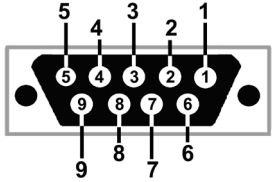


5 | Pinouts



Pin	RS-485, 4 wire	RS-485, 2 wire
1	Not Used	Not Used
2	Receive RDA - Input	Data A - Input/Output
3	Transmit TDB + Output	Data B + Input/Output
4	Ground	Ground
5	Not Used	Not Used
6	Ground	Ground
7	Receive RDB + Input	Data B + Input/Output
8	Transmit TDA - Output	Data A - Input/Output
9	Not Used	Not Used

6 | Troubleshooting

One USB port is required for each installed device. The USB port can be native to the PC or it can be a USB port on a USB hub that is connected to a PC.

- To verify installation:
- Open the Windows Device Manager.
- Scroll down to Ports.
- Expand the flyout window. You should see the new ports. If there are no exclamation points or other trouble indicators, the ports are installed correctly and ready for use.

7 | Locked Serial Numbers

Advantech B+B offers USB to serial converters with a 'locked serial number' version noted by the model number suffix "-LS".

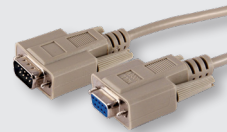
The LS version locks the USB serial number. This allows multiple devices with the same model number be used on multiple computers without installing a driver for each individual product.

For example, in field service applications tools are often shared. If the serial number was not locked, each converter would need to be installed on every PC in the pool.

Recommended Accessories

DB9 Male to DB9 Female Cable

Model# BB-9PAMF6



4 Port Industrial USB Hub

Model# BB-UH104



+ QUICK START GUIDE



BB-485USB9F-2W, BB-485USB9F-2W-LS, BB-485USB9F-4W, BB-485USB9F-4W-LS

USB to RS-485 Miniature Converter

Before you begin, be sure you have the following:

- + USB to RS-485 Mini Converter
- + USB Cable
- + CD ROM with Drivers

ADVANTECH

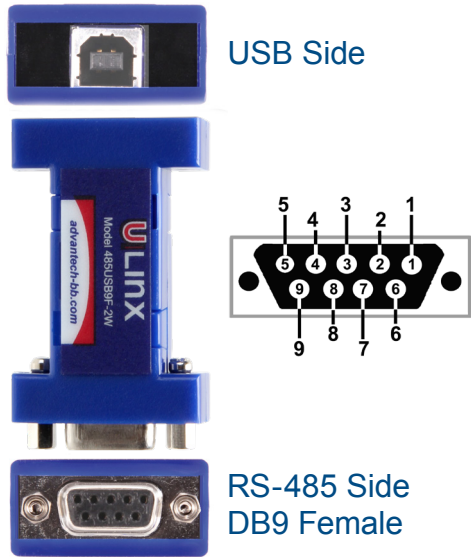
www.advantech.com

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

ADVANTECH

Fast and easy on the web: www.advantech.com

Product Overview



1 | Install the Drivers

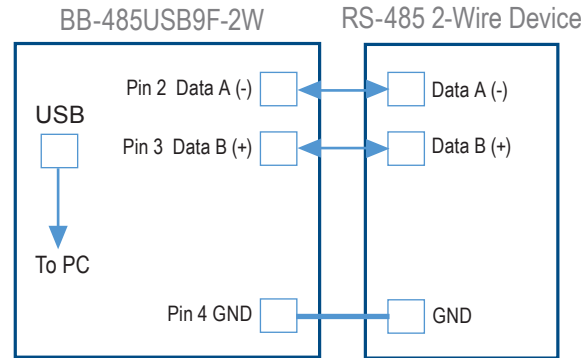
The driver software is contained on the CD that is packaged with your converter.

Warning: To prevent installation errors, do not plug in the hardware until you have already installed the drivers.

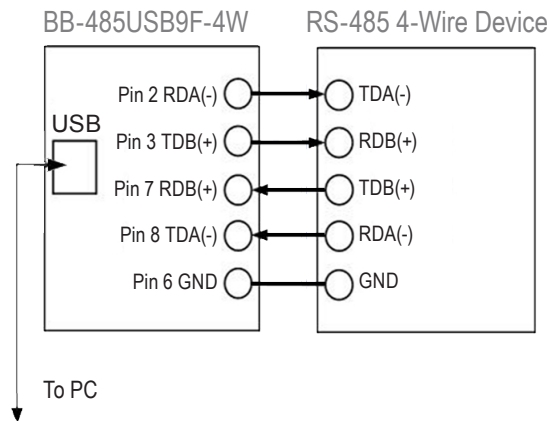
- Put the driver CD into the PC. The setup program should automatically launch.
- Click **Next**. Accept the license agreement and click **Next** again.
- The program will install the driver and a screen will be displayed indicating successful installation.
- When you connect the converter to your PC for the first time, the COM port will be configured. This could take up to 30 seconds.

2 | Connect the Converter

BB-485USB9F-2W Wiring

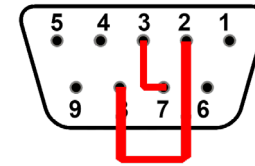


BB-485USB9F-4W Wiring



3 | Loopback Test (4 Wire)

- Loopback RDA(-) to TDA(-) and TDB(+) to RDB(+) as shown in the diagram.
- Using Hyper Terminal or similar program, connect to the appropriate COM port.
- Set the desired baud rate.
- Ensure that Hyper Terminal local Echo is off.
- Transmit data. If the same character string is returned, the test is good.

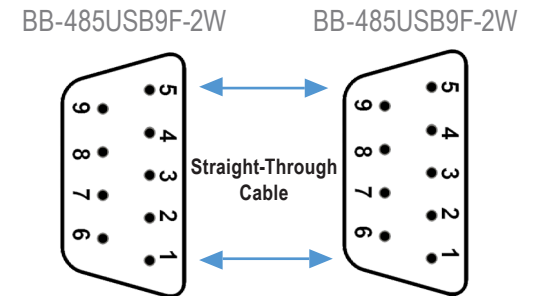


+ A detailed description of this test is located in the technical notes section of the website.

4 | Back-to-Back Test (2-Wire)

Due to the configuration, a loopback test is not possible with this model. However, two converters can be used in a back-to-back configuration.

- Wire the converters as shown below.



- Using HyperTerminal or similar program, connect to the appropriate COM ports.
- Set the desired baud rate.
- Transmit data. If the same string is returned the test is good.