

CTL101

CONTROL INTERFACE

The CTL101 control interface performs a variety of command signal conversions and repeating functions. The CTL101 converts infrared signals and contact closures to serial command codes and is ideal for expanding the control capability of Inline video scalers, switchers, matrices and other devices that feature serial control. The CTL101 also acts as a serial interface format converter, accepting RS-232, RS-422 and RS-485 serial commands and repeating them in any of the three formats. The unit can also receive IR commands and repeat them to one or more additional devices using the optional CTL130 IR emitter.

IR to Serial Code Conversion

The CTL101 can receive infrared control signals from an IR remote and output serial code strings that are associated with those signals. The unit features three groups of command codes that are associated with IR signals. The first two groups are programmed at the factory with the serial command codes for INLINE video scalers, switchers and matrices and are triggered when the unit receives IR commands from a CTL120 IR remote control. The third group is program-mable, learning command codes from a user-provided remote control and associating user-programmable command strings.

IR Learning Capability

The CTL101 can learn IR commands from many remote controls and associate a specific serial command string with a specific IR command. Terminal software included with the CTL101 leads the user through the IR learning and command string input process. First, the software asks the user to press a button on the IR remote so that the CTL101 can learn the infrared command. Next, the software prompts the user to select single press mode or continuous press mode. Finally, the software prompts the user to enter the serial command string that should be associated with that IR button. Each command code string may contain up to 122 characters.

Contact Closure to Serial Code Conversion

The CTL101 has 16 contact closure input ports that can be used to trigger serial command strings. These ports can



accept latching or momentary contact closures created by switches or other control devices. Each contact closure port can store two separate command code strings (up to 127 characters) that will be automatically sent when the contact closure port goes to the open or closed state. Terminal software included with the CTL101 lets the installer program the CTL101 with the command code strings to be associated with each of the 16 contact closure ports. The contact closure ports also include two +5V power sources.

Serial Command Pass-Through

The CTL101 has a serial input port and serial output port that may be configured to receive or transmit in the RS-232, RS-422 or RS-485 formats. This allows the CTL101 to pass along commands from a computer serial port or control system. Serial command pass-through capability makes it easy to control a device using both the CTL101 and a control system.

Serial Format Conversion

Since the two serial ports can be set for RS-232, RS-422 or RS-485 operation, the unit can also be used as a serial interface format converter that accepts commands in any of the three formats and transmits in any of the three formats.

IR Repeating

Infrared commands received by the CTL101 can be repeated to IR controlled equipment using the optional CTL130 IR emitter. The CTL101 IR output port can drive up to two CTL130 emitters.

Remote IR Sensor

The CTL101 front panel includes an internal IR sensor that receives commands from the CTL120 IR remote control or another IR transmitter. The CTL131 is an optional remote IR sensor that relays IR signals to the CTL101 in those applications where the CTL101 will be placed in an equipment rack.

FEATURES

- Converts IR Signals to RS-232 / RS-422 / RS-485 Commands
- Converts Contact Closures to RS-232 / RS-422 / RS-485 Serial Commands
- Serial Command Repeater and Format Converter for RS-232 / RS-422 / RS-485 — Converts Between All Three Formats
- IR Learning Mode — Can Learn IR Codes from Many IR Remote Controls and Associate a Specific Serial Command String with Different IR Codes
- IR Repeater — Can Repeat IR Commands to Additional Devices Using Optional CTL130 IR Emitter
- Optional CTL131 Remote IR Sensor Relays IR Signals from a Remote Location to the CTL101

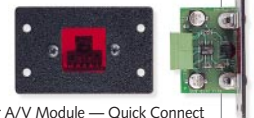
The CTL131 is a double-size A/V connector module that can be located up to 1000 feet away from the CTL101. The CTL131 connects to the CTL101 using two twisted pair wires. A switch on the back of the CTL101 determines whether the internal IR sensor or remote IR sensor is active.

CTL120 Remote Control

The CTL120 is an ergonomic infrared remote control that can send commands to the CTL101. The CTL120-1 is a generic remote that can be customized by the user with labels to match installation requirements. The CTL120-2 is the same remote with an overlay that customizes the unit to control IN1400 Series video scalers, IN3600 Series Switchers and IN31608 Matrix Switcher.



CTL120-1
IR Remote Control



CTL131DB Remote IR Sensor A/V Module — Quick Connect



CTL130 IR Emitter

SPECIFICATIONS

CONTROL PORTS

- IR Remote Sensor Port:** 4-Pin Captive Screw Terminal
- IR Emitter Port:** 2-Pin Captive Screw Terminal
- Contact Closure Ports:** (2) 10-Pin Captive Screw Terminals; (16) Control Ports / (2) Power / (2) Ground
- Contact Closure Signals:** Latching or Momentary (50 mSec minimum pulse time)
- Contact Closure Power:** +5VDC

- Serial Input Port:** 5-Pin Captive Screw Terminal
- Serial Output Port:** 5-Pin Captive Screw Terminal
- Serial Interface Formats:** RS-232 (default) / RS-422 / RS-485
- Default Serial Protocol:** 9600 bps, 1 start bit, 8 data bits, no parity, 1 stop bit
- Flow Control:** XON / XOFF or None
- Serial Port Baud Rates:** 1200 bps to 115,200 bps

GENERAL

- Power Supply:** Internal Universal: 90-260 VAC; 47-63 Hz
- Shipping Weight:** 3 lbs. / 1.5 Kg
- Product Weight:** 1 lb. / 0.45 Kg
- Dimensions:** 1.65" x 8.5" x 6" / 4.2cm x 21.6cm x 15.2cm
- Regulatory Approvals:** UL1950, CAN/CSA-22.2 No.950, Third Edition; CE: EN55022 (1987), EN50081-1 (1991), EN50082-1 (1992 and 1994), EN60950-92

OPTIONAL ACCESSORIES

- CTL120 IR Remote Control
- CTL130 IR Emitter
- CTL131DB / CTL131DW Remote IR Sensor

ORDER INFORMATION

- CTL101-1** Control Interface — Converts IR Signals and Contact Closures to RS-232 Commands —
- CTL120-1** IR Remote Control
- CTL120-2** IR Remote Control with Overlay for IN1400 Series Video Scalers, IN3600 Series Switchers and IN31608 Matrix Switchers

- CTL130** IR Emitter
- CTL131DB** Remote IR Sensor — Double Size A/V Connector Module — Black
- CTL131DW** Remote IR Sensor — Double Size A/V Connector Module — White