
TECHNICAL SPECIFICATIONS

SECURITY SYSTEM

DIVISION 16 - ELECTRICAL

SECTION 16770 - CLOSED CIRCUIT TELEVISION (CCTV) SYSTEM

PART 2 – PRODUCTS

2.01 GENERAL

- A. All equipment and materials used shall be standard components that are regularly manufactured and utilized in the manufacturer's system.
- B. All systems and components shall have been thoroughly tested and proven in actual use.
- C. All systems and components shall be provided with the availability of a toll-free (U.S. and Canada) technical support number from the manufacturer. The number shall provide technical assistance for either the dealer/installer or the end user at no charge for as long as the product is installed.

2.02 UNSHIELDED TWISTED-PAIR 4-PORT VIDEO RECEIVER, ACTIVE

- A. The UTP/CCTV Video Receiver device shall be capable of receiving up to four baseband monochrome or color video signals over unshielded twisted-pair (UTP) telephone wire up to a distance of 3,000 feet (1 km) when used with a passive transmitter.
- B. The UTP/CCTV Video Receiver device shall be capable of receiving up to four baseband monochrome or color video signals over UTP telephone wire up to a distance of 1 mile (1,6 km) when used with an active transmitter. NTSC distances up to 8,000 ft (2,4 km) shall be achieved when using Category 5 cable.
- C. The receiving device shall have continuously adjustable sharpness and brightness trimpot control knobs for each port.
- D. The receiving device shall have built-in ground lifting.
- E. The receiving device shall have built-in transient protection, with an earth-ground screw connection.
- F. The receiving device shall be equipped with a screw terminal block and an RJ-45 jack for connection to UTP telephone wire, low voltage power, and ground.
- G. The receiving device shall be equipped with female BNC for 75-ohm connections.
- H. The receiving device shall be powered by 24 Volts, AC or DC, 250 milliamps max.
- I. The receiving device shall have a Blue "Power-On" LED.
- J. The receiving device shall have a Green "Active" LED, for each video signal present.
- K. The receiving device shall have the ability to operate with signals in the same wire bundle as telephone, data, low voltage power, or other video signals.
- L. The receiving device shall meet or exceed the following design and performance specifications:

- a. Have typical common-mode rejection of 60 dB between the frequencies of 15 KHz to 5 MHz.
 - b. Shall have a frequency response from DC to 5 MHz.
 - c. Shall provide transient immunity of 6,000V 1.2uS x 50 uS and 3,000A 8uS x 20 uS when ground screw terminal is bonded to earth ground, per ANSI/IEEE 587C62.41 B3.
 - d. Shall be for indoor use or for use in an environmental enclosure and allow a maximum operating temperature range of 0 to 50 degrees Celsius.
- M. The receiving device shall be capable of utilizing 24-16 AWG (solid or stranded) UTP wire.
- N. The receiving device shall be capable of utilizing Category 2 or better UTP without compromising interference immunity or transmission distances.
- O. The receiving device shall have a weight of 0.7 lbs (0.32 kg).
- P. The receiving device shall have two 0.175 in. (4,4 mm) diameter holes spaced 6.75 in. (171,5 mm) apart for the purpose of surface or rack mounting.
- Q. The receiving device shall be UL and CUL listed.
- R. The receiving device shall be CE compliant.
- S. The receiving device shall be provided with a limited lifetime warranty.
- T. The UTP 4-Port video receiver, active, shall be the NVT:
 - a. NV-452R or
 - b. Approved equal