

PRELIMINARY

AirborneDirect™ Serial Client Kit User Guide

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FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for assistance.

FCC RF EXPOSURE STATEMENT

To satisfy RF exposure requirements, this device and its antenna must operate with a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Package Contents

The AirborneDirect™ Serial Client Kit includes the following items for the AirborneDirect™ Serial Client:

- One AirborneDirect™ Serial Client Module with an attached cable and a male DB9 DTE interface connector
- One AC power adapter
- One NETGEAR Access Point
- A CD containing VCOM drivers, a Microsoft Windows XP-compatible API DLL, the Airborne™ Dynamic Link Library Programmer's Guide, the Airborne™ VCOM Quick Start Guide, and Adobe® Reader® for viewing the documents

Getting Started Quickly

The AirborneDirect Serial Client is shipped ready to use. The following steps lead to rapid evaluation of the AirborneDirect Serial Client Module (hereafter referred to as "Module") using the supplied Access Point (AP).

1 Unpack the Kit

Unpack the AirborneDirect Serial Client Kit and compare the package contents with the items listed on the front of this *Guide*. If any item is missing or damaged, contact DPAC Technologies immediately.

2 What Else You Need

To complete your installation, you need:

- A serial client — a device or a computer with a DB9, female serial connector configured as Data Communications Equipment (DCE). If your device or computer has a male serial connector configured as Data Terminal Equipment (DTE), obtain a male-to-female converter from an electronics or computer store.
- A LAN host — a device or computer with a network-interface card (NIC).
- Access to a 110 VAC power supply.

3 Make the Access Point Connections

Unpack the supplied NETGEAR MR814v2 Cable/DSL Wireless Router AP, connect it to the LAN host, and place it in close proximity to the Module. Follow the directions in the *NETGEAR Installation Guide* to install and configure the AP. Remove the NETGEAR CD when finished.

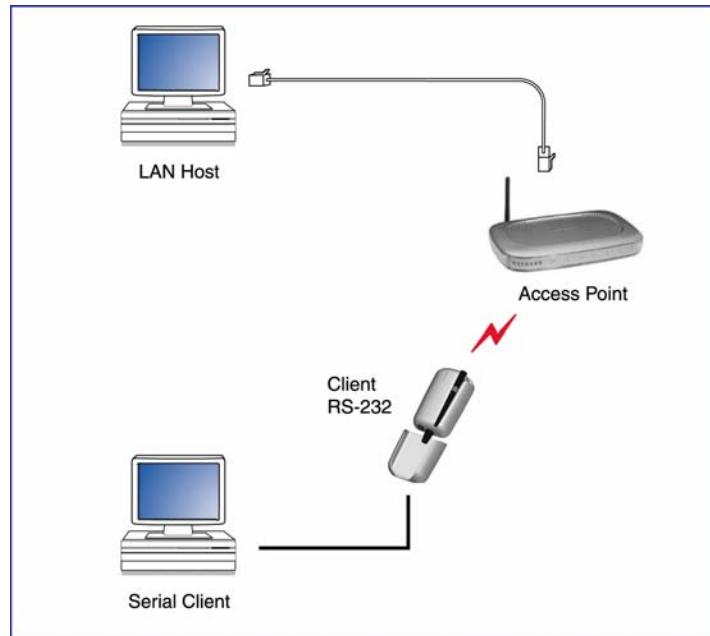


Note: Other APs in the area may interfere with the Module's ability to associate with the Netgear AP. Either remove power from these APs or perform the setup shown in the figure below in a remote location.

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Connect Your AirborneDirect Client Module

Connect the cable on the Module to a female DB9 serial connector configured as DCE on your device or computer. (If your device or computer has a male DTE serial connector, use a male-to-female converter to make this connection.) Use the supplied power adapter to connect the Module to a power outlet.



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Observe the Module LEDs

When the Module powers-up, the Module LEDs behave in the following sequence:

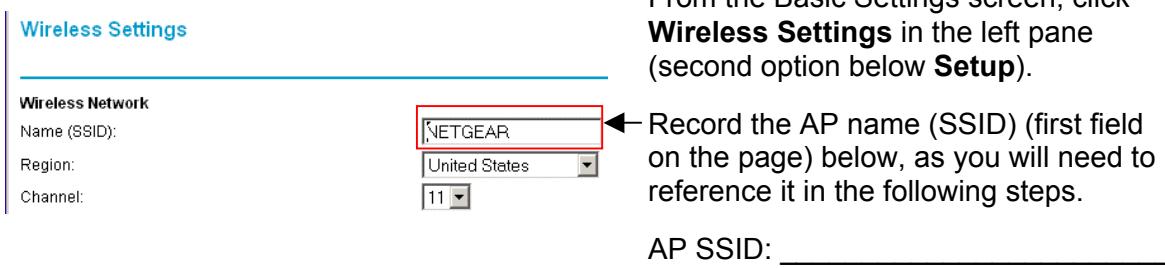
- **Power:** red → amber → green
- **Link:** amber → red → green/amber flicker → green
- **Comm:** either red → green or red → amber

If the LEDs do not behave in this manner, remove the power source from the Module, wait a few seconds, and reapply power. If the LEDs still do not behave in this sequence, contact DPAC Technologies.

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View the SSID

On the LAN host, use your Web browser to log into the NETGEAR configuration utility at IP address 192.168.0.1.



Wireless Settings

Wireless Network

Name (SSID): **NETGEAR**

Region: United States

Channel: 11

AP SSID: _____

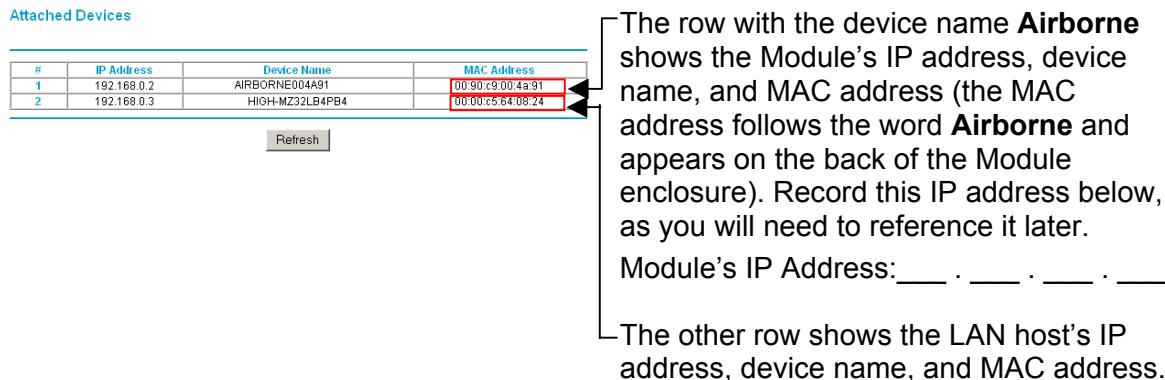
From the Basic Settings screen, click **Wireless Settings** in the left pane (second option below **Setup**).

← Record the AP name (SSID) (first field on the page) below, as you will need to reference it in the following steps.

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View the IP Addresses of the Module and LAN Host

Click **Attached Devices** in the left pane (second option below **Maintenance**). A read-only page shows the IP address, device name, and Media Access Control (MAC) address for each device attached to the AP. The order in which your attached devices are shown may vary from the order in the Attached Devices page below.



Attached Devices

#	IP Address	Device Name	MAC Address
1	192.168.0.2	AIRBORNE004A91	00:90:c9:00:4a:91
2	192.168.0.3	HIGH-MZ32LB4PB4	00:00:c5:64:08:24

Module's IP Address: _____

The row with the device name **Airborne** shows the Module's IP address, device name, and MAC address (the MAC address follows the word **Airborne** and appears on the back of the Module enclosure). Record this IP address below, as you will need to reference it later.

Module's IP Address: _____

The other row shows the LAN host's IP address, device name, and MAC address.



Note: If only the LAN host information is shown, click the **Refresh** button in the Attached Devices screen to update the displayed information. If it still does not appear, check your physical connections (see Step 4). Then remove the power source from the Module, wait a few seconds, reapply power, and verify that the LED sequences in Step 5 occur.

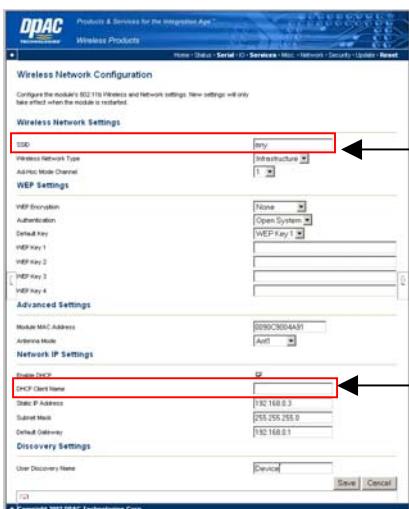
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Log into the Module Web Interface

On the LAN host, launch a second Web browser. In the address line, type `http://n.n.n.n` where `n.n.n.n` are numbers that represent the Module's IP address you obtained in the previous step. When the Module prompts you to login, enter **dpac** for the user name and **dpac** for the password. Then click the **OK** button to log in. The Home page appears, showing the manufacturer's settings.

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Change the Module SSID and DHCP Client Name



In the Module Web interface, click the **Network** link at the top of the page. The Wireless Network Configuration page appears.

Change the Module SSID (first field on the page) to that of the AP that you recorded in Step 6.

For DHCP Client Name, type **DPAC WLN**.

Click the **Save** button to save your change. When the Settings Saved screen appears, click the **Restart** button. When asked if you are sure you want to reboot the 802.11 interface, click **OK**.

Wait for the browser to refresh with the Module home page. If the browser returns with “The page cannot be displayed,” return to the Netgear Attached Devices page and click the **Refresh** button in your browser. The Module’s device name changes to **DPAC WLN** in the Netgear Attached Devices page.



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

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Where to Go from Here

After you verify that the LAN host, Module, and AP are communicating, you are ready to access the full Wi-Fi power of the AirborneDirect™ Serial Client Module and tap into your wireless local area network. The following tools are provided on the supplied CD to configure and operate the Module:

- A browser-based Web interface. See Chapter 3 of the AirborneDirect™ Data Book.
- An embedded Command Line Interface (CLI). See Appendix A of the AirborneDirect™ Data Book.

The supplied CD also contains DPAC Technologies’ VCOM serial-to-IP redirector utility. This utility uses virtual COM ports on a local computer to make remote ports appear as local ports to the computer. With this utility, applications that communicate through COM ports can use a TCP/IP network, without requiring changes to the application. For information about installing and using the utility, consult the VCOM Quick Start Guide supplied on the CD.



7321 Lincoln Way
Garden Grove, California 92841
Tel: 714.898.0007

Technical Support: 714.899.7543 ♦ wirelesssupport@dpactech.com

DECLARATION OF CONFORMITY

Trade Name:	AirborneDirect™ Serial
Model Number:	ABDB-SE-DP101
Compliance Test Report Number:	B31211D3
Compliance Test Report Date:	December 11, 2003
Responsible Party (In USA):	DPAC Technologies Corp.
Address:	7321 Lincoln Way Garden Grove, CA 92841
Telephone:	(714) 898-0007

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If the unit does cause harmful interference to radio or television reception, please refer to your user's manual for instructions on correcting the problem.

I the undersigned, hereby declare that the equipment specified above conforms to the above requirements.

Place: Garden Grove, California

Signature:



Date: January 29, 2004

Full Name: John Sprint

Position: Chief Operating Officer