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TECHNICAL SPECIFICATIONS

SECURITY SYSTEM

DIVISION 32 - ELECTRICAL

SECTION 32770 - 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 32-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 thirty-two cameras.
- B. The device shall be capable of receiving thirty-two 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 10MHz.
  - 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 -

Data, channels 17 - 20	Data, channels 21 -24
Pin 1: Data 18 +	Pin 1: Data 22 +
Pin 2: Data 18 -	Pin 2: Data 22 -
Pin 3: Data 19 +	Pin 3: Data 23 +
Pin 4: Data 17 -	Pin 4: Data 21 -
Pin 5: Data 17 +	Pin 5: Data 21 +
Pin 6: Data 19 -	Pin 6: Data 23 -
Pin 7: Data 20 +	Pin 7: Data 24 +
Pin 8: Data 20 -	Pin 8: Data 24 -

Data, channels 25 - 28	Data, channels 29 - 32
Pin 1: Data 26 +	Pin 1: Data 30 +
Pin 2: Data 26 -	Pin 2: Data 30 -
Pin 3: Data 27 +	Pin 3: Data 31 +
Pin 4: Data 25 -	Pin 4: Data 29 -
Pin 5: Data 25 +	Pin 5: Data 29 +
Pin 6: Data 27 -	Pin 6: Data 31 -
Pin 7: Data 28 +	Pin 7: Data 32 +
Pin 8: Data 28 -	Pin 8: Data 32 -

- G. Shall supply up to 0.5 Amp per channel, 16 amps aggregate.
- H. Shall provide 28VAC camera power, video and pass-through telemetry data connectivity for up to 32 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 32 video input channels with 1 video output per channel.
- M. Shall have protection of 5X20mm type T fuse 5 Amp, 250V & thermal shutdown.

- N. Shall require a minimum airflow of 4ft<sup>3</sup>/min (0.3m<sup>3</sup>/min).
- O. Shall require a minimum of 2.5in (63,5mm) unrestricted open air space on each side of unit.
- P. Shall have a wattage rating of 500 Watts.
- Q. Shall operate within a humidity (non-condensing) of 1 to 95%.
- R. Shall have 32 individually floating outputs ensuring total ground-loop immunity.
- S. Shall have per channel power and video diagnostics.
- T. Shall have per-channel automatic-reset fault protection.
- U. The device shall have built-in transient protection.
- V. Shall have female BNC outputs for 75-ohm connection.
- W. Shall be wall, desk or 19in rack mountable.
- X. Shall support Cat 5 or better UTP.
- Y. Shall have a product weight of 24.1lb / 10,93kg.
- Z. Shall have a package weight of 40lb / 18,14kg.
- AA. Shall have dimensions 17in wide, 1.7in high, 12in deep (43,2cm wide, 4,5cm high, 30cm deep).
- BB. Shall be UL and cUL listed.
- CC. Shall be CE compliant.
- DD. Shall be RoHs compliant.
- EE. Shall be WEEE compliant.
- FF. Shall be provided with a limited lifetime warranty.
- GG. Shall be the NVT: NV-32PS42-PVD or approved equal.