ALL-GHN101-2wire

GHN Bridge Konverter 2-Wire

USER MANUAL

INTRODUCTION

This G.hn to Gigabit Ethernet bridge connects any Ethernet device to a high speed access device or to a Home Networking LAN for Internet access. This bridge brings you the newest Ethernet compatible technology that uses the telephone wiring as the network's physical wiring thereby eliminating the need to install new wiring. It is designed to operate on the telephone wire installed in homes.

This bridge allows you to connect PCs and Ethernet enabled devices, such as FTTH ONU, DSL Modem, PC, HUB and STB, to a Home Networking LAN by simply plugging into the existing RJ-11 jacks

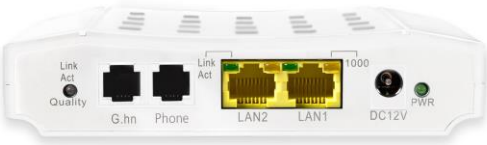
Features

- Plug & Play
- Using existing phoneline to build a home network
- Shares Internet access and streaming video
- 1 port connection compliant with G.hn over Phoneline standard
- 2 Standard 100/1000BaseT Gigabit Ethernet ports for connecting to Ethernet or FTTH/DSL modem
- MDI/MDIX Auto Crossover Support
- QoS Priority Mapping Support
- Configurable QoS, TagVLAN, Bandwidth Control
- Statistics and Status Information Support

HARDWARE INSTALLATION

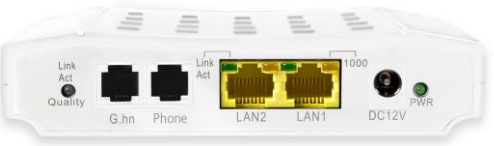
Parts Names and Functions

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
G.hn	**Link Act**	Link	Receive or Transmit	Disconnect or Link fail
	Quality	Green: High Orange: Medium Red: Low		

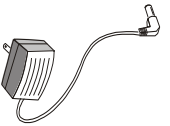
Ports on the Rear Panel



	Port Name	Type	Functions
A	**DC 12V**	DC	Connect to the power adapter plug.
B	**LAN1/LAN2**	RJ-45	Connect to Ethernet port on FTTH or xDSL Modem or Switch for Internet Access.
C	**Phone**	RJ-11	Connect to Phone
D	**G.hn**	RJ-11	Connect to G.hn devices

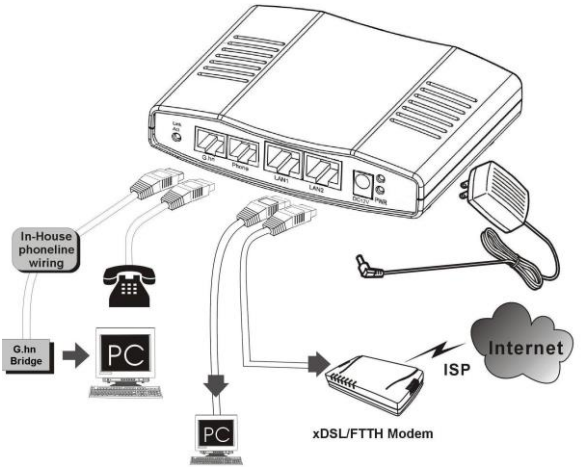
Essential Hardwares

Items Included	Description	Purpose
	G.hn to Gb Ethernet Bridge	Main Unit
	Telephone wire	Connects from G.hn Port to phone jack 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 telephone wire to connect the G.hn port to RJ-11 jack on the wall. Using another telephone wire to connect the other **Phone** port to a telephone set (or connect the **Phone** port to xDSL modem).
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 how to connect a FTTH/xDSL modem to a home phoneline network. Follow the same steps to connect any Ethernet device such as a STB or PC, to a home phoneline 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
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 Phoneline connector and cable is good.*

SPECIFICATIONS

Standards

- IEEE 802.3 10BaseT Ethernet
- IEEE 802.3u 100BaseT Fast Ethernet
- IEEE 802.3ab 1000BaseT Gigabit Ethernet
- ITU-T G.9960/G.9961 G.hn over Phoneline

Data Rates

- G.hn: 720Mbps (6-76 MHz)
- Ethernet: 100 /1000 Mbps

Transmission Range

- Ethernet: 100 meters maximum

Power Consumption

- 12V DC, 4 Watt

Certifications

- CE, FCC Part 15 & Part 68

LEDs

- Power
- Ethernet Link/Activity/Speed
- G.hn Link/Activity/Quality

Connectors

- Two RJ-11 connectors, one for connecting with G.hn device, and one for Phone/xDSL Bypass
- Two RJ-45 for 100/1000Mbps Ethernet

Cables

- G.hn: standard home phone wire
- Ethernet: CAT5E or better UTP

Safety Warnings

For your safety, be sure to read and follow all warning notices and instructions.

- Do not open the device. Opening or removing the device cover can expose you to dangerous high voltage points or other risks. Only qualified service personnel can service the device. Please contact your vendor for further information.
- Do not use your device during a thunderstorm. There may be a risk of electric shock brought about by lightning.
- Do not expose your device to dust or corrosive liquids.
- Do not use this product near water sources.
- Make sure to connect the cables to the correct ports.
- Do not obstruct the ventilation slots on the device.

ALLNET GmbH Computersysteme declares that the device ALL-GHN101-2wire is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. The Declaration of conformity can be found under this link:

www.allnet.de/downloads.html.