



TW3004AR Four-Channel Video Receiver

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
- Easy Termination with Removable UTP Connector
- Supports NTSC, PAL, and SECAM
- Can Be Mounted Into a Pelco Fiber Rack



The **TW3004AR** is a four-channel active receiver that can receive live video over unshield twisted pair (UTP) cable.

The adaptive technology in the **TW3004AR** 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.

The bottom of the **TW3004AR** has four DIP switches, one for each channel. Each DIP switch has five small switches, four of which can be used to override the adaptive technology by manually selecting the cable distance. Switches 2, 3, 4, and 5 can be set to 1,000 feet (304 meters), 2,000 feet (609 meters), 3,000 feet (914 meters), and 4,000 feet (1,219 meters), respectively. Switch 1 can be set to high mode or low mode.

The four LEDs on the front of the unit indicate the status of each channel. When an LED lights red, there is no UTP video being received. A green light indicates that UTP video is being received. A flashing amber light means that there are Coaxitron pan/tilt/zoom (PTZ) control commands being transmitted. The blue Pelco badge indicates there is power whether the 4-pin rack power connector or the 2-pin power connector is in use.

The **TW3004AR** allows for multiple applications. You can connect it to transmitters, such as the TW3001P passive transceiver and the TW3001AT active transmitter, and to Pelco UTP cameras, such as the CC3710/CC3610 series. You can also connect the receiver to a matrix switcher, such as the CM6800. Although you can connect these products using an unshielded twisted pair Cat3 and Cat5 cable, Cat5e and Cat6 are recommended for the best video performance.

The receiver can be mounted into a fiber rack (RK5000PS-3U/ RK5000-3U), into the WM5001-3U wall mount base kit, or into the supplied wall clip. Each receiver also has four rubber feet allowing you to place it on a flat surface, such as a desk or shelf.



C1667 / REVISED 1-07



International Standards
Organization Registered Firm,
ISO 9001 Quality System



TECHNICAL SPECIFICATIONS

MODELS

TW3004AR Active, 4-channel video receiver

ELECTRICAL

Input Voltage 12 VDC or 24 VAC, 50/60Hz
 Power Consumption 10 W
 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)

VIDEO CHARACTERISTICS

Video Output 4 BNC
 Format NTSC, PAL, SECAM
 Frequency Response DC to 10 MHz
 Common Mode/Differential Mode Rejection >70 dB

MECHANICAL

Connectors
 BNC Video output
 4-Pin Connector Rack power
 2-Pin Connector (2.5 mm) UTP input/output
 2-Pin Connector (3.5 mm) Power

GENERAL

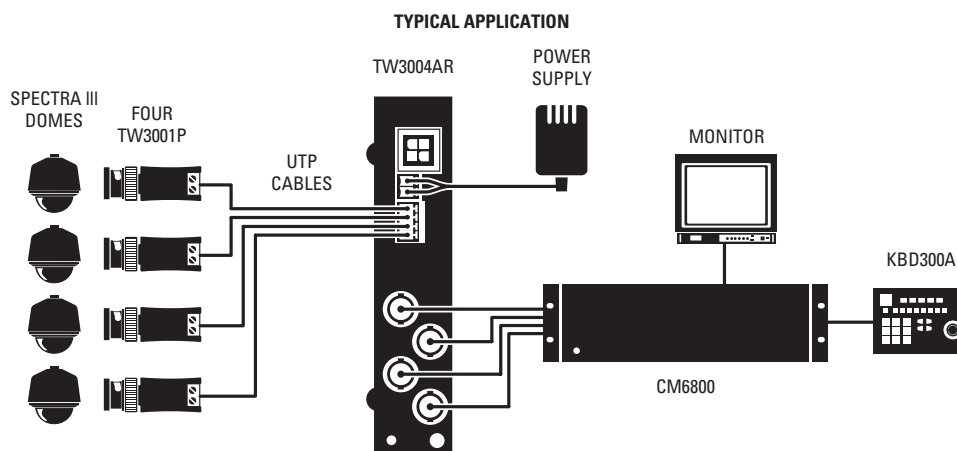
Construction Steel
 Finish
 Front Panel Gray metallic with black end caps
 Chassis Black matte finish
 Operating Temperature 32° to 167° F (0° to 75° C)
 Relative Humidity 0 to 90%, noncondensing
 Data Transmission Supports Coaxitron up to 750 feet (228.6 meters)
 LED Indicators Pelco Badge
 Status LEDs
 Dimensions 8.75" D x 1.08" W x 4.81" H (22.23 x 2.74 x 12.22 cm)
 Unit Weight 1.56 lb (0.70 kg)
 Shipping Weight 3 lb (1.36 kg)

CERTIFICATIONS

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

OPTIONAL ACCESSORIES

WM5001-3U Wall mount base kit for single-width module
 WM5001-3UEXP Wall mount expansion kit for single-width module
 RK5000-3U 19-inch rack mount chassis for 14 slots, no power (3 RUs)
 RK5000PS-3U 19-inch rack mount chassis for 12 slots, internal power supply (3 RUs)
 EPS5000-120 External/redundant power supply, 1 RU, 120 W x 2
 RK5001B-3U Blank filler panel, single width, for rack mount



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