![ADC logo]

UniPatch® Modular System

UniPatch

UniPatch® Modular System
Overview

RS-422 Data — Midsize Video — Bantam Audio — Video RGBS — RGB — Video
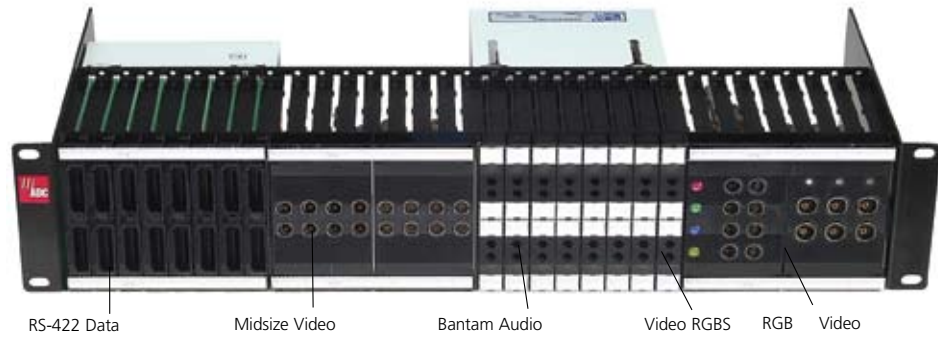
Loaded UniPatch Chassis

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

Modular Chassis for Unprecedented Flexibility

Features

- Jacks and backplanes have a modular design and fit into the rugged high-density card cage chassis. Just plug in a module to add more jacks or backplane connectors

- Modularity lets you start small and add modules and cards as needed

- Individual circuits are easily replaced without disturbing other circuits

- Backplanes available in high-density 64-circuit bantam audio, high-density 32-port data, standard-density 24-port data, and video options

- Gold-plated card edge connectors tested to withstand heavy use and vibration

- Shallow 7" deep chassis is perfect for mobile applications

Mix-and-Match Plug-in Jack Modules

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

Features

- Category 3 compliant RS-422 modules for demanding professional data patching applications

- Bantam audio modules in user-selectable normalled configurations

- Video modules for analog, SD, HD, and analog component

- AES 110 Ω to 75 Ω coaxial baluns

- BNC bulkhead feedthroughs

- Category 5, 5e and 6 data patching

UniPatch® Modular System
Backplane Options (mix-and-match)

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

Features

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

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

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

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

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

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

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

Gigabit Ethernet Jack Module

Features:

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

DM-GIGE

LSA-PLUS® 8-Circuit Backplane Module

Features:

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

VPRM-GIGE-LSA
(rear view)

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

UniPatch® Modular System
RS-422 Modules

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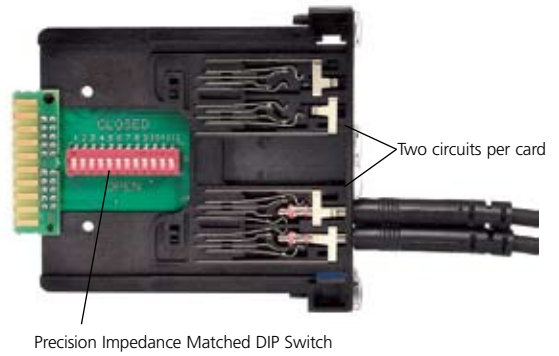
Features

- The standard in professional data patching

- Durable military-grade switch system rated for 30,000 insertion/withdrawal cycles. Unlike RJ45 systems, suitable for heavy daily professional use.

- Fully SMPTE 207M compliant circuits switch all ten pins, unlike bantam systems, which do not switch all ground pins, potentially causing problems

- Tough military-grade, gold-plated switch with long cantilever beam springs and unique self-wiping contacts ensures against premature wear and provides positive contact force

- RS-422 cards offer the highest density available. Up to 32 modules in two rack units for 33 percent greater density

- Normalled or non-normalled cards available

- Modular termination options: Dsub9, DB-25, EDAC 90-pin plug, QCP II, Ultra Patch, standard-density, 24 per frame, or Dsub9 high-density, 32 per frame (requires thin shell strain relief)

- Keyed for proper patch cord orientation

- Category 3 compliant for 10 Base-T data

UniPatch

UniPatch® Modular System
Bantam Audio Modules

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

Two circuits per card

Precision Impedance Matched DIP Switch

Features

- High-density, selectable normals, and excellent reliability

- 33 percent higher density than conventional frame-type bantam bays. Up to 32 cards in a frame with 2 circuits (4 jacks) per card for a total of 64 circuits (128 jacks)

- 32-across spacing exactly matches typical router configurations and provides larger designation area

- Switch-selectable normals and grounds for each circuit: normals strapped (NS), half-normal (HN), bussed ground (BG), or no normals (NN)

- WECO-standard jacks meet or exceed MIL-STD-202 for mechanical durability as well as corrosion, salt spray, thermal shock, moisture resistance, and vibration

- Precision-molded housing and sturdy, integrated all metal springs rated for 10,000 insertion/withdrawal cycles. Gold crossbar, self-cleaning contacts ensure a positive connection

- Modular termination options: QCP II, EDAC 3-pin plug, EDAC 90-pin plug, DB-25, AMP Champ 50-pin receptacle, or QCP IV with 4-foot umbilical Ultra Patch panel

- Snap-on designation holders accept individual labels without tools; conventional chassis-wide designation strips are also available. Large designations provide enough room for three lines of text

- Fully compliant 110 Ω circuit board meets demanding AES specifications

UniPatch® Modular System
Video Modules

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

Features

- Standard jacks mount 24 across, midsize jacks mount 32 across

- Standard-size, HD video modules contain SVJ-2 normalled-through Super Video Jacks with or without termination

- Standard size straight-through modules contain CJ2014N jacks without termination or CJ2020N-75 jacks with termination

- Midsize HD video modules contain MVJ-3 normalled-through Super Video Jacks with or without termination

- Midsize straight-through modules contain CJ3014/4014 jacks without termination or CJ3014N-75/4014N-75 jacks with termination

- MUSA modules contain SMJ-2100 HD-rated MUSA standard jacks.

- Modules are available for analog component video in the following configurations: RGB, $P_r P_r B Y$, RGBS, and RGBHV

- Large designations snap on without tools providing enough space for four rows of text

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

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

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

Midsize HD Video Module
(VM-MVJ-BK)

RGB, $P_r P_s Y$ HD Video Module
(VM-RGB-MVJ-BK)

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

UniPatch

UniPatch® Modular System
AES Balun Modules

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

Features

- Mounts on side of equipment rack with velcro or can be rack mounted

- Modules contain four circuits for up to 64 circuits per 2 RU chassis

- Works with quick-to-install QCP punchdown termination modules or EDAC 3-pin plug

- 1 Vp-p plug-in pad is available for equipment that cannot accept high-input voltages. Plug-in pad feature allows each circuit to be tailored for 1 Vp-p operation in 1dB increments to -20dB

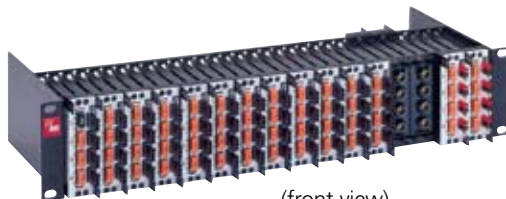- New splitter module provides 2-in/4-out passive split/110 Ω to 75 Ω converter

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

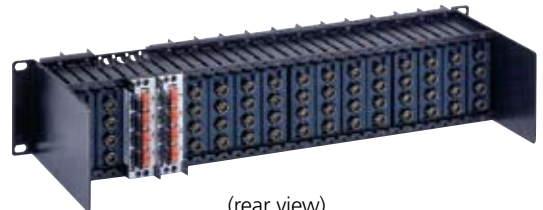**AES 110 Ω to 75 Ω Converter**
(AM-411075-MKII)

AES 2:4 Splitter
(AM-2110-475-E3)
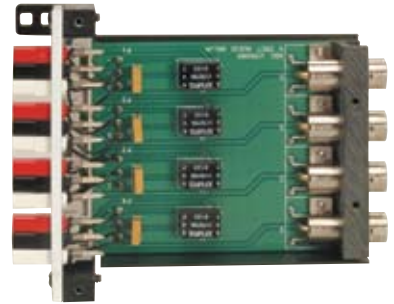
Precision Transformers, Glass Epoxy Circuit Board, True 75 Ω BNC Connectors

(front view)

(rear view)

UniPatch System fully loaded with 16 AES balun modules for 64 110-75 Ω circuits
(allows modules to be mounted either way)

UniPatch® Modular System

Ordering Information

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

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

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

The backshell kits are found on page 95.

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

Ordering Information

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

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Ordering Information

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

Ordering information continues on next page.

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

UniPatch® Modular System

Ordering Information

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

Ordering Information

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

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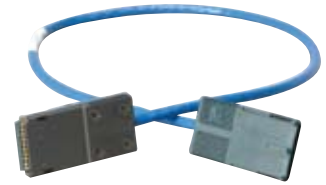
UniPatch® Modular System

Ordering Information

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

UniPatch Data Patch Cord