

CV-940-SER Series Installation Instructions

1.0 General Description

The CV-940-SER Series is a 2 channel non-powered RS232 to RS485 interface converter. CV-940-SER can convert the TD and RD signals of RS232 into balanced half-duplex RS485 signals.

2.0 Specifications

2.1 Interface

Conforms to EIA RS232 and RS485 standards

2.2 Connectors and signals

The CV-940-SER has a DB-9 female connector on the RS232 side and DB-9 male connector or a terminal block connector on the RS485 side.

RS232 Side:

Connector: DB-9 Female.

Signals: Use Pins 3 (RD) and Pin 2(TD also called SD). Pins 7 (RTS) and 8 (CTS) are tied together. Pins 4 (DTR), 6 (DSR), and 1 (CD) are tied together.

RS485 Side:

Connector: DB-9 male connector or 4 position terminal block -485+.485-.+5V.GND .

2.3 Data Rate

300 to 115.2 KBPS, up to 4,000 feet at 19,200 BPS.

2.4 Sending Control

CV-940-SER does not need RTS to control the RS485 driver.

The RS485 driver is automatically enabled during each spacing state of the SD line (also called TD) on the RS232 side.

The CV-940-SER has an internal connection to prevent data transmitted from the RS232 port from being echoed back to the RS232 port. The CV-940-SER is used as a two wire (half duplex) RS485 Converter.



2.5 Operating Distance

Data Rate (KBPS)	19.2	9.6	4.8	2.4
Max. Distance (feet)	4,000	6,000	8,000	10,000
Max. Distance (meters)	1,219	1,828	2,438	3,048

using 24 AWG wire

2.6 Power

CV-940-SER is powered from the RS232 data TD or hand-shake lines.

It will try to get its power from RTS or DTR (at least +5.5V or -5.5V in the quiescent state). If there are no RS232 control signals (DTR or RTS) available, CV-940-SER will get power from the data input TD pin (at least -5.5V in the quiescent state). Sufficient power is needed to operate the device. In some cases there may not be any available and the TD can not drive the CV-940-SER. An external 5VDC/40mA power supply can be connected to two terminals on the RS485 connector marked +5VDC and GND.

2.7 Dimensions

3.5" x 1.3" x 0.7" (88 mm x 33 mm x 17mm)

2.8 Environment

32° to 122°F (0° to 50°C), 5% to 95% Relative humidity

3.0 CV-940-SER connecting other RS485 device

CV-940-SER	DB-9 Male
PIN2(485-)	485-
PIN7(485+)	485+



Push Buttons



Keypads



Strikes



Magnetic Locks



Key Switches



Relays & Timers



Access Control