# WBX Model # WBX-XX-XX

## Introduction

This document provides basic info for wireless set up.



Scan now to download the full Quick Start Guide for advanced configuration; or go to:

## General Information

Your product may be custom configured with the service code "KBC-PRE-CONF". In that case, refer to all provided documentation for IP addresses and any other pre-set configuration.

KBC remote power solutions may replace a supplied power supply / injector in your application.

Inspect all contents upon receipt. Claims and discrepancies must be reported within 1 week of original product shipment from KBC.





On your mobile device, go to our website at: <a href="http://www.kbcnetworks.com">http://www.kbcnetworks.com</a>

- Tap on WBX-XX-XX Wireless (Wireless Products)
- Scroll down and tap "Contact Us Now" in the blue bar.

### Our full Quick Start Guide online will answer in depth questions.

Feel free to call us M-F 8-5 PT 949-297-4930

## Warranty Information

Laptop/Desktop:

- ✓ <u>www.kbcnetworks.com</u>
- Hover over "About Us"
- Click on "Policies & Procedures"
- Scroll down to "Warranty"

Mobile:

- ✓ <u>www.kbcnetworks.com</u>
- ✓ Click/tap WBX-XX-XX Wireless
- Click/tap Search bar and search for "Warranty"
- Click on "Policies & Procedures" from search results.
- Scroll down to "Warranty"



## Out of the Box Pre-set Configurations

The WBX-XX-XX is pre-set as an APHost, if you need for it to be a Client you will need to access the interface and change the mode.

Parameter	Setting
LAN IP Address	192.168.1.152
GUI User ID	admin
GUI Password	password
Mode	Access Point WDS
SSID	WBX-XX-XX
Pre-shared Key	11111111
Channel/Frequency	149 (5.745 GHz)
Chan Spectrum Width	20/40/80 MHz
MAC-Filter	Disabled
TX Power Output	Max
Antenna Gain	4.0 dBi

## **Approved Power Methods:**

- 1. Supplied injector in the unit boxes:
- ✓ Connect to POE Port via Cat5e / Cat6
- 2. POE port on 802.3af PoE PSE device:
- 3. Injector in a remote power solution:
- Connect to injector in SPB series.
  (If applicable common)
  - Connect to injector in AL2 / AL5 series
- solar kit. *(if applicable uncommon)* Connect to injector in UAL2/UAL5
- series UPS kit. (if applicable uncommon)

### FCC Statement

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

Note : 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. FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 30cm between the radiator& your body.

## HTG Status Indicators (Left to Right)

- 1. Power
  - Power applied.

O No power to unit. Ensure that the power injector and power supply is being used (or POE port on switch).

- 2. ETH1 Ethernet link activity
  - Link activity established

 $\star$  Link activity from WES3HTG to connected Ethernet device or across wireless link.

**O** No link to Ethernet cable connected device. (*not indicative of wireless link/strength*)

- 3. ETH2 -Do not use
- 4. S1-Signal Strength Indicator
  - 40+ RSSI
  - O RSSI less than 40 (or no link if the other RSSI LEDs are not on)
- 5. S2-Signal Strength Indicator
  - **30-39 RSSI**
  - O RSSI less than 30 (or no link if the other RSSI LEDs are not on)
- 6. S3-Signal Strength Indicator
  - 20-29 RSSI

O RSSI less than 20 (or no link if the other RSSI LEDs are not on)

- 7. S4-Signal Strength Indicator
  - 10-19 RSSI

O RSSI less than 10 (or no link if the other RSSI LEDs are not on)

- $\star$  Flashing LED
  - Solid LED
- O LED off

Note: The LEDs do not change colors.

## **Best Practice Field Re-Configuration**

A WES3HTG-AX-CW on its own will need another device to link to, such as a second (or more) WES3 or WES3HTG unit(s) configured as a Client.

## For the following suggestions:

# If you'll be using this as a multipoint receiver for two or more WES3 Clients to link:

- ✓ Keep the default APHost mode and ensure separate IPs for all other devices which should be in Client WDS mode.
- Ensure all Clients share the same SSID as this Host.

# NOTE: WES3 and WES3HTG do not share the same SSID under default configurations.



KBC recommends setting the MAC-Filter. Add the radio MAC addresses of all associated Clients. Add this Host radio MAC address to the Clients' "Remote MAC" All associated Clients should be within 65° of the WES3HTG-AX-BA with clear line of sight.

# If this will be deployed in a noisy RF environment:

Selecting the most appropriate frequency via Access Point WiFi scan is advised.

# If your system admin requires specific LAN settings:

 Re-configure the IP addresses via web browser GUI network settings. Be sure to record all changes!

### Recommended additional security measures:

- Always use the MAC lock feature (enabled by default).
- ✓ Hiding the SSID is possible from the Access Point interface.
- Change the GUI log in password and SSID and/or pre-shared key settings. Be sure to record these changes in a safe and accessible place.

# Common Trouble-shooting Tips

### No power LEDs:

- Check port LEDs on POE switch.
- Check all Ethernet cabling and wiring type. Cables should be straight-through using 568-B wiring code.

### No signal strength LEDs:

- Ensure Host in Access Point WDS mode and Client(s) in Client WDS mode. Ensure that all Clients are set to matching parameters as Host.
- Many times when the MAC filter is enabled there is an incorrect character. Verify all characters match exactly or try disabling and erasing the "Remote MAC" from the Client side (and MAC-Filter on the Host). If they link after disabling that feature then it is likely that an incorrect MAC or character was used.

### Not all signal strength LEDs light up:

- Ensure clear wide-open line of sight.
- ✓ Improve alignment
- Try another frequency

### No Network LED:

 Check all Ethernet cabling and LAN ports on all devices connected to WES3HTG unit.

### No Access to GUI or ping response:

- Note, your system may have been reconfigured; check documentation.
- It is important to record all changes. If the IP address is changed from default there is no way to recover it if forgotten other than a restore to defaults. Having to hard reset will be a time consuming effort.

### Unit reboots itself continuously:

The "Ping Watchdog" feature may be turned on and is configured improperly. Check the feature (system/tools) and disable to see if the constant auto-reboot stops.

### Units stop connecting until power is reset:

- This is a symptom of 3<sup>rd</sup> party RF interference. Scan using the Host to determine the most available frequency in the environment.
- Try one of the self-healing tools available such as auto-reboot.

## Still Need Help? Contact Us Now:

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- Send an email and leave your phone number. We will respond and/or return your call.