Lantronix Wi-Fi Module Configuration Guide

For BaseStation 3200 V12 Irrigation Controllers

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Customer Service 1-866-294-5847
Introduction

In order to remotely connect with your BaseStation irrigation controller and take advantage of BaseManager, the controller must be able to communicate over the Internet. Using a Wi-Fi module is one option for wireless Internet communication. The Wi-Fi module enables your controller to connect to an existing Wi-Fi network at your site.

When you choose a Wi-Fi module communication package from Baseline, we provide the Wi-Fi module and the firmware that activates the connection from your controller.

To establish communication through your Wi-Fi module, you need to perform the following tasks:

**Step 1** – Get network info from your network administrator.

**Step 2** – Use a computer with LANTRONIX DeviceInstaller to configure the Wi-Fi module. **IMPORTANT!** The computer used to configure the Wi-Fi module must have the Windows 7 (or earlier) operating system. Windows 8 does not support the ad hoc network connection that is used during configuration.

**Step 3** – Verify the Wi-Fi connection in the controller.

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**Step 1 – Get Network Info**

When you use a Baseline Wi-Fi module to connect a BaseStation controller to an existing wireless network, you need to configure the Wi-Fi module with information specific to the connection. **IMPORTANT!** The network information must be accurate. If you enter and save incorrect information in the Wi-Fi module configuration, a “factory reset” procedure will be required to return the Wi-Fi module to its default settings.

If the security key for the network is a passphrase, it typically contains both uppercase and lowercase letters. Be sure to record the case accurately when you write down the passphrase.

Ask the network administrator at the site for the following information:

- **Network Name (SSID):** __________________________________________
- **Security Type (e.g. WEP, WPA, etc.):** __________________________
- **Authentication (e.g. Open, PSK, etc.):** __________________________
- **Encryption (e.g. 64 bit, TKIP, etc.):** ____________________________
- **Key Type (Hex or Passphrase):** _________________________________
- **Key:** _________________________________________________________
- **TX Key (for WEP Security only):** ___

When properly configured, the Baseline Wi-Fi module will operate in bridge mode, which means that it simply passes data back and forth between the controller and the network.
Step 2 – Configure the Wi-Fi Module

**IMPORTANT!** The computer used to configure the Wi-Fi module must have the Windows 7 (or earlier) operating system. Windows 8 does not support the ad hoc network connection that is used during configuration.

1. On a desktop or laptop computer that has wireless network connectivity, download and install the LANTRONIX DeviceInstaller from the following URL:
   

2. Make sure that the Baseline controller is powered up in order to supply power to the Wi-Fi module.

3. Using the same computer where you installed the LANTRONIX DeviceInstaller, click the wireless network connection icon in the taskbar, and then connect to the wireless network named LTRX_IBSS.


5. Click the **Tools** menu, and then click **Options**. In the Options window, make sure that the Wireless Network connection is checked, and then click **OK**.

6. Click the **Search** button. It should find one device. If there are multiple devices, or unexpected devices listed, make sure you selected the correct Network Connection in the Options window.

7. New items display in the device tree in the left pane. In the pane on the right, you should see an entry called **WiBox b/g**. Confirm that the **Hardware Address** listed for this entry matches the MAC Address on the Wi-Fi module sticker. If it does not, confirm that no other new Wi-Fi modules are powered and that you are connected to the correct wireless network.
8. Double-click on the **WiBox b/g** entry in the right pane. The DeviceInstaller displays the device details in the right pane.

9. At the top of the right pane, click the **Web Configuration** tab, and then click the green arrow button.

10. When prompted for username and password, leave the defaults in the fields, and then click the **OK** button.

11. Click the **Network** option in the menu on the left side of the pane. The Network Settings page displays.
12. Click the drop-down arrow in the **Network Mode** field, and then click **Bridging (Single Host)**.

13. Click the **OK** button at the bottom of the page.

14. Click the **WLAN** option in the menu on the left side of the pane. The WLAN Settings page displays.

15. Use the details that you recorded above to complete the fields on the **WLAN Settings** page. **IMPORTANT!** Enter the information carefully to avoid making errors, which will require a factory reset.

16. Click the **OK** button at the bottom of the page, and then click **Apply Settings** in the menu on the left.

17. Close the LANTRONIX DeviceInstaller application, and then disconnect the computer from the wireless network named LTRX_IBSS.
Step 3 – Verify the Connection in the Controller

If you experience any problems during the configuration of your Wi-Fi module, call Baseline Support at 866.294.5847.

1. On the BaseStation 3200 V12 controller, turn the dial to the **Network** position.
2. Press the **Next** button to highlight the **Ethernet Setup** option, and then press **Enter**.
3. Ensure that **DHCP** displays in the **IP Address Mode** field. If a different setting displays in the field, press the + or – button to change the value to **DHCP**.
4. Press the **Back** button to return to the Network menu.
5. Press the **Previous** or **Next** button to highlight the **BaseManager Server Setup** option, and then press **Enter**. The BaseManager Address screen displays.
6. Ensure that **Ethernet** displays in the **Connection** field. If a different setting displays in the field, press the **Next** button to highlight the **Connection** field, and then press the + or – button to change the value to **Ethernet**.
7. Turn the controller’s dial to the **RUN** position. The status in the **BaseMgr** field should be “Connected.”
8. If you plan to use BaseManager, call Baseline Support (866-294-5847) to set up a new account or to add this controller to an existing account.
FCC Compliance Information

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 help.