

128Mbps HPNA3.0 over Coax Ethernet Bridge

Special Edition for MDU EP

User's Guide

V1.3

M73-APOxx-xxx

INTRODUCTION

This HCNA (HomePNA3.0 over Coax) to Ethernet bridge connects any Ethernet device to a high speed access network or to a LAN 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. It is designed to operate on the coaxial cable installed in building.

This bridge allows you to connect PCs and Ethernet enabled devices, such as STB and VoIP gateway, to a LAN by simply plugging into the existing coaxial F-Type connector.

Features

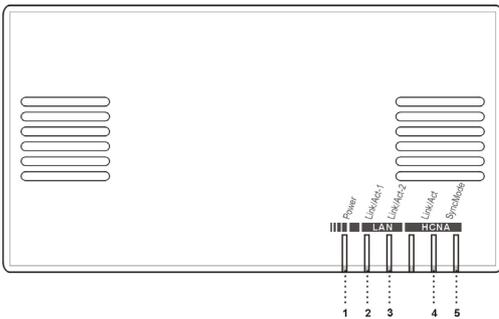
- Plug & play, as EP (Endpoint) while connects to a Coax network controlled by MDU Master bridge
- Using existing coaxial cable to build a home network
- Shares high speed Internet access and streaming video
- 1 port 128Mbps connection compliant with HomePNA 3.0 over Coax (HCNA) standard
- 2 standard 10/100BaseT fast Ethernet ports
- 10/100Mbps auto negotiation support
- MDI/MDIX auto crossover support
- QoS priority mapping support

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HARDWARE INSTALLATION

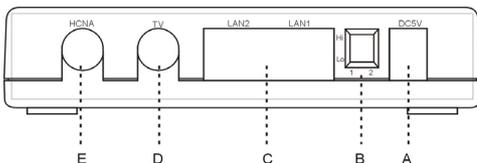
Parts Names and Functions

LED Indicators on the Front Panel



LED	Status		
	Glowing	Dimming	Flashing
① Power	Powered by DC5V	Not powered	N/A
② LAN Link /Act	LAN 1 Link	Disconnect or Link fail	Receive or Transmit
③ LAN Link /Act	LAN 2 Link	Disconnect or Link fail	Receive or Transmit
④ HCNA Link /Act	HCNA Link	Disconnect or Link fail	Receive or Transmit
⑤ HCNA SyncMode	Sync. Mode	Async. Mode	N/A

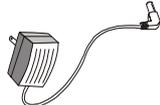
Ports on the Rear Panel



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	Port Name	Type	Functions
A	DC5V	DC	Connect to the power adapter plug
B	DIP Switch	DIP	Reserved
C	LAN1/LAN2 (Ethernet)	RJ-45	Connect to Ethernet port of PC or STB or VoIP Gateway
D	TV	F	Connect to TV
E	HCNA	F	Connect to F-Connector (on the Wall) to HCNA MDU Master bridge

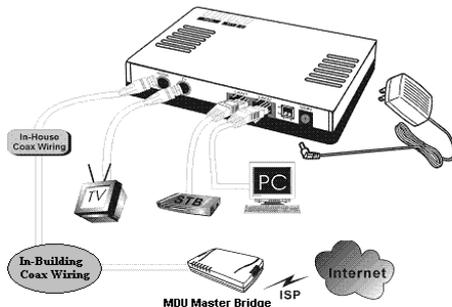
Essential Hardwares

Items Included	Description	Purpose
	HCNA to Ethernet Bridge	Main Unit
	Coaxial Cable (F-Type/ RG-59U)	Connects from HCNA port to coax F-Type connector on the wall outlet.
	CAT5 Ethernet cable	Connects from LAN port to Ethernet enabled devices as PC
	DC5V Power adapter	Connects from power port of the main unit into a wall outlet

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Hardware Connections

1. Select a convenient location for the bridge near the PC or STB or VoIP gateway. The bridge should be kept away from excessive heat.
2. Using one coaxial cable to connect the **HCNA** port to F-Type connector on the wall. Using another coaxial cable to connect the other F-type **TV** port to TV set.
3. Connect the **LAN1/LAN2** port to your Ethernet-equipped device (PC/STB...).
4. Connect the power adapter to the **DC5V** port into a wall outlet.



The figure above shows how to connect to in-house and in-building coaxial cable network, and to connect any Ethernet device such as PC or STB or VoIP gateway, to a coaxial cable network via the bridge.

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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) LED is off.

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

The LAN(Ethernet) or HCNA Link/Act LED is off.

- Make sure the connection to these two ports is secure.
- The Ethernet or HCNA device to which you are connected should be powered on and properly configured.

The HCNA SyncMode LED is off.

- Make sure if the coaxial cable is well connected with the F-connector on wall. Occasionally, the pin of coaxial cable may be not in a right position and not properly connect with female connector on wall.
- "SyncMode" LED on the EP bridge will be ON if there is a MDU Master bridge detected on the coaxial cable. "SyncMode" LED, on the MDU Master bridge will always be ON..
- Please consult your service provider.

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Now you should have connected the **LAN** port, **HCNA** port and the **DC5V** port to the appropriate devices or lines. LED will be as:

POWER	ON
LAN Link/Act	ON
HCNA Link/Act	ON
HCNA SyncMode	ON

Note: Just Plug and Play simply, no further setting.

For more information on LEDs, see section "**LED Indicators on the Front Panel**"

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SPECIFICATIONS

Standards

- IEEE 802.3 10BaseT Ethernet compliant
- IEEE 802.3u 100BaseT Fast Ethernet compliant
- HomePNA 3.0 over Coax (HCNA) compliant

Data Rates

- HCNA: 128 Mbps
- Ethernet: 10/100 Mbps

Distances

- HCNA : 1200 meter maximum between the two farthest nodes on LAN
- Ethernet: 100 meter maximum

Power Consumption:

- 5V DC IN, Less than 4 watt

Certifications

- VCCI, CE, FCC Part 15

LEDs

- Power
- Ethernet Link/Activity
- HCNA Link/Activity; SyncMode

Connectors

- Two F-Type connectors, one for connecting with HCNA device, and one for TV
- Two RJ-45 for 10/100M Ethernet

Cables

- HCNA Network: F-Type RG-59U coaxial cable
- Fast Ethernet: CAT5 or better UTP

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