



# Broadcast

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## Interconnect Products



AMS30




# MOSAIC

AVP Mosaic audio and video patching components provide exceptional functionality and circuit identification standards to simplify system design, installation, operation and maintenance.

## Key Mosaic Features:

- CIS (Circuit Identification System) allows color-coding of every circuit to visually identify each circuit by color
- Patented designation design maximizes viewable area
- Numbered jack positions for quick and accurate installation, system troubleshooting and operational ease
- Front-mount jacks simplify system re-design and maintenance




AVP suggests the use of the following color code to indicate various normaling options in Mosaic jackfields and patchbays. You are not limited to this color coding, as indicators are available in 10 colors. Our customers have found they are able to quickly determine the operation of each circuit by using the following standard:

-  **Red: Full Normals:** Red coding is used for 'full normals' (normals strapped) to designate **STOP** and be sure of your action because patching a full normalled jack will cause you to lose a circuit.
-  **Yellow: Half Normals** (audio): Yellow coding signifies patching into 'half normalled' positions, and **CAUTIONS** that patching the input (bottom jack) will break the path, while it is safe to patch into the top (output) without breaking the path.
-  **Green: No Normals:** Green coding indicates a 'non normalled' circuit, **GO**-ahead and patch, nothing to lose!

## AVP Circuit Identification System (CIS) Allows Specific Circuit Identification



... see page 38

-  Full Normals
-  Half Normals
-  No Normals



Mosaic jackfields are shipped with normaling type identified by color, but interchangeable Indicators are available in 10 colors so you can color-code your system according to your own system design. (easily identify critical circuits, signal type etc)

- |  |  |   |  |   |
|--|--|---|--|---|
|  <b>BLACK</b> |  <b>BROWN</b> |  <b>RED</b>    |  <b>ORANGE</b> |  <b>YELLOW</b> |
|  <b>GREEN</b> |  <b>BLUE</b>  |  <b>PURPLE</b> |  <b>GRAY</b>   |  <b>WHITE</b>  |



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#### Datapatch/RS422 Patching System - Durable Polarity Protected Patching

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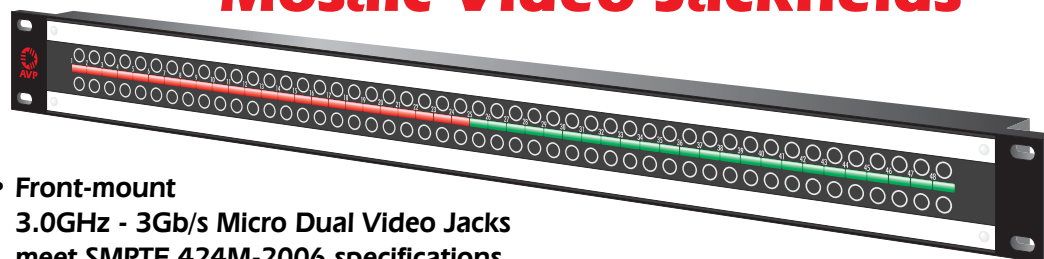
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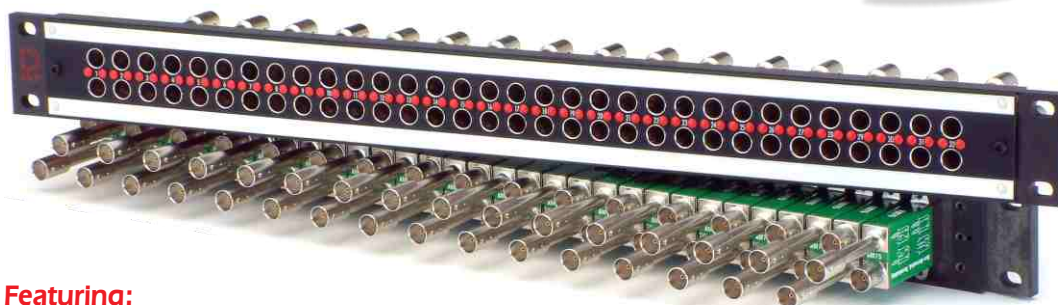
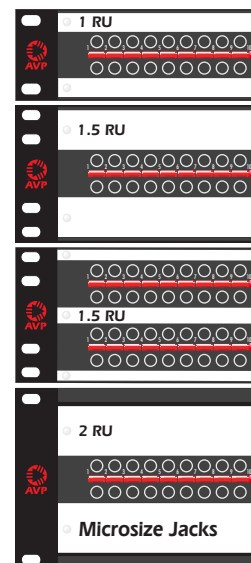
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### Super<sup>HD+</sup> Series Mosaic Video Jackfields



- Front-mount  
3.0GHz - 3Gb/s Micro Dual Video Jacks  
meet SMPTE 424M-2006 specifications
- Industry Standard DIN 1.0/2.3 rear termination
- Allows 48 channels / 96 patchpoints in a 1RU, 19" rack
- Design is based on our very successful, market proven midsize & standard size video jacks, with over a half million jacks in service
- Life Cycle rating of 20,000
- Multiple jack configurations available
- Made & assembled in Canada/USA

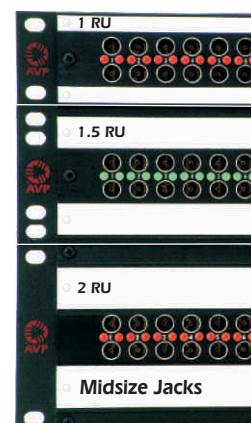
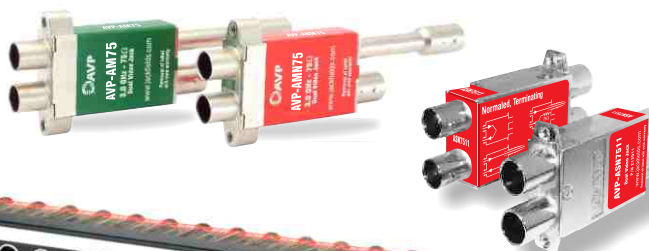
#### Microsize Jacks



#### Featuring:

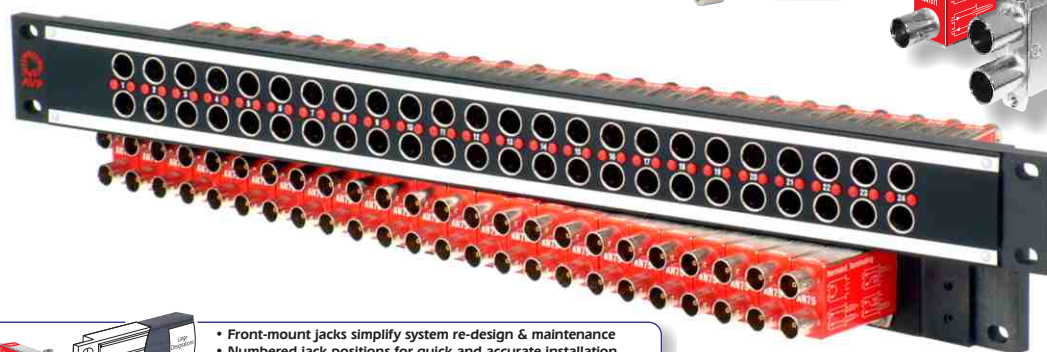
- SuperHD+ 3.0GHz - 3Gb/s Standard or Midsize jacks
- Jacks meet SMPTE 424M-2006 HDTV specifications
- Life Cycle rating of 30,000
- Various normalizing & terminating combinations for all applications
- 1RU, 1.5RU or 2RU Mosaic panels
- Made & assembled in Canada/USA

#### Midsize Jacks

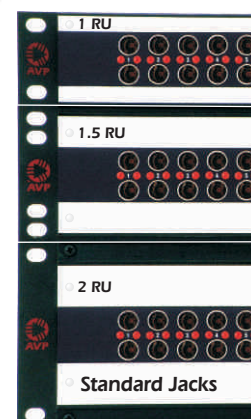


#### Application:

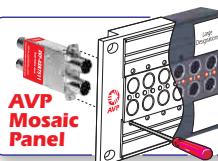
- HDTV, Serial Digital, Analog



#### Standard Jacks



### Features & Benefits



- Front-mount jacks simplify system re-design & maintenance
- Numbered jack positions for quick and accurate installation, system troubleshooting & operational ease
- Patented designation design maximizes viewable area
- CIS (Circuit Identification System), allows color-coding of every circuit
- Captive screws stay in the panel, not lost in the rack




### SuperHD+ Series 3.0GHz - 3Gb/s Microsize Dual Video Jack Specifications



#### Electrical:

Rated Bandwidth: 3.0GHz - 3Gb/s: meets HDTV SMPTE 424M-2006 Specification  
Characteristic Impedance: 75 Ohms  
Contact Resistance: Less than 50 milliohms  
Termination Resistance: 75 Ohms  $\pm$  1%

#### Environmental:

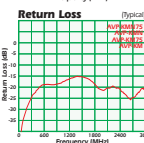
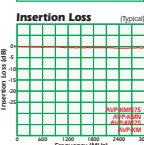
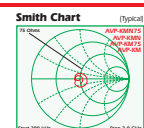
Operating Temperature: -40°C to 65°C  
Storage Temperature: -40°C to 65°C  
Thermal Shock: Per MIL-STD-202, Method 107  
Moisture and Humidity: Per MIL-STD-202, Method 106  
RoHS:  RoHS Compliant

#### Mechanical:

Mechanical Shock: Per MIL-STD-202, Method 213, Test condition I  
Vibration: Per MIL-STD-202, Method 201  
Life cycle: 20,000 minimum

#### Material:

Housing: Zinc alloy, nickel plated  
Center Contacts: Copper alloy, gold plated  
Switching Contacts: Copper alloy, gold plated  
Grounding Contacts: Copper alloy, gold plated  
Actuators: Thermoplastic, UL 94V-0 rated  
Insulators: Teflon



## Microsize Video Jacks Configurations and Specifications


### SuperHD+ Series 3.0GHz - 3Gb/s Midsize Dual & Single Video Jack Specifications



#### Electrical:

Rated Bandwidth: 3.0GHz - 3Gb/s: meets HDTV SMPTE 424M-2006 Specification  
Characteristic Impedance: 75 Ohms  
Return Loss: See typical Return Loss chart  
Insertion Loss: See typical Insertion Loss chart  
Contact Resistance: Less than 50 milliohms  
Termination Resistance: 75 Ohms  $\pm$  1%  
Center Conductor: Accepts 0.048" pin diameter

#### Environmental:

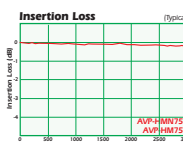
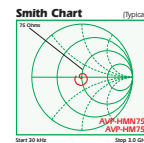
Operating Temperature: -40°C to 65°C  
Storage Temperature: -40°C to 65°C  
Thermal Shock: Per MIL-STD-202, Method 107  
Moisture and Humidity: Per MIL-STD-202, Method 106  
RoHS:  RoHS Compliant

#### Mechanical:

Mechanical Shock: Per MIL-STD-202, Method 213, Test condition I  
Vibration: Per MIL-STD-202, Method 201  
Insertion Force: 7 lbs. maximum  
Withdrawal Force: 3 lb. minimum  
Life cycle: 30,000 minimum

#### Material:

Housing: Zinc alloy, nickel plated  
Center Contacts: Copper alloy, gold plated  
Switching Contacts: Copper alloy, gold plated  
Grounding Contacts: Copper alloy, gold plated  
Actuators: Thermoplastic, UL 94V-0 rated  
BNC Insulators: Teflon



## Midsize Video Jacks Configurations and Specifications


### SuperHD+ Series 3.0GHz - 3Gb/s Standard Dual Video Jack Specifications



#### Electrical:

Rated Bandwidth: 3.0GHz - 3Gb/s: meets HDTV SMPTE 424M-2006 Specification  
Characteristic Impedance: 75 Ohms  
Return Loss: See typical Return Loss chart  
Insertion Loss: See typical Insertion Loss chart  
Contact Resistance: Less than 50 milliohms  
Termination Resistance: 75 Ohms  $\pm$  1%  
Center Conductor: Accepts 0.090" pin diameter

#### Environmental:

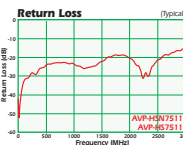
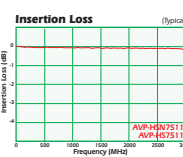
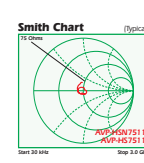
Operating Temperature: -40°C to 65°C  
Storage Temperature: -40°C to 65°C  
Thermal Shock: Per MIL-STD-202, Method 107  
Moisture and Humidity: Per MIL-STD-202, Method 106  
RoHS:  RoHS Compliant

#### Mechanical:

Mechanical Shock: Per MIL-STD-202, Method 213, Test condition I  
Vibration: Per MIL-STD-202, Method 201  
Insertion Force: 12 lbs. maximum  
Withdrawal Force: 3 lbs. minimum  
Life cycle: 30,000 minimum

#### Material:

Housing: Zinc alloy, nickel plated  
Center Contacts: Copper alloy, gold plated  
Switching Contacts: Copper alloy, gold plated  
Grounding Contacts: Copper alloy, gold plated  
Actuators: Thermoplastic, UL 94V-0 rated  
BNC Insulators: Teflon



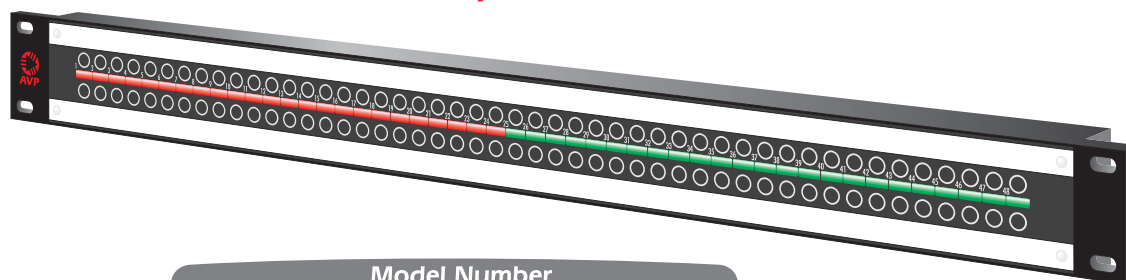
## Standard Video Jacks Configurations and Specifications

Ordering Information  
(over)

Video jack schematics... page 58

## Super<sup>HD+</sup> Series 3.0GHz - 3Gb/s Micro Video Jackfield

### Microsize Video Ordering Information



Model Number  
A V - K [ ] [ ] E [ ] - [ ] - [ ]

#### Panel Configuration

- 2 2x48 (48 Dual Jacks)
- 4 4x48 (96 Dual Jacks)

#### Number of Jacks Across

- 48 48 Jacks

#### Panel Height

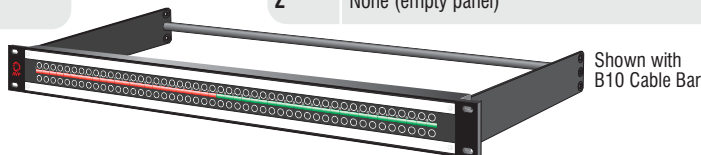
- 1 1 Rack Unit 1.75", 44mm
- 15 1.5 Rack Unit 2.62", 66mm
- 2 2 Rack Unit 3.50", 89mm

#### Cable Bar Option

- BZ No Cable Bar
- B10 7.0" [178mm] Cable Bar

#### Installed Front-mount Jack Type

- KMN75 3.0Ghz - 3Gb/s 75Ω Normaled, Terminating, dual jack
- KM75 3.0Ghz - 3Gb/s 75Ω Non-Normaled, Terminating, dual jack
- KMN 3.0Ghz - 3Gb/s 75Ω Normaled, Non-Terminating, dual jack
- KM 3.0Ghz - 3Gb/s 75Ω Non-Normaled, Non-Terminating, dual jack
- Z None (empty panel)




Shown with  
B10 Cable Bar

#### Popular Models

Model	Description
Complete Jackfields - 3.0GHz - 3Gb/s normaled terminating (KMN75)	
AV-K248E1-KMN75-B10	2x48 Panel, 1RU 48 KMN75 normaled terminating front-mount jacks, 7" [178mm] cable bar
AV-K248E15-KMN75-B10	2x48 Panel, 1.5RU 48 KMN75 normaled terminating front-mount jacks, 7" [178mm] cable bar
AV-K448E15-KMN75-B10	4x48 Panel, 1.5RU 96 KMN75 normaled terminating front-mount jacks, 7" [178mm] cable bar
AV-K248E2-KMN75-B10	2x48 Panel, 2RU 48 KMN75 normaled terminating front-mount jacks, 7" [178mm] cable bar
Complete Jackfields - 3.0GHz - 3Gb/s non-normaled terminating (KM75)	
AV-K248E1-KM75-B10	2x48 Panel, 1RU 48 KM75 non-normaled terminating front-mount jacks, 7" [178mm] cable bar
AV-K248E15-KM75-B10	2x48 Panel, 1.5RU 48 KM75 non-normaled terminating front-mount jacks, 7" [178mm] cable bar
AV-K448E15-KM75-B10	4x48 Panel, 1.5RU 96 KM75 non-normaled terminating front-mount jacks, 7" [178mm] cable bar
AV-K248E2-KM75-B10	2x48 Panel, 2RU 48 KM75 non-normaled terminating front-mount jacks, 7" [178mm] cable bar
Empty Panels	
AV-K248E1-Z-B10	2x48 Panel, 1RU, empty, for AVP front-mount jacks, 7" [178mm] cable bar
AV-K248E15-Z-B10	2x48 Panel, 1.5RU, empty, for AVP front-mount jacks, 7" [178mm] cable bar
AV-K448E15-Z-B10	4x48 Panel, 1.5RU, empty, for AVP front-mount jacks, 7" [178mm] cable bar
AV-K248E2-Z-B10	2x48 Panel, 2RU, empty, for AVP front-mount jacks, 7" [178mm] cable bar

Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)

Microsize Video Patchcords								
	1'	300mm	KPC-1-BLACK	KPC-1-RED	KPC-1-GREEN	KPC-1-BLUE	KPC-1-YELLOW	KPC-1-PURPLE
	1.5'	450mm	KPC-1.5-BLACK	KPC-1.5-RED	KPC-1.5-GREEN	KPC-1.5-BLUE	KPC-1.5-YELLOW	KPC-1.5-PURPLE
	2'	600mm	KPC-2-BLACK	KPC-2-RED	KPC-2-GREEN	KPC-2-BLUE	KPC-2-YELLOW	KPC-2-PURPLE
	3'	900mm	KPC-3-BLACK	KPC-3-RED	KPC-3-GREEN	KPC-3-BLUE	KPC-3-YELLOW	KPC-3-PURPLE
	4'	1200mm	KPC-4-BLACK	KPC-4-RED	KPC-4-GREEN	KPC-4-BLUE	KPC-4-YELLOW	KPC-4-PURPLE
	6'	1800mm	KPC-6-BLACK	KPC-6-RED	KPC-6-GREEN	KPC-6-BLUE	KPC-6-YELLOW	KPC-6-PURPLE
	10'	3.05m	KPC-10-BLACK	KPC-10-RED	KPC-10-GREEN	KPC-10-BLUE	KPC-10-YELLOW	KPC-10-PURPLE

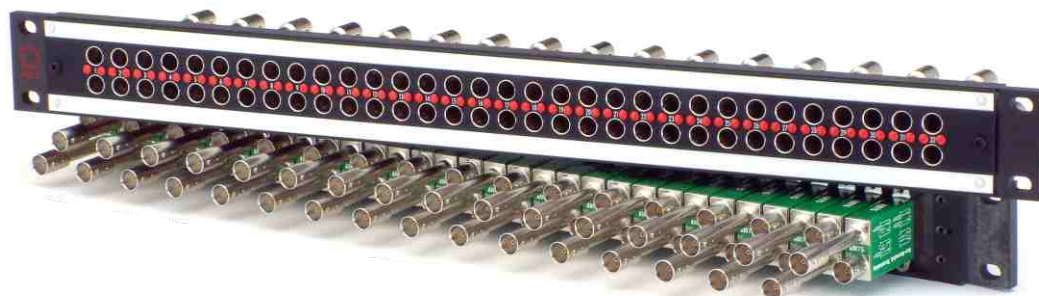
\*more patchcords available on page 5b

\*more patchcords available on page 56

### Microsize Video Patchcords 3GHz




## Super<sup>HD+</sup> Series 3.0GHz - 3Gb/s Midsize Video Jackfield



Model Number  
[ ] V - D 2 [ ] E [ ] - [ ] - [ ]

### Series

- A** Mosaic 
- T** Mosaic (Black CIS)

### Panel Hole Configuration

- 32** 2 x 32
- 34** 2 x 34
- 36** 2 x 36

### Rack Space

- 1** 1 Rack Unit 1.75", 44mm
- 15** 1.5 Rack Unit 2.62", 66mm
- 2** 2 Rack Unit 3.50", 89mm

### Cable Bar Option

- BZ** No Cable Bar
- B10** 7.0" [178mm] Cable Bar  
*\*not available on 2x34 & 2x36 panels\*\**
- B21** 6.0" [152mm] cable bar, *\*only available on 1.5 & 2RU, 2x34 & 2x36 panels*



*\*\*no cable bars available for 1RU 2x34 & 2X36 panels*

### Installed Jack Type


- AMN75** 3.0GHz - 3Gb/s 75Ω Normaled, Terminating
- AM75** 3.0GHz - 3Gb/s 75Ω Non-Normaled, Terminating
- AMN** 3.0GHz - 3Gb/s 75Ω Normaled, Non-Terminating
- AM** 3.0GHz - 3Gb/s 75Ω Non-Normaled, Non-Terminating
- AMSL75** 3.0GHz - 3Gb/s 75Ω Terminating, single long
- AMSS75** 3.0GHz - 3Gb/s 75Ω Terminating, single short
- AMSL** 3.0GHz - 3Gb/s 75Ω Non-Terminating, single long
- AMSS** 3.0GHz - 3Gb/s 75Ω Non-Terminating, single short
- Z** None (empty panel)

Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)

### Popular Models

	Model	Description
	Complete Jackfields - 3.0GHz - 3Gb/s normaled terminating (AMN75)	
	<b>AV-D232E1-AMN75-BZ</b>	1RU, 2x32 Captive Screw Panel 32 AMN75 normaled terminating jacks, no cable bar
	<b>AV-D232E2-AMN75-BZ</b>	2RU, 2x32 Captive Screw Panel 32 AMN75 normaled terminating jacks, no cable bar
	Complete Jackfields - 3.0GHz - 3Gb/s non-normaled terminating (AM75)	
	<b>AV-D232E1-AM75-BZ</b>	1RU, 2x32 Captive Screw Panel 32 AM75 non-normaled terminating jacks, no cable bar
	<b>AV-D232E2-AM75-BZ</b>	2RU, 2x32 Captive Screw Panel 32 AM75 non-normaled terminating jacks, no cable bar
	Empty Panels	
	<b>AV-D232E1-Z-BZ</b>	1RU, 2x32 Captive Screw Panel, empty, no cable bar
	<b>AV-D232E2-Z-BZ</b>	2RU, 2x32 Captive Screw Panel, empty, no cable bar

### Midsize Video Patchcords

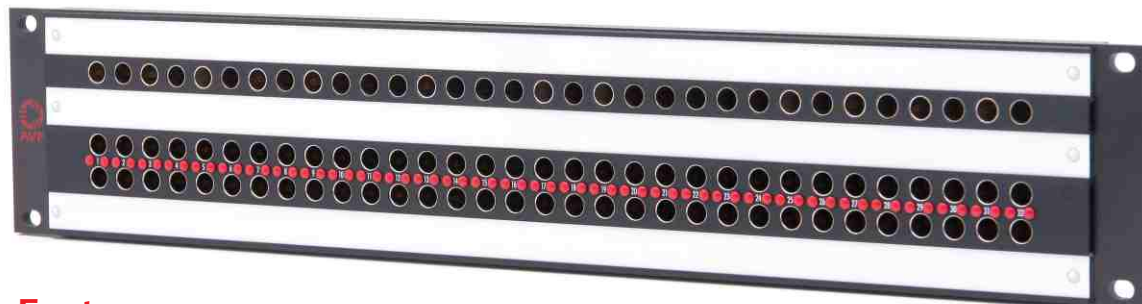
Midsize Video Patchcords								
	1'	300mm	MPC-1-BLACK	MPC-1-RED	MPC-1-GREEN	MPC-1-BLUE	MPC-1-YELLOW	MPC-1-PURPLE
	1.5'	450mm	MPC-1.5-BLACK	MPC-1.5-RED	MPC-1.5-GREEN	MPC-1.5-BLUE	MPC-1.5-YELLOW	MPC-1.5-PURPLE
	2'	600mm	MPC-2-BLACK	MPC-2-RED	MPC-2-GREEN	MPC-2-BLUE	MPC-2-YELLOW	MPC-2-PURPLE
	3'	900mm	MPC-3-BLACK	MPC-3-RED	MPC-3-GREEN	MPC-3-BLUE	MPC-3-YELLOW	MPC-3-PURPLE
	4'	1200mm	MPC-4-BLACK	MPC-4-RED	MPC-4-GREEN	MPC-4-BLUE	MPC-4-YELLOW	MPC-4-PURPLE
	6'	1800mm	MPC-6-BLACK	MPC-6-RED	MPC-6-GREEN	MPC-6-BLUE	MPC-6-YELLOW	MPC-6-PURPLE
	10'	3.05m	MPC-10-BLACK	MPC-10-RED	MPC-10-GREEN	MPC-10-BLUE	MPC-10-YELLOW	MPC-10-PURPLE

\*more patchcords available on page 56

*\*more patchcords available on page 56*

## Midsize Video Patchcords 3GHz

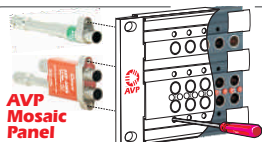
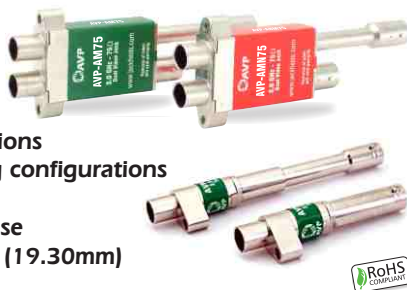
## Super<sup>HD+</sup> Series Midsize Video with Monitor Row



**Midsize 3x32  
3x34 & 3x36  
Video Monitor  
3.0GHz - 3Gb/s**

### Features

- Exceptional performance in HDTV, serial digital and analog applications
- 3.0GHz - 3Gb/s Midsize dual and single video jacks meet SMPTE 424M-2006 specifications
- Life cycle rating of 30,000
- Dual jacks available in normalizing and non-normalizing configurations
- Single & Dual jacks available in terminating and non-terminating configurations
- Numbered jack positions front and rear for quick and accurate installation, system troubleshooting and operational ease
- Patented designation design maximizes viewable height, 0.760" (19.30mm)
- Available in 3x32, 3x34 and 3x36 configurations



- Front-mount jacks simplify system re-design & maintenance
  - Numbered jack positions for quick and accurate installation, system troubleshooting & operational ease
  - Patented designation design maximizes viewable area
  - CIS (Circuit Identification System), allows color-coding of every circuit
- Captive screws stay in the panel, not lost in the rack

Video Jack Specifications... page 5


Patchcords available... page 56

## Ordering Information

### Popular Models Ordering Information

Model	Description
AV-D332E2-AMN75/AMS75-BZ	2RU, 3x32. - 2x32 3.0GHz - 3Gb/s, 75 Ohm, normaled, terminating midsize video jacks, with 1x32 monitor row of 3.0GHz - 3Gb/s, 75 Ohm, non-normaled, terminating midsize single video jacks, no cable bar
AV-D332E2-AMN75/AMS75-B10	2RU, 3x32. - 2x32 3.0GHz - 3Gb/s, 75 Ohm, normaled, terminating midsize video jacks, with 1x32 monitor row of 3.0GHz - 3Gb/s, 75 Ohm, non-normaled, terminating midsize single video jacks, with 7" [178mm] cable bar
AV-D334E2-AMN75/AMS75-BZ	2RU, 3x34. - 2x34 3.0GHz - 3Gb/s, 75 Ohm, normaled, terminating midsize video jacks, with 1x34 monitor row of 3.0GHz - 3Gb/s, 75 Ohm, non-normaled, terminating midsize single video jacks, no cable bar option
AV-D336E2-AMN75/AMS75-BZ	2RU, 3x36. - 2x36 3.0GHz - 3Gb/s, 75 Ohm, normaled, terminating midsize video jacks, with 1x36 monitor row of 3.0GHz - 3Gb/s, 75 Ohm, non-normaled, terminating midsize single video jacks, no cable bar option

Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)

Midsize Video Patchcords								
	1'	300mm	MPC-1-BLACK	MPC-1-RED	MPC-1-GREEN	MPC-1-BLUE	MPC-1-YELLOW	MPC-1-PURPLE
	1.5'	450mm	MPC-1.5-BLACK	MPC-1.5-RED	MPC-1.5-GREEN	MPC-1.5-BLUE	MPC-1.5-YELLOW	MPC-1.5-PURPLE
	2'	600mm	MPC-2-BLACK	MPC-2-RED	MPC-2-GREEN	MPC-2-BLUE	MPC-2-YELLOW	MPC-2-PURPLE
	3'	900mm	MPC-3-BLACK	MPC-3-RED	MPC-3-GREEN	MPC-3-BLUE	MPC-3-YELLOW	MPC-3-PURPLE
	4'	1200mm	MPC-4-BLACK	MPC-4-RED	MPC-4-GREEN	MPC-4-BLUE	MPC-4-YELLOW	MPC-4-PURPLE
	6'	1800mm	MPC-6-BLACK	MPC-6-RED	MPC-6-GREEN	MPC-6-BLUE	MPC-6-YELLOW	MPC-6-PURPLE
	10'	3.05m	MPC-10-BLACK	MPC-10-RED	MPC-10-GREEN	MPC-10-BLUE	MPC-10-YELLOW	MPC-10-PURPLE

\*more patchcords available on page 56

\*more patchcords available on page 56

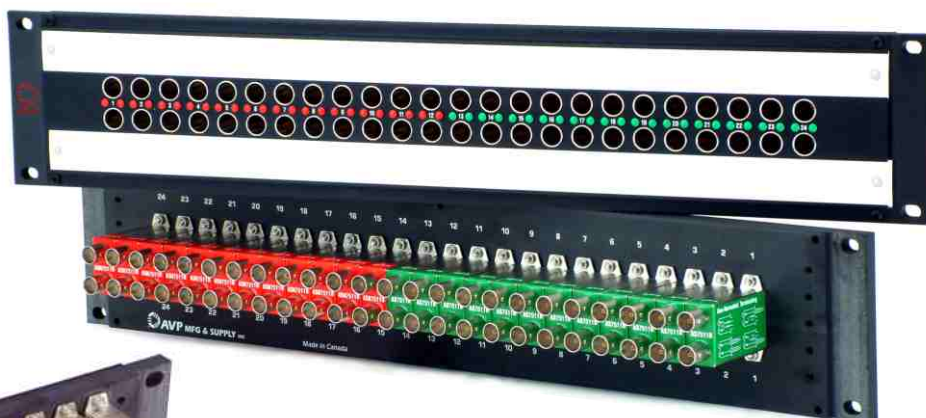
**Midsize Video  
Patchcords  
3GHz**



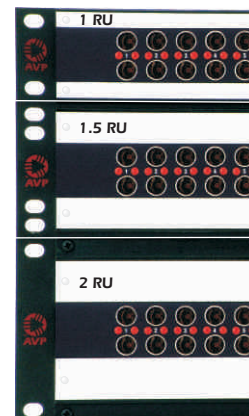
## Super<sup>HD+</sup> Series

### 3.0GHz - 3Gb/s Standard Size Video Jack

### Standard Size Video




Mosaic standard size video panels also accept AVP longframe audio jacks using the same captive screw system



### Ordering Information

Model Number	
<b>V</b>	<b>C 2 E</b>

**Series**

**A** Mosaic 

**T** Mosaic (Black CIS)

**Number of Dual Jacks**

**24** 24 Jacks

**26** 26 Jacks

**28** 28 Jacks

**Rack Space**

**1** 1 Rack Unit 1.75", 44mm

**15** 1.5 Rack Unit 2.62", 66mm

**2** 2 Rack Unit 3.50", 89mm

**Cable Bar Option**

**BZ** No Cable Bar

**B10** 7.0" [178mm] Cable Bar  
\*not available on 2x28 panels\*\*

**B21** 6.0" [152mm] cable bar, \*only available on 1.5 & 2RU, 2x28 panels

\*\*no cable bar available for 1RU 2x28 panel

**Installed Jack Type**

**ASN7511** 3.0GHz - 3Gb/s 75Ω Normaled, Terminating

**AS7511** 3.0GHz - 3Gb/s 75Ω Non-Normaled, Terminating

**ASN11** 3.0GHz - 3Gb/s 75Ω Normaled, Non-Terminating


**AS11** 3.0GHz - 3Gb/s 75Ω Non-Normaled, Non-Term.

**Z** None (empty panel)

Designation Layouts...  
[www.jackfields.com/support](http://www.jackfields.com/support)

#### Popular Models

Model	Description
Complete Jackfields - 3.0GHz - 3Gb/s normaled terminating (ASN7511)	
<b>AV-C224E1-ASN7511-BZ</b>	1RU, 2x24 Captive Screw Panel, 24 ASN7511 normaled terminating jacks, no cable bar
<b>AV-C224E2-ASN7511-BZ</b>	2RU, 2x24 Captive Screw Panel, 24 ASN7511 normaled terminating jacks, no cable bar
Complete Jackfields - 3.0GHz - 3Gb/s non-normaled terminating (AS7511)	
<b>AV-C224E1-AS7511-BZ</b>	1RU, 2x24 Captive Screw Panel, 24 AS7511 non-normaled terminating jacks, no cable bar
<b>AV-C224E2-AS7511-BZ</b>	2RU, 2x24 Captive Screw Panel, 24 AS7511 non-normaled terminating jacks, no cable bar
Empty Panels	
<b>AV-C224E1-Z-BZ</b>	1RU, 2x24 Captive Screw Panel, empty, no cable bar
<b>AV-C224E2-Z-BZ</b>	2RU, 2x24 Captive Screw Panel, empty, no cable bar

Standard Size Video Patchcords							
	1' 300mm	VPC-1-BLACK	VPC-1-RED	VPC-1-GREEN	VPC-1-BLUE	VPC-1-YELLOW	VPC-1-PURPLE
	1.5' 450mm	VPC-1.5-BLACK	VPC-1.5-RED	VPC-1.5-GREEN	VPC-1.5-BLUE	VPC-1.5-YELLOW	VPC-1.5-PURPLE
	2' 600mm	VPC-2-BLACK	VPC-2-RED	VPC-2-GREEN	VPC-2-BLUE	VPC-2-YELLOW	VPC-2-PURPLE
							*more patchcords available on page 56

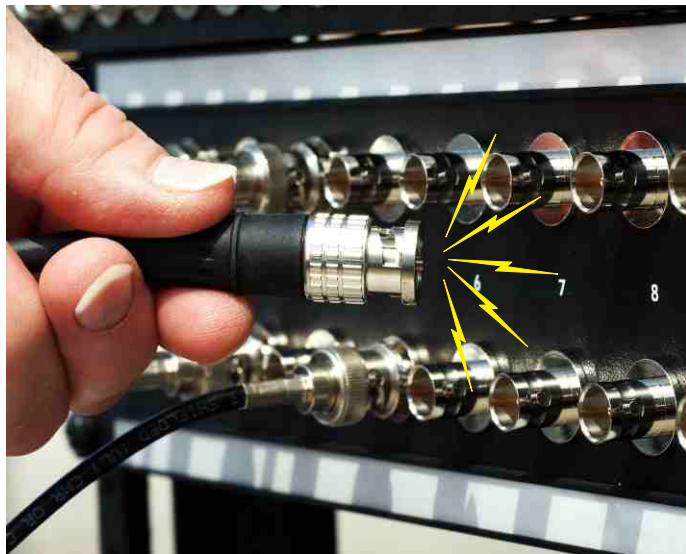
### Standard Size Video Patchcords 3GHz

## L Band Patching

### Overview

L Band comprises four different bands on the electromagnetic spectrum: 40-60 GHz (NATO), 1-2 GHz (IEEE), 1565-1625 nm (optical), and ~ 3.5 micrometres (infrared astronomy).

In broadcast technology, L Band refers to the frequency range of 950-1450 MHz ... 950-2025 MHz in MDU systems with stacked L band signals. Satellite modems and television receivers work in this range, with the signal translated to and from the satellite band by either dedicated upconverters/downconverters or a solid-state low-noise block converter and upconverter (LNB).



### The Problem

All receivers are designed with front ends featuring a generous input range and at least 50db of gain adaptable by Automatic Gain Control (AGC). Achieving full mute on the input typically requires isolation approaching 80db. Unpatched, a receiver with leakage across the jack will compensate by increasing sensitivity until it gets the input it

wants. This can usually be seen at initial patch when the signal briefly disappears until AGC obtains the required gain. The signal then reappears, apparently unaffected by patching. While it looks like the jack failed to switch, the receiver has actually compensated for the inadequate level. Most professional receivers have an input indicator which will show the drop but the “capture” effect of the front end will completely eliminate any cross-coupling of the two signals, and there will be no impairment to the patched signal. This AGC response is often very confusing to operations staff, and is almost always interpreted as jack failure.

There isn't a dual video jack on the market today that can meet the necessary level of isolation, so AVP does not recommend a dual video jack for L Band service. Even a BNC bulkhead using a BNC patchcord will have isolation issues when:

- LNBs connected to the upper row are powered
- The BNC patchcord is connected to a receiver input
- The other end of the BNC patchcord is held close to a BNC with a feed from an LNB

The signal from the LNB will radiate from the open BNC on the panel to the BNC on the end of the patchcord. At this point the receiver will often un-mute and display the signal from the LNB.

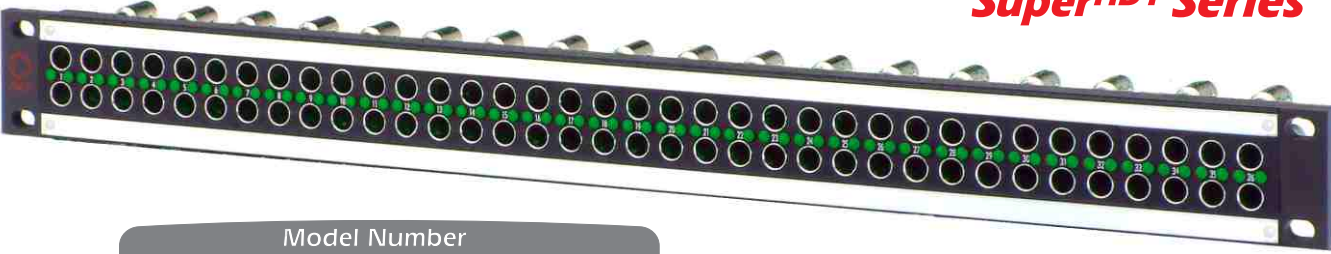
### The Solution

Because L Band service carries too much power on the cable for normalizing contacts and terminating resistors in a video jack, the answer is non-terminated midsize single jacks with looping plugs and/or insulated bulkhead BNC panels.

AVP midsize single video jacks with looping plugs for normalizing provide excellent return loss, the best isolation, and absolutely no issue with current load up to 2 amps.




## 3.0GHz - 3Gb/s Midsize Singles Video Jackfield Super<sup>HD+</sup> Series



**Model Number**

V - D 2 E - AMS -

**Series**

A Mosaic 


T Mosaic (Black CIS)

**Panel Hole Configuration**

32 2 x 32

34 2 x 34

36 2 x 36



AV-DLP  
Looping Plug

**Cable Bar Option**

BZ No Cable Bar

B10 7" [178mm] Cable Bar  
*\*not available on 1RU 2x34 & 2x36 panels*

**Installed Jack Type**

AMS 3.0GHz - 3Gb/s 75Ω Non-Terminating,  
alternating, single long & short


**Rack Space**

1 1 Rack Unit 1.75", 44mm

15 1.5 Rack Unit 2.62", 66mm

2 2 Rack Unit 3.50", 89mm

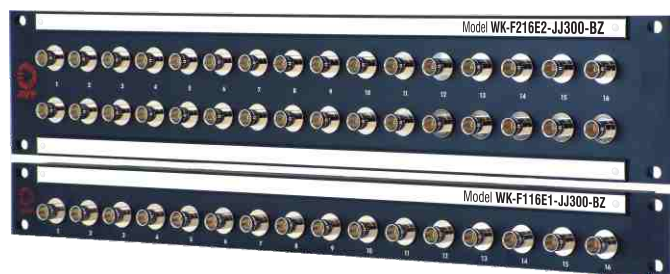
**AVP-AMSL**  
Non-Normaled, Non-Terminating



**AVP-AMSS**  
Non-Normaled, Non-Terminating

*Video Jack Specifications... page 5*  
*Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)*

## Insulated BNC Bulkhead Panels



**Non-Recessed Connector Panels**



**Semi-Recessed Connector Panels**

- Heavy-duty Rigid Phenolic Panels
- Attractive textured black semi-gloss finish
- Hi-Performance BNC-BNC Connectors
- Non-Recessed available in 12, 16, 20 & 24 positions
- Semi-Recessed available in 12, 16 & 20 positions
- Configurations up to 4x24

### Popular Models (Configurations up to 4x24 are available)

Model	Description
<b>BNC-BNC Non-recessed Connector Panels</b>	
WK-F116E1-JJ300-BZ	1RU, 1x16 position, BNC-BNC non-recessed panel, 16 JJ300 connectors, no cable bar
WK-F216E2-JJ300-BZ	2RU, 2x16 position, BNC-BNC non-recessed panel, 32 JJ300 connectors, no cable bar
WK-F320E2-JJ300-BZ	2RU, 3x20 position, BNC-BNC non-recessed panel, 60 JJ300 connectors, no cable bar
WK-F216E2-Z-BZ	2RU, 2x16 position, BNC-BNC non-recessed panel, empty, no cable bar
<b>BNC-BNC Semi-recessed Connector Panels</b>	
WK-G116E1-JJ300-BZ	1RU, 1x16 position, BNC-BNC semi-recessed panel, 16 JJ300 connectors, no cable bar
WK-G216E2-JJ300-BZ	2RU, 2x16 position, BNC-BNC semi-recessed panel, 32 JJ300 connectors, no cable bar
WK-G320E2-JJ300-BZ	2RU, 3x20 position, BNC-BNC semi-recessed panel, 60 JJ300 connectors, no cable bar
WK-G216E2-Z-BZ	2RU, 2x16 position, BNC-BNC semi-recessed panel, empty, no cable bar

For full line of BNC Bulkhead Panels... page 41  
For full line of Patchcords... page 56

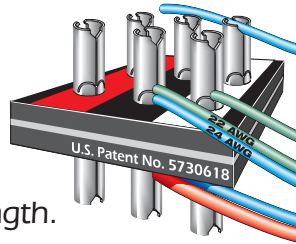
# AVP Rapid Punch Terminal (RPT) System

Worldwide installations...  
Unsurpassed performance...

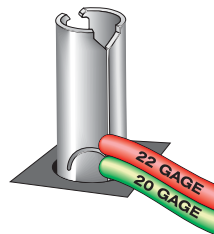
Features  
and Benefits

Performance  
Advantages

- 1 Bigger & Stronger**  
Size plus AVP's rigid mounting technique means unparalleled wire retention, no terminal push-through and overall superior strength.

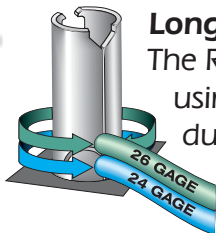


- 2 Extended Cable Range**  
The larger diameter barrel allows termination of 20-28 gage wire, solid or stranded, and it properly terminates bulkier 110 Ohm Digital Audio Cable.

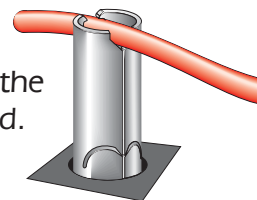


- 3 Multiple Wire Gages**  
The RPT terminal is certified for termination of different wire gages, **even on the same half of the terminal**. The colored arrows show the four mechanically independent slots.

- 4 Longer Life**  
The RPT terminal is certified for 300 punch cycles, using 22 to 26 gage wire, facilitating easy and durable re-configuration at any time.



- 5 Faster & Easier**  
The wire gripper locates and retains the wire before the punch enabling quick termination with just one hand.



- 6 Lifetime Tip Replacement**  
The AVP heavy-duty punch tip is guaranteed for life (and we're still waiting for the first claim).



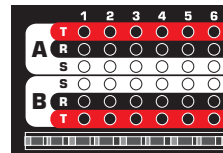


## Installation Advantages

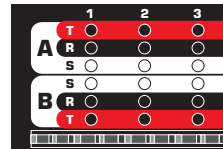
**7 Common Sense**  
Easy and unified integration because AVP panels have consistent color-coding and sequential numbering across the entire product line!

**8 Confidence**  
Terminate wire with 1 punch. The AVP punch tip makes a clear sound indicating a solid, gas-tight termination.

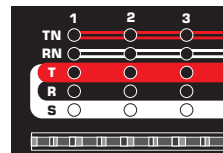
**9 Serviceability**  
Easily replace damaged terminals.



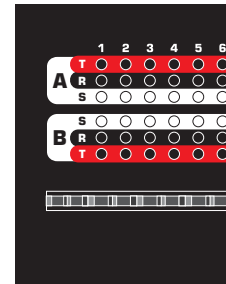
AP-B248S1 Series



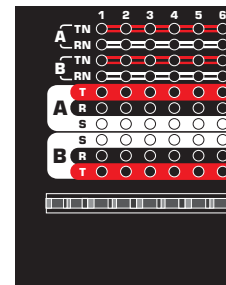
AP-A224E1 Series



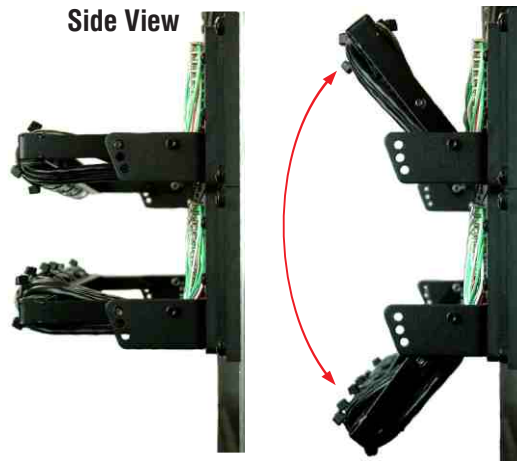
AP-A124E1 Series



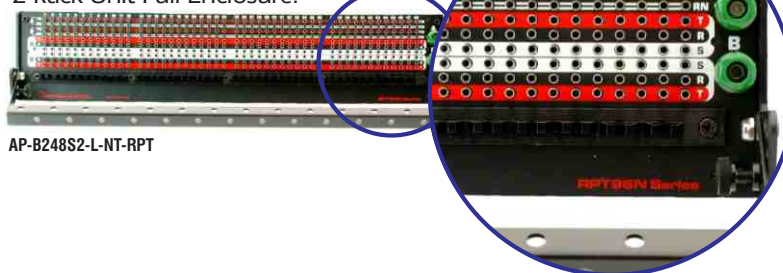
AP-B248S2 Series


AP-B248S2 Series  
with Normals Out

**10 RPT Pivoting Cable Bar**  
Accessibility is significantly improved with the pivoting cable bar, standard on all rack-mounted RPT product.



**11 Saves Space**  
2x48 Bantam Normals Out in a 2 Rack Unit Full Enclosure!



AP-B248S2-L-NT-RPT

## Standard Jackfield Styles

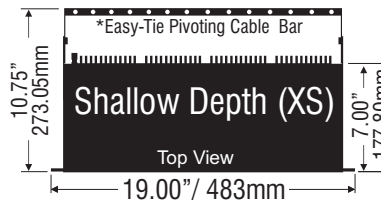
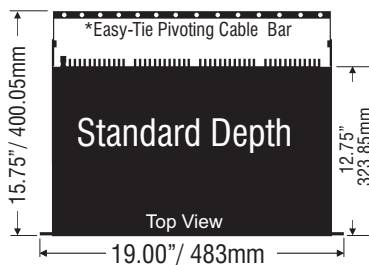
All AVP audio jackfields are suitable for AES/EBU digital and analog audio patching.



... see page 38



**Full Enclosure**

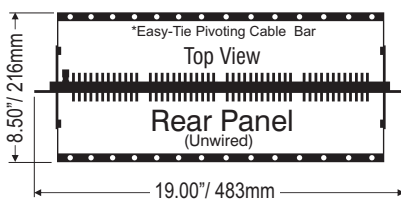


Standard Depth: 15.75", [400.05mm]

Shallow Depth Option (XS): 10.75", [273.05mm]

Standard umbilical length is 40", [1m]

See ordering details for specifying custom lengths



**Umbilical**



Punch Tool with Tip  
AT-RPT-PTK

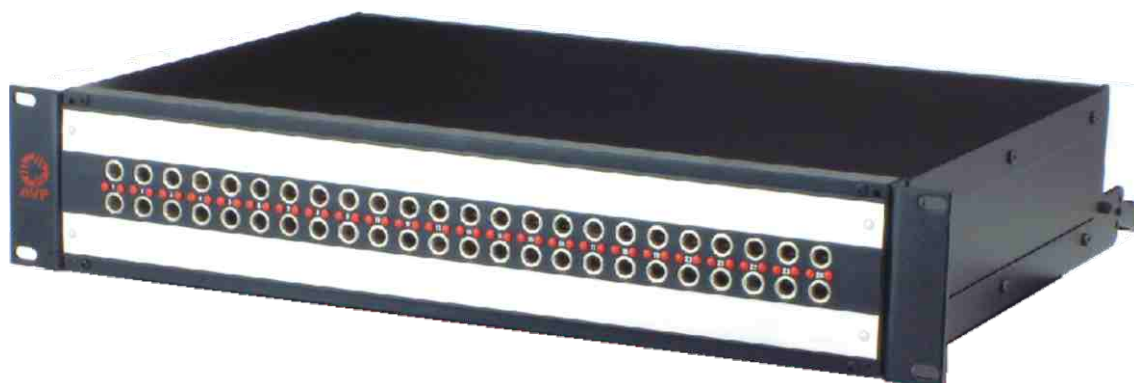


Punch Tip  
AT-RPT-TIP



Removal Tool Kit  
AT-RPT-RTK

**Tooling**



**Model Number**  
**P - A 2 E - L - RPT**

### Series

- A** Mosaic 
- T** Mosaic (Black CIS)

### Number of Jacks per Row

- 24** 2x24 Jacks
- 26** 2x26 Jacks

### Panel Height

- 1** 1 Rack Unit 1.75", 44mm
- 15** 1.5 Rack Unit 2.62", 66mm
- 2** 2 Rack Unit 3.50", 89mm

### Normaling

- FN** Full Normals installed at jacks
- FR** Normals Out, with Full Normals installed on the Punch Block
- HN** Half Normals installed at jacks
- HR** Normals Out, with Half Normals installed on the Punch Block
- NN** No Normals
- NT** Normals Out
- NTS** Sleeve Normals Out

### Options, add to end of Model Number


- XS** Jackfield Depth, Shallow, 10.75", 177.80mm
- BGHJ** Bussed Grounds at jacks, horizontal
- SGVJ** Strapped Grounds at each vertical jack pair

## Longframe Full Enclosure Ordering Information

Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)

### Popular Models

Model	Description
<b>AP-A224E2-L-NT-RPT</b>	2RU, 2x24 Longframe Jacks, Normals Out, RPT Punch Block
<b>AP-A224E2-L-FN-RPT</b>	2RU, 2x24 Longframe Jacks, Full Normals, RPT Punch Block
<b>AP-A224E2-L-HN-RPT</b>	2RU, 2x24 Longframe Jacks, Half Normals, RPT Punch Block
<b>AP-A224E1-L-FN-RPT</b>	1RU, 2x24 Longframe Jacks, Full Normals, RPT Punch Block
<b>AP-A224E1-L-HN-RPT</b>	1RU, 2x24 Longframe Jacks, Half Normals, RPT Punch Block



**Longframe Patchcords**

Length	Black	Red	Green	Blue	Yellow
2', 600mm	LPC-2-BLACK	LPC-2-RED	LPC-2-GREEN	LPC-2-BLUE	LPC-2-YELLOW
3', 900mm	LPC-3-BLACK	LPC-3-RED	LPC-3-GREEN	LPC-3-BLUE	LPC-3-YELLOW
4', 1200mm	LPC-4-BLACK	LPC-4-RED	LPC-4-GREEN	LPC-4-BLUE	LPC-4-YELLOW

110 Ohm AES/EBU Digital and Analog Audio Application

...more patchcords available on page 56

## Patchcords






### Model Number

**U - A 2 E - L - RPT**

#### Series

- A** Mosaic 
- T** Mosaic (Black CIS)

#### Number of Jacks per Row

- 24** 2x24 Jacks
- 26** 2x26 Jacks

#### Panel Height

- 1** 1 Rack Unit 1.75", 44mm
- 15** 1.5 Rack Unit 2.62", 66mm
- 2** 2 Rack Unit 3.50", 89mm

#### Normaling

- FN** Full Normals installed at jacks
- FR** Normals Out, with Full Normals installed on the Punch Block
- HN** Half Normals installed at jacks
- HR** Normals Out, with Half Normals installed on the Punch Block
- NN** No Normals
- NT** Normals Out
- NTS** Sleeve Normals Out

#### Options, add to end of Model Number

- Uxxx** Where xxx is the total umbilical length in inches
- BGHJ** Bussed Grounds at jacks, horizontal
- SGVJ** Strapped Grounds at each vertical jack pair

## Longframe Umbilical Ordering Information

Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)

#### Popular Models

Model	Description
<b>AU-A224E2-L-NT-RPT</b>	2RU, 2x24 Longframe, Normals Out, 40"(1m) Umbilical, RPT Punch Block
<b>AU-A224E2-L-FN-RPT</b>	2RU, 2x24 Longframe, Full Normals, 40"(1m) Umbilical, RPT Punch Block
<b>AU-A224E2-L-HN-RPT</b>	2RU, 2x24 Longframe, Half Normals, 40"(1m) Umbilical, RPT Punch Block

#### Longframe Patchcords



- 2', 600mm
- 3', 900mm
- 4', 1200mm

- LPC-2-BLACK**
- LPC-3-BLACK**
- LPC-4-BLACK**

- LPC-2-RED**
- LPC-3-RED**
- LPC-4-RED**

- LPC-2-GREEN**
- LPC-3-GREEN**
- LPC-4-GREEN**

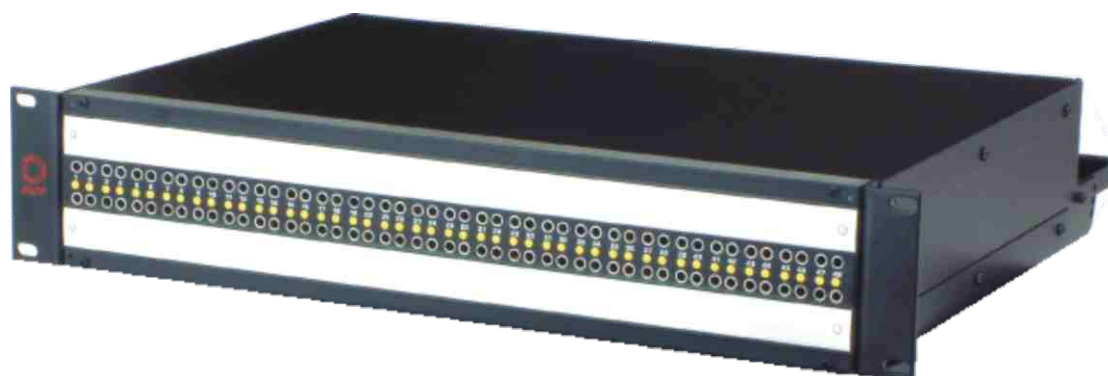
- LPC-2-BLUE**
- LPC-3-BLUE**
- LPC-4-BLUE**

- LPC-2-YELLOW**
- LPC-3-YELLOW**
- LPC-4-YELLOW**

110 Ohm AES/EBU Digital and Analog Audio Application

...more patchcords available on page 56

## Patchcords



**Model Number**  
**P - B 2 48 - L - RPT**

### Series

- A** Mosaic 
- T** Mosaic (Black CIS)

### Jack Spacing

- S** Stereo Spaced (most common)
- E** Even Spaced

### Panel Height

- 1** 1 Rack Unit 1.75", 44mm
- 15** 1.5 Rack Unit 2.62", 66mm
- 2** 2 Rack Unit 3.50", 89mm

### Normaling

- FN** Full Normals installed at jacks
- FR** Normals Out, with Full Normals installed on the Punch Block\*
- HN** Half Normals installed at jacks
- HR** Normals Out, with Half Normals installed on the Punch Block\*
- NN** No Normals
- NT** Normals Out\*
- NTS** Sleeve Normals Out\*\*

\*Not available in 1RU

\*\*Not available in 1 & 1.5RU

### Options, add to end of Model Number


- XS** Jackfield Depth, Shallow, 10.75", 177.80mm
- BGHJ** Bussed Grounds at jacks, horizontal
- SGVJ** Strapped Grounds at each vertical jack pair

## Bantam Full Enclosure Ordering Information

Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)

### Popular Models

Model	Description
<b>AP-B248S2-L-NT-RPT</b>	2RU, 2x48 Bantam Jacks, Normals Out, RPT Punch Block
<b>AP-B248S1-L-FN-RPT</b>	1RU, 2x48 Bantam Jacks, Full Normals, RPT Punch Block
<b>AP-B248S1-L-HN-RPT</b>	1RU, 2x48 Bantam Jacks, Half Normals, RPT Punch Block



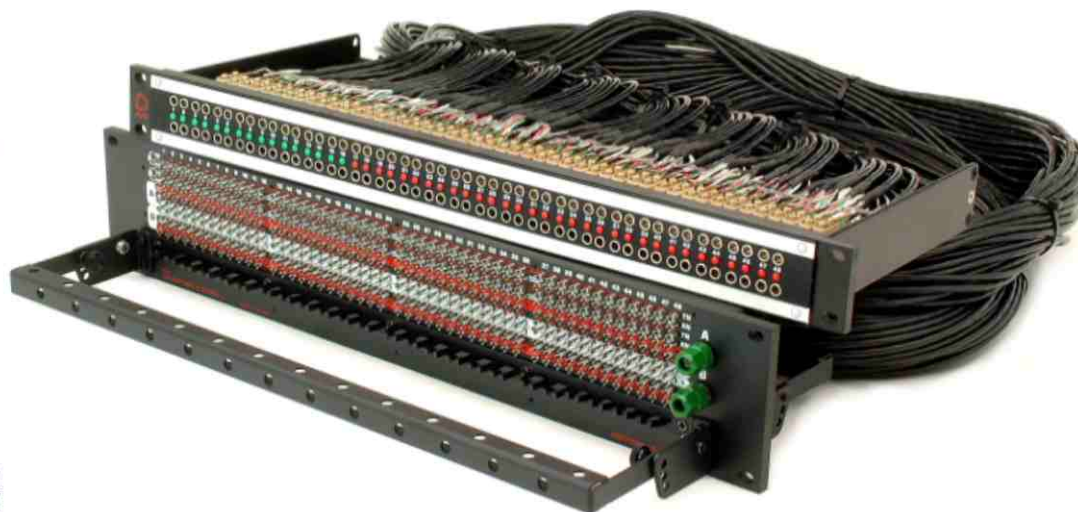
**Bantam Patchcords**

2', 600mm	<b>BPC-2-BLACK</b>	<b>BPC-2-RED</b>	<b>BPC-2-GREEN</b>	<b>BPC-2-BLUE</b>	<b>BPC-2-YELLOW</b>
3', 900mm	<b>BPC-3-BLACK</b>	<b>BPC-3-RED</b>	<b>BPC-3-GREEN</b>	<b>BPC-3-BLUE</b>	<b>BPC-3-YELLOW</b>
4', 1200mm	<b>BPC-4-BLACK</b>	<b>BPC-4-RED</b>	<b>BPC-4-GREEN</b>	<b>BPC-4-BLUE</b>	<b>BPC-4-YELLOW</b>

110 Ohm AES/EBU Digital and Analog Audio Application


...more patchcords available on page 56

## Patchcords



**Model Number**  
**U - B 2 48 - L - - RPT**

### Series

- A** Mosaic 
- T** Mosaic (Black CIS)

### Jack Spacing

- S** Stereo Spaced (most common)
- E** Even Spaced

### Panel Height

- 1** 1 Rack Unit 1.75", 44mm
- 15** 1.5 Rack Unit 2.62", 66mm
- 2** 2 Rack Unit 3.50", 89mm

### Normaling

- FN** Full Normals installed at jacks
- FR** Normals Out, with Full Normals installed on the Punch Block
- HN** Half Normals installed at jacks
- HR** Normals Out, with Half Normals installed on the Punch Block
- NN** No Normals
- NT** Normals Out
- NTS** Sleeve Normals Out

### Options, add to end of Model Number

- Uxxx** Where xxx is the total umbilical length in inches
- BGHJ** Bussed Grounds at jacks, horizontal
- SGVJ** Strapped Grounds at each vertical jack pair

## Bantam Umbilical Ordering Information

Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)

### Popular Models

Model	Description
<b>AU-B248S1-L-NT-RPT</b>	1RU, 2x48 Bantam, Front Panel, Normals Out, 40", 1m Umbilical, RPT Punch Block
<b>AU-B248S2-L-NT-RPT</b>	2RU, 2x48 Bantam, Front Panel, Normals Out, 40", 1m Umbilical, RPT Punch Block
<b>AU-B248S1-L-FN-RPT</b>	1RU, 2x48 Bantam, Front Panel, Full Normals, 40", 1m Umbilical, RPT Punch Block
<b>AU-B248S1-L-HN-RPT</b>	1RU, 2x48 Bantam, Front Panel, Half Normals, 40", 1m Umbilical, RPT Punch Block

### Bantam Patchcords



- 2', 600mm
- 3', 900mm
- 4', 1200mm

**BPC-2-BLACK**  
**BPC-3-BLACK**  
**BPC-4-BLACK**

**BPC-2-RED**  
**BPC-3-RED**  
**BPC-4-RED**

**BPC-2-GREEN**  
**BPC-3-GREEN**  
**BPC-4-GREEN**

**BPC-2-BLUE**  
**BPC-3-BLUE**  
**BPC-4-BLUE**

**BPC-2-YELLOW**  
**BPC-3-YELLOW**  
**BPC-4-YELLOW**

110 Ohm AES/EBU Digital and Analog Audio Application

...more patchcords available on page 56

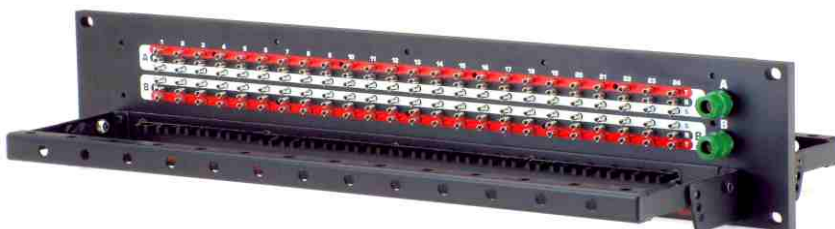
## Patchcords



## Rapid Punch Terminal Panels

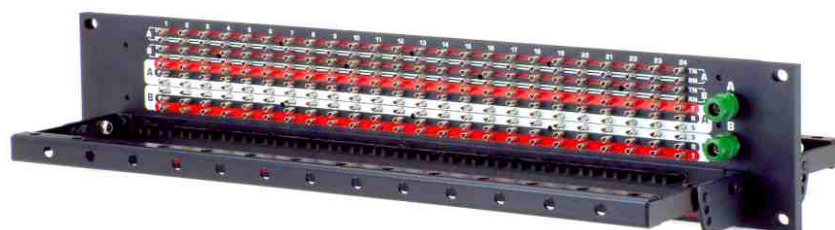
Color-coded and numbered, front and rear!

## Rapid Punch Terminal Panels



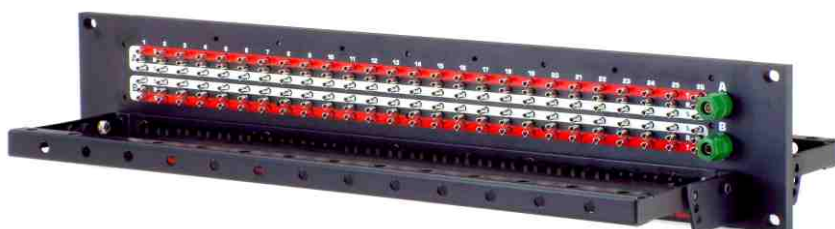
### Model RPT48

3.50", 88.14mm panel  
48 sets of tip, ring, sleeve  
Terminates one 2x24 patchbay  
Pivoting cable bar front & rear



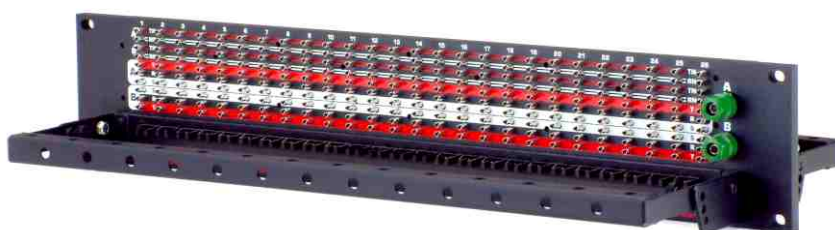
### Model RPT48N

3.50", 88.14mm panel  
48 sets of tip, ring, sleeve & normals  
Terminates one 2x24 patchbay with  
normals brought out  
Pivoting cable bar front & rear



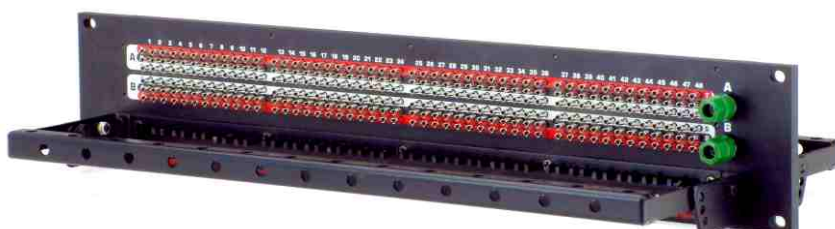
### Model RPT52

3.50", 88.14mm panel  
52 sets of tip, ring, sleeve  
Terminates one 2x26 patchbay  
Pivoting cable bar front & rear



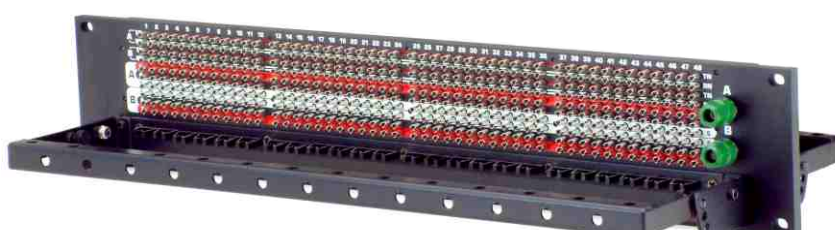
### Model RPT52N

3.50", 88.14mm panel  
52 sets of tip, ring, sleeve & normals  
Terminates one 2x26 patchbay with  
normals brought out  
Pivoting cable bar front & rear



### Model RPT96

3.50", 88.14mm panel  
96 sets of tip, ring, sleeve  
Terminates one 2x48 bantam patchbay  
Pivoting cable bar front & rear



### Model RPT96N

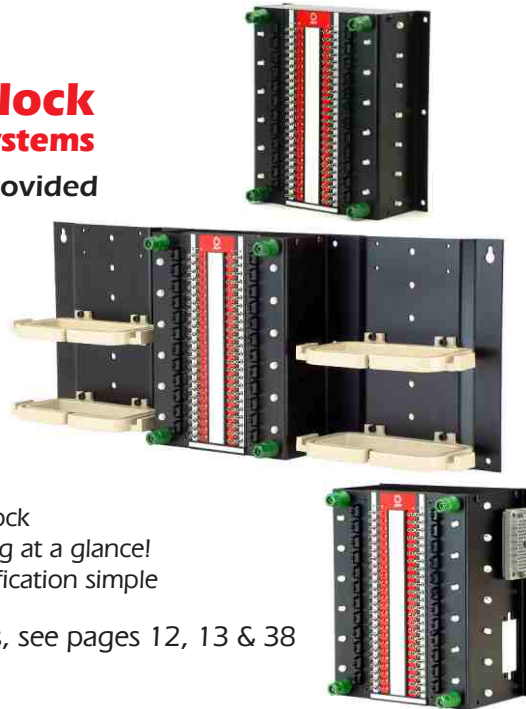
3.50", 88.14mm panel  
96 sets of tip, ring, sleeve & normals  
Terminates one 2x48 bantam patchbay  
with normals brought out  
Pivoting cable bar front & rear

### RPT Wall-Mount Punch Block & Integrated Cable Management Systems

Frames designed to stack on wall, links provided for shield bussing from block to block

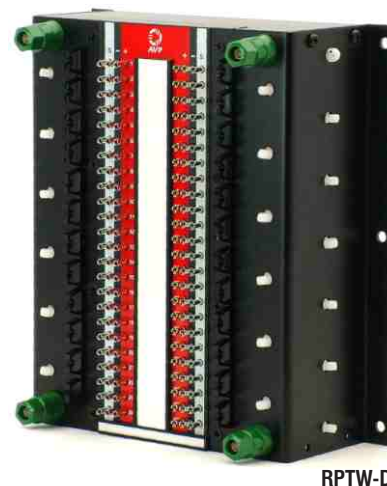
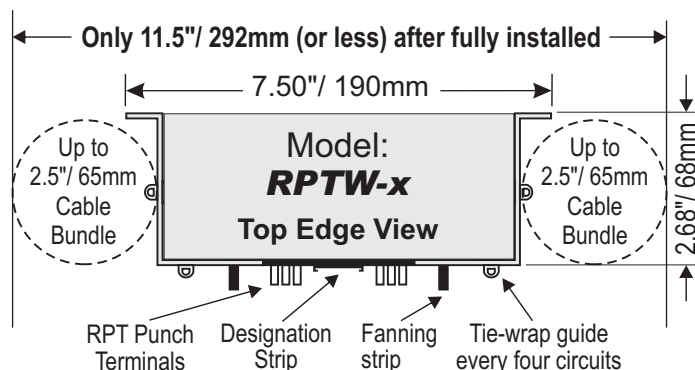
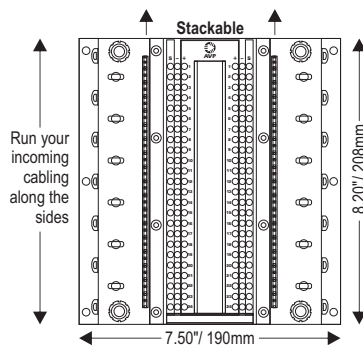
- Terminates 2 x 24 (T, R, S) circuits
- Terminates 20-28 gage solid or stranded, two wires per terminal, even 1 gage apart
- Oversize split cylinder, certified gas tight, heavy-duty rigid mounted terminal
- AVP Punch System allows clean one-step wire insertion and trimming
- Frames designed to stack on wall, links provided for shield bussing from block to block
- Circuit designation strip and title block. Everything at a glance!
- Color-coding and numbering makes circuit identification simple

For complete RPT specifications, see pages 12, 13 & 38



### Features and Benefits

### Punch Block with full cable management capabilities Model RPTW-x



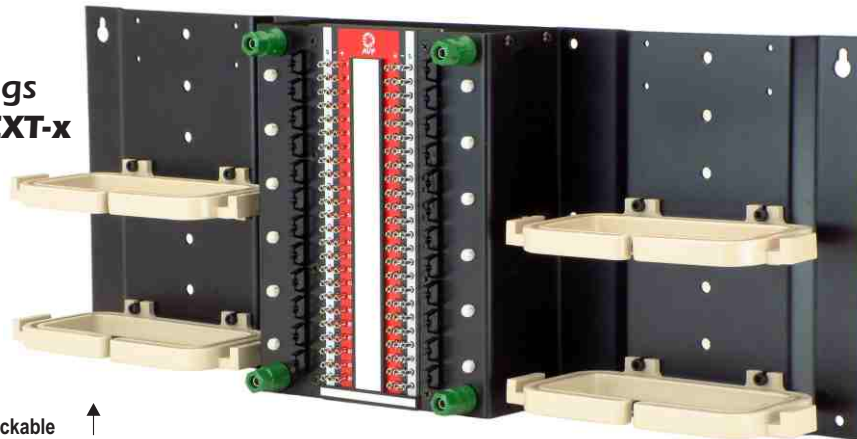
RPTW-D

### Full Cable Management Capabilities

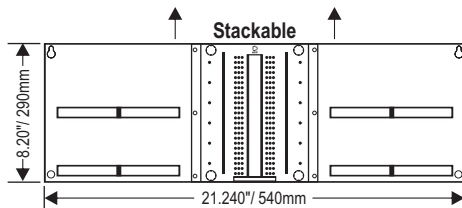
Please see page 22 for Configuration Options & Order Information

## Punch Block with cable distribution rings Model RPTW-EXT-x

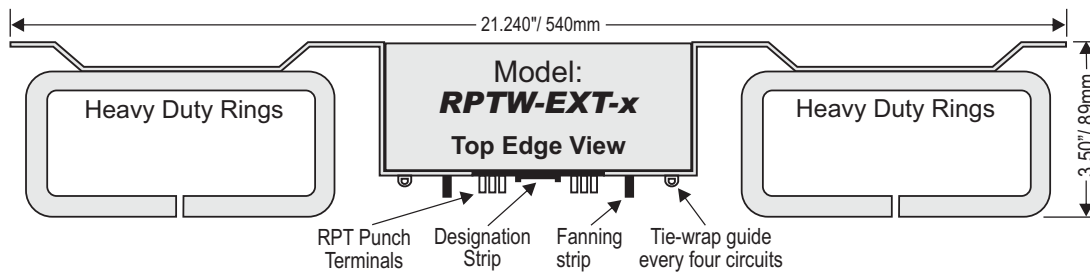
## Cable Distribution Rings



RPTW-EXT-D

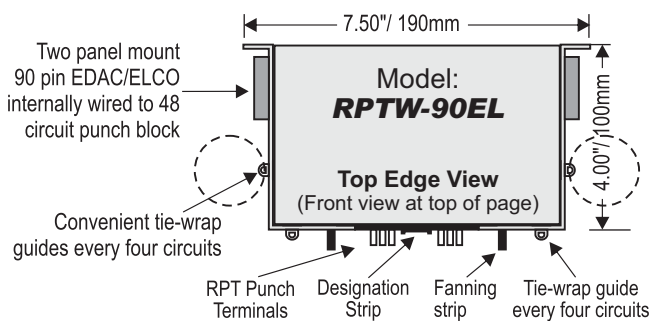


Please see page 22 for  
Configuration Options  
& Order Information

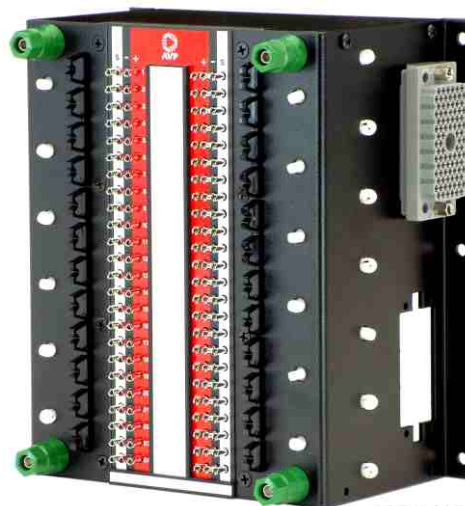


## Punch Block with EDAC/ELCO interface Model RPTW-90EL

## EDAC/ELCO Interface



Other connector interfaces are available

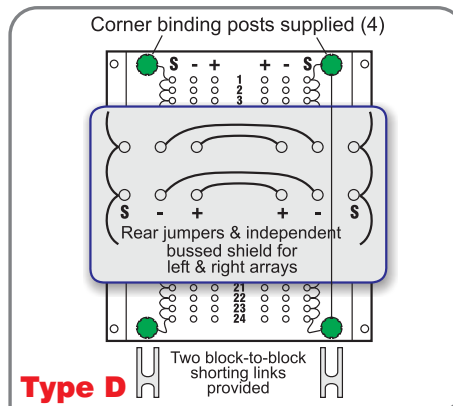
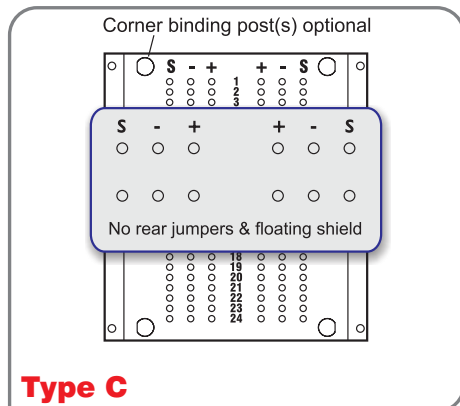
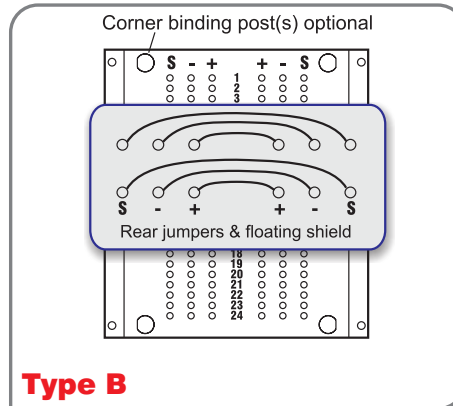
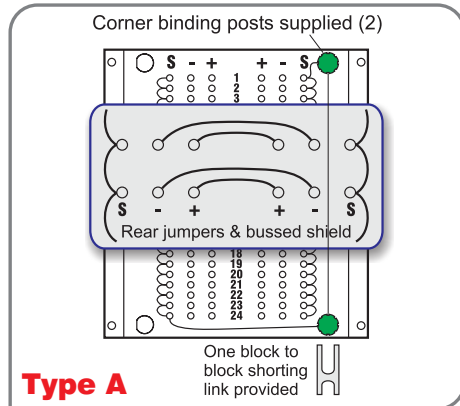


RPTW-90EL



## Four configurations to choose from

## Four Configurations



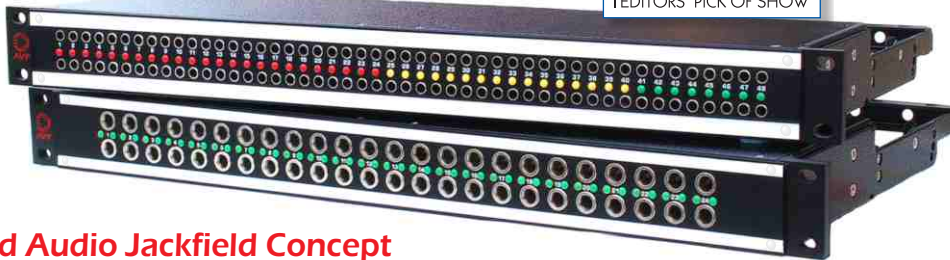
## Ordering Information

## Ordering Information

Popular Models		
	Model	Description
<b>RPTW-x &amp; RPTW-EXT-x Series</b>		
<b>Type A</b>	<b>RPTW-A</b>	Punch Block with full cable management capabilities
	<b>RPTW-EXT-A</b>	Punch Block with cable distribution rings
<b>Type B</b>	<b>RPTW-B</b>	Punch Block with full cable management capabilities
	<b>RPTW-EXT-B</b>	Punch Block with cable distribution rings
<b>Type C</b>	<b>RPTW-C</b>	Punch Block with full cable management capabilities
	<b>RPTW-EXT-C</b>	Punch Block with cable distribution rings
<b>Type D</b>	<b>RPTW-D</b>	Punch Block with full cable management capabilities
	<b>RPTW-EXT-D</b>	Punch Block with cable distribution rings
<b>Connectorized</b>	<b>RPTW-90EL</b>	Punch Block with EDAC/ELCO interface
<b>Accessories</b>	<b>B750</b>	Binding Post
	<b>L750</b>	Shorting Link
	<b>R750</b>	Cable Ring
	<b>AT-RPT-PTK</b>	Punch Tool with Tip
	<b>AT-RPT-TIP</b>	Punch Tip

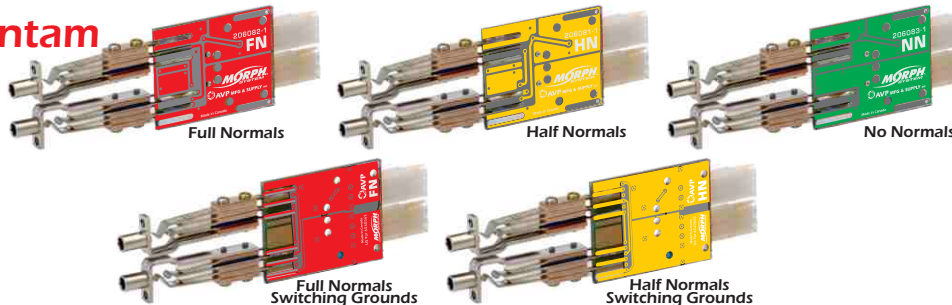
the AVP  
**MORPH**  
AUDIO SYSTEM™

television  
broadcast  
**NAB**  
EDITORS' PICK OF SHOW

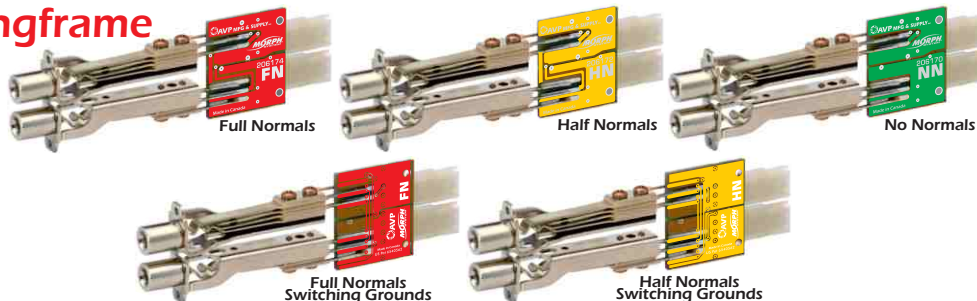


- Advanced Audio Jackfield Concept
- Next Generation Flexibility
- AES/EBU Digital and Analog Audio Application

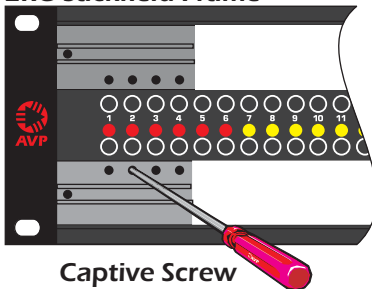
## Bantam



## Longframe



## 2RU Jackfield Frame



## Application: AES/EBU, Analog

- Morph modules can be effortlessly identified, mixed and changed. Entire racks of jackfields can be re-configured anytime
- EDAC/ELCO 3 pin interface
- Modules are front mounted, providing a simple module interchange method
- Maximized designations



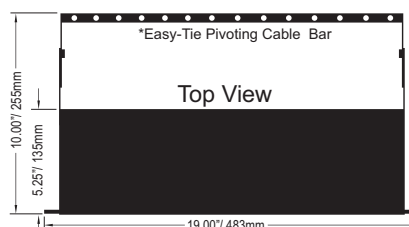
## Features and Benefits

The award-winning Morph Audio System excels in specialty application requirements as found in mobile units and harsh environments. Its EDAC 3-pin terminations can withstand a 50 gravity vibration with no loss of continuity. In addition, the Morph System's short depth and light weight, allows installation in the tightest spaces.

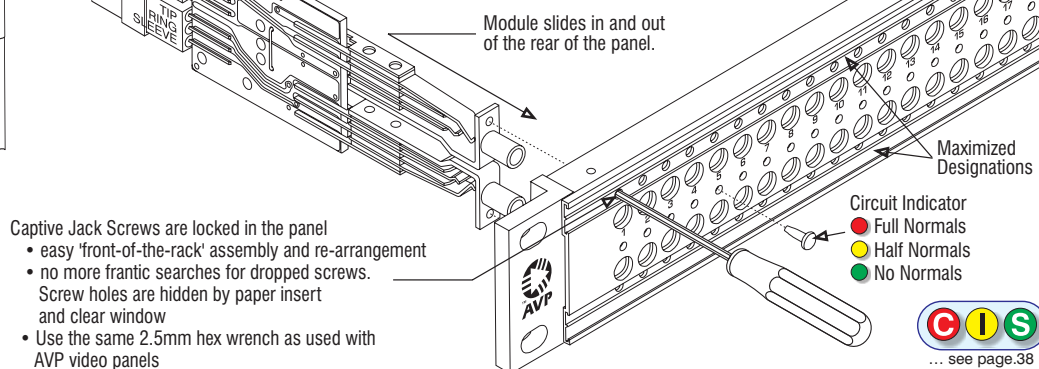




Keep an inventory of Morph Modules and empty Morph frames to allow custom jackfield assembly or re-configuration in minutes! Morph modules fit 1, 1.5 & 2 Rack Unit frames.



### Assembly Drawing



### Assembly Drawing

Each Morph Jackfield is shipped complete with its crimp-pin mating connector kit and a captive hex driver. (See ordering information for more details)



Mating Connector Kits, below, do not include the captive hex driver. Please contact AVP if required.

- MK224P-E03C** EDAC 3Pin Primaries Kit for 2x24 Patchbay, Crimp
- MK226P-E03C** EDAC 3Pin Primaries Kit for 2x26 Patchbay, Crimp
- MK224P-E03S** EDAC 3Pin Primaries Kit for 2x24 Patchbay, Solder
- MK226P-E03S** EDAC 3Pin Primaries Kit for 2x26 Patchbay, Solder

EDAC Hand Crimp Tool  
AVP Model **AT-EHCT**



EDAC Insertion Tool  
AVP Model **AT-EIT**

EDAC Ejection Tool  
AVP Model **AT-EET**

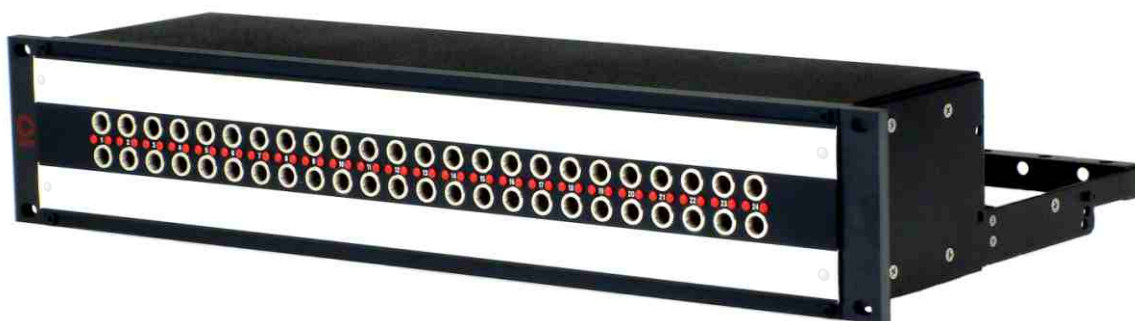


### Mating Connector Kit

### Tooling

**Ordering Information**  
(over)






## Model Number

**M - A 2 E - L - E03**

### Series

- A** Mosaic 
- T** Mosaic (Black CIS)

### Number of Dual Modules

- 24** 24 Modules
- 26** 26 Modules

### Panel Height

- 1** 1 Rack Unit 1.75", 44mm
- 15** 1.5 Rack Unit 2.62", 66mm
- 2** 2 Rack Unit 3.50", 89mm

### Installed Module Type

- FN** Full Normals
- HN** Half Normals
- NN** No Normals
- FNSG** Full Normals Switching Grounds
- HNSG** Half Normal Switching Grounds

### Options, add to end of Model Number

- KZ** No Mating Connector Kit
- KS** Solder Mating Connector Kit
- SGVM** Strapped grounds at each vertical jack pair

## Longframe Ordering Information

Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)

### Popular Models and Components

Model	Description
Complete Jackfields	
<b>AM-A224E1-L-FN-E03</b>	1RU, 2x24 Frame with 24 Dual Full Normal Modules (AM-A-FN-E03) installed, Mating Connector Kit
<b>AM-A224E1-L-HN-E03</b>	1RU, 2x24 Frame with 24 Dual Half Normal Modules (AM-A-HN-E03) installed, Mating Connector Kit
<b>AM-A224E1-L-NN-E03</b>	1RU, 2x24 Frame with 24 Dual No Normal Modules (AM-A-NN-E03) installed, Mating Connector Kit
Individual Components	
<b>AM-A-FN-E03</b>	Dual Longframe Module, Full Normals, EDAC 3 pin termination
<b>AM-A-HN-E03</b>	Dual Longframe Module, Half Normals, EDAC 3 pin termination
<b>AM-A-NN-E03</b>	Dual Longframe Module, No Normals, EDAC 3 pin termination
<b>AM-A224E1-Z</b>	1RU, 2x24 Frame, empty
<b>MK224P-E03C</b>	EDAC 3Pin Primaries Kit for 2x24 Patchbay, Crimp
<b>MK226P-E03C</b>	EDAC 3Pin Primaries Kit for 2x26 Patchbay, Crimp
<b>MK224P-E03S</b>	EDAC 3Pin Primaries Kit for 2x24 Patchbay, Solder
<b>MK226P-E03S</b>	EDAC 3Pin Primaries Kit for 2x26 Patchbay, Solder

### Longframe Patchcords

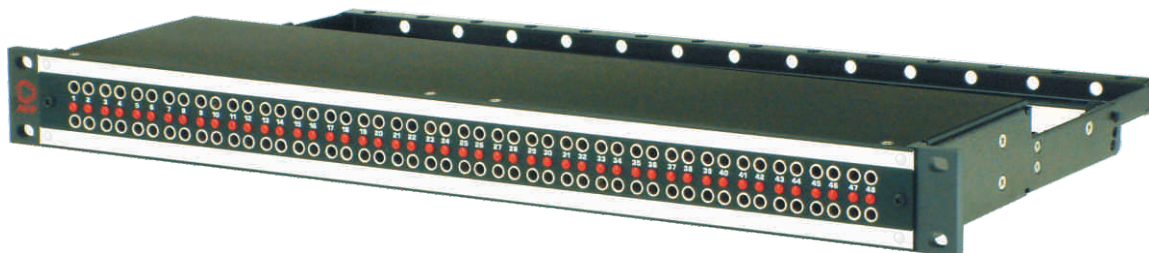


1'	300mm	LPC-1-BLACK	LPC-1-RED	LPC-1-GREEN	LPC-1-BLUE	LPC-1-YELLOW
1.5'	450mm	LPC-1.5-BLACK	LPC-1.5-RED	LPC-1.5-GREEN	LPC-1.5-BLUE	LPC-1.5-YELLOW
2'	600mm	LPC-2-BLACK	LPC-2-RED	LPC-2-GREEN	LPC-2-BLUE	LPC-2-YELLOW
3'	900mm	LPC-3-BLACK	LPC-3-RED	LPC-3-GREEN	LPC-3-BLUE	LPC-3-YELLOW
4'	1200mm	LPC-4-BLACK	LPC-4-RED	LPC-4-GREEN	LPC-4-BLUE	LPC-4-YELLOW
6'	1800mm	LPC-6-BLACK	LPC-6-RED	LPC-6-GREEN	LPC-6-BLUE	LPC-6-YELLOW
10'	3.05m	LPC-10-BLACK	LPC-10-RED	LPC-10-GREEN	LPC-10-BLUE	LPC-10-YELLOW

110 Ohm AES/EBU Digital and Analog Audio Application

... more patchcords available on page 56

## Longframe Audio Patchcords



## Model Number

**M - B 2 48 - L - E03**

### Series

- A** Mosaic 
- T** Mosaic (Black CIS)

### Module Spacing

- S** Stereo Spaced (most common)
- E** Even Spaced

### Panel Height

- 1** 1 Rack Unit 1.75", 44mm
- 15** 1.5 Rack Unit 2.62", 66mm
- 2** 2 Rack Unit 3.50", 89mm

### Installed Module Type

- FN** Full Normals
- HN** Half Normals
- NN** No Normals
- FNSG** Full Normals Switching Grounds
- HNSG** Half Normals Switching Grounds

### Options, add to end of Model Number

- KZ** No Mating Connector Kit
- KS** Solder Mating Connector Kit
- SGVM** Strapped grounds at each vertical jack pair


## Bantam Ordering Information

Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)

### Popular Models and Components

Model	Description
<b>Complete Jackfields</b>	
<b>AM-B248S1-L-FN-E03</b>	1RU, 2x48 Frame with 48 Dual Full Normal Modules (AM-B-FN-E03) installed, Mating Connector Kit
<b>AM-B248S1-L-HN-E03</b>	1RU, 2x48 Frame with 48 Dual Half Normal Modules (AM-B-HN-E03) installed, Mating Connector Kit
<b>AM-B248S1-L-NN-E03</b>	1RU, 2x48 Frame with 48 Dual No Normal Modules (AM-B-NN-E03) installed, Mating Connector Kit
<b>Individual Components</b>	
<b>AM-B-FN-E03</b>	Dual Bantam Module, Full Normals, EDAC 3 pin termination
<b>AM-B-HN-E03</b>	Dual Bantam Module, Half Normals, EDAC 3 pin termination
<b>AM-B-NN-E03</b>	Dual Bantam Module, No Normals, EDAC 3 pin termination
<b>AM-B248S1-Z</b>	1RU, 2x48 Frame, empty
<b>MK248P-E03C</b>	EDAC 3Pin Primaries Kit for 2x48 Patchbay, Crimp
<b>MK248P-E03S</b>	EDAC 3Pin Primaries Kit for 2x48 Patchbay, Solder

### Bantam Patchcords

Bantam Patchcords							
	1'	300mm	<b>BPC-1-BLACK</b>	<b>BPC-1-RED</b>	<b>BPC-1-GREEN</b>	<b>BPC-1-BLUE</b>	<b>BPC-1-YELLOW</b>
	1.5'	450mm	<b>BPC-1.5-BLACK</b>	<b>BPC-1.5-RED</b>	<b>BPC-1.5-GREEN</b>	<b>BPC-1.5-BLUE</b>	<b>BPC-1.5-YELLOW</b>
	2'	600mm	<b>BPC-2-BLACK</b>	<b>BPC-2-RED</b>	<b>BPC-2-GREEN</b>	<b>BPC-2-BLUE</b>	<b>BPC-2-YELLOW</b>
	3'	900mm	<b>BPC-3-BLACK</b>	<b>BPC-3-RED</b>	<b>BPC-3-GREEN</b>	<b>BPC-3-BLUE</b>	<b>BPC-3-YELLOW</b>
	4'	1200mm	<b>BPC-4-BLACK</b>	<b>BPC-4-RED</b>	<b>BPC-4-GREEN</b>	<b>BPC-4-BLUE</b>	<b>BPC-4-YELLOW</b>
	6'	1800mm	<b>BPC-6-BLACK</b>	<b>BPC-6-RED</b>	<b>BPC-6-GREEN</b>	<b>BPC-6-BLUE</b>	<b>BPC-6-YELLOW</b>
	10'	3.05m	<b>BPC-10-BLACK</b>	<b>BPC-10-RED</b>	<b>BPC-10-GREEN</b>	<b>BPC-10-BLUE</b>	<b>BPC-10-YELLOW</b>

110 Ohm AES/EBU Digital and Analog Audio Application

...more patchcords available on page 56

## Bantam Audio Patchcords

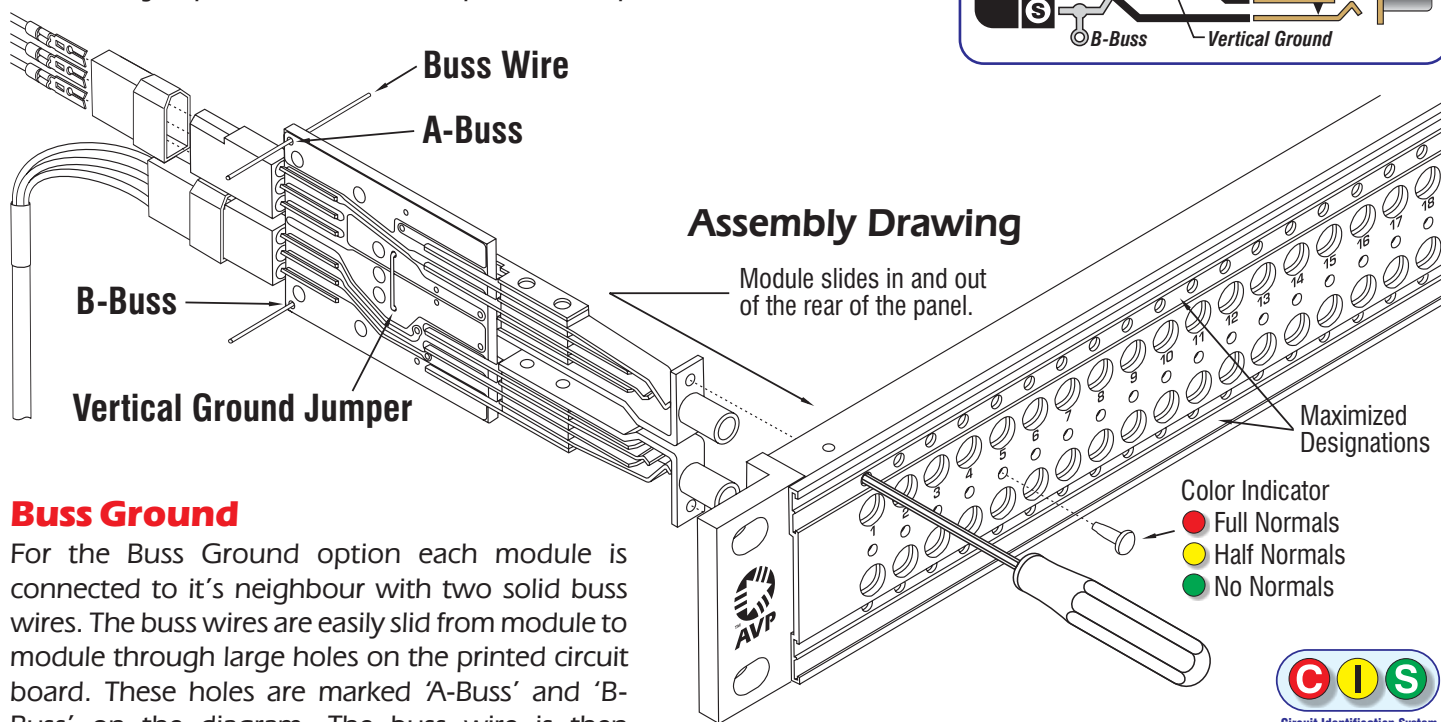
# Morph Module Grounding



All modules in the Morph line offer a number of options for the shield connections of the jacks. Most common are the 'Vertical Ground' and 'Bussed Ground'.

## Vertical Ground

The Vertical Ground option connects the shield from the 'A' row jack (top row) to the 'B' row jack (bottom row). This is accomplished by inserting a solid wire jumper that is the same shape and size as a standard paper staple into a set of holes on the module's printed circuit board. The jumper is then soldered in place to complete the connection.



## Buss Ground

For the Buss Ground option each module is connected to its neighbour with two solid buss wires. The buss wires are easily slid from module to module through large holes on the printed circuit board. These holes are marked 'A-Buss' and 'B-Buss' on the diagram. The buss wire is then soldered at each module to form the buss. At the left rear side of the panel there are two solder point terminals, one for the A row and one for the B row. The buss wire is connected to the terminal on the inside of the jackfield and provides the customer a location for making external connection to the busses.

To remove a module after applying the Buss Ground option, it is necessary to cut the buss wire on either side of the module to be removed. After the module is replaced a short buss wire can be re-attached to the cut end of the main buss wire to re-establish the buss grounds across the jackfield.

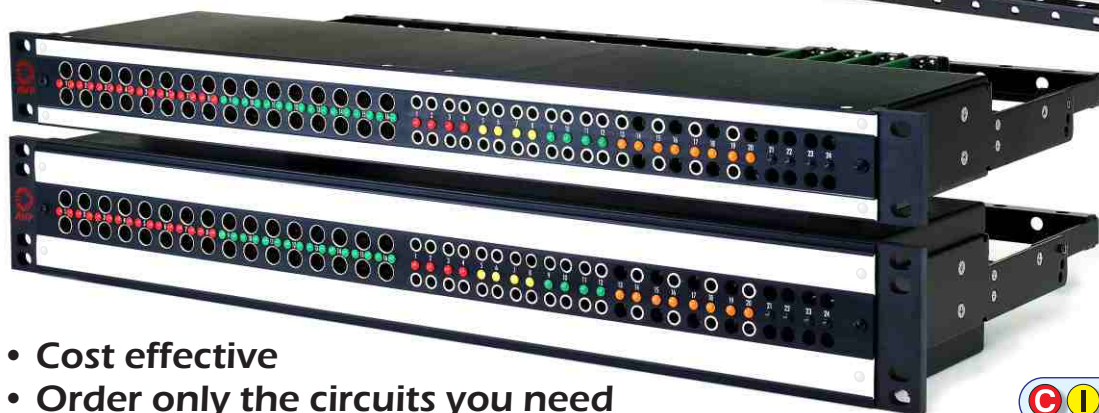
## Normaling Descriptions

T: Tip	TN: Tip Normal
R: Ring	RN: Ring Normal
S: Sleeve	SN: Sleeve Normal

\*US Patent No. 6,540,562



## Super<sup>HD+</sup> Series HD Audio/Video/Data Combo



- Cost effective
- Order only the circuits you need
- Easily expanded at a later date
- Enclosure provides neat installation
- Capacity: up to 16 Midsize video & up to 24 Bantam audio
- Available in 1RU, 1.5RU & 2RU

### Application:

- Video; HDTV, serial digital, analog
- Audio; AES/EBU digital & analog
- Perfect for non-linear edit suites
- With the RS422 module, panel functions as a passive edit suite router for video, audio and machine control combined into one jackfield

### Panel Features:

- CIS (Circuit Identification system) allows color-coding of each circuit's function, available in 10 colors
- Video and audio jacks are front mounted, featuring captive screws, simplify system redesign and maintenance
- Maximized designations
- Heavy-duty pivoting cable bar
- Jackfield shipped with crimp-pin mating connector kit and a captive hex driver

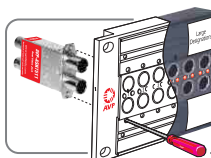
### Video Features:

- 16 SuperHD+ 3.0GHz - 3Gb/s Midsize video jack positions
- Jacks meet SMPTE 424M-2006 specs
- Life cycle rating of 30,000
- 4 different jack configurations available

### Audio Features:

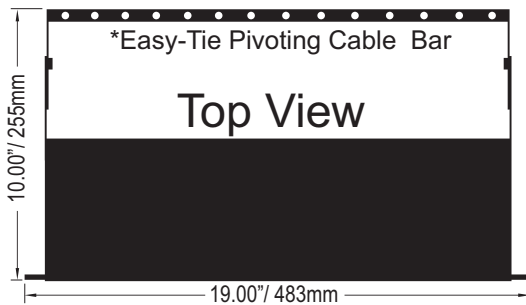
- 24 Bantam audio jack positions with stereo spacing
- AVP Morph Audio System
- Modules available feature Full Normals, Half Normals, No Normals, Full & Half Normals with Switching Grounds and \*RS422 Polarity Protected
- Modules are terminated with EDAC/ELCO 3 pin interface
- Life cycle rating of 30,000

## Features and Benefits



### AVP Mosaic Panel

Captive screws stay in the panel, not lost in the rack



## AVP Datasheet

### Polarity Protected



- Reduce the risk of equipment damage!
- Keyed jacks and patchcords eliminate inadvertent cross-patches

\*The jacks and plugs of these modules are polarized for the user's protection. However, use of patchcords other than the AVP Datasheet, or any other pair transposition within the customer's equipment will circumvent this polarity protection.

## Polarity Protection

## AVP Midsize 3.0GHz - 3Gb/s Dual Video Jacks



**AVP-AMN75**  
Normaled, Terminating



**AVP-AM75**  
Non-Normaled, Terminating



**AVP-AMN**  
Normaled, Non-Terminating

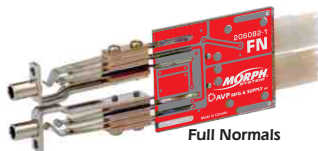


**AVP-AM**  
Non-Normaled, Non-Terminating

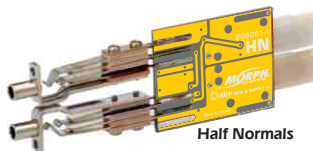
Video jack specs... page 5

## Video Jacks

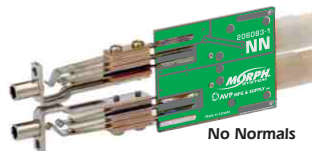
## AVP Morph Bantam Audio Jack Modules



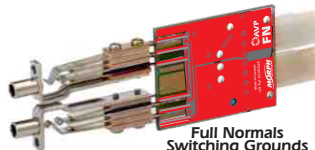
Full Normals



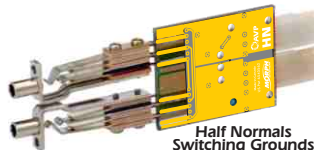
Half Normals



No Normals



Full Normals  
Switching Grounds



Half Normals  
Switching Grounds

Audio jack specs... page 38

## Audio Jack Modules

## Tools

Each Morph Jackfield is shipped complete with its crimp-pin mating connector kit and a captive hex driver.



Mating Connector Kits, below, do not include the captive hex driver. Please contact AVP if required.

**MK224P-E03C** EDAC 3Pin Primaries Kit for 2x24 Patchbay, Crimp  
**MK226P-E03C** EDAC 3Pin Primaries Kit for 2x26 Patchbay, Crimp  
**MK224P-E03S** EDAC 3Pin Primaries Kit for 2x24 Patchbay, Solder  
**MK226P-E03S** EDAC 3Pin Primaries Kit for 2x26 Patchbay, Solder



EDAC Ejection Tool  
AVP Model **AT-EET**



EDAC Insertion Tool  
AVP Model **AT-EIT**



EDAC Hand Crimp Tool  
AVP Model **AT-EHCT**

## Tools

## HD Audio/Video/Data Combo

### Ordering Information

Model	Description
Complete Jackfields	
<b>AM-DBS2-L-AMN75/AM-B-FN-E03</b>	2RU, 2x16 3.0GHz - 3Gb/s AMN75 Normaled, Terminating Dual video jacks, 2x24 Dual Full Normal Morph audio Modules installed, mating connector kit
<b>AM-DBS15-L-AMN75/AM-B-FN-E03</b>	1.5RU, 2x16 3.0GHz - 3Gb/s AMN75 Normaled, Terminating Dual video jacks, 2x24 Dual Full Normal Morph audio Modules installed, mating connector kit
<b>AM-DBS1-L-AMN75/AM-B-FN-E03</b>	1RU, 2x16 3.0GHz - 3Gb/s AMN75 Normaled, Terminating Dual video jacks, 2x24 Dual Full Normal Morph audio Modules installed, mating connector kit
Individual Components	
<b>AM-DBS2-Z</b>	2RU, 2x16 Midsize & 2x24 Bantam frame with pivoting cable bar, empty
<b>AM-DBS15-Z</b>	1.5RU, 2x16 Midsize & 2x24 Bantam frame with pivoting cable bar, empty
<b>AM-DBS1-Z</b>	1RU, 2x16 Midsize & 2x24 Bantam frame with pivoting cable bar, empty
<b>AMN75</b>	Normaled, Terminating Dual Midsize video jack
<b>AM75</b>	Non-Normaled, Terminating Dual Midsize video jack
<b>AMN</b>	Normaled, Non-Terminating Dual Midsize video jack
<b>AM</b>	Non-Normaled, Non-Terminating Dual Midsize video jack
<b>AM-B-FN-E03</b>	Dual Bantam Module, Full Normals, EDAC 3 pin termination
<b>AM-B-HN-E03</b>	Dual Bantam Module, Half Normals, EDAC 3 pin termination
<b>AM-B-NN-E03</b>	Dual Bantam Module, No Normals, EDAC 3 pin termination
<b>AM-B-FNSG-E03</b>	Dual Bantam Module, Full Normals Switching Grounds, EDAC 3 pin termination
<b>AM-B-HNSG-E03</b>	Dual Bantam Module, Full Normals Switching Grounds, EDAC 3 pin termination
<b>DAT-2-RED</b>	AVP Datacord, 2' (600mm) Dual Bantam Polarity Protected patchcord
<b>DAT-3-RED</b>	AVP Datacord, 3' (900mm) Dual Bantam Polarity Protected patchcord

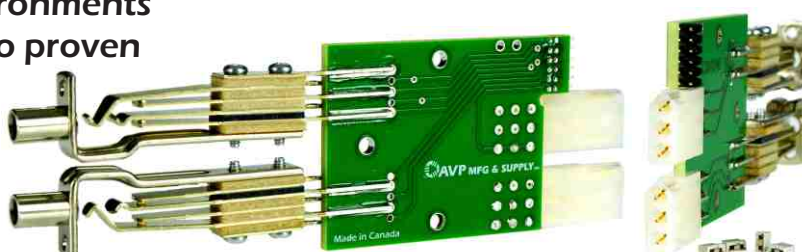
### Ordering Information



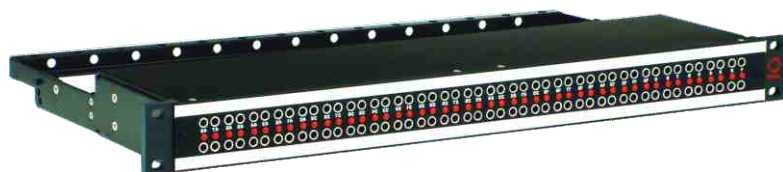
## Delta Series Programmable Jackfield System

Featuring: AVP Patented **MORPH** Style Modules

- Stellar performance in harsh environments
- Extensively used in mobiles due to proven reliability and compact design
- Jacks rated at 30,000 cycles
- No dip switches
- No ribbon cable
- No excessive connectorization
- Gold-plated programming jumpers



**Programmable Module**  
Available in Longframe & Bantam



- Available in 1RU, 1.5RU & 2RU
- Bantam and Longframe
- Application: AES/EBU, Analog
- Access Programming Links at rear of panel



A TIP	A RING
B TN	B RN
A TN	A RN
A SN	B SN
A SLV	B SLV
A BUSS	B BUSS

**A**

TIP

RING

SLEEVE

**B**

TIP

RING

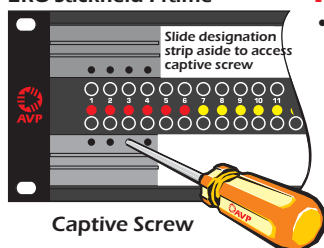
SLEEVE

### Programming Options

- Full Normals
- Half Normals
- No Normals
- Bussed Grounds
- Vertical Grounds
- Switching Grounds version also available

Rear View of Module with EDAC 3 pin connector interface (Sleeve = Ground)

2RU Jackfield Frame



### Panel Features:

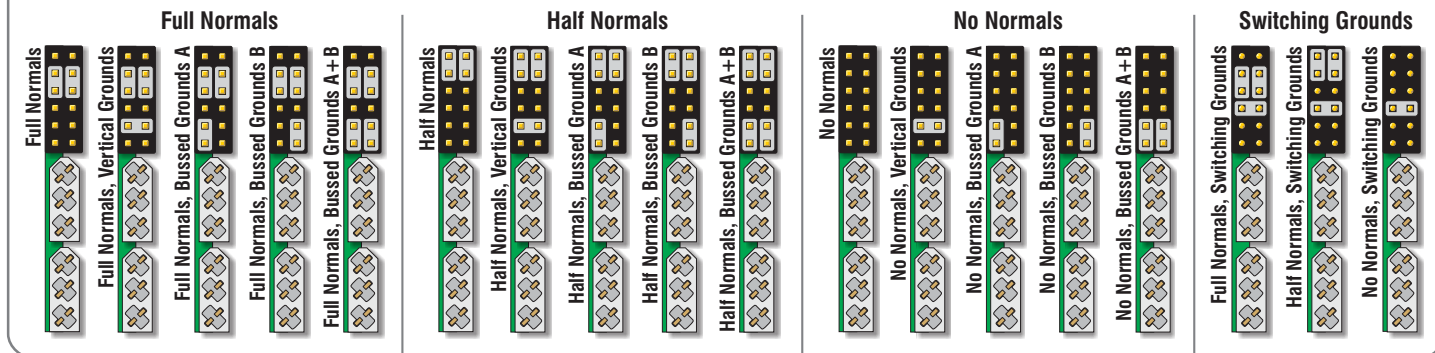
- CIS (Circuit Identification system) allows color-coding of each circuit's function, available in 10 colors
- Maximized designations
- Jackfield shipped with crimp-pin mating connector kit and a captive hex key (where applicable)

### Studio or Mobile:

Morph style modules simplifies system design, saves space, adds flexibility, reliability and reduces weight.



## Normalizing with the Programming Links



### Model Number

R - 2 E - L - E03 -

#### Series

A Mosaic   
T Mosaic (Black CIS)

#### Patch Type

A Longframe  
B Bantam

#### Number of Dual Modules

24 24 Longframe Modules  
26 26 Longframe Modules  
32 32 Bantam Modules  
48 48 Bantam Modules

#### Panel Height

1 1 Rack Unit 1.75", 44mm  
15 1.5 Rack Unit 2.62", 66mm  
2 2 Rack Unit 3.50", 89mm

#### Options, add to end of Model Number

-KZ No Mating Connector Kit

#### Installed Programming, all Modules Field Reconfigurable

##### Standard Longframe or Bantam Module

FN Full Normals  
FNBG Full Normals, Bussed Grounds  
FNVG Full Normals, Vertical Grounds  
HN Half Normals  
HNBG Half Normals, Bussed Grounds  
HNVG Half Normals, Vertical Grounds  
NN No Normals  
NNBG No Normals, Bussed Grounds  
NNVG No Normals, Vertical Grounds

##### Switching Ground Longframe or Bantam Module

FNSG Full Normals, Switching Grounds  
HNSG Half Normals, Switching Grounds  
NNSG No Normals, Switching Grounds

## Ordering Information

## Programming Link Specifications

#### Materials

Mouldings: Standard or High temperature Plastic, UL94V-0  
Contacts: Male: Copper alloy  
Female: Phosphor Bronze  
Link sockets: Beryllium Copper

#### Electrical

Current rating: 2A per single contact, 1A all contacts  
Voltage rating: 250V AC/DC  
Voltage proof: 650V AC  
Contact resistance: 30 mOhm max.  
Insulation resistance: 100 MOhm min.

#### Environmental

Temperature Classification: -40/+105/21 days 95% RH  
Operating Temperature: -40°C to 105°C  
Solderability: 235°C for 5 seconds  
Soldering heat resistance: SMT: 260°C for 5 seconds

#### Mechanical

Durability: Gold finish: 300 operations  
Tin finish: 50 operations  
Insertion force (max.): Female: 2.0N per contact  
Link sockets: 4.5N total  
Withdrawal force (min.): Female: 0.2N per contact  
Link sockets: 0.6N total  
Vibration sensitivity: 10-55Hz, 1.5mm, 6 hours duration  
Shock severity: 490m/s² (50G) for 11 ms

## Mating Connector & Programming Link Kits

Model	Description
Longframe	
<b>MK224P-E03C</b>	EDAC 3Pin Primaries Kit for Longframe 2x24 Patchbay, Crimp
<b>MK226P-E03C</b>	EDAC 3Pin Primaries Kit for Longframe 2x26 Patchbay, Crimp
Bantam	
<b>MK232P-E03C</b>	EDAC 3Pin Primaries Kit for Bantam 2x32 Patchbay, Crimp
<b>MK248P-E03C</b>	EDAC 3Pin Primaries Kit for Bantam 2x48 Patchbay, Crimp
Programming Links	
<b>AR-PL25</b>	Programming Links, package of 25
<b>AR-PL50</b>	Programming Links, package of 50
<b>AR-PL100</b>	Programming Links, package of 100

## Mating Connector & Programming Link Kits

## Connectorized 90 Pin



**Full Enclosure  
Longframe  
Ordering  
Information**

**Model Number**

**P - A 2 E - L - E90**

Series	
A	Mosaic (CIS)
T	Mosaic (Black CIS)

Number of Jacks per Row	
24	2x24 Jacks
26	2x26 Jacks

Panel Height		
1	1 Rack Unit	1.75", 44mm
15	1.5 Rack Unit	2.62", 66mm
2	2 Rack Unit	3.50", 89mm

Normaling	
FN	Full Normals installed at jacks
HN	Half Normals installed at jacks
NN	No Normals

Options, add to end of Model Number	
-XS	Jackfield Depth, Extra Short, 7.00", 177.8mm
-XL	Jackfield Depth, Extra Deep, 16.00", 406.4mm
-BGHJ	Bussed Grounds at jacks, horizontal
-SGVJ	Strapped Grounds at each vertical jack pair
-KZ	No Mating Connector Kit
-KS	Solder Mating Connector Kit

Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)

Popular Models	
Model	Description
AP-A224E1-L-FN-E90	1RU, 2x24 Longframe Jacks, Full Normals, EDAC 90 Pin Termination, Mating Connector Kit
AP-A224E1-L-HN-E90	1RU, 2x24 Longframe Jacks, Half Normals, EDAC 90 Pin Termination, Mating Connector Kit
MK224P-E90C	EDAC 90 pin Primaries Kit for 2x24 patchbay, Crimp
MK226P-E90C	EDAC 90 pin Primaries Kit for 2x26 patchbay, Crimp
MK224P-E90S	EDAC 90 pin Primaries Kit for 2x24 patchbay, Solder
MK226P-E90S	EDAC 90 pin Primaries Kit for 2x26 patchbay, Solder

Each Connectorized Jackfield is shipped complete with its crimp-pin Mating Connector Kit



EDAC Hand Crimp Tool  
AVP Model **AT-EHCT**



EDAC Insertion Tool  
AVP Model **AT-EIT**



EDAC Ejection Tool  
AVP Model **AT-EET**



90 Pin Metal Cover  
(not included in Mating Connector Kit)  
AVP Model **AP-MCE90**



**Mating  
Connector Kit**

**Tooling**

patchcords  
available on  
page 56

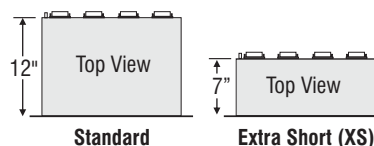






## Normaling Descriptions

All AVP audio jackfields are suitable for AES/EBU digital & analog audio patching



## Available Full Enclosure Depths

**Model Number**

**P - B 2 48 - L - E90**

Series	Jack Spacing	Panel Height	Normaling	Options, add to end of Model Number
A Mosaic (CIS)	S Stereo Spaced (most common)	1 1 Rack Unit 1.75", 44mm	FN Full Normals installed at jacks	-XS Jackfield Depth, Extra Short, 7.00", 177.8mm
T Mosaic (Black CIS)	E Even Spaced	15 1.5 Rack Unit 2.62", 66mm	HN Half Normals installed at jacks	-BGHJ Bussed Grounds at jacks, horizontal
		2 2 Rack Unit 3.50", 89mm	NN No Normals	-SGVJ Strapped Grounds at each vertical jack pair
				-KZ No Mating Connector Kit
				-KS Solder Mating Connector Kit

## Full Enclosure Bantam Ordering Information

Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)

Popular Models	
Model	Description
AP-B248S1-L-FN-E90	1RU, 2x48 Bantam Jacks, Full Normals, EDAC 90 pin termination, Mating Connector Kit
AP-B248S1-L-HN-E90	1RU, 2x48 Bantam Jacks, Half Normals, EDAC 90 pin termination, Mating Connector Kit
MK248P-E90C	EDAC 90 pin Primaries Kit for 2x48 patchbay, Crimp
MK248P-E90S	EDAC 90 pin Primaries Kit for 2x48 patchbay, Solder
*38 & 56 Pin available upon request	

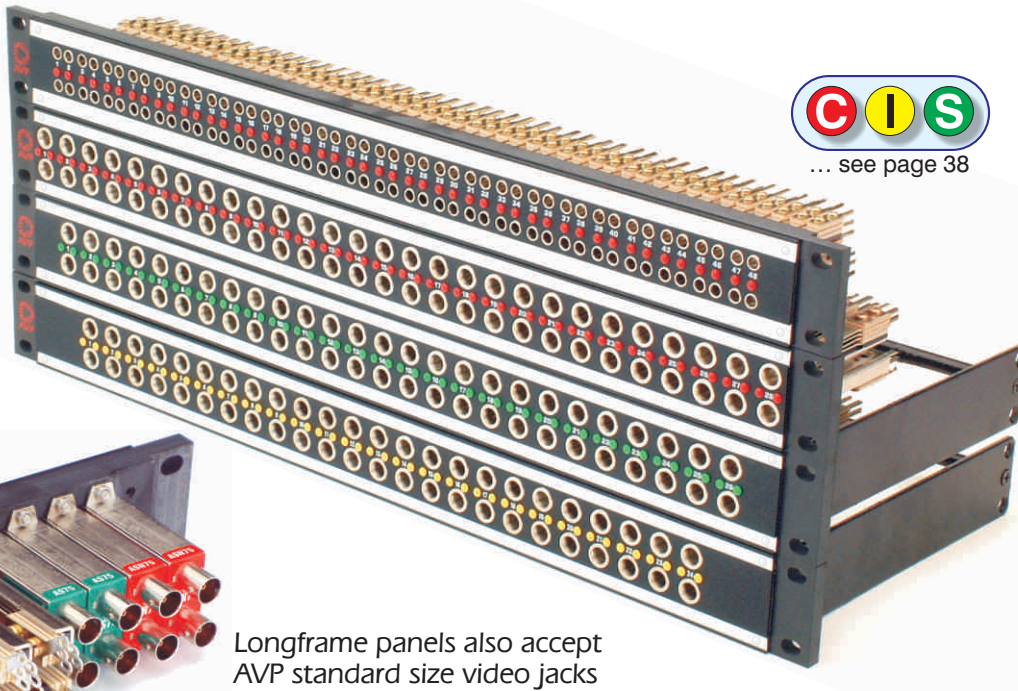
**Bantam Patchcords**

Length	Black	Red	Green	Blue	Yellow
2', 600mm	BPC-2-BLACK	BPC-2-RED	BPC-2-GREEN	BPC-2-BLUE	BPC-2-YELLOW
3', 900mm	BPC-3-BLACK	BPC-3-RED	BPC-3-GREEN	BPC-3-BLUE	BPC-3-YELLOW
4', 1200mm	BPC-4-BLACK	BPC-4-RED	BPC-4-GREEN	BPC-4-BLUE	BPC-4-YELLOW

110 Ohm AES/EBU Digital and Analog Audio Application

...more patchcords available on page 56

## Features and Benefits



Longframe panels also accept AVP standard size video jacks

### Panel Features

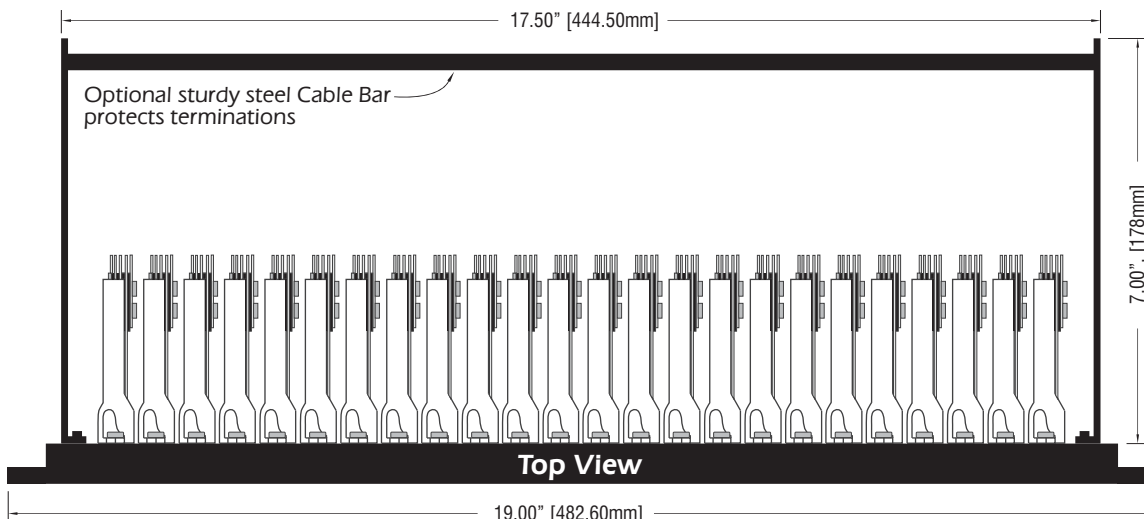
- Extensive Selection
  - Bantam, 2x48
  - Longframe, 2x24, 2x26, 2x28
  - 1RU, 1.5RU or 2RU
- Maximized Designations
- Front-mounting Jacks
- Captive Screws
- Heavy Duty Construction
- Cable bars secure all terminations (optional)



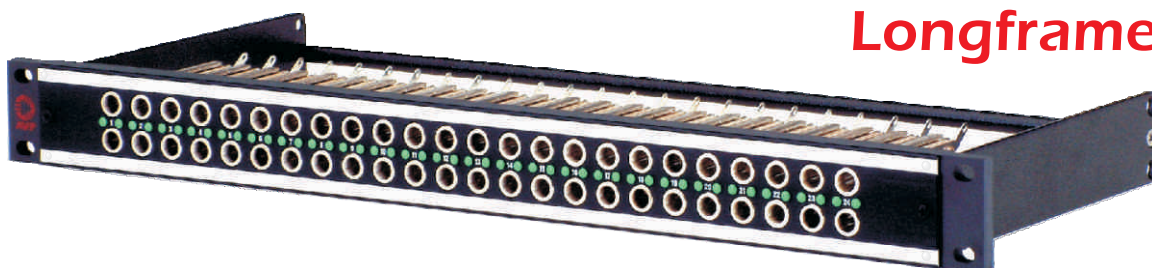
### Audio Jack Features

AVP Longframe and Bantam Jacks

- Certified for 30,000 mating cycles
  - Nickel-plated for corrosion resistance
  - Self-wiping gold contacts
  - Solder tail or wire-wrap
- (full specifications on page 38)




## Longframe



Shown with Optional Cable Bar

**Model Number**  
J - A 2 E - - -

**Series**

**A** Mosaic 

**T** Mosaic (Black CIS)

**Cable Bar Option**

**BZ** No Cable Bar

**B10** 7" [178mm] Cable Bar

**Number of Jacks per Row**

**24** 2x24 Jacks

**26** 2x26 Jacks

**Normaling**

**FN** Full Normal jumpers installed at jacks

**HN** Half Normal jumpers installed at jacks

**NN** No Normal jumpers installed at jacks

**Panel Height**

**1** 1 Rack Unit 1.75", 44mm

**15** 1.5 Rack Unit 2.62", 66mm

**2** 2 Rack Unit 3.50", 89mm

**Installed Jack Type**

**A1S** Longframe Jacks with solder lugs


**Z** None (empty panel)

## Longframe Ordering Information

Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)

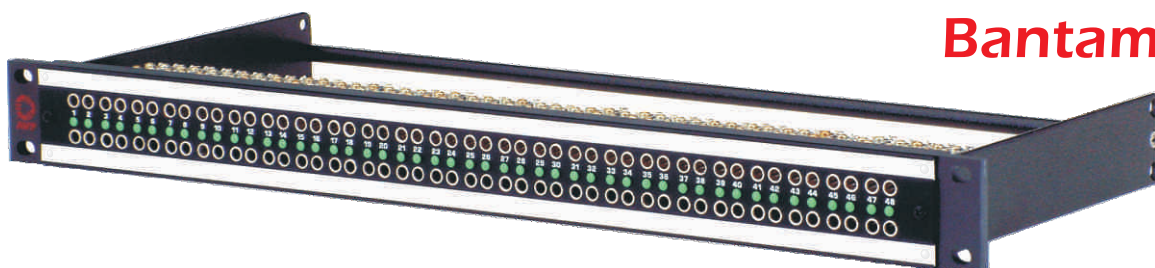
Popular Models	
Model	Description
Longframe Jackpanels	
<b>AJ-A224E1-A1S-BZ</b>	1RU, 2x24, 48 Longframe Jacks with solder tails, no cable bar
<b>AJ-A224E2-A1S-BZ</b>	2RU, 2x24, 48 Longframe Jacks with solder tails, no cable bar

Longframe Jacks	
<b>AJ-A1S</b>	1 Longframe Jack, solder, front-mount
<b>AJ-A2S-FN</b>	2 Longframe Jacks, solder, front-mount, Full Normal
<b>AJ-A2S-HN</b>	2 Longframe Jacks, solder, front-mount, Half Normal

Longframe Patchcords							
	1'	300mm	LPC-1-BLACK	LPC-1-RED	LPC-1-GREEN	LPC-1-BLUE	LPC-1-YELLOW
	1.5'	450mm	LPC-1.5-BLACK	LPC-1.5-RED	LPC-1.5-GREEN	LPC-1.5-BLUE	LPC-1.5-YELLOW
	2'	600mm	LPC-2-BLACK	LPC-2-RED	LPC-2-GREEN	LPC-2-BLUE	LPC-2-YELLOW
	3'	900mm	LPC-3-BLACK	LPC-3-RED	LPC-3-GREEN	LPC-3-BLUE	LPC-3-YELLOW
	4'	1200mm	LPC-4-BLACK	LPC-4-RED	LPC-4-GREEN	LPC-4-BLUE	LPC-4-YELLOW
	6'	1800mm	LPC-6-BLACK	LPC-6-RED	LPC-6-GREEN	LPC-6-BLUE	LPC-6-YELLOW
	10'	3.05m	LPC-10-BLACK	LPC-10-RED	LPC-10-GREEN	LPC-10-BLUE	LPC-10-YELLOW
110 Ohm AES/EBU Digital and Analog Audio Application				... more patchcords available on page 56			

## Longframe Audio Patchcords






Shown with Optional Cable Bar

## Bantam

Model Number	
<b>J</b>	<b>B 2 48</b>

**Series**

**A** Mosaic 

**T** Mosaic (Black CIS)

**Jack Spacing**

**S** Stereo Spaced (most common)

**E** Even Spaced

**Panel Height**

**1** 1 Rack Unit 1.75", 44mm

**15** 1.5 Rack Unit 2.62", 66mm

**2** 2 Rack Unit 3.50", 89mm

**Cable Bar Option**

**BZ** No Cable Bar

**B10** 7" [178mm] Cable Bar

**Normalizing**

**FN** Full Normal jumpers installed at jacks

**HN** Half Normal jumpers installed at jacks

**NN** No Normal jumpers installed at jacks

**Installed Jack Type**

**B1S** Bantam Jacks with solder lugs


**Z** None (empty panel)

## Bantam Ordering Information

Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)

Popular Models	
Model	Description
Bantam Jackpanels	
<b>AJ-B248S1-B1S-BZ</b>	1RU, 2x48, 96 Bantam Jacks, no cable bar
<b>AJ-B248S1-B1S-B10</b>	1RU, 2x48, 96 Bantam Jacks, 7" [178mm] Cable Bar

Bantam Jacks	
<b>AJ-B1S</b>	1 Bantam Jack, solder, front-mount
<b>AJ-B2S-FN</b>	2 Bantam Jacks, solder, front-mount, Full Normal
<b>AJ-B2S-HN</b>	2 Bantam Jacks, solder, front-mount, Half Normal

Bantam Patchcords							
	1'	300mm	<b>BPC-1-BLACK</b>	<b>BPC-1-RED</b>	<b>BPC-1-GREEN</b>	<b>BPC-1-BLUE</b>	<b>BPC-1-YELLOW</b>
	1.5'	450mm	<b>BPC-1.5-BLACK</b>	<b>BPC-1.5-RED</b>	<b>BPC-1.5-GREEN</b>	<b>BPC-1.5-BLUE</b>	<b>BPC-1.5-YELLOW</b>
	2'	600mm	<b>BPC-2-BLACK</b>	<b>BPC-2-RED</b>	<b>BPC-2-GREEN</b>	<b>BPC-2-BLUE</b>	<b>BPC-2-YELLOW</b>
	3'	900mm	<b>BPC-3-BLACK</b>	<b>BPC-3-RED</b>	<b>BPC-3-GREEN</b>	<b>BPC-3-BLUE</b>	<b>BPC-3-YELLOW</b>
	4'	1200mm	<b>BPC-4-BLACK</b>	<b>BPC-4-RED</b>	<b>BPC-4-GREEN</b>	<b>BPC-4-BLUE</b>	<b>BPC-4-YELLOW</b>
	6'	1800mm	<b>BPC-6-BLACK</b>	<b>BPC-6-RED</b>	<b>BPC-6-GREEN</b>	<b>BPC-6-BLUE</b>	<b>BPC-6-YELLOW</b>
	10'	3.05m	<b>BPC-10-BLACK</b>	<b>BPC-10-RED</b>	<b>BPC-10-GREEN</b>	<b>BPC-10-BLUE</b>	<b>BPC-10-YELLOW</b>

110 Ohm AES/EBU Digital and Analog Audio Application

...more patchcords available on page 56

## Bantam Audio Patchcords

## AVP Circuit Identification System (CIS)

Mosaic jackfields are shipped with each jack normalizing type identified by color, but interchangeable indicators are available in 10 colors so you can color-code your system according to your own system design. (easily identify critical circuits, source and destination, signal type, etc)



● Full Normals ● Half Normals ● No Normals

- Bantam: 1 Indicator per circuit
- Longframe & Video: 2 Indicators per circuit

● BLACK	● GREEN
● BROWN	● BLUE
● RED	● PURPLE
● ORANGE	● GRAY
● YELLOW	● WHITE



Jackfields with this insignia feature the AVP Circuit Identification System (CIS)

Additional information on inside front cover.

Model Number	
CIS - [ ] - [ ]	
Number of Color Indicators	Color
10 Package of 10	BLACK ● GREEN ●
30 Package of 30	BROWN ● BLUE ●
60 Package of 60	RED ● PURPLE ●
100 Package of 100	ORANGE ● GRAY ●
	YELLOW ● WHITE ●
	- MULTI of each color



AVP Circuit Identification System

Ordering Information

## Audio Jack Specifications

### Features and Benefits

- Certified for 30,000 mating cycles
- Nickel-plated for corrosion resistance
- Made and assembled in the USA
- Self-cleaning Gold Contacts
- Steel jack frame for superior jack life
- Offset ground terminal for ease in making common ground buss connections
- Solder lugs for Tip, Ring, Sleeve, Tip Normal, Ring Normal

### Materials

- Frame: Steel, nickel-plated
- Bushing: Brass, nickel-plated
- Springs: Nickel-plated, solder lugs
- Ground Terminal: Nickel-plated, solder lugs
- Gold switching contacts
- Insulation: Phenolic spacers, rigid PVC tubing through stack
- Screws: Steel, nickel-plated



### Electrical

- Contact Resistance: Less than .020 Ohms
- Contact Rating: .75 AMP @ 140 VDC
- Working Voltage: 140 VDC
- Insulation: 500 VAC for 1 minute
- Working Temperature Range: -40C to +85C

## Panel Specifications

### Material:

- Arboron thermo-laminate layers
- UL94 Flame Class / 94 VO
- UL card# E96516(M) June 17, 1986
- Full specification available upon request.



## RPT Specifications

### AVP Rapid Punch Terminal

- Barrel Diameter: 0.125"
- Material: Phosphor bronze, bright tin plate, special temper
- Wire Gage Capacity: 20 thru 28, stranded or solid
- Insulation Dia. Max: 0.086"
- Number of Wires per Terminal:
  - 1 or 2 wires per side. For 2 wires, gage of wire can be mixed providing they are 1 gage apart. (i.e. 20 & 22, 24 & 26)
- Re-Usability: Minimum 300 terminations
- Bare Wires: Must be sleeved with PVC tubing before termination
- Current Rating: 5 amperes / 22 AWG wire
- Test Specifications comply with MIL-STD-202, MIL-STD-1344 & EIA RS-364



# Datapatch/RS422



JR-16N

## Application

- Computer Data Interconnection
- RS422 Patching
- Universal Machine Control
- Editor to VTR Patching

## Application & Features



JR-32N

## Features

- Patch between any two data paths with reliable audio-type patchcord
- Easy interconnection of data ports (9-pin D connectors with screwlocks)
- Enclosed steel chassis (19", 480mm rack-mount x 12", 300mm deep)



JR-48N

Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)

## Polarity Protected



AVP Databcord

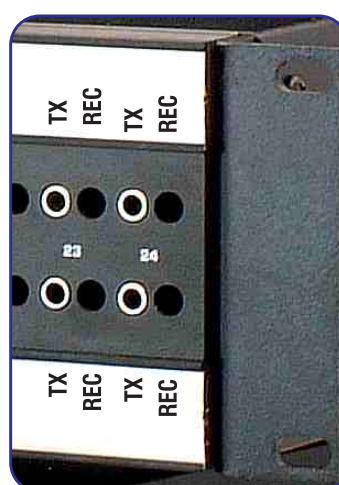
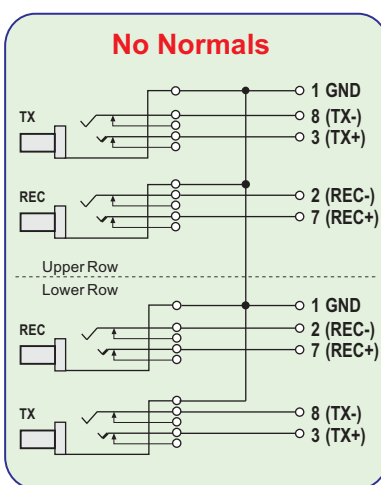
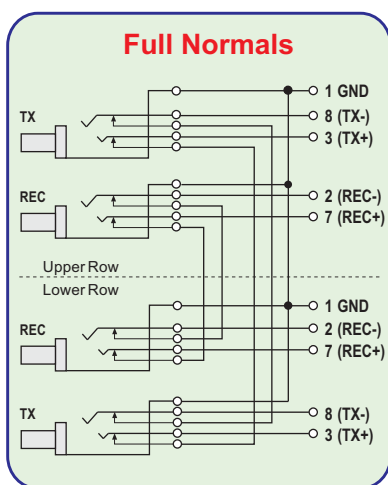
- Reduce the risk of equipment damage!
- Keyed jacks and patchcords eliminate inadvertent cross-patches

The jacks and plugs of this jackfield are polarized for the user's protection. However, use of patchcords other than the AVP Databcord, or any other pair transposition within the customer's equipment will circumvent this polarity protection.

- Datapatch Polarity Protected Bantam Patchcords: 2', [600mm] and 3', [900mm]. Please see page 56.

## Polarity Protected

## Datapatch Schematic



## Datapatch Schematic

**Note 1.**  
Grounds are bussed unless requested otherwise.

**Note 2.**  
The jacks and plugs of this jackfield are polarized for the user's protection. However, use of patch cords other than the AVP Databcord or any other pair transposition within the customer's equipment will circumvent this polarity protection.

**TX:** Transmit  
**REC:** Receive

### Product Listing

Model	Description
Datapatch / RS422	
JR-16N	1RU 1.75", 45mm Panel, 8 Send/Receive Circuit Pairs, Full Normals installed at jacks
JR-16	1RU 1.75", 45mm Panel, 16 Circuits, No Normals
JR-32N	2RU 3.50", 89mm Panel, 16 Send/Receive Circuit Pairs, Full Normals installed at jacks
JR-32	2RU 3.50", 89mm Panel, 32 Circuits, No Normals
JR-48N	2RU 3.50", 89mm Panel, 24 Send/Receive Circuit Pairs, Full Normals installed at jacks
JR-48	2RU 3.50", 89mm Panel, 48 Circuits, No Normals

## Ordering Information



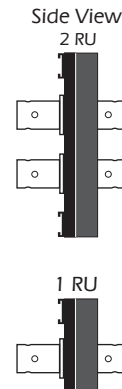
- Heavy-duty Rigid Phenolic Panels
- Attractive textured black semi-gloss finish
- Hi-Performance BNC-BNC and F-F Connectors
- Configurations up to 3x24 available

### Features



### Non-Recessed Connector Panels

- AVP Hi-Performance JJ300 BNC-BNC Connectors, for Analog to Digital Applications up to 3GHz

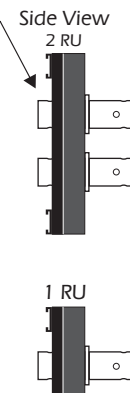


### BNC-BNC Non-Recessed

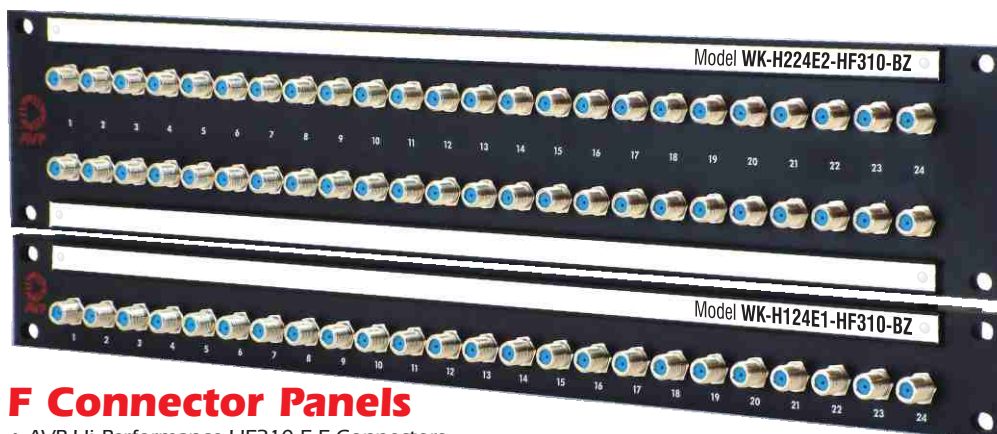


### Semi-Recessed Connector Panels

- AVP Hi-Performance JJ300 BNC-BNC Connectors, for Analog to Digital Applications up to 3GHz



### BNC-BNC Semi-Recessed



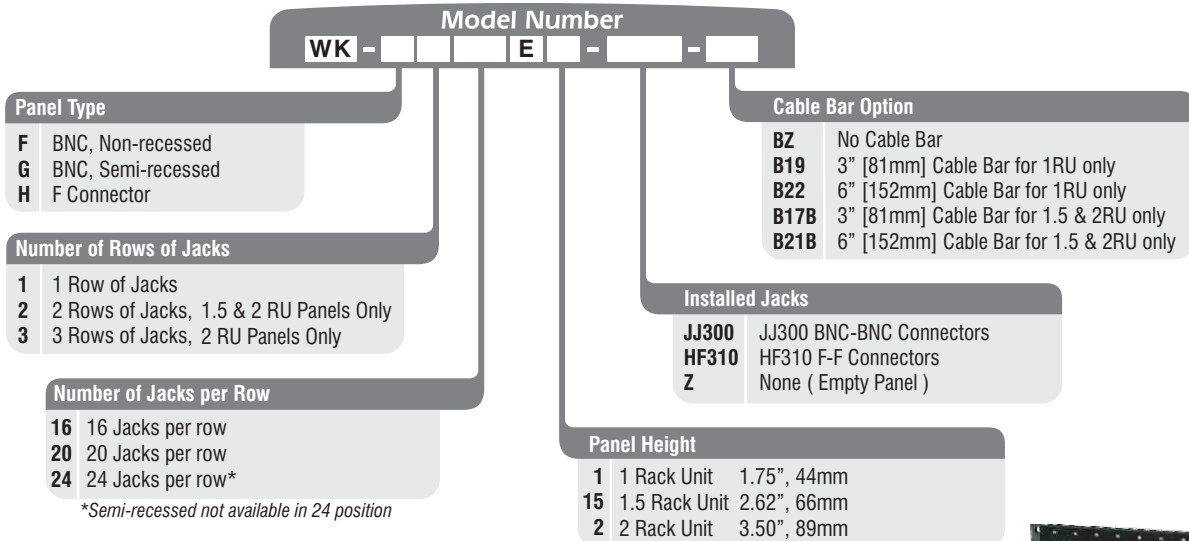
### F Connector Panels

- AVP Hi-Performance HF310 F-F Connectors



### F-F Connector

### Ordering Information



Designation Layouts...  
www.jackfields.com/support



WK-G216E2-JJ300-B21B shown

Popular Models (Configurations up to 3x24 are available )	
Model	Description
<b>BNC-BNC Non-recessed Connector Panels</b>	
<b>WK-F116E1-JJ300-BZ</b>	1RU, 1x16 position, BNC-BNC non-recessed panel, 16 JJ300 connectors, no cable bar
<b>WK-F216E2-JJ300-BZ</b>	2RU, 2x16 position, BNC-BNC non-recessed panel, 32 JJ300 connectors, no cable bar
<b>WK-F320E2-JJ300-BZ</b>	2RU, 3x20 position, BNC-BNC non-recessed panel, 60 JJ300 connectors, no cable bar
<b>WK-F216E2-Z-BZ</b>	2RU, 2x16 position, BNC-BNC non-recessed panel, empty, no cable bar
<b>BNC-BNC Semi-recessed Connector Panels</b>	
<b>WK-G116E1-JJ300-BZ</b>	1RU, 1x16 position, BNC-BNC semi-recessed panel, 16 JJ300 connectors, no cable bar
<b>WK-G216E2-JJ300-BZ</b>	2RU, 2x16 position, BNC-BNC semi-recessed panel, 32 JJ300 connectors, no cable bar
<b>WK-G320E2-JJ300-BZ</b>	2RU, 3x20 position, BNC-BNC semi-recessed panel, 60 JJ300 connectors, no cable bar
<b>WK-G216E2-Z-BZ</b>	2RU, 2x16 position, BNC-BNC semi-recessed panel, empty, no cable bar
<b>F-F Connector Panels</b>	
<b>WK-H116E1-HF310-BZ</b>	1RU, 1x16 position, F connector panel, 16 HF310 connectors, no cable bar
<b>WK-H216E2-HF310-BZ</b>	2RU, 2x16 position, F connector panel, 32 HF310 connectors, no cable bar
<b>WK-H324E2-HF310-BZ</b>	2RU, 3x24 position, F connector panel, 72 HF310 connectors, no cable bar

### F Connector Specifications

### BNC Connector Specifications



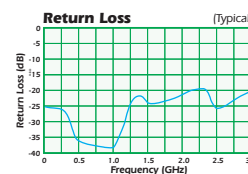
#### HF310 Specifications

**Description:** High Performance F-81 Barrel Splice  
**Body Material:** 360 Grade Brass, Bright Nickel Plated  
**Overall Length:** 1.026" (26.06mm)  
**Hex Size:** 0.44" (11.18mm)  
**Nut Width:** 0.147" (37.34)  
**Insulator Material:** Polypropylene  
**Center Pin Material:** Beryllium Copper



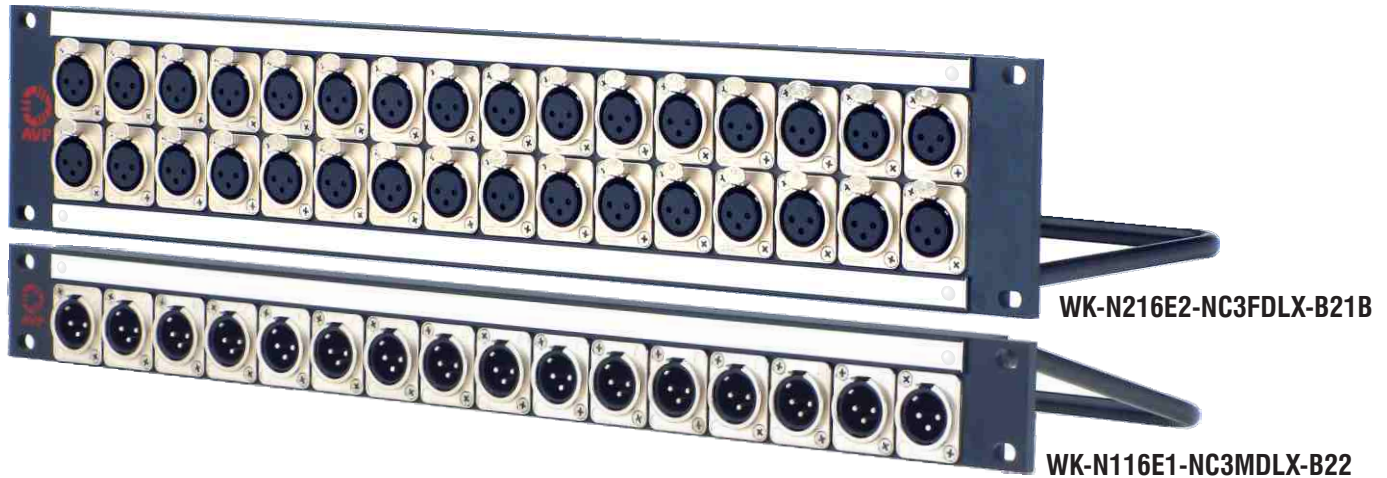
#### JJ300 Specifications

**Description:** 75 ohm Double BNC Female Bulkhead  
**Body Material:** Brass, Bright Nickel Plated  
**Overall Length:** 1.295" [32.90mm]  
**Barrel Diameter:** 0.378" [9.60mm]  
**Nut Width:** 0.551" [14.00mm]  
**Dielectric:** Teflon, T-02015  
**Center Pin:** Brass, Gold Plated



## XLR Connector Panels

- Male and female may be mixed on the same panel
- Tapped mounting holes
- 3" [81mm] or 6" [152mm] Strain relief cable bars available



### Model Number

**WK - N 16 E - -**

**Panel Type**  
N XLR

**Number of Rows of Connectors**  
1 1 Row of Connectors  
2 2 Rows of Connectors, 2 RU Panels Only

**Number of Connectors per Row**  
16 16 Jacks per row

**Panel Height**  
1 1 Rack Unit 1.75", 44mm  
2 2 Rack Unit 3.50", 89mm

### Ordering Information

**Cable Bar**  
BZ No Cable Bar  
B19 3" [81mm] Cable Bar for 1RU Panel  
B22 6" [152mm] Cable Bar for 1RU Panel  
B17B 3" [81mm] Cable Bar for 2RU Panel, at bottom  
B21B 6" [152mm] Cable Bar for 2RU Panel, at bottom

**Z Empty Panel**

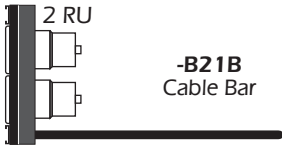
**Neutrik Black/Gold DL Series with Solder Cups**  
NC **DLB1**  
F - Female M - Male  
3, 4, 5, 6 or 7 Number of Poles

**Neutrik Black/Gold DLX Series with Solder Cups & Duplex Ground Contacts**  
NC **DLXB**  
F - Female M - Male  
3, 4, 5, 6 or 7 Number of Poles

**Neutrik Nickel/Silver DL Series with Solder Cups**  
NC **DL1**  
F - Female M - Male  
3, 4, 5, 6 or 7 Number of Poles

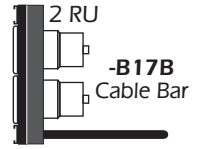
**Neutrik Nickel/Silver DLX Series with Solder Cups & Duplex Ground Contacts**  
NC **DLX**  
F - Female M - Male  
3, 4, 5, 6 or 7 Number of Poles

### Cable Bar Side Views




**-B21B**  
Cable Bar

6.00" [15.24"]




**-B17B**  
Cable Bar

3.179" [80.75mm]



**-B22**  
Cable Bar



**-B19**  
Cable Bar

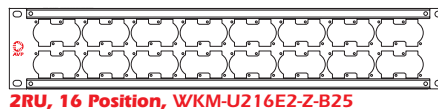
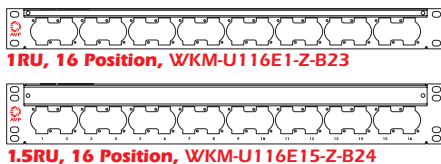
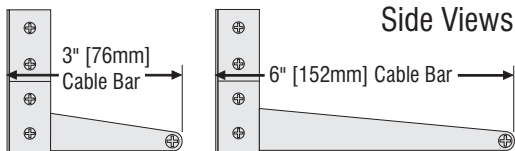


## Universal Bulkhead Panel System Maxxum Series

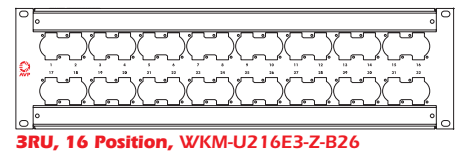


### Featuring:

- MIS Color-Code System
- Expanded Module Selection
- Dual Width Modules
- Introduction of 1.5RU
- Choose 3" (76mm) or 6" (152mm) Strain Relief Cable Bar System



Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)



### Ordering Information - Universal, Maxxum Series Bulkhead Panels

Model	Description
Metal Universal Panel - Panel with Cable Bar Only; no Connectors, no Adaptor Plates, no Cover Plates	
<b>WKM-U116E1-Z-B23</b>	1RU, 1x16 Metal Universal Panel, Panel & 3" [76mm] Cable Bar Only, No Connectors
<b>WKM-U116E1-Z-B31</b>	1RU, 1x16 Metal Universal Panel, Panel & 6" [152mm] Cable Bar Only, No Connectors
<b>WKM-U116E15-Z-B24</b>	1.5RU, 1x16 Metal Universal Panel, Panel & 3" [76mm] Cable Bar Only, No Connectors
<b>WKM-U116E15-Z-B32</b>	1.5RU, 1x16 Metal Universal Panel, Panel & 6" [152mm] Cable Bar Only, No Connectors
<b>WKM-U216E2-Z-B25</b>	2RU, 2x16 Metal Universal Panel, Panel & 3" [76mm] Cable Bar Only, No Connectors
<b>WKM-U216E2-Z-B33</b>	2RU, 2x16 Metal Universal Panel, Panel & 6" [152mm] Cable Bar Only, No Connectors
<b>WKM-U216E3-Z-B26</b>	3RU, 2x16 Metal Universal Panel, Panel & 3" [76mm] Cable Bar Only, No Connectors
<b>WKM-U216E3-Z-B34</b>	3RU, 2x16 Metal Universal Panel, Panel & 6" [152mm] Cable Bar Only, No Connectors
<b>Options:</b>	
<b>BUILD2</b>	2 or 3RU Assembly of connectors to panel
<b>BUILD1</b>	1 or 1.5RU Assembly of connectors to panel

### Ordering Information - Maxxum Color-Code Caps

MIS - [ ] - [ ]	
Number of Color-Code Caps	Cap Color
30 Package of 30	BLACK GREEN
60 Package of 60	BROWN BLUE
100 Package of 100	RED PURPLE
	ORANGE GRAY
	YELLOW WHITE
	- MULTI of each color



Ordering Information	
Model	Description
ALL Maxxum Modules INCLUDE MIS Black Cap and Mounting Hardware	
<b>FIBER OPTIC ST</b>	
<b>UMF-SMP-ST</b>	Multimode ST Mating Sleeve, Metal Housing, Phos. Bronze Sleeve
#907178	
<b>UMF-SMP-ST-DC</b>	Multimode ST Mating Sleeve, Metal Housing, Phos. Bronze Sleeve, 1 Dust Cap
#907179	
<b>UMF-SSP-ST</b>	Single Mode ST Mating Sleeve, Metal Housing, Zirconia Sleeve
#907180	
<b>UMF-SSP-ST-DC</b>	Single Mode ST Mating Sleeve, Metal Housing, Zirconia Sleeve, 1 Dust Cap
#907181	
<b>UMF-DMU-ST</b>	Duplex Multimode ST Mating Sleeve, Metal Housing, Phos. Bronze Sleeve
#907182	
<b>UMF-DMU-ST-DC</b>	Duplex Multimode ST Mating Sleeve, Metal Housing, Phos. Bronze Sleeve, 2 Dust Caps
#907183	
<b>UMF-DSU-ST</b>	Duplex Single Mode ST Mating Sleeve, Metal Housing, Zirconia Sleeve
#907184	
<b>UMF-DSU-ST-DC</b>	Duplex Single Mode ST Mating Sleeve, Metal Housing, Zirconia Sleeve, 2 Dust Caps
#907185	
<b>UMFO-DC-ST</b>	Metal Dust Cap & Chain for ST
#907203	
<b>FIBER OPTIC SC</b>	
<b>UMF-SMP-SC</b>	Multimode SC Mating Sleeve, Polymer Housing, Phos. Bronze Sleeve, Beige Color
#907186	
<b>UMF-SMP-SC-10G</b>	10Gig Multimode SC Mating Sleeve, Multimode, Polymer Housing, Aqua Color
#907187	
<b>UMF-SSP-SC</b>	Single Mode SC Mating Sleeve, Polymer Housing, Zirconia Sleeve, Blue Color
#907190	
<b>UMF-SSA-SC</b>	SC/APC Single Mode Mating Sleeve, Polymer Housing, Zirconia Sleeve, Green Color
#907193	
<b>UMF-DMP-SC</b>	Duplex Multimode SC Mating Sleeve, Polymer Housing, Beige Color
#907188 *2 Spaces	
<b>UMF-DMP-SC-10G</b>	Duplex 10Gig Multimode SC Mating Sleeve, Multimode, Polymer Housing, Aqua Color
#907189 *2 Spaces	
<b>UMF-DSP-SC</b>	Duplex Single Mode SC Mating Sleeve, Polymer Housing, Zirconia Sleeve, Blue Color
#907191 *2 Spaces	
<b>UMF-DSP-SC-SH</b>	Duplex Single Mode SC Mating Sleeve with Shutter, Poly. Housing, Zirconia Sl., Blue Color
#907192 *2 Spaces	
<b>UMF-DSA-SC</b>	Duplex SC/APC Single Mode Mating Sleeve, Polymer Housing, Zirconia Sleeve, Green Color
#907194 *2 Spaces	
<b>FIBER OPTIC LC</b>	
<b>UMF-SMP-LC</b>	Multimode LC Mating Sleeve, Phos. Bronze Sleeve, Beige Color
#907195	
<b>UMF-SSP-LC</b>	Single Mode LC Mating Sleeve, Zirconia Sleeve, Blue Color
#907196	
<b>UMF-SSA-LC</b>	LC/APC Single Mode Mating Sleeve, Zirconia Sleeve, Green Color
#907197	
<b>UMF-DMP-LC-SCF</b>	Duplex Multimode LC Mating Sleeve, Beige Color, SC Footprint
#907198	
<b>UMF-DMP-LC-10G-SCF</b>	10Gig Duplex Multimode LC Mating Sleeve, Aqua Color, SC Footprint
#907199	
<b>UMF-DSP-LC-SCF</b>	Duplex Single Mode LC Mating Sleeve, Zirconia Sleeve, Blue Color, SC Footprint
#907200	
<b>UMF-DSA-LC-SCF</b>	LC/APC Duplex LC Mating Sleeve, Zirconia Sleeve, Green Color, SC Footprint
#907201	
<b>UMF-DSP-LC-SCF-SH</b>	Duplex Single Mode LC Mating Sleeve with Shutter, Zirconia Sleeve, Blue Color
#907202	
<b>OpticalCON DUO</b>	
<b>UMNO2-4FDW-A</b>	OpticalCON Chassis connector with black chromium plating, 4 solder contacts and 1 LC-Duplex feedthru socket
#907378	
<b>UMNO2-4FDW-1-A</b>	OpticalCON 1 LC-Duplex feedthru socket, 1 shell ground contact (for SMPTE cable shield)
#907219	
<b>OpticalCON QUAD</b>	
<b>UMNO4FDW-A</b>	OpticalCON Chassis connector, black chromium plating
#907379	
*Requires 2 Panel Spaces	

Ordering Information	
Model	Description
ALL Maxxum Modules INCLUDE MIS Black Cap and Mounting Hardware	
<b>Data - Network - Multimedia</b>	
<b>Neutrik Ethercon</b>	
<b>Cat5e 110 Punch IDC</b>	
<b>UMNE8FDV-Y110</b>	Cat5e, Panel mount receptacle with IDC
#907383	110 punch down terminals, nickel chassis
<b>UMNE8FDV-Y110-B</b>	Cat5e, Panel mount receptacle with IDC
#907384	110 punch down terminals, black chassis
<b>Cat5e Krone Punch IDC</b>	
<b>UMNE8FDV-YK</b>	Cat5e, Panel mount receptacle with IDC
#907220	Krone punch down terminals, nickel chassis
<b>UMNE8FDV-YK-B</b>	Cat5e, Panel mount receptacle with IDC
#907322	Krone punch down terminals, black chassis
<b>Cat5e Feedthru</b>	
<b>UMNE8FDP</b>	RJ45 Feedthru receptacle, nickel chassis
#907385	
<b>UMNE8FDP-B</b>	RJ45 Feedthru receptacle, black chassis
#907386	
<b>Cat 6 Tool-less</b>	
<b>UMNE8FDY-C6</b>	Cat 6, IDC, Toolless, nickel chassis
#907387	
<b>UMNE8FDY-C6-B</b>	Cat 6, IDC, Toolless, black chassis
#907274	
<b>Ethernet</b>	
<b>UM2RJ45-6AFS</b>	*Cat6A, RJ45, Feedthru, female to female, Shielded
#907213	
<b>UM2RJ45-6FS</b>	**Cat6, RJ45, Feedthru, female to female, Shielded
#907214	
<b>UM2RJ45-6AS</b>	*Cat6A, Shielded, RJ45, Tool-less or 110/Krone Punchdown, 23-26AWG, stranded or solid, h/w
#907215	
<b>UM2RJ45-6S</b>	**Cat6, Shielded, RJ45, Tool-less or 110/Krone Punchdown, 23-26AWG, stranded or solid, h/w
#907216	
* For Cat3 to Cat6A shielded/unshielded applications ** For Cat3 to Cat6 shielded/unshielded applications	
<b>RJ11 (RJ12) Feedthru</b>	
<b>UMRJ11-F</b>	RJ11 (RJ12) 6 Pos/ 6 Conductor, IDC interface, Toolless
#907217	
<b>RJ11 (RJ12) IDC Toolless</b>	
<b>UMRJ11</b>	RJ11 (RJ12) 6 pos/6 con, Feedthru, female-female
#907218	
<b>Firewire</b>	
<b>UMFW-4</b>	Firewire 4 pin Feedthru, female-female, IEEE1394
#907261	
<b>UMNA1394-6-W</b>	Firewire 6 IEEE 1394 6-pole receptacles on both ends, nickel chassis
#907262	
<b>UMNA1394-6-W-B</b>	Firewire 6 IEEE 1394 6-pole receptacles on both ends, black chassis
#907380	
<b>USB</b>	
<b>UMSB-A</b>	USB 2, Type A to A, Feedthru, female-female, black chassis
#907303	
<b>UMSB-B</b>	USB 2, Type B to B, Feedthru, female-female, black chassis
#907305	
<b>UMNAUSB-W</b>	Reversible USB gender changer (A to B, B to A), Nickel chassis
#907381	
<b>UMNAUSB-W-B</b>	Reversible USB gender changer (A to B, B to A), black chassis
#907304	
<b>UMSB3-A</b>	USB 3, Type A to A, Feedthru, female-female, black chassis
#907446	
<b>HDMI</b>	
<b>UMHDMI-DFF</b>	HDMI 1.3 feedthru adapter, nickel chassis
#907266	
<b>UMNAHDMI-W-B</b>	HDMI 1.3 feedthru adapter, black chassis
#907272	
<b>DVI</b>	
<b>UMDVI-FF</b>	DVI female to female feedthru, 24+5, black/gold, *Requires 2 panel spaces
#907204	

Ordering Information	
Model	Description
ALL Maxxum Modules INCLUDE MIS Black Cap and Mounting Hardware	
<b>D Sub9 &amp; HD15</b>	
<b>UMD9-FF</b>	D-Sub 9-pin Female to Female Feedthru
#907205	
<b>UMD9-MM</b>	D-Sub 9-pin Male to Male Feedthru
#907206	
<b>UMD9-MF</b>	D-Sub 9-pin Male to Female Feedthru
#907207	
<b>UMD9-FM</b>	D-Sub 9-pin Female to Male Feedthru
#907208	
<b>UMD15HD-FF</b>	D-Sub 15-pin Female to Female Feedthru
#907209	
<b>UMD15HD-MM</b>	D-Sub 15-pin Male to Male Feedthru
#907210	
<b>UMD15HD-MF</b>	D-Sub 15-pin Male to Female Feedthru
#907211	
<b>UMD15HD-FM</b>	D-Sub 15-pin Female to Male Feedthru
#907212	
<b>UMDB9-CF</b>	DB9 Female, socket contacts - crimp
#907253	
<b>UMDB9-CM</b>	DB9 Male, pin contacts - crimp
#907254	
<b>UMDB9-SCF</b>	DB9 Female, solder-cup
#907255	
<b>UMDB9-SCM</b>	DB9 Male, solder-cup
#907256	
<b>UMDB9-SF</b>	DB9 Female, solder-cup
#907257	
<b>UMDB9-SM</b>	DB9 Male, solder-cup
#907258	
<b>UMHD15-CF</b>	HD15, Female, socket contacts - crimp
#907263	
<b>UMHD15-CM</b>	HD15, Male, pin contacts - crimp
#907264	
<b>UMHD15-SF</b>	HD15 Female, solder-cup
#907265	
<b>UMHD15-SM</b>	HD15 Male, solder-cup
#907081	
<b>VIDEO</b>	
<b>BNC</b>	
<b>UMJJ300</b>	BNC Feedthru, 3 GHz, AVP JJ300, 75 ohm, non-recessed, female-female, black plate
#907221	
<b>UMJJ300R</b>	BNC Feedthru, 3 GHz, AVP JJ300, 75 ohm, semi-recessed, female-female, black chassis
#907267	
<b>UMBNC50-F</b>	BNC Coaxial Feedthru, 50 ohm, female-female
#907250	
<b>UMBNC50-FR</b>	BNC Coaxial Feedthru, 50 ohm, Semi-Recessed, female-female
#907539	
<b>UMNBB75DFI</b>	BNC connector, Feedthru, full recessed, nickel chassis
#907388	
<b>UMNBB75DFIB</b>	BNC connector, Feedthru, full recessed, black chassis
#907389	
<b>UMNBB75DFIB-P</b>	BNC connector, Feedthru, semi-recessed, black chassis
#907273	
<b>SVHS</b>	
<b>UMSVHS-4G</b>	SVHS Feedthru, 4 pin, gold plated
#907308	
<b>UMSVHS-4GR</b>	SVHS Feedthru, 4 pin, semi-recessed, gold plated
#907540	
<b>UMSVHS-4N</b>	SVHS Feedthru, 4 pin, nickel plated
#907309	
<b>UMSVHS-4NR</b>	SVHS Feedthru, 4 pin, semi-recessed, nickel plated
#907541	
<b>F - TNC - SMA</b>	
<b>UMTNC-F</b>	TNC coaxial adapter, Feedthru, female-female, 50 Ohm
#907310	
<b>UMHF310</b>	F Style Feedthru
#907222	
<b>UMSMA</b>	SMA Feedthru
#907306	
Contact AVP if your required connector is not shown	

Ordering Information	
Model	Description
ALL Maxxum Modules INCLUDE MIS Black Cap and Mounting Hardware	
<b>AUDIO</b>	
<b>AVP Baluns</b>	
<b>UMBLN-XFB</b> #907244	AVP Universal Panel-mount Balun, female XLR 3Pin 110 Ohm, to BNC 75 Ohm
<b>UMBLN-XMB</b> #907245	AVP Universal Panel-mount Balun, male XLR 3Pin 110 Ohm, to BNC 75 Ohm
<b>UMBLN-BXF</b> #907246	AVP Universal Panel-mount Balun, BNC 75 Ohm, to female XLR 3Pin 110 Ohm
<b>UMBLN-BXM</b> #907247	AVP Universal Panel-mount Balun, BNC 75 Ohm, to male XLR 3Pin 110 Ohm
<b>UMBLN-XFB-10</b> #907248	AVP Universal Panel-mount Balun, fem XLR 3Pin 110 Ohm, to BNC 75 Ohm, -10dB att.
<b>UMBLN-BXF-10</b> #907249	AVP Universal Panel-mount Balun, BNC 75 Ohm, to female XLR 3Pin 110 Ohm, -10dB att.
<b>Edac 3 Pin</b>	
<b>UME3R-C</b> #907259	3 Pin EDAC Receptacle with crimp pins
<b>UME3R-S</b> #907260	3 Pin EDAC Receptacle with solder pins
<b>N Connectors</b>	
<b>UMNN320</b> #907279	N Style Feedthru, 50 Ohm
<b>XLR Adapters</b>	
<b>UMNA3FDM</b> #907282	XLR female-male Feedthru adapter for panel mount
<b>UMNA3MDF</b> #907283	XLR male-female Feedthru adapter for panel mount
<b>SpeakON Chassis Connectors</b>	
<b>UMNL2MP</b> #907275	2 pole chassis connector, black D-size flange. Does not intermate with the 4-pole cableconnector
<b>UMNL4MP</b> #907276	4 pole chassis connector, black D-size flange, silver contacts
<b>UMNL4MP-B</b> #907277	4 pole chassis connector, black D-size flange, gold contacts
<b>RCA to RCA Feedthru</b>	
<b>UMRCA-R</b> #907297	RCA Feedthru, red. MIS red cap included
<b>UMRCA-W</b> #907298	RCA Feedthru, white. MIS white cap included
<b>UMRCA-Y</b> #907298	RCA Feedthru, yellow. MIS yellow cap included
<b>UMRCA-B</b> #907321	RCA Feedthru, blue. MIS blue cap included
<b>UMRCA-G</b> #907320	RCA Feedthru, green. MIS green cap included
<b>UMRCA-O</b> #907542	RCA Feedthru, orange. MIS orange cap included
<b>UMRCA-K</b> #907543	RCA Feedthru, black. MIS black cap included
<b>Phone Jacks, rear solder terminals</b>	
<b>UMNJ3FP6C</b> #907390	1/4" Stereo/Mono Locking phone jack, D-size shell, nickel metal housing, silver contacts
<b>UMNJ3FP6C-B</b> #907391	1/4" Stereo/Mono Locking phone jack, D-size shell, black metal housing, gold contacts
<b>UMNJ3FP6C-BAG</b> #907307	1/4" Stereo/Mono Locking phone jack, D-size shell, black metal housing, silver contacts
<b>UMS35J</b> #907302	3.5mm Stereo Phone Jack
<b>Midi and Toslink</b>	
<b>UMMIDI</b> #907270	MIDI Isolated Connector, solder type
<b>UMTOS</b> #907311	Toslink optical audio coupler, Feedthru
*Requires 2 Panel Spaces	

Ordering Information	
Model	Description
ALL Maxxum Modules INCLUDE MIS Black Cap and Mounting Hardware	
<b>XLR BLACK/GOLD DL SERIES</b>	
<b>UMNC3FD-L-B-1</b> #907101	3 pole female receptacle, solder cups, black metal housing, gold contacts
<b>UMNC3MD-L-B-1</b> #907102	3 pole male receptacle, solder cups, black metal housing, gold contacts
<b>UMNC4FD-L-B-1</b> #907284	4 pole female receptacle, solder cups, black metal housing, gold contacts
<b>UMNC4MD-L-B-1</b> #907293	4 pole male receptacle, solder cups, black metal housing, gold contacts
<b>UMNC5FD-L-B-1</b> #907285	5 pole female receptacle, solder cups, black metal housing, gold contacts
<b>UMNC5MD-L-B-1</b> #907294	5 pole male receptacle, solder cups, black metal housing, gold contacts
<b>UMNC6FD-L-B-1</b> #907287	6 pole female receptacle, solder cups, black metal housing, gold contacts
<b>UMNC6MD-L-B-1</b> #907295	6 pole male receptacle, solder cups, black metal housing, gold contacts
<b>UMNC7FD-L-B-1</b> #907289	7 pole female receptacle, solder cups, black metal housing, gold contacts
<b>UMNC7MD-L-B-1</b> #907296	7 pole male receptacle, solder cups, black metal housing, gold contacts
<b>XLR BLACK/GOLD DLX SERIES</b>	
<b>UMNC3FD-LX-B</b> #907392	3 pole female receptacle, solder cups, black metal housing, gold contacts, duplex ground contact
<b>UMNC3MD-LX-B</b> #907393	3 pole male receptacle, solder cups, black metal housing, gold contacts, duplex ground contact
<b>UMNC4FD-LX-B</b> #907394	4 pole female receptacle, solder cups, black metal housing, gold contacts, duplex ground contact
<b>UMNC4MD-LX-B</b> #907395	4 pole male receptacle, solder cups, black metal housing, gold contacts, duplex ground contact
<b>UMNC5FD-LX-B</b> #907396	5 pole female receptacle, solder cups, black metal housing, gold contacts, duplex ground contact
<b>UMNC5MD-LX-B</b> #907397	5 pole male receptacle, solder cups, black metal housing, gold contacts, duplex ground contact
<b>UMNC6FD-LX-B</b> #907398	6 pole female receptacle, solder cups, black metal housing, gold contacts, duplex ground contact
<b>UMNC6MD-LX-B</b> #907399	6 pole male receptacle, solder cups, black metal housing, gold contacts, duplex ground contact
<b>UMNC7FD-LX-B</b> #907400	7 pole female receptacle, solder cups, black metal housing, gold contacts, duplex ground contact
<b>UMNC7MD-LX-B</b> #907401	7 pole male receptacle, solder cups, black metal housing, gold contacts, duplex ground contact
<b>XLR NICKEL/SILVER DL SERIES</b>	
<b>UMNC3FD-L-1</b> #907281	3 pole female receptacle, solder cups, nickel housing, silver contacts
<b>UMNC3MD-L-1</b> #907292	3 pole male receptacle, solder cups, nickel housing, silver contacts
<b>UMNC4FD-L-1</b> #907402	4 pole female receptacle, solder cups, nickel housing, silver contacts
<b>UMNC4MD-L-1</b> #907403	4 pole male receptacle, solder cups, nickel housing, silver contacts
<b>UMNC5FD-L-1</b> #907286	5 pole female receptacle, solder cups, nickel housing, silver contacts
<b>UMNC5MD-L-1</b> #907404	5 pole male receptacle, solder cups, nickel housing, silver contacts
<b>UMNC6FD-L-1</b> #907405	6 pole female receptacle, solder cups, nickel housing, silver contacts
<b>UMNC6MD-L-1</b> #907406	6 pole male receptacle, solder cups, nickel housing, silver contacts
<b>UMNC7FD-L-1</b> #907290	7 pole female receptacle, solder cups, nickel housing, silver contacts
<b>UMNC7MD-L-1</b> #907407	7 pole male receptacle, solder cups, nickel housing, silver contacts

Ordering Information	
Model	Description
ALL Maxxum Modules INCLUDE MIS Black Cap and Mounting Hardware	
<b>XLR NICKEL/SILVER DLX SERIES</b>	
<b>UMNC3FD-LX</b> #907408	3 pole female receptacle, solder cups, nickel housing, silver contacts, duplex ground contact
<b>UMNC3MD-LX</b> #907409	3 pole male receptacle, solder cups, nickel housing, silver contacts, duplex ground contact
<b>UMNC4FD-LX</b> #907410	4 pole female receptacle, solder cups, nickel housing, silver contacts, duplex ground contact
<b>UMNC4MD-LX</b> #907411	4 pole male receptacle, solder cups, nickel housing, silver contacts, duplex ground contact
<b>UMNC5FD-LX</b> #907412	5 pole female receptacle, solder cups, nickel housing, silver contacts, duplex ground contact
<b>UMNC5MD-LX</b> #907413	5 pole male receptacle, solder cups, nickel housing, silver contacts, duplex ground contact
<b>UMNC6FD-LX</b> #907414	6 pole female receptacle, solder cups, nickel housing, silver contacts, duplex ground contact
<b>UMNC6MD-LX</b> #907415	6 pole male receptacle, solder cups, nickel housing, silver contacts, duplex ground contact
<b>UMNC7FD-LX</b> #907416	7 pole female receptacle, solder cups, nickel housing, silver contacts, duplex ground contact
<b>UMNC7MD-LX</b> #907417	7 pole male receptacle, solder cups, nickel housing, silver contacts, duplex ground contact
<b>Maxxum Modules - Miscellaneous</b>	
<b>UMCP</b> #907068	Blank Cover Plate, black, covers one position
<b>UMB2-M</b> #907242	Banana Jacks (2), adapter plate
<b>UMB3-M</b> #907243	Banana Jack Triad (3), adapter plate
<b>UMBP1-S</b> #907251	Binding Post Single (1), adapter plate
<b>UMBP2-S</b> #907252	Binding Post Double (2), adapter plate
<b>UMMD66FF</b> #907268	PS/2 Keyboard Feedthru, female-female, adaptor plate
<b>UMMD66FFR</b> #907544	PS/2 Keyboard Feedthru, semi-recessed, female-female, adaptor plate
<b>UMMTS-L</b> #907271	Miniature Toggle Switch, DPDT, Locking Handle, 3Amps 250VAC, Solder
<b>Maxxum Indicator System (MIS)</b>	
Color-Code Caps	
<b>MIS-30-Color</b> #907	Replace "color" with; Black, Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray or White
<b>MIS-60-Color</b> #907	Replace "color" with; Black, Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray or White
<b>MIS-100-Color</b> #907	Replace "color" with; Black, Brown, Red, Orange, Yellow, Green, Blue, Purple, Gray or White
<b>MIS-30-MULTI</b> #907545	30 each of 10 colors, 300 caps total
<b>MIS-60-MULTI</b> #907546	60 each of 10 colors, 600 caps total
<b>MIS-100-MULTI</b> #907547	100 each of 10 colors. 1000 caps total
Contact AVP if your required connector is not shown	

## AES/EBU Digital Audio to 75Ohm Coax Baluns

Patch AES/EBU signals from XLR output equipment into standard 75 Ohm coax cabling systems to allow digital audio signals to be transmitted with longer runs than can be achieved with Shielded Twisted Pair wiring

### Features:

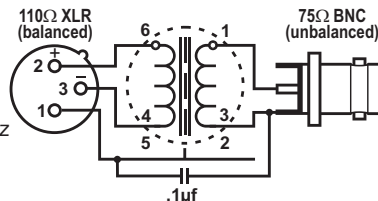
- SMPTE 276M and AES3 Transmission Standards
- Coaxial transmission of 2 Channel Digital Audio
- Allows longer cable runs than 110 Ohm Twisted Pair
- AES/EBU Signal distribution using AVP Universal Bulkhead Panel System
- Lightweight aluminum chassis
- Made in Canada

### Applications:

- Broadcast Control Rooms
- Recording Studios
- Post Production Facilities
- Satellite TV Facilities

### Specifications:

Maximum Voltage: 5Vp-p  
Max. Power: 250mW  
Frequency Band: 0.1MHz to 6MHz  
Insertion Loss: <0.3dB @ 0.1MHz to 10MHz  
Impedance Match: 110 ohm to 75 Ohm  
VSWR / Return Loss: <1.1/>26.4dB



### Ordering Information - Please specify Module Model Name for the AVP Universal Phenolic Panel, or the AVP Universal Metal Panel

For Phenolic Panel	For Metal Panel	Description
<b>UBLN-XFB</b>	<b>UMBLN-XFB</b>	AVP Universal Panel-mount Balun, female XLR 3Pin 110 Ohm, to BNC 75 Ohm, hardware
<b>UBLN-XMB</b>	<b>UMBLN-XMB</b>	AVP Universal Panel-mount Balun, male XLR 3Pin 110 Ohm, to BNC 75 Ohm, hardware
<b>UBLN-BXF</b>	<b>UMBLN-BXF</b>	AVP Universal Panel-mount Balun, BNC 75 Ohm, to female XLR 3Pin 110 Ohm, hardware
<b>UBLN-BXM</b>	<b>UMBLN-BXM</b>	AVP Universal Panel-mount Balun, BNC 75 Ohm, to male XLR 3Pin 110 Ohm, hardware
<b>UBLN-XFB-10</b>	<b>UMBLN-XFB-10</b>	AVP Universal Panel-mount Balun, female XLR 3Pin 110 Ohm, to BNC 75 Ohm, -10dB attenuation, h/w
<b>UBLN-BXF-10</b>	<b>UMBLN-BXF-10</b>	AVP Universal Panel-mount Balun, BNC 75 Ohm, to female XLR 3Pin 110 Ohm, -10dB attenuation, h/w

### Inline Balun

<b>BLN-XFB</b>	Inline Balun, female XLR 3Pin 110 Ohm, to BNC 75 Ohm
<b>BLN-XMB</b>	Inline Balun, male XLR 3Pin 110 Ohm, to BNC 75 Ohm



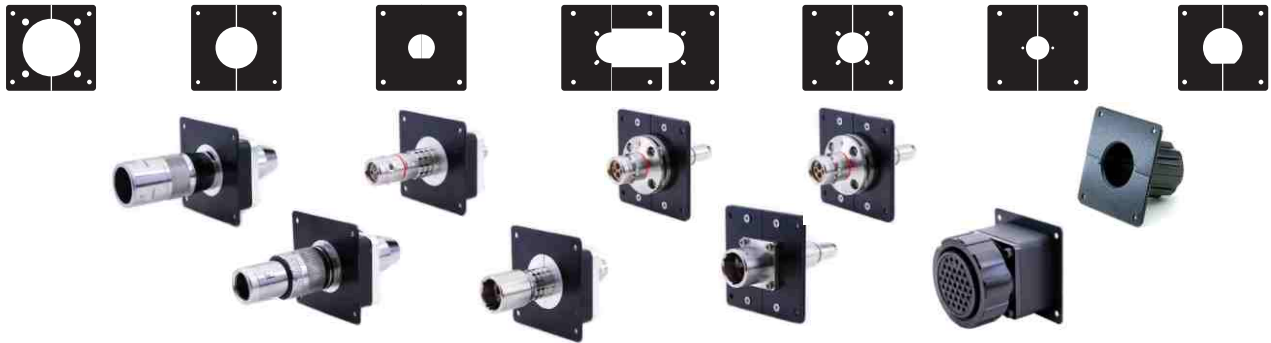
## Modular Bulkhead



**30° 6 Position Modular Bulkhead**

### Features:

- 2RU standard 19" NEMA EIA-310 rack spacing
- Available in 6 Position and 8 Position
- All split mounting plates allow post-termination panel mounting
- Adaptor plates available for:  
ADC®, Canare®, Kings®, Lemo®, Fischer®, Tajimi®, D&H®, DT-12 & more...



\*Adaptor plates shown with connectors for illustration

## Standard Modular Bulkhead



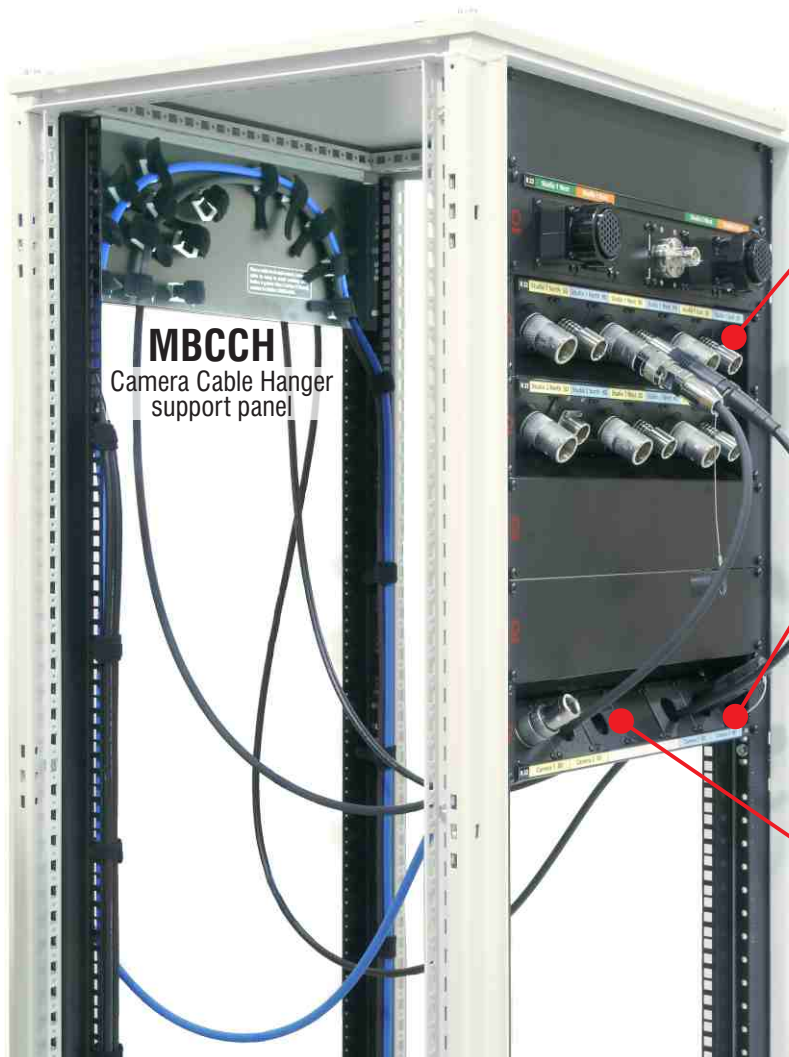
**Standard 6 Position Modular Bulkhead**



## Switchboard Style Patch System

### Features:

- 2RU standard 19" NEMA EIA-310 rack spacing
- Available in 6 Position and 8 Position
- Split patchcord retainer mounting plates allow post-termination panel mounting
- Eliminate costly patchcords
- Universal Mounting Plate fits: ADC<sup>®</sup>, Canare<sup>®</sup>, Kings<sup>®</sup>, Lemo<sup>®</sup>, Fischer<sup>®</sup>, Tajimi<sup>®</sup>, D&H<sup>®</sup> & more...



### 30 Degree Modular Bulkhead panel

2RU, 1x6 Position: WK-M3B106E2-Z-BZ

2RU, 1x8 Position: WK-M3B8108E2-Z-BZ

### Recessed Panel for Switchboard Style Patchcord Retainer System, Modular Bulkhead panel

2RU, 1x6 Position: WK-M3B106E2-Z-180-BZ

2RU, 1x8 Position: WK-M3B8108E2-Z-180-BZ



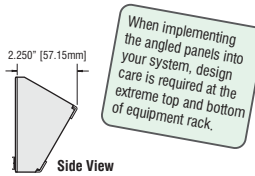
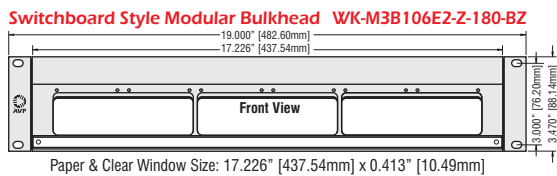
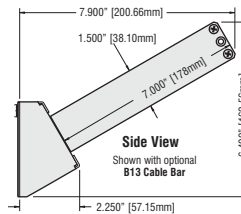
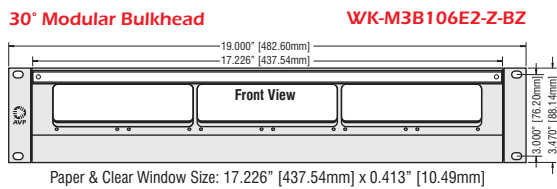
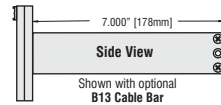
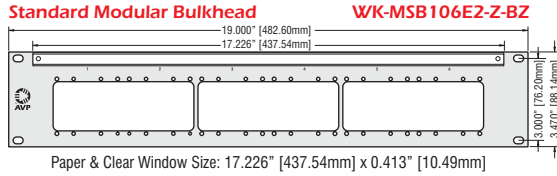
### Universal Switchboard Style patchcord retainer mounting plate

2RU, 1x6 Position:  
M3BSWB-R

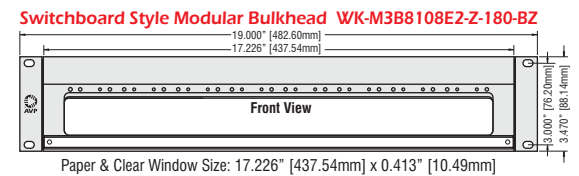
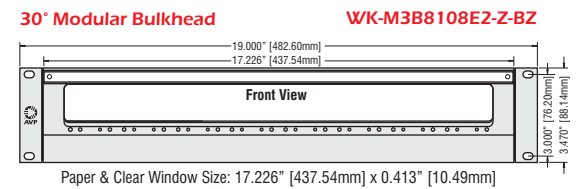
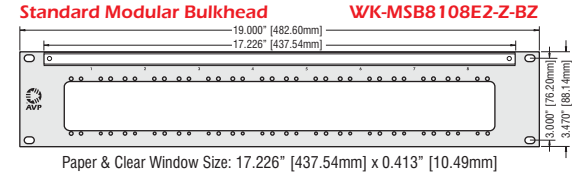
2RU, 1x8 Position:  
M3B8SWB-R

\*Adaptor plates shown with connectors for illustration

### 6 Position Panels



### 8 Position Panels



Designation Layouts... [www.jackfields.com/support](http://www.jackfields.com/support)

## Ordering Information

### Ordering Information for 6 & 8 Position, 2RU Modular Bulkhead Panels, Mounting Plates & Accessories

6 Position Panels	8 Position Panels	Description
<b>WK-M3B106E2-Z-BZ</b>	<b>WK-M3B8108E2-Z-BZ</b>	30 degree, 2RU, Modular Bulkhead panel, empty, no cable bar
<b>WK-MSB106E2-Z-BZ</b>	<b>WK-MSB8108E2-Z-BZ</b>	Standard (non angled), 2RU, Modular Bulkhead panel, empty, no cable bar
Add -B13	Add -B13	to model number for optional installed <b>CB-B13</b> Cable Bar
<b>CB-B13</b>	<b>CB-B13</b>	Cable Bar
<b>WK-M3B106E2-Z-180-BZ</b>	<b>WK-M3B8108E2-Z-180-BZ</b>	Recessed panel for switchboard style patchcord retainer system;
		2RU, Modular Bulkhead panel, empty, no cable bar
<b>MBCCCH</b>	<b>MBCCCH</b>	Camera Cable Hanger support panel for the switchboard style patchcord retainer system
<i>Mounting Plates</i>	<i>Mounting Plates</i>	
<b>MBCP</b>	<b>MB8CP</b>	Cover Plate, blank, covers one unused position, hardware
<b>MBKIN-CSP</b>	<b>MB8KIN-CSP</b>	KINGS Type C TRI-LOC Split Mounting Plate, hardware
<b>MBKIN-FSP</b>	<b>MB8KIN-FSP</b>	KINGS Type F TRI-LOC Split Mounting Plate, hardware
<b>MBDSUB3-1</b>	<b>MB8DSUB3-1</b>	DB25 or HD44 D-Sub Adapter Mounting Plate, single hole, hardware
<b>MBWIR-G2SP</b>	<b>MB8WIR-G2SP</b>	Wireworks G2 Connector Split Mounting Plate, hardware
<b>MBWIR-G3SP</b>	<b>MB8WIR-G3SP</b>	Wireworks G3 Connector Split Mounting Plate, hardware
<b>MBSP-m-c*</b>	<b>MB8SP-m-c*</b>	Split Mounting Plate, for any panel mount connector including;
		LEMO, ADC, KINGS, Canare, Fischer, Tajimi, D&H & more, hardware
<b>MBU2</b>	--	Universal Mounting Plate, holds 2 AVP Universal Modules, hardware
--	<b>MB8U1</b>	Universal Mounting Plate, holds 1 AVP Universal Module, hardware
<b>M3BSWB-R</b>	<b>M3B8SWB-R</b>	Universal Switchboard Style Patchcord Retainer Mounting Plate,
		recessed type for LEMO, ADC, KINGS, Canare, Fischer, Tajimi, D&H & more, hardware
<b>MBHMA-JMB</b>	<b>MB8HMA-JMB</b>	Stratos Lightwave HMA Series, Jam Nut Bulkhead Mounting Plate, hardware
<b>MBCL-m-c*</b>	<b>MB8CL-m-c*</b>	Mounting Plate, adapts any cable mount connector to panel mount including;
		LEMO, ADC, KINGS, Canare, Fischer, Tajimi, D&H & more, hardware
		* -m: manufacturer, -c: connector model number

# Hybrid Electrical & Fiber-Optic Connector Break-Out Modules

For use in television broadcasting and video equipment such as camera head to camera control-unit connections. These hybrid Break-Out modules terminate two singlemode fiber-optic contacts, two low-voltage contacts and two auxiliary 600VAC electrical contacts.

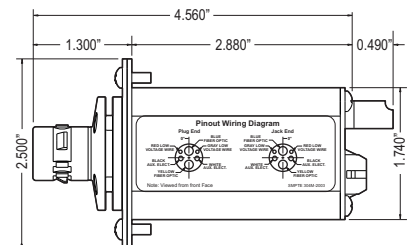
- Conform to SMPTE 304M-2003 Standard
- Feature Lemo® Connectors for Ultimate Reliability
- 6 Position and 8 Position Panel Configurations Available
- Include 60" [1.5m] Electrical Connector Mating Cable\*

\*Custom lengths available



### Modular Bulkhead SMPTE 304M Series Specifications

<b>Optical</b>	
Wavelength:	1100 nm – 1350 nm
Insertion Loss:	0.5 dB maximum
Return Loss:	Better than -45 dB
<b>Electrical</b>	
Auxiliary Elec. Contacts	
Voltage:	600VAC
Current:	10A
Low-Voltage Contacts:	
Voltage:	42VAC or 60VDC
Current:	1A
<b>Environmental</b>	
Temperature, Operating:	
-20°C to +60°C	
Temperature, Non-operating, storage:	
-40°C to +85°C	
Humidity:	
<95% RH (at +40°C)	
RoHS:	
Compliant	



### Ordering Information, 6 & 8 Position Panel Modules

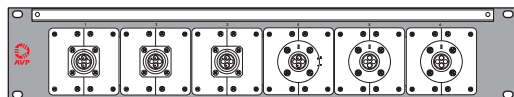
Model	Description
SMPTE 304M-2003 Hybrid Electrical & Fiber-Optic Connector Break-Out Module, includes 60" [1.5m] Connector Mating Cable; for <b>6 Position</b> panel	
<b>MB6FM-LP-LC</b>	Module, Lemo plug SMPTE 304M Camera Connector to dual singlemode LC Fiber-Optic* and 5 pin electrical contact break-out, (round flange)
<b>MB6FM-LS-LC</b>	Module, Lemo socket SMPTE 304M Camera Connector to dual singlemode LC Fiber-Optic* and 5 pin electrical contact break-out, (square flange)
SMPTE 304M-2003 Hybrid Electrical & Fiber-Optic Connector Break-Out Module, includes 60" [1.5m] Connector Mating Cable; for <b>8 Position</b> panel	
<b>MB8FM-LP-LC</b>	Module, Lemo plug SMPTE 304M Camera Connector to dual singlemode LC Fiber-Optic* and 5 pin electrical contact break-out, (round flange)
<b>MB8FM-LS-LC</b>	Module, Lemo socket SMPTE 304M Camera Connector to dual singlemode LC Fiber-Optic* and 5 pin electrical contact break-out, (square flange)
<b>AT-MBFM-MCK</b>	Mating Connector Kit, includes electrical mating connector and 5 crimp pins
<b>AT-MBFM-HCT1</b>	Heavy Duty Hand Crimp Tool, for use with <b>AT-MBFM-MCK</b> Mating Connector Kit
<b>AT-MBFM-HCT2</b>	Standard Hand Crimp Tool, for use with <b>AT-MBFM-MCK</b> Mating Connector Kit

\*Also available terminated to SC, ST and FC fiber-optic receptacles. Replace -LC in Model Name with -SC, -ST or -FC.

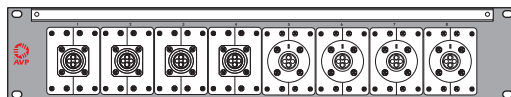
\*Add -WZ to end of model name to receive module with only **AT-MBFM-MCK** (electrical mating connector and 5 crimp pins)



### 6 Position Panel



### 8 Position Panel



## SMPTE 311M Fiber Camera Cable

This composite cable integrates power line for TV camera, control line and optical fiber for video and audio transmission. The cable is standardized by SMPTE as a cable for TV camera.



### Quality Built

- Test results supplied with each cable
- Epoxy and Polish Lemo F2 fiber contacts
- Connectors include bend relief & blanking cap (where applicable)



### Highest Performance with LEMO F2 Fiber Contact

The advantage of using epoxy and polish contacts is the reliability of the termination and longevity of the connector to assure a quality signal transmission. These contacts are very robust and can withstand wide outdoor temperature variations.

### Model Number

ASF - - - - -

#### Cable End A

<b>FUW</b>	FUW.3K.93C.TLKC96
<b>PUW</b>	PUW.3K.93C.TLKC96
<b>FMW</b>	FMW.3K.93C.TLKC96Z
<b>PBW</b>	PBW.3K.93C.TLKC96Z

#### Cable End B

<b>FUW</b>	FUW.3K.93C.TLKC96
<b>PUW</b>	PUW.3K.93C.TLKC96
<b>FMW</b>	FMW.3K.93C.TLKC96Z
<b>PBW</b>	PBW.3K.93C.TLKC96Z

#### Cable Length

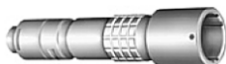
xxxM Length in Metres

#### Cable Type

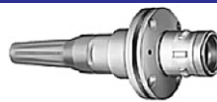
<b>1L</b>	LEMO CFN. 3K. 93C. 092PNCS
<b>1F</b>	Furukawa TV-OM-AMS



**FUW**  
Straight Cable Plug / Male



**PUW**  
Straight Cable Jack / Female



**FMW**  
Panel-mount Plug, round flange / Male



**PBW**  
Panel-mount Receptacle, square flange / Female

\*For requirements not shown, contact AVP



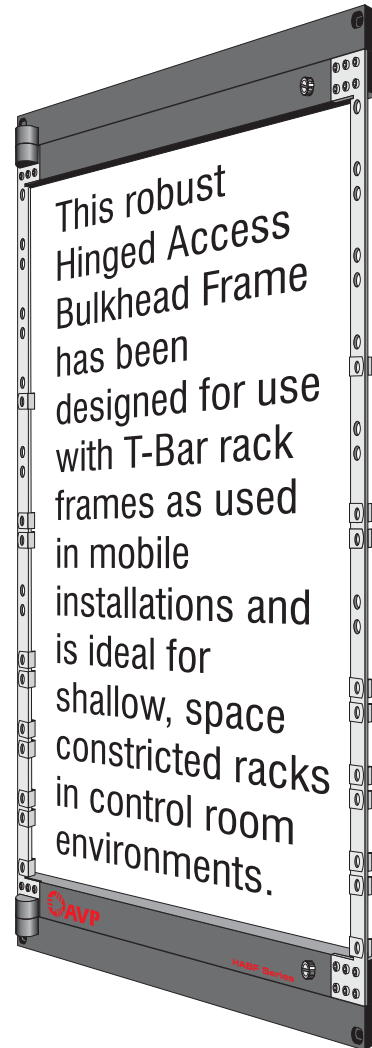
## Hinged Access Bulkhead Frame

### Features:

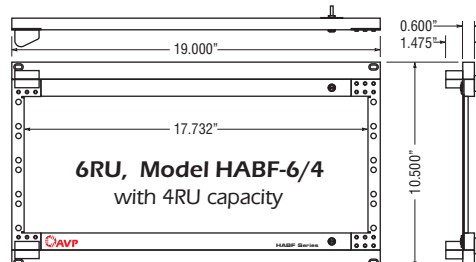
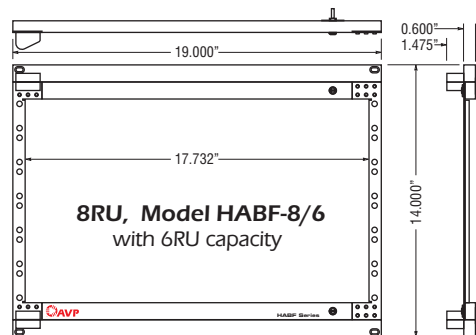
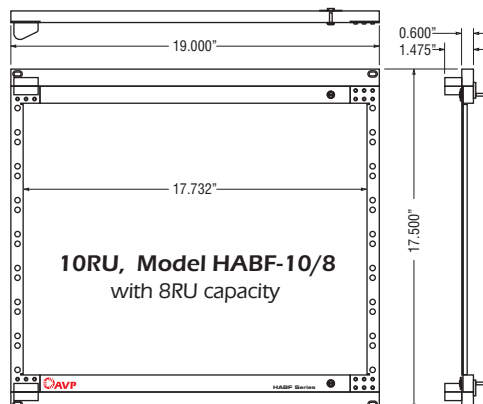
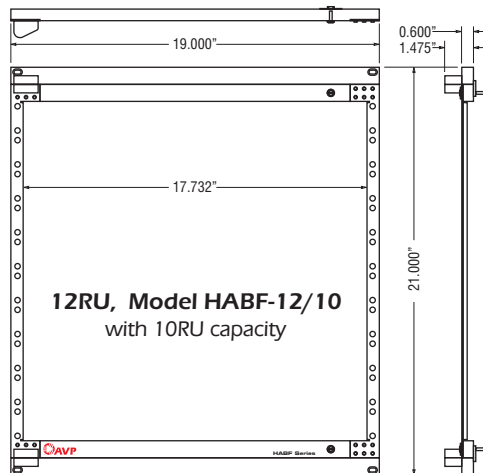
- standard 19" NEMA EIA-310 rack spacing
- 305 stainless steel & black anodized T6061 aluminum for maximum corrosion resistance
- supplied hardware is stainless steel, compression latches & clip nuts are RoHS compliant



12RU, Model HABF-12/10, with 10RU capacity  
 10RU, Model HABF-10/8, with 8RU capacity  
 8RU, Model HABF-8/6, with 6RU capacity  
 6RU, Model HABF-6/4, with 4RU capacity



### HABF Features



### Dimensions

## AVP DIN 1.0/2.3 Connector Series

The DIN 1.0/2.3 75 ohm connector series compact design permits dense connector packing and makes them ideal solutions to applications where space limitation is a factor.

DIN 1.0/2.3 connector performance specifications support high data rates for AES Audio, SD video, HD video, 3Gb/s video, and other high density digital broadcast formats. The DIN 1.0/2.3 connector series complies with DIN 41626, DIN 47297, and NFC 93-571 international specifications.

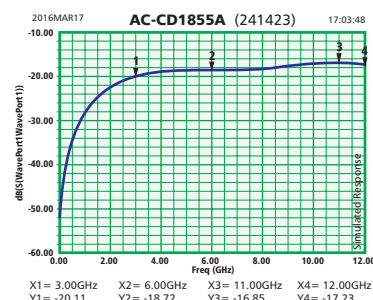
AVP 1.0/2.3 connector series feature push-pull coupling allowing quick installation and ensures positive locking and high retention.

### Features & Benefits

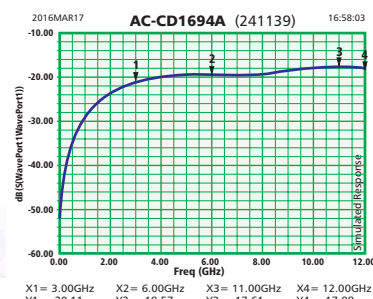
- Push-pull coupling with locking mechanism allows quick installation, will not vibrate loose and will not disconnect during trouble shooting
- 1.0/2.3 connectors are able to be densely packed, saving panel space in components
- Operation up to 12 GHz
- Supports 3Gbps HD SDI SMPTE 424M applications
- Standard crimp tooling can be used
- Center Pin plating: gold 3 $\mu$ in minimum over 80 $\mu$ in minimum nickel plating



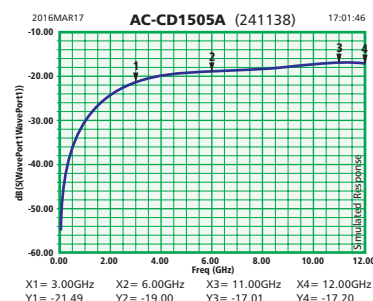
**AC-CD1855A**



**AC-CD1694A**



**AC-CD1505A**



### Models and Components

Model	Description	Model	Description
<b>Connectors</b>		<b>Tooling</b>	
<b>AC-CD1855A-001</b>	AVP DIN 1.0/2.3 Connector, terminate Belden 1855A or equivalent, includes center pin and ferrel	<b>AT-DAFM8</b>	Daniels Hand Crimp Tool AFM8, to crimp center pin, all models
<b>AC-CD1855A-100</b>	AVP DIN 1.0/2.3 Connector, 100 pieces, terminate Belden 1855A or equivalent, includes center pins & ferrels	<b>AT-DPAFM8</b>	Daniels Positioner, to set depth and center pin for Daniels AFM8
<b>AC-CD1694A-001</b>	AVP DIN 1.0/2.3 Connector, terminate Belden 1694A or equivalent, includes center pin and ferrel	<b>AT-DHX4</b>	Daniels Hand Crimp Tool HX4, to crimp ferrules, all models
<b>AC-CD1694A-100</b>	AVP DIN 1.0/2.3 Connector, 100 pieces, terminate Belden 1694A or equivalent, includes center pins & ferrels	<b>AT-DY1855A</b>	Hex Crimp Die Set Y2000P, to crimp AC-CD1855A ferrule with Daniels HX4/HX23
<b>AC-CD1505A-001</b>	AVP DIN 1.0/2.3 Connector, terminate Belden 1505A or equivalent, includes center pin and ferrel	<b>AT-DY1694A</b>	Hex Crimp Die Set Y2070, to crimp AC-CD1694A ferrule with Daniels HX4/HX23
<b>AC-CD1505A-100</b>	AVP DIN 1.0/2.3 Connector, 100 pieces, terminate Belden 1505A or equivalent, includes center pins & ferrels	<b>AT-DY1505A</b>	Hex Crimp Die Set Y2070, to crimp AC-CD1505A ferrule with Daniels HX4/HX23
		<b>AT-P8004</b>	Paladin Hand Crimp Tool 8004
		<b>AT-P2648</b>	Paladin Die Set 2648, use to crimp AC-CD1855A and AC-CD1505A
		<b>AT-P2657</b>	Paladin Die Set 2657, use to crimp AC-CD1694A DIN 1.0/2.3 connectors
		<b>AT-CJG</b>	Optional Centering Jig, used to locate the center pin in connector

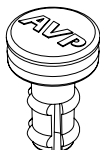
## Audio & Video Jack Dust Plugs

AVP Dust Plugs have been designed to serve the broadcast industry. Composed of a UV stabilized high density polyethylene (HDPE) for long life and durability.

- Longframe audio jacks, 1/4" B-Guage (BP0316), 1/4" Phone
- Bantam audio jacks, TT (Tiny Telephone)
- Standard Size video jacks
- Midsize video jacks
- Microsize video jacks



### Audio



#### Longframe

for jack inside diameter, 0.250" [6.35mm]

**DC-ABK10** Dust Plug, fits longframe audio jack, black, package of 10 plugs

**DC-ABK50** Dust Plug, fits longframe audio jack, black, package of 50 plugs



#### Bantam

for jack inside diameter, 0.175" [4.45mm]

**DC-BBK10** Dust Plug, fits bantam audio jack, black, package of 10 plugs

**DC-BBK100** Dust Plug, fits bantam audio jack, black, package of 100 plugs

### Video



#### Standard Size

for jack inside diameter, 0.375" [9.52mm]

**DC-CBK10** Dust Plug, fits standard size video jack, black, package of 10 plugs

**DC-CBK50** Dust Plug, fits standard size video jack, black, package of 50 plugs



#### Midsize

for jack inside diameter, 0.304" [7.72mm]

**DC-DBK10** Dust Plug, fits midsize video jack, black, package of 10 plugs

**DC-DBK65** Dust Plug, fits midsize video jack, black, package of 65 plugs



#### Microsize

for jack inside diameter, 0.180" [4.57mm]

**DC-KBK10** Dust Plug, fits microsize video jack, black, package of 10 plugs

**DC-KBK100** Dust Plug, fits microsize video jack, black, package of 100 plugs

## Video Patchcords


**Model Number**  
PC - [ ] - [ ]

**Patchcord Type**  
KM Microsize  
M Midsize  
V Standard Size

**Patchcord Length**  
1 1' [300mm]  
1.5 1.5' [450mm]  
2 2' [600mm]  
3 3' [900mm]  
4 4' [1200mm]  
6 6' [1800mm]  
10 10' [3.05m]

**Color**  
BLACK  
RED  
GREEN  
BLUE  
YELLOW  
PURPLE  
ORANGE  
WHITE

example... MPC-2-RED



## Video Patchcords

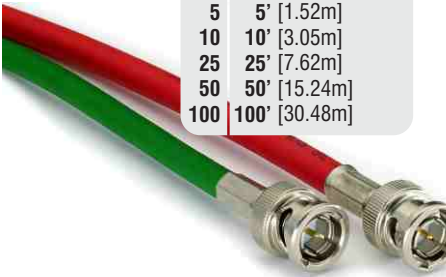
## BNC Patchcords

**Model Number**  
BNPC - [ ] - [ ]

**Patchcord Length**  
2 2' [600mm]  
3 3' [900mm]  
5 5' [1.52m]  
10 10' [3.05m]  
25 25' [7.62m]  
50 50' [15.24m]  
100 100' [30.48m]

**Color**  
BLACK  
RED  
GREEN  
BLUE  
YELLOW  
PURPLE  
ORANGE  
WHITE

**Opposite End Termination**  
BN BNC termination  
KM Microsize plug termination  
M Midsize plug termination  
V Standard Size plug termination



## BNC Patchcords

## Audio Patchcords

**Model Number**  
PC - [ ] - [ ]


**Patchcord Type**  
B Bantam  
L Longframe

**Patchcord Length**  
1 1' [300mm]  
1.5 1.5' [450mm]  
2 2' [600mm]  
3 3' [900mm]  
4 4' [1200mm]  
6 6' [1800mm]  
10 10' [3.05m]

**Color**  
BLACK  
RED  
GREEN  
BLUE  
YELLOW  
PURPLE  
ORANGE  
WHITE

For 110 Ohm AES/EBU Digital and Analog Audio Application

example... BPC-2-GREEN



## Audio Patchcords

## Stereo Bantam Patchcords Polarized Datacords


**Model Number**  
[ ] - [ ] - RED

**Patchcord Type**  
SBPC Stereo Bantam  
DATPC Polarized Datapatch

**Patchcord Length**  
2 2' [300mm]  
3 3' [450mm]

**Stereo Bantam**

**AVP Datacord**  
...see page 32 & 42



## Stereo Bantam Patchcords

## Datapatch Polarized Datacords

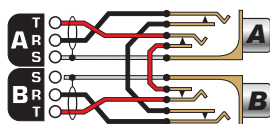


### Normaling Descriptions

— T: Tip  
— R: Ring  
— S: Sleeve  
— TN: Tip Normal  
— RN: Ring Normal  
— SN: Sleeve Normal

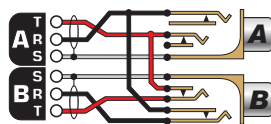
— Strapping at the  
— Punch Block

### FN Full Normals



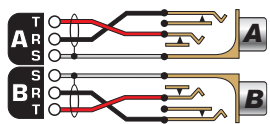
**Physical:**  
**A:** T, R, S, wired out to rear termination connector. TN, RN are strapped at the jacks to B: TN, RN respectively.  
**B:** T, R, S, wired out to rear termination connector. TN, RN are strapped at the jacks to A: TN, RN respectively.  
**Function:** Signal from A is automatically looped to B. If a patchcord is inserted in A or B, the automatic looping is broken.  
**Features and Benefits:**  
 Automatic Looping.

### HN Half Normals



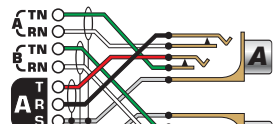
**Physical:**  
**A:** T, R, S, wired out to rear termination connector. T, R are strapped at the jacks to B: TN, RN respectively.  
**B:** T, R, S, wired out to rear termination connector. TN, RN are strapped at the jacks to A: T, R respectively.  
**Function:** Signal from A is automatically looped to B. If a patchcord is inserted in A, the signal is still looped to B. However, if a patchcord is inserted in B, the automatic looping is broken.  
**Features and Benefits:** Automatic Looping, Signal Monitoring when A is patched.

### NN No Normals



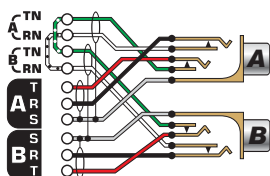
**Physical:**  
**A:** T, R, S, wired out to rear termination connector.  
**B:** T, R, S, wired out to rear termination connector.  
**Function:** A circuits are completely independent from B circuits. U-Links or patchcords must be used.  
**Features and Benefits:**  
 Simple patching.

### NT Normals Out



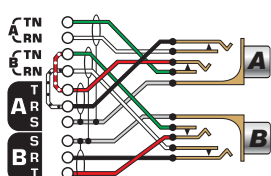
**Physical:**  
**A:** T, R, S, TN, RN wired out to rear termination connector.  
**B:** T, R, S, TN, RN wired out to rear termination connector.  
**Function:** No Normals, reconfigurable.  
**Benefits:**  
 1. Flexibility: Full or Half Normals can be strapped, per circuit, at the rear termination connector.

### FR Full Normals Strapped at Punch Block



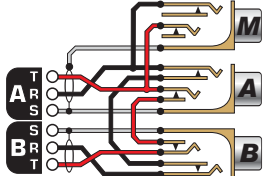
**Physical:**  
**A:** T, R, S, TN, RN wired out to rear termination connector.  
**B:** T, R, S, TN, RN wired out to rear termination connector.  
**Punch Block:** Full Normals  
**Function:** Full Normals, reconfigurable.  
**Benefits:**  
 1. Saves time at installation.  
 2. Flexibility: Full or Half Normals can be strapped, per circuit, at the rear termination connector.

### HR Half Normals Strapped at Punch Block



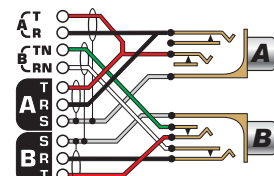
**Physical:**  
**A:** T, R, S, TN, RN wired out to rear termination connector  
**B:** T, R, S, TN, RN wired out to rear termination connector  
**Punch Block:** Half Normals  
**Function:** Half Normals, reconfigurable  
**Benefits:**  
 1. Saves time at installation.  
 2. Flexibility: Full or Half Normals can be strapped, per circuit, at the rear termination connector.

### FM Full Normals with Monitor



**Physical:**  
**A:** T, R, S, wired out to rear termination connector. TN, RN are strapped to B: TN, RN respectively. In addition T, R are strapped to M: T, R respectively  
**B:** T, R, S, wired out to rear termination connector. TN, RN are strapped to A: TN, RN respectively.  
**M:** T, R are strapped to A: T, R respectively  
**Function:** Full Normals (A and B). M monitoring of A.  
**Features and Benefits:** Automatic Looping from A to B. Monitoring of A is always available in M.

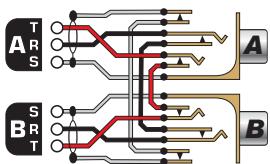
### HT Half Normals Out Connectorized 90 Pin Only



**Physical:**  
**A:** T, R, S, wired out to rear 90 pin connector. T, R also wired out to rear 120 pin connector.  
**B:** T, R, S, wired out to rear 90 pin connector. TN, RN wired out to rear 120 pin connector.  
**Function:** No Normals, reconfigurable.  
**Benefits:**  
 1. Flexibility: Half Normals or No Normals can be configured, per circuit, at the rear 120 pin connector.

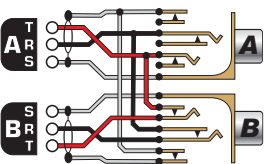
### Sleeve Normals

### FNS Sleeve Normals Strapped at Jacks



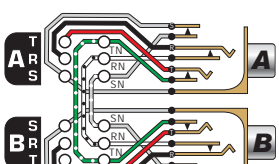
**Physical:**  
**A:** T, R, S, wired out to rear termination connector. TN, RN, SN are strapped at the jacks to B: TN, RN, SN respectively.  
**B:** T, R, S, wired out to rear termination connector. TN, RN, SN are strapped at the jacks to A: TN, RN, SN respectively.  
**Function:** Signal from A, (including Sleeve) is automatically looped to B. If a patchcord is inserted in A or B, the automatic looping is broken.  
**Features and Benefits:**  
 1. Automatic Looping of Tip, Ring & Sleeve.  
 2. Switching Grounds.

### HNS Sleeve Half Normals Strapped at Jacks



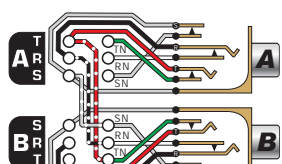
**Physical:**  
**A:** T, R, S, wired out to rear termination connector. T, R, S are strapped at the jacks to B: TN, RN, SN respectively.  
**B:** T, R, S, wired out to rear termination connector. TN, RN, SN are strapped at the jacks to A: T, R, S respectively.  
**Function:** Signal from A, (including Sleeve) is automatically looped to B. If a patchcord is inserted in A, the signal is still looped to B. However, if a patchcord is inserted in B, the automatic looping is broken.  
**Features and Benefits:**  
 1. Automatic Looping of Tip, Ring & Sleeve.  
 2. Switching Grounds.

### FRS Sleeve Normals Out Strapped at Punch Block



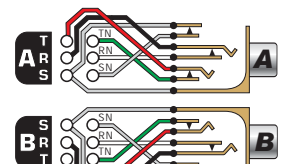
**Physical:**  
**A:** T, R, S, TN, RN, SN wired out to rear termination connector.  
**B:** T, R, S, TN, RN, SN wired out to rear termination connector.  
**Punch Block:** Full Normals  
**Function:** Full Normals, reconfigurable.  
**Benefits:**  
 1. Flexibility: Full or Half Normals can be strapped, per circuit, at the rear termination connector.  
 2. Switching Grounds.

### HRS Sleeve Half Normals Strapped at Punch Block



**Physical:**  
**A:** T, R, S, TN, RN, SN wired out to rear termination connector.  
**B:** T, R, S, TN, RN, SN wired out to rear termination connector.  
**Punch Block:** Half Normals  
**Function:** Half Normals, reconfigurable.  
**Benefits:**  
 1. Flexibility: Full or Half Normals can be strapped, per circuit, at the rear termination connector.  
 2. Switching Grounds.

### NTS Sleeve Normals Out



**Physical:**  
**A:** T, R, S, TN, RN, SN wired out to rear termination connector.  
**B:** T, R, S, TN, RN, SN wired out to rear termination connector.  
**Function:** No Normals, reconfigurable.  
**Benefits:**  
 1. Flexibility: Full or Half Normals can be strapped, per circuit, at the rear termination connector.  
 2. Switching Grounds.

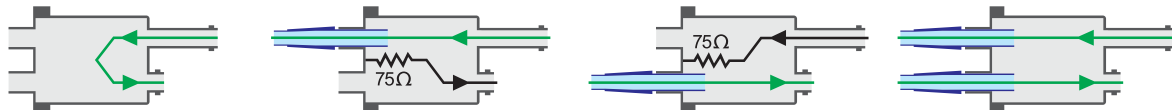
# Video Jack Normaling

## Super<sup>HD+</sup> Series

### Fullsize, Midsize & Micro 3.0GHz - 3Gb/s Dual Jacks & Single Jacks

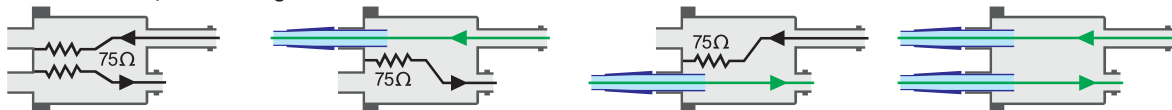
**AVP-ASN7511**  
**AVP-AMN75**  
**AVP-KMN75**

#### Normaled, Terminating



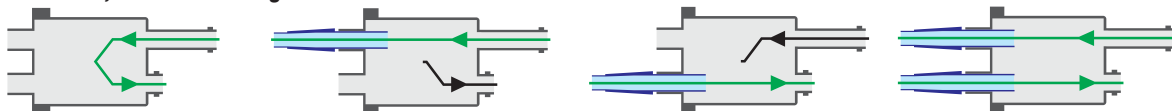
**AVP-AS7511**  
**AVP-AM75**  
**AVP-KM75**

#### Non-Normaled, Terminating



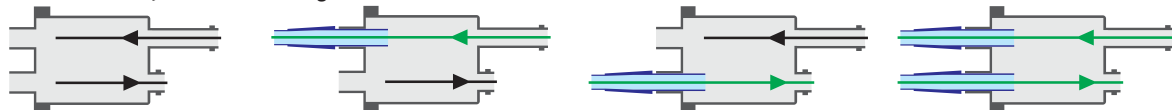
**AVP-ASN11**  
**AVP-AMN**  
**AVP-KMN**

#### Normaled, Non-Terminating



**AVP-AS11**  
**AVP-AM**  
**AVP-KM**

#### Non-Normaled, Non-Terminating



**AVP-AMSL75**  
**AVP-AMSS75**

#### Terminating, long



#### Terminating, short



**AVP-AMSL**  
**AVP-AMSS**


#### Non-Terminating, long



#### Non-Terminating, short



#### Legend

**AS:** 3.0 GHz Standard Size  
**AM:** 3.0 GHz Midsize  
**KM:** 3.0 GHz Micro Size  
**N:** Normaled  
**75:** 75 ohm Terminated  
**R:** Rear Mount  
 Video Patch Cord

## Corporate Info

### Line of Business

AVP MFG & Supply Inc., founded in 1985, is a manufacturer of commercial broadcast, telecom, and satellite equipment, including the design and manufacturing of audio, video, and digital jackfields, connectors, wire and cable assemblies. AVP sells through world-wide distribution, and also partners directly with clients, designing and manufacturing custom jackfield and panel solutions for its broadcast, telecom, and satellite customers and OEM relationships.

### The AVP Team

The AVP Team consists of personnel who are focused on quality customer relations and service, advanced design engineering, and manufacturing excellence.

### Major Products

Patented Mosaic Product line with Circuit Identification System (CIS)

Patented Rapid Punch (RPT) Jackfields and Wall Blocks

Patented Award-winning Morph System Audio Jackfields

SuperHD+ Ultimate Serial Digital Video Jackfields

RS422/Datapatch Jackfields

EDAC Connectorized Jackfields

Patchcords and Cable Assemblies

Custom Telecom and Satellite Panels

### Marketplace

AVP sells world-wide, through distribution, systems groups, and OEM channels, to commercial broadcast, telecom, and satellite end-users. AVP is currently represented in the Americas, Europe, Israel, Africa, India, China, SE Asia, and Australia.

### Summary

AVP Mfg. & Supply Inc. designs and manufactures premium quality, innovative product for its targeted market sectors. Exemplary product, short turn-around time, competitive pricing, and high-quality customer support has produced extraordinary product-line acceptance and customer loyalty.

### Patents

US Patent: 5,730,618; Rapid Punch Terminal (RPT) System

US Patent: 6,540,562; Morph Module Audio System

US Patent: 6,280,238; Full-Face Jackfield Designation Plate

### Main Office

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2288-B7 Dumfries Rd, RR2

Cambridge ON Canada

N1R 5S3 Toll Free: 1.800.481.2493

Fax: 519.740.0131

Main Office: 519.740.7966

[www.jackfields.com](http://www.jackfields.com)

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Skype: larry.shore.avp

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Amanda.Chamberlain@jackfields.com

### International Distributors

[USA](#) [Canada](#) [Europe](#) [Latin America](#)

[China/HK/Taiwan](#) [Other International](#)





# **SABER Series Media Converters**





# 3G SABER Media Converter

Partners in Broadcast, Telecom & Satellite Solutions

Small Form-Factor Pluggable (SFP)



(SFP modules sold separately)

The new AVP Active product family combines the requirements of Media, Broadcast & Outdoor Broadcast/Truck applications in a compact and solid platform.

It performs to the highest industry specifications utilizing the latest advanced Small Form-Factor Pluggable (SFP) technology. The SABER features 2 independent SFP paths and incorporates internal power (locking) for reliance and dependability. This simple 2 path design allows for integration into virtually any facility or platform, from Media to Broadcast to Outdoor Broadcast/Truck based designs.

## Features:

- Utilizes latest SFP (Small Form Pluggable) Technology
- Full support up to, and including 3G signals
- Embedded audio support (depending upon SFP installed)
- Up to 4 Totally INDEPENDENT signal Paths
- Locking Power Supply for confidence
- Made in North America
- Rack Mountable (January 2013)



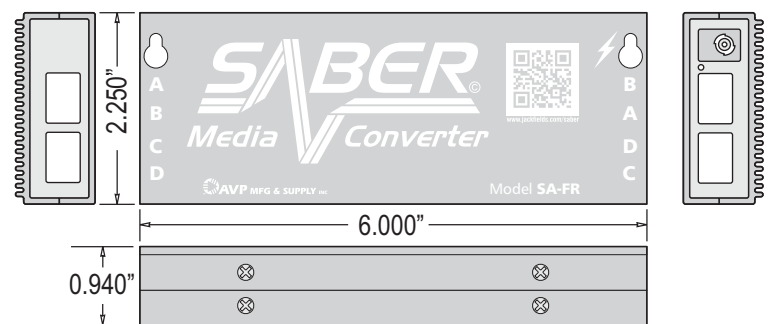
## Applications Include:

- Broadcast Facilities
- Outdoor Broadcast Applications
- Camera Applications
- Remote Applications

## Types of Signal Processing offered on the SABER Platform

	Page
HDMI to Fiber (1310)	5
HDMI to Copper (1694/1855)	5
DVI to Fiber	5
DVI to Copper (1694/1855)	5
Optical to Electrical (O/E up to 3G per path)	6
Electrical to Optical (O/E up to 3G per path)	6
Digital to Analog SDi Decoding over Fiber (1310)	7
Digital to Analog SDi Decoding over Copper (1694/1855)	7
Analog SDi to Digital Encoding over Fiber (1310)	8
Analog SDi to Digital Encoding over Copper (1694/1855)	8
OR any combination of the above processing	

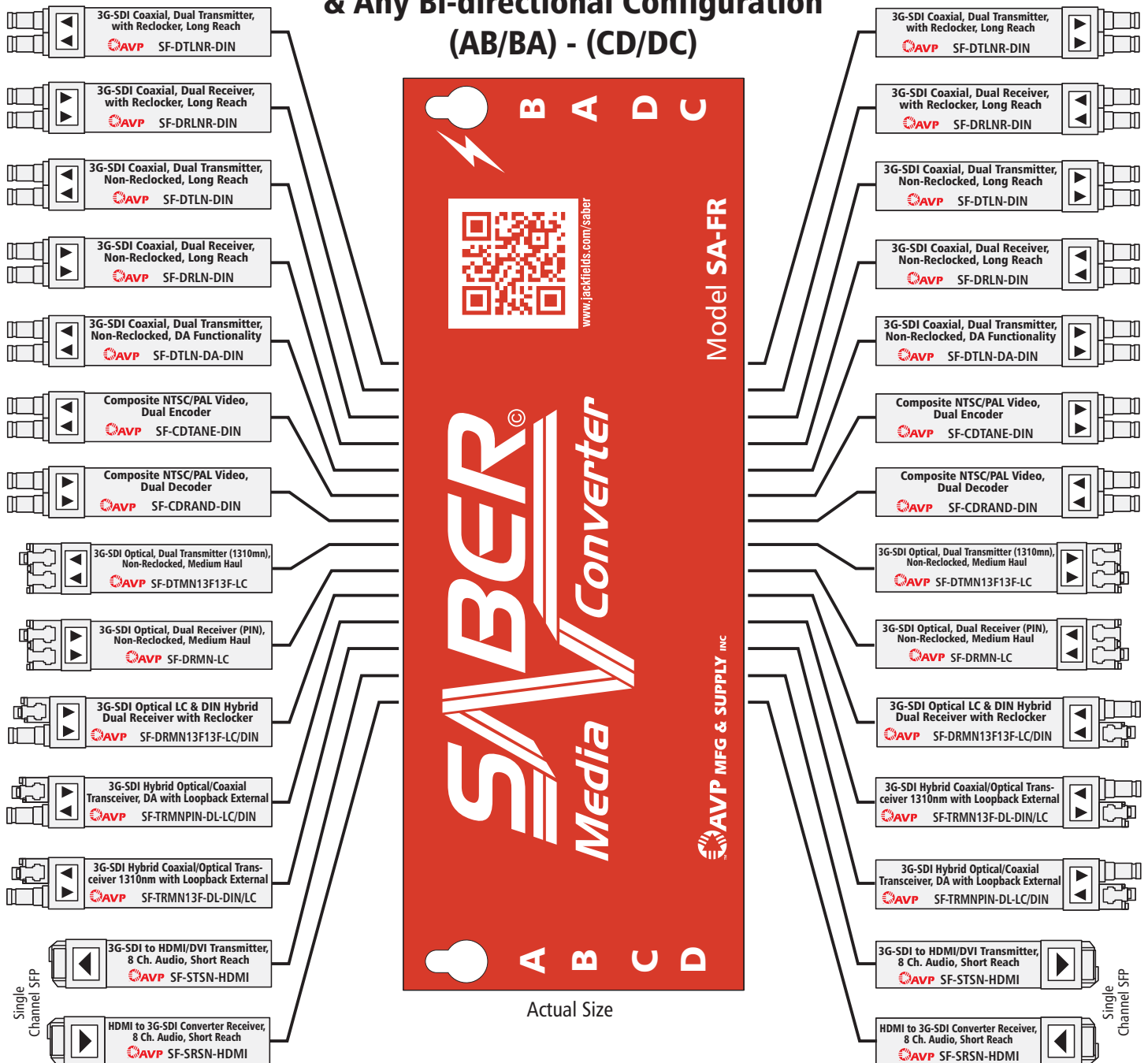
Note: HDMI & DVI SFPs are SINGLE signal path. All other SFPs are DUAL paths.



<b>System</b>	
Density:	SABER holds up to 4 independent SFP modules
Impedance:	75W
Connectors Supported:	DIN 1.0/2.3, HDBNC, LC Optical & HDMI/DVI
<b>Physical</b>	
Dimensions:	6.000"W x 2.250"D x 0.940"H
SFP Module Capacity:	Up to 4 AVP SFP modules including Dual TX and Dual RX
Status Indicator OK:	Green LED
<b>Electrical</b>	
Power Supply Configuration:	Single External Supply
Voltage:	DC Input 9-32VDC
Max Power Dissipation:	12 Watts (fully loaded)
Note:	Power consumption dependent on SFP type
<b>External Power Supply Brick</b>	
AC Mains Input:	Auto Ranging, 90-264VAC, 50/60Hz
Number of outputs:	1
Output Voltage:	24VDC@0.75A
<b>Warranty</b>	
Warranty:	One year, date of shipment from AVP

## SABER Offers Total Signal Processing

Flexibility from  
Left to Right & Right to Left  
& Any Bi-directional Configuration  
(AB/BA) - (CD/DC)



\*HDBNC interface available

(SPF modules sold separately)





### SDI SFP COAXIAL DUAL TRANSMITTER WITH RECLOCKER, NON-MSA, DIN 1.0/2.3

The SF-DTLNR Series is an electrical SFP Dual Transmitter with Reclocker module designed to transmit two reclocked SDI signals up to 2.97Gbps over 75Ω coaxial cables via Din 1.0/2.3 connectors. Cable Driver slew rates is automatically configured in order to achieve compliance to SMPTE 424M/SMPTE 292M and SMPTE 259M. By suppressing accumulated jitter, each reclocker procures optimal output jitter performance.



### SDI SFP COAXIAL DUAL TRANSMITTER, NON-RECLOCKED, NON-MSA, DIN 1.0/2.3

The SF-DTLN Series is an electrical SFP Dual Transmitter module designed to transmit two SDI signals up to 2.97Gbps over 75Ω coaxial cables via Din 1.0/2.3 connectors. Cable Driver slew rates is automatically configured in order to achieve compliance to SMPTE 424M/SMPTE 292M and SMPTE 259M.



### SDI SFP COAXIAL DUAL RECEIVER WITH RECLOCKER, NON-MSA, DIN 1.0/2.3

The SF-DRLNR Series is an electrical SFP Dual Receiver with Reclocker module designed to receive two SDI signals up to 2.97Gbps over 75Ω coaxial cables via Din 1.0/2.3 connectors. Equalizer features DC restoration to compensate for the DC content of SMPTE pathological test patterns. By suppressing accumulated jitter, each Reclocker procures predictable cable length on every system.



### SDI SFP COAXIAL DUAL RECEIVER, NON-RECLOCKED, NON-MSA, DIN 1.0/2.3

The SF-DRLN Series is an electrical SFP Dual Receiver module designed to receive two SDI signals up to 2.97Gbps over 75Ω coaxial cables via Din 1.0/2.3 connectors. Equalizer features DC restoration to compensate for the DC content of SMPTE pathological test patterns.



### COMPOSITE NTSC/PAL VIDEO SFP DUAL ENCODER, NON-MSA, DIN 1.0/2.3

The (NTSC PAL codec SFP) SF-CDTANE-DIN is an electrical SFP dual transmitter module designed to encode two video composite (CVBS) over 75Ω coaxial cables via DIN connectors. The module encodes the SD-SDI signal to NTSC or PAL composite output.



### 3G-SDI SFP HYBRID OPTICAL/COAXIAL TRANSCEIVER, MEDIUM HAUL, (PIN), NON-MSA, DA WITH LOOPBACK EXTERNAL, LC/DIN 1.0/2.3 CONNECTORS

The SF-TRMNPIN-DL-Series is a hybrid SFP distribution amplifier module designed to receive SDI signals up to 2.97Gbps on fiber over single mode fiber (9um/125um) and to transmit a copy over 75Ω coaxial cables via a Din 1.0/2.3 connector. The SF-TRMNPIN-DL-Series contains a PIN photodiode receiver with -21dBm of sensitivity.



### ASI/SD/HD/3G-SDI SFP DUAL OPTICAL TRANSMITTER, MEDIUM HAUL, NON-MSA

The SF-DTMN13F13F-LC is an optical SFP dual transmitter 1310nm module designed to transmit two SDI signals up to 2.97Gbps over single mode fiber (9um/125um). The module is carefully designed to accept pathological test patterns. The SF-DTMN13F13F-LC contains two 1310nm Fabry-Perot laser transmitters with optical output power of -1dBm +/- 1dBm.



### ASI/SD/HD/3G-SDI SFP DUAL OPTICAL DUAL RECEIVER, MEDIUM HAUL, NON-MSA

The SF-DRMN-LC is an optical SFP dual receiver module designed to receive two SDI signals up to 2.97Gbps over single mode fiber (9um/125um). The module is carefully designed to accept pathological test patterns. The SF-DRMN-LC contains two PIN photodiode receiver with -22dBm of sensitivity with pathological signal.



**3G-SDI TO HDMI/DVI TRANSMITTER WITH 8 CHANNEL AUDIO, SHORT REACH, NON-MSA, HDMI TYPE D, with RETENTION CLIP**  
The SF-STSN-HDMI is an electrical SFP transmitter module designed to convert SDI signals to an HDMI/DVI output (High definition multimedia interface® / Digital Visual Interface) without scaling artifacts. A copy of the reclocked SD/HD/3G-SDI source is loopback to the host. Up to 8 channel of audio is supported and embedded in the HDMI signal.



### HDMI to 3G-SDI CONVERTER RECEIVER WITH 8 CHANNEL AUDIO, SHORT REACH, NON-MSA, HDMI TYPE D, with RETENTION CLIP

The SF-SRSN-HDMI is an electrical SFP receiver module designed to convert HDMI to an SDI signal output without scaling artifacts. The SF-SRSN-HDMI can support HDCP by programming a key into it. Up to 8 channel of PCM audio is supported.



### COMPOSITE NTSC/PAL VIDEO SFP DUAL DECODER, NON-MSA, DIN 1.0/2.3

The (NTSC PAL codec SFP) SF-CDRAND-DIN is an electrical SFP dual receiver module designed to decode two video composite (CVBS) over 75Ω coaxial cables via DIN connectors. The module decodes NTSC or PAL composite inputs and convert to SD-SDI signal.



### 3G-SDI SFP HYBRID COAXIAL/OPTICAL TRANSCEIVER, MEDIUM HAUL, 1310NM, NON-MSA, DA WITH LOOPBACK EXTERNAL, DIN 1.0/2.3/LC CONNECTORS

The SF-TRMN13F-DL Series is a hybrid SFP distribution amplifier module designed to receive SDI signals up to 2.97Gbps over 75Ω coaxial cables via Din 1.0/2.3 connectors, transmit a copy on fiber over single mode fiber (9um/125um). The equalizer features DC restoration to compensate for the DC content of SMPTE pathological test patterns. The SF-TRMN13F-DL Series also contains a 1310nm Fabry-Perot laser transmitter with optical output power of -2dBm.

## SABER Series, advanced Small Form-Factor Pluggable (SFP) technology components

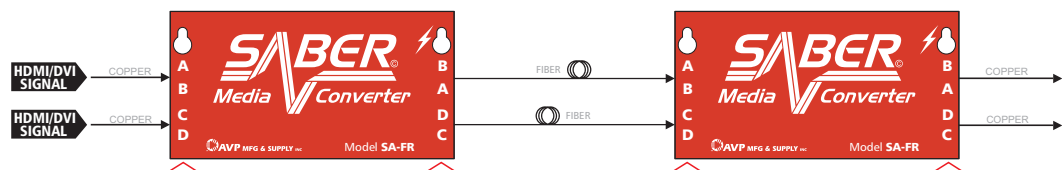


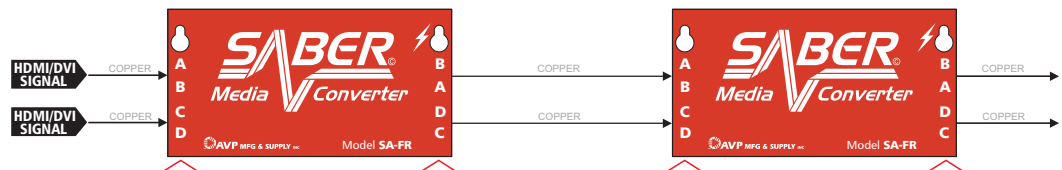
Signal Type	Model	Description
HDMI	SA-FR	SABER Series Enclosure, anodized, with 4 SFP Internal Cages, Power Status LED, Power Supply required, use SA-PS-NA or SA-PS-EU; (SFP modules sold separately)
	SA-PS-NA	Power Supply Unit, North American Adaptor Type for SABER Series
	SA-PS-EU	Power Supply Unit, with European & Global Power Supply Adaptors for SABER Series
	SA-MF18E2-Z	2RU, Multi-Frame Rackmount Enclosure, empty, holds up to 18 SABER Modules, includes one External Single Power Supply, MF-RPS-xx*
	SA-MFK	SABER Kit, Power Status LED, includes mounting plates, for use with 2RU Multi-Frame SA-MF18E2-Z; (SFP modules sold separately)
	MF-RPS-xx*	Redundant External Power Supply for use with SA-MF18E2-Z
		* Add: -NA (North America), -EU (Europe), -UK (United Kingdom), -JP (Japan), -AU (Australia) or -CN (China), to end of power supply Model Number for your respective region IEC320 C14 Grounded Power Cord.
	SA-FC	SABER Field Case, watertight, air tight, crushproof, chemical resistant, holds up to 8 SABERs, assorted SFPs, Conversion Cables. Customer specific
	SF-STSN-HDMI	HDMI/DVI SFP Transmitter with 8CH audio, Short Reach, Non-MSA, HDMI type D Connectors
	SF-SRSN-HDMI	HDMI SFP Receiver with 8CH audio, Short Reach, Non-MSA, HDMI type D Connectors
Coaxial*	SF-DTLNR-DIN	3G-SDI SFP Coaxial, Dual Transmitter with Reclocker, Long reach, Non-MSA, DIN 1.0/2.3 Connectors
	SF-DRLNR-DIN	3G-SDI SFP Coaxial, Dual Receiver with Reclocker, Long reach, Non-MSA, DIN 1.0/2.3 Connectors
	SF-DTLN-DIN	3G-SDI SFP Coaxial, Dual Transmitter, Long reach, Non-Reclocked, Non-MSA, DIN 1.0/2.3 Connectors
	SF-DRLN-DIN	3G-SDI SFP Coaxial, Dual Receiver, Long reach, Non-Reclocked, Non-MSA, DIN 1.0/2.3 Connectors
Transceiver & DA*	SF-TRLNR-DIN	3G-SDI SFP Coaxial, Transceiver, with Reclocker, Long Reach, Non-MSA, DIN 1.0/2.3 Connectors
	SF-TRLN-DIN	3G-SDI SFP Coaxial, Transceiver, Long Reach, Non-MSA, Non-Reclocked, DIN 1.0/2.3 Connectors
	SF-DTLN-DA-DIN	3G-SDI SFP Coaxial, Dual Transmitter, Non-Reclocked. DA functionality. Non-MSA, DIN 1.0/2.3 Connectors
	SF-TRMNPIN-DL-LC/DIN	3G-SDI SFP Hybrid Optical/Coaxial Transceiver, Medium Haul, (PIN), Non-MSA, DA with Loopback External, LC/DIN 1.0/2.3
Analog*	SF-TRMN13F-DL-DIN/LC	3G-SDI SFP Hybrid Coaxial/Optical Transceiver, Medium Haul, 1310nm, Non-MSA, DA with Loopback External, DIN 1.0/2.3/LC Connectors
	SF-CDTANE-DIN	Composite NTSC/PAL Video SFP Dual Encoder Non-MSA, DIN 1.0/2.3 Connectors
	SF-CDRAND-DIN	Composite NTSC/PAL Video SFP Dual Decoder, Non-MSA, DIN 1.0/2.3 Connectors
Fiber	SF-DTMN13F13F-LC	3G-SDI SFP Optical, Dual Transmitter (1310nm), Non-Reclocked, Medium Haul, Non-MSA, LC Connectors
	SF-DRMN-LC	3G-SDI SFP Optical, Dual Receiver (PIN), Non-Reclocked, Medium Haul, Non-MSA, LC Connectors
Accessories	HMDPC-2M-BLACK-HMA	Cable, HDMI type D Plug to HDMI type A Plug, black, 2meters
	HMDPC-4M-BLACK-HMA	Cable, HDMI type D Plug to HDMI type A Plug, black, 4meters
	HMDPC-6M-BLACK-HMA	Cable, HDMI type D Plug to HDMI type A Plug, black, 6meters
	HMDPC-2M-BLACK-DV	Cable, HDMI type D Plug to DVI Plug, black, 2meters, for DVI Processing
	HMDPC-4M-BLACK-DV	Cable, HDMI type D Plug to DVI Plug, black, 4meters, for DVI Processing
	D12PC-1-BLACK-BN	Cable, DIN 1.0/2.3/LC Plug (M) to BNC Jack (F), 1 foot, black, Belden 1855A
	D12PC-2-BLACK-BN	Cable, DIN 1.0/2.3/LC Plug (M) to BNC Jack (F), 2 feet, black, Belden 1855A

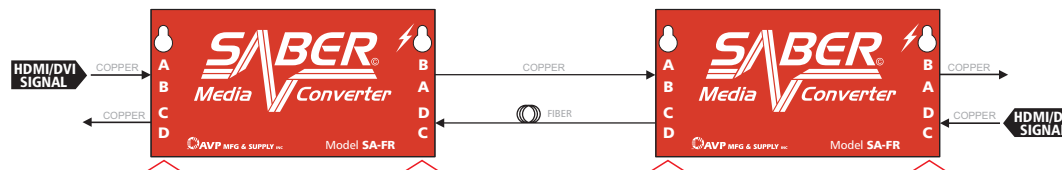
\*HDBNC interface available

## HDMI/DVI to Optical or Electrical Conversion

These packaged configurations for SABER will allow for the processing of up to 2 HDMI/DVI signals, one way or bi-directional, over copper and/or fiber depending on your specific needs. SABER allows for total flexibility in signal processing. SABER fully supports signals up to and including 3G (SMPTE 424M). Specific HDMI/DVI cables are needed for individual applications.

FIBER DUAL PATH (ONE WAY, LEFT TO RIGHT, OR RIGHT TO LEFT)				SK-M2O
				<b>Kit consists of:</b> SA-FR x2 SA-PS-NA x2 SF-SRSN-HDMI x2 SF-STSN-HDMI x2 SF-DTMN-13F13F-LC x2 SF-DRMN-LC x2 HMDPC-4M-BLACK-HMA x4
HDMI/DVI SIGNAL COPPER A B C D SF-SRSN-HDMI SF-SRSN-HDMI	B/A D/C SF-DTMN13F13F-LC SF-DTMN13F13F-LC	A/B C/D SF-DRMN-LC SF-DRMN-LC	B/A D/C SF-STSN-HDMI SF-STSN-HDMI	

COPPER DUAL PATH (ONE WAY, LEFT TO RIGHT, OR RIGHT TO LEFT)				SK-M2E-D
				<b>Kit consists of:</b> SA-FR x2 SA-PS-NA x2 SF-SRSN-HDMI x2 SF-STSN-HDMI x2 SF-DTLNR-DIN x2 SF-DRLNR-DIN x2 HMDPC-4M-BLACK-HMA x4
HDMI/DVI SIGNAL COPPER A B C D SF-SRSN-HDMI SF-SRSN-HDMI	B/A D/C SF-DTLNR-DIN SF-DTLNR-DIN	A/B C/D SF-DRLNR-DIN SF-DRLNR-DIN	B/A D/C SF-STSN-HDMI SF-STSN-HDMI	

BI-DIRECTIONAL HYBRID (COPPER & FIBER)				SK-M2E-M2O-D
				<b>Kit consists of:</b> SA-FR x2 SA-PS-NA x2 SF-SRSN-HDMI x2 SF-STSN-HDMI x2 SF-DTLNR-DIN x1 SF-DRLNR-DIN x1 SF-DTMN-13F13F-LC x1 SF-DRMN-LC x1 HMDPC-4M-BLACK-HMA x4
HDMI/DVI SIGNAL COPPER A B C D SF-SRSN-HDMI SF-STSN-HDMI	B/A D/C SF-DTLNR-DIN SF-DRMN-LC	A/B C/D SF-DTMN13F13F-LC SF-DTMN13F13F-LC	B/A D/C SF-SRSN-HDMI SF-SRSN-HDMI	

### Ordering Information

Kit Type	Model	DIN1.0/2.3 Connectors	Description
HDMI	SK-M2O		SABER Kit, HDMI to Optical (Fiber) Conversion
HDMI		SK-M2E-D	SABER Kit, HDMI to Electrical (Copper) Conversion
HDMI		SK-M2E-M2O-D	SABER Kit, HDMI Bi-Directional Hybrid (Copper & Fiber) Conversion
DVI	SK-V2O		SABER Kit, DVI to Optical (Fiber) Conversion
DVI		SK-V2E-D	SABER Kit, DVI to Electrical (Copper) Conversion
DVI		SK-V2E-M2O-D	SABER Kit, DVI Bi-Directional Hybrid (Copper & Fiber) Conversion
Add -EU to end of Kit Model Number to receive Power Supply Unit, with European & Global PS Adaptors for SABER Series			

\*HDBNC interface available



### \*Supported HDMI Resolutions:

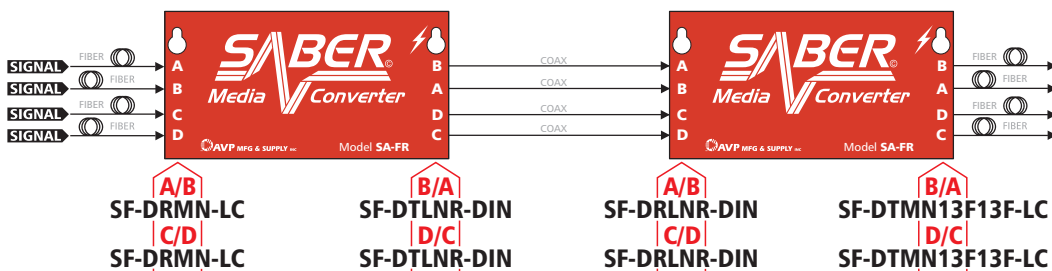
SMPTE 424M 1080p  
 1920 x 1080p  
 SMPTE 292M 720p  
 1280 x 720p  
 SMPTE 292M 1080i  
 1920 x 1080i 30  
 SMPTE 259M 525i  
 720 x 486  
 SMPTE 259M 625i  
 720 x 576



## Optical/Electrical up to 3G Conversion

These packaged configurations for SABER will allow for the processing of up to 4 Fiber Signals (single mode) to Electrical (copper), or up to 4 electrical (copper) signals to Fiber (single mode) depending on your specific needs. These signal paths can be either way (Left to Right or Right to Left) within the SABER or bi-directional as needed. SABER allows for total flexibility in signal processing. SABER fully supports signals up to and including 3G (SMPTE 424M).

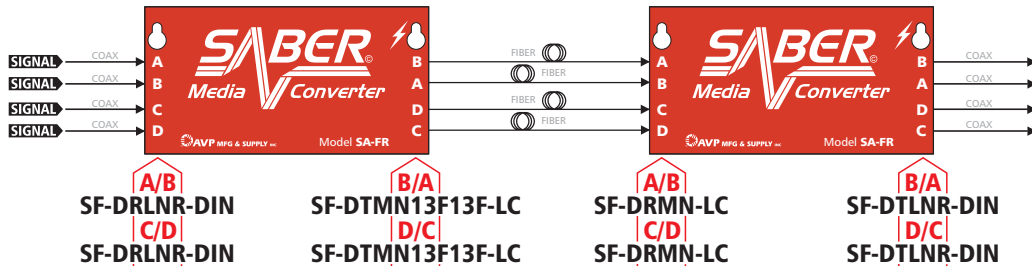
### OPTICAL TO ELECTRICAL OVER COPPER



### SK-02E-D

Kit consists of:  
SA-FR x2  
SA-PS-NA x2  
SF-DRMN-LC x2  
SF-DTMN-13F13F-LC x2  
SF-DTLNR-DIN x2  
SF-DRLNR-DIN x2

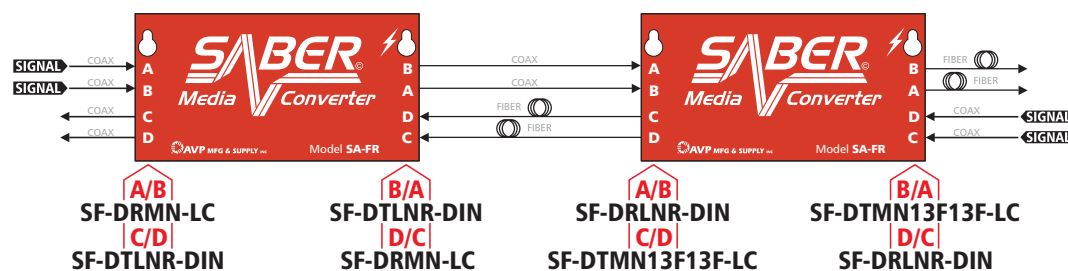
### ELECTRICAL TO OPTICAL OVER FIBER



### SK-E20-D

Kit consists of:  
SA-FR x2  
SA-PS-NA x2  
SF-DRLNR-DIN x2  
SF-DTMN13F13F-LC x2  
SF-DRMN-LC x2  
SF-DTLNR-DIN x2

### BI-DIRECTIONAL OPTICAL TO ELECTRICAL (HYBRID)



### SK-02E-02E-D

Kit consists of:  
SA-FR x2  
SA-PS-NA x2  
SF-DRLNR-DIN x2  
SF-DTLNR-DIN x2  
SF-DTMN-13F13F-LC x2  
SF-DRMN-LC x2

#### Ordering Information

Kit Type	DIN1.0/2.3 Connectors	Description
Optical to Electrical	SK-02E-D	SABER Kit, Optical to Electrical over Copper (Coax) Conversion
Electrical to Optical	SK-E20-D	SABER Kit, Electrical to Optical over Fiber (Optical) Conversion
Hybrid Bi-Directional	SK-02E-02E-D	SABER Kit, Optical to Electrical over Copper & Fiber Bi-Directional Hybrid Conversion

Add -EU to end of Kit Model Number to receive Power Supply Unit, with European & Global PS Adaptors for SABER Series

\*HDBNC interface available



## Digital to Analog SDI Conversion using Fiber or Copper

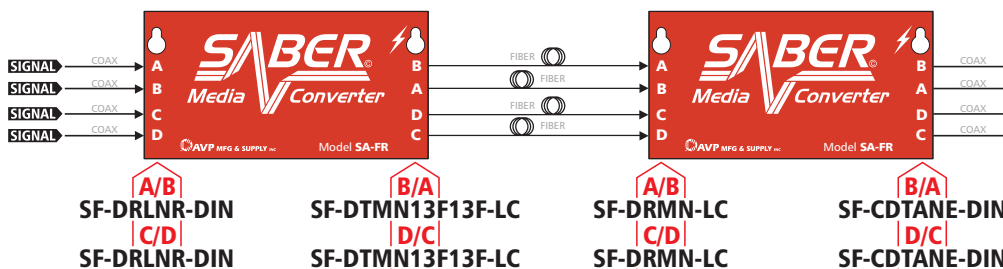
These packaged configurations for SABER will allow for the processing of up to 4 digital to analog conversions with the added functionality of further conversion within the SABER of these signals to either electrical (copper) and/or Fiber (single mode). These signal paths can be either way (Left to Right or Right to Left) within the SABER or bi-directional as needed. SABER allows for total flexibility in signal processing. SABER fully supports signals up to and including 3G (SMPTE 424M).

### DIGITAL TO ANALOG OVER FIBER

### SK-D2AO-D

Kit consists of:

- SA-FR x2
- SA-PS-NA x2
- SF-CDTANE-DIN x2
- SF-DTMN-13F13F-LC x2
- SF-DRMN-LC x2
- SF-DRLNR-DIN x2

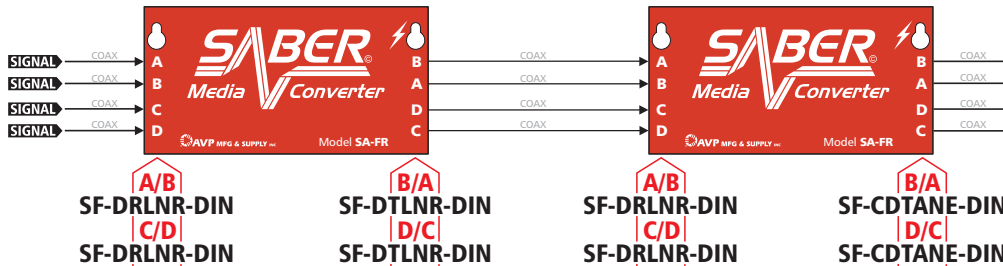


### DIGITAL TO ANALOG OVER COPPER

### SK-D2AE-D

Kit consists of:

- SA-FR x2
- SA-PS-NA x2
- SF-CDTANE-DIN x2
- SF-DTLNR-DIN x2
- SF-DRLNR-DIN x4

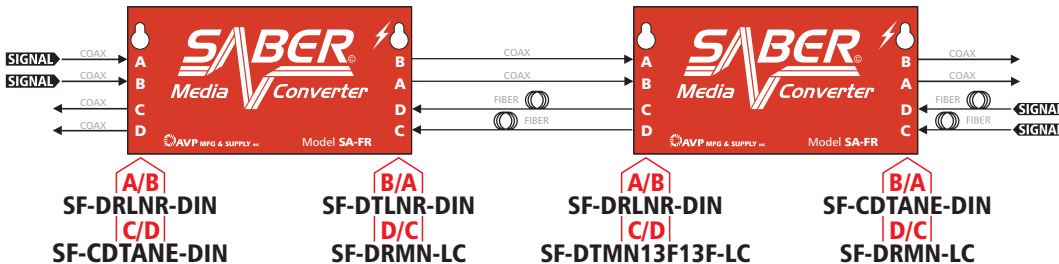


### BI-DIRECTIONAL HYBRID DECODER (L to R / R to L) (COPPER & FIBER)

### SK-D2AE-D2AO-D

Kit consists of:

- SA-FR x2
- SA-PS-NA x2
- SF-CDTANE-DIN x2
- SF-DRLNR-DIN x2
- SF-DTLNR-DIN x1
- SF-DTMN-13F13F-LC x1
- SF-DRMN-LC x2



#### Ordering Information

Kit Type	DIN1.0/2.3 Connectors	Description
D to A Decoding	SK-D2AO-D	SABER Kit, Digital to Analog Decoding over Fiber (Optical) Conversion
	SK-D2AE-D	SABER Kit, Digital to Analog Decoding over Copper (Electrical) Conversion
	SK-D2AE-D2AO-D	SABER Kit, Digital to Analog Decoding over Copper & Fiber Bi-Directional Conversion

Add -EU to end of Kit Model Number to receive Power Supply Unit, with European & Global PS Adaptors for SABER Series

\*HDBNC interface available





# SABER Video Converter

Partners in Broadcast, Telecom & Satellite Solutions

Small Form-Factor Pluggable (SPF)

## Analog SDI to Digital Conversion over Fiber or Copper

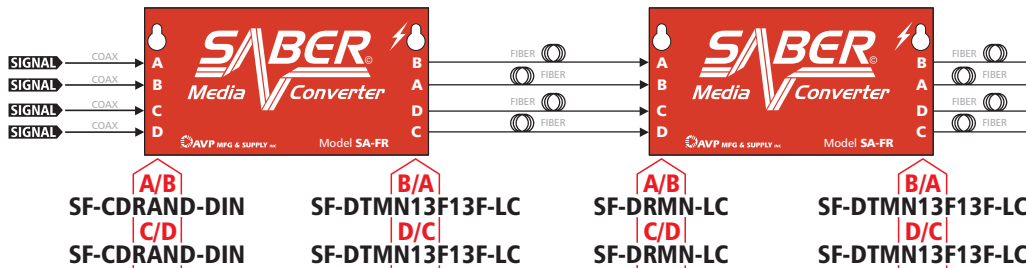
These packaged configurations for SABER will allow for the processing of up to 4 analog to digital conversions with the added functionality of further conversion within the SABER of these signals to either electrical (copper) and/or Fiber (single mode). These signal paths can be either way (Left to Right or Right to Left) within the SABER or bi-directional as needed. SABER allows for total flexibility in signal processing. SABER fully supports signals up to and including 3G (SMPTE 424M).

### ANALOG TO DIGITAL TO FIBER

#### SK-A2D0-D

Kit consists of:

- SA-FR x2
- SA-PS-NA x2
- SF-CDRAND-DIN x2
- SF-DTMN13F13F-LC x4
- SF-DRMN-LC x2

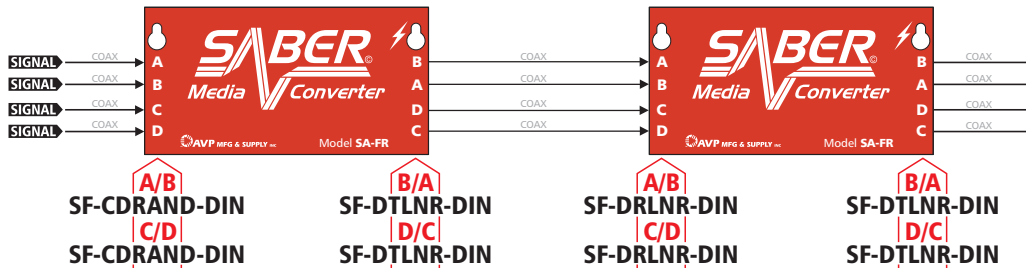


### ANALOG TO DIGITAL TO COPPER

#### SK-A2DE-D

Kit consists of:

- SA-FR x2
- SA-PS-NA x2
- SF-CDRAND-DIN x2
- SF-DTLNR-DIN x4
- SF-DRLNR-DIN x2

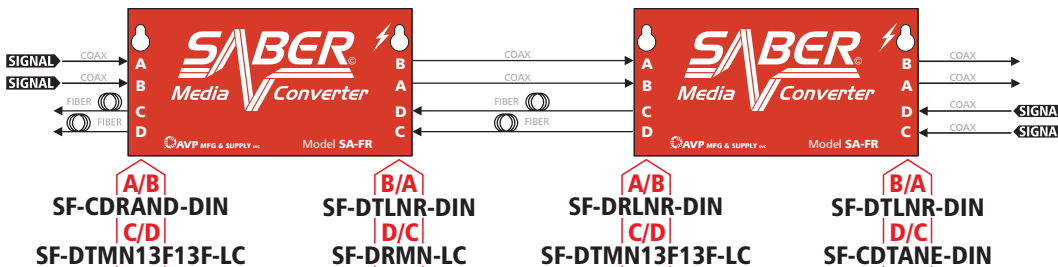


### BI-DIRECTIONAL HYBRID ENCODER (L to R / R to L) (COPPER & FIBER)

#### SK-A2DE-A2D0-D

Kit consists of:

- SA-FR x2
- SA-PS-NA x2
- SF-CDRAND-DIN x2
- SF-DTLNR-DIN x2
- SF-DRLNR-DIN x1
- SF-DTMN13F13F-LC x2
- SF-DRMN-LC x1



#### Ordering Information

Kit Type	DIN1.0/2.3 Connectors	Description
A to D Encoding	SK-A2D0-D	SABER Kit, Analog to Digital Encoding over Fiber (Optical) Conversion
	SK-A2DE-D	SABER Kit, Analog to Digital Encoding over Copper (Electrical) Conversion
	SK-A2DE-A2D0-D	SABER Kit, Analog to Digital Encoding over Copper & Fiber Bi-Directional Conversion
Add -EU to end of Kit Model Number to receive Power Supply Unit, with European & Global PS Adaptors for SABER Series		

\*HDBNC interface available

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**AVP MFG & SUPPLY INC**

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Partners in Broadcast, Telecom & Satellite Solutions

Small Form-Factor Pluggable (SFP)

# SABER<sup>®</sup>

Media Converter **MICRO**

Introducing Micro SABER Media Converter. The Micro SABER features up to two independent SFP paths and incorporates dual power/locking plugs for reliance and dependability. This simple two path design allows for integration into virtually any facility or platform, from Media to Broadcast to Outdoor Broadcast/Truck based designs.



(SFP modules sold separately)



## Features:

- Utilizes latest SFP (Small Form Pluggable) Technology
- Full support up to, and including 3G signals
- Embedded audio support (depending upon SFP installed)
- Up to 2 Totally INDEPENDENT signal Paths
- Dual Locking Power Supply for confidence
- Made in North America

## Applications Include:

- Broadcast Facilities
- Outdoor Broadcast Applications
- Camera Applications
- Remote Applications



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Partners in Broadcast, Telecom & Satellite Solutions

Small Form-Factor Pluggable (SFP)

## 3Gbit Bidirectional SDI/Fiber Transceiver



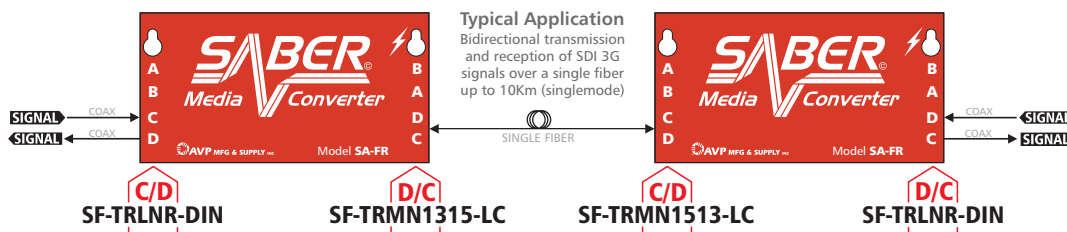
- Supports SDI 75 Ohm video up to 3Gbit/s (1080p60)
- Bidirectional send & receive on single fiber
- Error free optical connections
- Up to 10Km (6.2 miles) at 3Gbit/s
- Simplex LC/PC singlemode optical connection
- Supports hot swapping & hot plugging

The SK-OBD1F kit is a bidirectional SDI transmitter and receiver that uses a single fiber cable for distribution of uncompressed broadcast quality video signals over long distances up to 10Km. Fully supports signals up to and including 3G (SMPTE 424M)



### BIDIRECTIONAL ELECTRICAL TO OPTICAL TO ELECTRICAL (HYBRID)

### SK-OBD1F-D



#### Kit consists of:

- SA-FR x2
- SA-PS-NA x2
- SF-TRLNR-DIN x2
- SF-TRMN1315-LC x1
- SF-TRMN1513-LC x1
- D12PC-1-BLACK-BN x4
- Optional Case:  
SK-A1400-BK

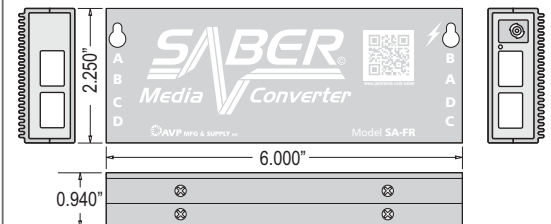
#### SK-OBD1F-D Kit includes:

- |                        |    |   |
|------------------------|----|---|
| <b>SA-FR</b>           | 2, | 3Gbit Bidirectional SDI/Fiber SABER Enclosure, 4 SFP Cages, Power Status LED, keyholes for wall-mount |
| <b>SA-PS-NA</b>        | 2, | Power Supply Unit, North American Adaptor Type for SABER Series                                       |
| <b>SF-TRLNR-DIN</b>    | 2, | 3G-SDI SFP Coaxial, Transceiver, with Reclocker, Long reach, non-MSA, DIN 1.0/2.3 connectors          |
| <b>SF-TRMN1315-LC</b>  | 1, | 3G HD SDI SFP Bidirectional 1310Rx/1550Tx, 0~70°C, 10Km, non-MSA, LC connectors                       |
| <b>SF-TRMN1513-LC</b>  | 1, | 3G HD SDI SFP Bidirectional 1550Rx/1310Tx, 0~70°C, 10Km, non-MSA, LC connectors                       |
| <b>D12PC-1BLACK-BN</b> | 4, | Cable, DIN 1.0/2.3 Plug (M) to BNC Jack (F) Cable Adapter, 1 foot, black, Belden 1855A                |

#### Optional Pelican Case:

- SK-A1400-BK** Pelican case, custom foam, version A

\*HDBNC interface available



<b>System</b>	
Density:	SABER holds up to 4 independent SFP modules
Impedance:	75W
Connectors Supported:	DIN 1.0/2.3, HDBNC, LC Optical & HDMI/DVI
<b>Physical</b>	
Dimensions:	6.000"W x 2.250"D x 0.940"H
SFP Module Capacity:	Up to 4 AVP SFP modules including Dual TX and Dual RX
Status Indicator OK:	Green LED
<b>Electrical</b>	
Power Supply Configuration:	Single External Supply
Voltage:	DC Input 9-32VDC
Max Power Dissipation:	12 Watts (fully loaded)
Note:	Power consumption dependent on SFP type
<b>External Power Supply Brick</b>	
AC Mains Input:	Auto Ranging, 90-264VAC, 50/60Hz
Number of outputs:	1
Output Voltage:	24VDC@0.75A
<b>Warranty</b>	
Warranty:	One year, date of shipment from AVP

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