

Product Overview



RS-485 Side

DB9F Pinout



RS-232 Side

1 RS-232 Side

Connector: DB-9 female.

Signals: Passes through pins 3 (TD) and 2 (RD). Pins 7 (RTS) and 8 (CTS) are tied together. Pins 4 (DTR), 6 (DSR), and 1 (CD) are tied together.

2 RS-485 Side

Connector: DB-9 female.

Signals: 2 wire, half-duplex operation only. Automatic control circuit enables driver only when transmitting.

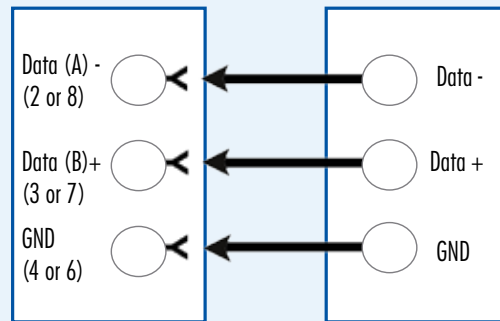
Receiver is disabled when transmitting to prevent echo back to RS-232 device.

Pinouts

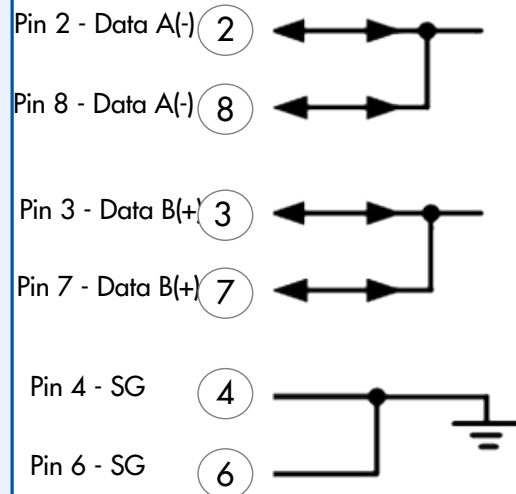
Signal	DB9 Pin #
Data A(-)	2 or 8
Data B(+)	3 or 7
Signal Ground	4 or 6

485SD9R

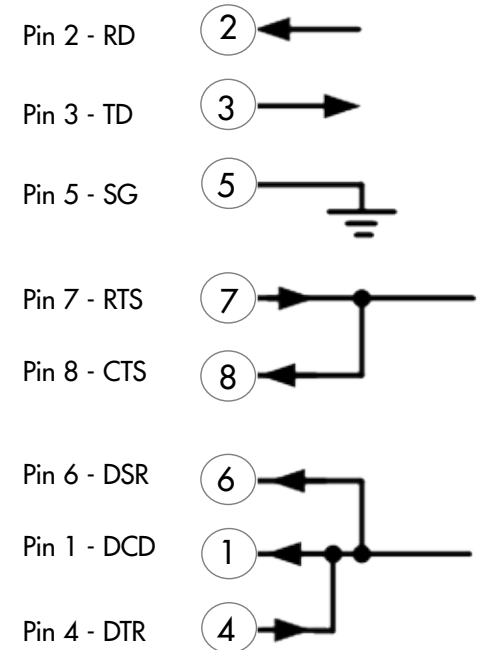
RS-485 2-Wire Device



485SD9R DB9 Female
RS-485 2-Wire Connector



485SD9R DB9 Female DTE
RS-232 Connector



Note: TD is also used to power the converter



Note: Control signals are looped back as shown. they are not used for flow control. However, they provide power to the converter. We recommend connecting all control signals.

Technical Notes

Although the 485SD9R uses handshake lines to power the converter, no handshaking is required to control the RS-485 driver. The RS-485 driver is automatically enabled during each spacing state on the RS-232 side. During the marking or idle state, the RS-485 driver is disabled and the data lines are held in the marking state by the 4.7K ohm pull-up and pull-down resistors.

See B+B SmartWorx free RS-422/RS-485 Application Note for more information on termination and DC biasing of an RS-485 network.

No external power is required if two RS-232 output handshake lines are available. If the handshake lines are raised and no termination is used, the power efficiency is greatly increased. Less than 3mA is required to operate the 485SD9R plus the load current.

Recommended Accessories

9PAMF3 DB9 Male To DB9 Female, 3 Ft Serial Cable

<http://www.bb-elec.com/Products/Power-Supplies-Accessories/Serial-Cables/DB9-to-DB9.aspx>



4WSD90TB Isolated Universal Converter

<http://www.bb-elec.com/Products/Serial-Connectivity/Serial-Converters/Isolated-Serial-Converters-and-Repeaters/4WSD90TB.aspx>



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B+B SMARTWORX **QUICK START GUIDE**



485SD9R

Port-Powered RS-232 to RS-485 Converter

✓ First Things First...

Before you begin, be sure you have the following:

485SD9R

Additional items **required** but not included:

Serial Cables