



TW-3000R

VIDEO RECEIVER FOR TWISTED PAIRS

- Range up to 5000 feet (1600 meters) with CAT5e UTP and over 3000 feet (1000 meters) with ordinary telephone cable
- Compatible with analog and digital systems
- Excellent picture quality
- Use with TW-1000A passive balun
- High reliability and durability

The TW-3000A is an amplified receiver which allows video signals to be transmitted over long lengths of unshielded twisted pair (UTP) telephone cable.

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 5000 feet (1600 meters). In addition to reduced cost, it is easier to achieve a neat and attractive installation compared to conventional CCTV installations with coaxial cable. Splicing is also cheaper and faster than a properly made coaxial joint.

For easy connection, the TW-3000R is placed near a monitor, multiplexer or DVR. The power terminals are connected to a 12V DC power source. The line terminals are connected to CAT5 or telephone cable leading to a camera. A TW-1000A balun connected to the camera adapts the 75 Ohms unbalanced output to a signal suitable for a balanced twisted pair of 100 Ohms impedance. When this signal is received by the TW-3000R, it is returned to the 75 Ohms unbalanced output which can be connected via a coaxial cable to the input of a monitor, VCR or multiplexer.

Due to the excellent balance provided by the TW-1000A, 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. Lightning protection is provided by gas discharge tubes.

TECHNICAL SPECIFICATIONS (TYPICAL VALUES)

- Frequency response:** : DC to 5 MHz
- Gain:** Adjustable between 0 and 20 dB
- Common mode rejection ratio:** ≥ 60 dB between DC and 5 MHz.
- Impedance, coaxial side:** 75 Ohms
- Impedance, balanced side:** 100 Ohms \pm 20%
- Power Supply:** 12V DC regulated at 0.2A



The TW-3000R receives video signals transmitted by the TW-1000A passive balun

