

BWWFA QUICK-START GUIDE

ENGLISH

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DI-000-BWWFA-05A

FCC COMPLIANCE: This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IC STATEMENT: This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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For Technical Assistance Call: 800-824-3005 - www.leviton.com

WARNINGS & CAUTIONS

- **WARNING: TO AVOID DEATH OR SERIOUS PERSONAL INJURY** never push objects of any kind into this product through openings, as they may touch dangerous voltages.
- **WARNING: TO AVOID DEATH OR SERIOUS PERSONAL INJURY** never touch uninsulated wires or terminals unless the wiring has been disconnected at the network interface.
- Read and understand all instructions. Follow all warnings and instructions marked on the product.
- **Do not use this product near water** - e.g., near a tub, wash basin, kitchen sink or laundry tub, in a wet basement, or near a swimming pool.
- Never install communications wiring or components during a lightning storm.
- Never install communications components in wet locations unless the components are designed specifically for use in wet locations.
- Use caution when installing or modifying communications wiring or components.
- **SAVE THESE INSTRUCTIONS.**

INSTALL THE WI-FI ADAPTER

With power removed from the Leviton® bitwise™ Controller and nothing plugged into the Ethernet port, insert the Wi-Fi Adapter into one of the unused USB ports and then apply power.

ADD THE CONTROLLER TO WI-FI NETWORK

The fastest and easiest way to add the *Leviton bitwise* Controller to the Wi-Fi network is to use the built-in Wi-Fi Protected Setup (WPS) feature. The Wireless system you are using must also support WPS via push button. Alternatively, the Wi-Fi settings can be entered manually using Ad-Hoc mode; we will cover WPS first.

WI-FI PROTECTED SETUP (WPS)

1. Once Plugged-in, wait until the red status light blinks with a pattern of 2 seconds on, 1 second off. This takes about 30 seconds after power-up and indicates the controller is in Ad-Hoc mode.
2. Press the WPS button on your wireless router or use the admin interface page to begin the process. You now have two-minutes to add the Controller to the wireless.
3. Press the small button labeled "WPS" on top of the Wi-Fi Adapter near the USB plug. The green light on the adapter and the red status light on the controller will begin to flash rapidly. Once the WPS process is complete, the *Leviton bitwise* Controller will reboot automatically and join the network in DHCP mode. This process takes approximately one minute. Please do not unplug the controller until the red status light is solid for more than 20 seconds.
4. The *Leviton bitwise* Controller is now on the network and can be discovered as though it were plugged in using the ethernet port.

ENTER ACCESS CREDENTIALS MANUALLY

If you are working with a router that does not support WPS or security policies do not allow it, you can enter credentials via the *Leviton bitwise* Controller's web interface.

JOIN THE AD-HOC NETWORK

- Once plugged-in, wait until the red status light blinks with a pattern of 2 seconds on, 1 second off. This takes about 30 seconds after power-up and indicates the *Leviton bitwise* Controller is in Ad-Hoc mode.
- Disable or disconnect all network connections except your wireless adapter.

- View your available wireless networks and look for an Ad-Hoc network named bwcadhoc##### (# signs will be replaced with the last 3 octets of the adapter's MAC address). Note: If you are on an Apple® computer, the Ad-Hoc network will show up in the Devices section of your Wi-Fi dropdown. Connect to this Ad-Hoc network.

SCAN AVAILABLE NETWORKS

- Enter 169.254.0.1 into a web browser and press Enter on your keyboard.
 - Enter Username: **admin** and Password: **bitwise** when prompted.
- Choose the SSID for the network you want to use to populate the SSID field. You will notice that levels and channels for each access point are displayed to help you choose the best one.
- Enter the Preshared Key for the Access Point (select the "Show Preshared Key" box if desired).
- Click "Save Configuration".
- You will be prompted to power cycle the unit to restart with the new configuration.
- The controller is now on the network and can be discovered as though it were plugged in using the ethernet port.

TROUBLESHOOTING AND DIAGNOSTICS

Release IP

If you have trouble accessing the page, your computer's wireless NIC may not have let go of the previous IP address yet. You can either disable and re enable your wireless adapter or enter ipconfig /release at a DOS prompt to release IP settings. (We suggest you disconnect or disable any other network adapters.)

If after following either procedure above the *Leviton bitwise* Controller is not able to associate to the Wireless Network, the *Leviton bitwise* Controller will return to Ad-Hoc mode (red light 2 seconds on, 1 second off). In order to ensure we clear out any incorrect settings, it's best to perform a soft factory default.

Soft Factory Default

- Remove power from the *Leviton bitwise* Controller.
- Hold reset button (you will need a pen or paper clip).
- Plug power back in while holding reset button.
- Continue to hold until the red status light turns on and goes back out (approx. 20 seconds).
- Wait for the controller to return to Ad-Hoc Mode and try again.

ACCESSING THE WI-FI CONFIGURATION PAGE

Once the *Leviton bitwise* Controller is set up and has an IP address, the WiFi configuration page can be accessed at anytime by entering the IP address of the *Leviton bitwise* Controller followed by **/wifi.htm** in a web browser.

EXAMPLE: If our controller has an IP address of 192.168.1.55, we can access the Wi-Fi Settings at: <http://192.168.1.55/wifi.htm> with **Username: admin** and **Password: bitwise**.

This is an easy way to change wireless settings or look at what channels nearby networks are using.

NOTE: NOT ALL LEVITON BITWISE CONTROLLERS SUPPORT THE WIFI ADAPTER! PLEASE CHECK THE FOLLOWING MAC ADDRESS RANGE AND MFG DATE BEFORE PURCHASING.

- BWBC1 Starting MAC: 94-4A-09-01-01-50 on or after Mfg Date: 2/13/14
- BWBC2 Starting MAC: 94-4A-09-02-02-50 on or after Mfg Date: 2/12/14
- BWBC4 Controllers are NOT compatible

CONTACT

- Technical Support:** 1-800-824-3005
- Email:** sabw@leviton.com
support@bitwisecontrols.com
- Web:** www.leviton.com/automation

SOFTWARE SPECIFICATIONS

Standards	IEEE 802.11n, IEEE802.11g, IEEE 802.11b
Wireless Signal Rates With Automatic Fallback	11g: Up to 54 Mbps (dynamic) 11n: Up to 150 Mbps (dynamic) 11b: Up to 11 Mbps (dynamic)
Frequency Range	2.4-2.4835 GHz
Wireless Transmit Power	17 dBm (MAX EIRP)
Modulation Type	OFDM/CCK/16-QAM/64-QAM
Receiver Sensitivity (without antenna)	135 M: -74 dBm @10% PER 108 M: -74 dBm @10% PER 54 M: -76 dBm @10% PER 11 M: -89 dBm @8% PER 6 M: -90 dBm @10% PER 1 M: -92 dBm @8% PER
Work Mode	Ad-Hoc Infrastructure
Wireless Security	64/128 bit WEP WPA/WPA2,WPA-PSK/WPA2-PSK (TKIP/AES)
Support Operating System	Win XP/ Vista/Win 7/Linux/MAC.OS

HARDWARE SPECIFICATIONS

Interface	USB 2.0 Hi-Speed connector
Certifications	CE, FCC
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)
Storage Temperature	-40°C ~ 70°C (-40°F ~ 158°F)
Relative Humidity	10% ~ 90%, non-condensation
Storage Humidity	5%~95%, non-condensation