

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 16-Channel Power Supply StubEQ™ Active Receiver Hub

- A. Shall be equipped with one RJ45 connector for connecting power, video and data to and from power-video-data transceiver at each camera, for up to sixteen cameras.
- B. The device shall be capable of receiving sixteen baseband monochrome or color video signals over unshielded twisted-pair (UTP) Category cable up to a distance of 1,500ft (460m) when used with a passive transceiver, 2000ft (600m) with an active transmitter.
- C. The device shall meet or exceed the following design and performance specifications:
 - a. Having typical common-mode rejection of 60dB between the frequencies of 15KHz to 10 MHz.
 - b. Shall have a frequency response from DC to 10 MHz.
 - c. Shall provide transient immunity per ANSI / IEEE 587C62.41.
 - 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.
- D. The device shall have fully automatic (no adjustment) 2-band digital distance equalization for each port, with distance specified for NTSC or PAL standards.
- E. Shall be compatible with a power-video-data transceiver at each camera and comply with standard telecom/datacom structured cabling pinouts per EIA/TIA 568B. Wiring pinouts shall be:
 - Pin 1: + Video
 - Pin 2: - Video
 - Pin 3: + Data
 - Pin 4: - Power
 - Pin 5: + Power
 - Pin 6: - Data
 - Pin 7: + Power
 - Pin 8: - Power
- F. Shall deliver Pan/Tilt/Zoom telemetry signals from the control room to an RJ45 jack for delivery via UTP wire to the cameras. Pinouts shall be:

Data, channels 1-4	Data, channels 5-8
Pin 1: Data 2 +	Pin 1: Data 6 +
Pin 2: Data 2 -	Pin 2: Data 6 -
Pin 3: Data 3 +	Pin 3: Data 7 +
Pin 4: Data 1 -	Pin 4: Data 5 -
Pin 5: Data 1 +	Pin 5: Data 5 +
Pin 6: Data 3 -	Pin 6: Data 7 -
Pin 7: Data 4 +	Pin 7: Data 8 +
Pin 8: Data 4 -	Pin 8: Data 8 -

Data, channels 9-12	Data, channels 13-16
Pin 1: Data 10 +	Pin 1: Data 14 +
Pin 2: Data 10 -	Pin 2: Data 14 -
Pin 3: Data 11 +	Pin 3: Data 15 +
Pin 4: Data 9 -	Pin 4: Data 13 -
Pin 5: Data 9 +	Pin 5: Data 13 +
Pin 6: Data 11 -	Pin 6: Data 15 -
Pin 7: Data 12 +	Pin 7: Data 16 +
Pin 8: Data 12 -	Pin 8: Data 16 -

- G. Shall supply up to 1.0 Amp per channel, 16 amps aggregate.
- H. Shall provide 28VAC camera power, video and pass-through and telemetry data connectivity for up to 16 cameras, each via a single RJ45 4-pair UTP cable.
- I. Shall have a maximum 28VAC output for each camera connection.
- J. Shall be powered by 115/230 VAC 50/60 Hz internal power supply.
- K. Shall have a Blue “Power-On” LED.
- L. Shall have 16 video input channels with 2 video outputs per channel.
- M. Shall have protection of 5X20mm type T fuse 5 Amp, 250V & thermal shutdown.
- N. Shall require a minimum airflow of 4ft³/min (0.3m³/min).
- O. Shall have a wattage rating of 500 Watts.
- P. Shall operate within a humidity (non-condensing) of 1 to 95%.
- Q. Shall have 16 individually floating outputs ensuring total ground-loop immunity.
- R. Shall have per channel power and video diagnostics.
- S. Shall have per-channel automatic-reset fault protection.
- T. The device shall have built-in transient protection.
- U. Shall have female BNC outputs for 75-ohm connection.
- V. Shall be wall, desk or 19in rack mountable.
- W. Shall support Cat 5 or better UTP.
- X. Shall have a product weight of 23.5lb / 10,66 kg.
- Y. Shall have a package weight of 32lb / 14,5kg.
- Z. Shall have dimensions 17in wide, 1.73in high, 12in deep (43,2m wide, 4,5cm high, 30cm deep).
- AA. Shall be UL and cUL listed.
- BB. Shall be CE compliant.
- CC. Shall be RoHs compliant.
- DD. Shall be WEEE compliant.
- EE. Shall be provided with a limited lifetime warranty.
- FF. Shall be the NVT: NV-16PS42-PVD or approved equal.