CDV®Group

RS-232 TO RS-485 CONVERTER CA-A360-A

The CA-A360-A RS-485 Converter module is a communication interface that is installed between the managing computer and the first controller of your Centaur access control system. Connect the controllers in a "daisy chain" configuration up to a distance of 1220m (4000ft). Two converters can also be used as a repeater, extending the distance of an RS-232 or RS-485 bus by 1220m (4000ft). Transmit, receive and power LEDs provide visual indication of the module's status.

- Converts RS-485 protocol to RS-232
- Communicate with a CT-V900-A controller up to 1220m (4000ft) away.
- Transmit, Receive and Power status LEDs
- On-board End-Of-Line (EOL) and BIAS jumpers
- 2m (6ft) 9-Pin D-Sub RS-232 connector included
- Power Requirements: 12Vdc
- Current consumption: 100mA max.
- Selectable baud rate: 9600 or 19200 bps
- Recommanded cable: Ethernet grade 3, blue jacket, 2 twisted pairs, 24 AWG

CABLE WIRING

LED INDICATORS
RX (receive data): Incoming transmission from controller network.
TX (transmit data): Outgoing transmission to controller network.
Power: Indicates the presence of 12Vdc.

JUMPERS
JP1 and JP2 (Positive and Negative bias)
Jumpers JP1 and JP2 are used to adjust the bias on the RS-485 bus.
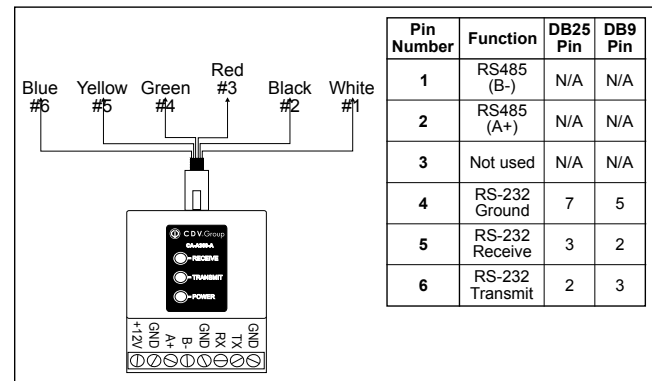Must remain "on" in the above configurations.

JP3 (End of line resistor)
Must remain "ON" for the first CA-A360-A of an RS-485 bus.
(Default: ON)

RATING
Maximum current consumption: 100mA @ 12Vdc

Figure 1

| Pin Number	Function	DB25 Pin	DB9 Pin
1	RS485 (B-)	N/A	N/A
2	RS485 (A+)	N/A	N/A
3	Not used	N/A	N/A
4	RS-232 Ground	7	5
5	RS-232 Receive	3	2
6	RS-232 Transmit	2	3

SYSTEM INSTALLATION

Connect one end of the 6 pin cable that comes with the CA-A360-A module to the connector on the module.

The other end of the 6 pin cable should be connected to the serial communications port on the computer using the appropriate adapter (9 pin adapters provided).

Connect the A+, B- and GND terminals of the CA-A360-A module to the A1+, B1- and GND terminals of the first controller using shielded, 4 wire, stranded cable (refer to Figure 1).

The +12V and GND terminals of the CA-A360-A should be connected to the +12V and GND terminals of the CT-V900-A controller (refer to Figure 2).

Figure 2
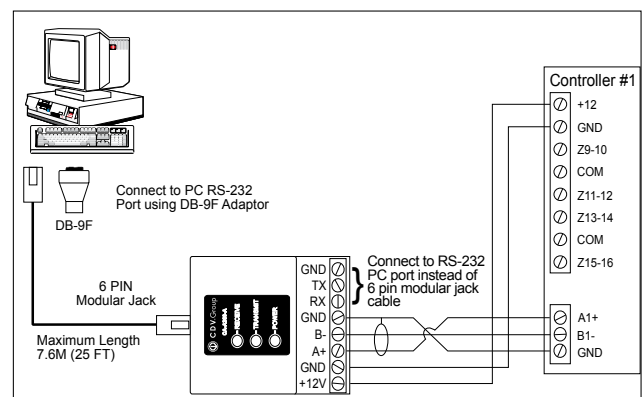
REPEATER INSTALLATION

Using the screw-in terminals, connect RX of the second CA-A360-A repeater module to TX of the 3rd module. Connect TX of the second module to RX of the 3rd module. Ground terminal of the second module should be connected to GND on the 3rd module (7.6m / 25ft maximum).

Connect the A+, B- and GND terminals of each CA-A360-A module to the A1+, B1- and GND terminals of the appropriate controller using a shielded, 4 wire, stranded cable (refer to Figure 3).

Power can be supplied by the model CT-V900-A controllers or a separate power supply. When using a separate supply, connect the GND terminal of the CA-A360-A module to the negative terminal of the controller.

Note:
Remove the EOL jumper on the CT-V900-A controllers connected to the CA-A360-A modules used as repeaters (Controllers 3 and 4 in Figure 3).

Figure 3