

## LongReach II Active CCTV Receiver Hub 500126 [8p], 500127 [16p

#### Overview

The LongReach II Active CCTV Receiver Hub (500126 [8p], 500127 [16p]) provides extended distance between the CCTV camera and the DVR via Cat5e/6 cable. The hub features Auto Gain Control (AGC) and supports up to 5,000 ft (1.5 km) via Cat5e/6 cable when used in conjunction with MuxLab's full range of passive CCTV baluns.

The LongReach II Hub also allows video, remote power and 2-wire PTZ control to be combined over Cat5e/6 cable and features ground loop isolation (GLI) for optimum video transmission.

#### **Applications**

Campus, highways, airports, hotels, casinos, commercial complexes, remote parking lots, self-storage, hospitals, car dealerships.



### **Features**

8 or 16 channel analog CCTV hub Up to 5,000 feet (1.5 km) via Cat5e/6 Up to 7,000 feet (2.1 km) via Cat5e/6 with 500100/101 at camera Video, power and PTZ over one Cat5e/6 Auto Gain Control (AGC) Auto Polarity Correction Ground Loop Isolation (GLI) LED diagnostics

| Specifications                                    |   |  |  |
|---|---|--|--|
| Environment                                       | CCTV composite baseband video; NTSC, PAL, SECAM   |  |  |
| Devices   | CCTV cameras, monitors, DVR, switchers, IP encoders, and other CCTV   |  |  |
|   | equip.  |  |  |
| Transmission                                      | Transparent to the user   |  |  |
| Video   |   |  |  |
| Bandwidth   | 20 Hz to 8 MHz.   |  |  |
| Input   | 1.5 Vp-p max, 100Ω, balanced (RJ45)   |  |  |
| Output  | 1.1 Vp-p, $\pm$ 1 dB, 75 $\Omega$ , unbalanced (BNC)  |  |  |
| Insertion Loss                                    | -14 dB minimum for luma, -60 dB minimum for chroma.   |  |  |
|   | Determined by Automatic Gain Control.   |  |  |
| Return Loss                                       | Greater than 15 dB over the frequency range   |  |  |
| Common Mode Rejection                             | Greater than 40 dB @ 3.85 MHz   |  |  |
| Ground Loop Isolation                             | Up to +/-50VDC  |  |  |
| Auto Polarity Correction                          | Automatically adjusts for any polarity  |  |  |
| Max. Distance via Cat5e/6                         | NTSC: 5,000 ft (1.5 km) with passive CCTV balun at camera   |  |  |
|   | NTSC: 7,000 ft (2.1 km) with 500100/101 at camera *Coax jumper cables must be less than 30 ft (9m)                              |  |  |
|   |   |  |  |
| LED Diagnostics                                   | Power, Video Sync   |  |  |
| Auto Gain Control (AGC)                           | Automatically adjusts for gain, sharpness and luminosity.   |  |  |
|   | Stabilization time: under 1 second  |  |  |
| Remote Power (i.e.; 24 VAC, 28                    | •   |  |  |
| Wiring  | Remote low voltage power supported via two (2) or three (3) twisted pairs. A  |  |  |
|   | Class II power supply is recommended.   |  |  |
| Max. Distance @ 24VAC via                         | 2 VA: 1,500 ft (457m)* 4 VA: 745 ft (227m)*   |  |  |
| three twisted pairs*. *Longer                     | 10 VA: 300 ft (91m)* 20 VA: 150 ft (46m)*  *Based on 10% voltage drop at camera. Please consult your CCTV vendor for more info. |  |  |
| distances may be achieved @ 28 VAC.  Max. Current | 2 5A rms or DC  |  |  |
|   | 2.07.1  |  |  |
| Wiring  | , Manchester/Bi-Phase, half duplex RS485)   |  |  |
| Maximum Distance                                  | Remote 2-wire PTZ control supported via one (1) twisted pair.   |  |  |
|   | Up to 4,000 ft (1.2 km) depending on the PTZ camera vendor  |  |  |
| Maximum Input Voltage                             | 48 Volts (AC RMS/DC)  |  |  |
| Maximum Current Rating                            | 2A (AC RMS/DC). No fuse   |  |  |

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#### **Head Office**

8495 Dalton Road, Mount Royal, Quebec, H4T 1V5 Tel: (+1) 514-905-0588 Fax: (+1) 514-905-0589 Toll Free: 877 689-5228 URL:www.muxlab.com

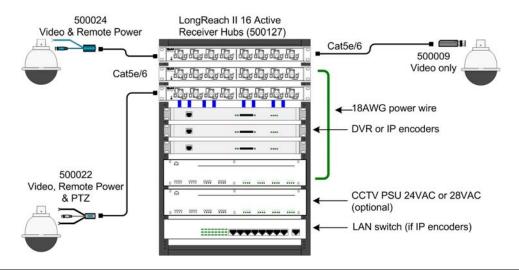
E-mail: videoease@muxlab.com



# LongReach II Active CCTV Receiver Hub 500126 [8p], 500127 [16p

| Cable - UTP  | 24 gauge or lower solid copper twisted pair wire. Impedance: 100 ohms at 1 MHz |                       |                       |  |
|--|--|-----------------------|-----------------------|--|
| Cable – CTI  | Maximum capacitance: 20 pf/foot. Attenuation: 6.6 dB/1000 ft at 1 MHz          |                       |                       |  |
| Cable - Coax                                       | Impedance: 75 Ω at 1 MHz. (RG59/U)   |                       |                       |  |
| Switch   | Select between Power-Thru (500024/500029) and Pass-Thru (500022) Mode          |                       |                       |  |
| RJ45 Pin Configuration*                            | Signal   | 500022 Mode           | 500024/500029         |  |
| *Reverse polarity sensitive if 12DC camera is used | Power A (+) *  | 1, 3                  | 1, 3, 5               |  |
|  | Power B (-) *  | 2, 6                  | 2, 4, 6               |  |
|  | Control (+)  | 4                     | NA                    |  |
|  | Control (-)  | 5                     | NA                    |  |
|  | Video BNC Center (Tip)   | 7 [T] same as 500000R | 7 [T] same as 500000R |  |
|  | Video BNC Ground (Ring)  | 8 [R] same as 500000R | 8 [R] same as 500000R |  |
| Connectors   | Video: BNC-F (8 or 16). Remote Power: 2-pole screw terminal block (8 or 16)    |                       |                       |  |
|  | PTZ: 2-pole screw terminal block (8 or 16) Cat5e/6 Link: RJ45S (8 or 16)       |                       |                       |  |
|  | Power connector. Gnd screw terminal  |                       |                       |  |
| Compatible Baluns                                  | 500000, 500000R, 500009, 500022, 500024, 500100/101                            |                       |                       |  |
| Power Supply (included)                            | 5VDC/2.6A max. Floating +/- 20%. Interchangeable blades                        |                       |                       |  |
| ,  | 500126: .79A max. 500127: 1.53A max.   |                       |                       |  |
| Transient Voltage Protection                       | ± 2.5V on the video line   |                       |                       |  |
| <b>3</b> · · · · · · · · · · · · · · · · · · ·     | ± 48V on the power and control lines   |                       |                       |  |
| AC/DC power surge protection                       | Above 34VAC RMS or +/- 48 VDC.   |                       |                       |  |
| Fuse Protection                                    | Auto-resettable fuse on 5VDC input and Power A (+) upon power cycling.         |                       |                       |  |
| Temperature  | Operating: 0° to 55°C. Storage:-20° to 85°C. Humidity: up to 95%               |                       |                       |  |
| Enclosure  | Aluminium  |                       |                       |  |
| Dimensions   | 500126: 8.4" x 5.15" x 1.65" (21.4 x 13.1 x 4.2cm)                             |                       |                       |  |
|  | 500127:16.9" x 505" x 1.65" (42.9 x 12.9 x 4.2cm) plus rackmount brackets      |                       |                       |  |
| Weight   | 500126: 2.8 lb. (1.3 kg). 500127: 4.6 lb. (2.1 kg)                             |                       |                       |  |
| Regulatory   | FCC and CE.  |                       |                       |  |
| Warranty   | 2 years  |                       |                       |  |
| Order Information                                  | 500126 LongReach II Active CCTV Receiver Hub, 8 Ports                          |                       |                       |  |
|  | 500127 LongReach II Active CCTV Receiver Hub. 8 Ports                          |                       |                       |  |

### **Typical Application**



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