



TW-1000-4 4 PORT VIDEO TRANSCEIVER FOR TWISTED PAIRS

- 4 Passive Transceiver Channels
- Range up to 2000 feet (600 meters) with CAT5e UTP and over 1000 feet (300 meters) with ordinary telephone cable
- Bi-directional signal conversion
- Passive device. No power supply required
- High Reliability and durability



The TW-1000-4 is a passive, non-amplified device which allows up to 4 video signals to be transmitted over unshielded twisted pair (UTP) telephone cable. This means of video transmission provides significant savings when compared to traditional coaxial cable.

The TW-1000-4 is normally installed at the head end of the system. At the camera end it is connected to up to four TW-1000A passive baluns. The TW-1000A adapts the 75 Ohms unbalanced output of a camera to a signal suitable for a balanced twisted pair of 100 Ohms of impedance. At the other end of the twisted pair, the TW-1000-4 returns the signal to the 75 Ohms unbalanced output, which can be connected to a coaxial cable compatible with the input of any monitor, VCR or multiplexer.

Due to the excellent balance provided by the TW-1000-4, the video signal will not affect or be affected by other signals, even when they are transmitted in contiguous pairs. You can transmit data, telephone signals or low voltage power using neighboring pairs without affecting video signal quality. Most of the electrical noise and RF interference which affect coaxial cables are eliminated by the TW-1000-4.

Using twisted pairs will bring cost savings in several ways. Twisted pairs are less expensive than coaxial cable. It may also be possible to use previously

installed telephone cables with unused pairs. The UTP CAT5E cable, widely used in computer local area networks (LANs), allows you to send signals from 4 cameras up to 2000 feet (600 meters). In addition to reduced cost, it is easier to achieve a neat and attractive installation compared to conventional CCTV installations with coaxial cable. In addition, splicing is much cheaper and faster compared to a properly-installed coaxial joint.

TECHNICAL SPECIFICATIONS TYPICAL VALUES

- Frequency response:** : DC to 12 MHz
- Insertion losses:** max 0.5 dB at 5 MHz
- Common mode rejection ratio:** ≥60 dB from 15 KHz to 5 MHz.
- Impedance, coaxial side:** 75 Ohms
- Impedance, balanced side:** 100 Ohms ± 20%
- Maximum signal voltage:** 1 Vpp



Use with TW-1000A passive balun at camera end of UTP cable.

