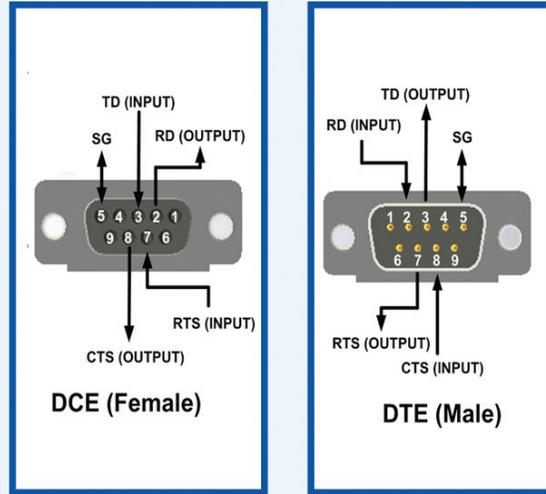
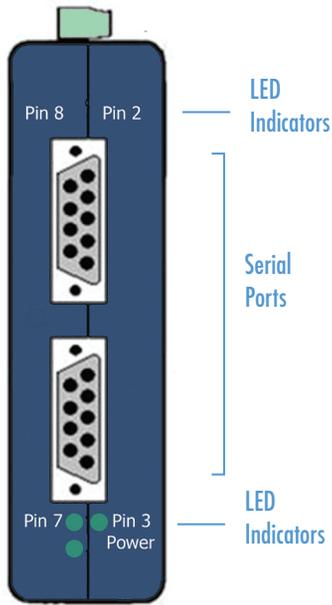


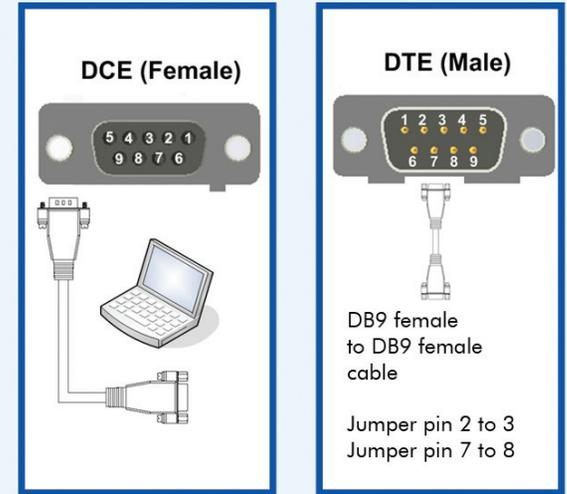
Product Overview

Front View

10 to 48 VDC
1.5 W Max



RS-232 Connections



Loopback Test

1 Connect Your RS-232 Devices

A DTE device is “Data Terminal Equipment.” This includes computers, PLCs, and most devices that are not used to extend communications.

(Think “COMPUTER” for DTE.)

A DCE device is “Data Communications Equipment.” This includes modems and other devices that extend communications, like RS-422, RS-485, fiber optic converters or radio modems.

(Think “MODEM” for DCE.)

When connecting a DTE device to a DCE device, use a straight through connection. When connecting a DTE device to a DTE device, or a DCE device to a DCE device, use a crossover (null) connection.

2 Loopback Test

- Use a DB9 Female to DB9 Male cable to connect a PC to the DCE port. (Recommended)
- Connect a DB9 Female to DB9 Female cable to the DTE port. On the DTE Port, jumper pin 2 to 3 and pin 7 to 8 on the female end of the cable. This loops TD to RD and CTS to RTS.
- Using HyperTerminal or similar program, connect to the appropriate COM port. (Remember to set the baud rate to 9600.)
- Turn off HyperTerminal local echo.
- Type some characters in HyperTerminal. The same characters should appear on your screen. The LED indicators will light up to show you that data is being transmitted.

3 Check LEDs

Pin 2 LED	Red, Flashes when RD present on DTE port
Pin 3 LED	Red, Flashes when TD present on DCE port
Power LED	Red, ON when power applied
Pin 7 LED	Red, Flashes when RTS raised on DCE port
Pin 8 LED	Red, Flashes when CTS raised on DTE port

Troubleshooting

Are My Devices Wired As DTE or DCE?

How to Check:

1. *Use Rule of Thumb* - If the device plugs into the computer serial port and works normally, the device is wired as DCE (or the connection cable is a crossover type that makes it work as a DCE). If the device connects to the computer port using a "null modem" crossover cable, it is wired as DTE.
2. *Use RS-232 Line Tester* - A quick and easy way to determine the DTE/DCE port type is to use a RS-232 line tester such as the 9PMTT. The tester can show the signal state of any active RS-232 data lines using LEDs lighting Red or Green. Active data lines are output from a device. They may be either High or Low.

Information – UL Class 1 Div 2

1. Power, input /output (I/O) wiring must be in accordance with Class 1 Division 2 wiring methods [Article 501.10(B) of the National Electric code, NFPA70] and in accordance with the local authority having jurisdiction.
2. Maximum ambient air temperature 80°C.
3. WARNING – EXPLOSION HAZARD: SUBSTITUTION OF ANY COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS 1, DIVISION 2.
4. WARNING – EXPLOSION HAZARD: WHEN IN HAZARDOUS LOCATIONS, TURNING OFF POWER BEFORE REPLACING OR WIRING MODULES.
5. WARNING – EXPLOSION HAZARD: DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS.
6. WARNING – THIS APPARATUS IS SUITABLE FOR USE IN CLASS 1 DIVISION 2, GROUPS A, B, C, AND D, OR UNCLASSIFIED.

Recommended Accessories and Power Supplies

Industrial Power Supply

<http://www.bb-elec.com/232OPDRI/ACC>



MDR-20-24

Surge Protector

<http://www.bb-elec.com/232OPDRI/ACC>



232HESP

Fast, Easy Answers

- **First, check step 2.**
- **Then use your smart phone to access complete documentation on our web site. Simply scan the code to the right.**



<http://www.bb-elec.com/232OPDRI>



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232OPDRI

RS-232 Repeater with Triple Isolation

✓ First Things First...

Before you begin, be sure you have the following:

- Ilinx 232OPDRI Isolated Repeater
- Additional items **required** but not included:
 - (1) 10 to 48 VDC Power Supply
 - Two RS-232 Cables
 - Ground Cable



Fast and easy on the web: www.bb-elec.com