



MD-4816



Modula Series Matrix Switcher MD-4816 Frame

- **New Flex-Slot™ technology provides significant cost savings and improved space efficiency in skewed I/O configurations.**
- **Flexible and scale-able I/O range to 60 inputs or 16 outputs per signal type. Integrate an entire installation's routing requirements into a single Modula system.**
- **High bandwidth-linearity and low crosstalk for best quality signal transfer from source to destination.**
- **Powerful 32-bit processor with AutoPatch Virtual Matrix I/O mapping for simple full-range and segmented "room" or zone control.**
- **Options include Digital Volume Control, Redundant Power Supplies, Vertical-Interval Switching, and more.**
- **XNNet Communication Architecture for seamless integration with other AutoPatch XNNet switchers and control interfaces.**
- **Routes high-resolution RGB, S-Video, HDTV, Composite, Y/C, YUV, Mono and Multi-Channel Audio, Serial Digital Audio, Serial Digital Video, and more...**

Applications -

Corporate Boardrooms

Command/Control Centers

Distance Learning Systems

Vide Conferencing Systems

Whole-house A-V and Home Theater

Security and Surveillance



The New Standard for Performance and Flexibility

The Modula Series was conceived and built on raising the standard for signal routing performance and flexibility. High bandwidth linearity and low crosstalk insure delivery of the best possible signal quality.

New Flex-Slot™ Technology

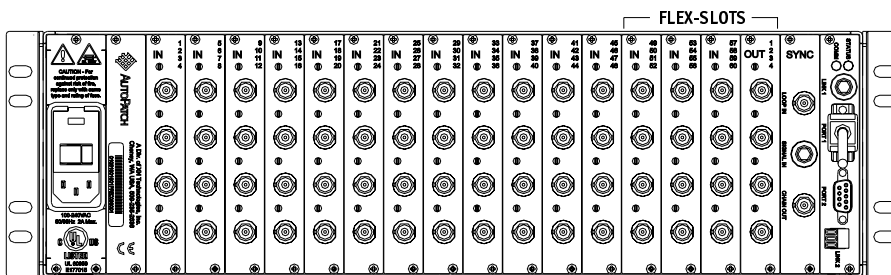
Flex-Slot™ technology gives AutoPatch products an even higher level of flexible sophistication, configure-ability, and space-efficiency. Modula Flex-Slots accept either input or output boards allowing the Modula-4816 to also be utilized in 52x12, 56x8, and 60x4 matrix I/O configurations. Whatever your I/O requirements, there's a Modula configuration to fit your needs.

A Wide Range of I/O Board Options

With a wide selection of modular I/O board options, each Modula system is custom assembled to fit your current needs and give you the flexibility you'll need in the future. I/O boards are available to dynamically route virtually any format of analog or digital A-V signal from mono audio to HDTV and high-resolution computer video.

Integration and Control Couldn't Be Easier

Want to control your Modula system from a third-party control platform like AMX or Crestron? Or do you want to use one or several of the available AutoPatch control panel interfaces? Either way or both, the Modula has you covered. Modula combines XNNet™ network communications architecture with AutoPatch's popular BCS™ serial-port control protocol to give you the precise level of control you need.



Modula MD-4816 configured for 60x4 Composite Video with Vertical Interval SYNC option.

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Modula MD-4816 Specifications

General

AC Power:	100-240 VAC single phase, 47-63 Hz
Power Consumption:	240 Watts max. per loaded enclosure
Humidity:	0 to 90% non-condensing
Enclosure Dimensions:	17" (43.18 cm) Depth 5.2" (13.0 cm) Height (3 r.u.) 17.4" (44.2 cm) Width w/o rack ears 18.8" (47.7 cm) Width w/ rack ears
Weight:	Appx. 22 lbs (9.98 kg) per loaded encl.
Input Range:	4 to 60 per signal type, modular in increments of four.
Output Range:	4 to 16 per signal type, modular in increments of four.
Communications:	RS-232, RS-422, Lontalk, Ethernet
Approvals:	UL
Signal Types:	Composite (NTSC, PAL, SECAM), Y/C, HDTV, Component Video, RGB, RGBS, RGBHV, Mono Audio, Stereo Audio, Multi-channel Audio, Serial Digital Audio & Video, RS-232, RS-422
Warranty:	Limited Lifetime Warranty, see warranty brochure for details.

Analog Audio Boards

Audio Throughput

Frequency Response:	<0.1 dB from 20 to 200 kHz
THD + Noise:	
Std. Audio Outputs	<0.2% from 20 to 20 kHz, Vin = -6 to +26.6 dBu
Digital Vol. Ctrl. Outputs	<0.05% from 20 to 20 kHz, Vin = 0 to +20.0 dBu
Crosstalk:	<-110 dB, 1kHz, Vin = +20 dBu
Signal to Noise Ratio:	-95 dB from 20 to 20kHz, Vin = +20 dBu

Audio Input

Level:	Common +24.7 dBu, Diff. +27.0 dBu
Impedance:	18 kOhms
Type:	Balanced and Unbalanced
Gain Adj. Range:	-3 dB to +3 dB, potentiometer
Connector:	Disconnectable three pos. terminal block

Audio Output

Level:	+27.0 dBu
Impedance:	50 Ohms
Type:	Balanced and Unbalanced
Gain Adj. Range:	
Std. Audio Outputs	-9 dB to +9 dB, potentiometer
Volume Adj. Range:	
Digital Vol. Ctrl. Outputs	-70 dB to +10 dB, control panel and serial command adjustment
Connector:	Disconnectable three pos. terminal block

Standard Video Boards

Standard Video Throughput

Frequency Response:	+/- 3 dB to 50 MHz (any routing state) +/- 1 dB to 20 MHz (any routing state)
Differential Gain*:	<0.2% or better (f = 3.58 MHz, 10 to 90% APL)
Differential Phase*:	<0.1° or better (f = 3.58 MHz, 10 to 90% APL)
Crosstalk (adj. ch.):	<-50 dB (f = 5 MHz)
*performed with a standard five-step modulated staircase test signal	

Standard Video Input

Level:	+/- 2.5 Volts
Impedance:	75 Ohms
Return Loss:	-45 dB at 5 MHz
Connector:	BNC

Standard Video Output

Level:	+/- 2.5 Volts
Impedance:	75 Ohms
Connector:	BNC

Wideband Video Boards

Ultra-Wideband Throughput

Frequency Response:	+/- 3 dB to 300 MHz (any routing state) +1.5 dB/-1 dB to 200 MHz (any routing state) +/- 1 dB to 60 MHz (any routing state)
Crosstalk (adj. ch.):	<-60 dB (f = 5 MHz) <-30 dB (f = 150 MHz)

Ultra-Wideband Input:

Level:	2 Volts p-p
Impedance:	75 Ohms
Return Loss:	-45 dB at 5 MHz
Connector:	BNC

Ultra-Wideband Output:

Level:	2 Volts p-p
Impedance:	75 Ohms
Connector:	BNC

Additional I/O board options available, see individual specification sheets for details.



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*Subject to certain conditions, see warranty brochure for details.

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