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# Quick Start Guide

## Airborne™ Evaluation kit

### WLNN-EK-DP55x

Revision 3

**February 2014**

Part Number: 710-10086-01

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## Kit Contents:

Upon receiving the kit please check that you received the following:

- One Airborne™ Enterprise Module Evaluation Circuit Board Assembly (EVB)
- One Airborne™ WLNN-EK-DP551 module (mounted to EVB)
- 5VDC Power Supply (2.1mm barrel jack)
- Two 2dBi, 2.4GHz/5GHz 50 ohm, omni-directional antenna
- DB9-to-DB9 Serial Cable (Null Modem)
- USB to Serial Adapter (232USB9M-LS)
- CAT5 Ethernet Cable
- Quick Start Guide
- Airborne™ software and documentation CD

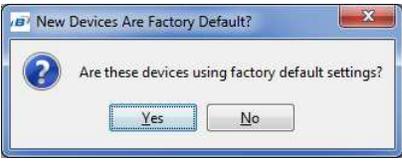
If any of the above contents are missing or appear to be damaged please contact B&B Electronics Sales support directly at **(888) 948-2248** or [support@bb-elec.com](mailto:support@bb-elec.com).

## What you will need:

To evaluate the unit you will need the following components and facilities:

- EVB unit with included antenna attached.
- Laptop or desktop system with an Ethernet port.
- Power outlet for power supply.
- 802.11b/g/n or 802.11a/n network for testing the unit, either AdHoc or Infrastructure (Access Points) mode. The test network configuration must be known. Required information will include:
  - SSID (Wireless network name).
  - Security settings (WEP, WPA, WPA2, etc.).
  - Security credentials (passphrase, key or certificates).
  - Static IP address, Subnet Mask and Gateway address if static IP addresses are used on the test network.
- A web browser on the laptop top or desktop (Internet Explorer, Firefox, Opera and Chrome v4.0 are supported).

# Getting Started:

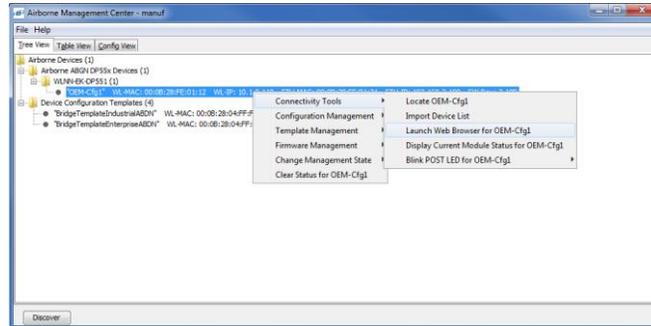
1	Open the Airborne™ Evaluation Kit packaging and locate the Install CD.
2	Place the CD in the CD/DVD drive of the laptop or desktop you will be using to configure the Airborne™ device. Follow the on screen directions for installation of the appropriate device software and documentation.
3	Connect the Ethernet cable to the Ethernet port on the EVB and to an Ethernet port on the laptop or desktop system.
4	Change the IP configuration of the laptop/desktop Ethernet interface to “Obtain an IP address automatically”.
5	Apply power to the Evaluation Kit. Move the Power switch (SW1) to the Power On position.  The EVB will boot. Confirm that the POST LED is illuminated (Orange). This indicates the module is ready to be configured.  If the POST LED is not illuminated check the power connections and reapply power (Make sure that SW1 is in the correct position). If the POST LED does not illuminate, contact B&B Electronics Technical Support. Even though the module is ready to be configured, you may have to wait a minute for the module and laptop/desktop to fall back to 169.254.x.x IP address.
6	Run the Airborne Management Center (AMC) application. This was installed during the CD installation and a menu item will be found in the Airborne folder located in the Programs directory of your system. When the application opens the following dialog will be displayed:  Select Group Name: <b>manuf</b> and enter Group Password: <b>dpac</b>
7	The AMC will discover the EVB and show the following message:  Press <b>Yes</b>
8	The AMC will ask of the devices are factory default:  Press <b>Yes</b>

The device's status will move to managed and the device will be displayed under the device type/group it belongs to.

Right click the device and then:

1. Select **Connectivity Tools**
2. Select **Launch Web Browser for OEM-Cfg1**

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Selecting device personality:

The EVB is shipped with the Airborne unit configured as a Serial Device server. You can change the device functionality by selecting an appropriate personality, committing the change and restarting the unit.

To change the personality:

1. Select the **Maintenance** link in the top menu bar.
2. Select the **Change Module Personality** link in the left-hand menu.
3. Select the appropriate device personality (See Device Personality section)
4. Press **Commit**
5. Press **Restart**

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The device will restart and the new personality will be active when the restart cycle has completed.

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Refer to the section below for further information on device personalities, device configuration and set-up.

# Device Personality

The Airborne™ EVB can support all device personalities available within the Quatech product line. A device personality is a specific configuration of the Airborne™ device which performs a certain function. Examples include Ethernet Router, Serial Device Server, SPI Device Server, etc. The EVB is shipped with the default personality set as an Industrial Serial server.

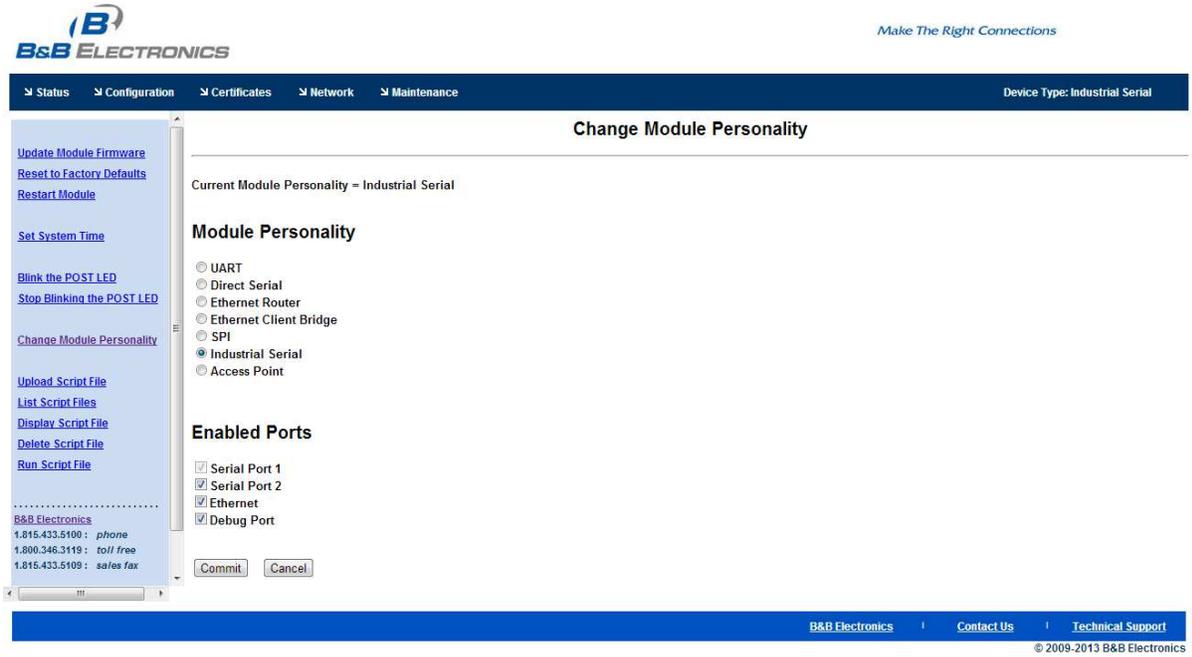
Changing the personality to match your application is the first thing you should do when working with the EVB. It is important to select the appropriate personality. The following table outlines the personalities and their specific functionality:

Personality	Description	Related Product
UART	Serial device server with LVTTTL I/O. Support dual UART, debug port, single Ethernet, 802.11a/b/g/n. Ethernet interface is a client.	WLNN-AN-DP55X
Direct Serial	Serial device server with control signals to support external RS232/422/485 drivers. Support dual serial ports, debug port, single Ethernet, and 802.11a/b/g/n.	WLNN-SE-DP55X
Ethernet Router	Ethernet NAT3 router. Built-in DHCP server on Ethernet port supports multiple Ethernet Clients on the Ethernet interface. Includes rule based Firewall and Port Forwarding. Ethernet interface is set as a router. Suitable for applications where there are multiple Ethernet clients on the Ethernet network. Also supports dual UARTs, debug port and 802.11a/b/g/n.	ABDN-ER-DP55X ABDN-ER-IN501X WLNN-ER-DP55X
Ethernet Client Bridge	Ethernet bridge designed to connect wireless (802.11a/b/g/n) to an existing Ethernet port. Suitable for applications where there is a single Ethernet client to be connected to a wireless network. Also supports dual UARTs and debug port.	ABDN-ER-DP55X ABDN-ER-IN501X WLNN-ER-DP55X  These units can easily be converted to bridge mode using AMC templates.
SPI	High speed SPI device server. SPI slave device. Also supports single UART, debug port and 802.11a/b/g/n.	WLNN-SP-DP55X
Industrial Serial	Serial device server with control signals to support external RS232/422/485 drivers. Support dual serial ports, debug port, single Ethernet and 802.11a/b/g/n. Similar to the Direct Serial but has the Ethernet interface enabled as an Ethernet client device.	ABDN-SE-IN542X ABDN-SE-IN541X
Industrial Ethernet	Ethernet NAT3 router. Built-in DHCP server on Ethernet port supports multiple Ethernet Clients on the Ethernet interface. Includes rule based Firewall and Port Forwarding. Also supports dual UARTs, debug port and 802.11a/b/g/n.	ABDN-ER-IN501X
Industrial Access Point	802.11a/b/g/n Access Point with an Ethernet port, that supports both bridge and router modes, and up to two serial ports which are compatible with RS232/422/485 devices.	APXN-Q5xxx

The **Change Module Personality** web page displays the available device personalities. The **Change Module Personality** page can be seen in Figure 1.

After selecting the appropriate personality you must press the **Commit** button and **Restart** the module to save and apply the change.

Figure 1 – Change Module Personality Setup Page



-  1. The web interface is context sensitive. Not all of the fields will be visible without a context change.



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