack and is engineered for easy access to front and rear connections. The rack-mounted QCP II or QCP IV punchdown panels are quick to connect, and the feedthrough design allows changing of cross-connection jumpers on the front without disturbing connections on the rear. Multiple I-96 panels can be installed for up to 768 circuits in a fully loaded 7-foot rack.

**1 RU Dsub9 Feedthrough Rack-Mount Control Panel Breakout Panel**
(I-116-D9F)

**2 RU QCP IV/DB-25 Rack-Mount Panel**
(I-DB25)

**2 RU QCP II/EDAC 90-Pin Plug Rack-Mount Panel**
(I-96-E)

**2 RU AMP 50-Pin Receptacle Panel (Rear View)**
(I-96-AMP)



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# ICON®
Video Rack-Mount Systems

## Durable Rack-Mounted Video Bulkhead Panels

The ICON VI series is a complete line of 19-inch (48 cm) rack-mounted bulkhead video cable management panels starting from the small 12-circuit VI-12 panel to the full-sized VI-48 with 48 bulkhead coax circuits. Each panel is made of the same strong powder-coated steel and uses high-quality 3 GHz coax bulkhead connectors suitable for HDTV.

- VI-12 and VI-16 2 RU panels handle 12 or 16 circuits for small applications, such as organizing monitor outputs or the inputs and outputs of a small router
- VI-24 and VI-32 2 RU panels provide 24 and 32 circuits for moderately-sized applications, such as feeding cables to a 32-input router
- The VI-132 (2x32) 1 RU panel provides the largest number of inputs and outputs in the smallest space
- VI-48 2 RU panel handles 48 circuits for larger applications
- Colors available include white, putty white, and black
- Some models include designation strip holders for circuit identification
- Insulated and non-insulated available
- 23" panels are also available

**Exclusive ADC Closed-entry Center Pin Resists Damage**

**Conventional Center Pins Prone to Damage**

**75 Ω 12-circuit BNC Panel**
(VI-12-PTY)

**75 Ω 48-circuit BNC Panel**
(BNC-BLK-48)



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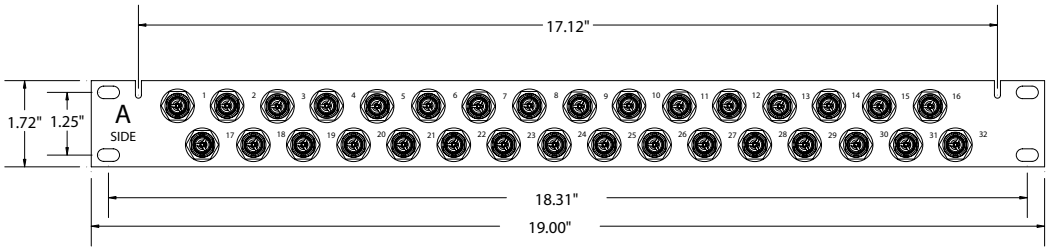
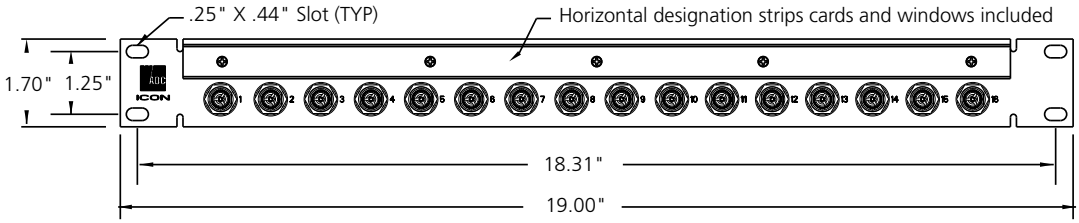
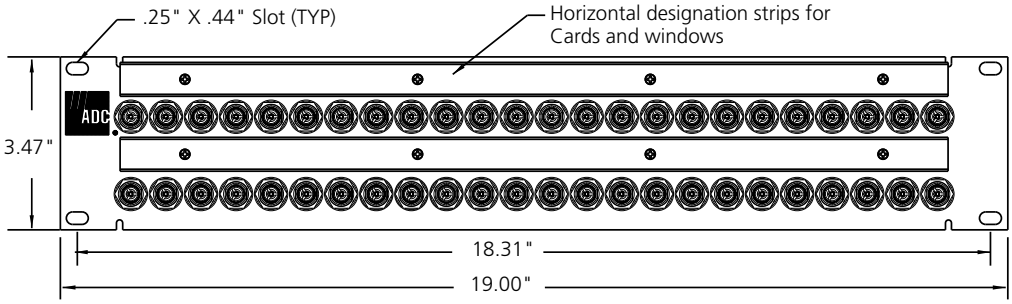


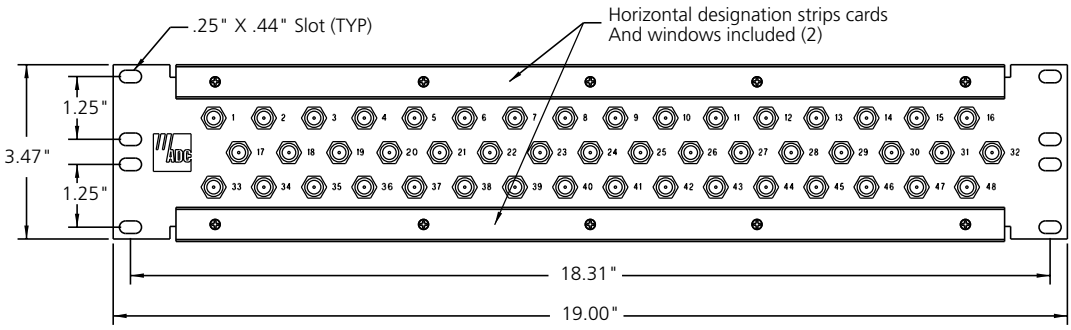

**32-Circuit 1 RU BNC Bulkhead Panel**
(VI-132-SS-BK)




**16-Circuit 1 RU BNC Bulkhead Panel**
(VI-116-DES-W)




**48-Circuit 2 RU BNC Bulkhead Panel**
(VI-48-19-TTDES-BK)




**48-Circuit 2 RU F81 Connector Bulkhead Panel**
(VI-48F-19-PTY)

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## Ordering Information

| Description | Catalog Number |
|---|---|
| **Audio Rack-Mount Systems** | |
| **Audio QCP Panels - EIA Rack-Mount 19"** | |
| 2 RU panel QCP II cross-connects, 96 balanced audio circuits | I-96 |
| 2 RU panel QCP IV cross-connects, 96 balanced audio circuits | I-96-MKIV |
| 2 RU QCP II to ELCO/EDAC 3-pin plug, cross-connects, 96 audio circuits | I-96-3E |
| 2 RU QCP II to AMP 50-pin receptacle, cross-connects, 96 audio circuits | I-96-AMP |
| 2 RU QCP II to EDAC 90-pin plug, cross-connects, 96 audio circuits | I-96-E |
| 2 RU QCP II with rear jumpers, cross-connects, 96 audio circuits | I-96B |
| 2 RU QCP IV with rear jumpers, cross-connects, 96 audio circuits | I-96B-MKIV |
| 2 RU QCP IV hinged left, cross-connects, 96 audio circuits, black | I-96S-MKIV-BK |
| 3 RU QCP II for 23" rack, cross-connects, 96 audio circuits | I-96S |
| 1 RU panel Dsub9 receptacles, 1x16 | I-116-D9F |
| 2 RU hinged panel QCP II cross-connects, 96 balanced audio circuits | I-96S-19B |
| 1 RU panel QCP IV cross-connects, 32 balanced audio circuits | I-32-DES-W |
| 2 RU panel QCP II cross-connects, 48 balanced audio circuits | I-48 |
| 2 RU panel QCP II to AMP 50-pin receptacle, 52 circuits | I-52-AMP |
| 1 RU panel QCP II to EDAC 90-pin plug, 52 circuits | I-52-E |
| 1 RU panel QCP IV cross-connects, 16 balanced audio circuit and 1 video bulkhead feedthrough | I-CS-V8 |
| 2 RU panel QCP II to (4) DB25 connectors | I-DB25 |

All products listed above are white unless otherwise noted.

## Ordering Information

| Description | Catalog Number |
|---|---|
| **Audio Accessories** | |
| **Fanning Panels - EIA Rack-Mount 19"** | |
| 2 RU panel with cable rings for routing cables horizontally. Used with multiple racks with I-FL (listed below) mounted between racks to route cables vertically and provide additional strain relief | I-FPD |
| 1 RU panel with cable rings for routing cables horizontally. Used with multiple racks with I-FL (listed below) mounted between racks to route cables vertically and provide additional strain relief | I-FPD-1RU |
| 2 RU panel with rings for horizontal or vertical cable routing Includes 2 rings to vertically route cables in the rear; to be used with a standalone channel rack | I-FPB |
| **Vertical Cable Ring/Spacers** | |
| Functions as a spacer mounted between channel racks and routes cabling from both the front and the rear of I-FPBs | I-FL |
| Ring for vertical cable routing; mounts on front or rear rack rails | I-VR |
| **Express Troughs - EIA Rack-Mount 19"** | |
| 2 RU express trough for horizontal cable routing between racks | I-ET-3 |
| 3 RU express trough for horizontal cable routing between racks | I-ET-5 |
| 4 RU express trough for horizontal cable routing between racks | I-ET-7 |

All products listed above are white unless otherwise noted.

**Express Trough**
(I-ET)

**Fanning Panel**
(I-FPB)

**Fanning Panel**
(I-FPD)

**Vertical Ring**
(I-VR)

**Fanning Panel**
(I-FL)

## Ordering Information

| Description | Number of Circuits | Catalog Number |
|---|---|---|
| **Video Rack-Mount Systems** | | |
| **19" Rack Mount BNC Bulkhead Panels, 75Ω** | | |
| 2 RU 2x6, putty | 12 | VI-12-PTY |
| 2 RU 2x6, white | 12 | VI-12-W |
| 1 RU 1x16 with designation strips, white | 16 | VI-116-DES-W |
| 2 RU 2x8 with designation strips, putty | 16 | VI-16-PTY |
| 2 RU 2x10 with designation strips, putty | 20 | VI-20-PTY |
| 2 RU 2x12, putty | 24 | VI-24-PTY |
| 2 RU 2x12 with vertical and horizontal rings, black | 24 | VI-24VHR-BK |
| 1 RU 2x16, black | 32 | VI-132-SS-BK |
| 2 RU 2x16 with designation strips, black | 32 | VI-32-BK |
| 2 RU 2x16 with designation strips, putty | 32 | VI-32-PTY |
| 2 RU 2x16 with upper and lower designation strips, white | 32 | VI-32-W |
| 2 RU 2x16 with lower and middle designation strips, white | 32 | VI-32-DES-W |
| 2 RU 3x16 with designation strips, black | 48 | VI-48-BK |
| 2 RU 3x16 with designation strips, putty | 48 | VI-48-PTY |
| 2 RU 3x16 with designation strips, white | 48 | VI-48-W |
| 2 RU 2x24 with designation strips, black | 48 | VI-48-TTDES-BK |
| 2 RU 2x24 with designation strips, gray | 48 | VI-48-TTDES-G |
| 1 RU 2x16 empty BNC panel for ADC bulkhead BNCs | 32 | VI-132-PNL-BK |
| **23" Rack Mount BNC Bulkhead Panels, 75Ω** | | |
| 2 RU 2x18 with top and bottom designation strips, putty | 36 | VI-36-23-DES-PTY |
| 2 RU 2x24 with upper and lower designation strips, black | 48 | VI-48-23-DES-BK |
| 2 RU 2x24 with upper and middle designation strips, black | 48 | VI-48-23-TT-DES-BK |
| 75 W 19" Rack Mount BNC Bulkhead Panels with Cable Tray | | |
| 2 RU 2x6 with cable tray, white | 12 | VI-12-TR-W |
| 2 RU 2X12 with cable tray, white | 24 | VI-24-TR-W |
| 1 RU 2x16 with cable tray, black | 32 | VI-132-TR-BK |
| 2 RU 2x16 with cable tray, putty | 32 | BNC-BLK-32-TR75 |
| **23" Rack Mount BNC Bulkhead Panels with Cable Tray, 75Ω** | | |
| 2 RU 2x14 with cable tray, putty | 28 | VI-28-BBG |
| 2 RU 2x18 with cable tray, black | 36 | BNC-BLK-36-TR-1U-B |
| 2 RU 2x24 with cable tray, black | 48 | BNC-BLK-48-TR-2U-B |
| 2 RU 2x24 with cable tray, putty | 48 | BNC-BLK-48-TR-2U-P |
| **F Connector Rack Mount Bulkhead Panels, 75Ω** | | |
| 2 RU 1x6 BNC, 1x6 F connector with tray, white | 12 | VI-12-BNC-F-W |
| 1 RU 19" 1x16 F connector panel with designation strip, putty | 16 | VI-16F-19-PTY |
| 2 RU 19" 3x16 F connector panel with designation strip, putty | 48 | VI-48F-19-PTY |
| 2 RU 23" 2x24 F connector panel with designation strip, putty | 48 | VI-48F-23-PTY |

# Coax Connectors

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# Coax Connectors

## BNC Connectors

ADC's true 75Ω BNC connectors are the most reliable and universally accepted method of terminating coaxial cable in the market today. Outstanding electrical performance (up to 3 GHz) is achieved by unique design elements in the industry's truest 75 Ω connector. Precision-molded insulators with locking gold-plated center conductors ensure true 75 Ω characteristic impedance. Innovative features result in significant reduction of impedance mismatch throughout the network and improved transmission reliability in digital applications.

An idea whose time has come, the new notched BNC series from ADC makes it easy to spot BNC connectors that are not properly latched to BNC jacks. This is especially helpful with high-density coax panels such as ADC's midsize video product offering where terminations are very tight, and in the back of dark racks.

### Features

- Designed to exceed the rigorous demands of today's telecom, CATV and broadcast environments including SMPTE 424M 1080p, 259, 274, and 292M standards
- Outstanding electrical performance beyond 3 GHz
- Gold-plated, locking center conductor
- True 75 Ω characteristic impedance end-to-end
- .625" crimp sleeve for greater pulloff force
- Compatible with hex, square, and 12-point crimp tools and select competitive crimp tools and die sets
- 100 percent guided mating
- Tarnish-resistant, nickel-plated body and machine bayonet
- Sizes for multiple cable types
- Meets or exceeds MIL-C-39012 requirements
- 100% North American/European precision components
- Strip lengths common between sizes and types (except for Belden 7731/CommScope 7530, RG11 Cable)



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# Coax Connectors
## Straight BNC Plug Connectors

### Ordering Information

| Description | | | | Catalog Number | |
|---|---|---|---|---|---|
| | Cable OD | | Center Conductor | | |
| Cable Numbers | in | mm | AWG | Crimp Die | Single | Bulk (100) |
| 734A/D, 734AP,9259, 1505A, 1505F, 9100, 9165, VPM2000, FM59, RCCH, 9167, M8023, LV61, 8241F, Image720 | 0.240 | 6.10 | 20 | WD-1, WD-2, WD-3, WD-5 | BNC-1-N | BNC-1B-N |
| RG59, RG59B/U, 9209, 8279, 8241, 9244 | 0.237 | 6.01 | 23 | WD-1, WD-2, WD-3, WD-5 | BNC-2-N | BNC-2B-N |
| 735A, NT735 | 0.127 | 3.23 | 26 | WD-2, WD-7 | BNC-3-N | BNC-3B-N |
| CECBV-75-2 | 0.173 | 4.39 | 26 | WD-3 | BNC-3TMX | - |
| 728, 8281, 8281B, 8281F, VP618PE, VP618PE, VP618M, CV752, CAMPLEX 1 | 0.305 | 7.75 | 20 | WD-1 | BNC-4-N | BNC-4B-N |
| 1187A, HEC-2, F-HEC59, F59SSEF | 0.278 | 7.07 | 20 | WD-1 | BNC-5-N | BNC-5B-N |
| 1506A, 1824A, VPM2000TS, VPM2000TK, CV7559-PLEN | 0.209 | 5.30 | 20 | WD-1, WD-2, WD-3, WD-5 | BNC-6-N | BNC-6B-N |
| 8218, 7538, 0222, CV75SM, RCC | 0.172 | 4.38 | 24 | WD-2, WD-7 | BNC-7 | - |
| 1694A, 9248, 9058, VSD2001, VSD2001TS, RG6SD, 1.0/4.8, M8024, Image1000, 1189AP, 9116P | 0.285 | 7.23 | 18 | WD-4, WD-5, WD-7 | BNC-8-N | BNC-8B-N |
| 1189A | 0.298 | 7.56 | 18 | WD-1 | BNC-9-N | - |
| 1695A, RG6SD-PLEN | 0.251 | 6.38 | 18 | WD-1, WD-2, WD-3, WD-5 | BNC-10-N | BNC-10B-N |
| 9268, S-HEC 89, 6605, PSF1/3 | 0.314 | 7.97 | 23 | WD-1 | BNC-11 | - |
| 1865, 8218, 7537, RGB250 | 0.171 | 4.34 | 25 | WD-2, WD-7 | BNC-12-N | - |
| 1855A, RGBSC250, VDM250, VDM230, DSM1 (3,4,5) M8025 | 0.170 | 4.32 | 24 | WD-2, WD-7 | BNC-13-N | BNC-13B-N |
| BT3002, T2C75024 | 0.176 | 4.46 | 28 | WD-2, WD-7 | BNC-14 | - |
| 8216, 9239, 83269, RGBSC260TS, VPM260, 1282P, 1277 | 0.108 | 2.75 | 26 | WD-2, WD-7 | BNC-16-N | BNC-16B-N |
| 88281, VP618TK, CV752-PLEN | 0.271 | 6.88 | 20 | WD-1 | BNC-17-N | BNC-17B-N |
| V45466-D1-B | 0.217 | 5.51 | 27 | WD-2 | BNC-18 | - |
| LL79301 | 0.160 | 4.05 | 24 | WD-2, WD-7 | BNC-19-N | - |
| 8228, 82120, H126D02 | 0.278 | 7.07 | 18 | WD-4, WD-7 | BNC-20-N | BNC-20B |
| 8219, RG58 | 0.222 | 5.65 | 20 | WD-1, WD-2, WD-3, WD-5 | BNC-21-N | - |
| 1167A, 1418B RGB | 0.171 | 4.34 | 25 | WD-2, WD-7 | BNC-22 | - |
| 7732A | | | | WD-6 | BNC-24 | - |
| 7731A, 5906, VHD1100, 89292, Image2000, PR611C4, L7CFB, RG1HO, CAMPLEX2 | 0.409 | 10.39 | 14 | WD-6 | BNC-25-N | BNC-25B-N |
| 0.6/2.8, SDV-25, 3CFB, Image360 | 0.185 | 4.69 | 23 | WD-2 | BNC-26-N | BNC-26B-N |
| 7530, VHD7000, 7855A | 0.322 | 8.18 | 16 | WD-1, WD-7 | BNC-27 | - |
| LL92833 | 0.118 | 1.96 | 26 | WD-2, WD-7 | BNC-28 | - |
| 5740, 5741, L-5CFB | 0.304 | 7.41 | 18 | WD-1 | BNC-29 | - |
| SFYZ-75-2-1, PD-847 | 0.039 | 1.00 | 27.5 | WD-2 | BNC-30 | - |
| DT179, 1522A; 1808A | 0.126 | 3.19 | 28.5 | WD-2, WD-7 | BNC-31-N | BNC-31B-N |
| Condumex Mini 75 Cable | 0.126 | 3.20 | 30 | WD-2, WD-7 | BNC-32 | - |

# Coax Connectors

## Right Angle BNC Plug Connectors

### Features

- Right angle design alleviates stress associated with bending cable
- Provides increased density
- Improves overall cable management
- Bulk packaging available
- Center conductor pins and crimp sleeves are fully interchangeable with ADC's straight plugs for same cable type

### Ordering Information

| Description | | | | | Catalog Number | |
|---|---|---|---|---|---|---|
| | Cable OD | | Center Conductor | | | |
| Cable Numbers | in | mm | AWG | Crimp Die | Single | Bulk (100) |
| **Right Angle BNC Plug Connectors** | | | | | | |
| 734A/D, 734AP,9259, 1505A, 1505F, 9100, 9165, VPM2000, CV752, FM59, RCCH, 9167, M8023, LV61, 8241F, Image720 | 0.240 | 6.10 | 20 | WD-1, WD-2, WD-3, WD-5 | BNC-RA-1 | BNC-RA-1-B |
| RG59, RG59B/U, 9209, 8279, 8241, 9244 | 0.237 | 6.01 | 23 | WD-1, WD-2, WD-3, WD-5 | BNC-RA-2 | BNC-RA-2-B |
| 735, NT735 | 0.127 | 3.23 | 26 | WD-2, WD-7 | BNC-RA-3 | BNC-RA-3-B |
| 8281B, 8281F, VP618PE, VP618M | 0.305 | 7.75 | 20 | WD-1 | BNC-RA-4 | BNC-RA-4-B |
| 8218, 1855A, 7538 | 0.172 | 4.38 | 24 | WD-2, WD-7 | BNC-RA-7 | BNC-RA-7-B |
| 1694A, 9248, 9058, VSD2001, VSD2001TS, RG6SD, 1.0/4.8, M8024, Image1000, 1189AP, 9116P | 0.285 | 7.23 | 18 | WD-4, WD-5, WD-7 | BNC-RA-8 | BNC-RA-8-B |





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# Coax Connectors
## Bulkhead Jack Connectors



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### Features

- Easier, more reliable termination; gold-plated locking center conductor ensures proper alignment during termination
- 100 percent guided mating
- Exclusive closed-entry contact prevents center conductor damage from non-standard BNCs or test probes
- Eliminates one termination point when used as a bulkhead connector

### Ordering Information

| Description | | | | | |
|---|---|---|---|---|---|
| | Cable OD | | Center Conductor | | |
| Cable Numbers | in | mm | AWG | Crimp Die | Catalog Number |
| **Bulkhead Jack Connectors** | | | | | |
| 734A/D, 734AP,9259, 1505A, 1505F, 9100, 9165, VPM2000, CV752, FM59, RCCH, 9167, M8023, LV61, 8241F, Image720 | 0.240 | 6.10 | 20 | WD-1, WD-2, WD-3, WD-5 | BNC-BHJ-1 |
| CECBV-75-2 | 0.173 | 4.39 | 26 | WD-3 | BNC-BHJ-3TMX |
| 1694A, 9248, 9058, VSD2001, VSD2001TS, RG6SD, 1.0/4.8, M8024, Image1000, 1189AP, 9116P | 0.285 | 7.23 | 18 | WD-4, WD-5, WD-7 | BNC-BHJ-8 |
| 1865, 1855A, RGBSC250 | 0.170 | 4.32 | 24 | WD-2, WD-7 | BNC-BHJ-13 |
| 8216, 9239, 83269, RGBSC260TS, VPM260, 1282P, 1277 | 0.108 | 2.75 | 26 | WD-2 | BNC-BHJ-16 |

# Coax Connectors

## F Connectors

ADC's high-performance F connectors are designed for demanding digital applications where a high-quality, high-performance F connector is required. These connectors provide superior return loss (-30 dB to 3 GHz) and are the perfect choice for use in digital headends, satellite down links, and high-performance customer premises applications.

### Features

- All-crimp two-piece design goes together like a BNC
- Combines the superior electrical performance of a BNC with the superior RF performance of an F connector
- True 75 Ω design for performance up to 3 GHz
- Crimp-on center pin provides outstanding connection rather than relying on the copper center conductor of the cable
- Gold-plated locking center pin just like a BNC connector
- Diamond-knurled crimp hub and long .500" crimp sleeve provides higher pull-off force than typical F connector types
- Long 3/8" wrench flats make for a more comfortable and easier connector to thread
- Precision machined parts for greater unit to unit consistency
- Exclusive molded center conductor insulator provides a truer impedance match over PVC and Teflon types
- Same strip and crimp dimensions as our standard BNC plugs, common tooling
- Cable sizes for RG59, RG187, and RG6 available
- Termination plugs in 1% and precision 0.1% available

### Ordering Information

| Description | | | | | Catalog Number | |
|---|---|---|---|---|---|---|
| | Cable OD | | Center Conductor | Crimp Die | | |
| Cable Numbers | in | mm | AWG | | Single | Bulk (100) |
| **F Connectors** | | | | | | |
| 734A/D, 734AP,9259, 1505A, 1505F, 9100, 9165, VPM2000, CV7559, FM59, RCCH, 9167, M8023, LV61, 8241F, Image720 | 0.240 | 6.10 | 20 | WD-1, WD-2, WD-3, WD-5 | CF-1 | CF-1B |
| 1187A, HEC-2, F-HEC59 | 0.278 | 7.07 | 20 | WD-1 | CF-5 | - |
| 1694A, 9248, 9058, VSD2001, VSD2001TS, RG6SD, 1.0/4.8, M8024, Image1000, 1189AP, 9116P | 0.285 | 7.23 | 18 | WD-1 | CF-8 | CF-8B |
| 1189A | 0.298 | 7.56 | 18 | WD-1 | CF-9 | - |
| 1855A, RGBS250, VDM250, VDM230, DSM1 (3,4,5) M8025 | 0.170 | 4.32 | 24 | WD-2, WD-7 | CF-13 | CF-13B |
| 5740, 5741, L-5CFB | 0.304 | 7.41 | 18 | WD-1 | CF-29 | - |
| DT179, 1522A; 1808A | 0.126 | 3.19 | 28.5 | WD-2 | CF-31 | - |

# Coax Connectors

## RCA Connectors

The venerable RCA connector is still the universally accepted method of terminating coaxial cable for audio and video signals in prosumer-type products such as video decks, DVDs, video projectors and HD monitors. ADC's new precision RCA connectors are designed for demanding professional environments, offering a performance-driven product with outstanding mechanical and electrical characteristics, as well as easy BNC-type assembly. Precision-molded insulators with locking gold-plated center conductors ensure nominal 75 Ω characteristic impedance. Innovative features such as ADC's proprietary geometrically molded insulator design result in a significant reduction of impedance mismatch and improved transmission reliability for digital applications. ADC's RCA connectors use the same strip and crimp tools as ADC BNC and F connector products, making installation easy and fast.

### Features

- Outstanding electrical performance up to 2 GHz
- 50 microinch gold-plated, locking internal center conductor crimps to cable
- Exclusive closed-entry center pin contact RCA pin/receptacle
- Nominal 75 Ω characteristic impedance end-to-end
- Easy preparation and installation; installs just like a standard BNC with BNC tooling
- Compatible with hex, square, and 12-point crimp tools and select competitive crimp tool and die sets
- Tarnish-resistant, nickel-plated body; 50 microinch gold-plated center pin, or all gold-plated version (shown)
- Sizes for multiple cable types
- Cable sizes for RG59, RG187 and RG6 available; uses same tooling
- Meets or exceeds MIL-STD-202F requirements



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# Coax Connectors
## RCA Connectors

### Ordering Information

| Description | | | | | Catalog Number | |
|---|---|---|---|---|---|---|
| | Cable OD | | Center Conductor | | | |
| Cable Numbers | in | mm | AWG | Crimp Die | Single | Bulk (100) |
| **RCA Connectors** | | | | | | |
| 734A/D, 734AP,9259, 1505A, 1505F, 9100, 9165, VPM2000, CV7559, FM59, RCCH, 9167, M8023, LV61, 8241F, Image720 | 0.240 | 6.10 | 20 | WD-1, WD-2, WD-3, WD-5 | CRCA-1 | CRCA-1B |
| RG59, RG59B/U, 9209, 8279, 8241, 9244 | 0.237 | 6.01 | 23 | WD-1, WD-2, WD-3, WD-5 | CRCA-2 | - |
| 728, 8281, 8281B, 8281F, VP618PE, VP618PE, VP618M, CV752, CAMPLEX 1 | 0.305 | 7.75 | 20 | WD-1 | CRCA-4 | - |
| 1187A, HEC-2, F-HEC59 | 0.278 | 7.07 | 20 | WD-1 | CRCA-5 | - |
| 1694A, 9248, 9058, VSD2001, VSD2001TS, RG6SD, 1.0/4.8, M8024, Image1000, 1189AP, 9116P | 0.285 | 7.23 | 18 | WD-1, WD-7 | CRCA-8 | CRCA-8B |
| 1855A, RGBS250, VDM250, VDM230, DSM1 (3,4,5) M8025 | 0.170 | 4.32 | 24 | WD-2, WD-7 | CRCA-13 | CRCA-13B |
| 8216, 9239, 83269, RGBSC260TS | 0.108 | 2.75 | 26 | WD-2, WD-7 | CRCA-16 | - |
| **Gold RCA Connectors** | | | | | | |
| 1694A, 9248, 9058, VSD2001, VSD2001TS, RG6SD, 1.0/4.8, M8024, Image1000, 1189AP, 9116P | 0.285 | 7.23 | 18 | WD-4 | CRCAG-8 | - |
| 1855A, RGBSC250, VDM250, VDM230, DSM1 (3,4,5) M8025 | 0.170 | 4.32 | 24 | WD-2 | CRCAG-13 | - |

**Gold RCA Connector**

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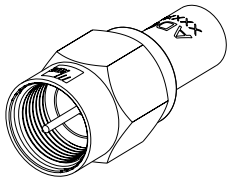
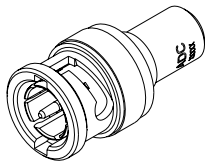
# Coax Connectors
## Terminating Plugs



**Precision 0.1%**
**F Terminating Plug**
(CF-TP2)



**Precision 0.1%**
**BNC Terminating Plug**
(BNC-TP2)

### Ordering Information

| Description | Catalog Number |
|---|---|
| **BNC Terminating Plug** | |
| 1% 75 Ω resistor | BNC-TP1 |
| Precision 0.1% 75 Ω resistor | BNC-TP2 |
| **F Terminating Plug** | |
| 1% 75 Ω resistor | CF-TP1 |
| Precision 0.1% 75 Ω resistor | CF-TP2 |
| **Accessories** | |
| Hex nut for .505" bulkhead connectors | TPC-1B |
| Locking washer for .505" bulkhead connectors | TPC-1C |
| Insulating shoulder washer for .505" bulkhead connectors | HDW-101611 |
| Hex nut for .440" bulkhead connectors | BNC-HN440 |
| Locking washer for .440" bulkhead connectors | BNC-LW440 |
| Insulating shoulder washer for .440" bulkhead connectors | BNC-IW440 |
| 2.5 mm x 5 mm Phillips pan head screw for BNC-PC-RRA | SA1089-00 |



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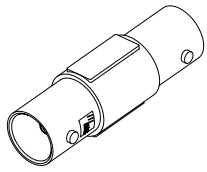
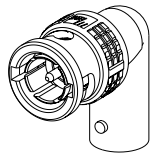
# Coax Connectors
## Adapters and Bulkheads

### Features

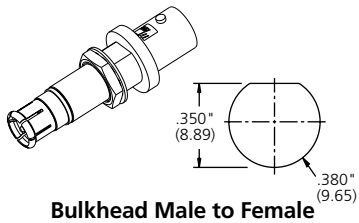
- Improved performance – true 75 Ω characteristic impedance
- Outstanding electrical performance to 3 GHz
- Bulkhead feedthrough available with or without panel isolation
- Meets the performance requirements of MIL-A-55339 for radio frequency coaxial adapters
- Gold-plated, closed-entry contact center conductor to prevent damage during test or mating plug termination



**Straight Adapter**
(BNC-STRT-ADPT)



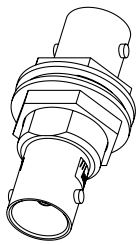
**Right Angle Adapter**
(BNC-RA-ADP)



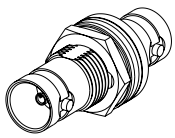

**Bulkhead Male to Female**
(BHFT-MF)

### Ordering Information

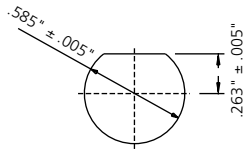
| Description | | Catalog Number |
|---|---|---|
| **BNC Adapters** | | |
| BNC straight adapter | | BNC-STRT-ADPT |
| BNC right angle adapter | | BNC-RA-ADP |
| **BNC to BNC Bulkhead Feedthrough** | | |
| for .505"/.585" cutout | | BHFT1 |
| for .440"/.505" cutout | | BHFT-I2 |
| with panel isolation washers | | BHFT-I1 |
| Bulk 100 pack version of above | | BHFT-I1B |
| **Bulkhead Male to Female** | | BHFT-MF |
| **Bulkhead Feedthrough Adapters** | | |
| F to BNC | No hardware | BHFT0-FB |
| | With hardware | BHFT1-FB |
| | Insulated with hardware | BHFT-FB-I1 |
| | Insulated with hardware, bulk 100 count | BHFT-FB-I1-B |
| F to F | No hardware | BHFT0-FF |
| | With hardware | BHFT1-FF |
| | Insulated with hardware | BHFT-FF-I1 |
| | Insulated with hardware, bulk 100 count | BHFT-FF-I1-B |



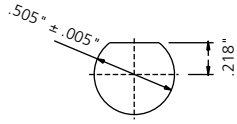
**BNC to BNC Bulkhead Feedthrough**
(BHFT-I1)



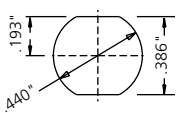
(BHFT-I2)



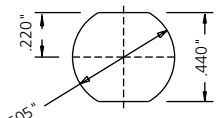

RECOMMENDED PANEL CUTOUT
WITH INSULATING WASHER
(MAX THICKNESS .250)




RECOMMENDED PANEL CUTOUT
WITHOUT INSULATING WASHER
(MAX THICKNESS .250)




RECOMMENDED PANEL CUTOUT
WITHOUT ISOLATION WASHER
(MAX PANEL THICKNESS: .250)



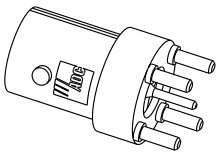

RECOMMENDED PANEL CUTOUT
WITH ISOLATION WASHER
(MAX PANEL THICKNESS: .250)

# Coax Connectors

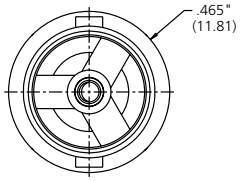
## PCB Mount BNC Connectors

### Ordering Information

| Description | Catalog Number |
|---|---|
| BNC PCB mount straight staked | BNC-PC-V1 |
| BNC PCB mount threaded right angle | BNC-PC-RTRA |
| BNC PCB mount threaded straight | BNC-PC-STRT |
| BNC PCB mount right angle screw mount | BNC-PC-RRA |
| BNC PCB mount right angle screw mount with screw | BNC-PC-RRA-1 |
| BNC square panel mount | BNC-BHJ-PNL-3TMX |



**BNC-PC-V1**

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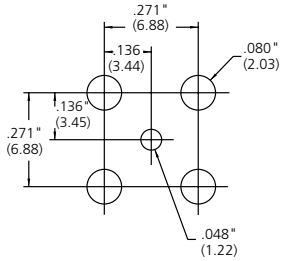
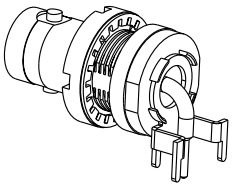
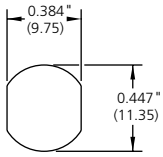



**Mounting Template**



**BNC-PC-RTRA**

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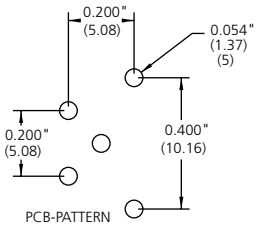
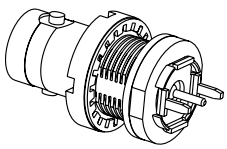
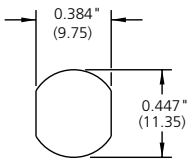



**Mounting Template**



**BNC-PC-STRT**

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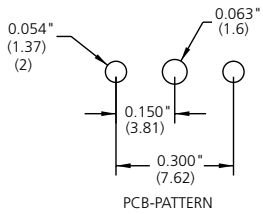
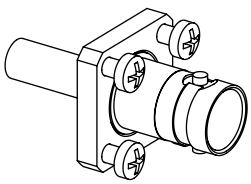
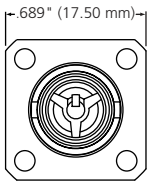


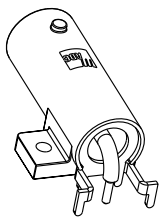

**Mounting Template**



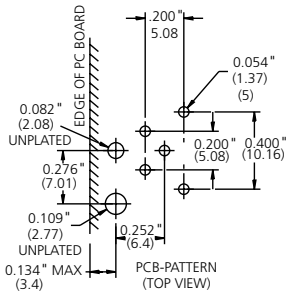
**BNC-BHJ-PNL-3TMX**




**Hole Cutout**



**BNC-PC-RRA**




**Mounting Template**



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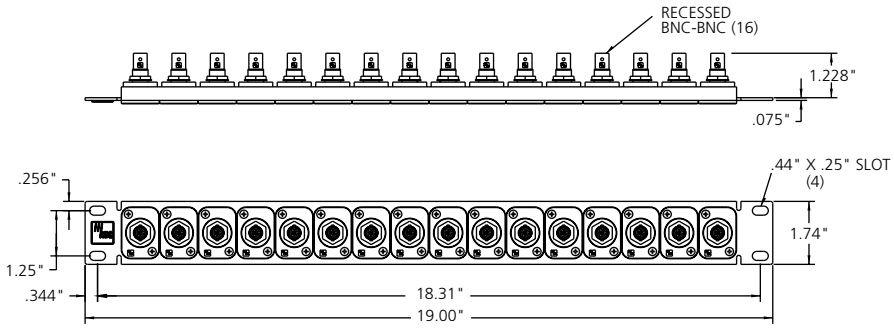
# Coax Connectors

## Recessed Panels and Connectors

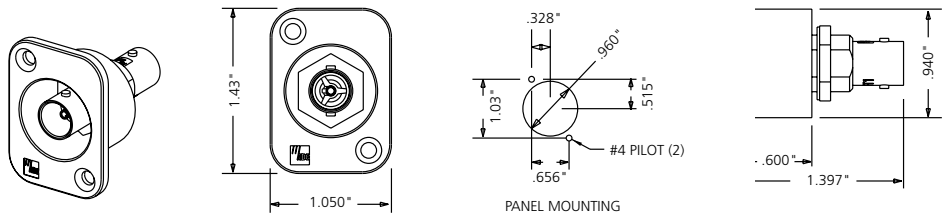
### Ordering Information

| Description | Catalog Number |
|---|---|
| **Recessed Panels;** 16-position empty 1 RU – for BHFT-R-X | |
| Black | BHFT-PNL-16-BK |
| Gray | BHFT-PNL-16-G |
| **Recessed Connectors** | |
| BNC, 75 Ω feedthrough | BHFT-R-X* |
| RCA | RCA-R-X* |
| S-Video | SV-R-X* |
| RJ45 Category 5e | BHFT-CAT5E-X* |
| RJ45 Category 6 | BHFT-CAT6-X* |

* Replace X in Catalog Number with desired color. (G=green, R=red, B=black, BL=blue, W=white, Y=yellow)




**Recessed BNC Panel**
(BHFT-PNL-16-BK)




**Recessed BNC Connector**
(BHFT-R-X)





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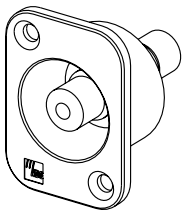
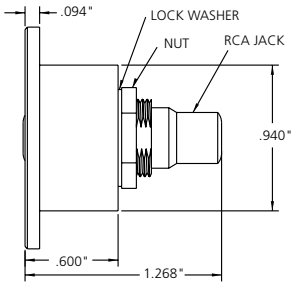
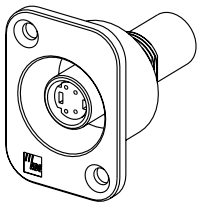
# Coax Connectors

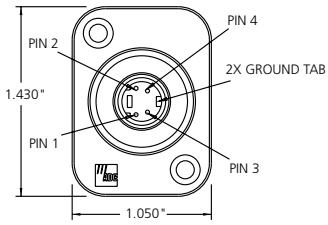
## Recessed Panels and Connectors

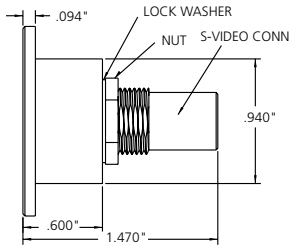




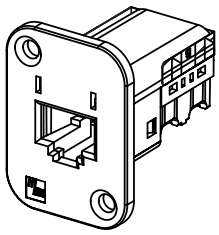

**Recessed RCA Connector**
(RCA-R-X)

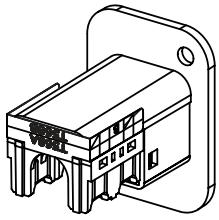


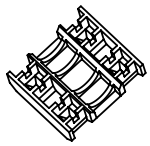



**Recessed S-Video Connector**
(SV-R-X)







**Recessed RJ45 Jack**
(BHFT-CAT5E-X, BHFT-CAT6-X)

# Coax Connectors
## Tools



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### Features

- Durable ergonomic handle provides greater comfort
- Fully adjustable for preloading to maintain die set alignment
- Exceptional life, rated for 100,000 crimp cycles
- Available in two handle sizes
- Highest mechanical advantage in the industry, reduces fatigue during crimping
- Precision-manufactured by Pressmaster in Sweden

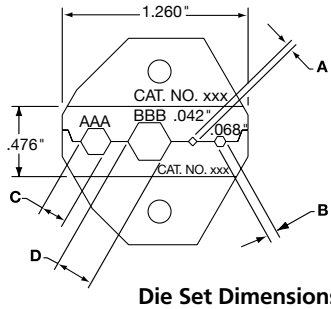
**BNC Crimping Tool**
(WT-2)

**BNC Insertion Tool**
(BT2000-12)

**Ordering Information**

| Description | Catalog Number |
|---|---|
| **Crimp Tools** for ADC die sets | |
| Ergonomic handle | WT-2 |
| Long ergonomic handle | WT-3 |
| **BNC Insertion Tool** | |
| 6" handle | BT2000-06 |
| 12" handle | BT2000-12 |
| 24" handle | BT2000-24 |
| **F Connector Insertion Tool** with 6" handle | SC-FG |
| **Crimp Tool,** 12 point For BNC, F, RCA and LCC | WT-C12 |

**12 Point Crimp Tool**
(WT-C12)




**Die Set Dimensions**

## BNC, F and RCA and LCC Die Sets

**Ordering Information**

| Description | | | | Catalog Number |
|---|---|---|---|---|
| **"A" Center Wire** | **"B" Center Wire** | **"C" Crimp Sleeve** | **"D" Crimp Sleeve** | **Die Set** |
| .042"/1.07 mm | .068"/1.73 mm | 0.255"/6.48 mm | 0.324"/8.23 mm | WD-1 |
| .042"/1.07 mm | .068"/1.73 mm | 0.178"/4.52 mm | 0.255"/6.48 mm | WD-2 |
| .042"/1.07 mm | .068"/1.73 mm | 0.197"/5.00 mm | 0.255"/6.48 mm | WD-3 |
| .042"/1.07 mm | .068"/1.73 mm | 0.197"/5.00 mm | 0.278"/7.06 mm | WD-4 |
| .042"/1.07 mm | .068"/1.73 mm | 0.255"/6.48 mm | 0.278"/7.06 mm | WD-5 |
| .068"/1.73 mm | - | 0.384"/9.76mm | - | WD-6 |
| .042"/1.07 mm | .068"/1.73 mm | 0.178"/4.52 mm | 0.278"/7.06 mm | WD-7 |
| .042"/1.07 mm | .068"/1.73 mm | 0.255"/6.48 mm | 0.324"/8.23 mm | WD-1-SER* |
| .042"/1.07 mm | .068"/1.73 mm | 0.178"/4.52 mm | 0.255"/6.48 mm | WD-2-SER* |

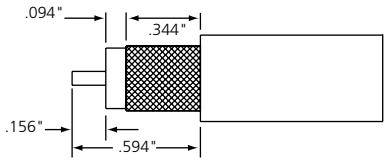
* SER units feature a unique serial number that imprints on the crimp sleeve. This is useful for tracking tooling or installation quality.

# Coax Connectors
## Tools

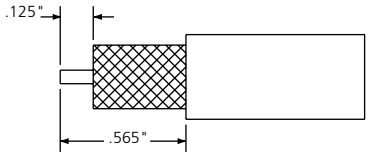
### Ordering Information

| Description | RG | Connector Type | Catalog Number |
|---|---|---|---|
| **Cable Stripper Tool Kit** | | | |
| **Complete Manual Stripper Tool Kit;** Includes stripper cassette, memory and tool | 187 | BNC-3, BNC-7, BNC-12, BNC-13, BNC-16, BNC-2 | STC-13B |
| | 59 | BNC-1, BNC-2, BNC-6, BNC-10 | STC-12B |
| | 6 | BNC-4, BNC-5, BNC-8, BNC-9, BNC-11, BNC-17 | STC-11B |
| | 11 | BNC-25 | STC-25B |
| **Individual Tools** | | | |
| **Stripper Cassette** Replacement cutting blades for the manual stripper tool | | All except BNC-25 | CCS-BLK |
| **Memory for Manual Stripper Tool** Determines how deep each blade on the stripper cassette will cut into cable. Can be adjusted for most cable types. | | BNC-4, BNC-5, BNC-8, BNC-9, BNC-11 | CCS-1 |
| | | BNC-1, BNC-2, BNC-6, BNC-10 | CCS-2 |
| | | BNC-3, BNC-7, BNC-12, BNC-1 | CCS-3 |
| | | BNC-25 | CCS-25-2B |
| **Empty Tool Handle** Requires memory and stripper cassette | | All except BNC-25 | STC-1 |

**Complete Manual Stripper Tool Kit**
(STC-12B)




**BNC,F, and RCA Plug Strip Length**
(All BNC Plug Connectors except BNC-25 and BNC-24)




**BNC Plug Strip Length**
(For BNC-25 and BNC-24)



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# Coax Connectors
## Tools





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### Ordering Information

| Description | Connector Type | Catalog Number |
|---|---|---|
| **Connection Tool Kit for BNC Connectors**<br>Includes:<br>• Crimp tool (WT-2)<br>• BNC crimp die set for 735, RG59 and 734 cables (WD-2)<br>• Stripping tool with cassette for 735/0222 cables (STC-13B)<br>• Stripping tool with cassette for RG59/734 cables (STC-12B)<br>• Cable termination tray (LCA-000009)<br>• Insertion/withdrawal tool for BNC connector (BT2000)<br>• Carrying case | | BNC-TOOL-1 |
| **Motorized Cable Stripper Kit**<br>Includes Nicad battery pack, stripper body, AC/DC charger, ABS plastic carrying case, instruction manual | All except BNC-25 | BNC-S1-KIT |
| **Cutter Heads**<br>for motorized cable stripper | BNC-1, BNC-2 BNC-6, BNC-8, BNC-9, BNC-10, BNC-H5, BNC-11 | BNC-H2 |
| | BNC-3, BNC-7, BNC-12, BNC-13 | BNC-H5 |
| **Battery Pack** for motorized cable stripper | | BNC-S1-BAT |
| **Motorized Cable Stripper** | | BNC-S1 |

**Connection Tool Kit**
(CBNC-TOOL-1)

**Motorized Cable Stripper**
(BNC-S1 with Cutter Head)

**Motorized Cable Stripper Kit**
(BNC-S1-KIT)

# Coax Connectors

## Boots

**Catalog Number**

**COAX-BOOT - __ - ____ - __**

**Cable Group**

| | |
|---|---|
| 1 | (BNC-1* & Other) |
| 3 | (BNC-3* & Other) |
| 4 | (BNC-4* & Other) |
| 5 | (BNC-5* & Other) |
| 8 | (BNC-8* & Other) |
| 13 | (BNC-13* & Other) |
| 26 | (BNC-26* & Other) |
| 31 | (BNC-31* & Other) |

**Quantity**

| | |
|---|---|
| A | 25 |
| B | 100 |
| C | 500 |

**Color**

| | |
|---|---|
| BK | Black |
| B | Blue |
| G | Green |
| R | Red |
| V | Violet |
| W | White |
| Y | Yellow |

**Coax Boots**

*Boots can be used for any variety of ADC connector Example: BNC-1; CF-1; CRCA-1; CRCAG-1; LCC-1; LCP-1

### Ordering Information

| Current LCP | Current LCC | Current RCA | Current F | Current BNC | ADC Groups | Catalog Number*** |
|---|---|---|---|---|---|---|
| - | LCC-1<br>LCC-2 | CRCA-1<br>CRCA-2 | CF-1 | BNC-1<br>BNC-2<br>BNC-6<br>BNC-15<br>BNC-20 | 1<br>2<br>6<br>15<br>20 | COAX-BOOT-1-XX-Y |
| LCP-3 | LCC-3 | - | - | BNC-3<br>BNC-19<br>BNC-28 | 3<br>19<br>28 | COAX-BOOT-3-XX-Y |
| - | - | CRCA-4 | CF-9*<br>CF-29 | BNC-4<br>BNC-9*<br>BNC-29 | 4<br>9<br>29 | COAX-BOOT-4-XX-Y |
| - | | CRCA-5<br>CRCA-8(1)<br>CRCAG-8 | CF-5<br>CF-8(1)<br>CF-9** | BNC-5<br>BNC-9**<br>BNC-11<br>BNC-17 | 5<br>9<br>11<br>17 | COAX-BOOT-5-XX-Y |
| - | - | - | - | BNC-8<br>BNC-10 | 8<br>10 | COAX-BOOT-8-XX-Y |
| LCP-13 | LCC-13 | CRCA-13<br>CRCAG-13 | CF-13 | BNC-7<br>BNC-12<br>BNC-13<br>BNC-14<br>BNC-22 | 7<br>12<br>13<br>14<br>22 | COAX-BOOT-13-XX-Y |
| - | - | - | - | BNC-3TMX<br>BNC-18<br>BNC-26 | 18<br>26 | COAX-BOOT-26-XX-Y |
| LCP-31 | LCC-31 | CRCA-16 | CF-31 | BNC-16<br>BNC-21<br>BNC-31<br>BNC-32 | 16<br>21<br>31<br>32 | COAX-BOOT-31-XX-Y |

* For cable outer diameter greater than .285
** For cable outer diameter smaller than .285
*** Replace XX with color; Replace Y with quantity
(1) CF-8 and CRCA-8 use an exception to Group 8

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Broadcast and Entertainment Products

# ProAx® Triax Camera Connectors

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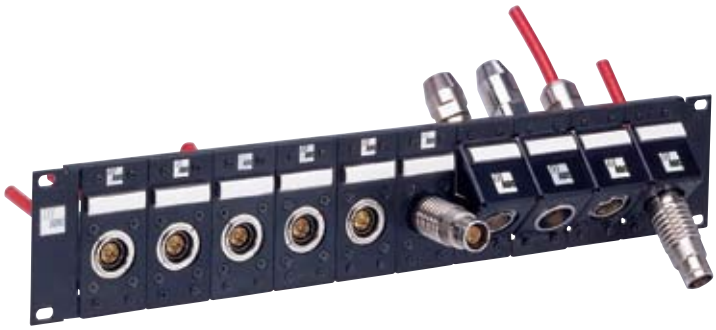
# ProAx® Triaxial Camera Connectors

## Introduction



For years, the industry has been locked into connector designs that are difficult to terminate, and even more difficult to field repair. ADC's line of ProAx® Triaxial Camera Connectors will change the way you think about this component forever. These connectors have innovative features such as gender/type changability field repairable center conductors that eliminate the need to restrip, o-rings that protect the signal path against moisture, fewer parts to assemble, and compatibility with the tooling you already own.

### Field Repairable

Triax connectors can really take a beating—especially in field applications where dirt, sand and moisture are everywhere. When the female center conductor breaks, or the male latches are worn, the entire assembly must be cut off and reterminated.

Using a two-piece center conductor and a housing assembly that can easily be replaced in the field without having to restrip and reterminate the entire connector, the patented ADC ProAx triax connector allows you to simply replace a damaged portion of the connector with common tools. When a repair is needed, the outer shell and insulator can be removed; next you simply unscrew the center conductor housing and replace the center conductor assembly, reversing the process to assemble. Absolutely no stripping or crimp tools are required.

### Gender Reversible

With ADC's ProAx triax connectors, gender parts can be swapped back and forth between males and females in only a few seconds. This process eliminates common problems such as when you've just run a thousand feet of triax only to discover the male is where the female should be. Simply trade the male for the female and continue with your project.

### Format Reversible

With ADC's U.S. and six international standard (Global, BBC, Reverse BBC, French, German and Japanese) versions, O.B. vans and internationally televised events no longer mean headaches for camera technicians. ADC's patented ProAx triax connectors can be format reversed between U.S. and global formats in only seconds. Plus, ADC's ProAx triax connectors are designed to fit standard U.S. triax cables as well as global metric cables.





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# ProAx® Triaxial Camera Connectors

Cable Mount

## Applications

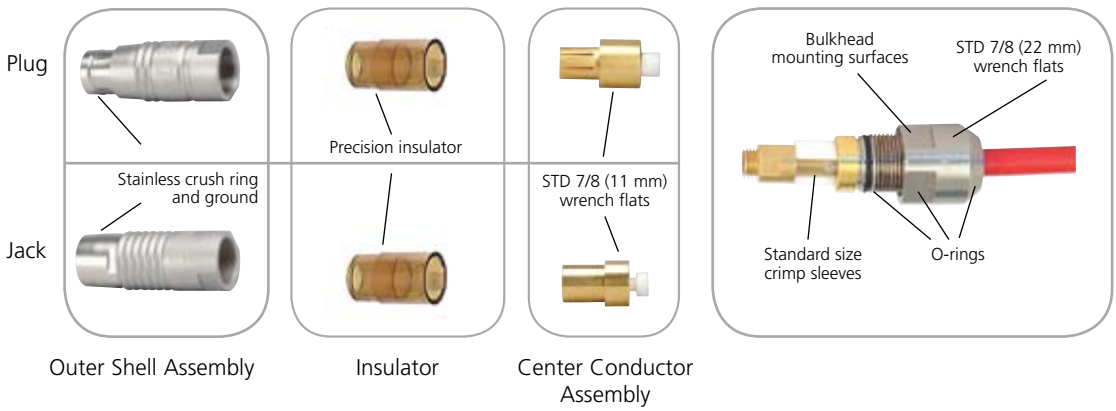
**High-Definition Ready True 75 Ω Impedance**

The ADC ProAx® triax connector line is designed for maximum bandwidth for serial digital and high-definition digital applications while maintaining a true 75 Ω impedance. All critical path components are gold-plated for outstanding durability and connectivity.

**ProAx® Triaxial Camera Connectors**

**Gender/Type Changer Connector Assembly**
(global standard shown)

**Universal Backshell Cable Dependent**




## Solid Outer Shield Ground

The solid outer braid ground in the ProAx triax connector maintains the ground no matter what the conditions. This eliminates camera shutdown from intermittent grounds, as well as the need for special conductive gaskets between the male and female connectors.

## Sturdy Construction

Each female ProAx triax connector is made of machined brass with stainless steel crush rings to assure maximum crush strength. The assembly will not go out of round under typical mobile application wear and tear.

## Patented Panel-Mount System

Each ProAx triax connector can be either cable-mounted or panel-mounted with our patented mounting kit. The mounting kit securely fastens the male or female connector to a steel plate that is attached to standard panels. Two different mounting options are available: a unique 45° and the standard 90° straight. ADC's angled 45° mounting option reduces the weight of the cables on the connectors providing less strain on the connectors than the traditional 90° mounting. Mounting yokes are available separately for custom metalwork applications.

## Compatibility

ProAx triax connectors are engineered to be compatible with other industry triaxial connectors from Kings Electronics Co. Inc., Fischer Connectors Holding S.A., LEMO SA, Tajimi, and Damar & Hagen, as well as standard industry tools and dies.

# ProAx® Triaxial Camera Connectors

Cable Mount



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**American Standard**
**A-Series**
Equivalent: Kings

**Global Standard**
**G-Series**
Equivalent: Fischer Connectors® Series 1051 A004*

**BBC Standard**
**B-Series**
Equivalent: Lemo 4M

**Reverse BBC Standard**
**N-Series**
Equivalent: Lemo 4E

**French Standard**
**L-Series**
Equivalent: Lemo 3T

**Japanese Standard**
**J-Series**
Equivalent: Tajimi

**German Standard**
**D-Series**
Equivalent: Damar & Hagen

| Standard | Equivalent | Series |
|---|---|---|
| American | Kings | A |
| Global | Fischer | G |
| BBC | Lemo 4M | B |
| Reverse BBC | Lemo 4E | N |
| French | Lemo 3T | L |
| Japanese | Tajimi | J |
| German | Damar & Hagen | D |

* Fischer connector series 1051 A004 is a registered trademark of Fischer Connectors Holding S.A.

# ProAx® Triaxial Camera Connectors

## Cable Mount

This system offers the flexibility of choosing/changing gender and type after terminating the cable. Ordering the gender changer kit and cable mount backshell separately results in reduced mistakes and repairs in the field. When a complete connector is ordered it is comprised of a gender changer kit (series and gender specific) and cable mount backshell (cable size specific).

## Gender Changer Kits

Kits include all parts needed for changing gender and series.

**Gender Changer Kit**
(global standard shown)

### Ordering Information

| Description (Series) | Gender | Catalog Number |
|---|---|---|
| **Gender Changer Kits** | | |
| American | Female jack | ATRK-GCF |
| | Male plug | ATRK-GCM |
| Global | Female jack | GTRK-GCF |
| | Male plug | GTRK-GCM |
| BBC | Female jack | BTRK-GCF-50* |
| | Male plug | BTRK-GCM-50* |
| Reverse BBC | Female jack | NTRK-GCF-75* |
| | Male plug | NTRK-GCM-75* |
| French | Female jack | LTRK-GCF |
| | Male plug | LTRK-GCM |
| Japanese | Female jack | JTRK-GCF |
| | Male plug | JTRK-GCM |
| German | Female jack | DTRK-GCF |
| | Male plug | DTRK-GCM |

*Available with 75 Ω or 50 Ω options.

**Legend:**

| Standard | Equivalent | Series | Standard | Equivalent | Series | Standard | Equivalent | Series |
|---|---|---|---|---|---|---|---|---|
| American | Kings | A | BBC | Lemo 4M | B | French | Lemo 3T | L |
| Global | Fischer | G | Reverse BBC | Lemo 4E | N | Japanese | Tajimi | J |
| | | | | | | German | Damar & Hagen | D |

Call a distributor for more information. To locate a distributor, visit ADC.com/partners.



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# ProAx® Triaxial Camera Connectors
Cable Mount

## Cable Mount Backshells

Includes all parts needed for cable termination.

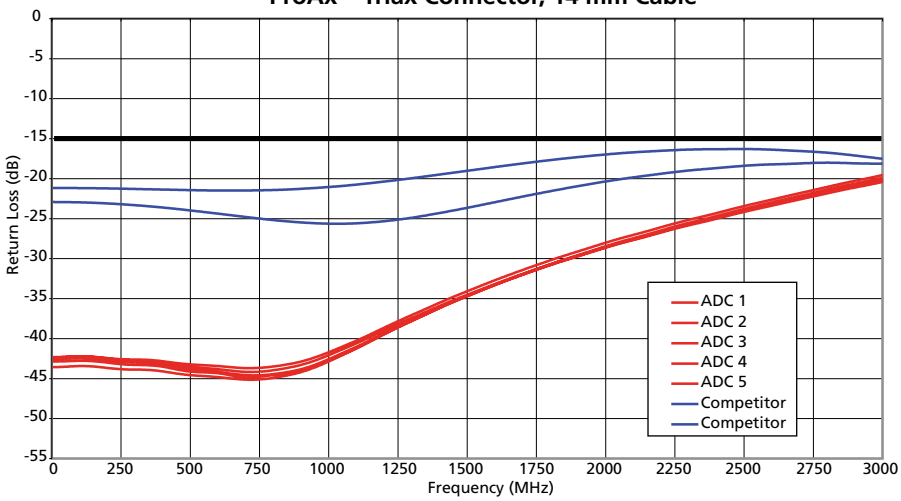
**Universal RoHS Compliant Backshell**
**Cable Size Dependent**

### Ordering Information

| Description | Catalog Number |
|---|---|
| **Universal RoHS Compliant Backshells*** | |
| A12 (1/2"), .475" cables, 75 Ω | GTRK-BS-A12 |
| B38 (3/8"), .360" cables, 75 Ω | GTRK-BS-B38 |
| C12 (1/2"), .520" cables, 75 Ω | GTRK-BS-C12 |
| D38 (3/8"), .410" cables, 75 Ω | GTRK-BS-D38 |
| E38 (3/8"), .315" cables, 75 Ω | GTRK-BS-E38 |
| F14 (1/4"), .246" cables, 75 Ω | GTRK-BS-F14 |
| G8 (8 mm) cables, 75 Ω | GTRK-BS-G8 |
| H11 (11 mm) cables, 75 Ω | GTRK-BS-H11 |
| K14 (14 mm) cables, 75 Ω | GTRK-BS-K14 |
| M9 (9 mm) cables, 75 Ω | GTRK-BS-M9 |
| N12 (12 mm) cables, 75 Ω | GTRK-BS-N12 |
| P13 (13 mm) cables, 75 Ω | GTRK-BS-P13 |

*See page 151 and 152 to cross reference your cable type with ADC's cable code and for additional cable sizes.

**Gated Return Loss**
**ProAx® Triax Connector, 14 mm Cable**




**Legend:**

| Standard | Equivalent | Series | Standard | Equivalent | Series | Standard | Equivalent | Series |
|---|---|---|---|---|---|---|---|---|
| American | Kings | A | BBC | Lemo 4M | B | French | Lemo 3T | L |
| Global | Fischer | G | Reverse BBC | Lemo 4E | N | Japanese | Tajimi | J |
| | | | | | | German | Damar & Hagen | D |

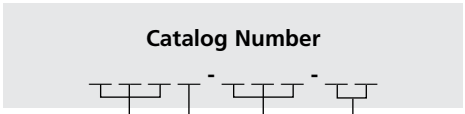
Call a distributor for more information. To locate a distributor, visit ADC.com/partners.

# ProAx® Triaxial Camera Connectors

Cable Mount

## Complete Connectors

ADC ProAx® triax connectors are available in US and six international formats. Use the following model to determine the catalog ordering number for your specific product needs.




**Series**

| | |
|---|---|
| ATC | American |
| GTC | Global |
| BTC | BBC |
| NTC | Reverse BBC |
| LTC | French |
| JTC | Japanese |
| DTC | German |

**Gender**

| | |
|---|---|
| J | Jack/Female |
| P | Plug/Male |

**Impedance***

| | |
|---|---|
| 50 | 50 Ω |
| 75 | 75 Ω |

**Cable Type****

| | |
|---|---|
| A12 | .475" OD |
| B38 | .360" OD |
| C12 | .520" OD |
| D38 | .410" OD |
| E38 | .315" OD |
| F14 | .246" OD |
| G8 | 8 mm OD |
| H11 | 11 mm OD |
| K14 | 14 mm OD |
| M9 | 9 mm OD |
| N12 | 12 mm OD |
| P13 | 13 mm OD |

**OR**

| | |
|---|---|
| BH | Bulkhead/Camera Mount |

**Examples:**

ATCJ-B38 = 75 Ω, US standard jack connector to fit .360" OD cable.

GTCP-G8 = 75 Ω, Global Triax plug connector to fit 8 mm cable.

BTCJ-H11-50 = 50 Ω, BBC Triax jack connector to fit 11 mm OD cable.

*Only applicable to BBC and Reverse BBC types.

**See page 151 and 152 to cross reference your cable type with ADC's cable code.

**Legend:**

| Standard | Equivalent | Series | Standard | Equivalent | Series | Standard | Equivalent | Series |
|---|---|---|---|---|---|---|---|---|
| American | Kings | A | BBC | Lemo 4M | B | French | Lemo 3T | L |
| Global | Fischer | G | Reverse BBC | Lemo 4E | N | Japanese | Tajimi | J |
| | | | | | | German | Damar & Hagen | D |

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# ProAx® Triaxial Camera Connectors

Cable Mount

American Triax Camera Connectors

## Ordering Information

| Description | Catalog Number | |
|---|---|---|
| **American Triax Complete Camera Connectors**** | **Jack** | **Plug** |
| A12 (1/2"), .475" cables, 75 Ω | ATCJ-A12 | ATCP-A12 |
| B38 (3/8"), .360" cables, 75 Ω | ATCJ-B38 | ATCP-B38 |
| C12 (1/2"), .520" cables, 75 Ω | ATCJ-C12 | ATCP-C12 |
| D38 (3/8"), .410" cables, 75 Ω | ATCJ-D38 | ATCP-D38 |
| E38 (3/8"), .315" cables, 75 Ω | ATCJ-E38 | ATCP-E38 |
| F14 (1/4"), .246" cables, 75 Ω | ATCJ-F14 | ATCP-F14 |

**See page 151 to cross reference your cable type with ADC's cable code.

**Legend:**

| Standard | Equivalent | Series | Standard | Equivalent | Series | Standard | Equivalent | Series |
|---|---|---|---|---|---|---|---|---|
| American | Kings | A | BBC | Lemo 4M | B | French | Lemo 3T | L |
| Global | Fischer | G | Reverse BBC | Lemo 4E | N | Japanese | Tajimi | J |
| | | | | | | German | Damar & Hagen | D |

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# ProAx® Triaxial Camera Connectors

Cable Mount

## Ordering Information

| Description (Series) | Gender | Cable Type** | Catalog Number |
|---|---|---|---|
| **International Triax Complete Camera Connectors** | | | |
| Global | Female jack | G8 (8 mm) cables | GTCJ-G8 |
| | | H11 (11 mm) cables | GTCJ-H11 |
| | | K14 (14 mm) cables | GTCJ-K14 |
| | Male plug | G8 (8 mm) cables | GTCP-G8 |
| | | H11 (11 mm) cables | GTCP-H11 |
| | | K14 (14 mm) cables | GTCP-K14 |
| BBC | Female jack | G8 (8 mm) cables | BTCJ-G8-50* |
| | | H11 (11 mm) cables | BTCJ-H11-50* |
| | | K14 (14 mm) cables | BTCJ-K14-50* |
| | Male plug | G8 (8 mm) cables | BTCP-G8-50* |
| | | H11 (11 mm) cables | BTCP-H11-50* |
| | | K14 (14 mm) cables | BTCP-K14-50* |
| Reverse BBC | Female jack | G8 (8 mm) cables | NTCJ-G8-75* |
| | | H11 (11 mm) cables | NTCJ-H11-75* |
| | | K14 (14 mm) cables | NTCJ-K14-75* |
| | Male plug | G8 (8 mm) cables | NTCP-G8-75* |
| | | H11 (11 mm) cables | NTCP-H11-75* |
| | | K14 (14 mm) cables | NTCP-K14-75* |
| French | Female jack | G8 (8 mm) cables | LTCJ-G8 |
| | | H11 (11 mm) cables | LTCJ-H11 |
| | | K14 (14 mm) cables | LTCJ-K14 |
| | Male plug | G8 (8 mm) cables | LTCP-G8 |
| | | H11 (11 mm) cables | LTCP-H11 |
| | | K14 (14 mm) cables | LTCP-K14 |
| Japanese | Female jack | G8 (8 mm) cables | JTCJ-G8 |
| | | H11 (11 mm) cables | JTCJ-H11 |
| | | K14 (14 mm) cables | JTCJ-K14 |
| | Male plug | G8 (8 mm) cables | JTCP-G8 |
| | | H11 (11 mm) cables | JTCP-H11 |
| | | K14 (14 mm) cables | JTCP-K14 |
| German | Female jack | G8 (8 mm) cables | DTCJ-G8 |
| | | H11 (11 mm) cables | DTCJ-H11 |
| | | K14 (14 mm) cables | DTCJ-K14 |
| | Male plug | G8 (8 mm) cables | DTCP-G8 |
| | | H11 (11 mm) cables | DTCP-H11 |
| | | K14 (14 mm) cables | DTCP-K14 |

*Available with 75 Ω or 50 Ω options.
**See page 152 to cross reference your cable type with ADC's cable code and for additional cable sizes. Call a distributor for more information. To locate a distributor, visit ADC.com/partners.



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# ProAx® Triaxial Camera Connectors

Cable Mount

**Center Conductor Repair Kit**
(american standard shown)

**Outer Shell Repair Kit**
(global standard shown)

## Ordering Information

| Description (Series) | Gender | Catalog Number |
|---|---|---|
| **Center Conductor Repair Kits** | | |
| American | Female jack | TRK-FF |
| | Male plug | TRK-FM |
| Global | Female jack | GTRK-FF |
| | Male plug | GTRK-FM |
| BBC and Reverse BBC | Female jack | BNTRK-FF-50 |
| | | BNTRK-FF-75 |
| | Male plug | BNTRK-FM-50 |
| | | BNTRK-FM-75 |
| French | Female jack | LTRK-FF |
| | Male plug | LTRK-FM |
| Japanese | Female jack | JTRK-FF |
| | Male plug | JTRK-FM |
| German | Female jack | DTRK-FF |
| | Male plug | DTRK-FM |
| **Outer Shell Repair Kits** | | |
| American | Female jack | ATRK-FOS |
| | Male plug | ATRK-MOS |
| Global | Female jack | GTRK-FOS |
| | Male plug | GTRK-MOS |
| BBC | Female jack | BTRK-FOS |
| | Male plug | BTRK-MOS |
| Reverse BBC | Female jack | NTRK-FOS |
| | Male plug | NTRK-MOS |
| French | Female jack | LTRK-FOS |
| | Male plug | LTRK-MOS |
| Japanese | Female jack | JTRK-FOS |
| | Male plug | JTRK-MOS |
| German | Female jack | DTRK-FOS |
| | Male plug | DTRK-MOS |

**Legend:**

| Standard | Equivalent | Series | Standard | Equivalent | Series | Standard | Equivalent | Series |
|---|---|---|---|---|---|---|---|---|
| American | Kings | A | BBC | Lemo 4M | B | French | Lemo 3T | L |
| Global | Fischer | G | Reverse BBC | Lemo 4E | N | Japanese | Tajimi | J |
| | | | | | | German | Damar & Hagen | D |

Call a distributor for more information. To locate a distributor, visit ADC.com/partners.



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# ProAx® Triaxial Camera Connectors

Cable Mount

Rear Re-termination Repair Kit

## Ordering Information

| Description | Catalog Number |
|---|---|
| **Rear Re-termination Repair Kits** (only parts required for retermination) | |
| Size A12 and D38 | GTRK-RAD |
| Size B38, E38 and F14 | GTRK-RBEF |
| Size C12 | GTRK-RC |
| Size G8 | GTRK-RG |
| Size H11 | GTRK-RH |
| Size K14 | GTRK-RK |
| Size M9 | GTRK-RM |
| Size N12 | GTRK-RN |
| Size P13 | GTRK-RP |

**Legend:**

| Standard | Equivalent | Series | Standard | Equivalent | Series | Standard | Equivalent | Series |
|---|---|---|---|---|---|---|---|---|
| American | Kings | A | BBC | Lemo 4M | B | French | Lemo 3T | L |
| Global | Fischer | G | Reverse BBC | Lemo 4E | N | Japanese | Tajimi | J |
| | | | | | | German | Damar & Hagen | D |

Call a distributor for more information. To locate a distributor, visit ADC.com/partners.



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# ProAx® Triaxial Camera Connectors

Cable Mount

## Protective Weather Boots

ADC's triax weather boots provide ultimate protection for your triax connector investment.

### Features

- Sealed to IP67 specification
- Available for all connector formats
- Feature a weather-tight patent pending lip-over seal protection
- Each boot is adjustable to fit any cable size
- Mating cap is attached via stainless steel lanyard, and is hermaphroditic for both male (plug) and female (jack) boots
- Made of a special high-performance UL rated rubber compound that can withstand extreme temperature ranges from -45 °C to +55 °C

**Boot with Cap**

**Cap**

**Global (G-Series) Triax Connectors with Boots**

## Ordering Information

| Description (Series) | Gender | Catalog Number |
|---|---|---|
| **Protective Weather Boot with Cap** | | |
| American, BBC and Reverse BBC | Female jack | BNTCJ-BOOT |
| | Male plug | BNTCP-BOOT |
| Global | Female jack | GTCJ-BOOT |
| | Male plug | GTCP-BOOT |
| French | Female jack | LTCJ-BOOT |
| | Male plug | LTCP-BOOT |
| German; caps are metallic | Female jack | DTCJ-BOOT |
| | Male plug | DTCP-BOOT |
| **Protective Weather Cap** | | |
| American, BBC and Reverse BBC | | BNTC-CAP |
| Global | | GTC-CAP |
| French | | LTC-CAP |
| German; caps are metallic | Female jack | DTCJ-CAP |
| | Male plug | DTCP-CAP |

**Legend:**

| Standard | Equivalent | Series | Standard | Equivalent | Series | Standard | Equivalent | Series |
|---|---|---|---|---|---|---|---|---|
| American | Kings | A | BBC | Lemo 4M | B | French | Lemo 3T | L |
| Global | Fischer | G | Reverse BBC | Lemo 4E | N | Japanese | Tajimi | J |
| | | | | | | German | Damar & Hagen | D |

Call a distributor for more information. To locate a distributor, visit ADC.com/partners.



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# ProAx® Triaxial Camera Connectors

## Bulkhead Mount

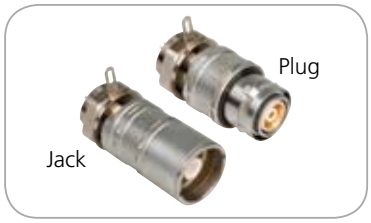
ADC's slim-line versions of its seven triax formats are specifically engineered for OEM camera use and low-profile bulkhead mounting. These new bulkhead connectors retain gender flexibility, field repairability and format reversable features that ensure high-performance.

### Features

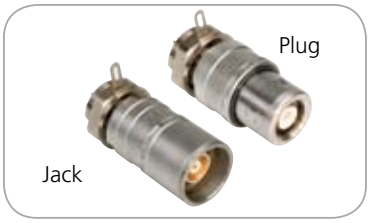
- Solder-style termination
- Connectors are gender and format interchangeable
- Field repairable without having to replace the connector or open the camera
- Compatible wtih industry-standard triaxial connectors
- Reverses between US and six international formats in just seconds
- Qualified to demanding MIL-STD 202

**American Standard**
**A-Series**
Equivalent: Kings

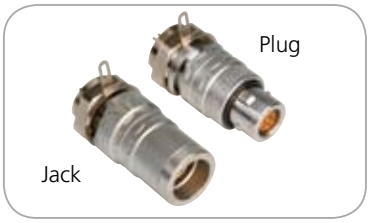
**Global Standard**
**G-Series**
Equivalent: Fischer Connectors®
Series 1051 A004*




**BBC Standard**
**B-Series**
Equivalent Lemo 4M




**Reverse BBC Standard**
**N-Series**
Equivalent: Lemo 4E




**French Standard**
**L-Series**
Equivalent: Lemo 3T

**Japanese Standard**
**J-Series**
Equivalent: Tajimi

**German Standard**
**D-Series**
Equivalent: Damar & Hagen

* Fischer connector series 1051 A004 is a registered trademark of Fischer Connectors Holding S.A.

**Legend:**

| Standard | Equivalent | Series | Standard | Equivalent | Series | Standard | Equivalent | Series |
|---|---|---|---|---|---|---|---|---|
| American | Kings | A | BBC | Lemo 4M | B | French | Lemo 3T | L |
| Global | Fischer | G | Reverse BBC | Lemo 4E | N | Japanese | Tajimi | J |
| | | | | | | German | Damar & Hagen | D |

Call a distributor for more information. To locate a distributor, visit ADC.com/partners.

# ProAx® Triaxial Camera Connectors

Bulkhead Mount





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## Ordering Information

| Description (Series) | Gender | Catalog Number |
|---|---|---|
| **Bulkhead/Camera Mount Triax Complete Camera Connectors (solder type)** | | |
| American | Female jack | ATCJ-BH |
| | Male plug | ATCP-BH |
| Global | Female jack | GTCJ-BH |
| | Male plug | GTCP-BH |
| BBC | Female jack | BTCJ-BH-50* |
| | Male plug | BTCP-BH-50* |
| Reverse BBC | Female jack | NTCJ-BH-75* |
| | Male plug | NTCP-BH-75* |
| French | Female jack | LTCJ-BH |
| | Male plug | LTCP-BH |
| Japanese | Female jack | JTCJ-BH |
| | Male plug | JTCP-BH |
| German | Female jack | DTCJ-BH |
| | Male plug | DTCP-BH |

## Ordering Information

| Description (Series) | Gender | Catalog Number |
|---|---|---|
| **Triax Camera Connector Repair Kits for Bulkhead Gender Changer Kits** | | |
| American | Female jack | ATRK-GCF-BH |
| | Male plug | ATRK-GCM-BH |
| Global | Female jack | GTRK-GCF-BH |
| | Male plug | GTRK-GCM-BH |
| BBC | Female jack | BTRK-GCF-BH-50* |
| | Male plug | BTRK-GCM-BH-50* |
| Reverse BBC | Female jack | NTRK-GCF-BH-75* |
| | Male plug | NTRK-GCM-BH-75* |
| French | Female jack | LTRK-GCF-BH |
| | Male plug | LTRK-GCM-BH |
| Japanese | Female jack | JTRK-GCF-BH |
| | Male plug | JTRK-GCM-BH |
| German | Female jack | DTRK-GCF-BH |
| | Male plug | DTRK-GCM-BH |
| **Universal Rear Unit Panel Mount** (solder-type) | | TRK-RU-BH |

*Available with 75 Ω or 50 Ω options.

**Universal Rear Unit**

Call a distributor for more information. To locate a distributor, visit ADC.com/partners.

# ProAx® Triaxial Camera Connectors

Bulkhead Mount

Center Conductor Repair Kit

## Ordering Information

| Description (Series) | Gender | Catalog Number |
|---|---|---|
| **Center Conductor Repair Kits** | | |
| American | Female jack | TRK-FF |
| | Male plug | TRK-FM |
| Global | Female jack | GTRK-FF |
| | Male plug | GTRK-FM |
| BBC and Reverse BBC | Female jack | BNTRK-FF-50 |
| | | BNTRK-FF-75 |
| | Male plug | BNTRK-FM-50 |
| | | BNTRK-FM-75 |
| French | Female jack | LTRK-FF |
| | Male plug | LTRK-FM |
| Japanese | Female jack | JTRK-FF |
| | Male plug | JTRK-FM |
| German | Female jack | DTRK-FF |
| | Male plug | DTRK-FM |
| **Outer Shell Repair Kits** | | |
| American | Female jack | ATRK-BH-FOS |
| | Male plug | ATRK-BH-MOS |
| Global | Female jack | GTRK-BH-FOS |
| | Male plug | GTRK-BH-MOS |
| BBC | Female jack | BTRK-BH-FOS |
| | Male plug | BTRK-BH-MOS |
| Reverse BBC | Female jack | NTRK-BH-FOS |
| | Male plug | NTRK-BH-MOS |
| French | Female jack | LTRK-BH-FOS |
| | Male plug | LTRK-BH-MOS |
| Japanese | Female jack | JTRK-BH-FOS |
| | Male plug | JTRK-BH-MOS |
| German | Female jack | DTRK-BH-FOS |
| | Male plug | DTRK-BH-MOS |

**Legend:**

| Standard | Equivalent | Series | Standard | Equivalent | Series | Standard | Equivalent | Series |
|---|---|---|---|---|---|---|---|---|
| American | Kings | A | BBC | Lemo 4M | B | French | Lemo 3T | L |
| Global | Fischer | G | Reverse BBC | Lemo 4E | N | Japanese | Tajimi | J |
| | | | | | | German | Damar & Hagen | D |

Call a distributor for more information. To locate a distributor, visit ADC.com/partners.



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# ProAx® Triaxial Camera Connectors

Mounting Solutions and Accessories



## Ordering Information

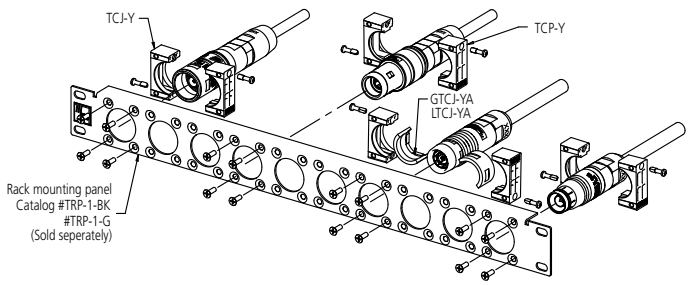
| Description | | Color | Catalog Number |
|---|---|---|---|
| **Cable Mounting Solutions** | | | |
| Panel 1 RU empty; for up to 10 connectors, requires connectors and yoke kits, sold separately | | Black | TRP-1-BK |
| | | Gray | TRP-1-G |
| Yoke clamp | Female ProAx® jacks | – | TCJ-Y |
| | Male ProAx® plugs | – | TCP-Y |
| Yoke clamp adapter** | G-Series jacks | – | GTCJ-YA |
| | L-Series, D-Series, J-Series jacks and D-Series plugs | – | LTCJ-YA |
| Panel 2 RU empty; for up to 10 TCM kits, requires connectors and TCM kits, sold separately | | Black | TRP-2-BK |
| | | Gray | TRP-2-G |
| Universal panel mount kit; mounts in TRP-2 panel (includes yoke clamps) | Straight | Black | TCM-KIT-BK |
| | | Gray | TCM-KIT-G |
| | 45 degree | Black | TCM45-KIT-BK |
| | | Gray | TCM45-KIT-G |
| Blank cover | | Black | TRP-2BLANK-BK |
| | | Gray | TRP-2BLANK-G |

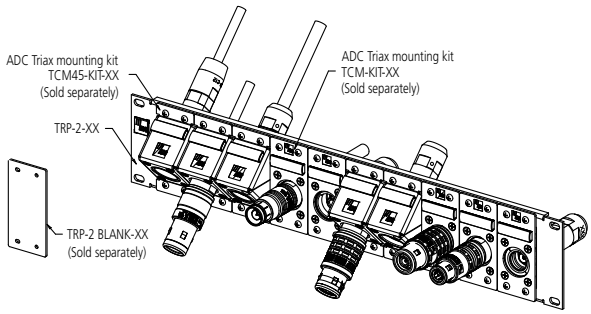
| **Yoke clamp kits for ADC catalog numbers.** *Includes two half Yokes per kit.* | |
|---|---|
| ***TCJ-Y** | ATCJ-XXX<br>**GTCJ-XXX<br>BTCJ-XXX<br>NTCJ-XXX<br>**LTCJ-XXX<br>**JTCJ-XXX<br>**DTCJ-XXX |
| ***TCP-Y** | ATCP-XXX<br>GTCP-XXX<br>BTCP-XXX<br>NTCP-XXX<br>LTCP-XXX<br>JTCP-XXX<br>**DTCP-XXX |

| **Yoke adapter kits for ADC catalog numbers.** *Includes two half Yoke adapter clampers per kit.* | |
|---|---|
| **GTCJ-YA** | GTCJ-XXX |
| **LTCJ-YA** | LTCJ-XXX<br>DTCJ-XXX<br>DTCP-XXX<br>JTCJ-XXX |

* Included in TCM kits

** Req's Yoke adapter (sold separately)




### Legend:

| Standard | Equivalent | Series | Standard | Equivalent | Series | Standard | Equivalent | Series |
|---|---|---|---|---|---|---|---|---|
| American | Kings | A | BBC | Lemo 4M | B | French | Lemo 3T | L |
| Global | Fischer | G | Reverse BBC | Lemo 4E | N | Japanese | Tajimi | J |
| | | | | | | German | Damar & Hagen | D |

Call a distributor for more information. To locate a distributor, visit ADC.com/partners.

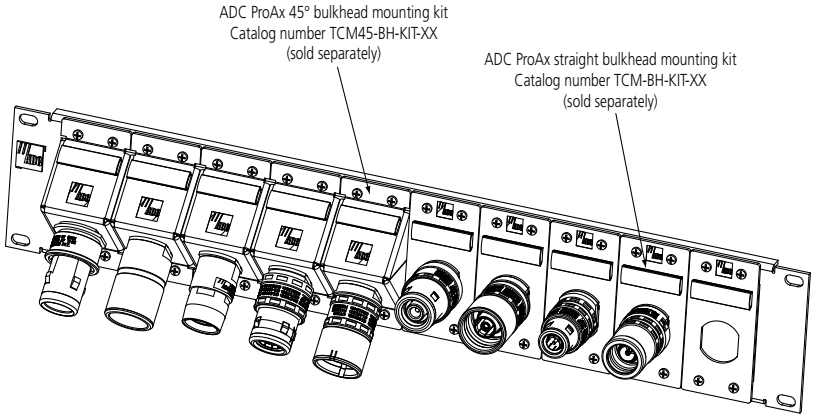
# ProAx® Triaxial Camera Connectors

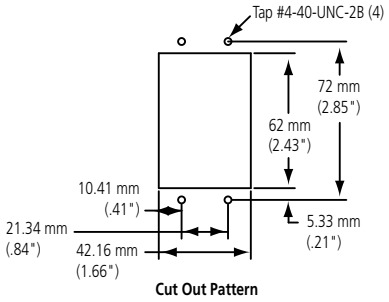
Mounting Solutions and Accessories



## Ordering Information

| Description | | Color | Catalog Number |
|---|---|---|---|
| **Bulkhead Mounting Solutions** | | | |
| Panel 2 RU empty; for up to 10 TCM kits, requires connectors and TCM-BH kits, sold separately | | Black | TRP-2-BK |
| | | Gray | TRP-2-G |
| Universal panel mount kit; mounts in TRP-2 rack mount | Straight | Black | TCM-BH-KIT-BK |
| | | Gray | TCM-BH-KIT-G |
| | 45 degree | Black | TCM45-BH-KIT-BK |
| | | Gray | TCM45-BH-KIT-G |
| Blank cover | | Black | TRP-2BLANK-BK |
| | | Gray | TRP-2BLANK-G |




**Cut Out Pattern**

### Legend:

| Standard | Equivalent | Series | Standard | Equivalent | Series | Standard | Equivalent | Series |
|---|---|---|---|---|---|---|---|---|
| American | Kings | A | BBC | Lemo 4M | B | French | Lemo 3T | L |
| Global | Fischer | G | Reverse BBC | Lemo 4E | N | Japanese | Tajimi | J |
| | | | | | | German | Damar & Hagen | D |

Call a distributor for more information. To locate a distributor, visit ADC.com/partners.

# ProAx® Triaxial Camera Connectors

## Mounting Solutions and Accessories

UTA-1

UTA-2

UTA-KIT

### Ordering Information

| Description | Dimensions | Catalog Number |
|---|---|---|
| **Universal Triax Adapter (UTA)** | | |
| UTA, adapts any connector type and gender. (Requires gender changer kit – See Pg. 4) | | UTA-1 |
| UTA short, adapts any connector type and gender. (Requires BH gender changer kit – See Pg. 13) | | UTA-2 |
| UTA kit, includes all triax (male and female) formats, with case (Japanese and German standards sold separately) | | UTA-KIT |
| Empty case for UTA kit | | UTA-CASE |
| Installation tool kits | | |
| American | | TRK-TKIT |
| International (Die sets sold separately) | | TRK-GTKIT |
| **Die Sets** | | |
| Size A12, D38, H11, N12 | 9.75 mm x 10.16 mm (.384" x .4") | TD-ADH |
| Size B38, E38, F14 | 6.47 mm x 10.16 mm (.255" x .4") | TD-BEF |
| Size C12 | 10.89 mm x 10.16 mm (.429" x .4") | TD-C |
| Size G8, M9 | 7.06 mm x 10.16 mm (.278" x .4") | TD-G |
| Size K14 | 12.09 mm x 10.16 mm (.476" x .4") | TD-K |
| **Crimp Tool;** long-handled Pressmaster | | WT-3 |
| **Wire Stripping Gauge** | | TRIAX-GAUGE |
| **Thin Feld Wrench** | | TRIAX-WRENCH |

**See page 151 and 152 to cross reference your cable type with ADC's cable code.
Call a distributor for more information. To locate a distributor, visit ADC.com/partners.

**Universal Triax Adapter Assembled**





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# ProAx® Triaxial Camera Connectors

Cable Reference Table

## Imperial Cable Types

| ADC Cable Code | A12 | | B38 | | C12 | | D38 | | E38 | | F14 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Inch | mm | Inch | mm | Inch | mm | Inch | mm | Inch | mm | Inch | mm |
| Center Conductor O.D. | **0.064** | 1.63 | **0.032** | 0.81 | **0.064** | 1.63 | **0.064** | 1.63 | **0.032** | 0.81 | **0.032** | 0.81 |
| Core Insulation O.D. | **0.285** | 7.24 | **0.143** | 3.63 | **0.312** | 7.92 | **0.285** | 7.24 | **0.143** | 3.63 | **0.135** | 3.43 |
| Inner Braid O.D. | **0.315** | 8.00 | **0.176** | 4.47 | **.0332** | 8.43 | **0.315** | 8.00 | **0.176** | 4.47 | **0.168** | 4.27 |
| Inner Jacket O.D. | **0.380** | 9.65 | **0.216** | 5.49 | **0.392** | 9.96 | **0.345** | 8.76 | **0.226** | 5.74 | **0.184** | 4.67 |
| Outer Braid O.D. | **0.395** | 10.03 | **0.250** | 6.35 | **0.422** | 10.72 | **0.375** | 9.53 | **0.256** | 6.50 | **0.215** | 5.46 |
| Outer Jacket O.D. | **0.475** | 12.07 | **0.360** | 9.14 | **0.520** | 13.21 | **0.410** | 10.41 | **0.315** | 8.00 | **0.235** | 5.97 |
| **Retermination Kits** | **GTRK-RA** | | **GTRK-RB** | | **GTRK-RC** | | **GTRK-RD** | | **GTRK-RE** | | **GTRK-RF** | |
| **ADC Crimp Die** | **TD-ADH** | | **TD-BEF** | | **TD-C** | | **TD-ADH** | | **TD-BEF** | | **TD-BEF** | |
| **Crimp Tool** | WT-3/WT-2* | | WT-3/WT-2* | | WT-3/WT-2* | | WT-3/WT-2* | | WT-3/WT-2* | | WT-3/WT-2* | |

| Cable Reference | | | | | | |
|---|---|---|---|---|---|---|
| | Belden 8233 | Belden 1856A | Belden 1858A | Belden 1859A | Belden 8232 | Belden 88232 |
| | Belden 8233A | Belden 1856B | Belden 9232 | Gepco VT618811TK | Belden 8232A | |
| | Belden 7803A | Belden 1857A | Belden 9192 | | CommScope 7810 | |
| | CommScope 7820 | Belden 9267 | Clark Wire TV7511 | | Nemal 1840 | |
| | CommScope 7827 | Clark Wire TV7559 | CommScope 7825 | | | |
| | Gepco VT61811 | CommScope 7811 | CommScope 7826 | | | |
| | Gepco VT61811PE | CommScope 7812 | Gepco LVT61811 | | | |
| | Gepco VT61811PE/AP | CommScope 7814 | Manhattan M8022 | | | |
| | | Gepco VT61859 | Nemal 1820 | | | |
| | Gepco VT61811PEF | Gepco LVT61859 | Nemal 1825 | | | |
| | | Gepco LVT61859S | | | | |
| | Nemel 1810 | Manhattan M8021 | | | | |
| | | Nemal 1835 | | | | |

* WT-3 long handle/WT-2 shorthandle

# ProAx® Triaxial Camera Connectors

Cable Reference Table

## Metric Cable Types

| ADC Cable Code | G8 | | H11 | | K14 | | M9 | | N12 | | P13 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Inch | mm | Inch | mm | Inch | mm | Inch | mm | Inch | mm | Inch | mm |
| Center Conductor O.D. | 0.039 | **0.99** | 0.056 | **1.42** | 0.087 | **2.21** | 0.039 | **1** | 0.055 | **1.4** | 0.074 | **1.89** |
| Core Insulation O.D. | 0.178 | **4.52** | 0.256 | **6.50** | 0.382 | **9.70** | 0.177 | **4.5** | 0.256 | **6.5** | 0.323 | **8.2** |
| Inner Braid O.D. | 0.200 | **5.08** | 0.284 | **7.21** | 0.413 | **10.49** | 0.201 | **5.1** | 0.280 | **7.1** | 0.350 | **8.9** |
| Inner Jacket O.D. | 0.260 | **6.60** | 0.344 | **8.74** | 0.468 | **11.89** | 0.260 | **6.6** | 0.339 | **8.6** | 0.394 | **10.0** |
| Outer Braid O.D. | 0.282 | **7.16** | 0.371 | **9.42** | 0.499 | **12.67** | 0.283 | **7.2** | 0.362 | **9.2** | 0.425 | **10.8** |
| Outer Jacket O.D. | 0.331 | **8.41** | 0.433 | **11.00** | 0.571 | **14.50** | 0.350 | **8.9** | 0.480 | **12.2** | 0.512 | **13** |

| Retermination Kits | GTRK-RG | GTRK-RH | GTRK-RK | GTRK-RM | GTRK-RN | GTRK-RP |
|---|---|---|---|---|---|---|
| **ADC Crimp Die** | **TD-G** | **TD-ADH** | **TD-K** | **TD-G** | **TD-ADH** | **TD-C + TD-K (for CC)** |
| **Crimp Tool** | WT-3/WT-2* | WT-3/WT-2* | WT-3/WT-2* | WT-3/WT-2* | WT-3/WT-2* | WT-3/WT-2* |

| Cable Reference | | | | | | |
|---|---|---|---|---|---|---|
| | Argosy CT2767300 | Argosy CT27674XX | Argosy CT2766700 | Draka Triax 8/1 | Draka Triax 11/1 | Triax B2 (France) |
| | | | | Triax A2 (France) | | |
| | Argosy CT27679XX | Argosy CT2766XXX | Argosy CT2766704 | | | |
| | Argosy CT2765XXX | Argosy CT27681XX | Argosy CT7666700 | | | |
| | Argosy CT28532XX | Argosy CT2850801 | Argosy CT2767000 | | | |
| | Bedea 1.0s/4.5s Standard 8 | Bedea 1.4s/6.6s Standard 11 | Bedea Standard 14 | | | |
| | Bedea 1.0Ls/4.5s Superflex 8 | Bedea 1.4Ls/6.6s Superflex 11 | Bedea Superflex 14 | | | |
| | Belden 7783A | Belden 7784AS | Belden 7785A | | | |
| | Belden 7801A | BIW 91307 | Draka Triax 14 | | | |
| | Draka Triax 8 | Draka Triax 11 | Fujikura 9.6/2.22EFTXF | | | |
| | Filotex SFP:A2 Video Fixe | Filotex SPF:B2 Video Fixe | Nokia Triax 14 | | | |
| | Filotex SFP:A2 Video Mobile | Filotex SFP:B2 Video Mobile | Nokia Triflex 14 | | | |
| | Fujikura 4.8/1.0 EFTXF | Intercond RX 75/56 | | | | |
| | Hirakava Triax 4.8/1.0 Tufret | N.E.K. 63990 | | | | |
| | Intercond RX 75/55 | Nokia Triax 11 1.4s/6.6s | | | | |
| | N.E.K. 23860 | Nokia Triflex 11 1.4Ls/6.6s | | | | |
| | Nokia Triax 8 1.0s/4.5s | | | | | |
| | Nokia Triflex 8 1.0Ls/4.5s | | | | | |
| | Percon Triax 8 Rigid (HF) | | | | | |
| | Percon Triax 8 Flex (HF) | | | | | |
| | Percon Triax 8 Z (Superflex) | | | | | |
| | Percon Triax 8 FRLSHF | | | | | |

* WT-3 long handle/WT-2 shorthandle

# ProAx® Fiber Connector Series

## Tactical Fiber Bulk Cable

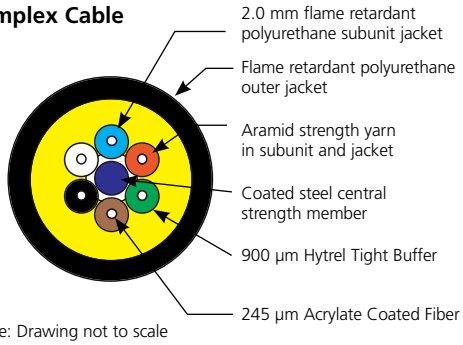
ADC's ruggedized high-density cables provide factory standard guaranteed performance specifications. They are 100% optically tested and are offered with a variety of optical performance levels.

**Features:**

- 245/900 polyester buffer
- Flame retardant polyurethane jacket; meets UL-VW-1
- Extremely rugged
- Superior abrasion resistance
- Excellent performance at extreme temperature
- Compatible with all industry standard connectors
- Available with dual reinforced jackets with aramid yarn served between the jackets

## Specifications

**Simplex Cable**




Note: Drawing not to scale

### Ordering Information

| Description | Catalog Number |
|---|---|
| **Tactical Fiber Bulk Cable;** | |
| Quad Fiber, 9.2 mm, F9A | F4CBL-F9A-BK |
| Quad Fiber, 12 mm, F12A | F4CBL-F12A-BK |

## Specifications

**MECHANICAL**

| | |
|---|---|
| **Crush Resistance:** | EIA-FOTP-41A 1200 N/cm |
| **Impact Resistance:** | EIA-FOTP-25B 500 Impacts |
| **Flexing:** | EIA-FOTP-104A 10,000 Cycles |
| **Maximum Pulling Load:** | EIA-FOTP-33A 2000 N |
| **Maximum Operating Load:** | 1000 N |
| **Min Bend Radius @ Max Load:** | 15x Cable OD |

**ENVIRONMENTAL**

| | |
|---|---|
| **Storage Temperature:** | -55 °C to 85 °C |
| **Operating Temperature:** | -40 °C to 85 °C |
| **Installation Temperature:** | -40 °C to 85 °C |
| **Low Temp Bend Test:** | EIA-FOTP-37A Passed @ -40 °C |



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# Fiber Patching and Management

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FiberGuide® Fiber Management System ..... 211
Fiber Optic Bulk Cable ..... 214

# Fiber Patching and Management

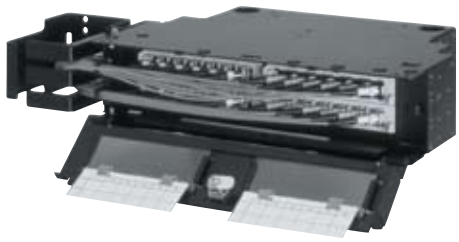
## FL2000 Series Fiber Optic Panels



## Introduction

The economical and flexible FL2000 series of fiber optic products is ideal for small fiber counts and can be used in moderate fiber count applications as well by combining various panels.

**FL2000 Rack Mount Chassis**



**FL2000 Rack Mount Chassis**
(door open)

### Features

- A complete line of modular panels developed for cabinet, rack and wall mounting
- Fully adaptable for large or small main distribution frame (MDF), intermediate distribution frame (IDF) or telephone closet (TC) applications
- Designed for 19" (48.26 cm) EIA rack or cabinet environment found in many broadcast networks; optional brackets are available to accommodate 23" (58.42 cm) or ETSI rack or cabinet mounting
- Provides termination, splicing and storage capabilities for in-building cables, outside plant cables and fiber optic terminal (FOT) equipment patch cords
- Modular design offers maximum flexibility to satisfy both current needs and future growth requirements
- A full line of options and accessories ensures compatibility with existing optical equipment
- FL2000 systems accommodate the Value-Added plug-in Modules (VAMs), adding flexibility and functionality to the optical transport systems. Splitters, wavelength division multiplexers (WDMs) and other optical components can be easily incorporated
- All FL2000 panels accommodate the modular FL2000 6pak plug-ins. 6paks are available in all connector styles and can be ordered as needed
- ADC's patented removable angled retainers allow easy access for single fiber maintenance
- FL2000 panels feature superior vertical cable protection and management
- Rack mount panels are hinged on one side, allowing full access to the rear of the front plate and the interior of the panel
- Rack mount panels are equipped with mounting brackets to provide 5" (12.7 cm) recess mounting; mounting brackets are available for virtually any mounting application
- Rack mount panels can be wall mounted
- The FL2000 splice wheel allows easy roll-up of pigtail and buffer tube lengths and superior bend radius protection
- The FL2000 splice deck is available to complete existing installations

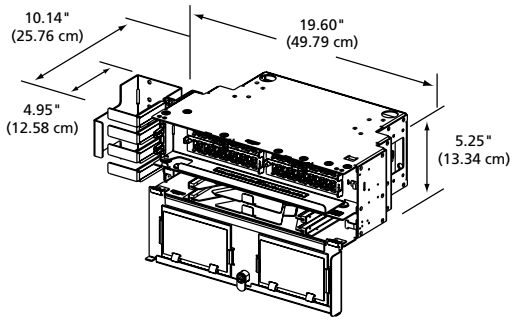
# Fiber Patching and Management

## FL2000 Series Fiber Optic Panels

## Preconfigured Termination/Splice Panels with Pigtails, Black

### Features

- FL2000 panels are shipped with 6paks and/or pigtails pre-installed at the factory
- Reduce installation time
- Simplify ordering process
- Use this configuration guide to determine the catalog number right for your application




**Preconfigured Termination/Splice Panel**

**Catalog Number**

FL2 - 0 - (1 2 3 4 5 6 7 8 9 10 11 12)

**Panel Type**

| | |
|---|---|
| C | Termination/splice |

**Nominal Capacity / Panel Height**

| | | |
|---|---|---|
| A | 12-position | 3.5" (8.89 cm) (2 RU) |
| B | 24-position | 5.25" (13.34 cm) (3 RU) |
| D | 48-position | 8.75" (22.23 cm) (5 RU) |
| E | 72-position | 14.00" (35.56 cm) (8 RU) |
| F | 96-position | 17.50" (44.45 cm) (10 RU) |

**Connector Style**

| | |
|---|---|
| **Multimode** | |
| 9 | SC |
| D | SC duplex |
| 5 | ST® |
| Y | LX.5® [1] |
| 6 | LC[1] |
| **Singlemode** | |
| 2 | FC ultra polish |
| L | FC with zirconia adapter |
| F | FC angled polish |
| 7 | SC ultra polish |
| N | SC with zirconia adapter |
| J | SC angled polish |
| E | SC duplex |
| 4 | ST ultra polish |
| P | ST® with zirconia adapter |
| X | LX.5® [1] |
| 8 | LC[1] |

**Number of Ports Loaded**

**Pigtail or Adapter Type**

| | |
|---|---|
| A | Adapters only |
| P | 6-fiber softwall bundle |
| H | 6-fiber Maxi-Strip |
| R | 12-fiber ribbon |
| K | 12-fiber softwall bundle[2] |
| Y | 12-fiber Maxi-Strip |

**Splice Type**

| | |
|---|---|
| 0 | None or N/A |
| M | Mechanical (Wheel) |
| W | Heat Shrink Fusion (Wheel) |
| 1 | Bare Fusion (Deck) |
| 2 | Heat Shrink Fusion (Deck) |
| 3 | Mechanical (Deck) |

**Splice Type[2]**

| | |
|---|---|
| M | Mechanical (Wheel) |

**Number of Splice Decks**

**Latch Type**

| | |
|---|---|
| 0 | Latch |
| 1 | Hole Plug |
| 2 | Screwdriver |
| 5 | K1 Lock |
| 6 | K2 Lock |

**Number of Cable Clamps**

| | |
|---|---|
| 0 | 1 clamp (standard) |
| 2 | 2 clamps |

**Mounting Style[3]**

| | |
|---|---|
| A | 19" (48.26 cm) standard (19.6" [49.78 cm] overall) |
| B | 19" (48.26 cm) maximum (19" [48.26 cm] overall) |
| C | 19" (48.26 cm) flush mount |

[1] LX.5® and LC connectors and adapters double the capacity of the panel by terminating two fibers at each adapter.
[2] For use with LX.5® and LC.
[3] Mounting kit shipped unattached if other than standard mounting style.

For options not listed please contact ADC Customer Service

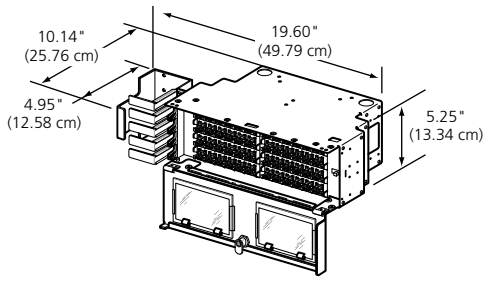
# Fiber Patching and Management

FL2000 Series Fiber Optic Panels

## Preconfigured Termination Panels with Pigtails, Black

### Features

- FL2000 panels are shipped with 6paks and/or pigtails pre-installed at the factory
- Reduce installation time
- Simplify ordering process
- Use this configuration guide to determine the catalog number right for your application




**Preconfigured Termination Panel**

**Catalog Number**

FL2 - __ __ __ 0 __ __ __ 0 - 0 __ __ __

1 2 3 4 5 6 7 8 9 10 11 12

**Panel Type**

| | |
|---|---|
| R | Termination only |

**Nominal Capacity / Panel Height**

| | | |
|---|---|---|
| A | 12-position | 1.75" (4.45cm) (1 RU) |
| B | 24-position | 3.5" (8.89 cm) (2 RU) |
| C | 36-position | 5.25" (13.34 cm) (3 RU) |
| D | 48-position | 5.25" (13.34 cm) (3 RU) |
| E | 72-position | 8.75" (22.23 cm) (5 RU) |
| F | 96-position | 10.5" (26.67 cm) (6 RU) |

**Connector Style**

| | |
|---|---|
| **Multimode** | |
| 9 | SC |
| D | SC duplex |
| 5 | ST® |
| Y | LX.5®[1] |
| 6 | LC[1] |
| **Singlemode** | |
| 2 | FC ultra polish |
| L | FC with zirconia adapter |
| F | FC angled polish |
| 7 | SC ultra polish |
| N | SC with zirconia adapter |
| J | SC angled polish |
| E | SC duplex |
| 4 | ST ultra polish |
| P | ST® with zirconia adapter |
| X | LX.5®[1] |
| 8 | LC[1] |

**Number of Ports Loaded**

**Pigtail or Adapter Type**

| | |
|---|---|
| A | Adapters only |
| P | 6-fiber softwall bundle |
| H | 6-fiber Maxi-Strip |
| R | 12-fiber ribbon |
| K | 12-fiber softwall bundle[2] |
| Y | 12-fiber Maxi-Strip |

**Mounting Style[3]**

| | |
|---|---|
| A | 19" (48.26 cm) standard (19.6" [49.78 cm] overall) |
| B | 19" (48.26 cm) maximum (19" [48.26 cm] overall) |
| C | 19" (48.26 cm) flush mount |

**Latch Type**

| | |
|---|---|
| 0 | Latch |
| 1 | Hole Plug |
| 2 | Screwdriver |
| 5 | K1 Lock |
| 6 | K2 Lock |

**Number of Cable Clamps**

| | |
|---|---|
| 0 | 1 clamp (standard) |
| 2 | 2 clamps |

[1] LX.5® and LC connectors and adapters double the capacity of the panel by terminating two fibers at each adapter.
[2] For use with LX.5® and LC
[3] Mounting kit shipped unattached, if other than standard mounting style.

# Fiber Patching and Management

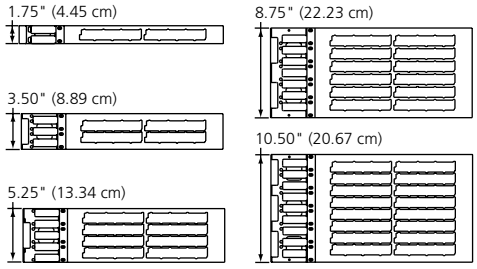
## FL2000 Series Fiber Optic Panels

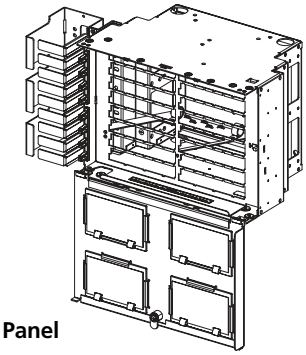
### Empty Termination Panels, Black

**Features**

- Mounting
  - 19" (48.26 cm) EIA rack or cabinets, standard 5" (12.7 cm) recess
  - Wall mounting option available
  - Other mounting kits available
- Hinged on left front side[1]; allows full access to rear of front plate and interior of panel
- FL2000 6pak adapter plug-ins ordered separately
- Constructed of high strength aluminum
- Equipped with removable metal doors with Plexiglass windows
- Designation labels included with each panel
- Complete line of accessories including locks for security

[1] Right hinged also available



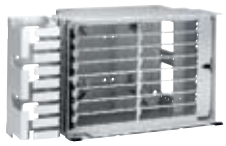
**Empty Termination Panel**

**Ordering Information**

| Description | Dimensions | Catalog Number |
|---|---|---|
| **Empty Termination Panel, Black;** includes vertical cable management trough | | |
| 12-fiber capacity | 1.75" (4.45 cm) | FL2-12RPNL-B |
| 24-fiber capacity | 3.50" (8.89 cm) | FL2-24RPNL-B |
| 36-fiber capacity | 5.25" (13.34 cm) | FL2-36RPNL-B |
| 48-fiber capacity | 5.25" (13.34 cm) | FL2-48RPNL-B |
| 72-fiber capacity | 8.75" (22.23 cm) | FL2-72RPNL-B |
| 96-fiber capacity | 10.50" (26.67 cm) | FL2-96RPNL-B |
| **Accessories** | | |
| **Wall Mount Bracket, Black;** needed for 12-fiber capacity panel only | | FL2-ACC008 |
| **Cable Clamp Kit;** one per cable recommended | | |
| Outer diameter .2" to .8" | | FL2-ACC007 |
| Outer diameter .7" to 1.0" | | FL2-ACC021 |
| Cable clamp kit for 12-fiber capacity panel only | | FL2-ACC033 |
| **Bonding/grounding kit** | | FL2-ACC006 |

**24-Fiber Capacity**

**72-Fiber Capacity**



**96-Fiber Capacity**

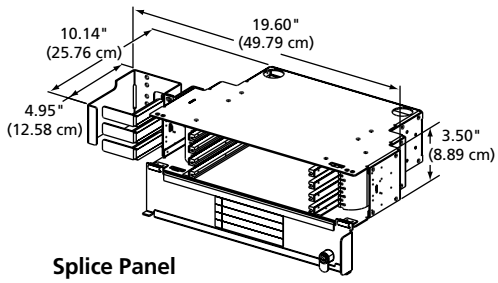
# Fiber Patching and Management

FL2000 Series Fiber Optic Panels

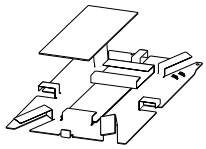
## Splice Panels

### Features

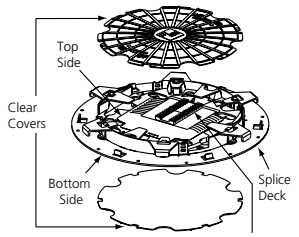
- Offers combination of splicing protection and associated fiber/pigtail storage
- Splice panel can be mounted in conjunction with any FL2000 termination panel or as a stand-alone splice panel
- Occupies same footprint and offers same mounting options as FL2000 termination panels
- Accepts the ADC splice wheel for efficient management of fiber cable and splice protection
- Accepts the traditional ADC splice deck




**Splice Panel**
(48-fiber Capacity module shown)



**Splice Deck with Splice Chip**
(Black)




**Splice Wheel with Splice Chip**
(Black)

### Ordering Information

| Description | Panel Height | Catalog Number |
|---|---|---|
| **Splice Panel for Splice Wheel, Black;** (accepts splice wheel only) | | |
| 48-fiber capacity | 3.5" (8.89 cm) | FL2-48SPNL2-B |
| 96-fiber capacity | 7" (17.78 cm) | FL2-96SPNL2-B |
| 144-fiber capacity | 8.75" (22.23 cm) | FL2-144SPNL2-B |
| **Splice Wheel with Splice Chip** | | |
| Heat shrink fusion | | FST-DRS12-HS |
| Mechanical | | FST-DRS12-MT |
| **Splice Panel for Splice Deck for Existing Installations, Black;** (also accepts splice wheel) | | |
| 48-fiber capacity | 3.5" (8.89 cm) | FL2-48SPNL-B |
| 96-fiber capacity | 7" (17.78 cm) | FL2-96SPNL-B |
| 144-fiber capacity | 8.75" (22.23 cm) | FL2-144SPNL-B |
| **Splice Deck with Splice Chip for Existing Installations** | | |
| Heat shrink fusion | | FL2-RSPLCE-HS-B |
| Mechanical | | FL2-RSPLCE-MT-B |
| Bare fusion | | FL2-RSPLCE-FT-B |
| **Cable Clamp Kit (kit of 1)** | | |
| Outer diameter .2" to .8" | | FL2-ACC007 |
| Outer diameter .7" to 1.0" | | FL2-ACC021 |

# Fiber Patching and Management

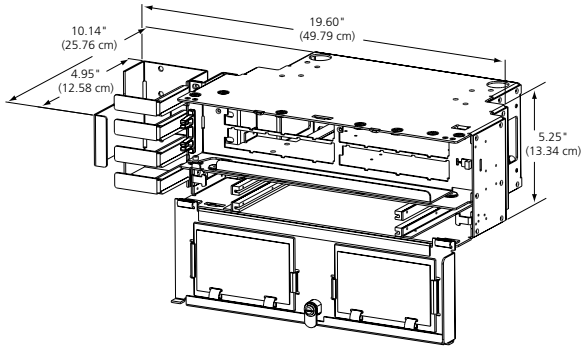
FL2000 Series Fiber Optic Panels

## Empty Termination/Splice Panels, Black

### Features

- Mounting
  - 19" (48.26 cm) EIA racks or cabinets, standard 5" (12.7 cm) recess
  - Wall mounting option available
- Hinged on left front side[1] for complete access to interior of termination section
- Ability to quickly and easily configure, utilizing the 6pak assemblies (ordered separately)
- Complete line of accessories including locks for security
- Uses ADC splice wheels or splice decks

[1] Right hinged also available




**Empty Termination/Splice Panel**

### Ordering Information

| Description | Panel Height | Catalog Number |
|---|---|---|
| **Empty Termination/Splice Panel, Black** | | |
| 12-position | 3.5" (8.89 cm) | FL2-12TS350-B |
| 24-position | 5.25" (13.34 cm) | FL2-24TS525-B |
| 48-position | 8.75" (22.23cm) | FL2-48TS875-B |
| 72-position | 14" (35.56 cm) | FL2-72TS140-B |
| 96-position | 17.5" (44.45 cm) | FL2-96TS175-B |
| **Splice Wheel with Splice Chip** | | |
| Heat shrink fusion | | FST-DRS12-HS |
| Mechanical | | FST-DRS12-MT |
| **Splice Deck with Splice Chip** | | |
| Heat shrink fusion | | FL2-RSPLCE-HS-B |
| Mechanical | | FL2-RSPLCE-MT-B |
| Bare fusion | | FL2-RSPLCE-FT-B |

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# Fiber Patching and Management

FL2000 Series Fiber Optic Panels

## 6pak Connector Plug-ins with Adapters and Pigtails

### Features

- Available with pre-terminated 3 meter (9.84') or 5 meter (16.4') pigtails
- Pigtails consist of a single outer jacket containing six color-coded 900 µm fibers
- One end of pigtail terminated to chosen connector style and installed into the 6pak plug-in adapters
- ADC recommends specific breakouts for panel and wall mount box products
- Saves installation time

**FL2000 6pak Plug-In**
(shown with SC adapters and pigtails)

## Multimode Pigtails and Adapters

**Catalog Number**

**FL2 - 6P B C 6**

**Multimode Connector Style**

| | |
|---|---|
| 5 | ST® |
| 9 | SC |
| A | FC |
| D | SC duplex |
| Y | LX.5®[1] |
| 6 | LC[1] |

**Fiber Size**

| | |
|---|---|
| B | Multimode 62.5/125 µm |
| C | Multimode 50/125 µm |

**Length (in meters)**

| | |
|---|---|
| 03W | 3 m (9.84') pigtail for wall-mount boxes |
| 05R | 5 m (16.4') pigtail for rack-mount panels |

Note: 6paks are putty in color
[1] LX.5® and LC 6paks are loaded with 12-fiber pigtails

## Singlemode Pigtails and Adapters

**Catalog Number**

**FL2 - 6P S 6**

**Singlemode Connector Style**

| | |
|---|---|
| E | SC duplex |
| 2 | FC ultra polish |
| 4 | ST ultra polish |
| 7 | SC ultra polish |
| F | FC angled polish |
| J | SC angled polish |
| X | LX.5®[1] |
| 8 | LC[1] |
| Q | SC angled polish |

**Fiber Size**

| | |
|---|---|
| S | Singlemode |

**Length (in meters)**

| | |
|---|---|
| 03W | 3 m (9.84') pigtail for wall-mount boxes |
| 05R | 5 m (16.4') pigtail for rack-mount panels |

**Fiber Type**

| | |
|---|---|
| C | Stranded |
| D | Maxi-Strip |

Note: 6paks are putty in color
[1] LX.5® and LC 6paks are loaded with 12-fiber pigtails

# Fiber Patching and Management

FL2000 Series Fiber Optic Panels

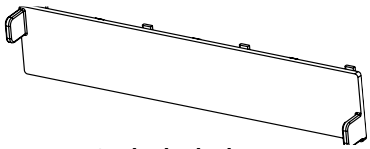
## 6pak Adapter Plug-Ins

### Features

- Can be ordered with all standard types of simplex and duplex single and multimode adapters and connectors
- Feature ADC's patented removable angled retainers which provide superior fiber management
- No tools required to install into FL2000 panels
- Can be ordered with adapters only, or for quick and easy installation, with pre-terminated 3 meter (9.84') or 5 meter (16.4') pigtails

**6pak Plug-In**
(shown with singlemode duplex adapters)

**6pak Plug-In**
(shown with multimode duplex adapters)

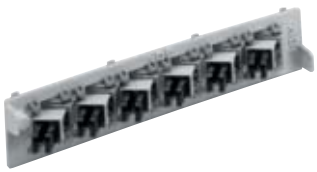


**6pak Blank Plug-In**

**6pak Plug-In**
(shown with singlemode simplex adapters)

**6pak Plug-In**
(shown with mulitmode simplex adapters)

**6pak Plug-In**
(shown with singlemode LX.5® adapters)



**6pak Plug-In**
(shown with multimode LX.5® adapters)

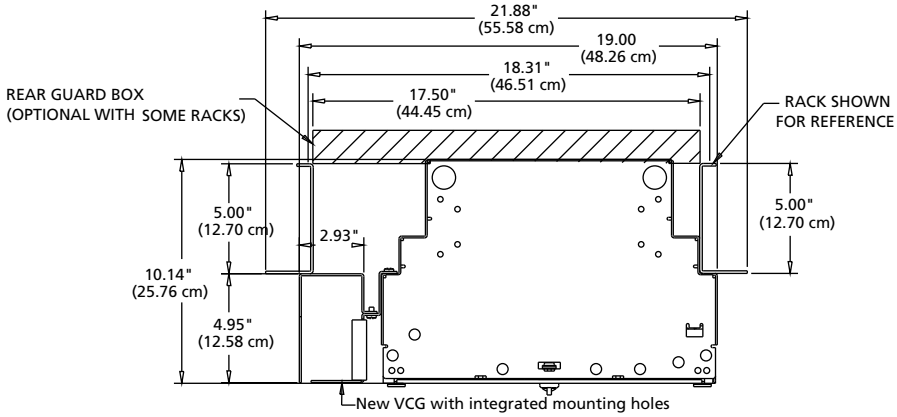
### Ordering Information

| Description | Catalog Number |
|---|---|
| **Multimode** | |
| SC | FL2-6PMMSC |
| ST® | FL2-6PMMST |
| FC | FL2-6PMMFC |
| SC, duplex | FL2-6PMMDSC |
| SC, zirconia | FL2-6PMMSC-Z |
| ST®, zirconia | FL2-6PMMST-Z |
| FC, zirconia | FL2-6PMMFC-Z |
| LX.5® | FL2-6PMMLX |
| LC | FL2-6PMMLC |
| **Singlemode** | |
| SC | FL2-6PSMSC |
| ST® | FL2-6PSMST |
| FC | FL2-6PSMFC |
| SC, duplex | FL2-6PSMDSC |
| FC angled polish | FL2-6PSMAFC |
| SC angled polish | FL2-6PSMASC |
| SC, zirconia | FL2-6PSMSC-Z |
| ST®, zirconia | FL2-6PSMST-Z |
| FC, zirconia | FL2-6PSMFC-Z |
| LX.5® | FL2-6PSMALX |
| LC | FL2-6PSMLC |
| Hybrid: ST® front, SC back | FL2-6PSMST/SC |
| **6pak Blank Plug-In** | FL2-6PBLNK |

# Fiber Patching and Management

## FL2000 Series Mounting

### 19" Maximum Mounting




**Ordering Information**

| Description | Panel Height | Catalog Number |
|---|---|---|
| **19" Maximum Mounting, Black;** allows entire panel to be contained within frame footprint<br><br>Kit includes: new vertical cable guide with integrated mounting holes | 1.75" (4.45 cm) | FL2-19MAX0175-B |
| | 3.5" (8.89 cm) | FL2-19MAX0350-B |
| | 5.25" (13.34 cm) | FL2-19MAX0525-B |
| | 7" (17.78 cm) | FL2-19MAX0700-B |
| | 8.75" (22.23cm) | FL2-19MAX0875-B |
| | 10.5" (26.67 cm) | FL2-19MAX1050-B |
| | 14" (35.56 cm) | FL2-19MAX1400-B |
| | 17.5" (43.18 cm) | FL2-19MAX1750-B |

# Fiber Patching and Management

FMT Series Fiber Optic Panel



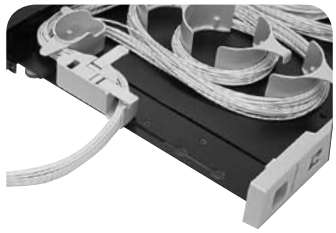
## Introduction

Cable management is an essential consideration in any successful fiber communications network. ADC's FMT series fiber optic panel enables termination, termination/splicing, termination/storage, splicing only and slack storage for optical fibers in a compact 1 or 2 RU panel.

### Sliding Radius Limiter

Sliding radius limiters provide ultimate fiber management by addressing one of the most critical elements of fiber cable management: bend radius protection.

By controlling the movement of fibers into the drawer, error-proof slack loop management is maintained, ensuring proper bend radius protection. This is crucial to protecting fiber, eliminating service failures and decreasing costs.



### Sliding Adapter Pack

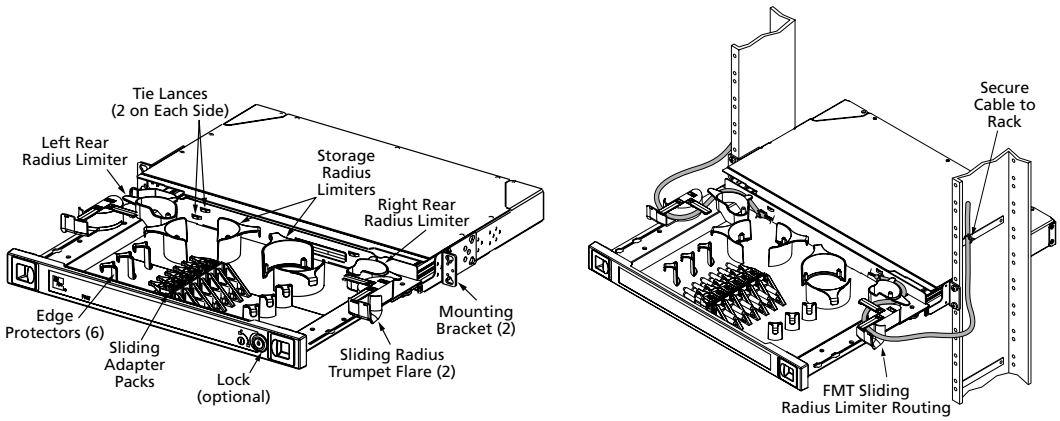
Sliding adapter packs allow easy access for connecting jumpers and cleaning connectors, ensuring that any fiber can be installed or removed without disturbing adjacent fibers. That means a significant reduction in connector installation/reconfiguration time.

### Modular Design

ADC's modular design offers the value of a single interface for performing multiple tasks in your network. By employing a 1 or 2 RU modular drawer, network technicians have familiar access to terminating, splicing and storing fiber. This cable management approach translates to time and money saved for moves, adds and changes.

# Fiber Patching and Management

## FMT Series Fiber Optic Panel




**12-Termination/Storage Drawer, Universal Entry**

### Termination-Only Drawers
This FMT accommodates 24-, 32-, 48-, 72- or 96- standard single circuit access connectors in 1 or 2 RU drawers. It is ideal for interconnect applications that will experience minimal network reconfiguration.

### Termination and Splice Drawers
This FMT has termination/splicing capability for 12-, 16- or 24-fibers within 1 RU or 48-fibers in 2 RU. Splice trays can be placed on the left and right side of the FMT, offering great flexibility in ordering the panel to fit your specific network application.

### Termination and Storage Drawers
This FMT accommodates terminations in groups of 12, 16 or 24. This panel stores slack fiber for the line and/or equipment side of the demarcation. It's an ideal solution for interconnect applications that may see some reconfiguration activity and where exact patch cord lengths cannot be determined. Slack storage within the drawer also allows for reconnectorization of the fiber.

### Slack Storage Drawers
These FMTs properly manage and protect excess optical jumper length at the equipment frame. They may be used in conjunction with other FMT solutions or as a stand-alone slack storage solution at the equipment frame. Both bulk and discrete storage solutions are available to accommodate industry-standard jumper configurations.

### Sliding Radius Limiters
Minimize fiber movement during drawer usage and the need for a long slack loop.

### Sliding Adapter Packs
Two adapter/connectors in 1 RU panels and six in 2 RU panels provide easy hand access for connecting cables and cleaning connectors.

### Edge Protectors
Protect cables from sharp angles at bend points in the cable routing.

### Rear Radius Limiters
Maintain a protective minimum bend radius for cables routed into the FMT.

### Tie Lances
Secure fibers at the ingress/egress point for additional cable management.

### Storage Radius Limiters
Provide slack storage for cable terminated within the FMT.

### Lockable
Allows controlled accessibility to the drawer.

# Fiber Patching and Management

FMT Series Fiber Optic Panel

## Product Overview

| | FMT 1 RU Rack Mount | FMT 2 RU Rack Mount |
|---|---|---|
| **Recommended Applications** | Small to medium fiber count application. Offers the secure fiber protection that comes with a drawer solution coupled with a high degree of cable management. Ideal for mixed use with active equipment in either frame or cabinet applications. | |
| **Description** | 1.75"H – all front access 19"/23" all purpose drawer; high-density 1 RU chassis | 3.5"H – all front access 19"/23" all purpose drawer; high-density 2 RU chassis |
| **Number of fibers, future growth potential** | 12 to 32 | Termination/Splice: 48<br>Termination only: 72 (96 with LC) |
| **Interconnect** | Ideal | Ideal |
| **Cross-connect** | Yes | Yes |
| **Accommodates on-frame splicing** | Yes. Built-in | Yes. Built-in |
| **Accommodates off-frame splicing** | Yes | Yes |
| **Rear access** | Not required | Not required |
| **All front access** | Yes | Yes |
| **Customer premises application** | Ideal | Ideal |
| **19" mounting** | Yes | Yes |
| **23" mounting** | Yes | Yes |
| **Cabinet mount** | Yes | Yes |
| **Wall mount** | Yes. A wall mount kit is available | Yes. A wall mount kit is available |
| **Mix equipment with fiber product?** | Ideal | Ideal |
| **Use as dedicated fiber frame** | Not recommended.<br>(See ODF catalog #103742AE) | Not recommended.<br>(See ODF catalog #103742AE) |
| **VAM capabilities** | No | Yes. MicroVAM plug-ins available |
| **Optimum jumper storage location** | Can be configured with storage | Can be configured with storage |
| **Vertical cable guide** | VCG available as separate item | VCG available as separate item |



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# Fiber Patching and Management

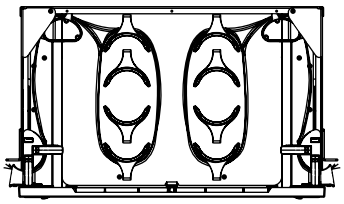
FMT Series Fiber Optic Panel

## 1 RU Slack Storage Drawers

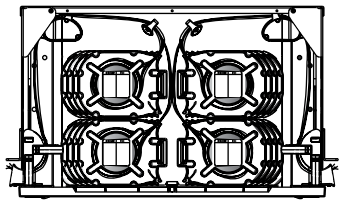
**Features**

- Offers bulk storage for up to 60 fibers and discrete slack storage for up to 16 fibers
- All-front-access drawer mounts in 19- or 23-inch racks
- Sliding radius limiters provide cable management for incoming and outgoing fibers

### Bulk Storage Drawer



### Discrete Storage Drawer



| | Capacity | | |
|---|---|---|---|
| **Slack storage type** | **3.0 mm cable** | **2.0 mm cable** | **1.7 mm cable** |
| Bulk | 32 cables, 2.5 m each | 48 cables, 2.5 m each | 60 cables, 4 m each |
| Discrete | 16 cables, 1.7 m each | 16 cables, 2 m each | 16 cables, 2.5 m each |

**Catalog Number**

**FMT - D ___ 0 0 0 00 __ - A 00 P**

**Drawer Configuration**

| | |
|---|---|
| BS | Bulk storage |
| DS | Discrete storage |

**Lock Type**

| | |
|---|---|
| 0 | No lock |
| 1 | Lock, key type #1 |

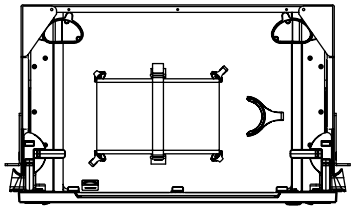
All 19- and 23-inch mounting brackets are reversible and can mount in EIA and WECO racks.

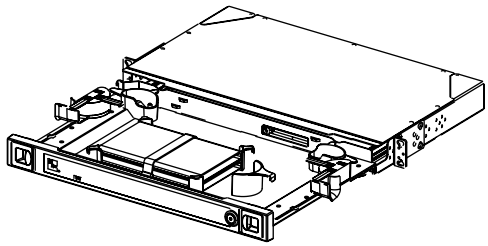
Other configurations are available upon request. Please contact ADC Technical Assistance Center.

# Fiber Patching and Management

FMT Series Fiber Optic Panel

## 1 RU Splice Drawers





**1 RU Splice-Only Drawer**

**Catalog Number**

**FMT - DAS0000 __ __ - A __ __ P**

**Splice Type**

| | |
|---|---|
| 0 | None |
| 2 | Heat shrink (single fiber fusion) |
| 3 | Mechanical (mass fusion) |

**Lock Type**

| | |
|---|---|
| 0 | No lock |
| 1 | Lock, key type #1 |

**Drawer Capacity**

| | |
|---|---|
| 12 | 1 splice tray |
| 24 | 2 splice trays |

All 19- and 23-inch mounting brackets are reversible and can mount in EIA and WECO racks.

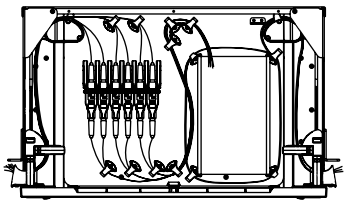
# Fiber Patching and Management

## FMT Series Fiber Optic Panel

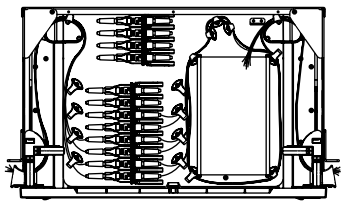
## 1 RU Fiber Termination/Splice Drawers with Adapters or Pigtails

### Features

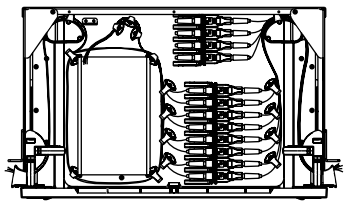
- Terminates and splices 12-, 16- or 24-fibers in an all front access design
- Mounts in 19- or 23-inch racks
- Sliding radius limiters provide cable management for incoming and outgoing fibers
- Panels loaded with pigtails come with color-coded 900 µm pigtails



**1 RU 12-Termination/Splice Drawer**
(right splice entry)



**1 RU 24-Termination/Splice Drawer**
(right splice entry)



**1 RU 24-Termination/Splice Drawer**
(left splice entry)

**1 RU 12-Termination/Splice Drawer**
(right splice entry)

**1 RU 24-Termination/Splice Drawer**
(right splice entry)

### Catalog Number

**FMT - ____ 0 __ 0 ____ - A ___ P**

**Cable Entry**

| | |
|---|---|
| D | Front Entry |
| J | Rear Entry |

**Drawer Configuration**

| | |
|---|---|
| TL | Term splice with splice tray (left splice entry) |
| TR | Term splice with splice tray (right splice entry) |
| TU | Term splice with splice tray (universal splice entry - rear entry only) |

**Connector and Adapter Type**

| | |
|---|---|
| **Multimode** | |
| 9 | SC |
| 6 | LC |
| **Singlemode** | |
| 7 | SC ultra polish |
| J | SC angled polish |
| 2 | FC ultra polish |
| 8 | LC ultra polish |
| Z | LC angled polish |

**Number of Ports**

| | |
|---|---|
| 12 | 12 ports |
| 16 | 16 ports |
| 24 | 24 ports |

**Lock Type**

| | |
|---|---|
| 0 | No lock |
| 1 | Lock, key type #1 |

**Chip Type (mini splice tray)**

| | |
|---|---|
| 0 | N/A |
| 2 | Heat shrink (single fiber fusion) |
| 3 | Mechanical (mass fusion) |

**Pigtail or Adapter Type**

| | |
|---|---|
| A | Adapter-only |
| C | Multimode stranded pigtails (50/125 µm) |
| K | Multimode stranded pigtails (62.5/125 µm) |
| U | Singlemode stranded pigtails |
| R | Singlemode ribbon pigtails |

All 19- or 23-inch mounting brackets are reversible and can mount in EIA and WECO racks.

Other configurations are available upon request. Please contact ADC Technical Assistance Center.

# Fiber Patching and Management

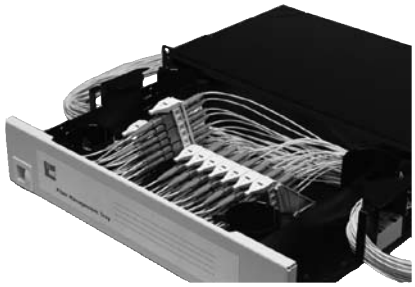
FMT Series Fiber Optic Panel

## 2 RU Adapter-Only Fiber Termination Drawers

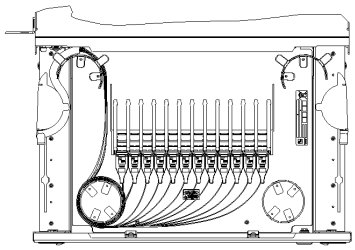
### Features

- Provides termination for 72- or 96-fibers in an all-front-access design
- Mounts in 19- or 23-inch racks
- Sliding radius limiters provide cable management for incoming and outgoing fibers

**2 RU 72-Termination Adapter-Only Drawer**



**Sliding Adapter Pack**
(shown in access position)



**Catalog Number**

**FMT-GRT0 __ 0 A 0 __ - A ___ P**

**Connector and Adapter Type**

| | |
|---|---|
| **Multimode** | |
| 9 | SC |
| 6 | LC |
| **Singlemode** | |
| 7 | SC ultra polish |
| J | SC angled polish |
| 2 | FC ultra polish |
| 8 | LC ultra polish |
| Z | LC angled polish |

**Number of Ports**

| | |
|---|---|
| 72 | 72 ports |
| 96 | 96 ports (LC connectors only) |

**Lock Type**

| | |
|---|---|
| 0 | No lock |
| 1 | Lock, key type #1 |

Other configurations are available upon request. Please contact ADC Technical Assistance Center.

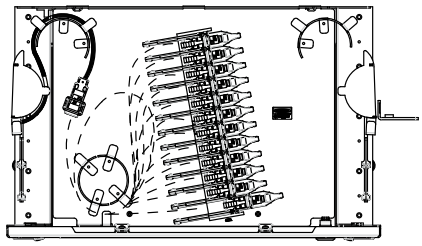
# Fiber Patching and Management

## FMT Series Fiber Optic Panel

## 2 RU Fiber Termination Drawers with Multifiber Cable (Preterminated)

### Features

- Provides termination for 72- or 96-fibers preterminated with IFC or OSP multifiber cable
- Mounts in 19- or 23-inch racks
- Sliding radius limiters provide cable management for incoming and outgoing fibers



**2 RU 72-Termination Drawer with Multifiber Cable (IFC or OSP)**

**Catalog Number**

**FMT-GN7 ___ ___ ___ ___ - A ___ P**

**Cable Type**

| | |
|---|---|
| **Multimode** | |
| Y | IFC stranded 50/125 µm riser |
| C | IFC stranded 62.5/125 µm riser |
| **Singlemode** | |
| A | IFC stranded riser |
| M | IFC ribbon riser |
| L | OSP armored ribbon |

**Connector and Adapter Type**

| | |
|---|---|
| **Multimode** | |
| 9 | SC |
| 6 | LC |
| **Singlemode** | |
| 7 | SC ultra polish |
| J | SC angled polish |
| 2 | FC ultra polish |
| 8 | LC ultra polish |
| Z | LC angled polish |

**Number of Ports**

| | |
|---|---|
| 72 | 72 ports |
| 96 | 96 ports (LC connectors only) |

**Lock Type**

| | |
|---|---|
| 0 | No lock |
| 1 | Lock, key type #1 |

**Cable Length**

| | |
|---|---|
| 008 | 8 m (25') |
| 016 | 16 m (50') |
| 023 | 23 m (75') |
| 031 | 31 m (100') |
| 039 | 39 m (125') |
| 046 | 46 m (150') |
| 061 | 61 m (200') |
| 077 | 77 m (250') |
| 092 | 92 m (300') |
| 122 | 122 m (400') |
| 153 | 153 m (500') |

Other configurations are available upon request. Please contact ADC Technical Assistance Center.

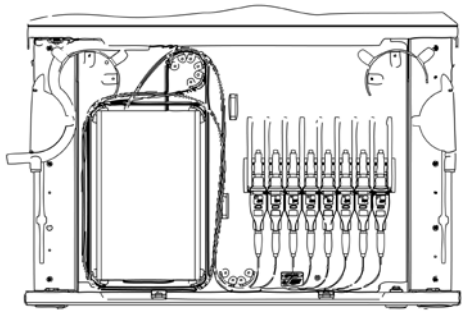
# Fiber Patching and Management

FMT Series Fiber Optic Panel

## 2 RU Fiber Termination/Splice Drawers with Adapters or Pigtails

### Features

- Terminates and splices 48-fibers in an all-front-access design
- Mounts in 19- or 23-inch racks
- Sliding radius limiters provide cable management for incoming and outgoing fibers
- Panels loaded with pigtails come with color-coded 900 µm pigtails



**2 RU 48-Termination/Splice Drawer**

**Catalog Number**

**FMT-GTL 0 __ 0 __ __ __ - A48 P**

**Connector and Adapter Type**

| | |
|---|---|
| **Multimode** | |
| 9 | SC |
| 6 | LC |
| **Singlemode** | |
| 7 | SC ultra polish |
| J | SC angled polish |
| 2 | FC ultra polish |
| 8 | LC ultra polish |
| Z | LC angled polish |

**Lock Type**

| | |
|---|---|
| 0 | No lock |
| 1 | Lock, key type #1 |

**Chip Type**

| | |
|---|---|
| 0 | No splice tray |
| 2 | Heat shrink (single fiber fusion) |
| 3 | Mechanical (mass fusion) |

**Pigtail or Adapter Type**

| | |
|---|---|
| A | Adapter-only |
| C | Multimode stranded pigtails (50/125 µm) |
| K | Multimode stranded pigtails (62.5/125 µm) |
| U | Singlemode stranded pigtails |
| R | Singlemode ribbon pigtails |

Other configurations are available upon request. Please contact ADC Technical Assistance Center.

# Fiber Patching and Management

FMT Series Fiber Optic Panel

## 2 RU Value-Added Module (VAM) MicroVAM Chassis

The FMT MicroVAM chassis accommodates MicroVAM modules. The MicroVAM module is ADC's highest density and most versatile VAM module.

**Single MicroVAMs**
(shown in access position)

**2 RU FMT with Single MicroVAMs**

**1 RU FMT with Single MicroVAMs**

### Ordering Information

| Description | Dimensions (HxWxD) | Catalog Number |
|---|---|---|
| **2 RU FMT MicroVAM Chassis, Unloaded;** accommodates up to 12 single MicroVAMs for monitoring optical signals | 89 mm x 483 mm/584 mm x 244 mm (3.5" x 19"/23" x 9.6") | FMT-GVM000000-A72P |
| **1 RU FMT MicroVAM Chassis, Unloaded;** accommodates up to 4 single MicroVAMs for monitoring optical signals | 44 mm x 483 mm/584 mm x 244 mm (1.75" x 19"/23" x 9.6") | FMT-DVS000000-E00B |

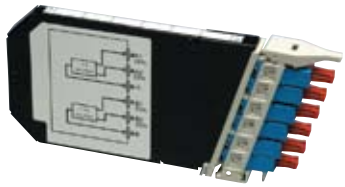
## Value-Added Module (VAM) System

ADC offers an expansive line of monitor, splitter, WDM and CWDM VAM plug-in modules designed to meet all application needs. Please reference the **Value-Added Module (VAM) System Catalog #101663AE** for details at www.adc.com or contact ADC Customer Service.

# Fiber Patching and Management

FMT Series Fiber Optic Panel

## 2 RU MicroVAM Monitor Module



**Catalog Number**

**FMT-M ___ ___ 1 ___ ___ 0 0 0**

**Input Connector/Adapter Singlemode**

| | |
|---|---|
| 7U | SC ultra polish |
| KU | LC ultra polish |

**or**

**Multimode***

| | |
|---|---|
| 9A | SC 50/125 µm |
| 9B | SC 62.5/125 µm |
| PM | LC |

**Output Connector/Adapter Singlemode**

| | |
|---|---|
| 7U | SC ultra polish |
| KU | LC ultra polish |

**or**

**Multimode***

| | |
|---|---|
| 9A | SC 50/125 µm |
| 9B | SC 62.5/125 µm |
| PM | LC |

**Module Style**

| | |
|---|---|
| B | Cross-connect customer premises |
| J | Dual monitor |
| S | Splitter module |

**Split Ratio**

| | |
|---|---|
| A | 90/10 |
| B | 95/05 |
| C | 50/50 |
| H | 70/30 |
| J | 60/40 |
| K | 99/01 |
| L | 98/02 |

**Monitor Connector Type Singlemode**

| | |
|---|---|
| 7U | SC ultra polish |
| KU | LC ultra polish |

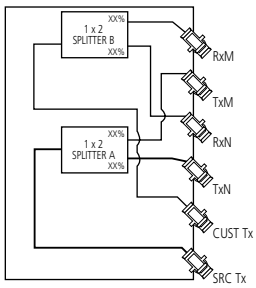
**or**

**Multimode***

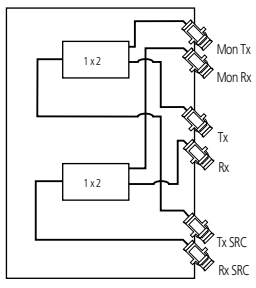
| | |
|---|---|
| 9A | SC 50/125 µm |
| 9B | SC 62.5/125 µm |
| PM | LC |

*Contact ADC for specifications and available split ratios.

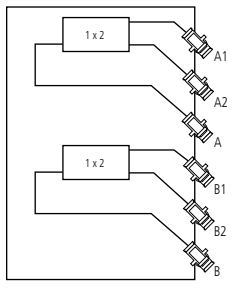
B Customer Premises Monitor Module




J Dual Monitor Cross-Connect




S Splitter Module



# Fiber Patching and Management

## FPL Series Fiber Optic Panel

**5 RU 144-Position Panel**

**1 RU 24-Position Panel**

ADC's FPL series provides industry-leading fiber cable protection and management. The panel utilizes an internal splicing system that creates a compact, feature-rich, high-density solution. FPL achieves densities of 48-fiber terminations/splices in 1 RU (1.75") and 288-terminations/splices in 5 RU (8.75") using LC connectors. These densities are attained while utilizing ADC's angled adapters to ease cable access, protect bend radius and provide individual fiber access. Vertical cable guides on either side of the panel allow for managed routing and protection of the fiber entering and exiting the panel. The FPL's wide range of features and options are designed for your networks' growing needs.

Panels are equipped with adjustable mounting brackets to provide either 19- or 23-inch rack mounting with either four- or five-inch recess mounting. The panel is available preterminated with pigtails or IFC cable to simplify ordering and reduce installation time. ADC's removable angled retainers allow for easy access for single fiber maintenance. Vertical cable guides on either side of the panel provide fiber routing and management of fibers exiting the panel. Using LC small-form-factor connectors doubles the capacity of each panel.

# Fiber Patching and Management

FPL Series Fiber Optic Panel

## Product Overview

| | |
|---|---|
| **Recommended Applications** | High-density termination/splice panel solution. Often used in small wire closets or frames. Ideal for small to medium fiber counts. |
| **Description** | 288-fiber terminations in 8.75" H or 48-fiber terminations in 1.75" H (LC connectors) |
| **Number of fibers, future growth potential** | 12 to 288 |
| **Flexibility/ ability to grow** | Yes |
| **Interconnect** | Ideal |
| **Cross-connect** | Yes |
| **Accommodates on-frame splicing** | Yes. Built-in |
| **Accommodates off-frame splicing** | Yes. IFC cable and assembly available |
| **Rear access** | Required on panels greater than 1 RU |
| **All front access** | No. (All panels are rear access with the exception of the 1 RU panel) |
| **Customer premises application** | Ideal |
| **19" mounting** | Yes |
| **23" mounting** | Yes |
| **Cabinet mount** | Not recommended. (See FMT) |
| **Wall mount** | No |
| **Mix equipment with fiber product?** | Ideal |
| **Use as dedicated fiber frame** | Not recommended. (See ODF catalog #103742AE) |
| **VAM capabilites** | No |
| **Optimum jumper storage location** | IMP or separate storage panel required |
| **Vertical cable guide** | Includes VCG on both sides |

# Fiber Patching and Management

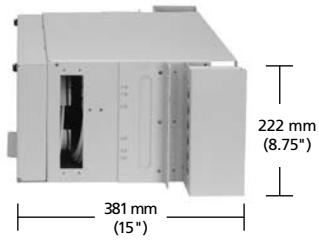
## FPL Series Fiber Optic Panel

## 5 RU High-Density Termination and Splice Panels

### Features

- Provides termination and splicing for up to 144 fibers (288 fibers with LC connectors) within an 8.75-inch height (5 RU)
- Rear flip-down splicing area uses standard splice trays and provides slack storage for OSP/IFC buffer tubes
- Angled bulkhead ensures ease of access to individual connectors
- Panel is equipped with six dual height splice trays
- Optional lock for front door (available separately)
- Removable front polycarbonate door
- Designation labels included with each panel
- Mounting brackets included with panel may be flipped to accommodate 19- or 23-inch mounting with either a 4- or 5-inch recess
- Maximum of three panels to be used within one frame, for a total of 432 terminations

**5 RU Termination/Splice Panel**
(front view)




**Side View**
(splicing area closed)

**Top Cover Removed**
(splicing area open)

**Side View**
(splicing area open)

**Catalog Number**

**FPL-144 R __ 0 __ -_____ __ 0**

**Pigtail or Adapter Type**

| | |
|---|---|
| A | Adapter-only |
| P | Stranded pigtails and adapters |
| R | Ribbon pigtails and adapters |

**Connector and Adapter Type**

| | |
|---|---|
| **Multimode*** | |
| 9 | SC |
| 6 | LC[1] |
| **Singlemode** | |
| 7 | SC ultra polish |
| J | SC angled polish |
| 2 | FC ultra polish |
| 8 | LC ultra polish[1] |
| Z | LC angled polish[1] |

**Splice Type**

| | |
|---|---|
| 0 | None (termination-only)[2] |
| 1 | Bare fusion |
| 2 | Heat shrink (single fiber fusion) |
| 3 | Mechanical (mass fusion) |

**Number of Ports Loaded**

| | |
|---|---|
| 72 | 72 ports |
| 144 | 144 ports |
| 288 | 288 ports (with LC connectors) |

*Standard multimode pigtails are 62.5/125 µm
[1] LC connectors and adapters double the capacity of the panel by terminating two fibers at each adapter.
[2] Termination-only panels have a 12-inch depth, termination/splice panels have a 15-inch depth and splice trays cannot be added to termination-only panels.

Other configurations are available upon request. Please contact ADC Technical Assistance Center.

# Fiber Patching and Management

FPL Series Fiber Optic Panel

## 1 RU High-Density Termination and Splice Panels

### Features

- Panels are only 1 RU (1.75-inch) high
- Up to 48 connections in 1 RU of space
- Available in 12- or 24-port termination-only or termination/splice within a single panel
- Using LC small-form-factor connectors doubles the capacity of each panel
- Angled left and right connectors allow easy cable routing from left and right
- Vertical cable guides on either side of the panel provide bend radius protection and management of fibers exiting or entering the panel
- Front entry/exit cable management
- Highly accessible splicing area that uses a drawer design
- Flexible mounting allows for use in 19- or 23-inch rack with either a four- or five-inch recess

**1 RU Termination/Splice Panel**

**Catalog Number**

**FPL - ____ R __ 0 __ - ____ __ 0**

**Panel Capacity**

| | |
|---|---|
| 12 | 12-position |
| 1D | 24-position |

**Pigtail or Adapter Type**

| | |
|---|---|
| A | Adapter-only |
| P | Stranded pigtails and adapters |
| R | Ribbon pigtails and adapters |

**Connector and Adapter Type**

| | |
|---|---|
| **Multimode*** | |
| 9 | SC |
| 6 | LC[1] |
| **Singlemode** | |
| 7 | SC ultra polish |
| J | SC angled polish |
| 2 | FC ultra polish |
| 8 | LC ultra polish[1] |
| Z | LC angled polish[1] |

**Splice Type**

| | |
|---|---|
| 0 | None |
| 2 | Heat shrink (single fiber fusion) |
| 3 | Mechanical (mass fusion) |

**Number of Ports Loaded**

| | |
|---|---|
| 12 | 12 ports |
| 24 | 24 ports |
| 48 | 48 ports (24 port panel with LC) |

*Standard multimode pigtails are 62.5/125 µm.

[1] LC connectors and adapters double the capacity of the panel by terminating two fibers at each adapter.

Other configurations are available upon request. Please contact ADC Technical Assistance Center.

# Fiber Patching and Management

FPL Series Fiber Optic Panel

## Fiber Termination/Splice Panels with Adapters or Pigtails

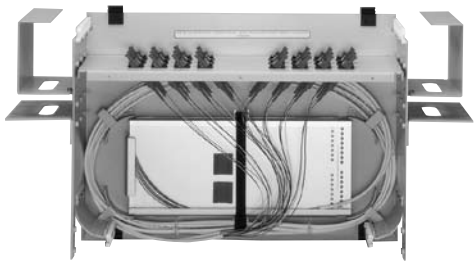
### Features

- Available in 12-, 24-, 48-, 72-, 96-, 144- and 288-termination densities
- Provides termination and splice of pigtails as well as associated fiber/pigtail storage
- Rear splice area saves space by reducing panel height (1 RU versions use drawer splicing)
- Splice area provides up to a total of seven meters of slack storage for pigtails and OSP/IFC buffer tubes
- Optional lock for both front and rear doors available separately – (not available on 1 RU)
- Removable front polycarbonate door
- Designation labels included with each panel
- Mounting brackets included with panel may be flipped to accommodate 19- or 23-inch mounting with either four- or five-inch recess

**12-Position Termination/Splice Panel**
(front view with drawer open)

**24-Position Termination/Splice Panel**
(front view)

**24-Position Termination/Splice Panel**
(rear view)



**24-Position Termination/Splice Panel**
(top cover removed with pigtail routing shown)

**See ordering information on following page.**

# Fiber Patching and Management

FPL Series Fiber Optic Panel

## Fiber Termination/Splice Panels with Adapters or Pigtails

**Catalog Number**

**FPL- _____ R ___ 0 __ - _____ __ 0**

**Panel Capacity / Panel Height**

| | | |
|---|---|---|
| 12 | 12-position | 1.75" (1 RU) |
| 1D | 24-position | 1.75" (1 RU) |
| 24 | 24-position | 5.25" (3 RU) |
| 48 | 48-position | 8.75" (5 RU) |
| 72 | 72-position | 8.75" (5 RU) |
| 96 | 96-position | 8.75" (5 RU) |
| 144 | 144-position | 8.75" (5 RU) |

**Pigtail or Adapter Type**

| | |
|---|---|
| A | Adapter-only[2] |
| P | Stranded pigtails and adapters |
| R | Ribbon pigtails and adapters |

**Connector and Adapter Type**

| | |
|---|---|
| **Multimode*** | |
| 9 | SC |
| 6 | LC[1] |
| **Singlemode** | |
| 7 | SC ultra polish |
| J | SC angled polish |
| 2 | FC ultra polish |
| Z | LC angled polish[1] |
| 8 | LC ultra polish[1] |

**Splice Type**

| | |
|---|---|
| 0 | None |
| 1 | Bare fusion |
| 2 | Heat shrink (single fiber fusion) |
| 3 | Mechanical (mass fusion) |

**Number of Ports Loaded**

| | |
|---|---|
| 12 | 12 ports |
| 24 | 24 ports |
| 48 | 48 ports |
| 72 | 72 ports |
| 96 | 96 ports |
| 144 | 144 ports (use 72-position panel with LC connectors) |
| 192 | 192 ports (use 96-position panel with LC connectors) |
| 288 | 288 ports (use 144-position panel with LC connectors) |

*Standard multimode pigtails are 62.5/125 µm.

[1] LC connectors and adapters double the capacity of the panel by terminating two fibers at each adapter.

[2] 144-position panels loaded with adapters-only have a 12-inch depth. 144-position termination/splice panels have a 15-inch depth. Splice trays cannot be added to termination-only panels

Other configurations are available upon request. Please contact ADC Technical Assistance Center.



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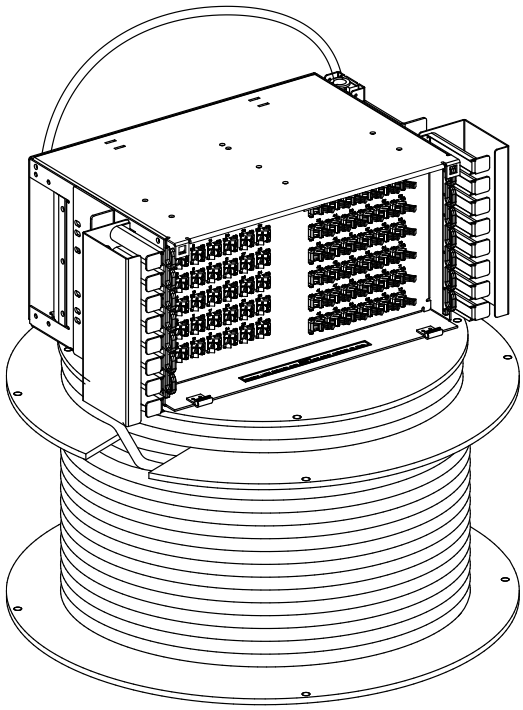
# Fiber Patching and Management

FPL Series Fiber Optic Panel

## Fiber Termination Panels with Multifiber Cable (Preterminated)

### Features

- Available in 12-, 24-, 48-, 72-, 96-, 144- and 288- (LC connectors only) termination densities
- Preterminated with factory-installed multifiber intrafacility cable (IFC) or outside plant (OSP) cable
- Panels with multifiber cable attached ship as a single unit with cable clamp installed
- Equipped with customer specified adapters, connectors, cable type and cable length
- Attached multifiber cable reduces installaton time and simplifies ordering process with a single part number
- Optional lock for both front and rear doors (available separately)
- Removable front polycarbonate door
- Designation labels included with each panel
- Mounting brackets included with panel may be flipped to accommodate 19- or 23-inch mounting with either four- or five-inch recess



**72-Position Panel with IFC**

See ordering information on following page.

# Fiber Patching and Management

FPL Series Fiber Optic Panel

## Fiber Termination Panels with Multifiber Cable (Preterminated)

**Catalog Number**

FPL- ____ ____ / ____ ____ ____ ____ ____ ____ ____

A B

**Panel Capacity / Panel Height**

| | | |
|---|---|---|
| 12 | 12-position | 1.75" (1 RU) |
| 1D | 24-position | 1.75" (1 RU) |
| 24 | 24-position | 5.25" (3 RU) |
| 48 | 48-position | 8.75" (5 RU) |
| 72 | 72-position | 8.75" (5 RU) |
| 96 | 96-position | 8.75" (5 RU) |
| 144 | 144-position | 8.75" (5 RU) |

**Panel Type**

| | |
|---|---|
| S | Singlemode |
| M | Multimode |

**Near End (A)/Far End (B) Connector and Adapter Type**

| | |
|---|---|
| 0 | Stub |
| **Multimode** | |
| 9 | SC |
| 6 | LC[1] |
| **Singlemode** | |
| 7 | SC ultra polish |
| J | SC angled polish |
| 2 | FC ultra polish |
| 8 | LC ultra polish[1] |
| Z | LC angled polish[1] |

[1] LC connectors and adapters double the capacity of the panel by terminating two fibers at each adapter.

**Cable Length**

| | |
|---|---|
| 008 | 8 m (25') |
| 016 | 16 m (50') |
| 023 | 23 m (75') |
| 031 | 31 m (100') |
| 039 | 39 m (125') |
| 046 | 46 m (150') |
| 061 | 61 m (200') |
| 077 | 77 m (250') |
| 092 | 92 m (300') |
| 122 | 122 m (400') |
| 153 | 153 m (500') |

**Cable Exit Direction**

| | |
|---|---|
| U | Up |
| D | Down |

**Cable Type**

| | |
|---|---|
| **Multimode** | |
| Y | IFC stranded 50/125 µm riser |
| C | IFC stranded 62.5/125 µm riser |
| **Singlemode** | |
| A | IFC stranded riser |
| M | IFC ribbon riser |
| L | OSP armored ribbon 24 fibers and up |

**Cable Size**

| | |
|---|---|
| 1 | 12 |
| 2 | 24 |
| 4 | 48 |
| 7 | 72 |
| 9 | 96 |
| A | 144 |
| H | 2 x 144 (144-position panel with LC connectors) |

Other configurations are available upon request. Please contact ADC Technical Assistance Center.



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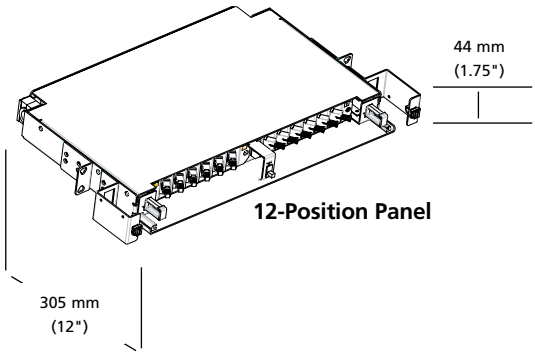
# Fiber Patching and Management

## FPL Series Fiber Optic Panel

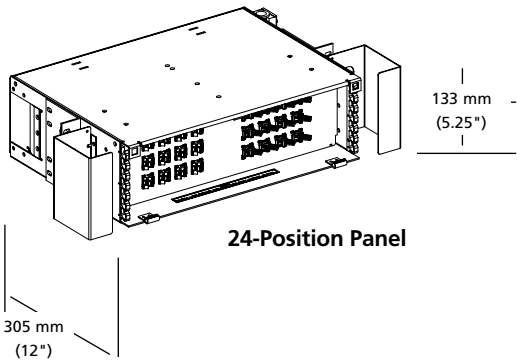
### Fiber Termination Panels with Adapters or Pigtails

**Features**

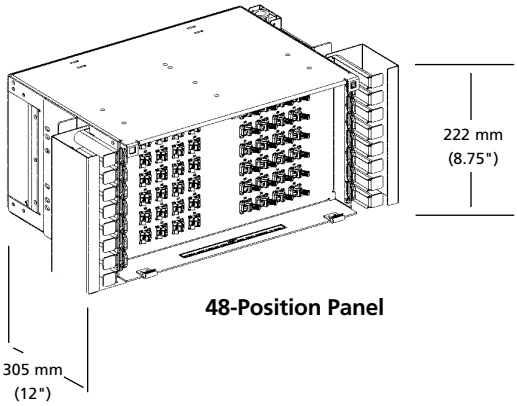
- Available in 12-, 24-, 48-, 72-, 96-, 144- and 288-termination densities
- Density doubles with use of LC connectors
- Panel may be ordered with adapters only for a termination-only interconnect solution
- Panel may be ordered with 3.5 m pigtails for use with splice and storage panels
- Rear panel pigtail storage
- Optional lock for both front and rear doors (not available for 1 RU)
- Removeable front polycarbonate door
- Designation labels included with each panel
- Mounting brackets included with panel can flip to accommodate 19- or 23-inch mounting with either four- or five-inch recess



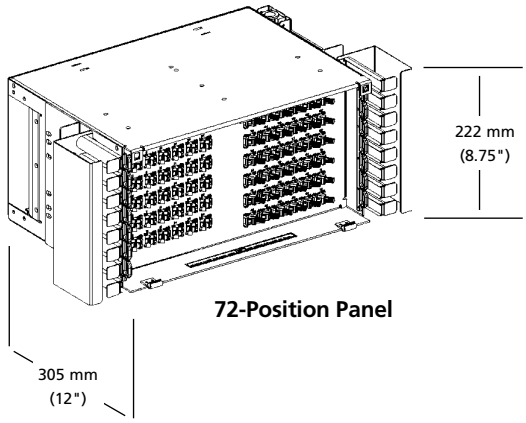

**12-Position Panel**



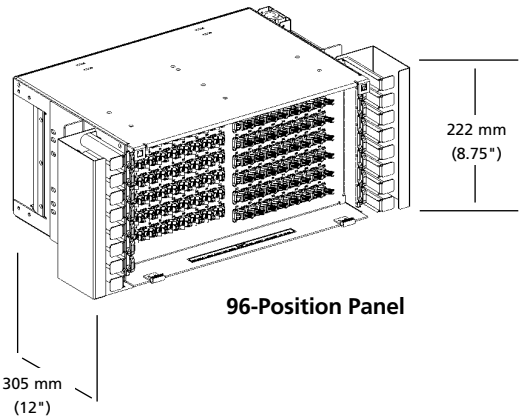

**24-Position Panel**



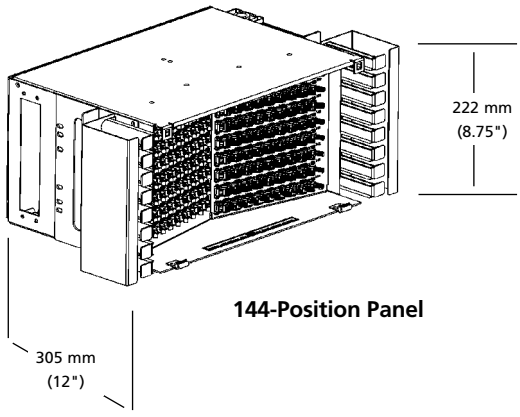

**48-Position Panel**




**72-Position Panel**




**96-Position Panel**




**144-Position Panel**

# Fiber Patching and Management

FPL Series Fiber Optic Panel

## Fiber Termination Panels with Adapters or Pigtails

**Catalog Number**

**FPL- _____ R __ 0 __ - _____ 0 0**

**Panel Capacity / Panel Height**

| | | |
|---|---|---|
| 12 | 12-position | 1.75" (1 RU) |
| 1D | 24-position | 1.75" (1 RU) |
| 24 | 24-position | 5.25" (3 RU) |
| 48 | 48-position | 8.75" (5 RU) |
| 72 | 72-position | 8.75" (5 RU) |
| 96 | 96-position | 8.75" (5 RU) |
| 144 | 144-position | 8.75" (5 RU) |

**Pigtail or Adapter Type**

| | |
|---|---|
| A | Adapter-only |
| P | Stranded pigtails and adapters |
| R | Ribbon pigtails and adapters |

**Number of Ports Loaded**

| | |
|---|---|
| 06 | 6 ports |
| 12 | 12 ports |
| 24 | 24 ports |
| 48 | 48 ports |
| 72 | 72 ports |
| 96 | 96 ports |
| 144 | 144 ports |
| 192 | 192 ports (96 port panel with LC connectors) |
| 288 | 288 ports (144 port panel with LC connectors) |

**Connector and Adapter Type**

| | |
|---|---|
| **Multimode*** | |
| 9 | SC |
| 6 | LC[1] |
| **Singlemode** | |
| 7 | SC ultra polish |
| J | SC angled polish |
| 2 | FC ultra polish |
| 8 | LC ultra polish[1] |
| Z | LC angled polish[1] |

*Standard multimode pigtails are 62.5/125 µm.

[1]LC connectors and adapters double the capacity of the panel by terminating two fibers at each adapter.

**Ordering Example: FPL-**
144RP08-28800
specifies a 5 RU panel, 144-positions and 288 fibers/terminations with LC connectors only.

Other configurations are available upon request. Please contact ADC Technical Assistance Center.

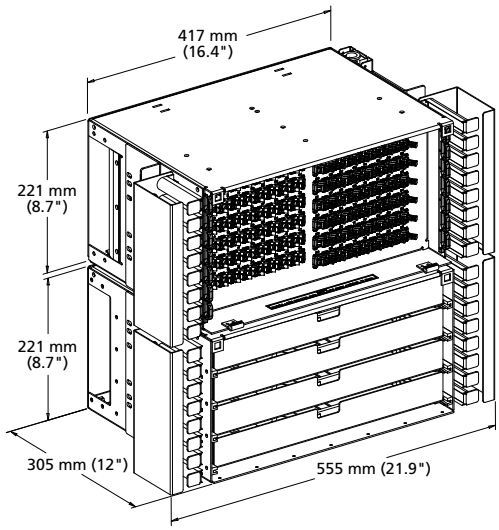
# Fiber Patching and Management

## FPL Series Fiber Optic Panel

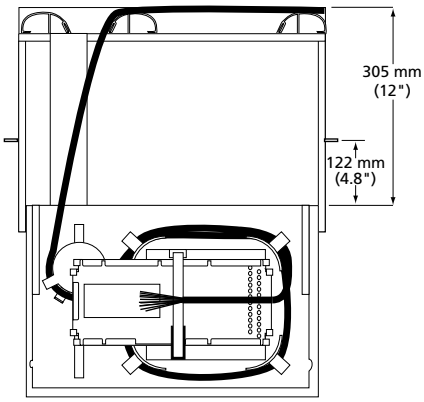
## Splice and Storage Drawers

### Features

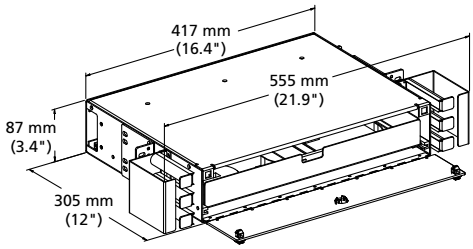
- Available in 24-, 48-, 72- and 96-splice densities. Each drawer provides splicing and storage functions
- Each splice drawer accommodates one dual (24-fibers/tray) or two single (12-fibers/tray) splice trays
- Occupies same footprint as FPL termination-only panels
- Splice trays sold separately
- Hinged transparent front door protects storage drawers and cables from damage during routine activity at or near the panel
- Mounting brackets included with panel can flip to accommodate 19- or 23-inch mounting with either four- or five-inch recess
- Designation labels included with each panel



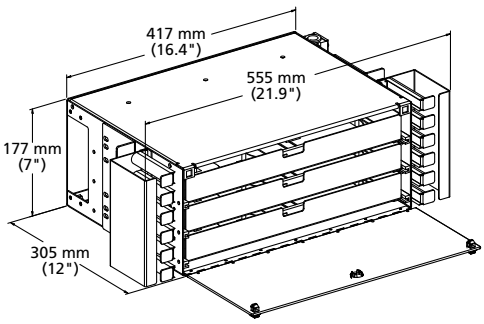

**96-Position Termination Panel**
(with FPL-SR2000 mounted below)




**FPL-SR2000**
(top view with drawer open)




**FPL-SR2024**




**FPL-SR2072**

### Ordering Information

| Description | Catalog Number |
|---|---|
| **24-Fiber Splice Drawer,** rack mount | FPL-SR2024 |
| **48-Fiber Splice Drawer,** rack mount | FPL-SR2048 |
| **72-Fiber Splice Drawer,** rack mount | FPL-SR2072 |
| **96-Fiber Splice Drawer,** rack mount | FPL-SR2000 |

# Fiber Patching and Management

FPL Series Fiber Optic Panel

## Splice Tray

For use with FPL termination/splice panels.

| Panel Size | Splice Tray Type | Number of Splice Trays Included for a Fully Loaded Panel |
|---|---|---|
| 12 (1 RU) | Single Height | 1 |
| 24 (1 RU) | Dual Height | 1 |
| 24 (3 RU) | Single Height | 2 |
| 48 (5 RU) | Dual Height | 2 |
| 72 (5 RU) | Dual Height | 3 |
| 96 (5 RU) | Dual Height | 4 |
| 144 (5 RU) | Dual Height | 6 |

**Splice Tray**

### Ordering Information

| Description | Splice Tray Type | Splice Quantity | Catalog Number |
|---|---|---|---|
| **12-Position Splice Tray** | | | |
| Bare fusion | Single height | 12 | FST-FT |
| Heat shrink (single fiber fusion) | Single height | 12 | FST-HS |
| Mechanical | Single height | 12 | FST-MT |
| **24-Position Splice Tray** | | | |
| Bare fusion | Dual height | 24 | FST-D-FT |
| Heat shrink (single fiber fusion) | Dual height | 24 | FST-D-HS |
| Mechanical (mass fusion) | Dual height | 24 | FST-D-MT |

## Miscellaneous Accessories

### Ordering Information

| Description | Catalog Number |
|---|---|
| **Lock** | |
| Key lock #1 | IPA-K1 |
| Key lock #2 | IPA-K2 |
| Screwdriver lock | IPA-SC |
| **Cable Clamp Kit;** kit of 1<br>Outer diameter 5 mm to 20 mm (0.2" to 0.8") | FL2-ACC007 |

# Fiber Patching and Management

## RMG Series Fiber Optic Panels

ADC's RMG Series fiber enclosure provides rugged and durable protection for patching or splicing of fiber cables. Especially designed to be user-friendly, the slide-out design and removable front and rear panels provide convenient access points.

ADC's RMG Series offers a cost effective and high density rack mount fiber enclosure in 1, 2 and 4 rack unit sizes. Its modular design and flexible configurations including terminating, splicing and MTP/MPO solutions makes it very user friendly and easy to install.

### Applications and Benefits

- High-density makes suitable for telecommunications and equipment rooms
- Configurations with preterminated fiber can be used for rapid deployment in storage area networks and data centers
- Can be cabinet mounted for data center applications

### Features

- 1 and 2 RU size units contain sliding and removable front and rear access panels, providing convenient access points
- Made with 16 gauge steel and scratch resistant paint providing durable rugged construction
- Designed for 19- inch EIA rack or cabinet environment; optional brackets to accommodate 23- inch rack or cabinet mounting
- All RMG panels accommodate the modular RMG adapter packs or RMG MTP cassettes
- Density: up to 72 termination in 1RU
- Low profile design with higher density for space limited applications
- User-friendly design utilizing industry standard LSX/LGX modular adapter packs
- Modular adapter packs are available preterminated with pigtails to simplify ordering process and reduce installation time
- Side and rear cable entry points on back of panel supports a wide range of deployment applications

# Fiber Patching and Management

RMG Series Fiber Optic Panels

## RMG Fast Facts

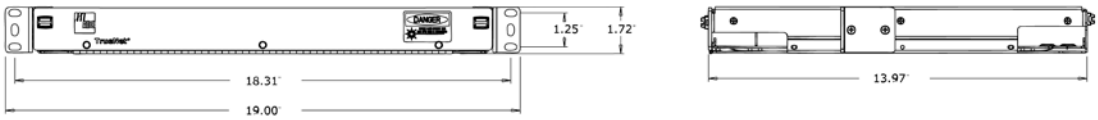
| | Size in Rack Units | | |
|---|---|---|---|
| | **1 RU** | **2 RU** | **4 RU** |
| Maximum Density for Termination Only—Quad LC style connector | 72 | 144 | 288 |
| Maximum Density for Termination Only—Standard LC style connector | 36 | 72 | 144 |
| Maximum Density for Termination Only—non LC style connector | 18 | 36 | 72 |
| Maximum Density for Termination/Splice—Quad LC style connector | 72 | 144 | 144 |
| Maximum Density for Termination/Splice—Standard LC style connector | 36 | 72 | 144 |
| Maximum Density for Termination/Splice—non LC style connector | 18 | 36 | 72 |
| Compatible with ADC Glide System? | Yes, panel itself contains no vertical cable guide. | | |
| Best Application | Telecommunications rooms or to terminate incoming fiber trunks. | | |
| Features at a Glance | Limited cable management, high density with features price comparable to competitors' products. | | |

# Fiber Patching and Management

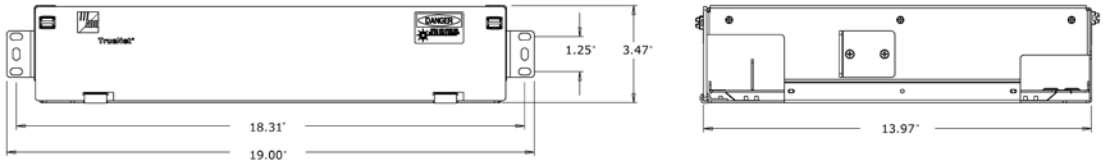
RMG Series Fiber Optic Panels

## Specifications

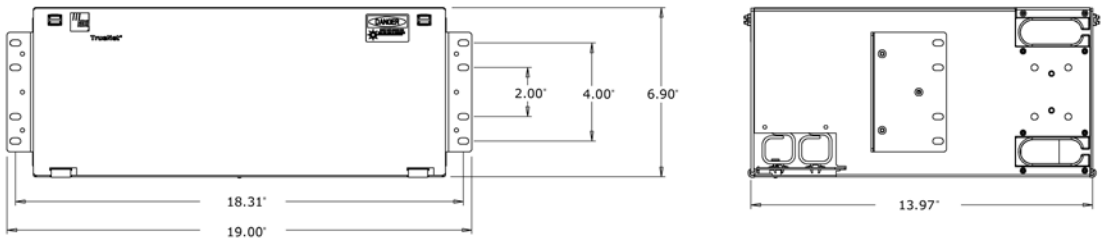
**1 RU Model**



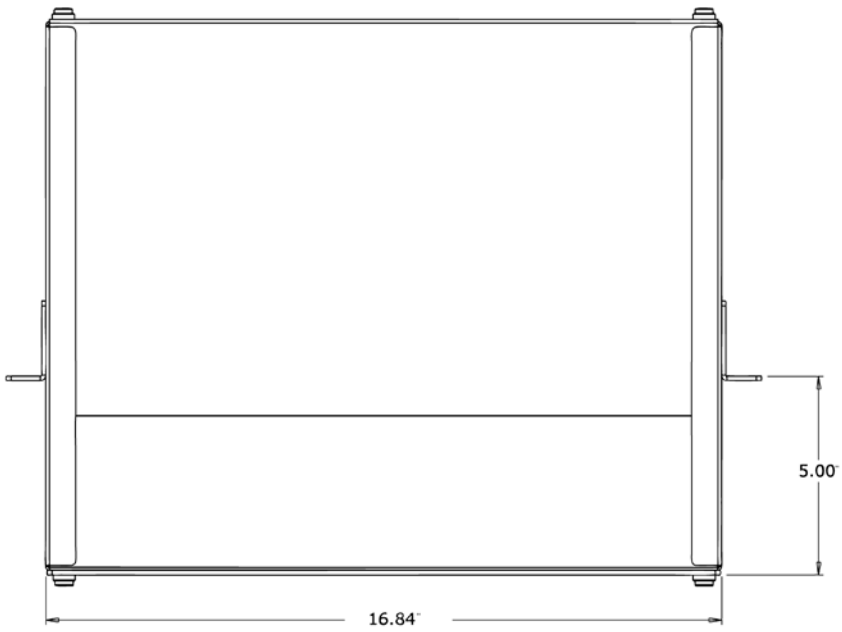

**2 RU Model**




**4 RU Model**




**1 RU, 2 RU and 4 RU**



# Fiber Patching and Management

RMG Series Fiber Optic Panels

## Preconfigured Termination or Termination/Splice Panels, Black

ADC's RMG series fiber panels are available to be shipped with factory installed adapter modules and/or preterminated pigtail assemblies which simplifies the ordering process and reduces installation time and costs.

**Catalog Number**

**RMG - _ _ _ _ - _ _ _ _**

**Panel Size**

| | Description | Nom Capacity |
|---|---|---|
| 1 | 1U (1.75") | 3 adapter packs |
| 2 | 2U (3.50") | 6 adapter packs |
| 4 | 4U (7.00") | 12 adapter packs |

**Adapters/Pigtails**

| | |
|---|---|
| 0 | None |
| A | Adapters only |
| P | Adapters and singlemode stranded pigtails |
| R | Adapters and singlemode ribbon pigtails |
| B | Adapters and stranded 50/125 multimode pigtails |
| D | Adapters and stranded 50/125 multimode ultra pigtails (300m) |
| E | Adapters and stranded 62.5/125 multimode ultra pigtails |

**Connector Style**

| | |
|---|---|
| 00 | None |
| **Multimode Connectors** | |
| C1 | SC |
| C2 | SC (aqua) with zirconia sleeve |
| C3 | SC duplex |
| C4 | SC duplex (aqua) with zirconia sleeve |
| M1 | MTRJ |
| Q1 | LC |
| Q2 | LC (aqua) with zirconia sleeve |
| Q3 | Quad LC |
| Q4 | Quad LC (aqua) with zirconia sleeve |
| T1 | ST® |
| **Singlemode Connectors** | |
| C5 | SC |
| C6 | SC duplex |
| Q7 | LC duplex |
| Q8 | Quad LC |
| T2 | ST® |

**Panel Color**

| | |
|---|---|
| B | Black |

**Splice Deck Type**

| | |
|---|---|
| 0 | None or N/A |
| 2 | Heat Shrink Fusion |
| 3 | Mechanical |
| 6 | Nortel Qpak |

**Loaded Adapter Packs**

| | |
|---|---|
| 00 | None |
| 01 | 1 adapter pack loaded |
| 02 | 2 adapter pack loaded |
| 03 | 3 adapter pack loaded |
| 04 | 4 adapter pack loaded |
| 06 | 6 adapter pack loaded |
| 08 | 8 adapter pack loaded |
| 12 | 12 adapter pack loaded |

### Ordering Information

| Configurations Readily Available | |
|---|---|
| **Description** | **Catalog Number** |
| 1 RU panel loaded w/1 adapter pack of multimode duplex SC adapters | RMG-1AC3-010B |
| 4 RU panel loaded w/12 adapter packs of multimode duplex SC adapters | RMG-4AC3-120B |
| 4 RU panel loaded w/12 adapter packs of singlemode duplex SC zirconia adapters | RMG-4AC8-120B |
| 2 RU panel loaded w/4 adapter packs of multimode LC adapters | RMG-2AQ1-040B |

# Fiber Patching and Management

RMG Series Fiber Optic Panels

## Empty Panels, Black

The RMG empty panel with blank panels includes 19-inch EIA mounting brackets and hardware, polycarbonate front door, cable ties, cable management rings and improved circuit identification cards. The RMG empty panel allows for the user to mix and match any combination of MTP cassettes and modular adapter packs or simply utilize a "grow as you go" approach to their network.

### Features

- Mounting options:
  - Shipped with standard 19-inch EIA rack or cabinet mounting hardware
  - Optional brackets to accommodate 23-inch EIA rack or cabinet mounting.
- Ability to quickly and easily configure, utilizing the modular adapter pack or MTP cassette assemblies.

### Ordering Information

| Description | Panel Height | Catalog Number |
|---|---|---|
| **Rack or Cabinet Mount Panel, Black** | | |
| 1 RU empty panel; accommodates 3 MTP cassettes or 3 modular adapter packs | 4.45cm (1.75-inch) | RMG-1000-000B |
| 2 RU empty panel; accommodates 6 MTP cassettes or 6 modular adapter packs | 8.89cm (3.50-inch | RMG-2000-000B |
| 4 RU empty panel: accommodates 12 MTP cassettes or 12 adapter packs; also includes cable management bracket and cable clamp | 17.78cm (7.00-inch) | RMG-4000-000B |
| **Accessories** | | |
| Cable Clamp Kit (for 1 and 2 rack units) | | RMG-ACC001 |
| Label Kit | | RMG-ACC002 |
| **Splice Tray** | | |
| Heat Shrink Fusion | | FST-DV-HS |
| Mechanical | | FST-DV-MS |
| **Extender Brackets; 19" to 23"** | | |
| 1 RU | | EB-17B |
| 2 RU | | EB-35B |

# Fiber Patching and Management

RMG Series Fiber Optic Panels

## Modular Adapter Packs

ADC's RMG modular adapter pack assemblies can be used in any of the RMG series fiber enclosures in a variety of connector styles and with or without preterminated 3m (9.84 ft) pigtails. Its modular design is user-friendly and easy to install.

### Features

- Completely interchangeable between RMG and WMG panel products
- Can be ordered with all standard types of simplex and duplex multimode and singlemode adapters
- Available with preterminated 3m (9.84 ft) pigtails to reduce installation time and cost
- One end of pigtail terminated to chosen connector style and installed into adapter pack plug-in adapters

Note: RMG modular adapter packs are not interchangeable with FL2000 products.

**Ordering information follows on the next page**

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# Fiber Patching and Management

RMG Series Fiber Optic Panels

## Modular Adapter Packs

**Catalog Number**

**RMG - ___ ADP _ _ _ _ _ _**

**Number of Adapters**

| | |
|---|---|
| 06 | 6 Simplex adapters |
| 12 | 6 Duplex adapters |
| 24 | 6 Quad adapters |

**Connector Style**

| | |
|---|---|
| 00 | None |
| **Multimode Connectors** | |
| C2 | SC (aqua) with zirconia sleeve |
| C3 | SC duplex |
| C4 | SC duplex (aqua) with zirconia sleeve |
| M1 | MTRJ |
| Q1 | LC |
| Q2 | LC (aqua) |
| Q3 | Quad LC |
| Q4 | Quad LC (aqua) |
| T1 | ST® |
| **Singlemode Connectors** | |
| C5 | SC |
| C6 | SC duplex |
| Q7 | LC duplex |
| Q8 | Quad LC |
| T2 | ST® |

**Pigtail Length**

| | |
|---|---|
| blank | Adapters-only |
| 03 | 3 meter Pigtails |

**Pigtail Type**

| | |
|---|---|
| blank | Adapters-only |
| B | Singlemode stranded |
| D | Singlemode Maxi-strip |
| E | Multimode stranded |

**Fiber Size**

| | |
|---|---|
| blank | Adapters-only |
| B | 62.5/125 multimode |
| C | 50/125 multimode |
| D | 50/125 multimode laser optimized to 300m |
| S | Singlemode |

## Ordering Information

| Description | Catalog Number |
|---|---|
| **Adapter Packs Loaded with** | |
| 6 multimode LC adapters only | RMG-12ADPQ1 |
| 6 multimode ST adapters only | RMG-06ADPT1 |
| 6 singlemode SC zirconia adapters | RMG-06ADPC7 |
| 6 multimode SC adapters only | RMG-06ADPC1 |
| 6 duplex multimode SC adapters only | RMG-12ADPC3 |

# Fiber Patching and Management

RMG Series Fiber Optic Panels

## Modular MTP/MPO Cassettes

ADC's RMG modular MTP cassette assemblies can be used in any of the RMG series fiber enclosures in a variety of connector styles. Designed for easy installation and allowing rapid deployment with less labor.

### Features

- Completely interchangeable between RMG panel products
- Can be ordered with all standard types duplex and quad multimode and singlemode adapters
- Modular design reduces installation costs.

**Catalog Number**

**RMG - ___ MTP ___ ___**

**Number of Adapters**

| | |
|---|---|
| 12 | 6 duplex adapters |
| 24 | 6 quad adapters |

**Fiber Size**

| | |
|---|---|
| B | 62.5/125 multimode |
| C | 50/125 multimode |
| D | 50/125 multimode laser optimized to 300m |
| S | Singlemode |

**Connector Style**

| | |
|---|---|
| 00 | None |
| **Multimode Connectors** | |
| C3 | SC duplex |
| C4 | SC duplex (aqua) with zirconia sleeve |
| M1 | MTRJ |
| Q1 | LC [1] |
| Q2 | LC (aqua) [1] |
| Q3 | Quad LC |
| Q4 | Quad LC (aqua) |
| **Singlemode Connectors** | |
| C6 | SC duplex |
| Q7 | LC [1] |
| Q8 | Quad LC |

[1] LC adapters terminate two fibers at each adapter and should be considered duplex adapters in this ordering scheme.

### Ordering Information

| Description | Catalog Number |
|---|---|
| **MTP Cassette 50/125 Multimode Fiber** | |
| 6 multimode LC adapters | RMG-12MTPCQ1 |
| 6 quad multimode LC adapters | RMG-24MTPCQ3 |

# Fiber Patching and Management

## FL1000 Series Fiber Optic Wall Boxes

ADC's FL1000 customer premises fiber termination products include a variety of one and two door wall mount panels. These products are designed specifically to act as part of the fiber distribution system as the demarcation point for the service provider at the customers location.

Recent improvements to labeling grommets, door latches and ribbon pigtail routing reinforce the value these products bring to the physical layer of any network with higher quality and reliability, greater operational efficiencies and network simplification.

## Product Overview

| | |
|---|---|
| **Recommended Applications** | Ideal for small to medium fiber counts within communication closets or demarcation points |
| **Description** | One or two door wall box solution offering excellent fiber protection and technician-friendly cable routing. Termination, termination/splice or splice-only boxes available |
| **Number of fibers, future growth potential** | 12, 24, 48, 72 |
| **Flexibility/ ability to grow** | Modular growth design |
| **Demarcation** | Yes |
| **Accommodates in box splicing** | Yes. Built-in |
| **Accommodates out of box splicing** | Yes. IFC cable and assembly available |
| **All-front-access** | Yes |
| **Customer premises application** | Ideal |
| **Wall mount** | Yes |
| **VAM capabilites** | No |
| **Optimum jumper storage location** | Slack storage built-in |

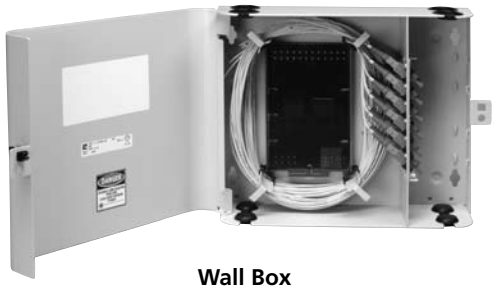
# Fiber Patching and Management

FL1000 Series Fiber Optic Wall Boxes

## Wall Mount Boxes (One Door)

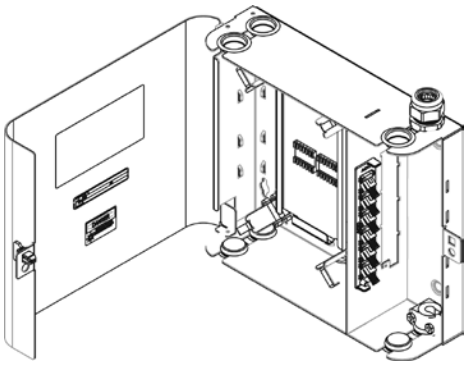
**Features**

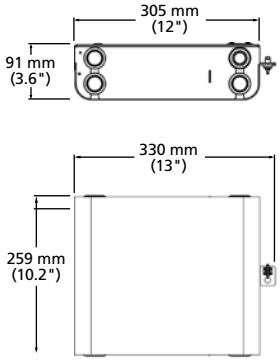
- Numerous cable tie points within the boxes
- Ability to accept locks
- Acceptance of cable clamps at each corner
- Grounding screws, mounting screws and dust caps are included with each panel.



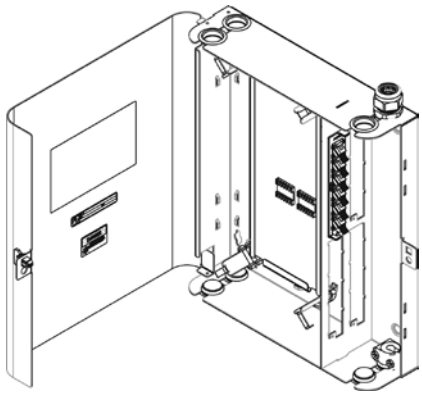
**Wall Box**
(one door)

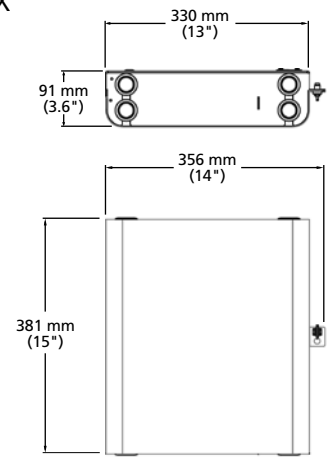
## 12-Position Termination/Splice Wall Box






## 24-Position Termination/Splice Wall Box






**See ordering information on following page.**

# Fiber Patching and Management

FL1000 Series Fiber Optic Wall Boxes

## Wall Mount Boxes (One Door)

### How to order

1. Select wall box type
2. Select 6pak adapters (with or without fiber)
3. Select 6pak adapter/connector type (choose placement in the wall box)
4. Select splice tray with chip
5. Select quantity of cable clamps (0–9)
6. Select quantity of compression fittings (0–9)
7. Select quantity of bonding grounding kits (0–9)

**Catalog Number**

**FL1- __ __ __ __ __ __ N N __ - __ __ __ 0**

**A B C D**

**Wall Box Type**

| | |
|---|---|
| A | 12-position termination/splice |
| B | 24-position termination/splice |
| C | 48-position splice-only |

**6pak Adapters**

| | |
|---|---|
| 3 | Adapters with pigtails |
| 4 | Adapter-only |
| 6 | Singlemode or multimode 62.5/125 µm 6-fiber stranded softwall bundle (12-fiber for LC) |
| 9 | Singlemode or multimode 62.5/125 µm 12-fiber ribbon |
| I | Multimode 50/125 µm stranded softwall bundle |

**6pak Adapter/ Connector Type[1, 2]**

| | |
|---|---|
| **Multimode** | |
| N | None/NA |
| 9 | SC |
| 6 | LC[3] |
| **Singlemode** | |
| N | None/NA |
| 7 | SC ultra polish |
| J | SC angled polish |
| 2 | FC ultra polish |
| 8 | LC ultra polish[3] |
| Z | LC angled polish[3] |

**Accessories**

(Enter the desired quantity 0–9 above the corresponding accessory.)

| |
|---|
| Cable clamp |
| Compression fittings |
| Bonding grounding kit |

**Splice Tray with Chip**

| | |
|---|---|
| 1 | Bare fusion |
| 2 | Heat shrink (single fiber fusion) |
| 3 | Mechanical (mass fusion) |
| N | None |

[1] For a fully loaded 12-position wall box, fill in spaces A & B with 6pak adapter/ connector type. Populate fields C & D with "N".

[2] For a fully loaded 24-position wall box, fill in spaces A, B, C & D with 6pak adapter/connector type.

[3] LC connectors and adapters double the capacity of the panel by terminating two fibers at each adapter.

Other configurations are available upon request. Please contact ADC Technical Assistance Center.

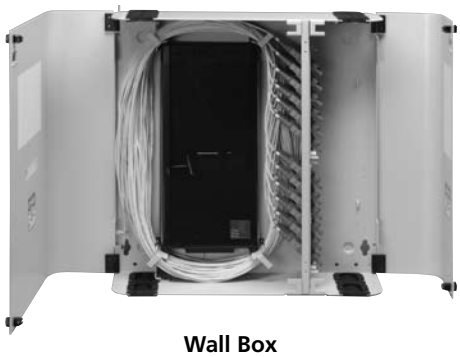
# Fiber Patching and Management

FL1000 Series Fiber Optic Wall Boxes

## 24-Position Termination/Splice Wall Box (Two Door)

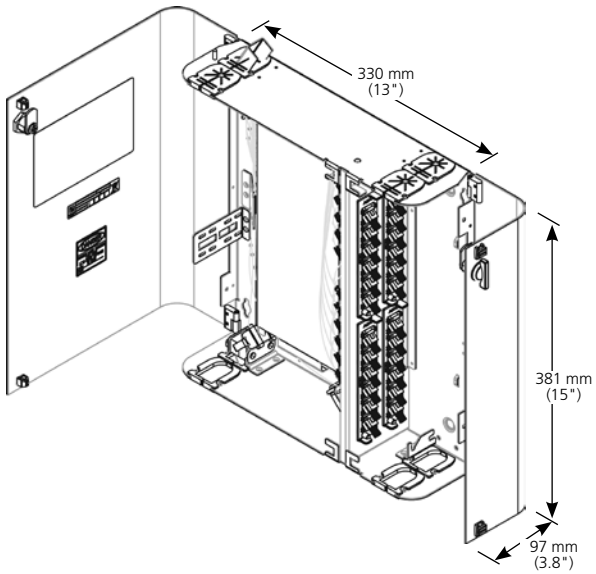
**Features**

- Uses 6pak adapters with angled retainers
- Multiple, configurable locking options that allow users and service providers separate access for security
- Acceptance of strength member tie-off hardware
- Acceptance of cable clamps at each corner
- Grounding screws, mounting screws and dust caps are included with each panel.



**Wall Box**
(two door)

## 24-Position Termination/Splice Wall Box




**See ordering information on following page.**

# Fiber Patching and Management

## FL1000 Series Fiber Optic Wall Boxes

### Wall Mount Boxes (Two Door)

**How to order:**

1. Select wall box type
2. Select 6pak adapters (with or without fiber)
3. Select 6pak adapter/connector type (choose placement in the wall mount box)
4. Select splice tray with chip
5. Select quantity of cable clamps (0–9)
6. Select quantity of compression fittings (0–9)
7. Select quantity of bonding grounding kits (0–9)
8. Select quantity of strength member tie-off kits (each wall box accepts 2, maximum) (0–9)
9. Select lock type

**Catalog Number**

FL1- _ _ _ _ _ _ _ - _ _ _ _ _ _

A B C D E

**Wall Box Type**

| | |
|---|---|
| G | 12-position termination/splice |
| H | 24-position termination/splice |
| J | 48-position termination/splice |
| P | 72-position termination/splice |

**6pak Adapters**

| | |
|---|---|
| 3 | Adapters with pigtails |
| 4 | Adapter-only |
| 6 | Singlemode or multimode 62.5/125 µm 6-fiber stranded softwall bundle installed (12-fiber for LC) |
| 9 | Singlemode or multimode 62.5/125 µm 12-fiber ribbon |
| I | Multimode 50/125 µm stranded softwall bundle |

**6pak Adapter/ Connector Type[1]**

| | |
|---|---|
| **Multimode** | |
| N | None/NA |
| 9 | SC |
| 6 | LC[2] |
| **Singlemode** | |
| N | None/NA |
| 7 | SC ultra polish |
| J | SC angled polish |
| 2 | FC ultra polish |
| 8 | LC ultra polish[2] |
| Z | LC angled polish[2] |

**Splice Tray with Chip**

| | |
|---|---|
| 1 | Bare fusion |
| 2 | Heat shrink (single fiber fusion) |
| 3 | Mechanical (mass fusion) |
| N | None |

**Accessories**
(Enter the desired quantity 0–9 above the corresponding accessory.)

| | |
|---|---|
| | Cable clamp |
| | Compression fittings |
| | Bonding grounding kit |
| | Strength member tie-off |

**Lock Type**

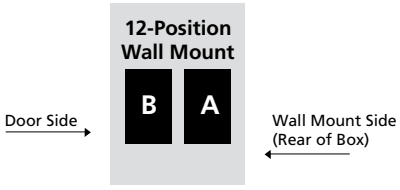
| | |
|---|---|
| N | None |
| A | (2) A keys |
| B | (2) B keys |
| C | (1) A key, (1) B key |

[1] Use the guides on the next page for placement of 6paks. Place the desired connector or adapter type above the corresponding location designation of A, B, C, D or E. The diagram on the following page illustrates the location of each 6pak within the bulkhead.

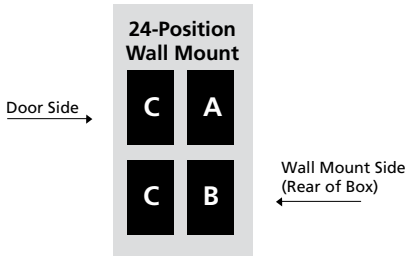
[2] LC connectors and adapters double the capacity of the panel by terminating two fibers at each adapter.

Other configurations are available upon request. Please contact ADC Technical Assistance Center.

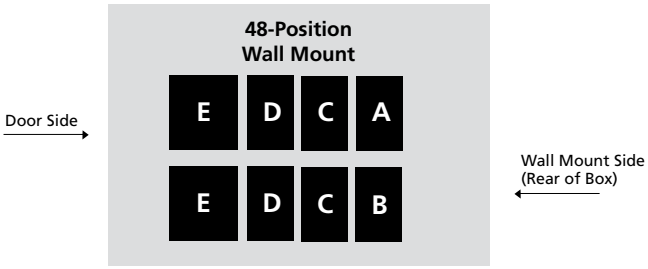
## Placement of 6paks for Wall Mount Boxes (Two Door)



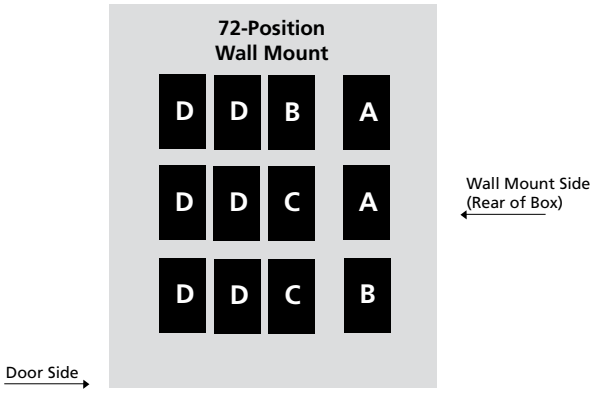

**Type G Box**
(viewed from side of box)




**Type H Box**
(viewed from side of box)




**Type J Box**
(viewed from side of box)




**Type P Box**
(viewed from side of box)

Note: All configured wall boxes will have adapter packs loaded starting from the wall side.

# Fiber Patching and Management

## FL1000 Series Fiber Optic Wall Boxes

### Wall Mount Boxes (One Door or Two Door) with Multifiber Cable

**How to order:**

1. Select wall box type
2. Select near end/far end connector and adapter type
3. Select cable size
4. Select cable type (IFC or OSP)
5. Select entrance point
6. Select cable length
7. Select locking options

**Catalog Number**

FL1 - ___ / ___ ___ - ___ ___ ___ ___

(A = Wall Box Type; B = Near End (A)/Far End (B) Connector and Adapter Type)

**Wall Box Type**

| | |
|---|---|
| A | 12-position, 1 door wall box |
| B | 24-position, 1 door wall box |
| G | 12-position, 2 door wall box |
| H | 24-position, 2 door wall box |
| J | 48-position, 2 door wall box |
| P | 72-position, 2 door wall box |

**Near End (A)/Far End (B) Connector and Adapter Type**

| | |
|---|---|
| **Multimode** | |
| 9 | SC |
| 6 | LC[1] |
| **Singlemode** | |
| 7 | SC ultra polish |
| J | SC angled polish |
| 2 | FC ultra polish |
| 8 | LC ultra polish[1] |
| Z | LC angled polish[1] |

**Cable Size**

| | |
|---|---|
| 1 | 12 |
| 2 | 24 |
| 4 | 48 |
| 7 | 72 |
| 9 | 96 (48-position panel using LC connectors) |
| A | 144 (72-position panel using LC connectors) |

[1] LC connectors and adapters double the capacity of the panel by terminating two fibers at each adapter.

**Lock Type**

| | |
|---|---|
| N | None |
| A | (2) A keys |
| B | (2) B keys |
| C | (1) A key, (1) B key |

**Cable Length**

| | |
|---|---|
| 008 | 8 m (25') |
| 016 | 16 m (50') |
| 023 | 23 m (75') |
| 031 | 31 m (100') |
| 039 | 39 m (125') |
| 046 | 46 m (150') |
| 061 | 61 m (200') |
| 077 | 77 m (250') |
| 092 | 92 m (300') |
| 122 | 122 m (400') |
| 153 | 153 m (500') |

**Entrance Point**

| | |
|---|---|
| 1 | Bottom left |
| 2 | Top left |

**Cable Type**

| | |
|---|---|
| **Multimode** | |
| NC | IFC stranded 62.5/125 µm riser |
| **Singlemode** | |
| NA | IFC stranded riser |
| NS | IFC ribbon riser |
| NR | OSP armored ribbon (24-fibers or more) |

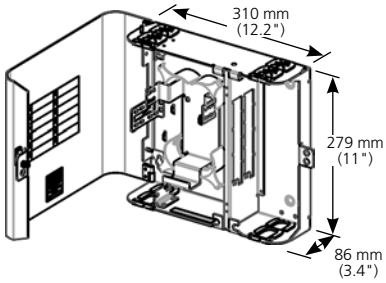
Other configurations are available upon request. Please contact ADC Technical Assistance Center.

# Fiber Patching and Management

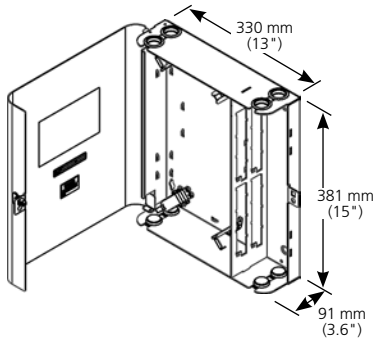
FL1000 Series Fiber Optic Wall Boxes

## One Door Wall Mount Chassis

Allows single door access.




**12-Position Termination/Splice**
**One Door Wall Box**
(FL1-A)




**24-Position Termination/Splice**
**One Door Wall Box**
(FL1-B)

**Ordering Information**

| Description | Catalog Number |
|---|---|
| **Empty Termination/Splice Chassis** | |
| 12-position | FL1-A |
| 24-position | FL1-B |
| **Empty Splice-Only Chassis** | |
| 48-position | FL1-C |

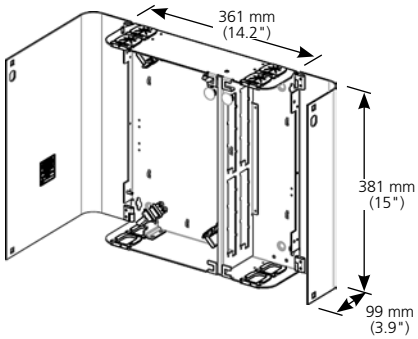
All empty chassis' use ADC FL1000 and FL2000 6pak adapters.

# Fiber Patching and Management

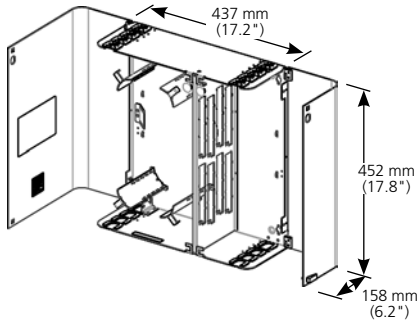
FL1000 Series Fiber Optic Wall Boxes

## Two Door Wall Mount Chassis

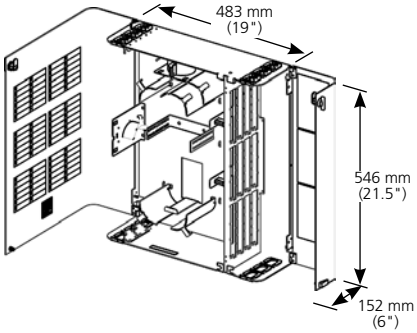
Allows separate customer and provider access.




**24-Position Termination/Splice Two Door Wall Box**
(FL1-H)




**48-Position Termination/Splice Two Door Wall Box**
(FL1-J)




**72-Position Termination/Splice Two Door Wall Box**
(FL1-P)

### Ordering Information

| Description | Catalog Number |
|---|---|
| **Empty Termination/Splice Chassis** | |
| 12-position | FL1-G |
| 24-position | FL1-H |
| 48-position | FL1-J |
| 72-position | FL1-P |
| **Empty Splice-Only Chassis** | |
| 144-position | FL1-Q |

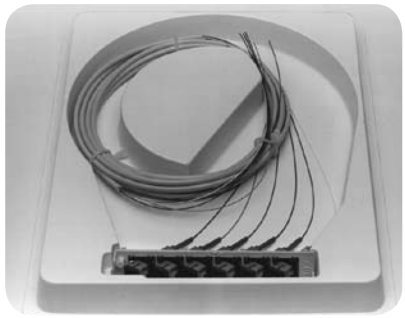
# Fiber Patching and Management

FL1000 Series Fiber Optic Wall Boxes

## 6pak Adapter — Adapters and Pigtails

### Features

- Can be purchased and installed as growth necessitates
- Available with preterminated three- or five-meter pigtails
- Pigtails consist of a single outer jacket containing six color-coded 900 µm fibers
- One end of pigtail terminated with chosen connector style and installed into the 6pak adapter
- Saves installation time



**6pak Adapter**
(with SC adapters and pigtails)

## Stranded Multimode Pigtails and Adapters

**Catalog Number**

**FL2 - 6P __ __ C 6 __ __ __**

**Connector and Adapter Type**

| | |
|---|---|
| 9 | SC |
| A | FC |
| 6 | LC[1] |

**Fiber Type**

| | |
|---|---|
| B | Multimode 62.5/125 µm |
| C | Multimode 50/125 µm |

**Pigtail Length**

| | |
|---|---|
| 03W | 3 m pigtail |
| 05R | 5 m pigtail |

[1] LC 6paks are loaded with 12-fiber pigtails.

## Stranded Singlemode Pigtails and Adapters

**Catalog Number**

**FL2 - 6P __ S C 6 __ __ __**

**Connector and Adapter Type**

| | |
|---|---|
| 7 | SC ultra polish |
| J | SC angled polish |
| 2 | FC ultra polish |
| 8 | LC ultra polish[1] |
| B | LC angled polish[1] |

**Pigtail Length**

| | |
|---|---|
| 03W | 3 m pigtail |
| 05R | 5 m pigtail |

[1] LC 6paks are loaded with 12-fiber pigtails.

Other configurations are available upon request. Please contact ADC Technical Assistance Center.

# Fiber Patching and Management

## FL1000 Series Fiber Optic Wall Boxes

### Miscellaneous

**6pak Adapter-Only**
(without fiber)

**Ordering Information**

| Description | Catalog Number |
|---|---|
| **Multimode 6pak Adapter-Only**[1] | |
| SC | FL2-6PMMSC |
| FC | FL2-6PMMFC |
| LC | FL2-6PMMLC |
| **Singlemode 6pak Adapter-Only**[1] | |
| SC ultra polish | FL2-6PSMSC |
| SC angled polish | FL2-6PSMASC |
| FC ultra polish | FL2-6PSMFC |
| LC ultra polish* | FL2-6PSMLC |
| LC angled polish* | FL2-6PSMALC |
| **Compression Fitting** | FL1-ACC001 |
| **Compression Fitting with Plate** | FL1-ACC006 |
| **Strength Member Tie-Off Kit** | FL1-ACC003 |
| **Cable Clamp** | FL1-ACC011 |
| **Bonding Grounding Kit** | FL1-ACC004 |
| **Lock and Key Type A** | IPA-K1 |
| **Lock and Key Type B** | IPA-K2 |
| **Mini-Splice Tray;** (used **only** in 12-position, wall-mount box) | |
| Bare fusion | FST-M-FT |
| Heat shrink (single fiber fusion) | FST-M-HS |
| Mechanical (mass fusion) | FST-M-MT |
| **Standard Splice Tray** | |
| Bare fusion | FST-FT |
| Heat shrink (single fiber fusion) | FST-HS |
| Mechanical (mass fusion) | FST-MT |

*Includes 12 fibers
[1] For 6paks with fiber, see the previous page.

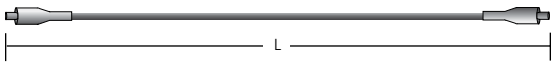
# Fiber Patching and Management

Fiber Optic Patch Cords

## Specifications

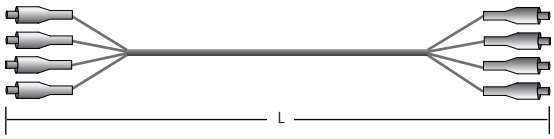
| | | | | | |
|---|---|---|---|---|---|
| **Multimode Ultra Polish Connectors** | **SC** | **ST®** | **FC** | **LC** | **LX.5®** |
| **Insertion Loss (850/1310nm)** | 0.5dB max. | 0.5dB max. | 0.5dB max. | 0.5dB max. | 0.4dB max.<br>0.15dB typical |
| **Return Loss (850/1310nm)** | 20dB min. | 20dB min. | 20dB min. | 20dB min. | 25dB min. |
| **Singlemode Ultra Polish Connectors (UPC)** | **SC** | **ST®** | **FC** | **LC** | **LX.5®** |
| **Insertion Loss (1310 and 1550nm)** | 0.2dB max.<br>0.09dB typical | 0.2dB max.<br>0.15dB typical | 0.2dB max.<br>0.09dB typical | 0.3dB max.<br>0.1dB typical | 0.2dB max.<br>0.08dB typical |
| **Return Loss (1310 and 1550nm)** | 57dB min. | 57dB min. | 57dB min. | 55dB min. | 57dB min. |
| **Fiber Recess** | ± 50nm | ± 50nm | ± 50nm | -100 to +50nm | ± 50nm |
| **Apex Offset** | 50 micron max. | 50 micron max. | 50 micron max. | 50 micron max. | 50 micron max. |
| **Radius of Curvature** | 10–25mm | 10–25mm | 10–25mm | 10–25mm | 10–25mm |
| **Singlemode Angled Polish Connectors (APC)** | **SC** | **ST®** | **FC** | **LX.5®** | |
| **Insertion Loss (1310 and 1550nm)** | 0.5dB max.<br>0.15dB typical | 0.5dB max.<br>0.2dB typical | 0.5dB max.<br>0.15dB typical | 0.2dB max.<br>0.08dB typical | |
| **Return Loss (1310 and 1550nm)** | 65dB min. | 65dB min. | 65dB min. | 65dB min. | |
| **Polished Endface Radius** | 5–15mm | 5–15mm | 5–15mm | 5–12mm | |
| **Fiber Recess** | -100 to +50nm | -100 to +50nm | -100 to +50nm | ± 50nm | |
| **Apex Offset** | 50 micron | 50 micron | 50 micron | 65 micron | |
| **Endface Angle** | 8˚ ± 0.5 | 8˚ ± 0.5 | 8˚ ± 0.5 | 8˚ ± 0.5 | |

## Patch Cords




| **Length** | **Tolerance** |
|---|---|
| 0 to 15m | +16cm/-0cm |
| +15m | +1%/-0cm |

## Multifiber




| **Length** | **Tolerance** |
|---|---|
| 0 to 15m | +16cm/-0cm |
| +15m | +1%/-0cm |

# Fiber Patching and Management

## Fiber Optic Patch Cords

### 62.5/125 Multimode

**Catalog Number**

__ __ - __ - B - __ M

**Cable Option**

| | |
|---|---|
| FPC | Connector on both ends (patch cord) |
| FPT | Connector on one end (pigtail) |

**Cable Type**

| | |
|---|---|
| *Leave Blank* | 3mm single |
| M | 2mm single |
| F | 1.7mm single |
| 9 | 900 micron |
| Z | 3mm dual zip |
| 2 | 2mm dual zip |
| T | 1.7mm dual zip |

**Length**
X Length in meters

**Connector Type [1]**

| | |
|---|---|
| MSC | SC ultra polish |
| MDSC | SC duplex [2] |
| MST | ST® ultra polish |
| MLC | LC ultra polish |
| MDLC | LC duplex |

1 For hybrid patch cords, enter both connector types in this field and separate them with a slash mark (/)
2 One connector per end; requires dual zip cable

**Ordering Example**
FPC-MST/MSC-B-7M: Patch cord with ST® ultra polish connector on one end and SC ultra polish connector on the other end, 62.5/125 fiber size, 7 meters in length.

### 50/125 Multimode

**Catalog Number**

__ __ - __ - A - __ M

**Cable Option**

| | |
|---|---|
| FPC | Connector on both ends (patch cord) |
| FPT | Connector on one end (pigtail) |

**Cable Type**

| | |
|---|---|
| *Leave Blank* | 3mm single |
| OM | 2mm single |
| F | 1.7mm single |
| 9 | 900 micron |
| Z | 3mm dual zip |
| 2 | 2mm dual zip |
| T | 1.7mm dual zip |

**Length**
X Length in meters

**Connector Type [1]**

| | |
|---|---|
| MSC | SC ultra polish |
| MDSC | SC duplex [2] |
| MST | ST® ultra polish |
| MLC | LC ultra polish |
| MDLC | LC duplex |

[1] For hybrid patch cords, enter both connector types in this field and separate them with a slash mark (/)
[2] One connector per end; requires dual zip cable

**Ordering Example**
FPC2-MSC/MLC-A-7M: Patch cord with SC ultra polish connector at one end and LC ultra polish on the other end, 2mm dual zip 50/125 fiber, 7 meters in length.

# Fiber Patching and Management

## Fiber Optic Patch Cords

### 50/125 Ultra Multimode (Laser Optimized to 300m)

**Catalog Number**

__ __ - __ - A - __ M

**Cable Option**

| | |
|---|---|
| FPC | Connector on both ends (patch cord) |
| FPT | Connector on one end (pigtail) |

**Cable Type**

| | |
|---|---|
| A | 3mm single |
| MA | 2mm single |
| FA | 1.7mm single |
| 2A | 2mm dual zip |
| TA | 1.7mm dual zip |

**Length**
X Length in meters

**Connector Type [1]**

| | |
|---|---|
| MSC | SC ultra polish |
| MDSC | SC duplex [2] |
| MST | ST® ultra polish |
| MLC | LC ultra polish |
| MDLC | LC duplex |

[1] For hybrid patch cords, enter both connector types in this field and separate them with a slash mark (/)
[2] One connector per end; requires dual zip cable

**Ordering Example**
FPCTA-MSC/MLC-A-7M: Patch cord with SC ultra polish connector at one end and LC ultra polish on the other end, 2mm dual zip 50/125 ultra fiber, 7 meters in length.

### Singlemode

**Catalog Number**

__ __ - __ - __ - __ M

**Cable Option**

| | |
|---|---|
| FPC | Connector on both ends (patch cord) |
| FPT | Connector on one end (pigtail) |

**Cable Type**

| | |
|---|---|
| *Leave Blank* | 3mm single |
| M | 2mm single |
| F | 1.7mm single |
| 9 | 900 micron |
| Z | 3mm dual zip |
| 2 | 2mm dual zip |
| T | 1.7mm dual zip |

**Length**
X Length in meters

**Cable Type**

| | |
|---|---|
| Blank | 2mm |
| S | 900micron, 1.7mm, 3mm |

**Connector Type [1]**

| | |
|---|---|
| SPSC | SC ultra polish |
| APSC | SC angled polish |
| SDSC | SC duplex [2] |
| SPFC | FC ultra polish |
| APFC | FC angled polish |
| SPST | ST® ultra polish |
| SPLX | LX.5® ultra polish [3] |
| SDLC | LC ultra polish duplex [2] |

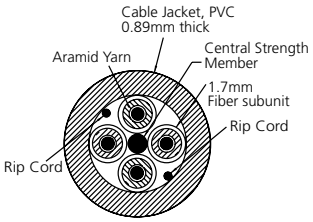
[1] For hybrid patch cords, enter both connector types in this field and separate them with a slash mark; remove "S" from the ultra polish connector options (see second ordering example).
[2] One connector per end; requires dual zip cable

**Ordering Example**
FPC2-SPFC-10M: Patch cord with ultra polish FC connectors on both ends, 2mm dual zip cable, 10 meters in length with standard breakout length of 12" on both ends.
FPC-SPST/PSC-S-10M: Patch cord with ST® ultra polish connector on one end and SC ultra polish connector on the other end, 10 meters in length.

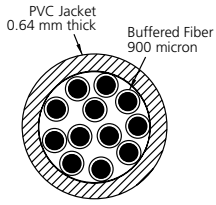
# Fiber Patching and Management

## Fiber Optic Patch Cords

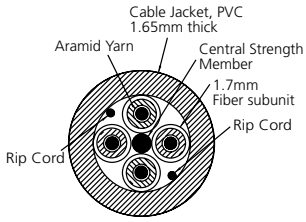
### Multifiber Patch Cords (4 to 32 fibers)




Standard wall
(4-fiber shown)




Soft wall
(12-fiber shown)




Thick wall
(4-fiber shown)

**Standard wall:** Available with 4, 6, 12 or 32 tight buffered 1.7mm fibers enclosed in a standard wall outer jacket. Each 1.7mm fiber is coded for easy identification of individual fibers. Central strength member, aramid yarn; PVC jacket thickness 0.89mm.

**Soft wall:** Available with 6, 8 or 12 tight buffered 900 micron fibers with a thin outer jacket. No central strength member or aramid yarn; PVC jacket thickness 0.64mm.

**Thick wall:** Available with 4 or 24 tight buffered 1.7mm fibers. Each 1.7mm fiber is coded for easy identification of individual fibers. Central strength member, aramid yarn; PVC jacket thickness 1.65mm.

### Multimode

**Catalog Number**

**MFPM- __ / __ - __ __ __ __ M- __ __ / __ __**

**Connector Type (1st and 2nd end)**

| | |
|---|---|
| 0 | Stub |
| 9 | SC ultra polish |
| 5 | ST® ultra polish |
| A | FC ultra polish |
| P | LC ultra polish |

**Length**
X Length in meters

**Breakout Length**
X Length in inches
Leave blank if both ends 12"

**Cable Type**

| | |
|---|---|
| WB | 4-fiber soft wall, 62.5/125 |
| PB | 6-fiber soft wall, 62.5/125 |
| NB | 12-fiber soft wall, 62.5/125 |

### Singlemode

**Catalog Number**

**FPM-0 __ / __ - __ __ __ __ M- __ __ / __ __**

**Connector Type (1st and 2nd end)**

| | |
|---|---|
| 0 | Stub |
| 7 | SC ultra polish |
| 4 | ST® ultra polish |
| 2 | FC ultra polish |
| E | SC angled polish |
| D | FC angled polish |
| K | LC ultra polish |

**Length**
X Length in meters

**Breakout Length**
X Length in inches
Leave blank if both ends 12"

**Cable Type**

| | |
|---|---|
| A | 4-fiber thick wall with 1.7mm subunits |
| D | 4-fiber standard wall with 1.7mm subunits |
| W | 4-fiber soft wall |
| E | 6-fiber standard wall with 1.7mm subunits |
| P | 6-fiber soft wall |
| L | 8-fiber soft wall |
| F | 12-fiber standard wall with 1.7mm subunits |
| M | 12-fiber soft wall |
| AD | 24-fiber thick wall with 1.7mm subunits |
| BD | 32-fiber thick wall with 1.7mm subunits |

# Fiber Patching and Management

## FiberGuide® Fiber Management System

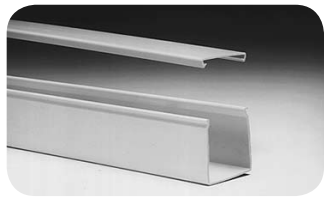


10/09 • 102117AE

### The Industry's Most Comprehensive Optical Raceway System

ADC's FiberGuide® fiber management systems offer the greatest breadth of optical raceway products in the industry. In response to customer requirements, ADC continues to innovate and improve FiberGuide systems, adding greater flexibility and driving down installation time to ensure a smooth deployment.

FiberGuide is a raceway system designed to protect and route fiber optic patch cords, multi-fiber cable assemblies and intrafacility fiber cable (IFC) to and from fiber splice enclosures, fiber distribution frames and fiber optic terminal devices. FiberGuide ensures a two-inch minimum bend radius is maintained throughout the system. Tool-less, Snap-Fit™ junctions, cover options and Plenum Express Exit™ drops significantly reduce the amount of time required for installation.

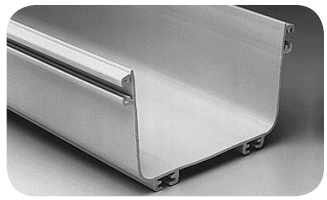


The FiberGuide system is a complete set of products designed and manufactured to ensure total off-frame protection and ease of use. Basic components include horizontal and vertical straight sections, horizontal and vertical elbows, downspouts, junctions and numerous support hardware and flex-tube kits.

Available in a variety of sizes:

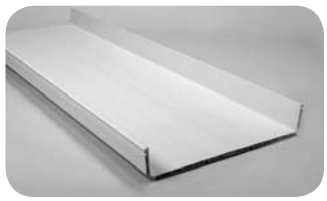
**2x2 –** Ideal for smaller installations or for vertical routing of a maximum of four hundred 2 mm fiber optic patch cords. All 2x2 FiberGuide products are shipped with covers.

**2x6 –** Designed for height restricted environments, this robust system provides the same support and system flexibility of the traditional 4-inch-high system while saving 2 inches of overhead space. It features a maximum capacity of 1,200, 2 mm patch cords.



**4x4 –** Features the maximum capacity to support 1,600, 2 mm patch cords. It has been engineered to allow straight sections to be self-supporting over a span of up to 1.83 m (6 feet).

**4x6 –** Features the same benefits of the 4-inch system and a maximum trough capacity of 2,400, 2 mm patch cords.



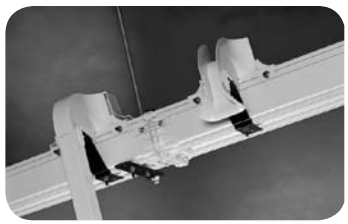
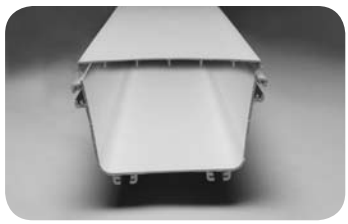
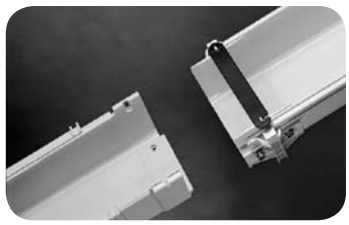
**4x12 –** The 12-inch-wide trough has a maximum capacity to support nearly 5,000, 2 mm patch cords. Perfect for runs over fiber frame lineups and perimeter routes.

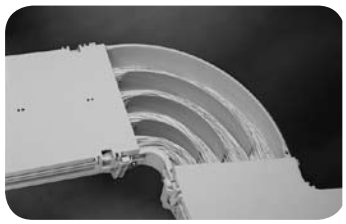


**4x24 –** The 4x24-inch system is the ultimate raceway solution to securely route and protect patch cords over high-density optical distribution frames including ADC's Next Generation Frame (NGF) and Next Generation 3 Frame (NG3®). Designed for maximum capacity, this robust system provides the same support and flexibility as the traditional 4x12-inch system while doubling capacity.

# Fiber Patching and Management

## FiberGuide® Fiber Management System



### Features and Benefits

- **Speed of Installation**
  FiberGuide® systems feature a variety of products that allow for quick and easy installation. Express Exit™ drops as well as tool-less products including Snap-Fit™ junctions, snap-on covers and new hinged cover options save valuable time for installers.
- **Speed of Deployment**
  The Express Exit system enables new drops to be added or removed quickly and easily. A drop can be added into a fully loaded raceway in seconds—without cutting.
- **Raceway Flexibility**
  FiberGuide features 38 support structures, over 75 fittings, multiple drop options and several other components to suit any application you create.
- **Fiber Protection**
  ADC's broadband expertise translates into maximum protection for your network. Two-inch minimum bend radius is maintained throughout the system regardless of the raceway size.
- **Strength and Durability**
  100% raceway reliability—stands up to any challenge.

# Fiber Patching and Management

## FiberGuide® Fiber Management System

Recommended capacity takes into consideration random jumper placement into the FiberGuide® system. Maximum density refers to the maximum number of fiber jumpers in a given cross-section of a FiberGuide installation. The TracerLight® Connector Identification System is ADC's newest patch cord solution. It features slightly different dimensions than standard patch cords.

### Recommended/Maximum Density

| 1.7 mm Patch Cords (per in²) | 2.0 mm Patch Cords (per in²) | 3.0 mm Patch Cords (per in²) |
|---|---|---|
| 120/142 | 90/102 | 40/44 |

### Trough Pileup Recommended/Maximum Density

| | 2-Inch | 3-Inch | 4-Inch |
|---|---|---|---|
| **4x24 System** | | | |
| **1.7 mm** | 5760/6816 | 8640/10224 | 11520/13632 |
| **2.0 mm** | 4320/4869 | 6480/7344 | 8640/9792 |
| **3.0 mm** | 1920/2112 | 2880/3168 | 3840/4224 |
| **4x12 System** | | | |
| **1.7 mm** | 2880/3408 | 4320/5112 | 5760/6816 |
| **2.0 mm** | 2160/2448 | 3240/3672 | 4320/4896 |
| **3.0 mm** | 960/960 | 1440/1584 | 1920/2112 |
| **4x6 System** | | | |
| **1.7 mm** | 1440/1704 | 2160/2556 | 2880/3408 |
| **2.0 mm** | 1080/1224 | 1620/1836 | 2160/2448 |
| **3.0 mm** | 480/528 | 720/792 | 960/1056 |
| **4x4 System** | | | |
| **1.7 mm** | 960/1136 | 1440/1704 | 1920/2272 |
| **2.0 mm** | 720/816 | 1080/1224 | 1440/1632 |
| **3.0 mm** | 320/352 | 480/528 | 640/704 |
| **2x6 System** | | | |
| **1.7 mm** | 1440/1740 | – | – |
| **2.0 mm** | 1080/1224 | – | – |
| **3.0 mm** | 480/528 | – | – |
| **2x2 System** | | | |
| **1.7 mm** | 480/568 | – | |
| **2.0 mm** | 360/408 | – | – |
| **3.0 mm** | 160/176 | – | – |

### TracerLight® Patch Cords—65 Patch Cords per in²

| | 2-inch | 3-inch | 4-inch |
|---|---|---|---|
| **4x24 System** | 3120 | 4680 | 6420 |
| **4x12 System** | 1560 | 2340 | 3120 |
| **4x6 System** | 780 | 1170 | 1560 |
| **4x4 System** | 520 | 780 | 1040 |
| **2x6 System** | 780 | – | – |
| **2x2 System** | 260 | – | – |

For complete product ordering information see ADC literature number:
**104892AE FiberGuide® Fiber Management Systems Catalog** or contact ADC customer service.

# Fiber Patching and Management

## Fiber Optic Bulk Cable

ADC has over 15 years of fiber cable manufacturing experience and offers a complete family of high performance cable and related product.

- Loose tube cable (outside plant)
- Flame retardant (Plenum and riser) loose tube cable
- Intrafacility and distribution cable
- Patch cord/pigtail cables
- Specialty cables
  - Tactical and broadcast cable for rapid deployment
  - Aircraft cable
  - Shipboard cables
  - Cables for extreme temperature and operating environments
  - Cables for remote operating vehicles
  - Furcation tubing for optical devices

### Features

- Each fiber tested to specifications after cabling
- Each fiber type available in all standard ADC cable designs
- All multimode fiber types exceed Gigabit Ethernet industry standards (IEEE 802.3z)
- Ultra 50$\mu$m fiber is laser-optimized for 300 meter 10Gbps applications (IEEE 802.3ae)
- Ultra 50$\mu$m fiber for 550 meter 10Gbps applications is also available

For complete product ordering information see ADC literature number:
**105239AE Fiber Cable Products** or contact ADC Customer Service.

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# RF Signal Management

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# SignalOn® Series
RF Signal Management

## Introduction

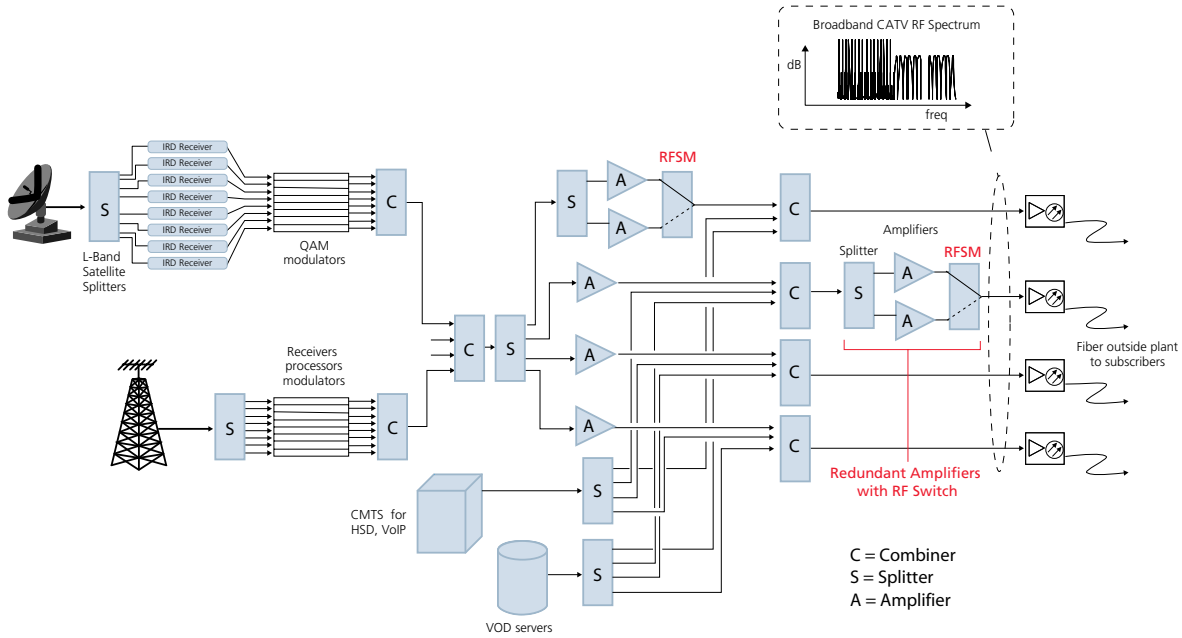
Advanced broadband services are being developed and launched at an ever-accelerating pace. While these services vary, they have one thing in common. Whether it be high-speed data, video-on-demand, or IP telephony, broadband subscribers expect a reliable, high-quality experience at an affordable price.

ADC's SignalOn® Series has been designed with these demanding service requirements in mind. This next generation RF signal management platform provides unmatched density, RF performance, and reliability—all at a competitive price. With its patented hitless "make-before-break" attenuator circuit design, maintaining your RF signal network has never been easier.

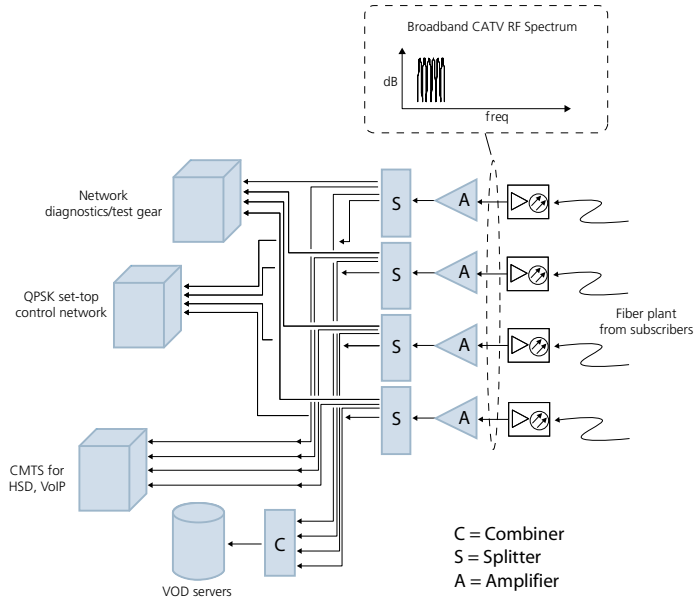
# SignalOn® Series
RF Signal Management



## Typical Downstream Configuration



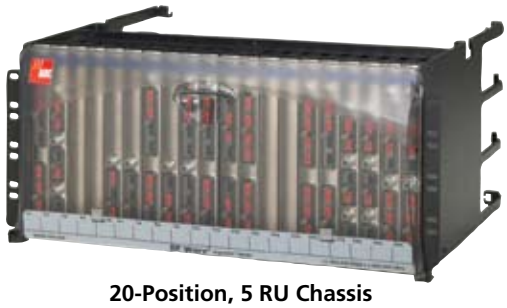

## Typical Upstream Configuration



# SignalOn® Series
RF Signal Management

## Chassis

**32-Position, 4 RU Drawer**



**20-Position, 5 RU Chassis**

**8-Position, 2 RU Chassis**

**4-Position, 1 RU Chassis**

**2-Position, 1 RU Chassis**

**Catalog Number**

**N - C ___ ___ B**

**Type**

| | |
|---|---|
| 32D | 32-position, Drawer |
| 20V | 20-position, Vertical |
| 08H | 8-position, Horizontal |
| 04H | 4-position, Horizontal |
| 02H | 2-position, Horizontal |

**Power Kit**

| | |
|---|---|
| N | No |
| Y | Yes* |

* 20 and 8-position only

## Ordering Information

| Description | Catalog Number |
|---|---|
| **Passive Chassis** | |
| 32-position high-density chassis, 4 RU, black | N-C32DNB |
| 20-position chassis, 5 RU, black | N-C20VNB |
| 20-position chassis, 5 RU, NEBS | N-C20VN-NEBS |
| 8-position chassis, 2 RU, black | N-C08HNB |
| 8-position reversible chassis, 2 RU, black | N-C08HNB-R |
| 4-position chassis, 1 RU, black | N-C04HNB |
| 2-position chassis, 1 RU, black | N-C02HNB |
| **Active Chassis** | |
| 20-position powered chassis, 5 RU, black | N-C20VYB |
| 20-position powered chassis, 5 RU, NEBS | N-C20VY-NEBS |
| 8-position powered chassis, 2 RU, black | N-C08HYB |

# SignalOn® Series
RF Signal Management

## Passives: Introduction

The SignalOn® Series, combined with the innovative cable management of the chassis, provides engineers with a variety of products to simplify the RF signal management challenge.

**Plain Splitter/Combiner Module**

**Pad and Monitor Module with Make-Before-Break Attenuation**

## Passives: RF Splitter/Combiner Modules 5 MHz to 1 GHz

**Catalog Number**

**N - M**

**Module Type**

| | |
|---|---|
| P | Plain splitter/ combiner |
| C | Combiner with pad/monitor |
| S | Splitter with pad/ monitor |
| X | Splitter and combiner with pad/monitor (2 x 4:1 module only) |

**Connector Type**

| | |
|---|---|
| F | F |
| B | BNC |

**Make-Before-Break Attenuation****

| | |
|---|---|
| M0 | 0 dB default |
| M6 | 6 dB default |

**Configuration**

| | |
|---|---|
| 12 | 2:1 |
| 14 | 4:1 |
| 18 | 8:1 |
| 32 | 3 x 2:1* |
| 24 | 2 x 4:1* |

*3 x 2:1 and 2 x 4:1 housed in a single module.
**Leave last two digits blank for plain modules.

### Features

- Industry's highest density with standard F and BNC connectors
- Industry's best performance and specifications
- Individual performance certificate shipped with every module
- Patented make-before-break attenuator pad design for hitless signal balancing
- Chassis supports both passive and active modules
- Clear chassis door provides protection and clear view of modules
- Clear attenuator pad covers and patented pad guides for simplified maintenance
- High quality, precision F or BNC connectors
- Designed to exceed NEBS requirements for grounding/bonding
- Independent EMI near and far-field testing
- Ten year warranty on all passive modules
- Available in 1 RU, 2 RU, 4 RU and 5 RU chassis
- NEBS Level 3 compliant

## Selection of default pad option for pand and monitor modules

The make before break attenuation feature requires that a default attenuation padding value be chosen for the module. The two options are:

**M0 – 0 dB loss on the splitter or combiner leg when attenuator pad is removed**
The M0 option is used in systems where the attenuator pad values will range from 0 dB to 10 dB.

**M6 – 6 dB loss on the splitter or combiner leg when attenuator pad is removed**
The M6 option is typically used in systems where the attenuator pad values range from 10 dB to 25 dB. In this situation, the additional 6 dB of loss that is placed in line when the pad is removed will help to limit overdriving active devices further downstream and will help limit transmitter laser clipping, and overdriving of RF amplifiers in the distribution plant.



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## Ordering Information

| Description | | | Catalog Number |
|---|---|---|---|
| **Plain Splitter/Combiner Modules** | | | |
| BNC connector | 2:1 plain | | N-MPB12 |
| | 4:1 plain | | N-MPB14 |
| | 8:1 plain | | N-MPB18 |
| | 3 x 2:1 plain | | N-MPB32 |
| | 2 x 4:1 plain | | N-MPB24 |
| F connector | 2:1 plain | | N-MPF12 |
| | 4:1 plain | | N-MPF14 |
| | 8:1 plain | | N-MPF18 |
| | 3 x 2:1 plain | | N-MPF32 |
| | 2 x 4:1 plain | | N-MPF24 |
| BNC connector | 0 dB default | 2:1 combiner with monitor | N-MCB12M0 |
| | | 2:1 splitter with monitor | N-MSB12M0 |
| | | 2x4:1 combiner with monitor | N-MCB24M0 |
| | | 2x4:1 splitter with monitor | N-MSB24M0 |
| | | 2x4:1 splitter/combiner with monitor | N-MXB24M0 |
| | | 3x2:1 combiner with monitor | N-MCB32M0 |
| | | 3x2:1 splitter with monitor | N-MSB32M0 |
| | | 4:1 combiner with monitor | N-MCB14M0 |
| | | 4:1 splitter with monitor | N-MSB14M0 |
| | | 8:1 combiner with monitor | N-MCB18M0 |
| | | 8:1 splitter with monitor | N-MSB18M0 |
| | 6 dB default | 2:1 combiner with monitor | N-MCB12M6 |
| | | 2:1 splitter with monitor | N-MSB12M6 |
| | | 2x4:1 combiner with monitor | N-MCB24M6 |
| | | 2x4:1 splitter with monitor | N-MSB24M6 |
| | | 2x4:1 splitter/combiner with monitor | N-MXB24M6 |
| | | 3x2:1 combiner with monitor | N-MCB32M6 |
| | | 3x2:1 splitter with monitor | N-MSB32M6 |
| | | 4:1 combiner with monitor | N-MCB14M6 |
| | | 4:1 splitter with monitor | N-MSB14M6 |
| | | 8:1 combiner with monitor | N-MCB18M6 |
| | | 8:1 splitter with monitor | N-MSB18M6 |

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## Ordering Information

| Description | | | Catalog Number |
|---|---|---|---|
| **Splitter/Combiner with Pad and Monitor Modules** | | | |
| F connector | 0 dB default | 2:1 combiner with monitor | N-MCF12M0 |
| | | 2:1 splitter with monitor | N-MSF12M0 |
| | | 2x4:1 combiner with monitor | N-MCF24M0 |
| | | 2x4:1 splitter with monitor | N-MSF24M0 |
| | | 2x4:1 splitter/combiner with monitor | N-MXF24M0 |
| | | 3x2:1 combiner with monitor | N-MCF32M0 |
| | | 3x2:1 splitter with monitor | N-MSF32M0 |
| | | 4:1 combiner with monitor | N-MCF14M0 |
| | | 4:1 splitter with monitor | N-MSF14M0 |
| | | 8:1 combiner with monitor | N-MCF18M0 |
| | | 8:1 splitter with monitor | N-MSF18M0 |
| | 6 dB default | 2:1 combiner with monitor | N-MCF12M6 |
| | | 2:1 splitter with monitor | N-MSF12M6 |
| | | 2x4:1 combiner with monitor | N-MCF24M6 |
| | | 2x4:1 splitter with monitor | N-MSF24M6 |
| | | 2x4:1 splitter/combiner with monitor | N-MXF24M6 |
| | | 3x2:1 combiner with monitor | N-MCF32M6 |
| | | 3x2:1 splitter with monitor | N-MSF32M6 |
| | | 4:1 combiner with monitor | N-MCF14M6 |
| | | 4:1 splitter with monitor | N-MSF14M6 |
| | | 8:1 combiner with monitor | N-MCF18M6 |
| | | 8:1 splitter with monitor | N-MSF18M6 |

# SignalOn® Series
RF Signal Management

## Passives:
## Directional Coupler Modules
## 5 MHz to 1 GHz

**Catalog Number**
**N - MD ___ ___ ___ ___**

**Connector Type**

| | |
|---|---|
| F | F |
| B | BNC |

**Circuit Quantity**

| | |
|---|---|
| 1 | Single circuit |
| 3 | Triple circuit |

**Application Type**

| | |
|---|---|
| R | Rear narrowcast signal port |

**DC Value**

| | |
|---|---|
| 09 | 9 dB |
| 12 | 12 dB |
| 20 | 20 dB |
| V12 | 12 dB variable |

**Directional Coupler**

## Ordering Information

| Description | | | Catalog Number |
|---|---|---|---|
| **Directional Coupler Modules** | | | |
| BNC connector | 9 dB | Triple circuit | N-MDB309R |
| | 12 dB | Single circuit | N-MDB112R |
| | | Triple circuit | N-MDB312R |
| | | 6x variable | N-MDB6V12R |
| | 20 dB | Single circuit | N-MDB120R |
| | | Triple circuit | N-MDB320R |
| F connector | 9 dB | Triple circuit | N-MDF309R |
| | 12 dB | Single circuit | N-MDF112R |
| | | Triple circuit | N-MDF312R |
| | | 6x variable | N-MDF6V12R |
| | 20 dB | Single circuit | N-MDF120R |
| | | Triple circuit | N-MDF320R |

# SignalOn® Series
RF Signal Management

## Passives: Conditioning and Monitor Modules

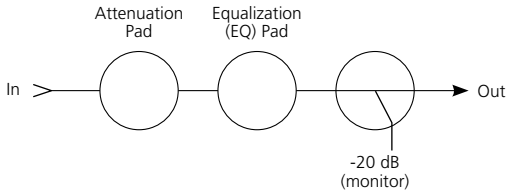
### Features

- Typically placed at the input to the forward path optical transmitter, this module allows for conditioning and grooming of the RF signal gain and slope. It is designed as 1:1 input to output with two MBB circuits in series for pad and EQ placement.
- -20 dB front facing monitor port
- NEBS Level 3 compliant

**Triple C & M F-Connectors**

### Ordering Information

| Description | Catalog Number |
|---|---|
| **Conditioning and Monitor Modules;** triple circuit, 20 dB, 0 dB default | |
| BNC connector | N-MMB320FM0 |
| F connector | N-MMF320FM0 |




**Conditioning and monitor module schematic**



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## Passives: L-Band Satellite Splitter Modules 950 MHz to 2.15 GHz

ADC's new L-Band series satellite splitter modules are engineered for the highest performance in the 950 MHz to 2.15 GHz frequency range. These plain splitter/combiner modules feature dual port **power-passing** capability for powering LNB's. All L-Band modules are available with precision F or BNC connectors, and are NEBS Level 3 compliant.

**Catalog Number**
**N - ML**

**Connector Type**

| | |
|---|---|
| F | F |
| B | BNC |

**Configuration**

| | |
|---|---|
| 12 | 2:1 |
| 14 | 4:1 |
| 18 | 8:1 |
| 32 | 3 x 2:1* |
| 24 | 2 x 4:1* |

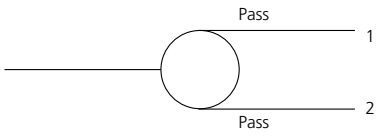
*Housed in a single module.

**L-Band Satellite Splitter**

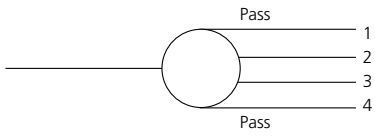
## Ordering Information

| Description | | Catalog Number |
|---|---|---|
| **L-Band Satellite Splitter Modules** | | |
| BNC connector | 2:1 splitter | N-MLB12 |
| | 4:1 splitter | N-MLB14 |
| | 8:1 splitter | N-MLB18 |
| | 3x2:1 splitter | N-MLB32 |
| | 2x4:1 splitter | N-MLB24 |
| F connector | 2:1 splitter | N-MLF12 |
| | 4:1 splitter | N-MLF14 |
| | 8:1 splitter | N-MLF18 |
| | 3x2:1 splitter | N-MLF32 |
| | 2x4:1 splitter | N-MLF24 |

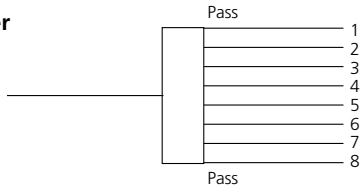
All L-Band modules feature dual port power passing capability.




**2-Way Splitter**




**4-Way Splitter**




**8-Way Splitter**

# SignalOn® Series
RF Signal Management

Broadcast and Entertainment Products

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## Actives: Introduction

Today's broadband services require high-quality headend infrastructure that offers excellent performance, reliability and design flexibility. Furthermore, your infrastructure solution should maximize the uptime of carrier-class services like VoIP, VOD and HSD as applications evolve and your network changes.

Leveraging over a decade of RF amplifier design experience, ADC's SignalOn® amplifiers have been engineered to meet these demanding service requirements. Featuring operation from 50 MHz to 1 GHz, the amplifiers offer excellent performance and reliability. SignalOn amplifiers and associated power supplies can be housed in the same chassis as the SignalOn passive products for increased design flexibility. With its electronically variable gain and slope controls, you can adjust signal levels in your network with no service downtime.

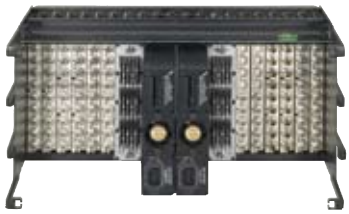
SignalOn amplifiers feature non-service-affecting gain and slope controls. This capability along with the patented make-before-break attenuator pad design of the splitters and combiners, allow for "hitless" RF signal adjustment—critical for today's carrier-class broadband service applications.

### Features

- Operation from 50 MHz to 1 GHz
- GaAs technology with near-100% surface mount design for high performance
- Meets MIL-202 specs for quality and reliability
- Mounts in same SignalOn chassis as passive modules for maximum design flexibility
- Digitally variable gain and slope control for non-service-affecting signal level adjustments
- 20 dB monitor points on both input and output signals for testing and troubleshooting
- "Blind-mate" power bus connector with gold-on-gold contacts; requires no cabling
- Chassis-mounted AC-DC and DC-DC power supply options
- Redundant powering with dual load shared power supplies for increased availability
- External +24 Vdc powering option
- NEBS Level 3 compliant

**Amplifier**
(front view)

**20-Position, 5 RU Powered Chassis**
(with mixture of passive and active modules)



**20-Position, 5 RU Powered Chassis**
(rear view)

**8-Position, 2 RU Powered Chassis**
(front view)

**8-Position, 2 RU Powered Chassis**
(rear view)

# SignalOn® Series
RF Signal Management

## Actives: Amplifier Modules

**Amplifier**
(front view)

### Ordering Information

| Description | | Catalog Number |
|---|---|---|
| **Forward Path Amplifier Modules** | | |
| BNC connector | 20 dB | N-MAB20FA |
| | 30 dB | N-MAB30FA |
| F connector | 20 dB | N-MAF20FA |
| | 30 dB | N-MAF30FA |

| PERFORMANCE ATTRIBUTE | 20 dB Forward Amplifier | 30 dB Forward Amplifier |
|---|---|---|
| **Bandwidth** | 50-1000 MHz | 50-1000 MHz |
| **Optimum RF input** | +20 dBmV per channel | +10 dBmV per channel |
| **Minimum full gain** | 20.0 dB | 30.0 dB |
| **Gain adjustment range** | 10 +/-1 dB in 0.5 dB steps | 10 +/-1 dB in 0.5 dB steps |
| **Tilt adjustment range** | 10 +/-1 dB @ 50 MHz in 0.5 dB steps | 10 +/-1 dB @ 50 MHz in 0.5 dB steps |
| **Gain flatness** | +/- 0.4 dB from 50 to 870 MHz<br>+/- 0.5 dB from 870 to 1000 MHz | +/- 0.45 dB from 50 to 870 MHz<br>+/- 0.65 dB from 870 to 1000 MHz |
| **Return loss, input and output ports** | -19.0 dB from 50 to 870 MHz<br>-16.5 dB from 870 to 1000 MHz | -18.0 dB from 50 to 870 MHz<br>-15.0 dB from 870 to 1000 MHz |
| **Noise figure** | 7.3 dB from 50 to 870 MHz<br>7.6 dB from 870 to 1000 MHz | 5.7 dB from 50 to 870 MHz<br>6.2 dB from 870 to 1000 MHz |
| **CTB1** | -73.1 dB | -78.9 dB |
| **CSO1** | -81.7 dB | -84.5 dB |
| **IMD1** | -78.2 dB | -83.7 dB |
| **Monitor ports** | -20 dB test point for both RF input and RF output | |
| **Power dissipation** | 17W max | |
| **Operating temperature** | 0 - 50 degrees C | |
| **Dimensions** | 8.55"H x 1.67"W x 7.81"D | |
| **Power connector** | gold-on-gold, slide-on contacts | |
| **Thermal shock** | Meets MIL-STD-202 Method 107 | |
| **Office vibration** | Meets GR-63-Core Section 5.4.2 | |
| **Mechanical shock** | Meets MIL-STD-202 Method 213 | |
| **Accelerated aging** | Meets MIL-STD-202 Method 108 | |
| **NEBS** | Meets NEBS Level 3 | |

**Note:** Measured with 110 channel loading and optimum RF input level at full gain and no tilt. Specifications are typical worst-case numbers across the given frequency range, unless otherwise noted, and are subject to change without notice.

# SignalOn® Series
RF Signal Management

## Actives: Power Supply Modules

**Power Supply**
(front view)

### Ordering Information

| Description | Catalog Number |
|---|---|
| **Power Supply Modules** | |
| AC to DC | N-MVUVAC |
| DC to DC | N-MV48DC |

## Specifications

| PERFORMANCE ATTRIBUTE | AC-DC | DC-DC |
|---|---|---|
| **Input voltage** | 90-264 Vac, 50/60 Hz | 36-72 Vdc nominal |
| **Efficiency** | 75% nominal | 80% nominal |
| **Output voltage** | 24 Vdc ± 5% | 24 Vdc ± 5% |
| **Output power** | 200W (24 Vdc @ 8.33 Amps) | 192W (24 Vdc @ 8 Amps) |
| **Amplifiers supported** | Up to nine 30 dB amplifiers | Up to nine 30 dB amplifiers |
| **Redundancy** | Yes, dual load sharing | Yes, dual load sharing |
| **Operating temperature** | 0 - 50° C | 0 - 50° C |
| **Dimensions** | 8.55"H x 1.67"W x 12.96"D | 8.55"H x 1.67"W x 12.96"D |
| **Power connector** | gold-on-gold, slide-on contacts | gold-on-gold, slide-on contacts |
| **Test points** | 24 Vdc output test points | 24 Vdc output test points |
| **Fan** | Field replaceable unit | Field replaceable unit |
| **Alarm relays** | Fan fail, output power fail | Fan fail, output power fail |
| **TTL contacts** | Remote inhibit, input power fail, output power fail | Remote inhibit, input power fail, output power fail |
| **NEBS** | Meets NEBS Level 3 | Meets NEBS Level 3 |



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# SignalOn® Series
RF Signal Management

## Actives: RF Switch Modules

The ADC SignalOn® RF Switch Module (RFSM) is designed for use with the SignalOn 8-position, or 20-position powered chassis. All RF connections to the switch are made through standard 75 Ω BNC, or F connectors on the rear of the module. All operating controls and indicators are located on the front panel with configuration controls located on the rear of the module.

The primary function of the module is to monitor the RF signal gain of the operating primary "A" input, and switch to the backup "B" input if the gain of the primary path rises, or falls below the pre-set customer selected threshold. Should the "A" input side go above, or fall below the threshold of the unit, the RFSM will rapidly switch the input from the failed input to the secondary input. This switch usually is less that 10 milliseconds. Switch status, failure LEDS, and RF level bar graphs are mounted on the front panel of the switch module. Switching threshold: +/- 3 dB or +/- 6 dB, and alarm contact closures are located on the rear of module.

**Dual RF Switch Module**

### Features

- Continuous monitoring of primary and secondary
- Detects both high and low power failures
- User-selectable switching threshold: +/- 3 dB or +/- 6 dB
- Fail-over switching time < 10 ms
- Automatic switchback after "A" path is restored
- Front-panel LED status and dual power level displays
- Alarm contact for remote failure monitoring
- Available in BNC and F-connector configurations
- Single or dual modules
- Easily configured for redundancy or A-B switch applications
- Front panel bar graph display provides indication of RF power and switching threshold
- Indication of switch status provided by front panel LED and rear terminal block contacts
- Easily configured switching threshold levels via rear DIP switch
- One-step calibration
- Auto switch-back feature to primary input
- Built-in delay to prevent from false switching
- Automatic or manual modes of operation
- NEBS Level 3 compliant

### Ordering Information

| Description | | Catalog Number |
|---|---|---|
| **Redundant RF Switch Modules** | | |
| BNC connector | Single circuit | N-MRFSM1-B |
| | Dual circuit | N-MRFSM2-B |
| F connector | Single circuit | N-MRFSM1-F |
| | Dual circuit | N-MRFSM2-F |

# SignalOn® Series
RF Signal Management

## Actives: Reverse Path Amplifier Modules

ADC's Return Path Amplifier was designed specifically to solve problems particular to your environment. Providing greater density, unparalleled cable management, greater functionality and redundant powering, the return path amplifier is part of the system approach to integrating all signal management functions in a common format and modular system.

To mount modules in SignalOn chassis use these amplifiers in conjunction with N-ACC-BRKT-RA (mounts 1 or 2 amps) – see page 245.

**Reverse Path Amplifier**

### Features

- Fixed 22 dB
- Low distortion characteristics
- Low noise figure
- 5-200 MHz bandwidth
- Two 20 dB monitor ports (input and output)
- BNC or F connectors
- AC or DC powering
- Power redundancy (optional)

### Ordering Information

| Description | | Dimensions (H x W x D) | Catalog Number |
|---|---|---|---|
| **Reverse Path Amplifier Modules 22 dB Fixed Gain** | BNC connectors | 57 mm x 31 mm x 203 mm (2.25" x 1.2" x 8.0") | RFX-AMP-22B |
| | F connectors | | RFX-AMP-22F |



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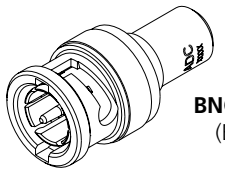
## Accessories

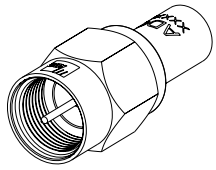
### Ordering Information

| Description | Catalog Number |
|---|---|
| **Cable Management Kits;** (includes rack mount cable management rings) | |
| 2 brackets, 2 – 2.5" x 5.5" cable rings | N-ACMK-01P |
| 4 brackets, 4 – 2.5" x 5.5" cable rings | N-ACMK-04P |
| **Chassis Extender Brackets** for; | |
| 2-position chassis, 23" rack | EB-17B |
| 8-position chassis, 23" rack | EB-35B |
| 20-position chassis, ETSI 21" rack | EB-87B |
| **Insertion/Withdrawal Tools** | |
| BNC insertion tool with 12" handle | BT2000-12 |
| BNC insertion tool with 24" handle | BT2000-24 |
| F connector insertion tool | SC-FG |
| **Terminating Plugs** | |
| BNC terminating plug, 75 Ω ± 1.0% | BNC-TP1 |
| BNC high-performance terminating plug, 75 Ω ± .1% | BNC-TP2 |
| F terminating plug, 75 Ω ± 1.0% | CF-TP1 |
| F high-performance terminating plug, 75 Ω ± .1% | CF-TP2 |
| **Attenuator Pads** | |
| XX dB pads, qty 25 (replace XX with 00 through 26) | N-ACC-AP-XX |
| 1-5 dB pads, 5 of each pad value, total qty 25 | N-ACC-AP-S1 |
| 6-10 dB pads, 5 of each pad value, total qty 25 | N-ACC-AP-S2 |
| 11-15 dB pads, 5 of each pad value, total qty 25 | N-ACC-AP-S3 |
| 16-20 dB pads, 5 of each pad value, total qty 25 | N-ACC-AP-S4 |
| 21-25 dB pads, 5 of each pad value, total qty 25 | N-ACC-AP-S5 |
| 3,6,9,12,15 dB pads, 5 of each pad value, total qty 25* | N-ACC-AP-M0 |
| 0,3,9,12,15 dB pads, 5 of each pad value, total qty 25** | N-ACC-AP-M6 |
| 75 Ω termination pads, qty 25 | N-ACC-TP-75 |

* Kit intended for 0 db default MBB modules (-M0 modules)
** Kit intended for 6 db default MBB modules (-M6 modules)



**BNC Terminating Plugs**
(BNC TP-1 and TP-2)



**F Terminating Plugs**
(CF TP-1 and TP-2)

## Ordering Information

| Description | Catalog Number |
|---|---|
| **Equalizer Pads** | |
| 2 dB plug-in | N-ACC-LE-02 |
| 3 dB plug-in | N-ACC-LE-03 |
| 4 dB plug-in | N-ACC-LE-04 |
| 5 dB plug-in | N-ACC-LE-05 |
| 6 dB plug-in | N-ACC-LE-06 |
| 7 dB plug-in | N-ACC-LE-07 |
| 8 dB plug-in | N-ACC-LE-08 |
| 9 dB plug-in | N-ACC-LE-09 |
| 10 dB plug-in | N-ACC-LE-10 |
| 11 dB plug-in | N-ACC-LE-11 |
| 12 dB plug-in | N-ACC-LE-12 |
| 13 dB plug-in | N-ACC-LE-13 |
| **DC Power Upgrade Kits for;** | |
| 2 RU chassis – used to power 8-position | N-ACC-PWRKIT-08B |
| 5 RU chassis – used to power 20-position | N-ACC-PWRKIT-20B |
| **Power Supply Accessories** | |
| Power cord for power supply | N-ACC-CBL-DC-DC |
| Fan replacement kit for power supply | N-ACC-FAN |
| **Module Conversion Kits;** to install | |
| 1 RF Worx® passive module into SignalOn® chassis | N-ACC-BRKT-RFW |
| 2 RF Worx® reverse amps into powered SignalOn® chassis | N-ACC-BRKT-RA |
| 1 SignalOn® passive module into MAXNET™ chassis1 | N-AMCK-01 |
| 18 SignalOn® passive modules into MAXNET™ chassis1 | N-AMCK-18 |
| **Blank Module Covers** | |
| Single blank panel cover | N-ACC-BLANK-01 |
| Dual blank panel cover | N-ACC-BLANK-02 |
| **Bulkhead Testpoint Panels** | |
| Single panel with 2 F-81 bulkhead connectors | N-MTPF2 |
| Single panel with 2 F-81 bulkhead connectors | N-MTPF6 |

[1] MAXNET is a trademark of ATX Networks

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# Broadcast and Entertainment Products

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## SHDC Jacks for PPM Panels

**ELECTRICAL**

| | |
|---|---|
| **Characteristic impedance:** | 75 Ω |
| **Voltage rating:** | 600 Volts RMS |
| **Bandwidth** | |
| **HD LCC:** | Up to 3 GHz |
| **HD 1.0/2.3:** | Up to 1.0 GHz |
| **Straight-through LCC:** | Up to 3 GHz |
| **Straight-through 1.0/2.3:** | Up to 1.0 GHz |
| **AES:** | Up to 500 MHz |
| **Contact resistance:** | .030 Ω max change post environmental |
| **Insulation resistance:** | 200 MΩ min change |

**MECHANICAL**

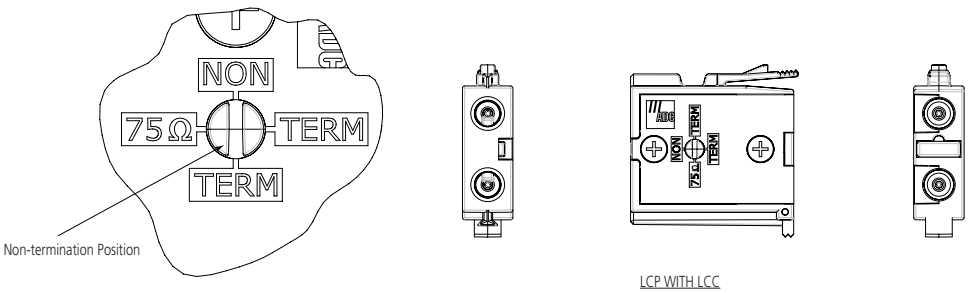
| | |
|---|---|
| **Mechanical durability:** | 10,000 cycles min (Front port: LCP)<br>500 cycles min (Back port: LCC) |
| **Center contact retention:** | 6 lbs min |
| **SHDC jack panel retention:** | 20 lbs min |
| **Patch cord cable bend and twist:** | 500 cycles min |

**ENVIRONMENTAL**

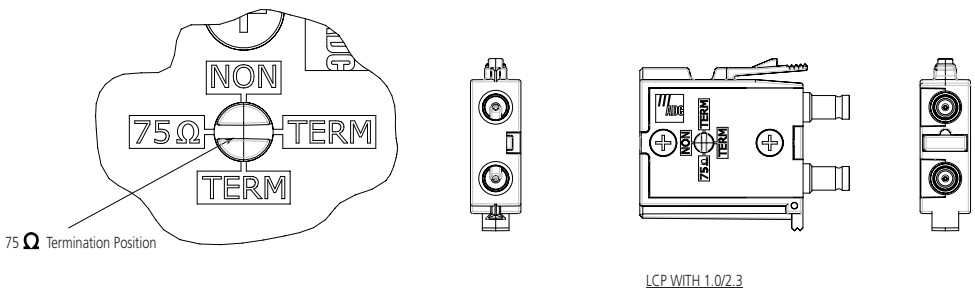
| | |
|---|---|
| **Thermal shock:** | -40°C to 65°C, operating; -55°C to 85°C, non-operating |
| **Moisture resistance:** | 0% to 95%; MIL-STD-202 Method 106 |
| **Corrosion (salt spray):** | MIL-STD-202 Method 101, Test Condition B |
| **Flammability:** | UL 94-VO rated (center conductor insulator) |
| **Vibration:** | MIL-STD-202 Method 201 |
| **Solvent resistance:** | MIL-STD-202 Method 215 |

**FINISH**

| | |
|---|---|
| **Sheet metal panel:** | .060 CRS with protective black finish |
| **Jack plastic housing:** | 30% Glass Filled Valox |
| **Nickel coax housings:** | Tarnish-resistant electroless nickel plating |
| **Springs:** | Beryllium copper with 50 millionths inch gold plating |
| **Center conductors:** | 50 millionths inch gold plating |

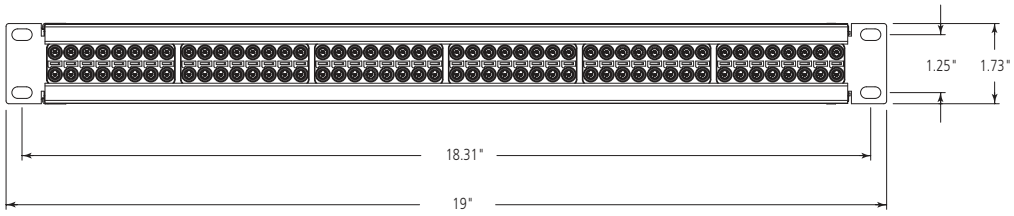



LCP WITH LCC

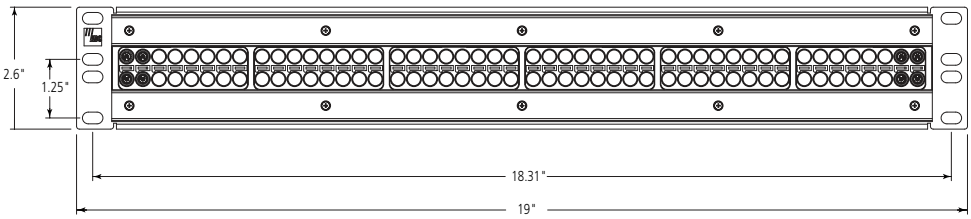



LCP WITH 1.0/2.3

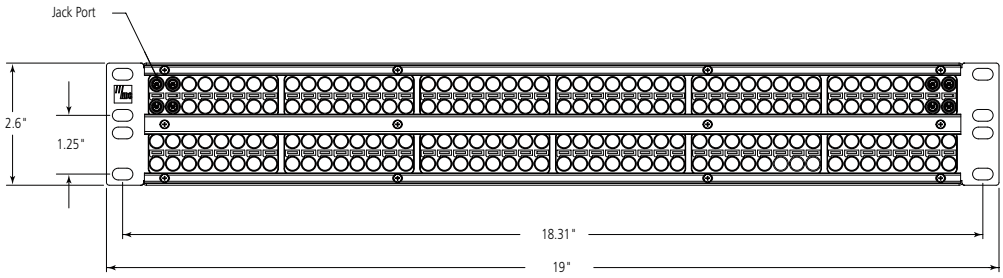
## PPM Panels



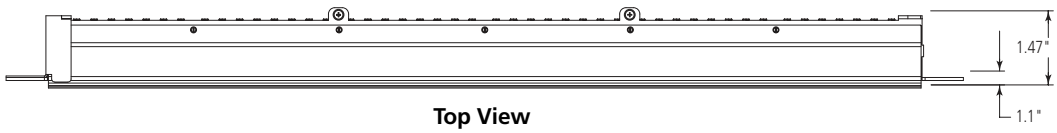

**PPM 1248 Series**




**PPM 15248 Series**




**PPM 15448 Series**




**Top View**

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# MVJ-3
# WECO HD Midsize Video Jack Specifications

The MVJ-3 Family is rated to handle digital video data rates up to and including uncompressed HDTV SMPTE 292M 1.485 Gbps and SMPTE 424M 3 Gbps.

**ELECTRICAL**

| | |
|---|---|
| **Rated bandwidth:** | 1 MHz to 3 GHz |
| **Return loss:** | Better than -17 dB; 1 MHz to 3 GHz |
| **Characteristic impedance:** | 75 Ω |
| **Insertion loss:** | 0.3 dB Loss to 3 GHz |
| **Center conductor Diameter:** | 0.048 (.12cm) |
| **Contact resistance:** | 0.01 W maximum change |
| **Termination resistor:** | 75 Ω, MVJ-3T only |

**MECHANICAL**

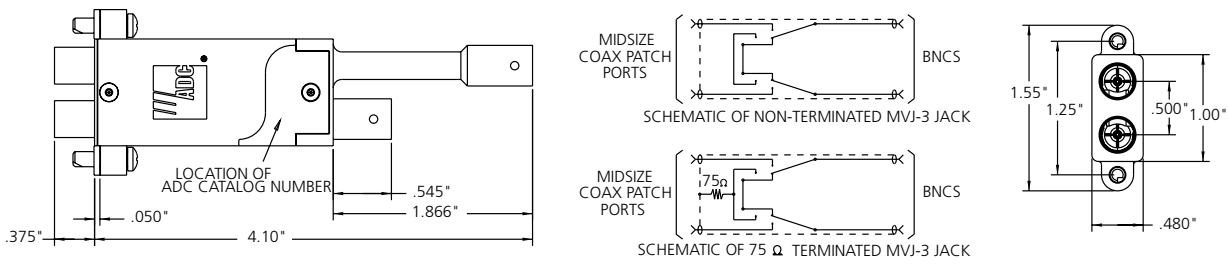
| | |
|---|---|
| **Mechanical shock:** | Per MIL-STD-202, Method 213 |
| **Vibration:** | Per MIL-STD-202, Method 201 |
| **Insertion force:** | 7 lbs (3.17 Kg) maximum |
| **Withdrawal force:** | 1 lb (.452 Kg) minimum |
| **Life cycles:** | 20,000 |

**MATERIAL**

| | |
|---|---|
| **Body and cover:** | Zinc alloy per ASTM B86 |
| **Front and rear center conductors:** | Beryllium copper per ASTM B196 |
| **Insulators:** | Unreinforced polyetherimide resin rated UL94-VO for flammability |
| **Switching springs:** | Beryllium copper per ASTM B196 |

**ENVIRONMENTAL**

| | |
|---|---|
| **Operating temperature:** | -40°C to 65°C |
| **Storage temperature:** | -40°C to 65°C |
| **Thermal shock:** | Per MIL-STD-202, Method 107 |
| **Operating humidity:** | 0% to 95%, non-condensing |
| **Storage humidity:** | 0% to 95%, non-condensing |
| **Salt spray:** | Per MIL-STD-202, Method 101 |
| **Moisture resistance:** | Per MIL-STD-202, Method 106 |
| **Dust resistance:** | Per MIL-STD-202, Method 110 |




**MVJ-3 Midsize Video Jack**

# Drawings and Specifications

Video Patching Products

## WECO HD Midsize Straight-Through Video Jack Specifications

The CJ midsize jacks are rated to handle digital video data rates up to and including uncompressed HDTV SMPTE 292 M 1.485 Gbps. They are also rated for L-Band and S-Band use.

**ELECTRICAL**

| | |
|---|---|
| **Characteristic impedance:** | 75 Ω nominal |
| **Return loss:** | > 19 dB; 300 Khz to 2.4 GHz |
| **Contact resistance:** | 10 mΩ typical |
| **Termination resistance (3014N-75/4014N-75):** | 75 Ω commercial, 1/8 watt 5% |

**MECHANICAL**

| | |
|---|---|
| **Mechanical shock:** | Per MIL-STD-202, Method 213 |
| **Vibration:** | Per MIL-STD-202, Method 201 |
| **Insertion force:** | 7 lbs max |
| **Withdrawal force:** | 1.5 lbs min |

**ENVIRONMENTAL**

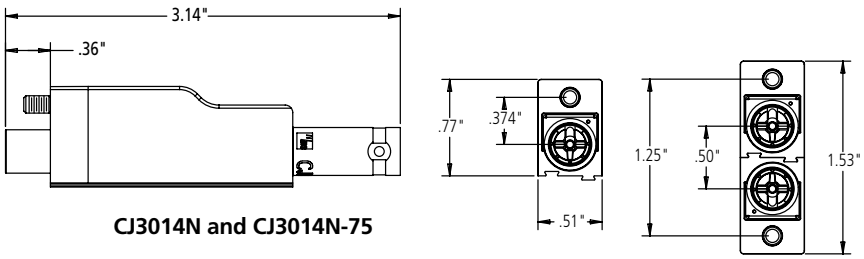
| | |
|---|---|
| **Operating temp:** | -40°C to 65°C |
| **Storage temp:** | -55°C to 85°C |
| **Thermal Shock:** | Per MIL-STD-202, Method 107 |
| **Humidity:** | 0% to 95% non-condensing, operating and non-operating |
| **Salt spray:** | Per MIL-STD-202, Method 101 |
| **Moisture resistance:** | Per MIL-STD-202, Method 106 |

**MATERIAL**

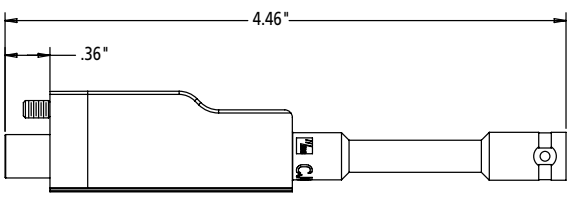
| | |
|---|---|
| **Jack sleeve and frame: per QQ-N-290** | CDA 360 brass rod per ASTM B16 with electro-deposit nickel plating |
| **Center conductors: per MIL-G-45204** | Phosphor bronze per ASTM B139 with electro-deposited gold plating |
| **Insulators:** | TFE-Fluorocarbon per ASTM D1710 |

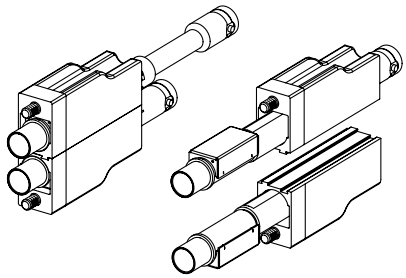
**OTHER**

| | |
|---|---|
| **Interface dimensions: pin diameter of .048" (.12 cm)** | Outside diameter of mating plugs must be .298" (.75 cm) with |
| **Mounting details: (zinc chromate plated)** | Jacks supplied with a 6-32 UNC-2A 5/16" Phillips head screws |




**CJ3014N and CJ3014N-75**



**CJ4014N and CJ4014N-75**

# Drawings and Specifications
Video Patching Products

## SVJ-2
## Standard Size Super Video Jack Specifications

The SVJ-2 family is rated to handle digital video data rates up to and including uncompressed HDTV SMPTE 292M 1.485 Gbps and SMPTE 424M 3 Gbps.

**ELECTRICAL**

| | |
|---|---|
| **Rated bandwidth:** | 2.4 GHz |
| **Return loss:** | Better than -20 dB to 2.4 GHz |
| **Characteristic impedance:** | 75 Ω |
| **Insertion loss:** | <.5 dB Loss to 2.4 GHz |
| **Center conductor diameter:** | Accepts .09 center conductor |
| **Contact resistance:** | Less than 20 mΩ |
| **Termination resistor:** | 75 Ω, ± 1% |

**MECHANICAL**

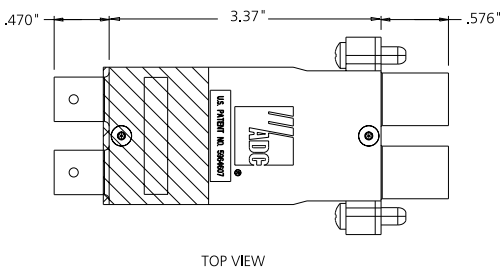
| | |
|---|---|
| **Mechanical shock:** | Per MIL-STD-202, Method 213 test condition G |
| **Vibration:** | Per MIL-STD-202, Method 201 |
| **Insertion force:** | 12 lbs max |
| **Withdrawal force:** | 3 lbs min |
| **Life cycles:** | 20,000 insertion/withdrawal cycles min |

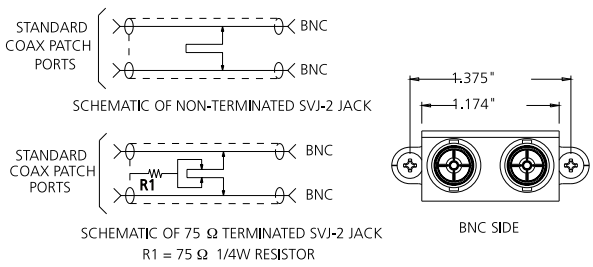
**MATERIAL**

| | |
|---|---|
| **Body and cover:** | Zinc diecast per ASTM B86 |
| **Front and rear** | |
| **Center conductors:** | Phosphor bronze per ASTM B139 |
| **Insulators:** | Polyethermide resin rated UL 94V-0 |
| **Switching springs:** | Beryllium copper per ASTM B196 |

**ENVIRONMENTAL**

| | |
|---|---|
| **Temperature** | |
| **Operating:** | -40°C to 65°C |
| **Storage:** | -55°C to 85°C |
| **Thermal shock:** | Per MIL-STD-202, Method 107 |
| **Humidity** | |
| **Operating:** | 0% to 95%, non-condensing |
| **Storage:** | 0% to 95%, non-condensing |
| **Salt spray:** | Per MIL-STD-202, Method 101 |
| **Moisture resistance:** | Per MIL-STD-202, Method 106 |
| **Dust resistance:** | Per MIL-STD-202, Method 110A |




**SVJ-2 Standard Size Super Video Jack**

# Drawings and Specifications
Video Patching Products

## CJ2014N and CJ2020N-75 (terminated)
## WECO Standard Size Straight-Through Video Jack Specifications

The CJ standard size jacks are rated to handle digital video data rates up to and including uncompressed HDTV 292M 1.485 Gpbs and SMPTE 424M 3 Gbps. They are also rated for L-Band and S-Band use.

**ELECTRICAL**

| | |
|---|---|
| **Characteristic impedance:** | 62.5 Ω nominal |
| **Return loss:** | > -20 dB; 1 MHz to 2 GHz |
| **Contact resistance:** | 0.030 Ω max change post environment |

**MECHANICAL**

| | |
|---|---|
| **Mechanical shock:** | Per MIL-STD-202, Method 213 |
| **Vibration:** | Per MIL-STD-202, Method 201 |
| **Insertion force:** | 7 lbs (3.17 kg) min |
| **Withdrawal force:** | 1.5 lbs (0.675 kg) min |
| **Life:** | 10,000 insertion/withdrawal cycles min |

**ENVIRONMENTAL**

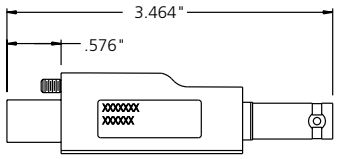
| | |
|---|---|
| **Operating temperature:** | -40°C to +65°C |
| **Non-operating temperature:** | -55°C to +85°C non-operating |
| **Thermal shock:** | Per MIL-STD-202, Method 107 |
| **Humidity:** | 0% to 95% non-condensing, operating and non-operating |
| **Salt spray:** | Per MIL-STD-202, Method 101 |
| **Moisture resistance:** | Per MIL-STD-202, Method 106 |

**MATERIAL**

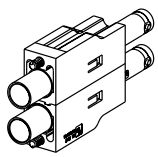
| | |
|---|---|
| **Jack sleeve and frame:** | Brass per ASTM B16 with electro-deposited nickel plating per QQ-N-290 or electro-deposited gold plating per MIL-G-45204 |
| **Center conductors .090" (.23 cm):** | Beryllium copper per QQ-C-533 with electro-deposited gold plating per MIL-G-45204 on contact areas only |
| **Outer conductor contacts:** | Phosphor bronze QQ-B-746 with electro-deposited gold plating per MIL-G-45204 or electro-deposited nickel plating per QQ-N-290 |
| **Insulators:** | Rated UL 94V-0 for flammability |
| **Crimping sleeves:** | Brass per ASTM B16 with tin plating per MIL-T-10727 |

**OTHER**

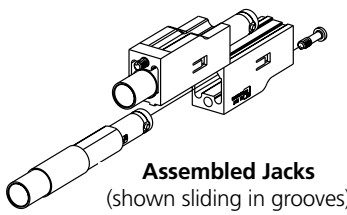
| | |
|---|---|
| **Interface dimensions:** | Outer diameter of mating plugs must be .375" (.95 cm) with pin diameter of .090" (.23 cm) or .070" (.18 cm) |
| **Mounting information:** | All jacks are supplied with 6-32, 5/16" Phillips head screws |



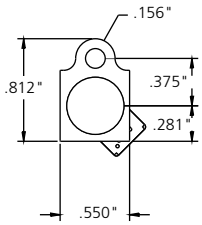

**CJ2014N**



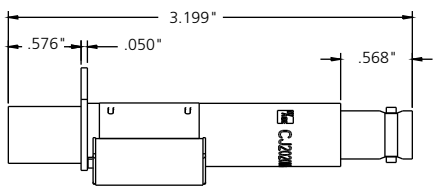
**Assembled Jacks**
(shown assembled)



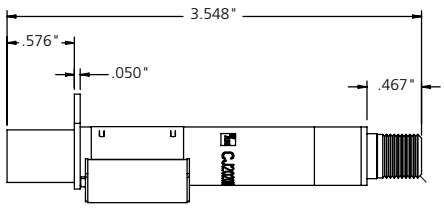
**Assembled Jacks**
(shown sliding in grooves)




**CJ2020-N75**
**CJ2020-N75FF**




**Dimensions for CJ2020N-75 and CJ2011N**
**(CJ2011N has no termination can)**




**Dimensions for CJ2020-N75FF**

## SJ2000 Switching Coaxial Jack Specifications

The SJ2000 family is rated to handle analog and digital video data rates up to 360 Mbps

**ELECTRICAL**

| | |
|---|---|
| **Insertion Loss:** | 0.4 dB DC to 200 MHz |
| **Characteristic Impedance:** | 75 Ω nominal |
| **Return Loss:** | Better than 15 dB 1 MHz to 600 MHz relative to 75 Ω for .090" (.23 cm) diameter center conductor |
| **Contact Resistance:** | 0.030 Ω maximum change post environment |
| **Termination Resistor Values:** | 75 Ω commercial, 1/8 watt, 5% |

**MECHANICAL**

| | |
|---|---|
| **Mechanical Shock:** | Per MIL-STD-202, Method 213, Test Condition I |
| **Vibration:** | Per MIL-STD-202, Method 201 |
| **Insertion Force:** | 7 lbs (3.17 kg) minimum |
| **Withdrawal Force:** | 1 lb (0.452 kg) minimum |
| **Life:** | 10,000 insertion/withdrawal cycles (single port) minimum |

**ENVIRONMENTAL**

| | |
|---|---|
| **Operating Temperature:** | -40ºC to +65ºC operating |
| **Non-operating Temperature:** | -55ºC to +85ºC non-operating |
| **Thermal Shock:** | Per MIL-STD-202, Method 107 |
| **Humidity:** | 0% to 95% non-condensing, operating and non-operating |
| **Salt Spray:** | Per MIL-STD-202, Method 101 |
| **Moisture Resistance:** | Per MIL-STD-202, Method 106 |

**MATERIAL**

| | |
|---|---|
| **Outer Shell, Jack Bodies and Rear Connectors:** | Zinc die-casting with electro-deposit gold plating per MIL-G-45204 or electro-deposited nickel plating per QQ-N-290 |
| **Center Conductors:** | 0.090" (.23 cm) Beryllium copper per QQ-C-533 with electro-deposited gold plating per MIL-G45204 on contact areas only |
| **Insulators:** | Unreinforced polyethermide resin rated UL94V-0 for flammability |
| **Springs:** | Beryllium copper per QQ-C-553 with electro-deposited gold plating per MIL-G-45204 |

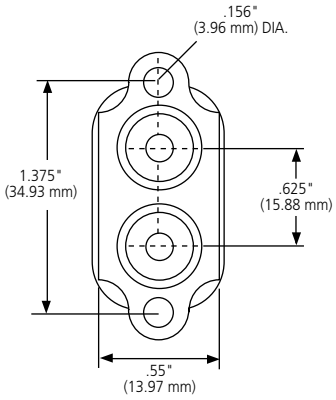
**INTERFACE DIMENSIONS**

| | |
|---|---|
| **Standard Size:** | Outside diameter of mating plugs must be .375" (.95 cm) with pin diameter of .090" or (.23 cm) or .070 (.18 cm) |

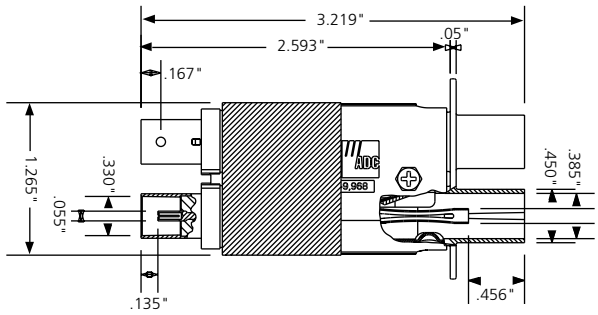
**MOUNTING INFORMATION:** All jacks are supplied with two 6-32, round head, 5/16" Phillips head screws

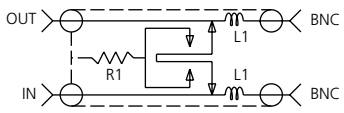
# Drawings and Specifications

## Video Patching Products

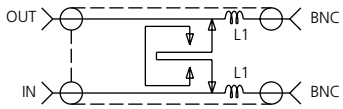


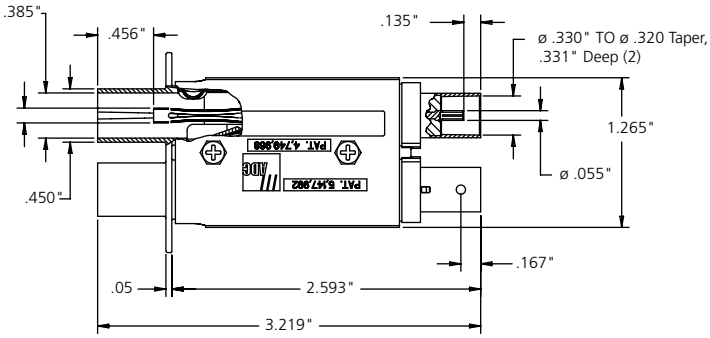

**SJ2000 Standard Size**
**Switching Coaxial Video Jack**



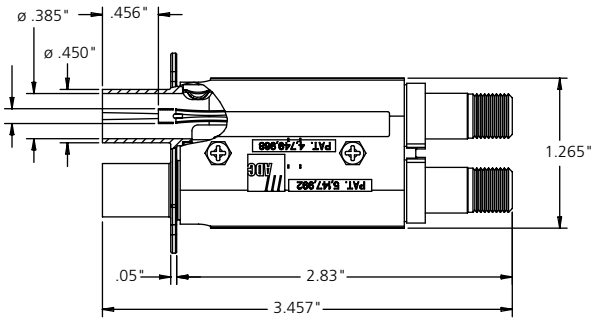




REFERENCE SCHEMATIC




**SJ2000 WECO BNC to BNC**
**Coaxial Video Jack**




**SJ2000N-75F Modified F-connection**
**Switching Coaxial Video Jack**

# Drawings and Specifications

Video Patching Products

## SMJ 2100
## MUSA Straight-Through Video Jack Specifications

The SMJ family is rated to handle analog and digital video data rates up to and including HDTV SMPTE 242M 1.485 Gbps and SMPTE 424M 3 Gbps. They are also rated for L-Band and S-Band use.

**ELECTRICAL**

| | |
|---|---|
| **Characteristic impedance:** | 75 Ω nominal |
| **Return loss:** | > 17 dB; 300 KHz to 2.4 GHz |
| **Contact resistance:** | 10 mΩ typical |

**MECHANICAL**

| | |
|---|---|
| **Mechanical shock:** | Per MIL-STD-202, Method 213 |
| **Vibration:** | Per MIL-STD-202, Method 201 |
| **Insertion force:** | 7 lbs maximum |
| **Withdrawal force:** | 1.5 lbs minimum |

**ENVIRONMENTAL**

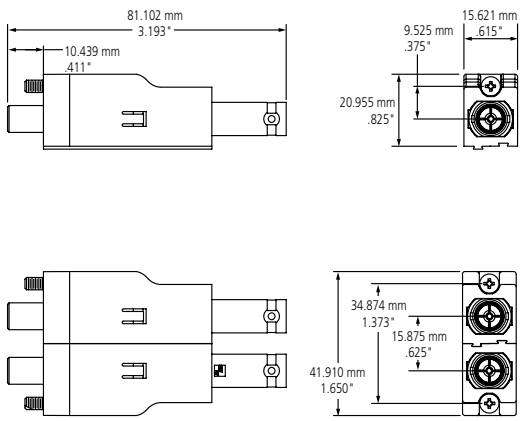
| | |
|---|---|
| **Operating temp:** | -40°C to 65°C |
| **Storage temp:** | -55°C to 85°C |
| **Thermal shock:** | Per MIL-STD-202, Method 107 |
| **Humidity:** | 0% to 95% non-condensing, operating and non-operating |
| **Salt spray:** | Per MIL-STD-202, Method 101 |
| **Moisture resistance:** | Per MIL-STD-202, Method 106 |

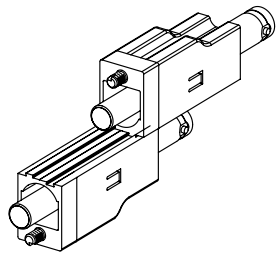
**MATERIAL**

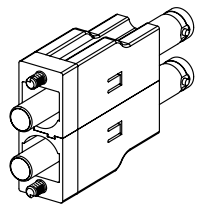
| | |
|---|---|
| **Jack sleeve and frame:** | CDA 360 brass rod per ASTM B16 with electro-deposit nickel plating per QQ-N-290 |
| **Center conductors:** | Phosphor bronze per ASTM B139 with electro-deposited gold plating per MIL-G-45204 |
| **Insulators:** | Unreinforced polyetherimide resin rated UL94-V0 for flammability |

**OTHER**

| | |
|---|---|
| **Interface dimensions:** | Outside diameter of mating plugs must be .298" (.75 cm) with pin diameter of .048" (.12 cm) |
| **Mounting details:** | Jacks supplied with a 6-32 UNC-2A 5/16" Phillips head screws (zinc chromate plated) |



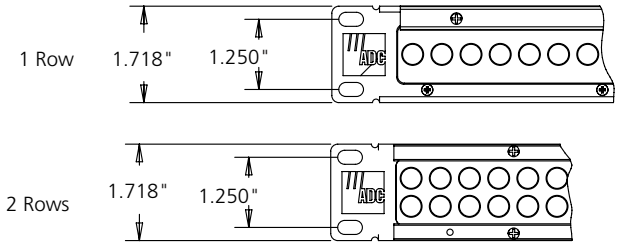


**SMJ-2100N**

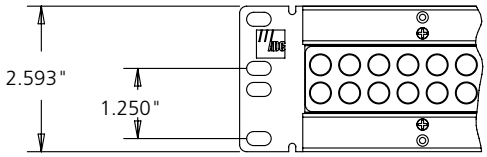
# Drawings and Specifications

Video Patching Products

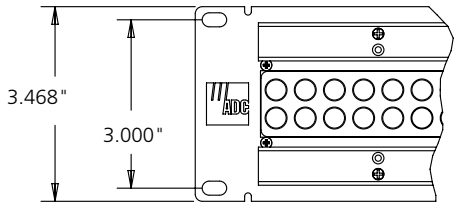
## PPI and PPE Panels



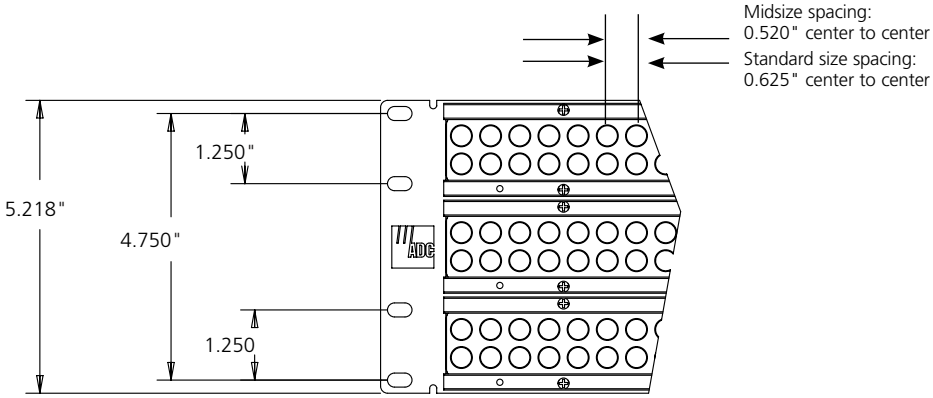

**1 Rack Unit**




**1.5 Rack Unit**




**2 Rack Unit**




**3 Rack Unit**

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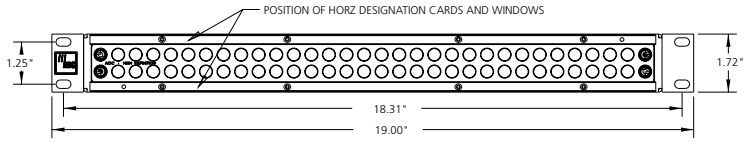
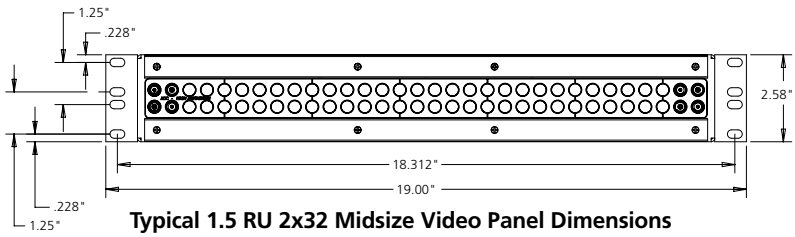
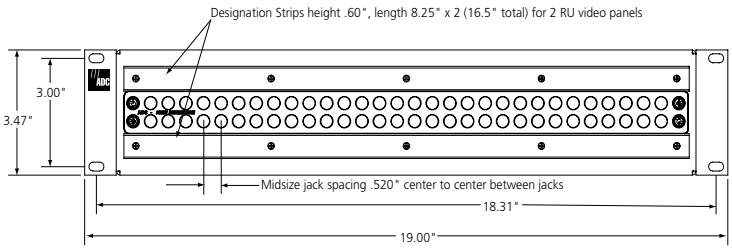


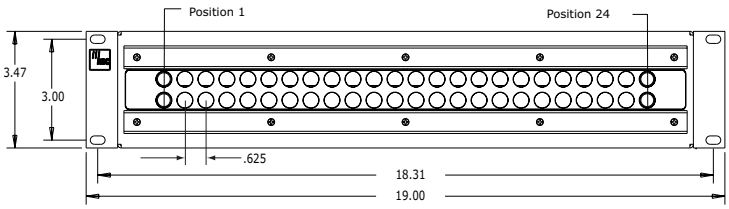

**Typical 1 RU 2x32 Midsize Video Panel Dimensions**



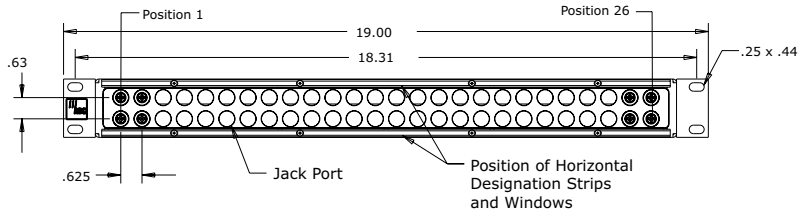

**Typical 1.5 RU 2x32 Midsize Video Panel Dimensions**



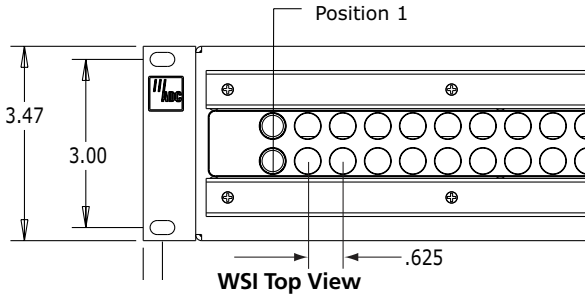

**Typical 2 RU 2x32 Midsize Video Panel Dimensions**




**Typical 2 RU 2x24 Standard Size and MUSA Video Panel Dimensions**

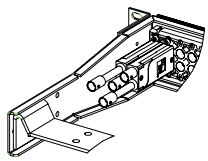



**Typical 1 RU 2x26 Standard Size and MUSA Video Panel Dimensions**

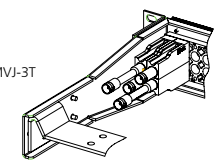



**WSI Top View**

**Typical 2 RU Series 2x32 Midsize Video Panel Dimensions**



Jacks Type MVJ-3 and MVJ-3T



Jacks Type CJ3014N and CJ4014N/
CJ3014N-75 and CJ4014N-75

# Drawings and Specifications

Audio Patching Products

## Bantam and Longframe Chassis and Module Specifications

**ELECTRICAL**

| | |
|---|---|
| **Contact resistance:** | 0.020 Ω max (initial)<br>0.020 Ω max (after life cycling)<br>0.10 Ω max (after salt spray) |
| **Insulation resistance:** | 10,000 MΩ min (initial)<br>1,000 MΩ min (after moisture resistance test) |
| **Dielectric withstanding:** | Voltage: 500 Vac |
| **Contact rating:** | Max: 100 mA + 130 Vdc; Min: -40 dBm |

**MECHANICAL**

| | |
|---|---|
| **Mechanical shock:** | Per MIL-STD-202F, Method 213B, test condition H |
| **Vibration:** | MIL-STD-1344, Method 2005, test condition I |
| **Insertion force:** | 7 lbs (3.17 kg) max |
| **Withdrawal force:** | 1.5 lbs (.679 kg) min |
| **Life:** | 20,000 insertion/withdrawal cycles min |

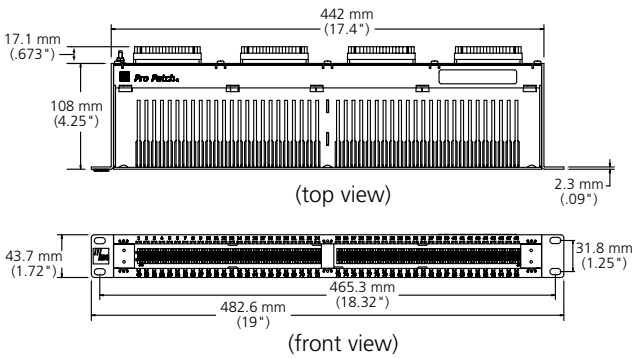
**ENVIRONMENTAL**

| | |
|---|---|
| **Operating temperature:** | -40° to 65°C (-40° to 149°F) |
| **Storage temperature:** | -55° to 85°C (-67° to 185°F) |
| **Thermal shock:** | Per MIL-STD-202F, Method 107G, test condition A |
| **Operating humidity:** | 0% to 95% (no condensation) |
| **Storage humidity:** | 0% to 95% (no condensation) |
| **Salt spray:** | Per MIL-STD-202F, Method 101D |
| **Moisture resistance:** | Per MIL-STD-202F, Method 106E |

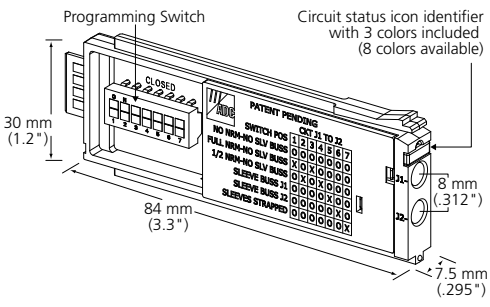
**MATERIALS**

| | |
|---|---|
| **Chassis frame:** | Steel, zinc plated with electroless nickel plating |
| **Jack frame:** | Unreinforced polyetherimide resin rated UL 94-V0 for flammability |
| **Springs:** | Nickel-silver |
| **Contacts:** | WECO No. 1 gold crossbar alloy welded to springs |
| **PC boards:** | FR-4 |
| **Sockets:** | Phosper bronze<br>30 micro inches gold on contact |
| **Switches:** | Copper alloy<br>10 micro inches min gold on contact |

## Bantam Chassis and Jack Dimensions




**Typical 1 RU 48-Position Panel**




**Bantam Jack**

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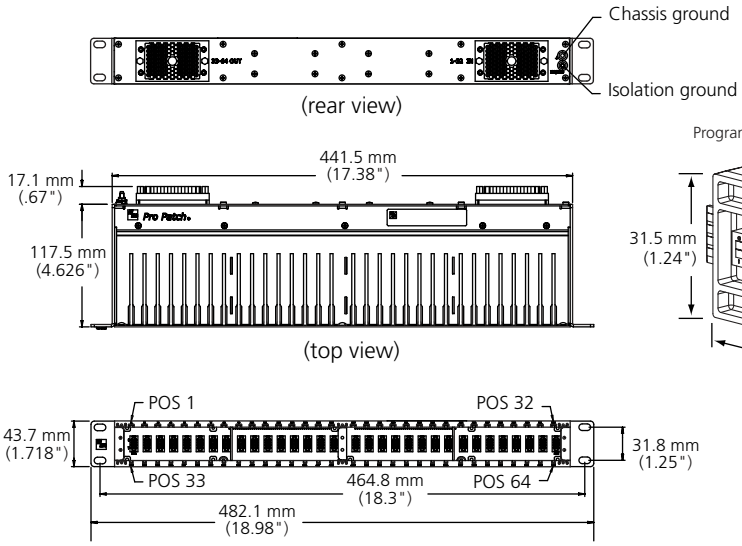
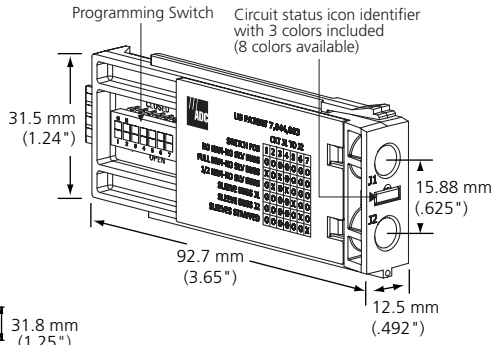
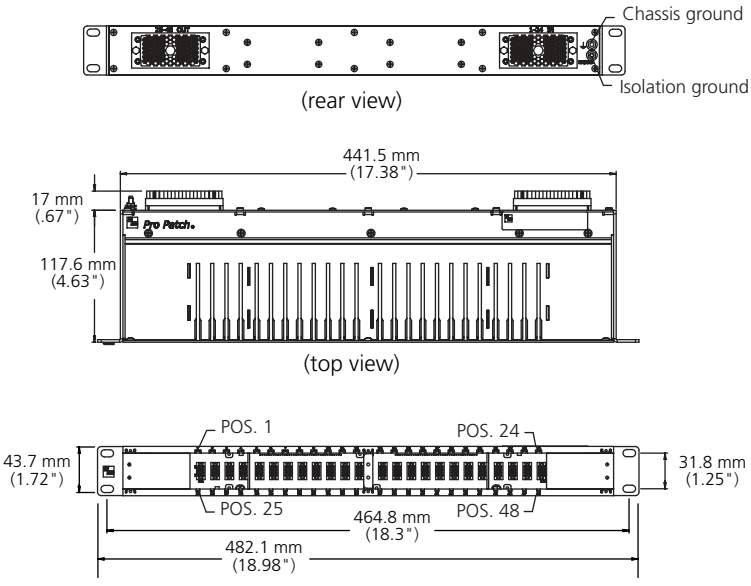
## Longframe Chassis and Jack Dimensions




**Typical 1 RU 32-Position Panel**




**Longframe Jack**

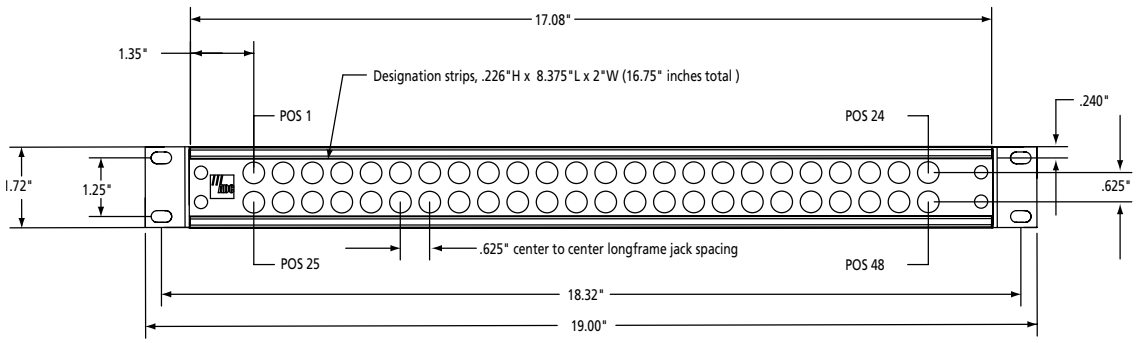



**Typical 1 RU 24-Position Panel**

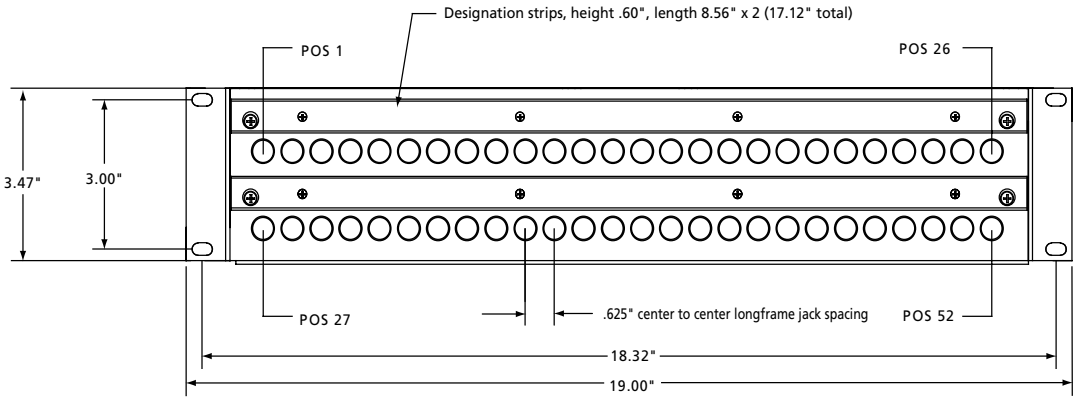
# Drawings and Specifications

## Audio Patching Products

This section presents drawings and specifications for typical products. For additional information or for information about products not presented here, please see the ADC web site at www.adc.com or consult our Technical Assistance Center.




**Typical 1 RU 2x24 Longframe Audio Panel Dimensions**




**Typical 2 RU 2x26 Longframe Audio Panel Dimensions**



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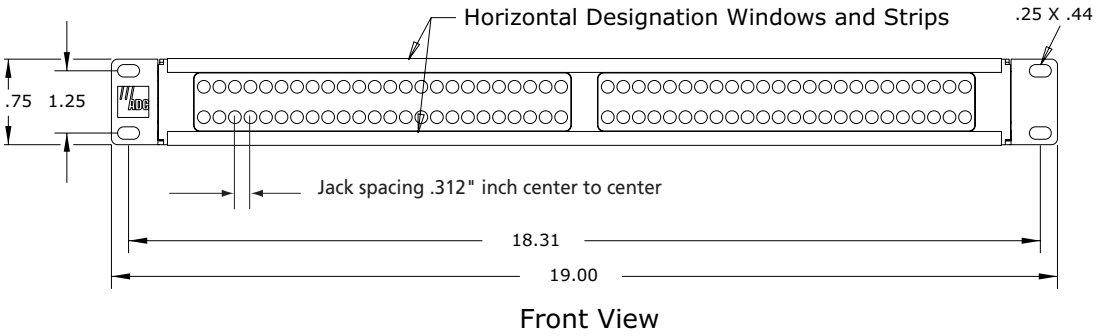
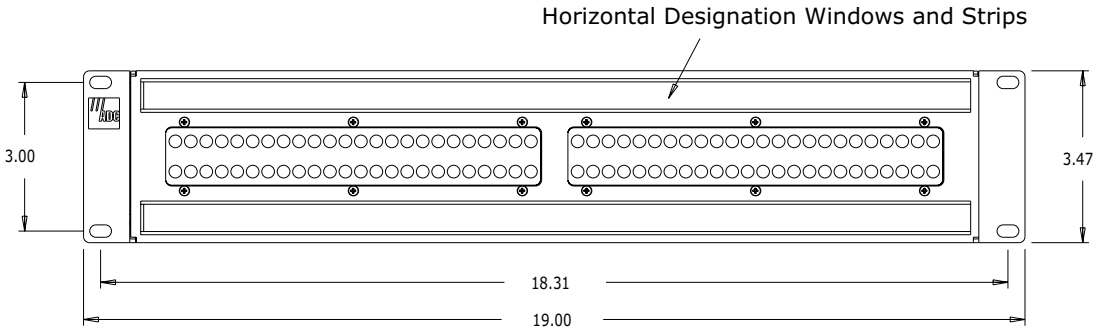



Front View

**Typical 1 RU 2x48 Regular Spaced Bantam Audio Panel Dimensions**




Front View

**Typical 2 RU 2x48 Regular Spaced Bantam Audio Panel Dimensions**

## PJ339 and PJ482 Longframe Audio Jack Specifications

**ELECTRICAL**

| | |
|---|---|
| **Contact Resistance:** | 0.020 Ω maximum (initial)<br>0.020 Ω maximum (after life cycling)<br>0.10 Ω maximum (after salt spray) |
| **Insulation Resistance:** | 10,000 megΩs minimum (initial)<br>1,000 megΩs minimum (after moisture resistance test) |
| **Dielectric Withstanding:** | Voltage: 500 Vac |
| **Contact Rating:** | Maximum: 100 mA + 130 Vdc; Minimum: -40 dBm |

**MECHANICAL**

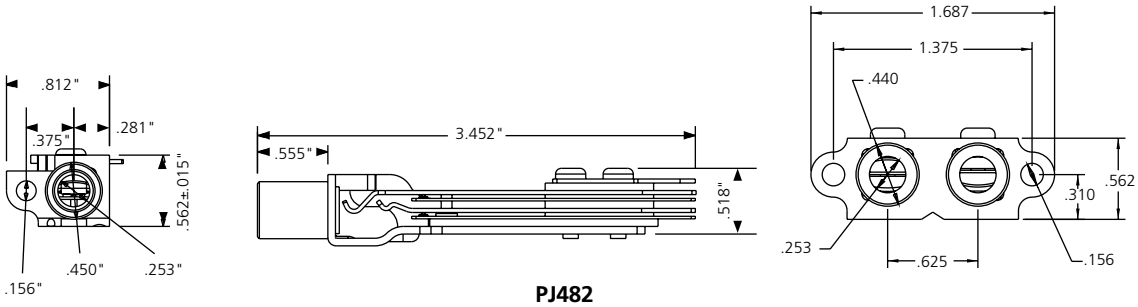
| | |
|---|---|
| **Mechanical Shock:** | Per MIL-STD-202F, Method 213B, test condition H |
| **Vibration:** | MIL-STD-1344, Method 2005, test condition I |
| **Insertion Force:** | 7 lbs. (3.17 kg) maximum |
| **Withdrawal Force:** | 1.5 lbs. (.679 kg) minimum |
| **Life:** | 20,000 insertion/withdrawal cycles minimum |

**ENVIRONMENTAL**

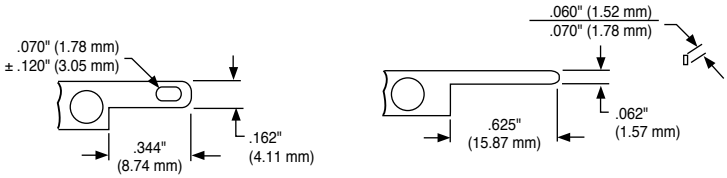
| | |
|---|---|
| **Operating Temp:** | -40°C to 65°C |
| **Storage Temp:** | -55°C to 85°C |
| **Thermal Shock:** | Per MIL-STD-202F, Method 107G, test condition A |
| **Operating Humidity:** | 0% to 95% (no condensation) |
| **Storage Humidity:** | 0% to 95% (no condensation) |
| **Salt Spray:** | Per MIL-STD-202F, Method 101D |
| **Moisture Resistance:** | Per MIL-STD-202F, Method 106E |

**MATERIALS**

| | |
|---|---|
| **Frame:** | Steel, zinc plated with electroless nickel plating |
| **Sleeve:** | Brass, nickel plated |
| **Insulators:** | Unreinforced polyetherimide resin rated UL 94-V0 for flammability |
| **Springs:** | Nickel-silver |
| **Contacts:** | WECO No. 1 gold crossbar alloy welded to springs |
| **Solder Lugs:** | Hot tin dipped |




**PJ482**




**Single Longframe Audio Jack**

## PJ839 and PJ889 Bantam Audio Jack Specifications

**ELECTRICAL**

| | |
|---|---|
| **Contact Resistance:** | 0.020 Ω maximum (initial)<br>0.020 Ω maximum (after life cycling)<br>0.10 Ω maximum (after salt spray) |
| **Insulation Resistance:** | 10,000 megΩs minimum (initial)<br>1,000 megΩs minimum (after moisture resistance test) |
| **Dielectric Withstanding:** | |
| **Voltage:** | 500V RMS |
| **Contact Rating:** | Maximum: 100 mA ± 130 Vdc; Minimum: -40 dBm |

**MECHANICAL**

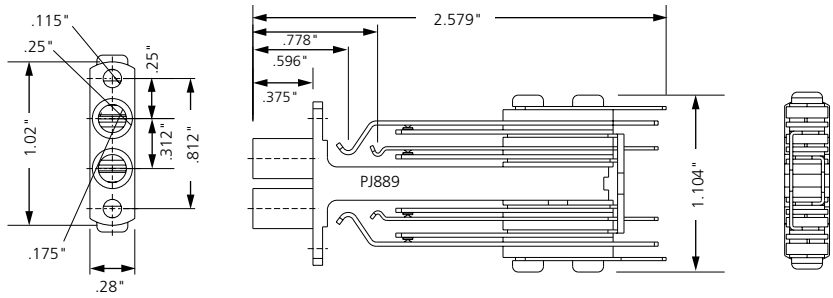
| | |
|---|---|
| **Mechanical Shock:** | Per MIL-STD-202F, Method 213B, test condition H |
| **Vibration:** | MIL-STD-1344, Method 2005, test condition I |
| **Insertion Force:** | 7 lbs. (3.17 kg) maximum |
| **Withdrawal Force:** | 1.5 lbs. (.679 Kg) minimum |
| **Life:** | 20,000 insertion/withdrawal cycles minimum |

**ENVIRONMENTAL**

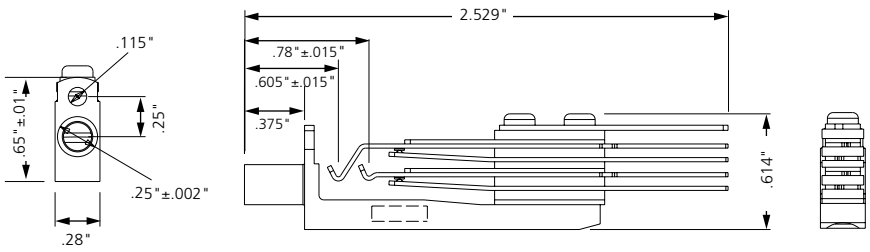
| | |
|---|---|
| **Operating Temp:** | -40°C to 65°C |
| **Storage Temp:** | -55°C to 85°C |
| **Thermal Shock:** | Per MIL-STD-202F, Method 107G, test condition A |
| **Operating Humidity:** | 0% to 95%, non-condensing |
| **Storage Humidity:** | 0% to 95%, non-condensing |
| **Salt Spray:** | Per MIL-STD-202F, Method 101D |
| **Moisture Resistance:** | Per MIL-STD-202F, Method 106E |

**MATERIALS**

| | |
|---|---|
| **Frame:** | Zinc die-cast zinc plated with electroless nickel plating |
| **Insulators:** | Unreinforced polyetherimide resin rated UL 94-V0 for flammability |
| **Springs:** | Nickel-Silver alloy |
| **Contacts:** | WECO No. 1 gold crossbar alloy welded to springs |




**Three-Conductor Dual Bantam Jack**




**Three-Conductor Single Bantam Jack**

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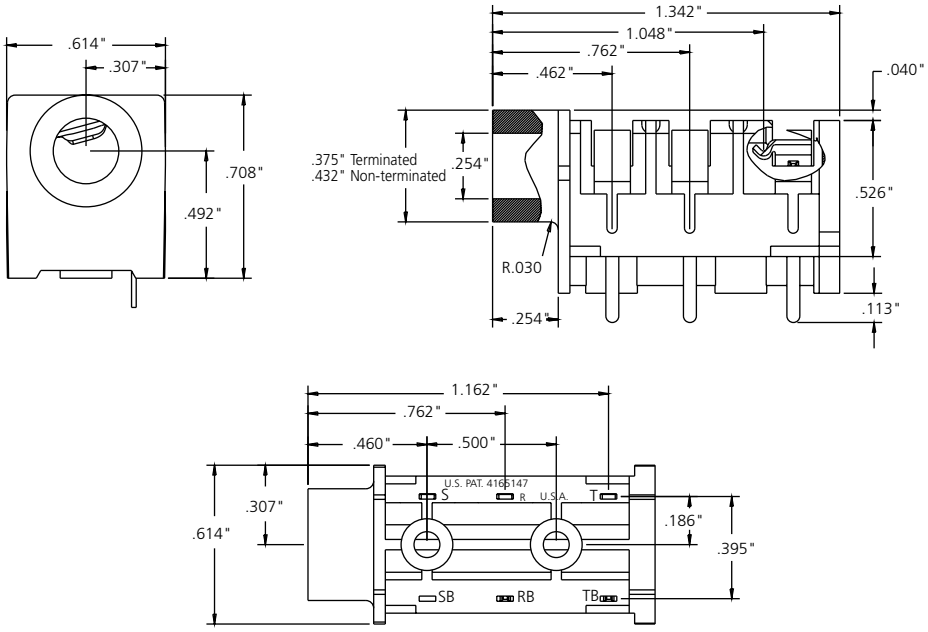
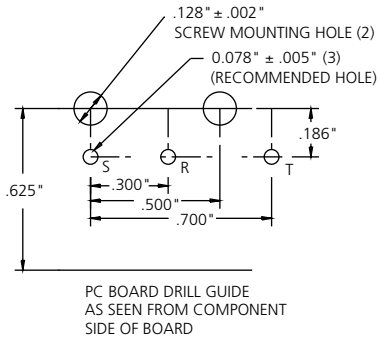
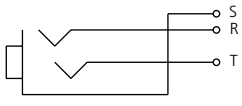



**AJ238/AJ339**

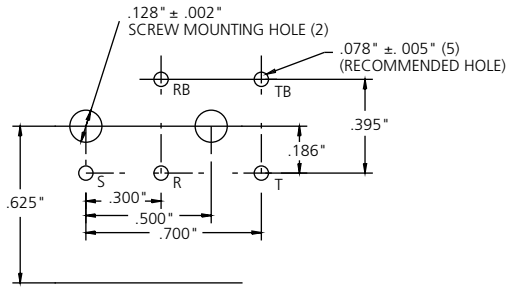



PC BOARD DRILL GUIDE
AS SEEN FROM COMPONENT
SIDE OF BOARD

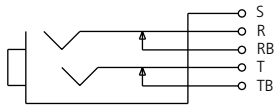



REFERENCE SCHEMATIC

**AJ238**



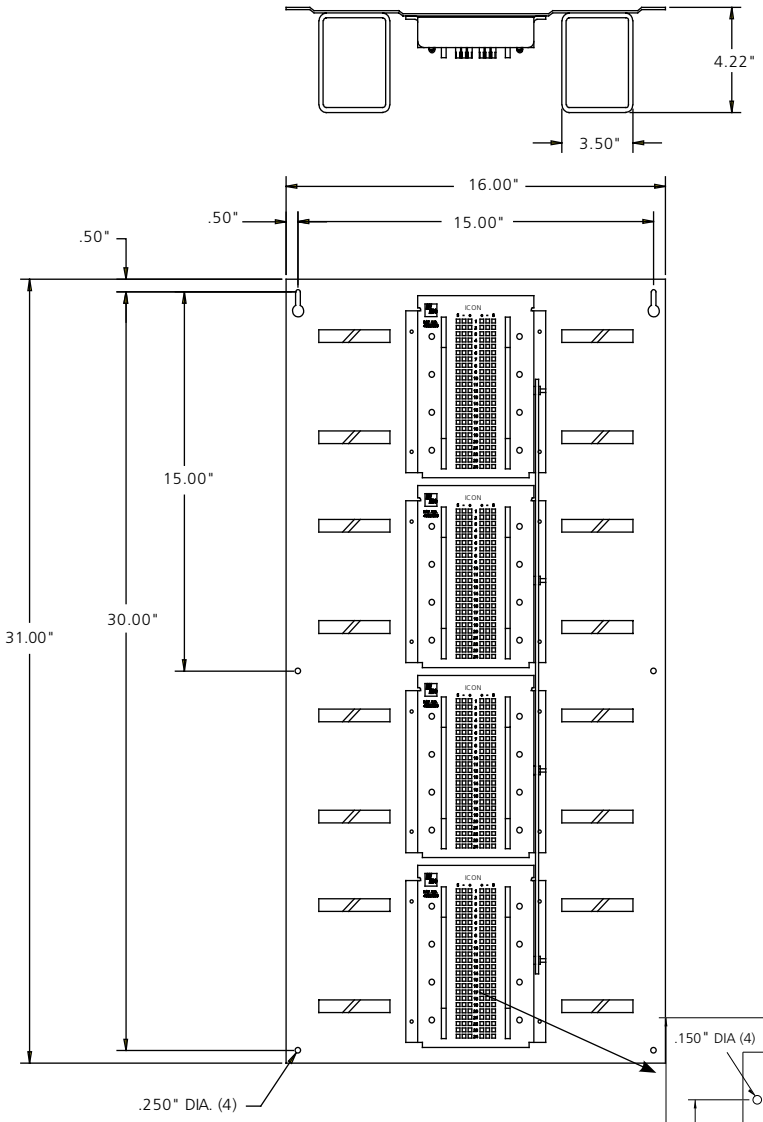

PC BOARD DRILL GUIDE
AS SEEN FROM COMPONENT
SIDE OF BOARD



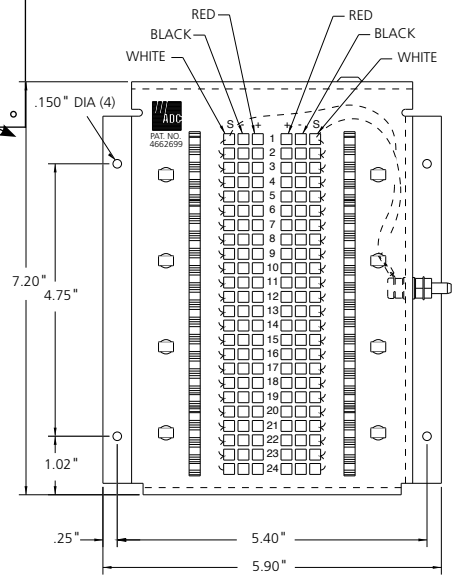

REFERENCE SCHEMATIC

**AJ339**

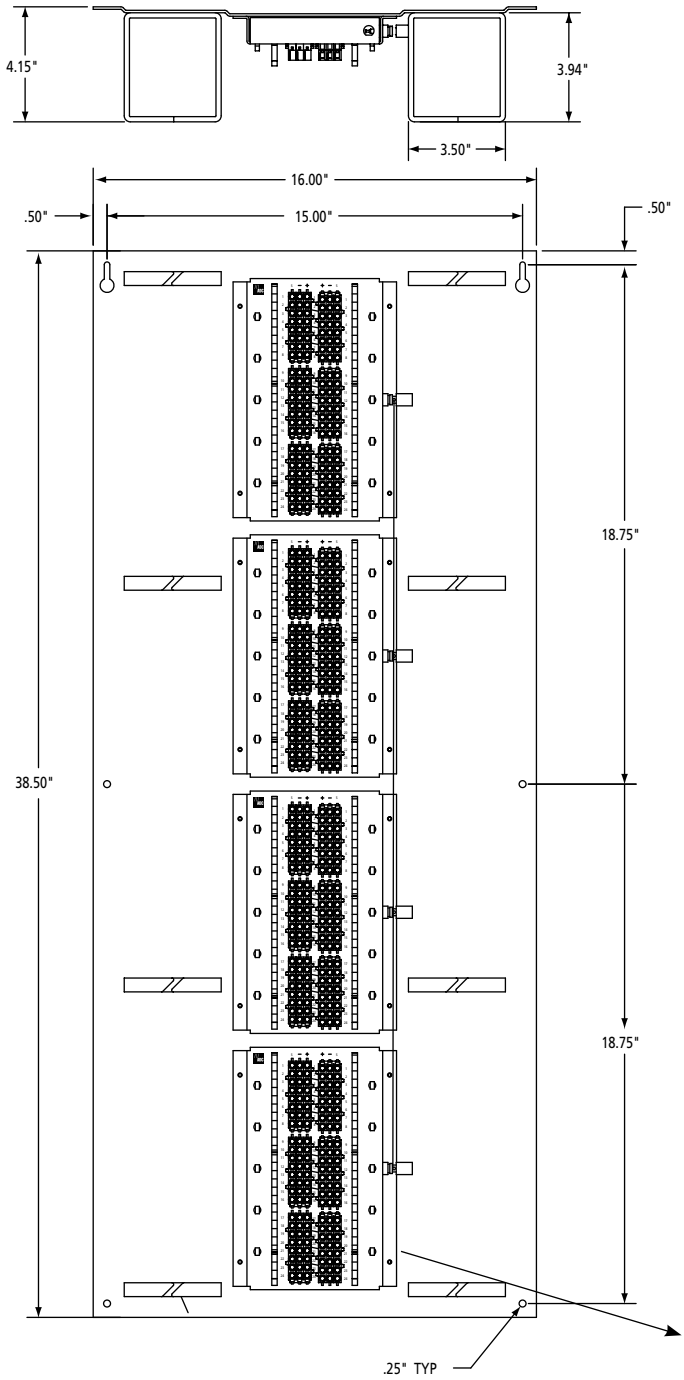
10/09 • 102117AE



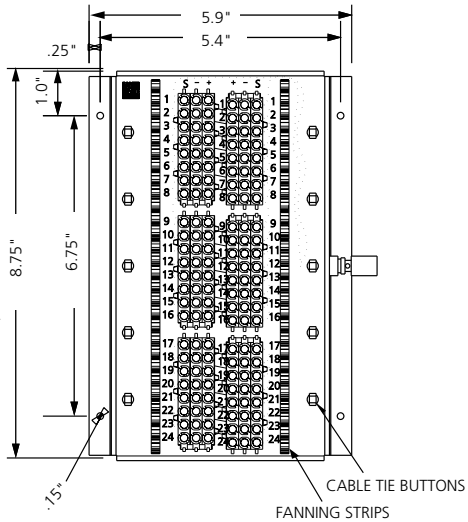

**ICON Audio Wall-Mount Frame with MKII**
**I-WA/I-WB**




**I-24 A**
**I-24 B**
**I-24 C**




**ICON Audio Wall-Mount Frame with MKIV**
**I-MKIV**
**I-WA-MKIV/I-WB-MKIV (fully populated)**
**I-W-MKIV-PNL (panel only)**




**I-24 A-MKIV**
**I-24 B-MKIV**
**I-24 C-MKIV**

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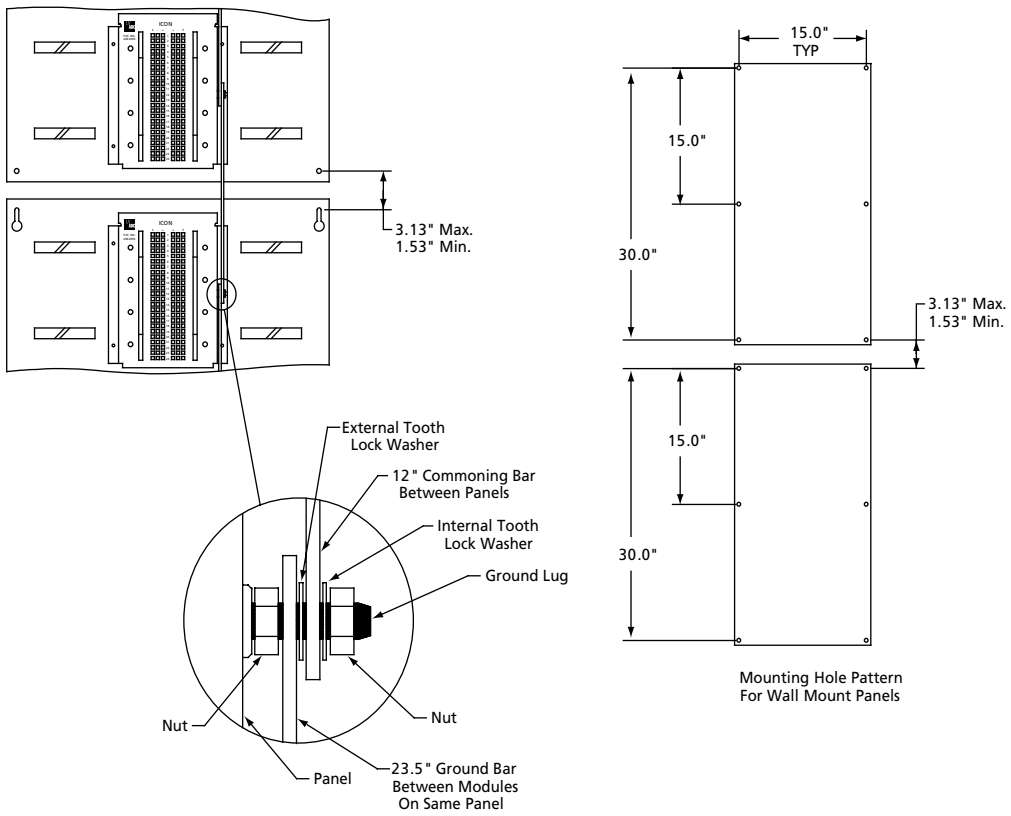
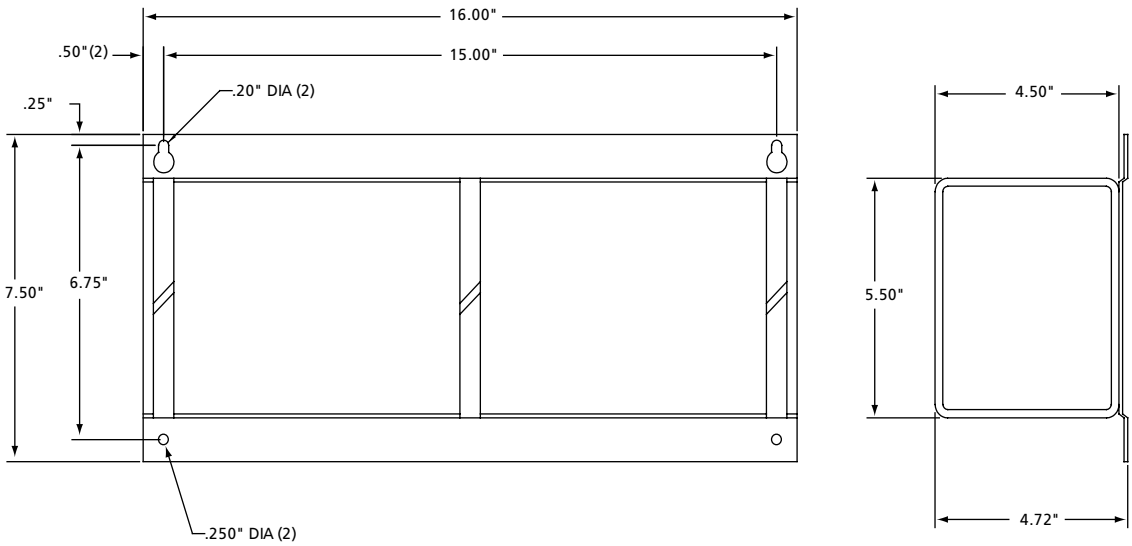
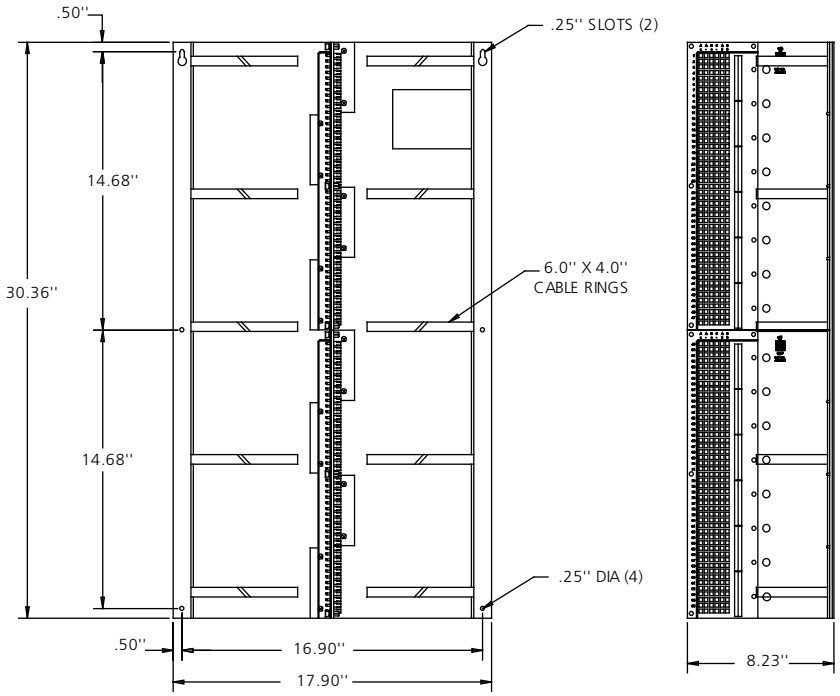


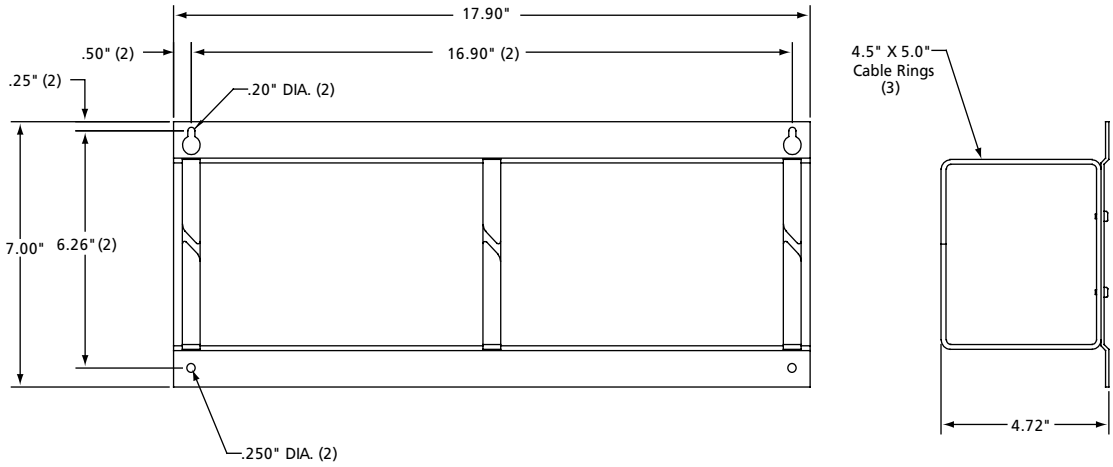

**I-WA/I-WB Mounting Details**



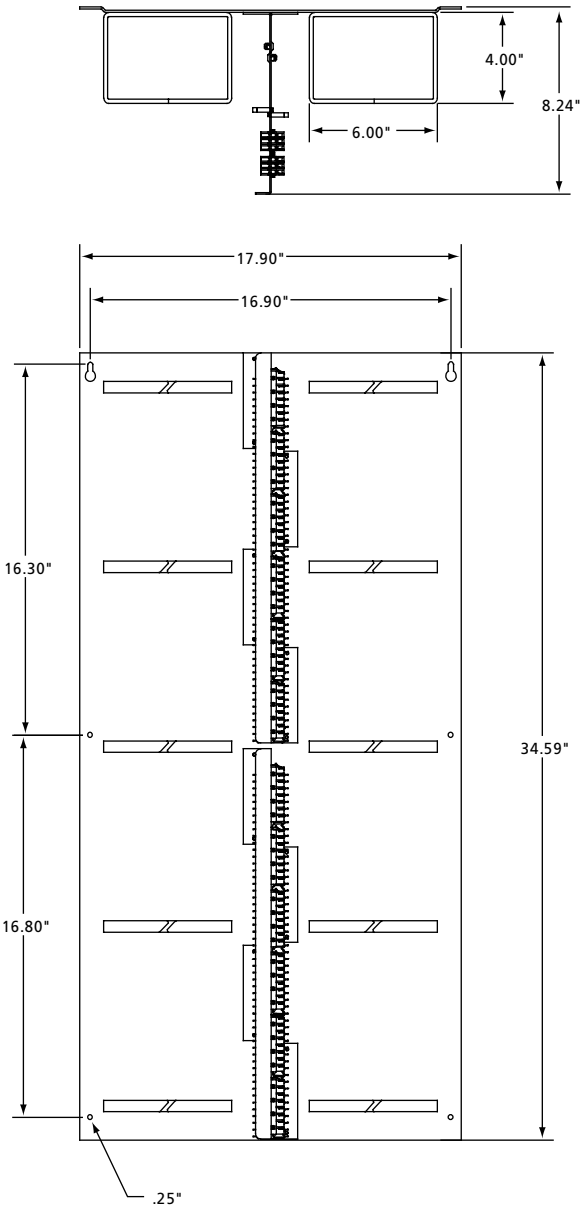

**ICON I-WFP Fanning Panel Dimensions**




**ICON I-WS-MKII Wall-Mount Audio Panel Dimensions**



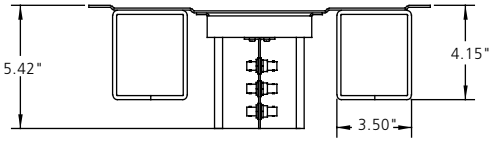

**ICON I-WSET Express Trough Dimensions**



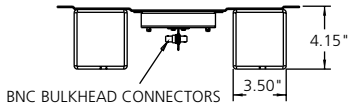

**ICON I-WS-MKIV Wall-Mount Audio Frame Dimensions**

# Drawings and Specifications

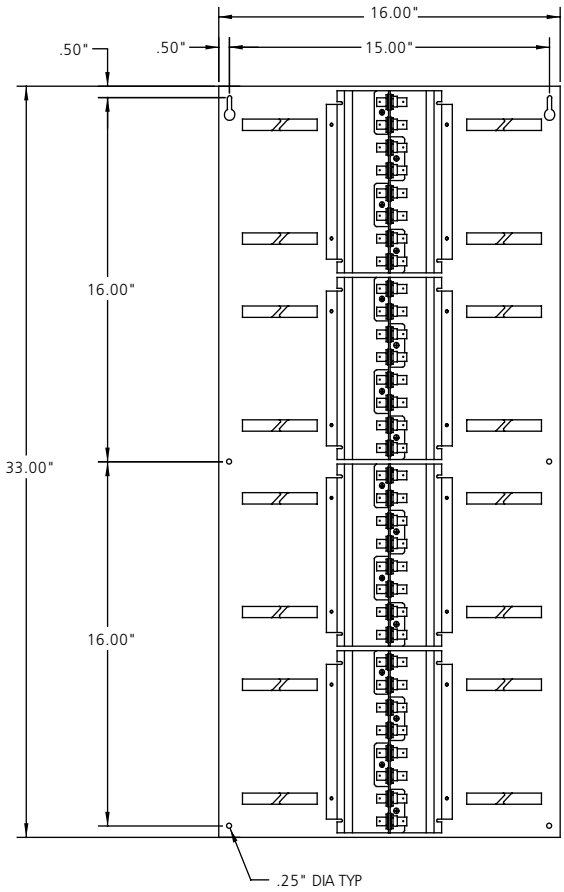
## ICON® Video Wall-Mount Panels




**VIW-424**




**VIW-408**




**Video ICON VIW-424/408 Wall-Mount Panel Dimensions**

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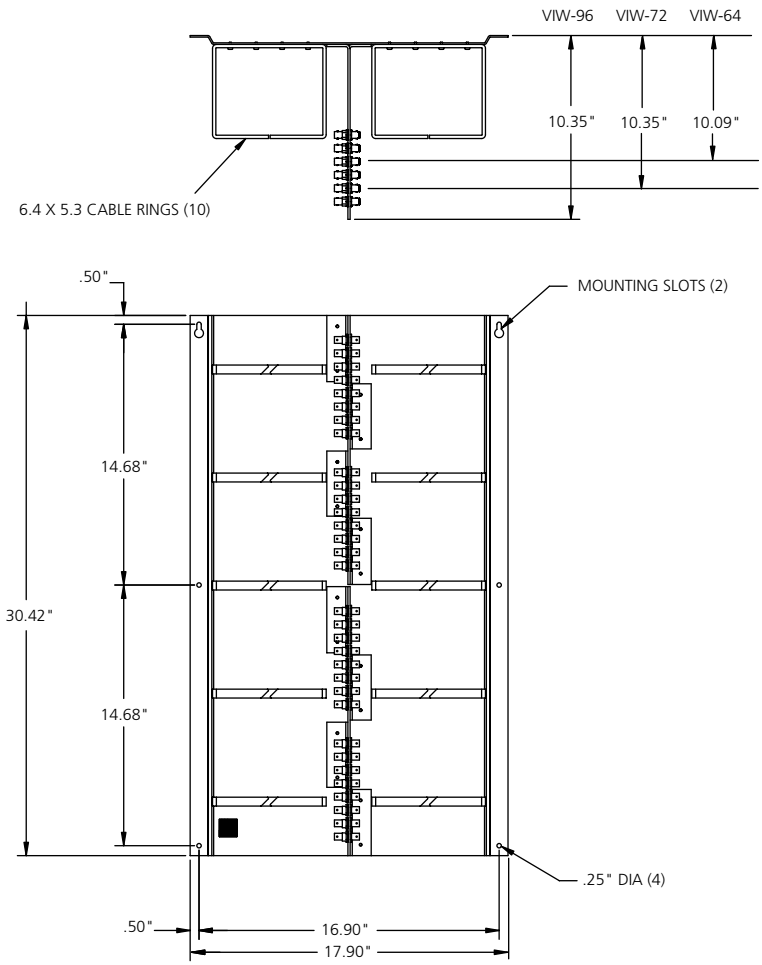
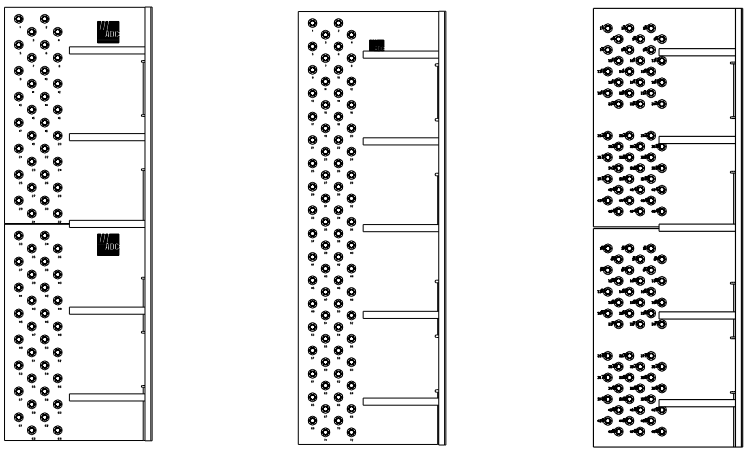



**Video ICON VIW-64/72/96 Wall-Mount Panel Dimensions**

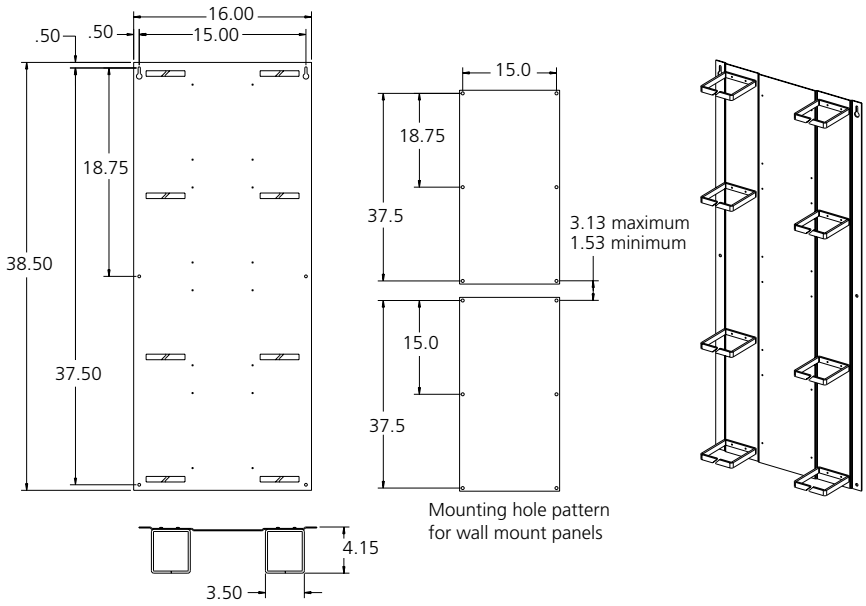


**VIW-64** **VIW-72** **VIW-96**

# Drawings and Specifications

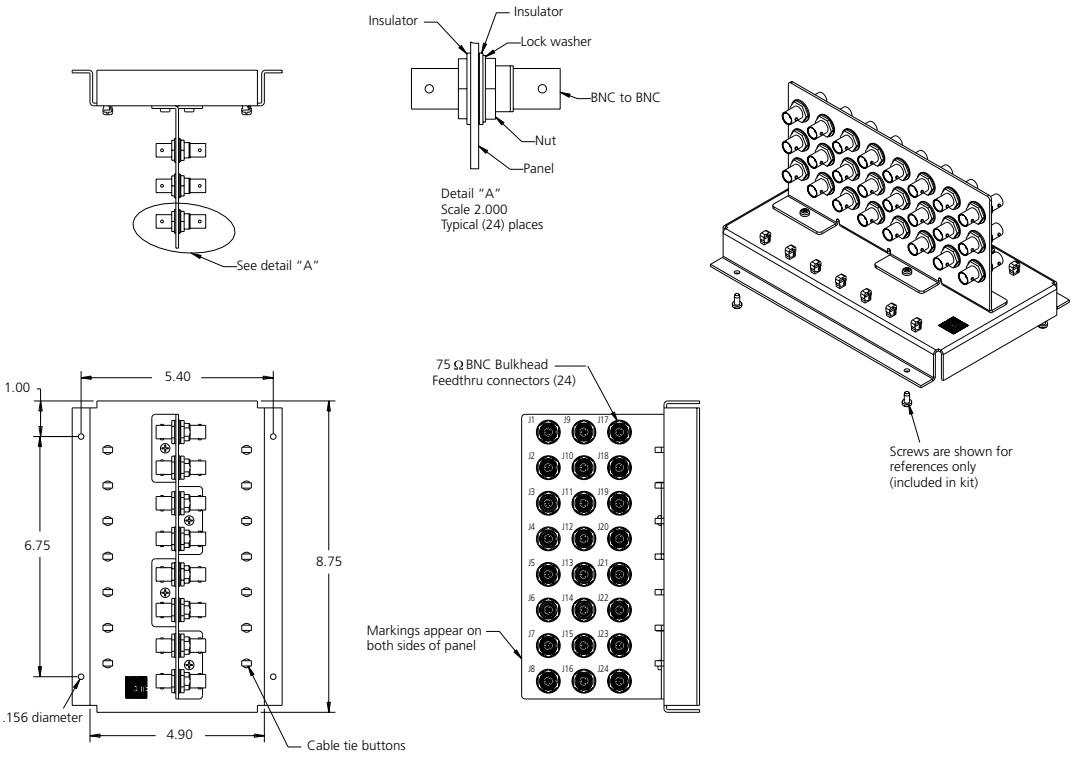
ICON® I-W Modular Wall-Mount System

## Modular Wall-Mount Panel




**I-W-MKIV-PNL**

## BNC and BNC to F Wall-Mount Block

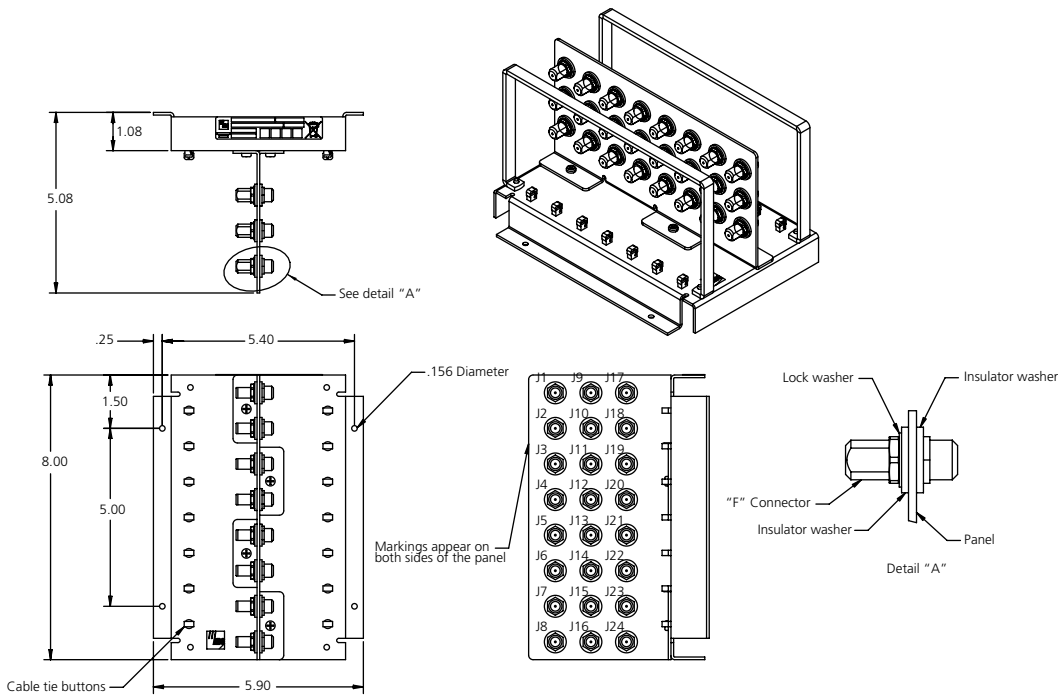



**VIW-24**

# Drawings and Specifications

ICON® I-W Modular Wall-Mount System

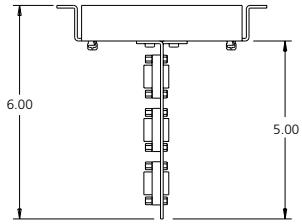
## F Wall-Mount Block

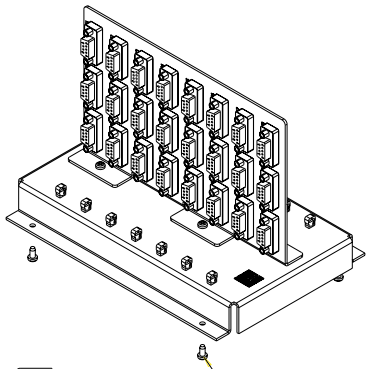


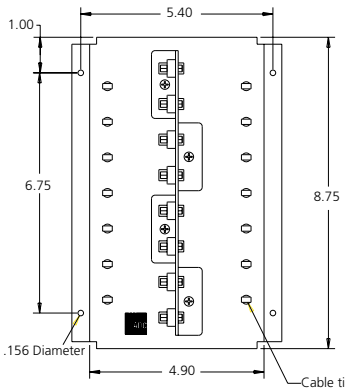
# Drawings and Specifications

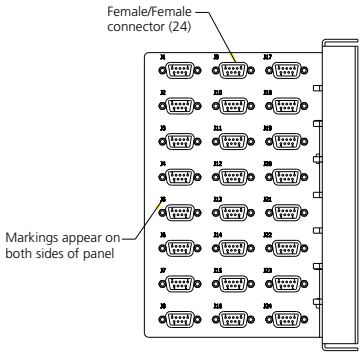
ICON® I-W Modular Wall-Mount System

## DB-9 Wall-Mount Block

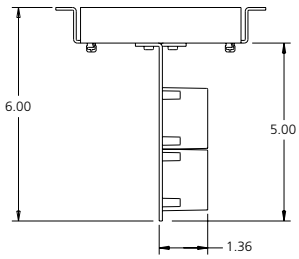


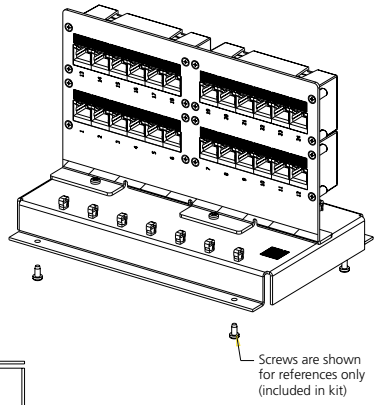



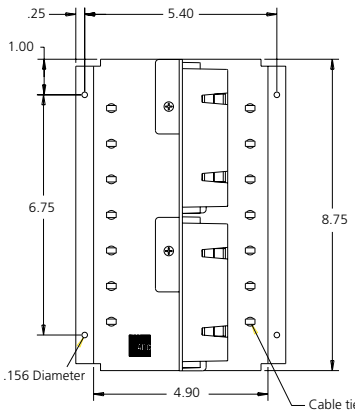



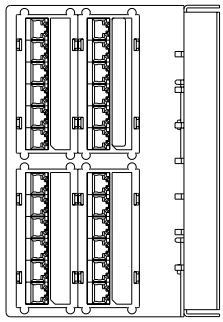




## RJ Wall-Mount Block



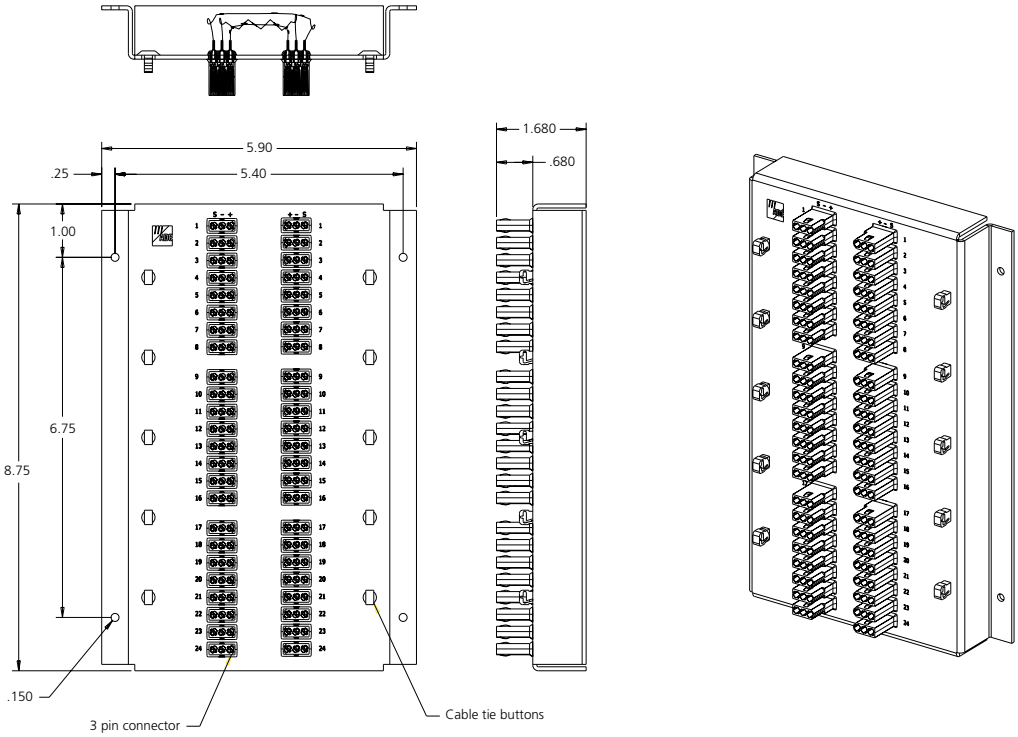



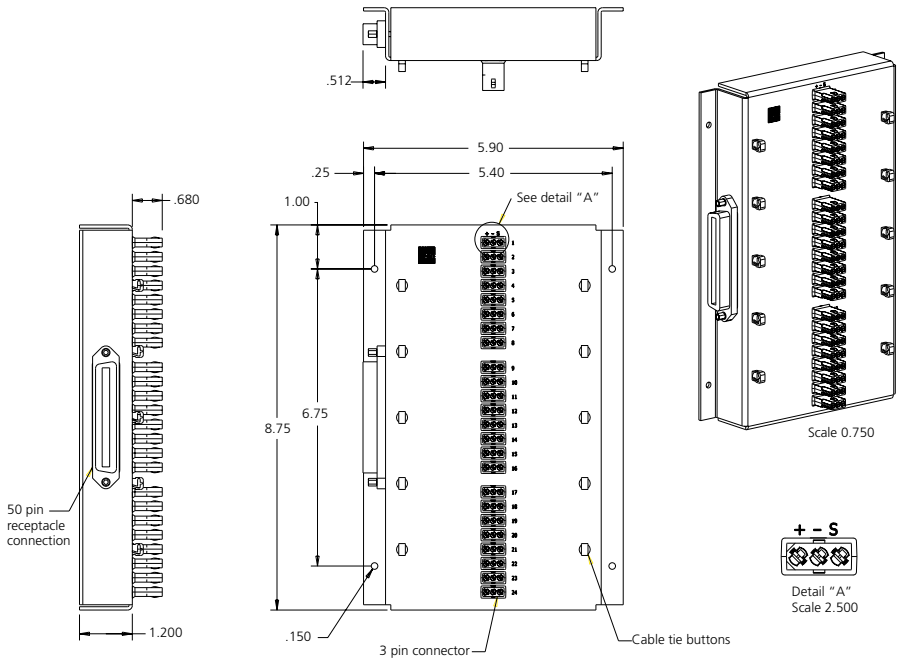
# Drawings and Specifications

ICON® I-W Modular Wall-Mount System

## E3 Wall-Mount Block

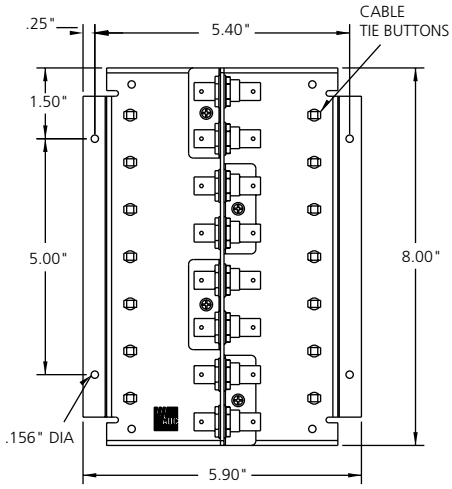


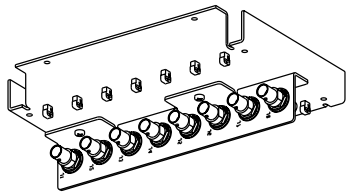

## E3-AMPWall-Mount Block

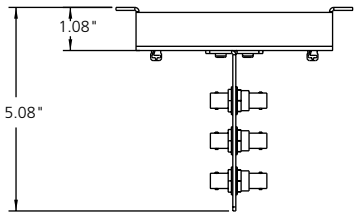


# Drawings and Specifications

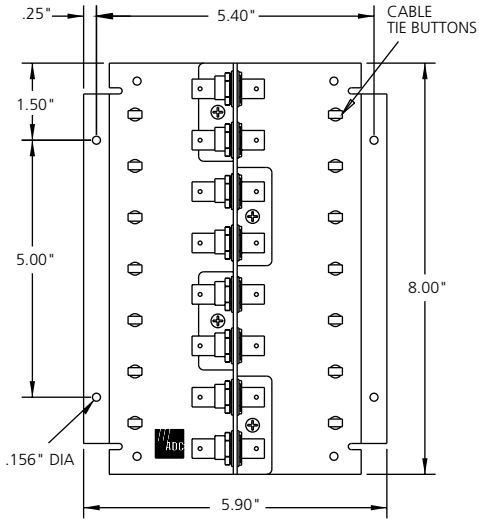
ICON® Video Wall-Mount Panels

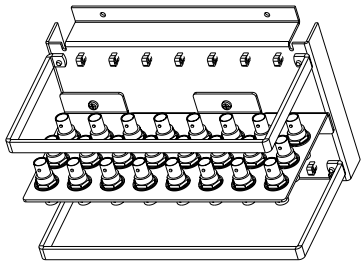


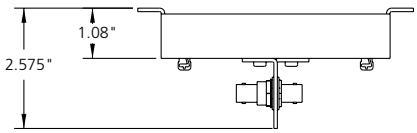






**VIW-8**






**VIW-24**

# Drawings and Specifications

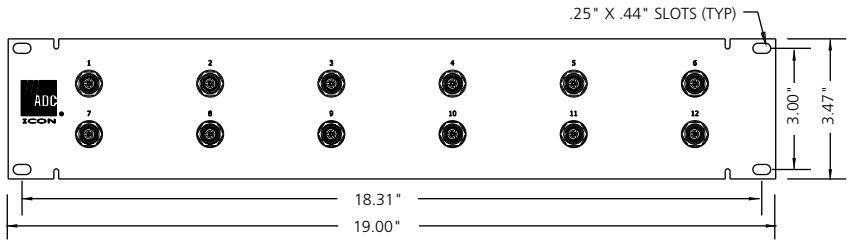
ICON® Video Bulkhead Panels

ADC offers a wide variety of bulkhead panels featuring our exclusive impedance matched true 75 Ω bulkhead connector.

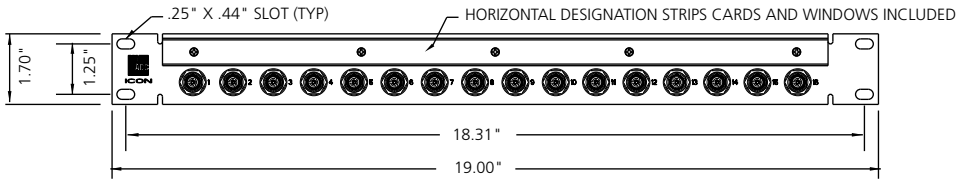
**Features:**

- Rack-mount versions in 19" (48.26 cm) or 23" (58.42 cm) 1 RU or 2 RU heights
- Models from 12 to 48 circuits with or without cable trays
- Wall-mount systems from 8 to 96 circuits

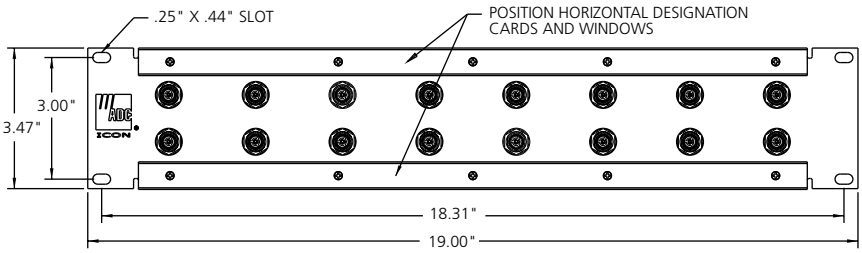
## 19" (48.26 cm) Panels



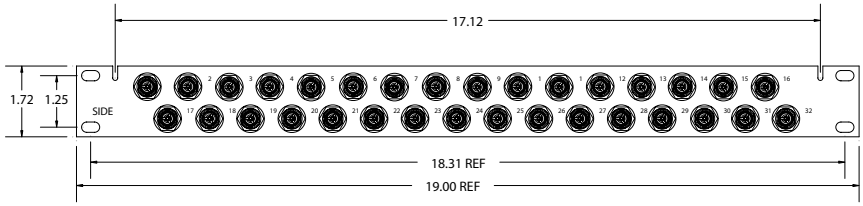

**12-Circuit 2 RU BNC Bulkhead Panel**
**VI-12-W**




**16-Circuit 1 RU BNC Bulkhead Panel**
**VI-116-DES-W**




**16-Circuit 2 RU BNC Bulkhead Panel**
**VI-16-PTY**

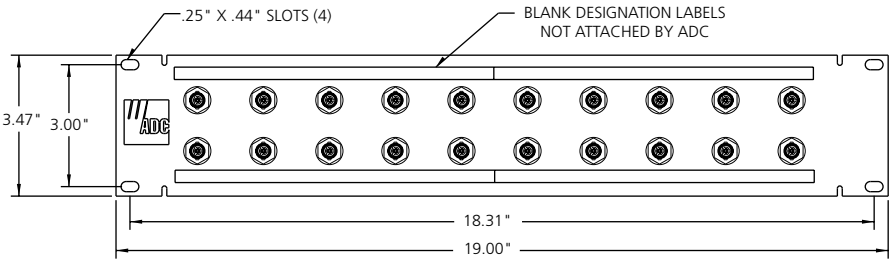



**32-Circuit 1 RU BNC Bulkhead Panel**
**VI-132-BK**

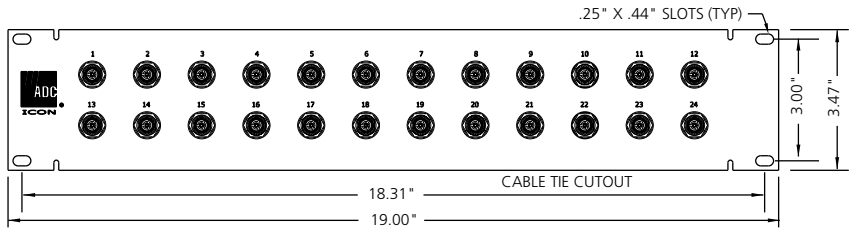
# Drawings and Specifications

ICON® Video Bulkhead Panels

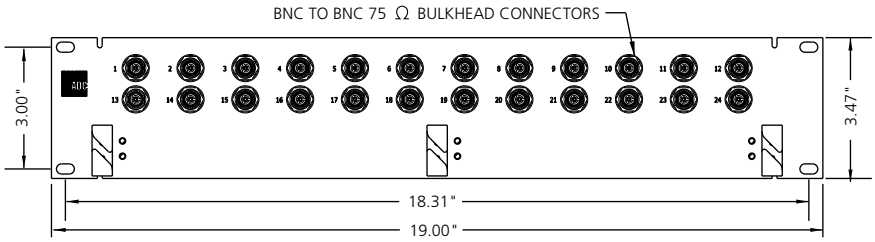
## 19" (48.26 cm) Panels



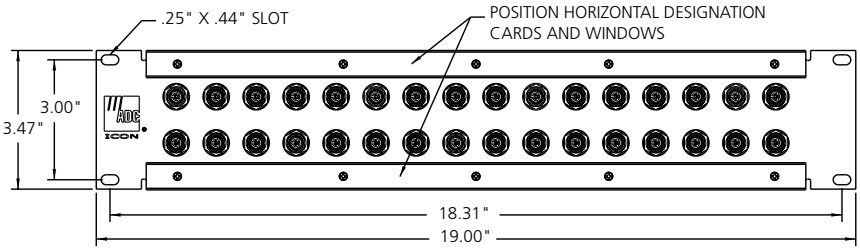

**VI-20-PTY**




**VI-24-PTY**

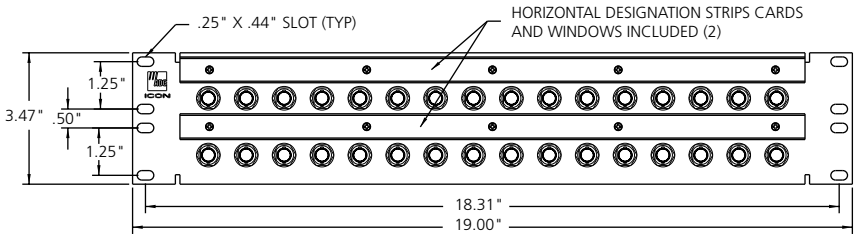



**VI-24VHR-BK**

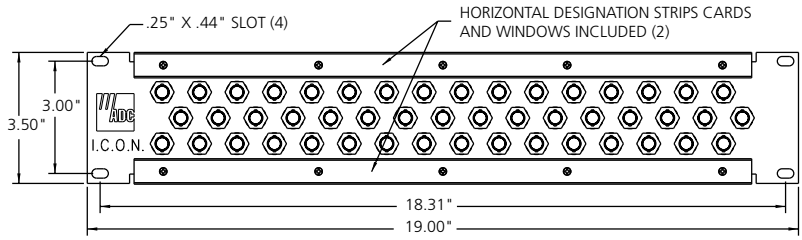



**VI-32-BK**

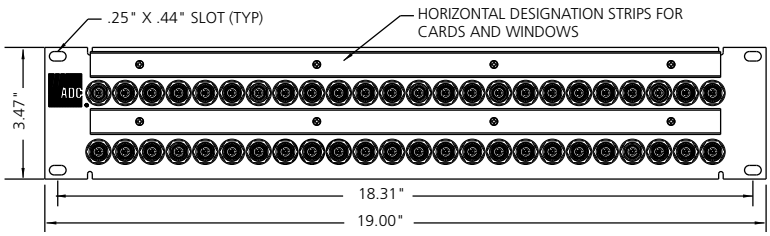
## 19" (48.26 cm) Panels



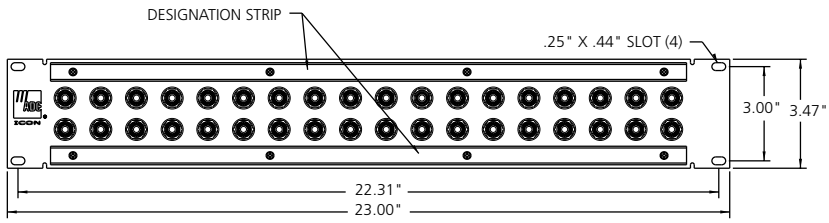

**VI-32-DES-W**



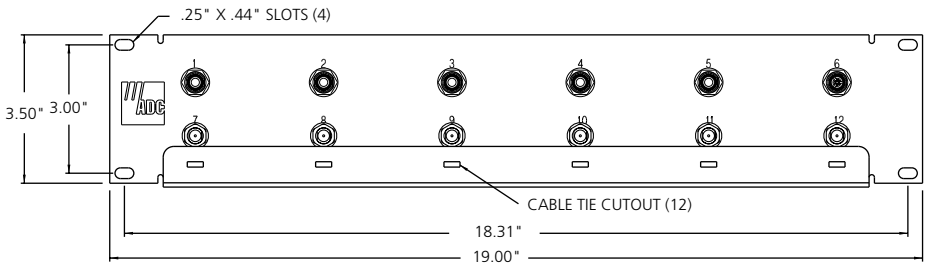

**VI-48-BK**



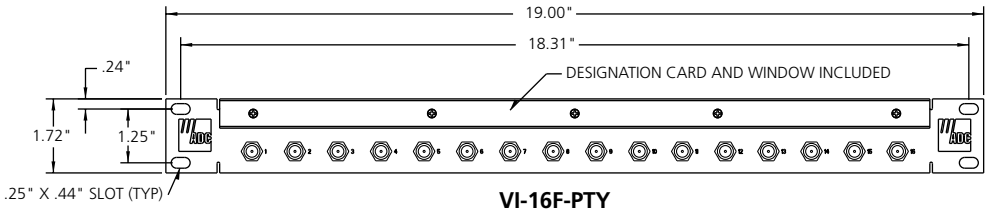

**VI-48-19-TTDES-BK**



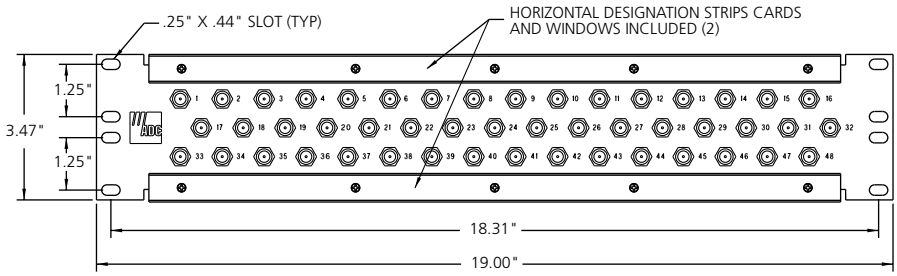

**VI-36-23-DES-PTY**




**VI-12-BNC-F-W**




**VI-16F-PTY**

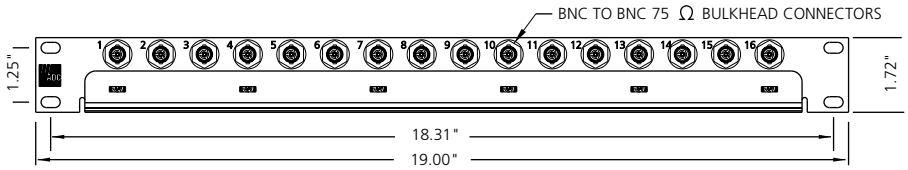


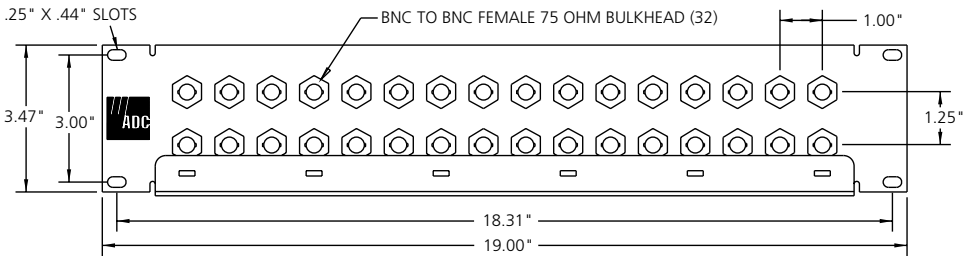

**VI-48F-PTY**

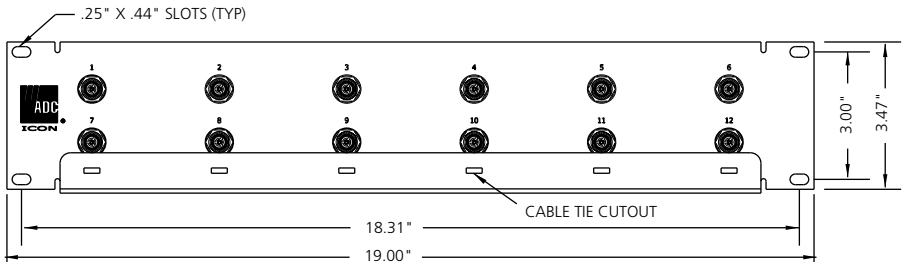
# Drawings and Specifications

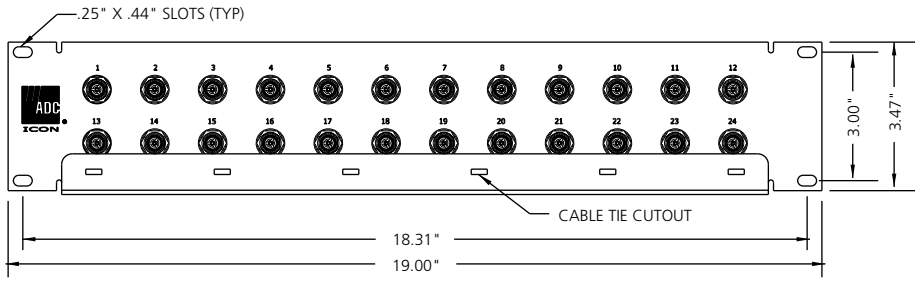
ICON® Video Bulkhead Panels

## 19" (48.26 cm) Panels with Cable Tray



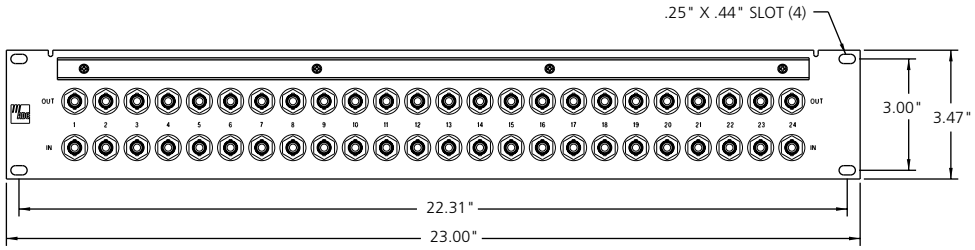



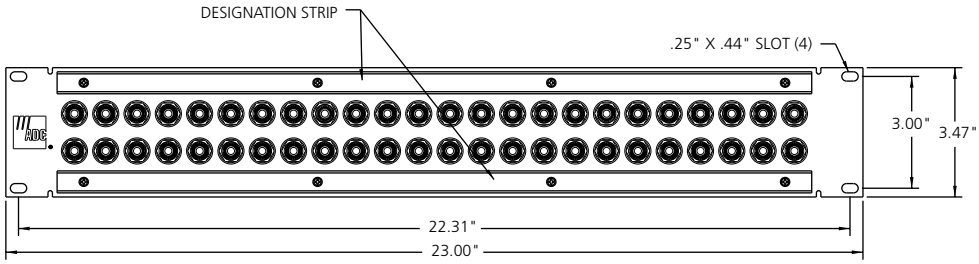
# Drawings and Specifications

ICON® Video Bulkhead Panels

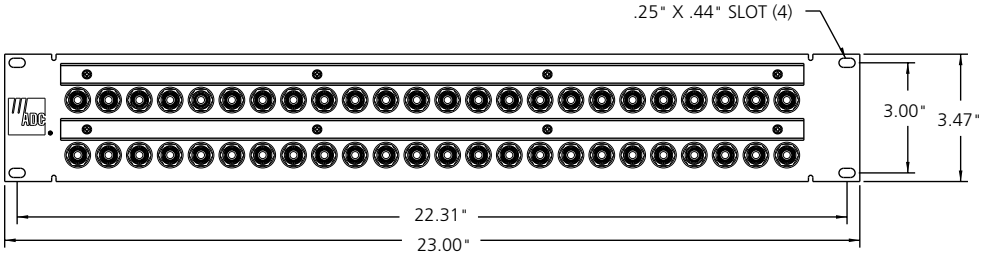
## 23" (58.42 cm) Panels



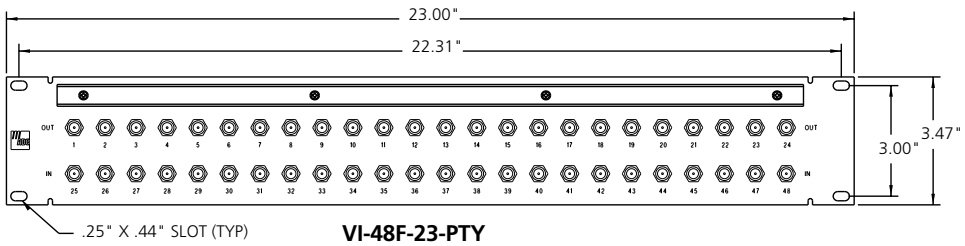

**BNC-BLK-48-CL**




**VI-48-23-DES-BK**




**VI-48-23-TT-DES-BK**

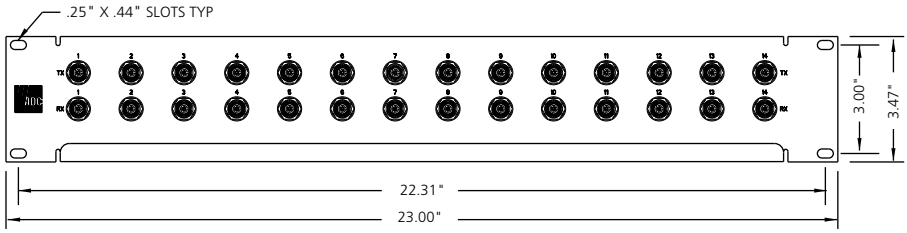



**VI-48F-23-PTY**

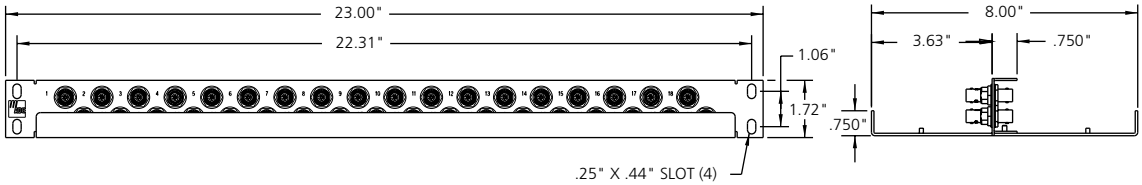
# Drawings and Specifications

ICON® Video Bulkhead Panels

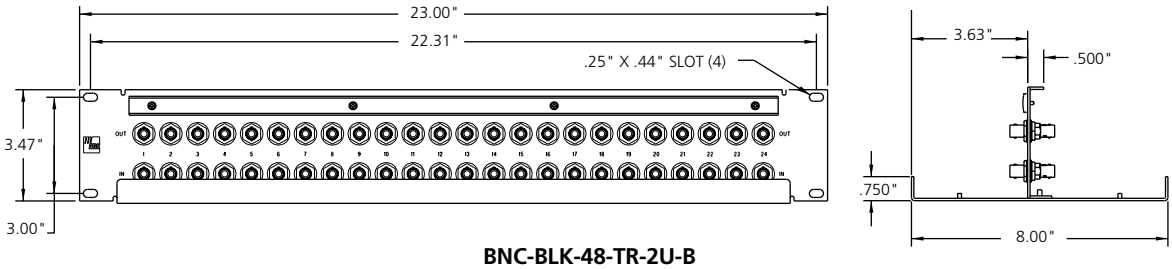
## 23" (584.2 mm) Panels with Cable Tray




**VI-28-BBG**




**BNC-BLK-36-TR-1U-B**




**BNC-BLK-48-TR-2U-B**

# Drawings and Specifications

75 Ω BNC Connectors

## Straight BNC Connectors

**ELECTRICAL**

| | |
|---|---|
| **Characteristic Impedance:** | 75 Ω |
| **Voltage Rating:** | 1000 Volts RMS |
| **Insertion Loss:** | < 0.6 dB 1 MHz to 1 GHz (measured with 1 meter of 728 cable) |
| **Return Loss:** | Better than 35 dB to 1 GHz; 30 dB to 2 GHz; 26 dB to 3 GHz |
| **Contact Resistance:** | .030 Ω maximum change post environmental |
| **Insulation Resistance:** | 200 MΩ minimum change |

**MECHANICAL**

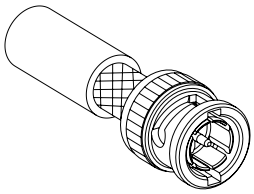
| | |
|---|---|
| **Mechanical Durability:** | 500 cycles minimum |
| **Center Contact Retention:** | 6 lbs. min |
| **Coupling Mechanism:** | 100 lbs. min |
| **Cable Pulloff Force:** | Dependent on cable size |
| **Cable Bend and Twist:** | 500 cycles min |
| **Force to Engage/Disengage:** | Torque 2.5 in/lb max; longitudinal force 3 lbs. max |
| **Interface Dimension:** | MIL-C-39012 except 75 Ω |

**ENVIRONMENTAL**

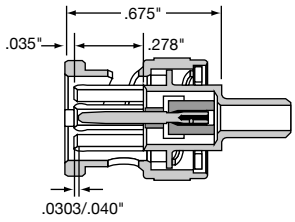
| | |
|---|---|
| **Thermal Shock:** | -40°C to 65°C operating; -55°C to 85°C, non-operating |
| **Moisture Resistance:** | 0% to 95%; MIL-STD-202 Method 106 |
| **Corrosion (Salt Spray):** | MIL-STD-202 Method 101, Test Condition B |
| **Flammability:** | UL 94-VO rated (center conductor insulator) |
| **Vibration:** | MIL-STD-202 Method 201 |
| **Solvent Resistance:** | MIL-STD-202 Method 215 |

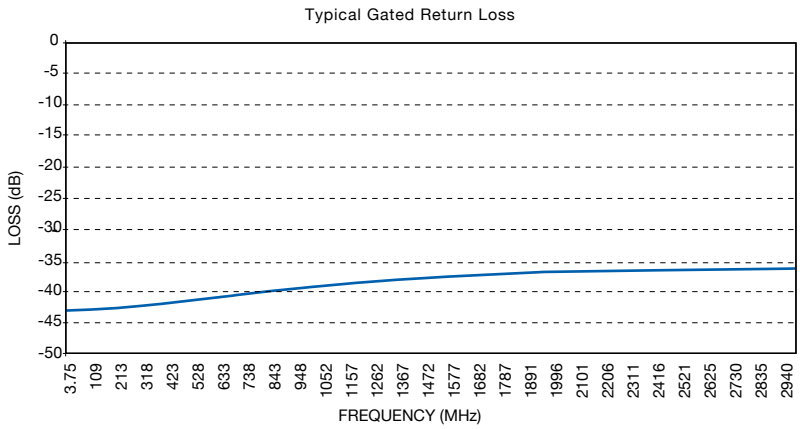
**FINISH**

| | |
|---|---|
| **Body/Bayonet:** | Tarnish-resistant electroless nickel plating |
| **Center Conductor:** | 50 millionths inch gold plating MIL-G-45204 Type 1, Grade C, Class 1; requires .042" crimp station die |



**BNC-XX**



# Drawings and Specifications

75 Ω BNC Connectors

## Right Angle BNC Connectors

**ELECTRICAL**

| | |
|---|---|
| **Characteristic Impedance:** | 75 Ω |
| **Voltage Rating:** | 1000 Volts RMS |
| **Insertion Loss:** | < 0.6 dB 1 MHz to 1 GHz (measured with 1 meter of 728 cable) |
| **Return Loss:** | Better than 30 dB to 1 GHz; 26 dB to 2 GHz; 20 dB to 3 GHz |
| **Contact Resistance:** | .030 Ω maximum change post environmental |
| **Insulation Resistance:** | 200 MΩ minimum change |

**MECHANICAL**

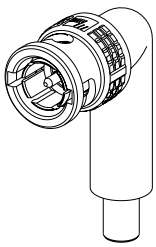
| | |
|---|---|
| **Mechanical Durability:** | 500 cycles min |
| **Coupling Mechanism:** | 100 lbs. min |
| **Cable Bend and Twist:** | 500 cycles min |
| **Force to Engage/Disengage:** | Torque 2.5 in/lb max; longitudinal force 3 lbs. max |
| **Interface Dimension:** | MIL-C-39012 except 75 Ω |

**ENVIRONMENTAL**

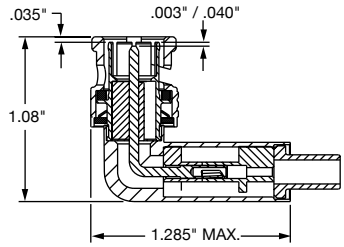
| | |
|---|---|
| **Thermal Shock:** | -40°C to 65°C operating; -55°C to 85°C, non-operating |
| **Moisture Resistance:** | 0% to 95%; MIL-STD-202 Method 106 |
| **Corrosion (Salt Spray):** | MIL-STD-202 Method 101, Test Condition B |
| **Flammability:** | UL 94-VO rated (center conductor insulator) |
| **Vibration:** | MIL-STD-202 Method 201 |
| **Solvent Resistance:** | MIL-STD-202 Method 215 |

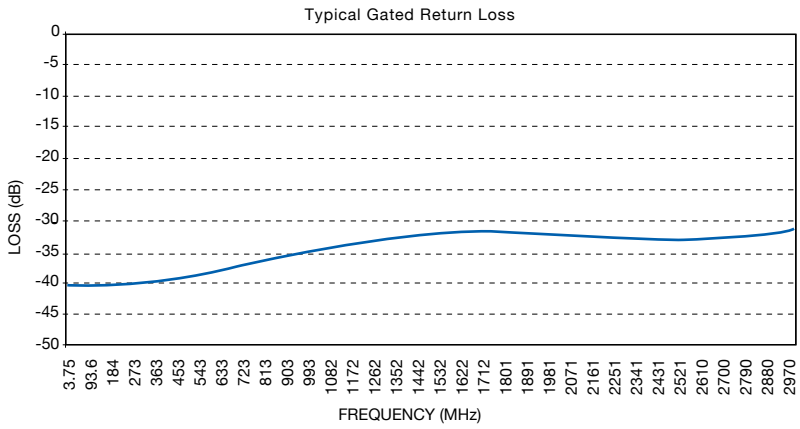
**FINISH**

| | |
|---|---|
| **Body/Bayonet:** | Tarnish-resistant electroless nickel plating |
| **Center Conductor:** | 50 millionths inch gold plating MIL-G-45204 Type 1, Grade C, Class 1; requires .042" crimp station die |



**BNC-RA-XX**



# Drawings and Specifications

75 Ω BNC Connectors

## Bulkhead Jack Connectors

**ELECTRICAL**

| | |
|---|---|
| **Characteristic Impedance:** | 75 Ω |
| **Voltage Rating:** | 1500 Volts RMS |
| **Insertion Loss:** | Better than 0.20 dB 1 MHz to 2 GHz |
| **Return Loss:** | Better than 26 dB to 1 GHz; 18 dB to 2 GHz; 16 dB to 3 GHz |
| **Contact Resistance:** | .030 Ω maximum change post environmental |
| **Insulation Resistance:** | 5000 MΩ minimum change |

**MECHANICAL**

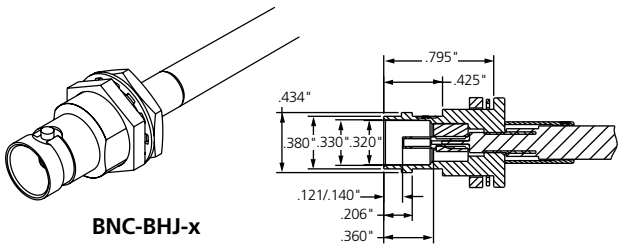
| | |
|---|---|
| **Mechanical Durability:** | 500 cycles minimum |
| **Center Contact Retention:** | 6 lbs. min |
| **Coupling Mechanism:** | 100 lbs. min |
| **Cable Bend and Twist:** | 500 cycles min |
| **Force to Engage/Disengage:** | Torque 2.5 in/lb max; longitudinal force 3 lbs. max |
| **Interface Dimension:** | MIL-C-39012 except 75 Ω |

**ENVIRONMENTAL**

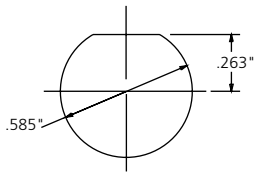
| | |
|---|---|
| **Thermal Shock:** | -40°C to 65°C operating; -55°C to 85°C, non-operating |
| **Moisture Resistance:** | 0% to 95%; MIL-STD-202 Method 106 |
| **Corrosion (Salt Spray):** | MIL-STD-202 Method 101, Test Condition B |
| **Flammability:** | UL 94-VO rated (center conductor insulator) |
| **Vibration:** | MIL-STD-202 Method 204, Test Condition B |
| **Solvent Resistance:** | MIL-STD-202 Method 215 |

**FINISH**

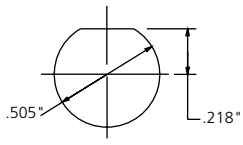
| | |
|---|---|
| **Body/Bayonet:** | Tarnish-resistant electroless nickel plating |
| **Center Conductor:** | 50 millionths inch gold plating MIL-G-45204 Type 1, Grade C, Class 1 |



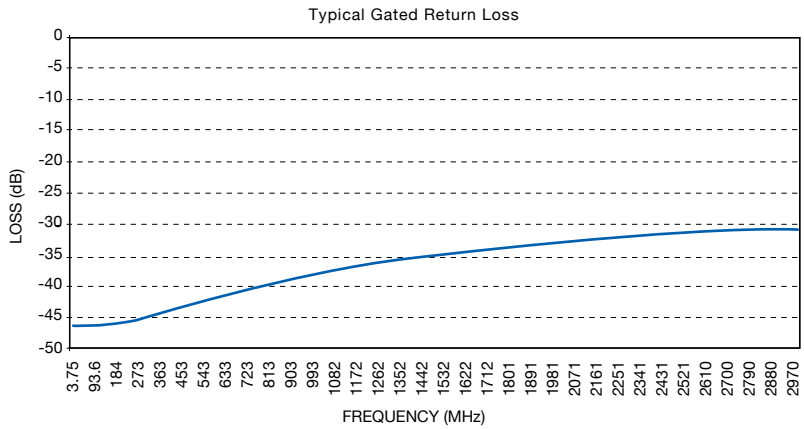

BNC-BHJ-x




RECOMMENDED PANEL CUTOUT
WITH INSULATING WASHER
(MAX THICKNESS: .240)




RECOMMENDED PANEL CUTOUT
WITHOUT INSULATING WASHER
(MAX THICKNESS: .240)



# Drawings and Specifications

75 Ω F Connectors

## Straight F Connectors

**ELECTRICAL**

| | |
|---|---|
| **Characteristic Impedance:** | 75 Ω |
| **Voltage Rating:** | 1000 Volts RMS |
| **Insertion Loss:** | < 0.6 dB 1 MHz to 1 GHz (measured with 1 meter of 728 cable) |
| **Return Loss:** | Better than 35 dB to 1 GHz; 30 dB to 2 GHz; 26 dB to 3 GHz |
| **Contact Resistance:** | .030 Ω max change post environmental |
| **Insulation Resistance:** | 200 MΩ min change |

**MECHANICAL**

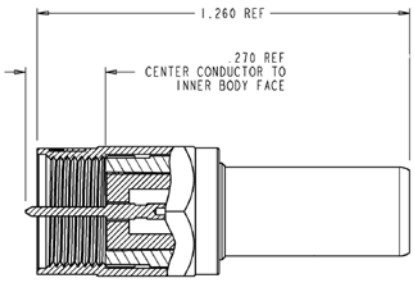
| | |
|---|---|
| **Mechanical Durability:** | 500 cycles min |
| **Center Contact Retention:** | 6 lbs. min |
| **Coupling Mechanism:** | 80 lbs. min |
| **Cable Pulloff Force:** | Dependent on cable size |
| **Cable Bend and Twist:** | 500 cycles min |
| **Coupling Nut Proof Torque:** | Torque 20 in/lb min |
| **Interface Dimension:** | See Interface Detail below |

**ENVIRONMENTAL**

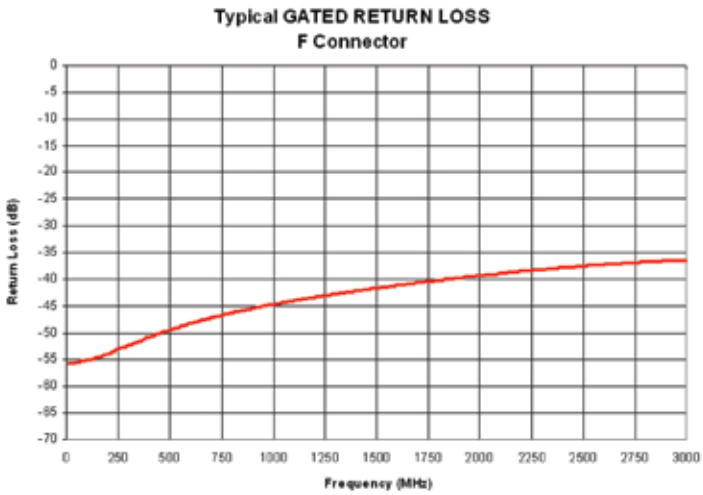
| | |
|---|---|
| **Thermal Shock:** | -40°C to 35°C operating; -55°C to 85°C, non-operating |
| **Moisture Resistance:** | 0% to 95%; MIL-STD-202 Method 106 |
| **Corrosion (Salt Spray):** | MIL-STD-202 Method 101, Test Condition B |
| **Flammability:** | UL 94-VO rated (center conductor insulator) |
| **Vibration:** | MIL-STD-202 Method 201 |
| **Solvent Resistance:** | MIL-STD-202 Method 215 |

**FINISH**

| | |
|---|---|
| **Body:** | Tarnish-resistant electroless nickel plating |
| **Center Conductor:** | 50 millionths inch gold plating MIL-G-45204 Type 1, Grade C, Class 1; requires .042" crimp station die |




**CF-XX**



# Drawings and Specifications

RCA Connectors

## Straight RCA Connectors

**ELECTRICAL**

| | |
|---|---|
| **Characteristic Impedance:** | 75 Ω typical |
| **Voltage Rating:** | 1000 Volts RMS |
| **Insertion Loss:** | < 0.6 dB 1 MHz to 1 GHz (measured with 1 meter of 728 cable) |
| **Return Loss:** | Better than 26 dB up to 200 MHz |
| **Contact Resistance:** | .030 Ω maximum change post environmental |
| **Insulation Resistance:** | 200 MΩ minimum change |

**MECHANICAL**

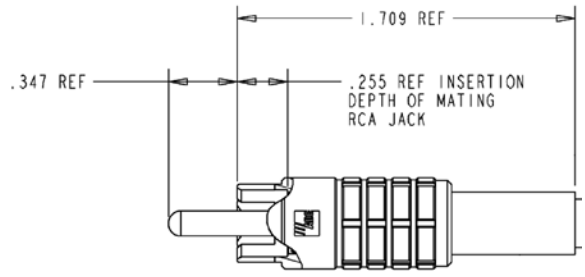
| | |
|---|---|
| **Mechanical Durability:** | 500 cycles min |
| **Center Contact Retention:** | 6 lbs. min |
| **Cable Pulloff Force:** | Dependent on cable size |
| **Cable Bend and Twist:** | 500 cycles min |
| **Force to Engage/Disengage:** | Longitudinal force 3 lbs. typical |
| **Interface Dimension:** | See Interface Detail below |

**ENVIRONMENTAL**

| | |
|---|---|
| **Thermal Shock:** | -40°C to 35°C operating; -55°C to 85°C, non-operating |
| **Moisture Resistance:** | 0% to 95%; MIL-STD-202 Method 106 |
| **Corrosion (Salt Spray):** | MIL-STD-202 Method 101, Test Condition B |
| **Flammability:** | UL 94-VO rated (center conductor insulator) |
| **Vibration:** | MIL-STD-202 Method 201 |
| **Solvent Resistance:** | MIL-STD-202 Method 215 |

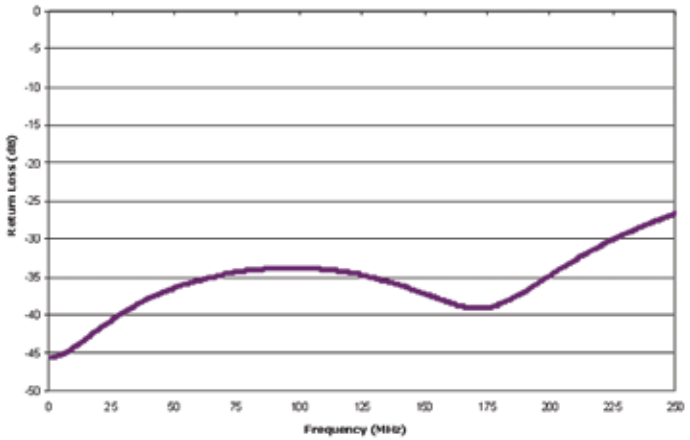
**FINISH**

| | |
|---|---|
| **Body:** | Tarnish-resistant electroless nickel plating |
| **Center Conductor:** | 50 millionths inch gold plating MIL-G-45204 Type 1, Grade C, Class 1; requires .042" crimp station die |




**CRCA-XX**

**Typical Gated RETURN LOSS**
**RCA Plug**



## BNC Terminations Plugs

**ELECTRICAL**

| | |
|---|---|
| **Characteristic Impedance:** | 75 Ω |
| **Termination Resistance:** | BNC-TP-2, 75 Ω + 0.1% (resistor value); BNC-TP-1, 75 Ω + 1.0% (resistor value) |
| **Return Loss:** | BNC-TP-2, better than -29 dB return loss to 3.0 GHz; BNC-TP-1, better than -16 dB return loss to 2.0 GHz |

**MECHANICAL**

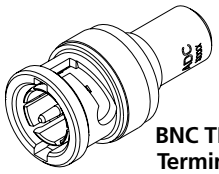
| | |
|---|---|
| **Mechanical Durability:** | 500 cycles min |
| **Coupling Mechanism:** | 100 lbs. min |
| **Mechanical Shock:** | MIL-STD-202, Method 213 |
| **Interface Dimensions:** | MIL-C-39012 except 75 Ω |

**ENVIRONMENTAL**

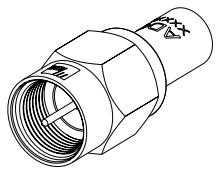
| | |
|---|---|
| **Thermal Shock:** | -40°C to 65°C -55°C to 85°C, non-operating; |
| **Moisture Resistance:** | 0% to 95% relative humidity, tested to MIL-STD-202 Method 106 |
| **Corrosion (Salt Spray):** | MIL-STD-202 Method 101, Test Condition B |
| **Vibration:** | MIL-STD-202 Method 201 |

**FINISH**

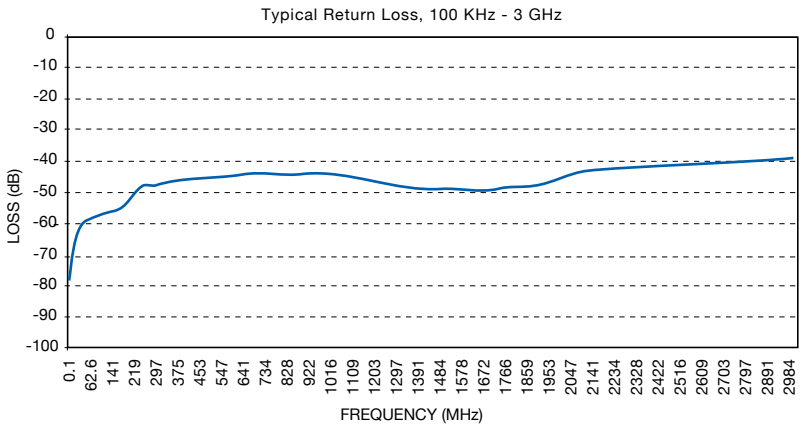
| | |
|---|---|
| **Body/Bayonet:** | Tarnish resistant electroless nickel plating |
| **Center Conductor:** | 50 millionth inch gold plating MIL-C-45204 Type 1, Grade C, Class 1 |



**BNC TP-1 and TP-2 Terminating Plugs**



**CF TP-1 and TP-2 Terminating Plugs**



# Drawings and Specifications
75 Ω BNC Connectors

## BNC Adapters

**ELECTRICAL**

| | |
|---|---|
| **Characteristic Impedance:** | 75 Ω |
| **Voltage Rating:** | 1500 Volts RMS |
| **Insertion Loss:** | Better than 0.20 dB 1 MHz to 2 GHz |
| **Return Loss:** | Better than 40 dB to 1 GHz; 30 dB to 2 GHz; 26 dB to 3 GHz |
| **Contact Resistance:** | .030 Ω maximum change post environmental |
| **Insulation Resistance:** | 5000 MΩ minimum change |

**MECHANICAL**

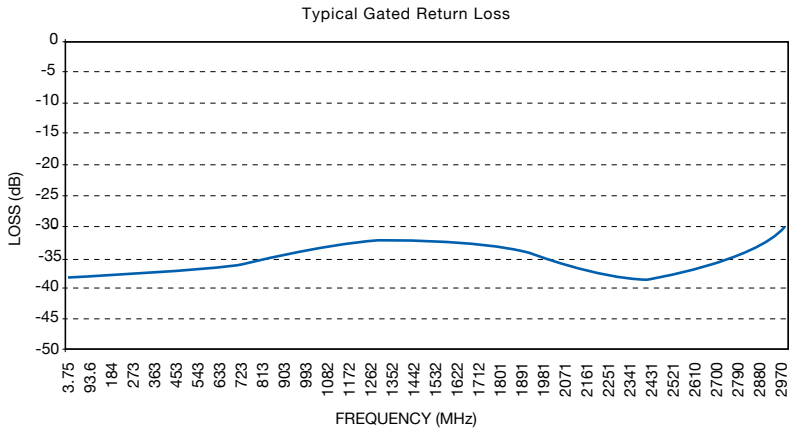
| | |
|---|---|
| **Mechanical Durability:** | 500 cycles min |
| **Center Contact Retention:** | 6 lbs. min |
| **Coupling Mechanism:** | 100 lbs. min |
| **Cable Bend and Twist:** | 500 cycles min |
| **Force to Engage/Disengage:** | Torque 2.5 in/lb max; longitudinal force 3 lbs. max |
| **Interface Dimension:** | MIL-C-39012 except 75 Ω |

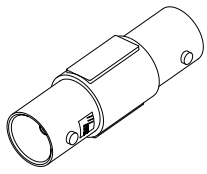
**ENVIRONMENTAL**

| | |
|---|---|
| **Thermal Shock:** | -40°C to 65°C operating; -55°C to 85°C, non-operating |
| **Moisture Resistance:** | 0% to 95%; MIL-STD-202 Method 106 |
| **Corrosion (Salt Spray):** | MIL-STD-202 Method 101, Test Condition B |
| **Flammability:** | UL 94-VO rated (center conductor insulator) |
| **Vibration:** | MIL-STD-202 Method 204, Test Condition B |
| **Solvent Resistance:** | MIL-STD-202 Method 215 |

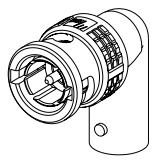
**FINISH**

| | |
|---|---|
| **Body/Bayonet:** | Tarnish-resistant electroless nickel plating |
| **Center Conductor:** | 50 millionths inch gold plating<br>MIL-G-45204 Type 1,Grade C, Class 1 |

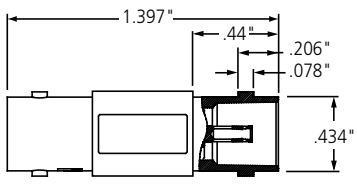


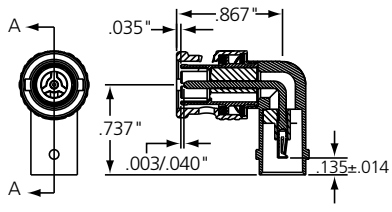
**BNC Straight Adapter**



**BNC Right Angle Adapter**




**BNC Straight Adapter**




**BNC Right Angle Adapter**



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# Drawings and Specifications

75 Ω BNC Connectors

## Recessed BNC

**ELECTRICAL**

| | |
|---|---|
| **Characteristic Impedance:** | 75 Ω |
| **Voltage Rating:** | 1500 Volts RMS |
| **Insertion Loss:** | Better than 0.20 dB 1 MHz to 2 GHz |
| **Return Loss:** | Better than 40 dB to 1 GHz; 30 dB to 2 GHz; 26 dB to 3 GHz |
| **Contact Resistance:** | .030 Ω maximum change post environmental |
| **Insulation Resistance:** | 5000 MΩ minimum change |

**MECHANICAL**

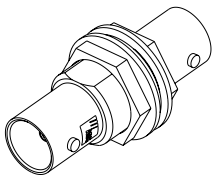
| | |
|---|---|
| **Mechanical Durability:** | 500 cycles minimum |
| **Center Contact Retention:** | 6 lbs. min |
| **Coupling Mechanism:** | 100 lbs. min |
| **Cable Bend and Twist:** | 500 cycles min |
| **Force to Engage/Disengage:** | Torque 2.5 in/lb max; longitudinal force 3 lbs. max |
| **Interface Dimension:** | MIL-C-39012 except 75 Ω |

**ENVIRONMENTAL**

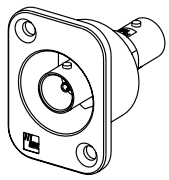
| | |
|---|---|
| **Thermal Shock:** | -40°C to 65°C operating; -55°C to 85°C, non-operating |
| **Moisture Resistance:** | 0% to 95%; MIL-STD-202 Method 106 |
| **Corrosion (Salt Spray):** | MIL-STD-202 Method 101, Test Condition B |
| **Flammability:** | UL 94-VO rated (center conductor insulator) |
| **Vibration:** | MIL-STD-202 Method 204, Test Condition B |
| **Solvent Resistance:** | MIL-STD-202 Method 215 |

**FINISH**

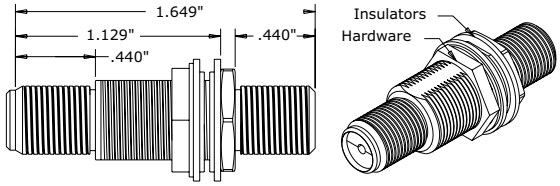
| | |
|---|---|
| **Body/Bayonet:** | Tarnish-resistant electroless nickel plating |
| **Center Conductor:** | 50 millionths inch gold plating<br>MIL-G-45204 Type 1,Grade C, Class 1 |



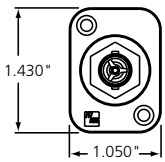
**BNC Bulkhead Feed Through**

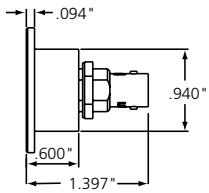


**Recessed BNC**

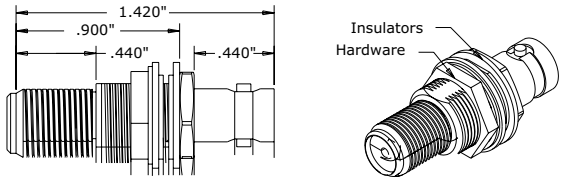



**F to F Adapter**

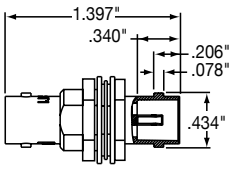


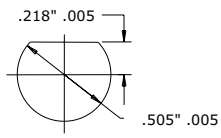

**Recessed BNC**



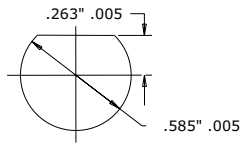

**F to BNC Adapter**




**Bulkhead Feed Through**




**Recommended Panel cutout without Isolation Washer (Max Panel Thickness: .250)**



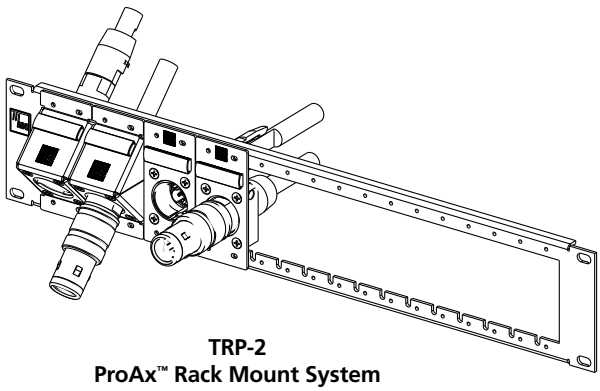

**Recommended Panel cutout with Isolation Washer (Max Panel Thickness: .250)**

# Drawings and Specifications

## ProAx® Triaxial Camera Connectors

Electrical performance specifications of ProAx® Triaxial camera connectors are based on a male and female connector mated together.

| | |
|---|---|
| **Rated Bandwidth:** | 1 MHz to 1.5 GHz |
| **Return Loss:** | Better than -20 1 GHz/-15 to 2 GHz |
| **Characteristic Impedance:** | 75 Ω nominal |
| **Insertion Loss:** | Better than 0.8 dB loss 1 MHz to 1.5 GHz |
| **Dielectric Withstanding Voltage:** | 1500 Volts AC |
| **Life Cycles:** | 1000 cycles minimum per MIL-PFR-39012 |
| **MECHANICAL** | |
| **Life Cycles:** | 1000 cycles minimum per MIL-PFR-39012 |
| **Cable Retention:** | 100 lb. Per MIL-STD-1344A Method 2010.1 |
| **MATERIALS** | |
| **Body materials:** | Brass per ASTM B16, CDA Alloy 360 with electroless nickel plating per QQ-N-290 |
| **Inner bodies:** | Brass per ASTM B16, CDA Alloy 360 with 50 millionths inch gold plating |
| **Latching spring:** | Stainless Steel 460 SE heat treated and Electro-Polished |
| **Spring center conductors:** | Beryllium Copper with 50 millionths inch Gold per MIL-G-45204 Type 1 |
| **Crush rIngs:** | 303 Stainless |
| **Machined center conductors:** | Brass per ASTM B16 CDA Alloy 360 with 50 millionths inch Gold per MIL-G-45204 Type 1 |
| **Ground Clip:** | Beryllium Copper with electroless nickel plating per QQ-N-290 and Gold per MIL-G-45204 Type 1 |
| **Insulators:** | Teflon™ |
| **O-Rings:** | Ethylene Propylene |
| **ENVIRONMENTAL** | |
| **Temperature** | |
| **Operating:** | -40°C to 65°C |
| **Storage:** | -55°C to 85°C |
| **Thermal shock:** | Per MIL-STD-202, Method 107 |
| **Humidity** | |
| **Operating:** | 0% to 95%, non-condensing |
| **Storage:** | 0% to 95%, non-condensing |
| **Salt spray:** | Per MIL-STD-202, Method 101, Test Condition B |
| **Moisture resistance:** | Per MIL-STD-202, Method 106 |
| **Sand and dust resistance:** | Per MIL-STD-202, Method 101 |
| **Flammability:** | UL 94-VO Rated |
| **Crush resistance:** | Per MIL-STD-1344A, Method 2008.1 |



**TRP-2**
**ProAx™ Rack Mount System**



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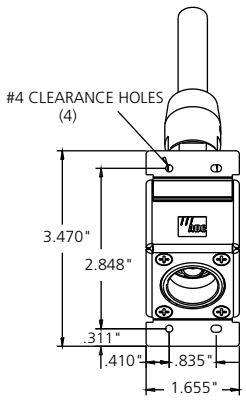
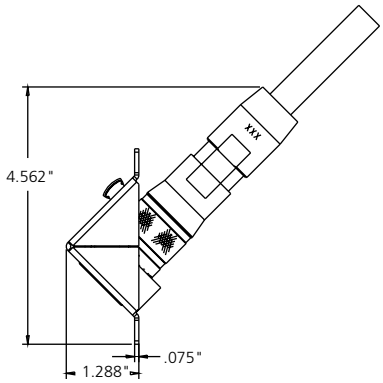
# Drawings and Specifications

ProAx® Triaxial Camera Connectors

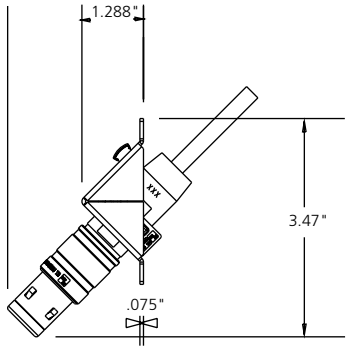
## 45° Angled Adapter




**Front View**

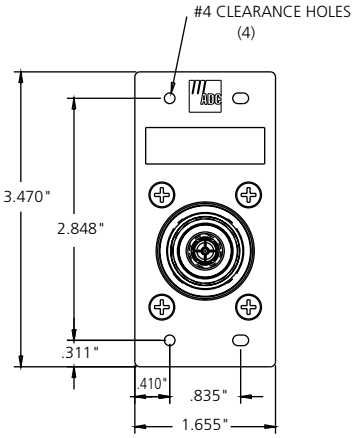



**Jack**

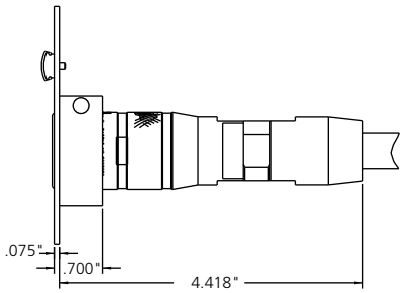



**Plug**

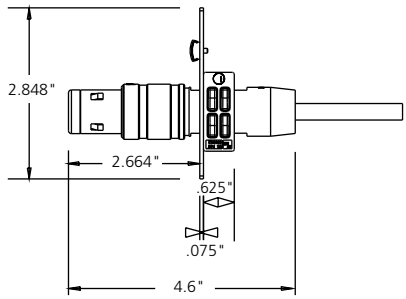
## Straight Adapter Kit




**Front View**



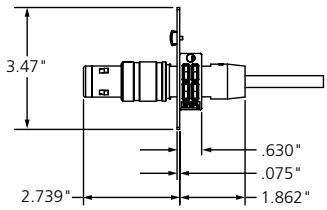

**Jack**



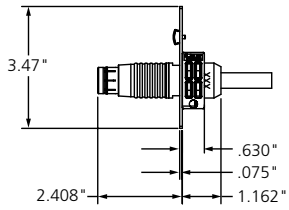

**Plug**

# Drawings and Specifications

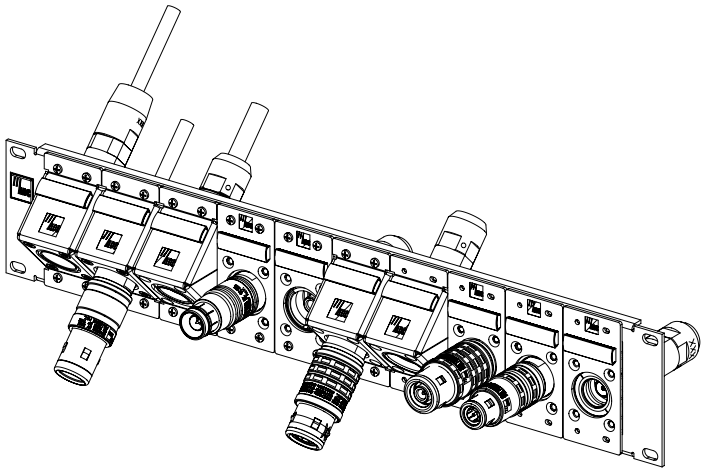
## ProAx® Triaxial Camera Connectors



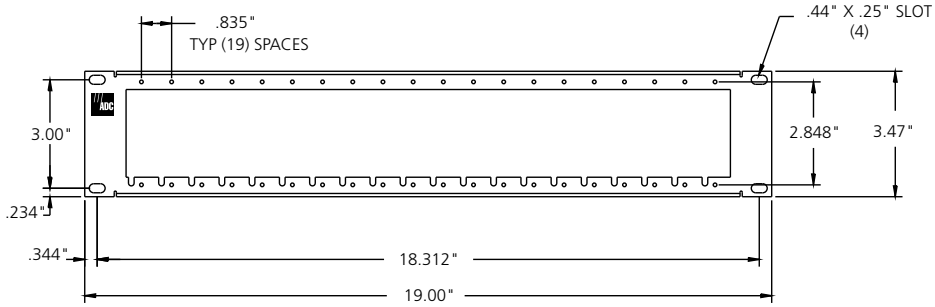

**Triax Connector with Traditional (old) Backshell**




**Triax Connector with Global Backshell**



**GTCJ-XXX**
**Global ProAx Triax**

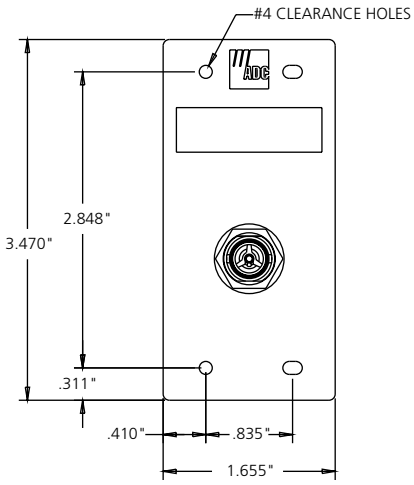



**TRP-2**
**ProAx™ Rack Mount System**

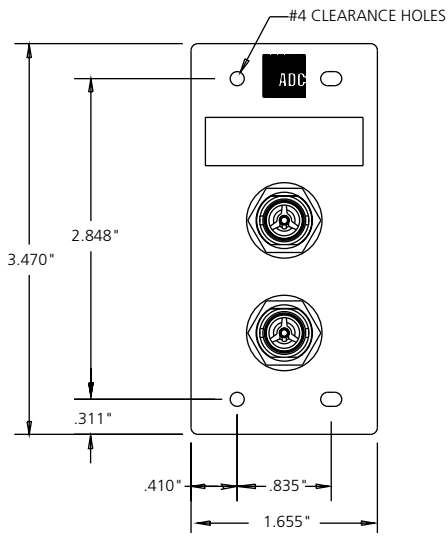
# Drawings and Specifications

ProAx® Triaxial Camera Connectors

## BNC Modules for ProAx™ Rack Mount Plate

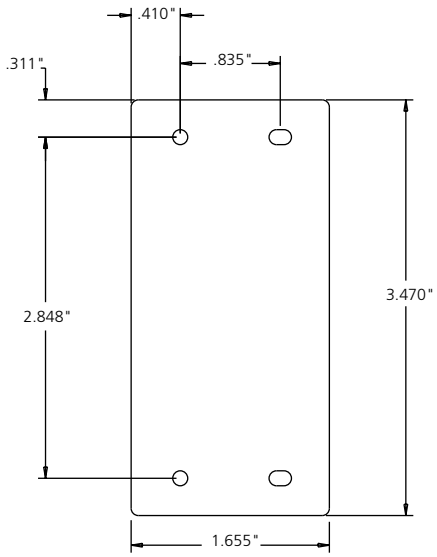



**TRP-2BNCFT-x**

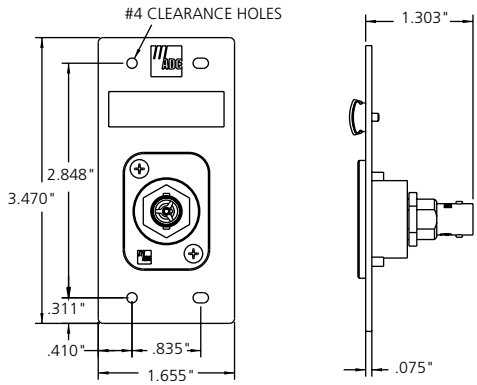



**TRP-2BNCFT-2-x**

## Recessed BNC Modules for ProAx™ Rack Mount Plate




**TRP-2BLANK-G**




**BHFT-R-XX**

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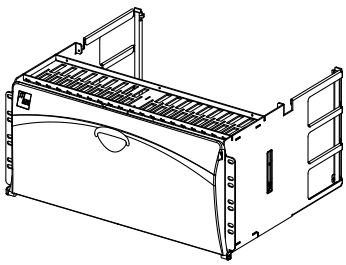
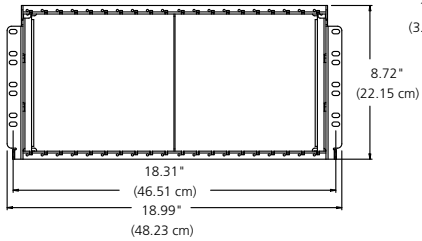
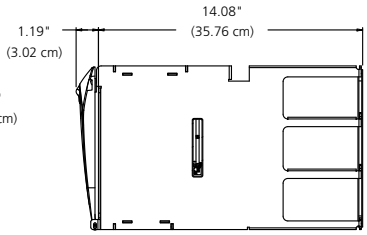
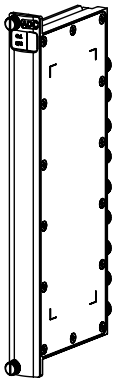




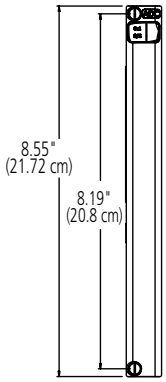

**20-Position Chassis Front View**



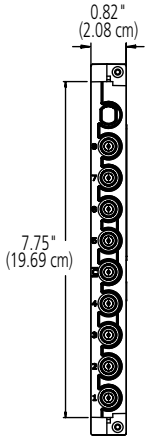

**20-Position Chassis Side View**



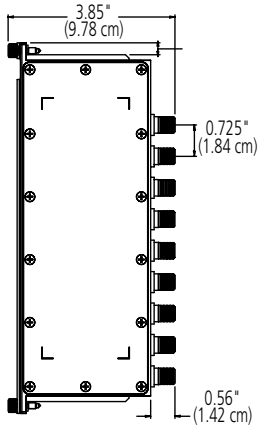
**Module**



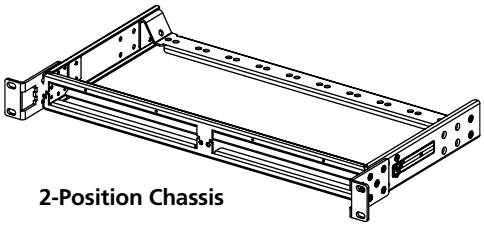

**Module Front View**



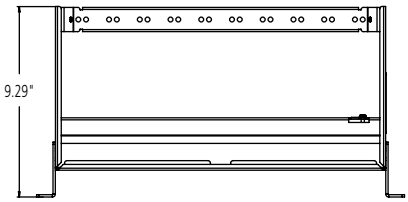

**Module Rear View**



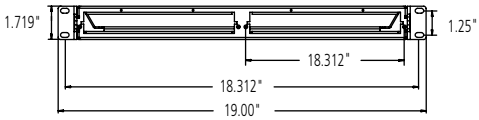

**Module Side View**



**2-Position Chassis**




**2-Position Chassis Top View**




**2-Position Chassis Front View**

# Drawings and Specifications

SignalOn® Series Passives

## Splitter/Combiner Specifications

The RF Worx® SignalOn® Series offers specifications that meet or exceed the best in the industry for insertion loss, port-to-port isolation and frequency response.

**ELECTRICAL**

| | |
|---|---|
| **Return Loss (All Ports):** | -20 dB |
| **Insertion Loss Flatness (Input Ports)** | |
| **Plain Modules (S/C):** | Nominal ± 0.5 dB; 5-1000 MHz |
| **Modules with Pad Monitor and Make-Before-Break Attenuation** | ± 0.5 dB; 5-860 MHz<br>± 0.7 dB; 860-1000 MHz |
| **Isolation (Adjacent Ports):** | -30 dB |

**MECHANICAL**

| | |
|---|---|
| **Connector Center-to-center Spacing:** | 0.725" |

| Assembly Type | MBB Default | Performance Attributes | Specification (dB) | |
|---|---|---|---|---|
| | | | 5-860 MHz | 860-1000 MHz |
| All Modules | | Minimum Return Loss, All Ports | -20 | -20 |
| | | Minimum Isolation, Adjacent Ports | -30 | -30 |
| | | Minimum EMI, Near-Field & Far-Field | -100 | -100 |
| 2x1 Plain Module | - | Insertion Loss, Input Ports to C-Port | -3.8 ± 0.5 | -3.8 ± 0.5 |
| 4x1 Plain Module | - | Insertion Loss, Input Ports to C-Port | -7.3 ± 0.5 | -7.3 ± 0.5 |
| 8x1 Plain Module | - | Insertion Loss, Input Ports to C-Port | -11.6 ± 0.5 | -11.6 ± 0.5 |
| 2x1 Splitter | 0 dB | Insertion Loss, Input Ports to C-Port | -4.6 ± 0.5 | -4.6 ± 0.7 |
| | | Monitor Level, C-Port to M-Port | -20.0 ± 0.6 | -20.0 ± 0.8 |
| | 6 dB | Insertion Loss, Input Ports to C-Port | -10.6 ± 0.5 | -10.6 ± 0.7 |
| | | Monitor Level, C-Port to M-Port | -20.0 ± 0.6 | -20.0 ± 0.8 |
| 2x1 Combiner | | Insertion Loss, Input Ports to C-Port | -4.6 ± 0.5 | -4.6 ± 0.7 |
| | 0 dB | Monitor Level, Input Ports to M-Port | -24.6 ± 0.6 | -24.6 ± 0.8 |
| | 6 dB | Insertion Loss, Input Ports to C-Port | -10.6 ± 0.5 | -10.6 ± 0.7 |
| | | Monitor Level, Input Ports to M-Port | -30.6 ± 0.6 | -30.6 ± 0.8 |
| 4x1 Splitter | 0 dB | Insertion Loss, Input Ports to C-Port | -8.6 ± 0.5 | -8.6 ± 0.7 |
| | | Monitor Level, C-Port to M-Port | -20.0 ± 0.6 | -20.0 ± 0.8 |
| | 6 dB | Insertion Loss, Input Ports to C-Port | -14.6 ± 0.5 | -14.6 ± 0.7 |
| | | Monitor Level, C-Port to M-Port | -20.0 ± 0.6 | -20.0 ± 0.8 |
| 4x1 Combiner | | Insertion Loss, Input Ports to C-Port | -8.6 ± 0.5 | -8.6 ± 0.7 |
| | 0 dB | Monitor Level, Input Ports to M-Port | -28.6 ± 0.6 | -28.6 ± 0.8 |
| | 6 dB | Insertion Loss, Input Ports to C-Port | -14.6 ± 0.5 | -14.6 ± 0.7 |
| | | Monitor Level, Input Ports to M-Port | -34.6 ± 0.6 | -34.6 ± 0.8 |
| 8x1 Splitter | 0 dB | Insertion Loss, Input Ports to C-Port | -12.4 ± 0.5 | -12.4 ± 0.7 |
| | | Monitor Level, C-Port to M-Port | -20.0 ± 0.6 | -20.0 ± 0.8 |
| | 6 dB | Insertion Loss, Input Ports to C-Port | -18.4 ± 0.5 | -18.4 ± 0.7 |
| | | Monitor Level, C-Port to M-Port | -20.0 ± 0.6 | -20.0 ± 0.8 |
| 8x1 Combiner | | Insertion Loss, Input Ports to C-Port | -12.4 ± 0.5 | -12.4 ± 0.7 |
| | 0 dB | Monitor Level, Input Ports to M-Port | -32.4 ± 0.6 | -32.4 ± 0.8 |
| | 6 dB | Insertion Loss, Input Ports to C-Port | -18.4 ± 0.5 | -18.4 ± 0.7 |
| | | Monitor Level, Input Ports to M-Port | -38.4 ± 0.6 | -38.4 ± 0.8 |

# Drawings and Specifications

SignalOn® Series Satellite Splitters/Combiners

## Splitter/Combiner 2-Way

**ADC catalog numbers: N-MLF12, N-MLB12**

| | Customer Specifications | | | |
|---|---|---|---|---|
| Assy Type 2 Way | 950-1450 MHz | 1450-1750 MHz | 750-2150 MHz | Units |
| Insertion Loss Ports 1-2 to C-Port | -3.7±0.5 | -3.7±0.5 | -3.9±0.5 | dB |
| Return Loss Min Ports 1-2 | -18 | -18 | -16 | dB |
| Return Loss Min Common Port | -17 | -17 | -16 | dB |
| Isolation Min Adjacent Ports | -20 | -20 | -20 | dB |

## Splitter/Combiner 4-Way

**ADC catalog numbers: N-MLF14, N-MLB14**

| | Customer Specifications | | | |
|---|---|---|---|---|
| Assy Type 4 Way | 950-1450 MHz | 1450-1750 MHz | 750-2150 MHz | Units |
| Insertion Loss Ports 1-4 to C-Port | -6.8±0.5 | -6.8±0.5 | -7.1±0.5 | dB |
| Return Loss Min Ports 1-4 | -18 | -18 | -16 | dB |
| Return Loss Min Common Port | -17 | -17 | -16 | dB |
| Isolation Min Adjacent Ports | -20 | -20 | -20 | dB |

## Splitter/Combiner 8-Way

**ADC catalog numbers: N-MLF18, N-MLB18**

| | Customer Specifications | | | |
|---|---|---|---|---|
| Assy Type 8 Way | 950-1450 MHz | 1450-1750 MHz | 750-2150 MHz | Units |
| Insertion Loss Ports 1-8 to C-Port | -10.3±0.5 | -10.6±0.5 | -11.0±0.7 | dB |
| Return Loss Min Ports 1-8 | -18 | -16 | -16 | dB |
| Return Loss Min Common Port | -17 | -17 | -16 | dB |
| Isolation Min Adjacent Ports | -20 | -20 | -20 | dB |

## Splitter/Combiner 2-4-8 Way

**ADC catalog numbers: N-MLF12, N-MLB12, N-MLF14, N-MLB14, N-MLF18, N-MLB18**

| Assy Type | DC Power Passing Ports | Maximum Power Rating |
|---|---|---|
| 2 Way | 1,2 | 24 VDC @ 1 Ampere |
| 4 Way | 1,4 | 24 VDC @ 1 Ampere |
| 8 Way | 1,8 | 24 VDC @ 1 Ampere |

## Electrical Characteristics (General)

| Characteristic | Engineering | Customer |
|---|---|---|
| Impedance | 75 Ω nominal | 75 Ω nominal |
| DC Power | 24 VDC @ 1 Ampere Max. | 24 VDC @ 1 Ampere Max. |

# Drawings and Specifications

SignalOn® Series Actives

## Forward Path Amplifier Specifications

| Performance Attribute | 20dB Forward Amplifier | 30dB Forward Amplifier |
|---|---|---|
| Bandwidth | 50-1000 MHz | 50-1000 MHz |
| Optimum RF Input | 20dBmV per channel | 10dBmV per channel |
| Minimum Full Gain | 20.0 dB | 30.0 dB |
| Gain Adjustment Range | 10 ±1dB in 0.5dB steps | 10 ±1dB in 0.5dB steps |
| Tilt Adjustment Range | 10 ±1dB @ 50MHz in 0.5dB steps | 10 ±1dB @ 50MHz in 0.5dB steps |
| Gain Flatness | ±0.4 dB from 50 to 870 MHz<br>±0.5 dB from 870 to 1000 MHz | ±0.45 dB from 50 to 870 MHz<br>±0.65dB from 870 to 1000 MHz |
| Return Loss,<br>input and output ports | -19.0 dB from 50 to 870 MHz<br>-16.5 dB from 870 to 1000 MHz | -18.0 dB from 50 to 870 MHz<br>-15.0 dB from 870 to 1000 MHz |
| Noise Figure | 7.3 dB from 50 to 870MHz<br>7.6 dB from 870 to 1000MHz | 5.7 dB from 50 to 870MHz<br>6.2 dB from 870 to 1000MHz |
| CTB[1] | -73.1 dB | -78.9 dB |
| CSO[1] | -81.7 dB | -84.5 dB |
| IMD[1] | -78.2 dB | -83.7 dB |
| Monitor ports | -20dB test point for both RF input and RF output | |
| Power dissipation | 17W max | |
| Operating Temperature | 0 - 50 degrees C | |
| Dimensions | 8.55"H x 1.67"W x 7.81"D | |
| Power connector | gold-on-gold, slide-on contacts | |
| Thermal Shock | Meets MIL-STD-202 Method 107 | |
| Office Vibration | Meets GR-63-Core Section 5.4.2 | |
| Mechanical Shock | Meets MIL-STD-202 Method 213 | |
| Accelerated Aging | Meets MIL-STD-202 Method 108 | |

## Power Supply Specifications

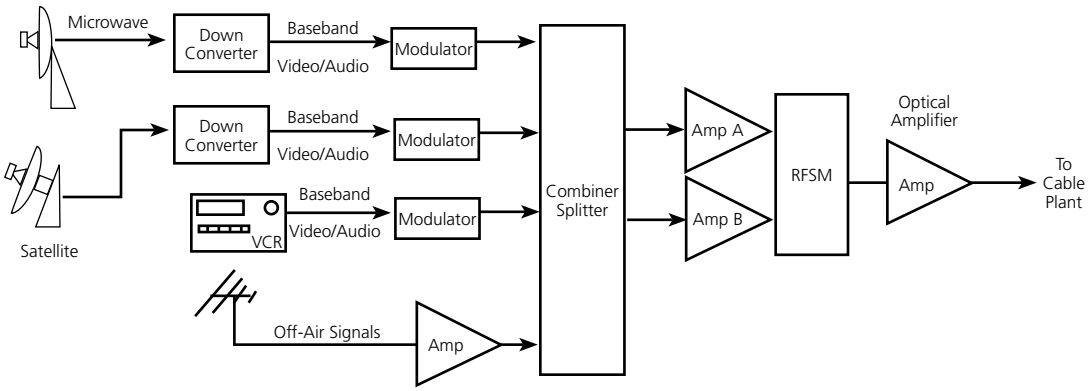
| Performance Attribute | AC-DC | DC-DC |
|---|---|---|
| Input Voltage | 90-264 VAC, 50/60 Hz | 36-72 VDC nominal |
| Efficiency | 75% nominal | 80% nominal |
| Output Voltage | 24 VDC ± 5% | 24 VDC ± 5% |
| Output Power | 200W (24 VDC @ 8.33 Amps) | 192W (24 VDC @ 8Amps) |
| Amplifiers Supported | Up to nine 30dB amplifiers | Up to nine 30dB amplifiers |
| Redundancy | Yes, dual load sharing | Yes, dual load sharing |
| Operating Temperature | 0 – 50° C | 0 – 50° C |
| Dimensions | 8.55"H x 1.67"W x 12.96"D | 8.55"H x 1.67"W x 12.96"D |
| Power Connector | gold-on-gold, slide-on contacts | gold-on-gold, slide-on contacts |
| Test Points | 24 VDC output test points | 24 VDC output test points |
| Fan | Field Replaceable Unit | Field Replaceable Unit |
| Alarm Relays | Fan Fail, Output Power Fail | Fan Fail, Output Power Fail |
| TTL Contacts | Remote Inhibit, Input Power Fail, Output Power Fail | Remote Inhibit, Input Power Fail, Output Power Fail |

[1] – Measured with 110 channel loading and optimum RF input level at full gain and no tilt

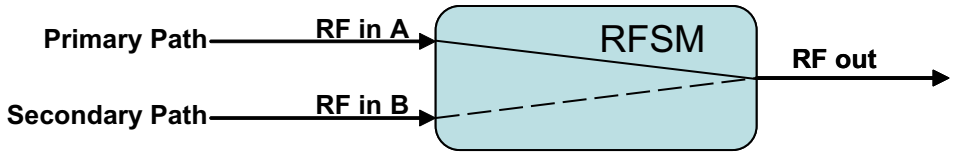
Specifications are typical worst-case numbers across the given frequency range, unless otherwise noted, and are subject to change without notice.

# Drawings and Specifications

## SignalOn® Series RF Switch Modules




**General Application Amplifier Redundancy**




**General Application Path Redundancy**

## Electrical Specifications

| | |
|---|---|
| **Frequency Range of operation** | 5MHz to 1GHz |
| **Operating input level** | 50MHz to 1GHz |
| **Insertion Loss** | < 1dB to 1GHz |
| **Flatness** | < 0.6dB |
| **Return Loss** | > 20dB to 1GHz |
| **Isolation between signal paths** | > 60 dB |
| **Isolation between circuits (Dual units)** | > 70dB |

# ADC Patents for Products in this Catalog

| Product | Patent |
|---|---|
| SVJ-2 Super Video Jack | USO5964607<br>USO6045378 |
| MVJ-3 Super Video Jack | USO5885096<br>USO6045378 |
| UniPatch®, High-Density | USO6186798 |
| Data Patching System | USO6345986<br>USO6623278<br>USO6992257<br>Others Pending |
| UniPatch® Balun Modules | USO6597256<br>Others Pending |
| ProAx® Triaxial Connectors | USO5967852<br>USO6109963<br>USO6146192<br>USO6231380<br>USO6575786<br>USO6561848<br>USO6997744<br>USO6783395<br>USO6811432<br>USO6942491<br>USO6991491<br>Others Pending |
| BNC/Coaxial Connectors | USO5921802<br>USO6428354<br>USO5921802<br>USO6712647<br>USO6848948<br>USO6953368<br>Others Pending |
| ProPatch® Programmable | USO6875060 |
| RF Worx® | USO6888078 |

**Note:** This is a brief representation of ADC's patents. Numerous patents remain unlisted that apply to the products mentioned in this catalog.



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Americas



| | | | |
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| Broadcasters General Store | 352-622-9058 | 352-629-7000 | www.bgsfl.com |
| BTX Technologies | 800-666-0996 | 914-592-0800 | www.btx.com |
| Clark Wire & Cable | 800-222-5348 | 847-949-9595 | www.clarkwire.com |
| Gepco | 800-966-0069 | 847-795-8770 | www.gepco.com |
| Herman Electronics | 305-477-0063 | 305-392-3377 | www.hermanelectronics.com |
| Pacific Radio | 800-634-9476 | 323-969-2053 | www.pacrad.com |
| Westlake Electronic Supply Inc. | 800-523-8677 | 206-628-0508 | www.westlake-electronic.com |
| **Canada** | | | |
| Azcar Technologies, Inc | 888-694-6623 | 905-470-2559 | www.azcar.com |
| BSE | 800-268-4081 | 416-438-6230 | www.bse.on.ca |
| Delco Wire & Cable | 800-667-8014 | 905-669-6869 | www.delcowire.com |
| **Latin America** | | | |
| Gepco | 800-966-0069 | 818-569-5222 | www.gepco.com |
| Invisio/Video Solutions Int'l | 305-823-0144 | 305-823-9939 | ww.invisio.tv |
| **Argentina** | | | |
| LADE Professional | (54-11) 4639-8939 | | www.ladeprofesional.com.ar |
| **Bolivia** | | | |
| Ingeniería de Televisión y Telecomunicaciones S.R.L. | 591-2-222-0975 | | |
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| Libor Comercio e Importação Ltda. | 55-11-34-8339 | | |
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| AMT - Advanced Media Technologies | 954-427-5711 ext. 226 | | www.goamt.com |
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| SEEL S.A. | 571-252-3800 | | |
| **Costa Rica** | | | |
| Provideo S.A. | 506-227-8283 | | |
| **Ecuador** | | | |
| BPE Electronic, Ltda | +593 (2) 244-2902 | +593 (2) 225-5327 | www.bpeelectronic.com |
| **Honduras** | | | |
| Cocatel | (504) 255-0604 | (504) 255-0730 | www.cocatel.com |
| **Mexico** | | | |
| Dicimex | 5605-5878 | 5605-7616 | www.dicimex.com |
| DBE Inc. | 210-805-606 | | |
| Excelencia en Comunicaciones y Tecnologia, S.A. de C.V. | 52-55-523-350 | | |
| **Panama** | | | |
| Dataserve | 507-263-4646 | | |
| **Peru** | | | |
| TELVICOM S.A. | 51-1-225-8338 | | |
| **Puerto Rico** | | | |
| RGB | 1-787-793-8091 | | |
| **Venezuela** | | | |
| Hercasa Tecnologia, S.A. | +58 (212)-285-6440 | +58 (212) 285-9296 | |
| **Uruguay** | | | |
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## Asia-Pacific

| | | |
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| **Australia** | | |
| Australian Tel-TEC Pty Ltd | +61 (02) 9482 4533 | www.teltec.com.au |
| **China** | | |
| Beijing Lively Digital Technology | +86 10 51285311 | www.ldt.com |
| GuanHua Glory AV System Integration Co., Ltd. | +86 10 52215908 | www.ghg-av.com |
| Guangzhou Countline Tehnology Co Ltd. | +86 20 85599948 | |
| Sanitec Broadcast Systems Co Ltd. | +86 10 84981421 | www.sanitec.net.cn |
| Shanghai TV & Radio Int'l (HK) Co | +86 51801888 | |
| **Hong Kong** | | |
| Advanced Communication Equipment (Int) Co. Ltd. | +852 2942 2100 | www.acehk.com |
| EverTop International Technology Ltd. | +852 2370 9722 | www.evertoptech.com |
| Futac International Limited | +852 8200 2056 | www.futac.com |
| Ideal Systems Asia Pacific Co. Ltd. | +852 2801 4040 | |
| Macostar Technology Ltd. | +852 2814 1881 | www.macostar.com |
| TOPCAST Technical Supplies | +852 23054111 | |
| **India** | | |
| CINEOM Broadcasting India | +91 222 8783401 | www.cineom.com |
| IDEAL Broadcasting India Pvt. Ltd. | +91 11 26134221 | |
| PROMEDIA | +91 22 67021711 | www.promediain.net |
| SETRON India Pvt. Ltd. | +91 11 26242250 | www.setronindia.com |
| SHAF Broadcast Pvt. Ltd. | +91 22 56972999 | www.shafindia.com |
| TELERAD | +91 7922813017 | www.teleradindia.com |
| **Indonesia** | | |
| ALFATECH | +62 21 5723139 | www.alfatech-broadcast.com |
| **Japan** | | |
| AIM Co. Ltd. | +81035 549 7511 | |
| **Malaysia** | | |
| Argosy Cable Asia SDN BHD | +60 379567422 | steve@argosycable.com |
| O'Connor's Engineering SDN. BHD. | +60 3 79538568 | www.oconnors.com.my |
| **New Zealand** | | |
| Cobalt Technologies Limited | +649 4139070 | www.cobalt.co.nz |
| **Philippines** | | |
| ADTEL | +63 29102727 | www.adtelinc.com.ph |
| Composite Technology, Inc. | +63 2 4110747 | www.composite.com |
| Media Convergence Inc. | +63 2 4264360 | www.mediaconvergenceinc.com |
| **Singapore** | | |
| Broadcast Engineering Services Pte. Ltd. | +65 65540110 | www.bes.com |
| Coastal Electronics Pte. Ltd. | +65 63383076 | www.coastal.com.sg |
| **South Korea** | | |
| Shinjeong Protech Corp. | +82 7837588 | |
| SION MEDIA | +82 2 21095842 | www.sionmedia.com |
| SyncTech Audio Visual System Engineering | +82 2 4256450 | |
| Vision Systems Corp | +82 2 84877718 | www.visions.co.kr |
| **Taiwan** | | |
| Interactive Digital Technologies Inc. | +886 2 26585858 | |
| TELTAI (Taiwan) Ltd. | +866 2 27733237 | www.teltai.com.tw |
| **Thailand** | | |
| KDM Trading Co Ltd | +66 2 7186085 | www.kdm.co.th |
| PINNACLE | +66 2 7343488 | www.pinnacleholding.com |
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| TelTechco | +68 4 5370927 | www.teltechco.com |



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| **Belgium** | | |
| Diginet | +32 2 257 01 81 | www.diginet.be |
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| Professional Sound systems | +45 3297 2900 | www.pss.dk |
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| TV Tools Oy | +358 9 525 9700 | www.tvtools.fi |
| **France** | | |
| Pilote Films | +33 (0) 5 58 41 41 41 | www.pilotefilms.com |
| **Germany** | | |
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| **Greece** | | |
| Telmaco | +30 210 68 74 100 | www.telmaco.gr |
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| Professional Show | +39 049 865 7111 | www.professionalshow.com |
| **Lithuania** | | |
| TV & Communication Systems | +370 41 520 295 | www.tvc.lt |
| **Macedonia** | | |
| Videolab | +49 221 595 69 200 | www.video-lab.de |
| **The Netherlands** | | |
| Diginet | +32 2 257 01 81 | www.diginet.be |
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| **Ukraine** | | |
| ComTel | +380 44 2386845 | www.comtel.com.ua |
| **United Kingdom** | | |
| Argosy Components Ltd | +44 (0)1844 202 101 | www.argosycable.com/ |

For any other country in Europe, Middle-East and Africa :
please contact ADC - Hervé Fauvelet +33 (0) 6 21 24 43 80 herve.fauvelet@adc.com

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