

5 | UL Installation Information


Underwriters Laboratories Conditions of Acceptability – When installed in the end-use equipment, consideration should be given to the following:

1. The wiring terminals are suitable for factory wiring only.
2. This device is to be mounted in a suitable enclosure in the end-product.
3. This device is suitable for operation at a maximum surrounding air temperature as described in the documentation.
4. These devices are intended for use in a Pollution Degree 2 environment.


- Input Voltage: 10 – 30 VDC
- Input Power: 1.2 Watts
- Wire Range: 12 – 24 AWG
- Tightening Torque: 4 kgf-cm
- Temperature rating of field installed conductors is 105 °C minimum, sized for 60 °C ampacity.
- Use copper wire only.
- Maximum surrounding ambient air temperature 80 °C.

Recommended Accessories

**Power Supply
24VDC, 1.7A**
Model BB-MDR-40-24



**Power Supply
24VDC, 1.0A**
Model BB-MDR-20-24



QUICK START GUIDE



Model BB-232OPDR

RS-232 Repeater, Industrial

Before you begin, be sure you have the following:

- + BB-232OPDR Repeater
- + 10-30 VDC, 1.2W Power Supply
- + Serial Cable (optional)

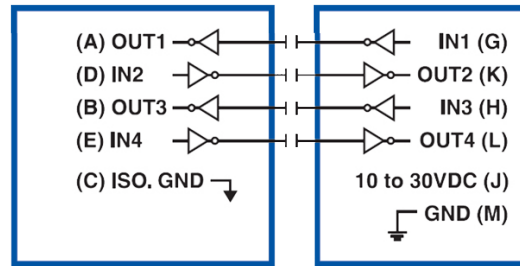
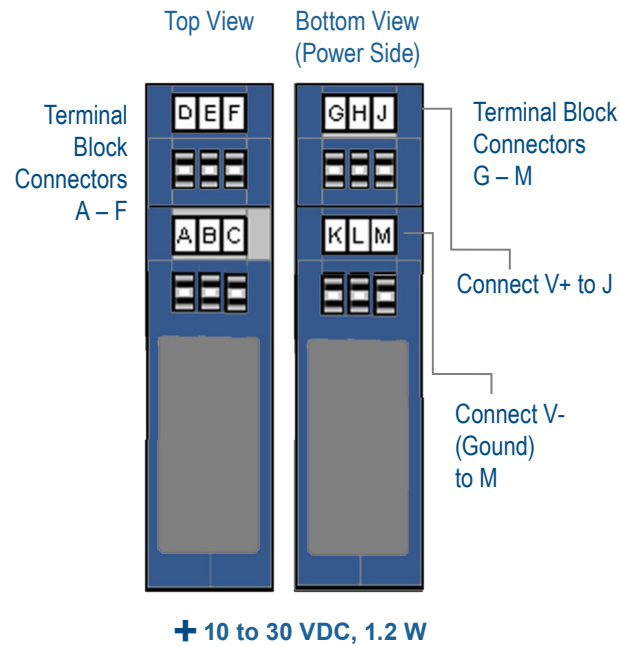
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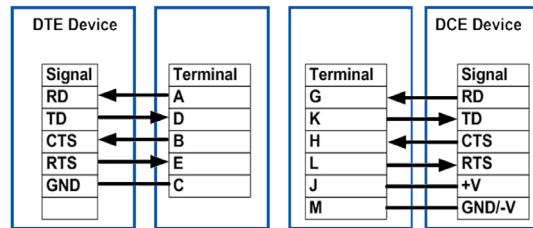
707 Dayton Road | PO Box 1040 | Ottawa, IL 61350 USA
Phone: 1 (815) 433-5100 | Fax: 1 (815) 433-5109
www.advantech.com | E-mail: support@advantech-bb.com

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Product Overview



RS-232 Isolated Repeater - Two sets of data lines with control signals.

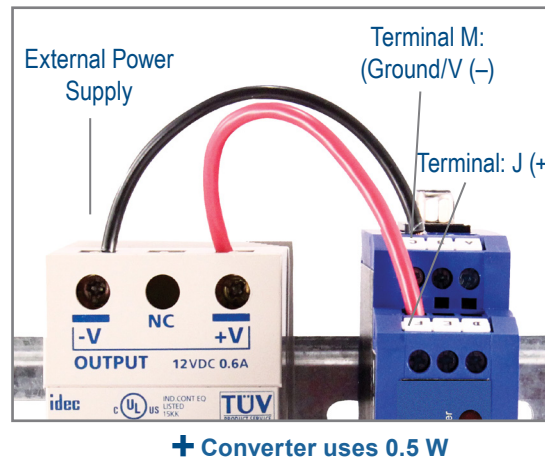


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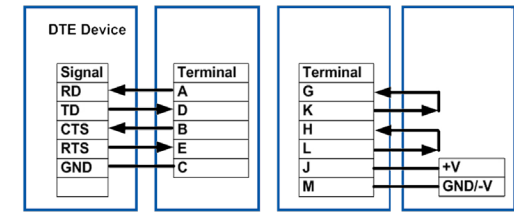
1 | Connect Your Device

Terminal Block	Signal
A	Output 1
B	Output 3
C	Isolated Ground
D	Input 2
E	Input 4
F	Not Connected
G	Input 1
H	Input 3
J	10 to 30 VCD
K	Output 2
L	Output 4
M	Power Supply Ground

2 | Connect Your Power Supply



3 | Test Setup



Connect a PC to the DTE side.

Place a jumper between Terminal G & K and Terminal H & L.

Using HyperTerminal or a similar program, connect to the appropriate COM port.

Turn off Hyper Terminal local echo.

Transmit data. The same data should be returned. Data LED will indicate data being transmitted.

4 | Troubleshooting

Connecting Two Devices using RS-232

Usually inputs are connected to inputs; and outputs to outputs. It is important to know that there are two types of RS-232 ports, DTE and DCE, and that the signal names and pin numbers are the same, but *signal flow is opposite*. The pin labeled Tx can be input; and Rx can be output.

The two ports types are complementary. Output signals on a DTE port are Inputs to a DCE port; and Output signals on a DCE port are Inputs to a DTE port. The signal names match each other and connect pin for pin.

Data LEDs

- D1 activity shows output on terminal "A"
- D2 activity shows output on terminal "K"
- D3 activity shows output on terminal "B"
- D4 activity shows output on terminal "L"