

GXT542U Gigabit Wi-Fi Extender

QUICK INSTALL GUIDE



This guide will facilitate installation of the GXT 5G model number GXT542U Gigabit Wi-Fi Extender which may be configured as a:

- **Multicast (IPTV) Video Bridge Access Point (AP) (Section 1)**
- **Multicast (IPTV) Video Bridge Client (Section 2)**
- **Gigabit Wi-Fi AP (Section 3)**
- **Gigabit Wi-Fi Client (Section 4)**

Prior to starting, ensure you have one each:

- GXT542U unit
- CAT5 Ethernet cable
- Power adapter
- Quick Installation Guide

MULTICAST (IPTV) VIDEO BRIDGE INSTALLATION

Section 1

Multicast (IPTV) Video Bridge AP Installation

The initial GXT542U must be installed as an AP

Step 1 - Unit Mode Configuration

- A. On the back of the device, set the unit mode switch to AP (left position) as illustrated below.



Step 2 - Power and LEDs

- A. Plug in the 12V A/C adapter and connect it to the GXT542U AP. Verify the AP / STA LED is BLUE indicating AP mode.



Changing the mode from AP (Blue) to Client or Station (STA) (Green) requires a power cycle.



Step 3 - Placement and network connections

- A. Place the GXT542U AP near the ONT/Residential Gateway

- B. Insert one end of an Ethernet cable into the Video LAN port of the ONT/ RG with the other to the GXT542U's RJ-45 port.



DO NOT connect both Ethernet ports on the AP to the same subnetwork ports on the ONT/Gateway as this will create a loop and disrupt traffic.



Home Gateway or
Cable/DSL Modem

Section 2

Multicast (IPTV) Video Bridge Client Installation

After installing a GXT542U AP per Section 1, Clients can be added using the steps below:

Step 1 - Unit Mode Configuration

- A. Set the unit mode switch at the back of the unit to STA (Right position) as illustrated below.



Step 2 - Power and LEDs

- A. Plug in the 12V A/C adapter and connect it to the GXT542U STA unit. Verify the AP / STA LED is GREEN indicating Client (STA) mode.



Step 3 – Placement and network connections

- A. Place the GXT542U Client near the Multicast Video Set-Top Box (STB).
- B. Insert the Ethernet cable into the STB and the other end into one of the Ethernet ports of the GXT542U.



Step 4 – Pair the Client with the AP

- A. Press the WPS button on the back of the GXT542U AP. The WPS LED on the top front will flash for up to 2 minutes, indicating it is ready for association with Clients.



- B. Within 2 minutes, press the WPS button on the GXT542U Client. The WPS LED will continue flashing until associated with the AP and stop at which time the WLAN LED will illuminate.



Client



AP



The WLAN LED color indicates the receiver signal strength (RSSI)

Green = Good, Blue = Fair, Red = Poor

Step 5 - Install the DVR and STBs

Congratulations. You have completed installation of a Gigabit Wi-Fi Multicast IPTV link. Turn on any TV channel for visual verification of the wireless connection quality.



Additional GXT542U clients can be paired to the AP following the guideline in Section 2.

Step 6 - Verify the wireless performance

Access the Web User Interface to verify the wireless capacity for watching and recording video.

- Set all TV(s) to the highest resolution HD channels
- Begin recording HD channels on the DVR (if installed)
- Ensure the laptop Ethernet port is configured to a fixed IP address of 10.0.0.50

- D. Connect the PC to the AP via Ethernet, open a browser and enter the AP's default IP address <http://10.0.0.2> to access the GXT542U.
- E. Login using user name: **admin** password: **last 4 digits of the MAC address** (printed on the bottom of the device)
- F. Click on the System Information on the left
- G. Ensure the Free Air Time is GREEN
- H. Select Video Station List
- I. Verify all the RSSI levels are GREEN or BLUE

GIGABIT Wi-Fi INTERNET ACTIVATION AND AP AND CLIENT INSTALLATION

Section 3

Activating the Gigabit Data Wi-Fi Network

By default, the GXT542U Internet Network and associated SSID are not pre-configured.

Steps 1 and 2 - Refer to Section 1, Steps 1 and 2 instructions on page 2 Multicast (IPTV) Video Bridge AP Installation.



When Multicast Video (IPTV) and Internet Data originate on the **SAME** ONT/ RG port, connect the single Ethernet port to the GXT542U.



Home Gateway or
Cable/DSL Modem



If Multicast Video (IPTV) and Internet Data originate on **SEPARATE** ONT / RG ports, refer to the instructions on the attached addendum ***Segregating Video & Internet Ports***. The 2 GE GXT542U ports are factory bridged and need to be reconfigured to segregate these traffic types and eliminate the potential for IP related issues.

Step 3 – Activate the Internet Wi-Fi Network

To login to the web Interface to create the Data Wi-Fi network:

- A. Follow Section 2, Step 6 C - E directions to access the AP web interface
- B. Click on the Data Wireless Setup menu item on the left
- C. Check the box and click Apply to enable the Data network
- D. Confirm the screen displays the Data wireless network

Congratulations! You have activated and installed the Gigabit Wi-Fi Internet network. Connect any 5 GHz 11ac or 11n device to the Internet SSID using the passphrase below to access the internet.



The default passphrase for connecting to the Data Wi-Fi Network is the last 8 digits of the AP's MAC address printed on the bottom.

SECTION 4

INSTALLING a Gigabit Wi-Fi Client

The GXT542U configured as a Client offers an ultra-high performance Gigabit Wi-Fi connection to Gaming Consoles, SmartTVs and streaming devices such as FireTV, Roku and Apple TV.

Steps 1 – 2

- A. Follow the instructions outlined in Section 2, Steps 1 – 2 substituting the Smart TV, Gaming Console or streaming device for the STB

Step 3 – Pairing the Client with the AP

- A. Follow the instructions below for pairing the Client to the Data Wireless Network

By default, the WPS function is associated with the Video Network. To change the WPS capability to the Data Wireless Network, login to the WEB User Interface to set up the Data Wi-Fi network as the default WPS SSID.

- A. Follow Steps 1 -3 in Section 3
- B. Click on the Data Wireless Setup menu item on the left
- C. Check the WPS Default option and click Apply
- D. Follow the pairing instructions in Section 2 Step 4 to pair the Client with the AP

LED Guide



For Additional Help: Please consult the troubleshooting section of the user manual if the Quick Install Guide didn't resolve your issue. For further questions or personal assistance, email us or call us at:

support@airsonics.com

(800) 651-0175

ADDENDUM: SEGREGATING VIDEO AND INTERNET PORTS

Step 1 - Extend the VLAN on the ONT / RG WAN port for the video subnet to the video LAN port. For example, if 10 is the access video network VLAN then enable and tag the video LAN port the same.

Step 2

- A. Login to the AP at <http://10.0.0.2> using a browser and user name: **admin** password: **last 4 digits of the MAC address**
- B. Click on the Video Wireless Setup
- C. In the VLAN ID field, enter the VLAN which is tagged on the video LAN port on the ONT/GW and click Apply
- D. Click on the Switch Settings
- E. Check the Block Traffic Between Ports option and click Apply
- F. Now you can connect the Video LAN port of the RG/ONT to the Blue and the Internet LAN port to the Black GigE port on the GXT542U, respectively.

FCC Statement:

Federal Communication Commission Interference 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 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 Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this 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.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.

This device is restricted for indoor use.

IMPORTANT NOTE:

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 20 cm between the radiator & your body.