



AirborneDirect™ Serial Bridge Quick Start Guide

Package Contents

The AirborneDirect™ Serial Bridge includes the following items:

- One AirborneDirect™ Serial Bridge
- One AC power adapter and cord (*except ABSE-100D-POC model*)
- A mounting cradle (*mounting hardware is user-supplied*)
- A female-to-female null-modem adapter
- A female RS-232 loopback adapter
- An AirborneDirect Serial Bridge Quick Start Guide (*this document*)
- One CD containing documentation and software.
- Access Point

100-8000-131G

Getting Started Quickly

The AirborneDirect Serial Bridge is shipped ready-to-use. Follow these quick steps to set up the Serial Bridge

1. **Unpack the Evaluation Kit**

Unpack the AirborneDirect Serial Bridge and compare the package contents with the items listed on the front of this *Quick Start Guide*. If any item is missing or damaged, contact Quatech immediately.

2. **What Else You Need**

To complete your installation, you need the following items:

- An RS-232 serial client with a DB-9 connector -- a computer with a built-in serial port is perfect. The serial client must be within the transmit and receive range of the Access Point (AP) to be used with the Serial Bridge.
- A LAN host -- a device or computer with a network-interface card (NIC).
- A DHCP-enabled, IEEE 802.11b/g-compliant Access Point.
- Mounting hardware for the AirborneDirect Serial Bridge cradle.

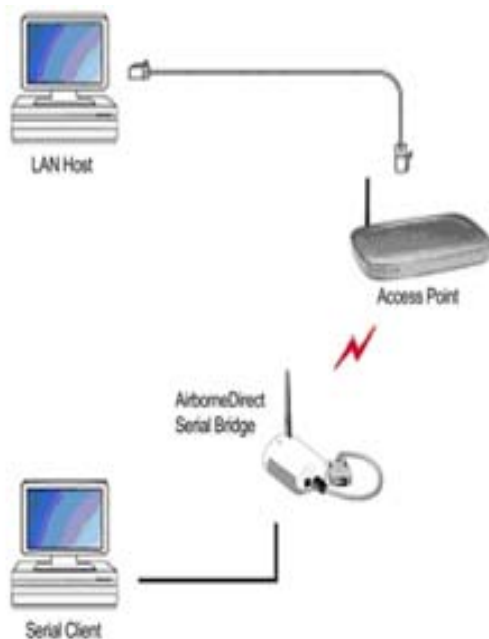
3. **Install Software**

Insert the CD. The program installation should start automatically.

4. Make the Access Point Connections

Place the Access Point in close proximity to the Serial Bridge. Follow the directions in the Access Point manual to install the network cable (to the LAN Host) and the power cable for the Access Point. For initial configuration, the security on Access Point must be disabled.

Note: Other AP's in the area may interfere with the Serial Bridge's ability to associate with the AP you intend to use (the Wireless Device Server will try to associate with the first, available "best-quality" AP). Either remove power from the other APs or perform the setup in a remote location.



5. Connect Your AirborneDirect™ Serial Bridge

- Plug the DB-9 RS-232 connector on the other end of the cable into the RS-232 serial port on the computer or other serial client.
- If the serial client is configured as DCE with a female DB9 connector, connect the cable on the Serial Bridge directly to the client. If the serial client is DTE with a male DB9 connector, use the provided female-to-female null-modem adapter to connect the Serial Bridge to the client.

6. Power Up the Serial Bridge

Use the supplied power adapter to connect the Serial Bridge to a power outlet. When the Serial Bridge is powered up, the three indicator LEDs at the top of the Serial Bridge will indicate the status of the Serial Bridge.

LED	LED Color	Function
Power	Off	Serial Bridge is not receiving power.
	Red	Serial Bridge failed its Power On Self Test (POST) and is not configured for wireless communication.
	Amber	Serial Bridge passed its POST but has not obtained a valid IP Address.
	Green	Serial Bridge passed its POST and has a valid IP Address.
Link	Off	Serial Bridge is not receiving power.
	Blinking Red	Serial Bridge is searching for an Access Point.
	Green	Serial Bridge and MAC have associated with an Access Point.
Comm	Off	No wireless TCP session is established and no serial physical connection is detected.
	Red	No wireless TCP session is established; a physical serial connection is detected.
	Blinking Red	A physical serial connection was detected and there is serial traffic present on that connection, but no wireless TCP session is established.
	Amber	A wireless TCP connection is established but no physical serial connection is detected (i.e., no serial cable is attached to the Serial Bridge).
	Blinking Amber	A wireless TCP session is established, a physical serial connection is detected, and the Serial Bridge is transmitting or receiving data across the wired serial port.
	Green	A wireless TCP session is established, a physical serial connection is detected, but there is no active data movement across the wired serial port.

If the LEDs indicate a problem with a wired or wireless connection, remove the power source from the Serial Bridge, wait a few seconds, and re-apply power. If the LEDs still do not behave appropriately, refer to the *AirborneDirect™ Serial Bridge Users Guide* (on the CD) for troubleshooting suggestions.

7 ■ Record Settings from Your Access Point's Configuration Program

On the LAN host, use your Web browser to log into your Access Point's online configuration program at the appropriate IP address (for example: <http://192.168.0.1>). Your Access Point documentation provides this procedure. Go to the appropriate screen in that program and perform these steps:

- **Find the Service Set Identifier String (SSID)**

Go to the Wireless Settings or equivalent screen in your Access Point's configuration application that shows the Access Point's SSID. Record the SSID below. (This is case sensitive).

Access Point SSID: _____

- **Disable Wireless Security**

Go to the Wireless Settings, Security, Encryption, or equivalent screen in your Access Point's configuration application that shows the WEP/WPA setting. If WEP or WPA is enabled, disable it (you can enable the AP security after the Serial Bridge has been configured).

- **Find the Bridge's Internet Protocol (IP) Address**

Go to the Attached Devices or equivalent screen in your Access Point's configuration application that lists the IP addresses of devices attached to the Access Point. Find the IP address for the Serial Bridge and record it below. You will need it to access the Serial Bridge with the Airborne Control Center (ACC).

Bridge's IP address: _____

Note: *If you do not see the Serial Bridge as an attached device, refresh the configuration screen (some Access Point programs provide a Refresh button for this purpose). If the Serial Bridge still does not appear, refer to the troubleshooting chapter in this Guide and in the documentation for your Access Point.*

You can also use the device discovery feature of the Airborne Control Center software to help determine the Bridge's IP address.

- **Verify the MAC Address**

Go to the Attached Devices or equivalent screen in your Access Point's configuration application that lists the MAC addresses of attached devices. Verify that the MAC address shown for the Serial Bridge matches the one on the label on the back of the Bridge.

- **Verify the Dynamic Host Configuration Protocol (DHCP) Name**

Go to the Router Status or equivalent screen in your Access Point's configuration application that shows the Serial Bridge's DHCP client name. Verify that this name matches the last six characters in the Serial Bridge's MAC address (AIRBORNExxxxxx) on the label on the back of the Serial Bridge.

8. ■ Configure the Serial Bridge using the Airborne Configuration Center

On the LAN host, launch the Airborne Configuration Center (ACC). An icon to launch the ACC will be found in your Windows Start menu if you properly installed the software as directed in Step 3. The ACC's initial window displays a list of devices detected on your local network. Select the Serial Bridge with with the IP address you recorded in Step 6.

Log in to the Bridge using the user id of "dpac" and password of "dpac". Be sure to use all lowercase. The Status page will now appear with status information about the Serial Bridge.

9. ■ Change the Wireless Device Server SSID

In the ACC interface, click the **Network** link at the top of the page. The Wireless Network Configuration page will now appear. Be sure the **Wireless Network Type** is set to **Infrastructure**.

Change the **SSID** to that of the Access Point that you recorded in Step 5B (this is case sensitive so it must be exactly the same; for example, all uppercase).

To assign a static IP address, uncheck the enable DHCP option.

Click the **Save** button to apply your changes. Once the changes are saved, the ACC confirms the settings are saved and prompts you to reset the Serial Bridge. After the Serial Bridge resets, the ACC will attempt to reconnect automatically and display the Status page.

Note: *In the unlikely event the page still does not appear, determine whether the Serial Bridge IP address changed. If it did, use the new IP address. Otherwise, try the old one again. The ACC's reconnection effort may time-out before the Serial Bridge can obtain its DHCP lease.*

10. Where to Go from Here

After you verify that the LAN host, Serial Bridge, and Access Point are communicating, you are ready to access the full Wi-Fi power of the AirborneDirect™ Serial Bridge and tap into your wireless local area network.

The supplied CD contains the AirborneDirect™ Serial Bridge Users Guide, which provides comprehensive information about the Bridge, including a complete explanation of the Airborne Control Center (ACC).

The CD also contains a VCOM driver and configuration utility that you can use to test the Bridge's serial functionality. For more information, see the *AirborneDirect™ Serial Bridge User's Guide*.

Quatech also offers developer documentation for OEMs and developers interested in using Airborne™ wireless technologies with their own products and applications. For more information, please contact Quatech.



5675 Hudson Industrial Parkway

Hudson, OH 44236

Tel: 330.655.9000

800.553.1170

support@quatech.com

www.quatech.com

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