

# **INT-232/485 COMBO Interface Board USER'S GUIDE**

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## **INT232/485 Combo Interface Board**

### **General Information**

This INT-232/485 Combo is an RS-232 and RS-485 compliant interface board for the CDR series of data radios. The board is available in DCE configurations. The unit is designed for 9-28 volt operation.

The CDR series radio is connected to the interface board using a 10 pin connector and four mechanical mounts.

Both the RS-232 and RS-485 interfaces are active simultaneously. So long as only one interface is passing data at any given time, both may be connected at the same time. This allows for the possibility of connecting the RS-485 interface to a SCADA system, as well as providing an RS-232 connection for configuration.

## INT-232DXR INTERFACE BOARD SPECIFICATIONS

### Overall

Interface..... RS-232 and RS-485 Compliant  
Connector ..... DB9 Female (DCE)  
Baud Rate ..... 2400 bps – 57,600 bps  
Temperature ..... -30 to +70 °C  
Data Flow Control ..... Hardware using CTS (RS-232)

### Power Requirements

Input Voltage ..... 9-28 VDC  
Input Current ..... Depends on radio

### Indicators

Yellow LED ..... Clear-to-Send  
Green LED ..... Receive Data  
Red LED ..... Transmit Data

### Mechanical

Size ..... 2.65" x 4.85"  
Power Connector..... 2.5mm x 5.5mm

## INT-232/485 COMBO INTERFACE BOARD LED Indicators

**Yellow** indicates the radio is ready to accept data from the user-connected equipment.

**Green** indicates data is being sent from the radio to the user-connected equipment.

**Red** indicates data is being sent from the user-connected equipment to the radio.

## DB-9 Pin Out (RS-232)

- PIN 1** – RS-485 A
- PIN 2** – RD (Receive Data) is serial data from the radio to the user device.
- PIN 3** – TD (Transmit Data) is serial data from the user device to the radio.
- PIN 4** – DTR (Data Terminal Ready) indicates the user device is ready to send data to the radio for transmission. When this line is high, the radio will transmit any data across the RF network. When this line is low, the radio will process the data as commands. If left unconnected, this line will be high.
- PIN 5** – GND (Ground) is the interface common.
- PIN 6** – DSR (Data Set Ready) is always held high by the radio.
- PIN 7** – RTS (Request To Send) is not connected on an RS-232 Interface board.
- PIN 8** – CTS (Clear To Send) is used to indicate to the user device that the radio can accept more data. When this line is high, the user device is clear to send more data. When this line is low, the user device should not send data. (This line may be ignored at baud rates of 2400 and 4800 bps. The TX Packet size should be changed to 150 bytes to prevent a buffer overflow.)
- PIN 9** – RS-485 B

## Power Connector Pin Out

The power connector should receive 9-28 VDC at 1000mA. The 2.5mm x 5.5mm jack is center positive.