

**1Y-16**



- Matrix sizes from 4x4 up to 16x16 per signal type
- Multiple I/O board combinations
- 400 MHz Ultra-Wideband performance

## **1Y-16 Distribution Matrix**

### **Applications**

Sports Bars

Board Rooms

Home Theater Systems

Distance Learning

Broadcast Environments

Security Systems

Video Arrangement Systems



## GENERAL

AC Power:	100 - 240 VAC
Maximum Power Consumption:	30 Watts per enclosure
Operational Temperature:	32° to 110° F (0° to 43° C)
Humidity:	0 to 90% non-condensing
Dimensions:	17.00 in (43.18 cm) depth 17.00 in (43.18 cm) width without mounting ears 19.00 in (48.26 cm) width with mounting ears 3.50 in (8.89 cm) height (2 r.u.)
Weight:	17 lbs (7.73 kg) per enclosure
Approvals:	CE, ETL (conforms to UL 1419)

## AUDIO

<b>Throughput:</b>	
Frequency Response:	< ± 0.1 dB (20 Hz to 20 kHz)
Total Harmonic Distortion + Noise:	< 0.01% (20 Hz to 20 kHz, Vin = -3.3 dBu to 13.2 dBu)
Crosstalk:	< -95 dB (1 kHz, Vin = ± 24 V Balanced)
Signal to Noise Ratio (SNR):	-103 dB (20 Hz to 20 kHz, Vin = 13.2 dBu)

<b>Input:</b>	
Maximum Level:	Common Mode: 22.7 dBu Differential: 28.2 dBu
Impedance:	18 kΩ
Type:	Balanced or Unbalanced
Common Mode Rejection Ratio (CMRR):	-90 dB typical, -70 dB min. (20 Hz to 20 kHz, Vcm = ± 10 V)
Power Supply Rejection Ratio (PSRR):	-80 dB typical, -60 dB min. (20 Hz to 20 kHz, Vs = ± 15 V)
Gain Adjustment Range (optional):	-3 dB to +10 dB (Vin = 3 Vp-p)
Connector type(s):	Disconnectable, 3 Position Screw Terminal

<b>Output:</b>	
Maximum Level:	25.96 dBu, Balanced
Impedance:	50 Ω
Type:	Balanced or Unbalanced
Gain Adjustment Range:	-3 dB to +10 dB
Connector type(s):	Disconnectable, 3 Position Screw Terminal

## STANDARD VIDEO

<b>Throughput:</b>	
Frequency Response:	± 3 dB to 60 MHz or Better ± 1 dB to 30 MHz or Better
Differential Gain:	0.1% or Better (f = 3.58 MHz)
Differential Phase:	0.1° or Better (f = 3.58 MHz)
Crosstalk (adjacent channel):	< -40 dB (f = 5 MHz)
Propagation Delay:	< 20 ns (Vin = ± 0.5 V)
Signal to Noise Ratio (SNR):	< -70 dB (Vin = 0.7 V, 100% IRE)

<b>Input:</b>	
Maximum Level:	± 5 V
Impedance:	75 Ω or Hi-Z (22 kΩ)
Gain Adjustment Range (optional):	-3 dB to +10 dB
Connector type(s):	BNC

<b>Output:</b>	
Maximum Level:	± 5 V
Impedance:	75 Ω
Gain Adjustment:	-7.5 dB to +7.5 dB
Connector type(s):	BNC

## WIDEBAND VIDEO

<b>Throughput:</b>	
Frequency Response:	± 3 dB to 200 MHz or better
Crosstalk (adjacent channel):	< -60 dB (f = 5 MHz)
Propagation Delay:	< 20 ns (Vin = ± 0.5 V)
Signal to Noise Ratio (SNR):	< -70 dB (Vin = 0.7 V, 100% IRE)

<b>Input:</b>	
Maximum Level:	± 2 V
Impedance:	75 Ω or Hi-Z (22 kΩ)
Gain Adjustment Range (optional):	-3 dB to +10 dB
Connector type(s):	BNC

<b>Output:</b>	
Maximum Level:	± 2 V
Impedance:	75 Ω
Gain Adjustment:	-5.5 dB to +6.7 dB
Connector type(s):	BNC

## ULTRA-WIDEBAND VIDEO

<b>Throughput:</b>	
Frequency Response:	± 3 dB to 400 MHz or better
Crosstalk (adjacent channel):	< -60 dB (f = 5 MHz)
Propagation Delay:	< 20 ns (Vin = ± 0.5 V)
Signal to Noise Ratio (SNR):	< -70 dB (Vin = 0.7 V, 100% IRE)

<b>Input:</b>	
Maximum Level:	± 2 V
Impedance:	75 Ω or Hi-Z (22 kΩ)
Gain Adjustment Range (optional):	-3 dB to +10 dB
Connector type(s):	BNC

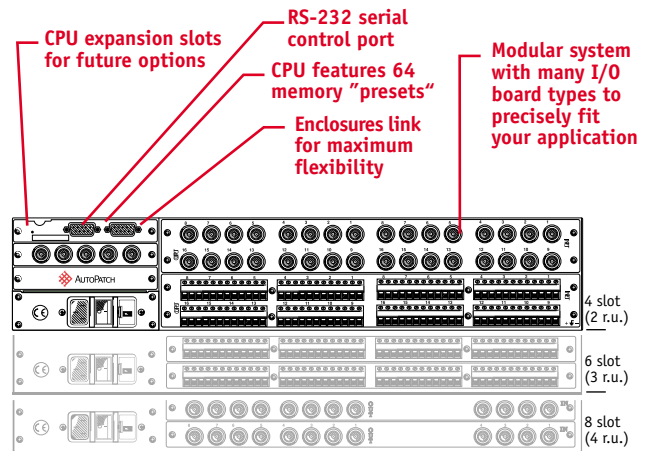
<b>Output:</b>	
Maximum Level:	± 2 V
Impedance:	75 Ω
Gain Adjustment:	-5.5 dB to +6.7 dB
Connector type(s):	BNC

# 1Y-16 Distribution Matrix Specifications

- Matrix sizes from 4x4 up to 16x16 per signal type
- Ideal for routing: Composite Video (NTSC, PAL, SECAM), Y/C and S-Video, Component Video, RGB, RGBS, RGBHV, Mono Audio, Stereo Audio, Serial Digital, RS-232, RS-422
- Multiple I/O board combinations
- 400 MHz Ultra-Wideband performance
- Switch any input to any or all outputs, or any combination
- Multiple vertical enclosure size options for precise customization
- Includes APControl, free Windows matrix control and scheduling software
- X/Y Control Panels support quick disconnect and single touch status

### System Options:

Local and Remote (to 1000 ft.) X/Y Control Panels  
Single Bus Controller Keypads  
Vertical Interval Switching  
Input Gain Control (Audio and Video)  
Redundant Power Supply  
4-slot, 6-slot, and 8-slot enclosures



2416 Cheney-Spokane Rd. Cheney, WA 99004-0350  
509-235-2636 800-622-0246 (US) Fax 509-235-2646  
www.autopatch.com e-mail: sales@autopatch.com  
AutoPatch is a division of XN Technologies, Inc.