

G.hn over Coax Wi-Fi Gb Ethernet Bridge

User's Guide

V1.0

INTRODUCTION

This G.hn to Wi-Fi Gb Ethernet bridge connects any wireless and Ethernet devices to a high speed connection of the coax network for Internet access. This bridge brings you the newest Ethernet compatible technology that uses the coaxial cable as the network's physical wiring thereby eliminating the need to install new wiring in a residential environments. It is designed to operate on the coaxial cable network.

This bridge allows you to connect PCs, STB and wireless devices to Internet by simply plugging into the existing coaxial F-Type connector.

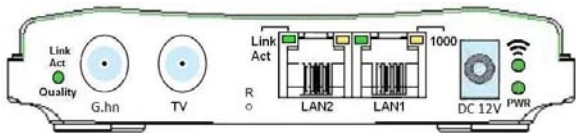
Features

- Plug & Play
- Using existing coaxial TV cable to build a network
- Shares Internet access and streaming video
- 1 port connection compliant with 2Gbps G.hn over Coax standard
- 2 Standard 100/1000BaseT Gigabit Ethernet ports for connecting to Ethernet or PC or STB
- IEEE 802.11 b/g/n/a/ac Wi-Fi MIMO Interface
- QoS Priority Mapping Support
- Configurable WiFi SSID and Key/Password
- Statistics and Status Information Support

HARDWARE INSTALLATION

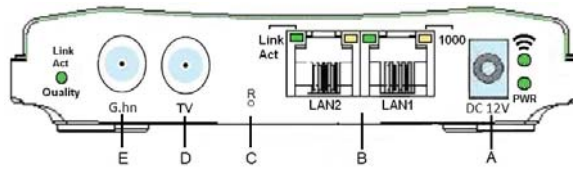
Parts Names and Functions

LED Indicators on the Rear Panel



Port	LED	Status		
		ON	Flashing	OFF
DC 12V	PWR	Powered by DC12V	N/A	Not powered
LAN1	Link Act	Link	Receive or Transmit	Disconnect or Link fail
	1000	1000Mbps	N/A	10Mbps or 100Mbps
LAN2	Link Act	Link	Receive or Transmit	Disconnect or Link fail
	1000	1000Mbps	N/A	100Mbps
WiFi		Link	Receive or Transmit	Disconnect or Link fail
G.hn	Link Act	Link	Receive or Transmit	Disconnect or Link fail
	Quality	Green:High Orange:Medium Red:Low		

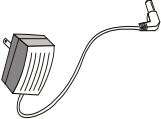
Ports on the Rear Panel



	Port Name	Type	Functions
A	DC 12V	DC	Connect to the power adapter plug.
B	LAN1/LAN2	RJ-45	Connect to PC or STB or other Ethernet devices.
C	R		Factory Reset Button
D	TV	F	Connect to TV
E	G.hn	F	Connect to G.hn devices

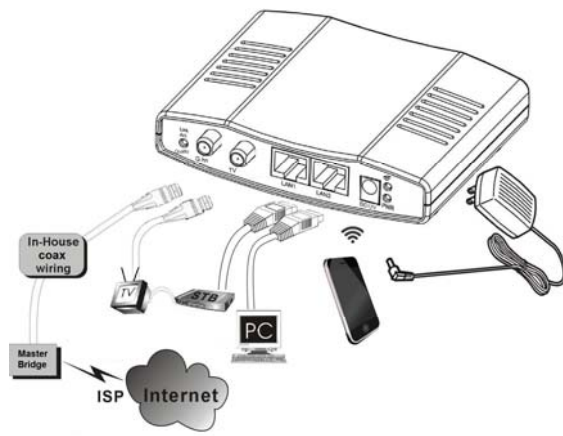
Essential Hardwares

Items Included	Description	Purpose
	G.hn to WiFi GbE Bridge	Main Unit
	Coaxial Cable (F-Type/RG-59U or RG-6)	Connects from G.hn port to coax F-Type connector on the wall outlet.

	CAT5 Ethernet cable	Connects from LAN port to Ethernet enabled devices as PC or STB
	DC12V Power adapter	Connects from Power port of the main unit into a wall outlet

Hardware Connections

1. Select a convenient location for the bridge near the PC or Ethernet device to which it will be connected. The bridge should be kept away from excessive heat.
2. Using one coaxial cable to connect the **G.hn** port to F-Type connector on the wall. Using another coaxial cable to connect the other F-type **TV** port to TV set (optional). ***Please make sure the coaxial network is well grounded.***
3. Connect the **LAN1/LAN2** port to your Ethernet-equipped device.
4. Connect the power adapter to the **DC 12V** port into a wall outlet.



The figure above shows the connection diagram of coax network. Follow the same steps to connect any Ethernet devices such as a STB or PC, and Wi-Fi devices to the coax network.

Now you should have connected the **LAN** port, **G.hn** port and the **DC 12V** port to the appropriate devices or lines. LED will be as:

PWR	ON
LAN Link/Act	ON
WiFi (WiFi)	ON
G.hn Link/Act	ON (Green or Orange)

For more information on LEDs, see section entitled "[LED Indicators on the Rear Panel](#)"

TROUBLESHOOTING

The bridge has been designed to be a reliable and easy to use connection device. Please refer to the list below to aid in troubleshooting.

The Power (green PWR) LED is off.

- *Make sure the power adapter is properly plugged into a live electrical outlet.*

The LAN(Ethernet) LED is off.

- *Make sure the connection to LAN port is secure.*
- *The Ethernet device to which you are connected should be powered on and properly configured.*

The G.hn Link/Act/Quality LED is off or red

- *Make sure the connection to G.hn port is secure.*
- *G.hn device to which you are connected should be powered on and properly configured.*
- *Make sure the quality of coaxial connector and cable is good.*

The (WiFi) LED is off

- *Power off then power on the G.hn device.*

Cannot connect to the Wi-Fi Bridge.

- *Make sure if the settings are correct.*
- *The default SSID and the default WPA/WPA2 pre-shared key are on the label of device.*
- *Restore the default factory reset by pressing R button more than 3 sec (LED flashing), then release the button while LED steady ON.*

SPECIFICATIONS

Standards

- IEEE 802.3u 100BaseT Fast Ethernet
- IEEE 802.3ab 1000BaseT Gigabit Ethernet
- IEEE 802.11b/g/n/a/ac compliant
- ITU-T G.9960/G.9961 G.hn over Coax

Data Rates

- G.hn: 2Gbps (6-200MHz / Filter 216MHz)
- Ethernet: 100 /1000 Mbps
- Wi-Fi : 866M(5GHz)/300Mbps(2.4GHz) max

Transmission Range

- G.hn : Up to 80dB attenuation
- Ethernet: 100 meters maximum

Power Consumption

- 12V DC, 8 watt

Certifications

- CE, FCC Part 15, VCCI

LEDs

- Power
-  (WiFi) Link/Activity
- Ethernet Link/Activity/Speed
- G.hn Link/Activity/Quality

Connectors

- Two F-Type connectors, one for connecting with G.hn device, and one for TV Bypass
- Two RJ-45 for 100/1000Mbps Ethernet

**Federal Communications Commission (FCC)
Statement**

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

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.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

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 of the device.

FCC RF 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 20cm between the radiator & your body. This transmitter must not be

co-located or operating in conjunction with any other antenna or transmitter.