MoCA Adapter

ZMC-201

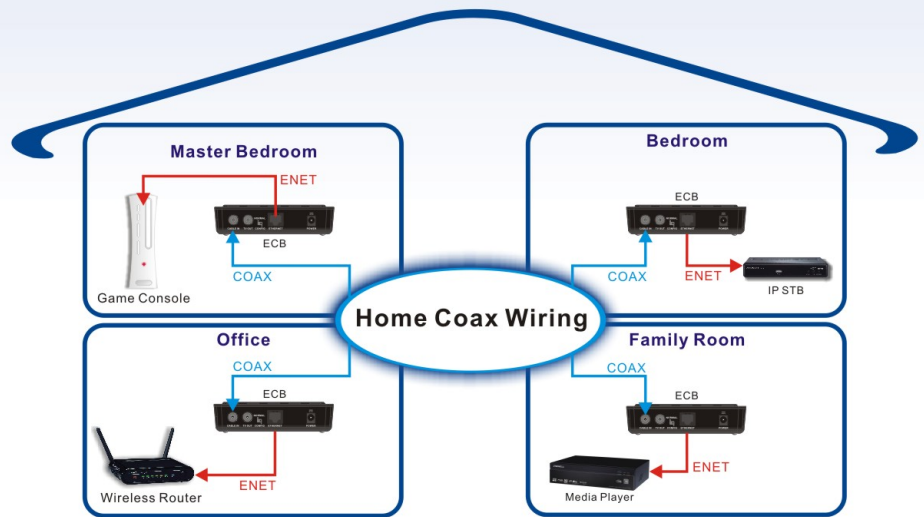## Typical Applications

The ZMC-201 utilizes the EN2510 Coaxial Network Controller SoC to distribute multiple streams of high-definition video, digitized voice call and broadband data on the same coaxial cable network without having to interrupt existing cable broadband services.
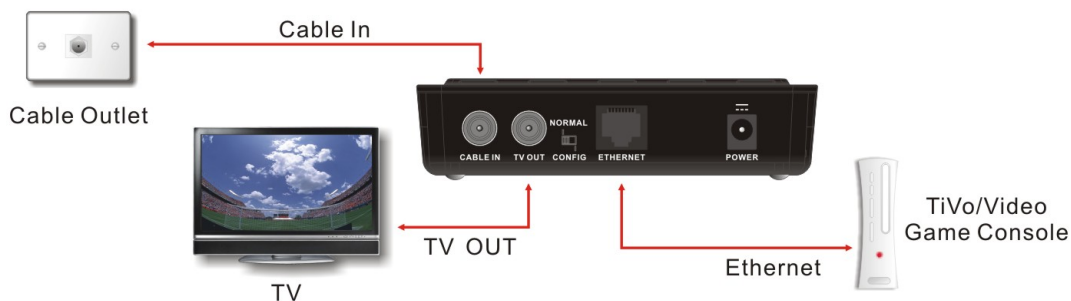
The typical applications include:

▶ **High-speed Network Streamer for hi-definition internet videos**
▶ **DVR / PVR Network Bridge for sharing contents:**
  • **Photos**
  • **Music**
  • **Videos (ideal for HD DVR, Digital Media Recorder and TiVo™ DVR)**
▶ **On-line enabler for gaming consoles:**
  • **Xbox360™**
  • **Playstation3™**
  • **Gaming PC**
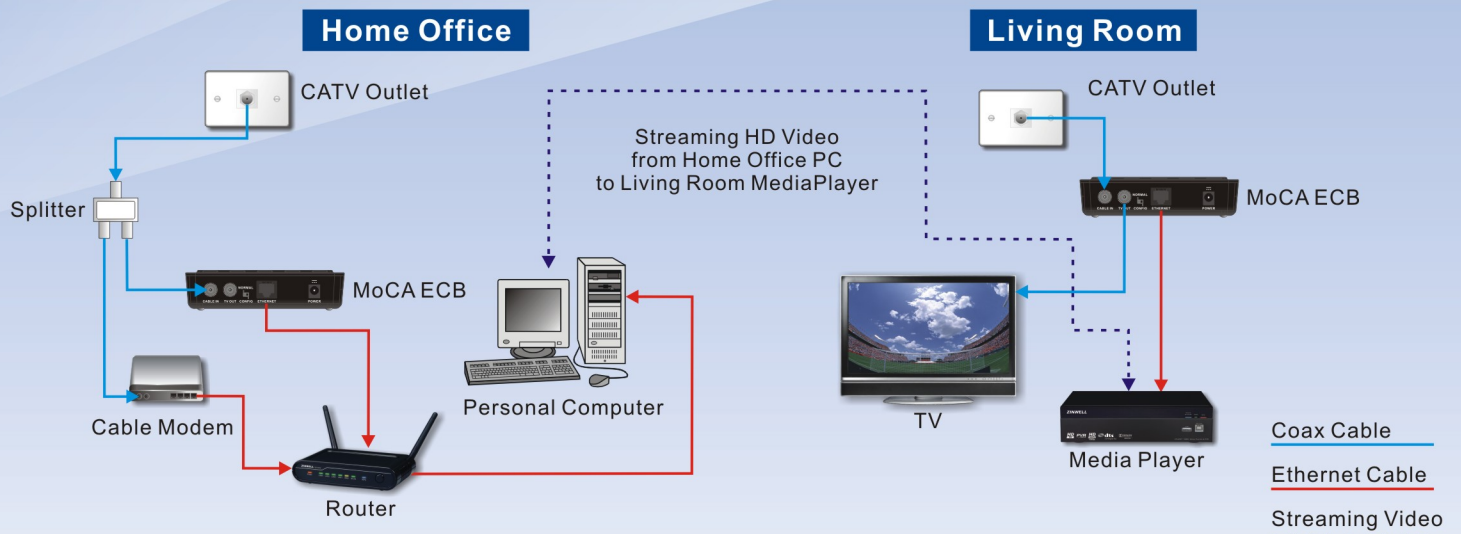▶ **Wired or wireless network extender**

Installation

The following section provides instructions to connect the ZMC-201 device to your home cable network.

a. Connect a coaxial cable between the cable outlet and the Cable In port on the back panel of the ZMC-201.

b. Connect the power adapter between the power outlet and the +12V Power port on the ZMC-201. The Power LED on the ZMC-201 will illuminate when the power adapter is properly connected.

c. If there is Cable TV and/or terrestrial (OTA) antenna service being received in the room and you wish to continue viewing the service, connect a coaxial cable from your TV to the TV Out port on the ZMC-201. This will enable your existing devices to continue receiving television service. If you are not using TV Out port, skip to step "d".

d. Locate other coaxial cable outlets and repeat step "a" through "c" for all of your ZMC-201s.

e. Connect the Ethernet cable between the Ethernet port of the ZMC-201 and your Ethernet enabled device (i.e. Computer, Gaming Console, NAS... etc.).

f. After the ZMC-201 has been connected and formed a MoCA coaxial network with at least one other node, the MoCA LED on the front panel of each ZMC-201 in the network will illuminate.

g. If you wish to install a cable modem in the coaxial network, follow the instructions and refer to the diagram below.

h. Connect a 2-way cable splitter to the cable outlet. Connect one of the outputs from the cable splitter to your cable modem and connect the other output from the cable splitter to the Cable In port on the ZMC-201.

I. Connect Ethernet cables between the cable modem and the Ethernet router, between the ZMC-201 and the Ethernet router, and between the Ethernet enabled device and the Ethernet router as shown below:

Home Office

CATV Outlet
Splitter
MoCA ECB
Cable Modem
Personal Computer
Router

Streaming HD Video from Home Office PC to Living Room MediaPlayer

Living Room

CATV Outlet
MoCA ECB
TV
Media Player

Coax Cable
Ethernet Cable
Streaming Video

Note: Any sudden change in the cable plant or network topology in the home, (i.e. connecting and disconnecting cables or other devices on the cable network), may cause reset of the link.

Technical Specifications

RF Interface	Connector : F-type (for USA) Impedance : 75Ω
Ethernet Interface	Connector : RJ-45 Configuration : 10/100/1000 Mbps Ethernet x 1
Network Center Frequency Range	1150 ~ 1500MHz
Network Frequency Range	1125 ~ 1525MHz
Max Transmit Power	+2dBm typical
Link Conditions	Min Attenuation(>225Mbps) 10dB Max Attenuation(>225Mbps) 50dB Max Attenuation(>30Mbps) 75dB
Network Channels	8
Network Channels Bandwidth	50MHz
Network Size	16 Devices (including NC)
Max Physical Data Rate	Up to 270Mbps
MoCA Standards	MoCA1.1
Power Requirement	Power Consumption : (TBC) Watts Input Range : 100-240VAC, 50/60Hz External power adapter: 12VDC, 1A
Environmental Conditions	Operation Temperature Range : 0 ~ 40 °C Storage Temperature Range : -5 ~ 65 °C Operating Humidity : 10% ~ 95% Non-condensing

CABLE IN   TV OUT   CONFIG   ETHERNET   POWER
NORMAL