



TW3016AR Series Sixteen-Channel Video Receivers

ACTIVE VIDEO TRANSMISSION OVER UNSHIELDED TWISTED PAIR

Product Features

- Adaptive Technology Eliminates Manual Adjustments
- Full Motion Color/Black-White Video up to 4,000 Feet (1,219 meters)
- Supports Coaxitron® Control (PTZ Control Signals) up to 750 Feet (228.6 meters)
- Compatible with All Pelco Twisted Pair Equipped Cameras, Enclosures, and Domes
- Built-In Surge Suppression
- Each Channel Has BNC Connectors for Video Output
- Easy Termination with the RJ-45 UTP Connectors
- Optional Patch Panels Convert RJ-45 Connections to Individual Screw Terminal Connections
- Supports NTSC, PAL, and SECAM
- Power Supply with an IEC 320-C13 Socket for Interchangeable AC Power Cords (US, UK, AU, EU)
- Can Be Mounted Into a Standard EIA, 19-Inch Rack

The **TW3016AR Series** 16-channel active receivers can receive live video over unshielded twisted pair (UTP) cable. There are two 16-channel models in the series: **TW3016AR** and **TW3016AR-2**. Each unit can be connected to the optional TW3016-PATCH1 patch panel.

The adaptive technology in the **TW3016AR Series** automatically adjusts the low, medium, and high frequency components of the video signal allowing for the best possible video transmission. The adaptive technology eliminates the need for manual adjustment by automatically adjusting to provide the most favorable video transmission (depending on cable length). The unit has been optimized for use with Cat5e and Cat6 cable, although Cat3 and Cat5 cable can be used for shorter distances.



TW3016AR-2

The front of each model has a dial and an LED for each channel. The dial is used for selecting the cable distance. You can leave the dial on auto (default adaptive technology) or manually select 1,000 feet (304 meters), 2,000 feet (609 meters), 3,000 feet (914 meters), or 4,000 feet (1,219 meters). An LED lights green when UTP video is being received and red when no UTP video is being received. A flashing amber LED means that there are Coaxitron® pan/tilt/zoom (PTZ) control commands being transmitted.

The back of each model has BNC connectors for video output, RJ-45 video input connectors for connecting to a TW3016-PATCH1 patch panel, a 5 mm barrel power connector, and a 6-pin Molex® power connector that can be used in a multiunit installation with the optional EPS5000-120TW rack-mountable external power supply. The EPS5000-120TW also provides redundant power for the TW3016AR and TW3016AR-2.



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International Standards
Organization Registered Firm,
ISO 9001 Quality System



TECHNICAL SPECIFICATION

MODELS

TW3016AR	16-channel active receiver; base model
TW3016AR-2	16-channel active receiver with 32 BNC video inputs; base model

A suffix of -US, -UK, -AU, or -EU is added to the above model number when ordering a region-specific power cord. For example, a TW3016AR-US is a base model with a power cord for use in the United States. Please reference the following table.

Suffix	Part Number	Region
-US	US-320-C13	United States
-UK	UK-320-C13	United Kingdom, Ireland, and Hong Kong
-AU	AU-320-C13	Australia and New Zealand
-EU	EU-320-C13	Most of continental Europe

Configurations that include a patch panel are available for the TW3016AR and TW3016AR-2. A model number with a 1 after AR indicates that the configuration includes a TW3016-PATCH1 patch panel. Please reference the following table.

Model Number	Receiver	Patch Panel
TW3016AR1-US	TW3016AR	TW3016-PATCH1
TW3016AR1-UK	TW3016AR	TW3016-PATCH1
TW3016AR1-AU	TW3016AR	TW3016-PATCH1
TW3016AR1-EU	TW3016AR	TW3016-PATCH1
TW3016AR1-2-US	TW3016AR-2	TW3016-PATCH1
TW3016AR1-2-UK	TW3016AR-2	TW3016-PATCH1
TW3016AR1-2-AU	TW3016AR-2	TW3016-PATCH1
TW3016AR1-2-EU	TW3016AR-2	TW3016-PATCH1

ELECTRICAL

Input Voltage	12 VDC, 50-60 Hz
Current	2.25 A
Wire Type	Unshielded Twisted Pair (24 AWG minimum)
Wire Category	Cat3 or better
Wire Distance	4,000 feet (1,219.2 meters) maximum using Cat5e or Cat6

Cable Type	Maximum Distance (with Coaxitron)	Maximum Distance (video only)
Cat3	750 ft (228.6 m)	1,500 ft (457.2 m)
Cat5	750 ft (228.6 m)	3,000 ft (914.4 m)
Cat5e	750 ft (228.6 m)	4,000 ft (1,219.2 m)
Cat6	750 ft (228.6 m)	4,000 ft (1,219.2 m)

DC Loop Resistance	52 ohms per 1,000 feet (304.8 meters)
Differential Capacitance	19pF/ft max
Transient Immunity	300 W peak pulse power (8/20 US)
Insertion Loss	72 dB over; 0-8 MHz frequency range

VIDEO CHARACTERISTICS

Video Output	16 or 32 BNC
Format	NTSC, PAL, SECAM
Frequency Response	DC to 10 MHz
Common Mode/Differential Mode Rejection	>70 dB

MECHANICAL

Connectors	
BNC	Video output
6-Pin Connector	For use with EIA rack-mounted power supply accessory
RJ-45	UTP input
Barrel Connector	For connection to external power supply

GENERAL

Construction	Aluminum
Finish	Black
Operating Temperature	32° to 167°F (0° to 75°C)
Relative Humidity	0 to 90%, noncondensing
Data Transmission	Supports Coaxitron up to 750 feet (228.6 meters)
LED Indicators	16 status LEDs
Dimensions	
TW3016AR	11.00" D x 17.25" W x 1.72" H (27.94 x 43.82 x 4.37 cm)
TW3016AR-2	11.00" D x 17.25" W x 1.72" H (27.94 x 43.82 x 4.37 cm)
Unit Weight	
TW3016AR	4.6 lb (2.09 kg)
TW3016AR-2	4.6 lb (2.09 kg)
Shipping Weight	
TW3016AR	9 lb (4.08 kg)
TW3016AR-2	9 lb (4.08 kg)

CERTIFICATIONS/RATINGS

- CE, Class A
- UL Listed
- UL listed to Canadian safety standards
- FCC, Class A

OPTIONAL ACCESSORIES

EPS5000-120TW	External rack power supply, 1 RU, 120 W power output; provides redundant power for TW3016AR and TW3016AR-2
TW3016-PATCH1	Patch panel



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