ScreenBeam®

Coaxial over Ethernet Conversion

Single

User Guide

Bonded MoCA Network Adapter

Model # ECB7250

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Getting Started

Introduction

Congratulations for purchasing the ScreenBeam ECB7250 MoCA 2.5 Network Adapter. The Adapter is a simple, flexible solution for extending a home network. By leveraging the ubiquity of coaxial cabling within the modern home, the Adapter provides an Ethernet Internet port anywhere a coaxial connection is available.

This user manual explains the procedures needed to connect the Adapter.



Getting Started

Package Contents

- ECB7250 MoCA 2.5 Network Adapter
- Coaxial cable
- Power adapter
- Quick Start Guide
- Ethernet cable

Requirements

- Available coaxial port in installation areas
- Available electrical wall socket in installation areas

Features

- Ethernet port (2.5 gigabit)
- Coax In coaxial port (v. 2.5)
- MoCA Protected Setup
- Power, Coax, and Ethernet LEDs:
    - Power LED: glows solid green when Adapter is powered up.
    - Coax LED: glows solid green with connection on the Coax port, LED blinks green when data is transferred across port.
    - Ethernet LEDs (2): located on upper right and left corners of the Ethernet port; left LED glows green on connection; right LED blinks green when data is transferred across port.

Connecting the Adapters

Connecting the Adapter is a relatively simple process. First, connect one Adapter to the broadband modem or router and the coaxial network to establish the Internet signal. Then, additional Adapters can be installed throughout the home or office at any location Ethernet Internet access is needed, and an available coaxial port is available.

Connecting the First Adapter

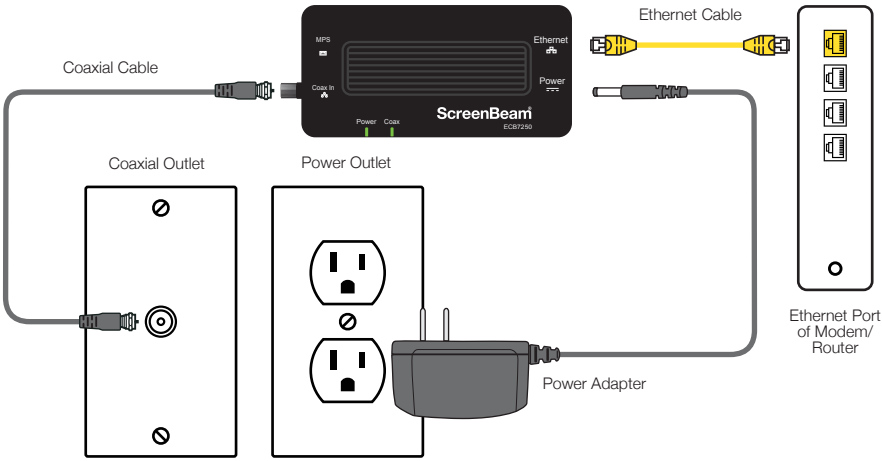
The first Adapter must be connected to the broadband modem or router and the coaxial network. This Adapter takes the Internet signal from the modem/router and delivers it to the coaxial network.

To connect the first Adapter:

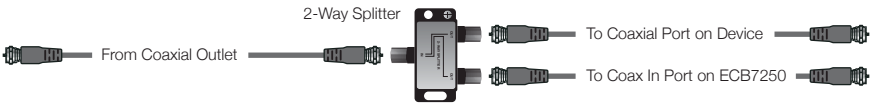
1. Connect a coaxial cable to a nearby coaxial outlet.
2. Connect the other end of the coaxial cable to the Coax In coaxial port on the side of the Adapter.
3. Connect one end of an Ethernet cable to the Ethernet port of the modem/router.
4. Connect the other end of the Ethernet cable to the Ethernet port on the side of the Adapter.
5. Plug the provided power adapter into the Power port on the side of the Adapter.
6. Plug the other end of the power adapter (external, 5V DC, 2A, made by APD, model #WB-10E05FU) into an electrical outlet.

Connecting the Adapters

When complete, the setup should look similar to the figure below:



If Coaxial Port is Being Used buy Another Device:



The Internet signal is now being delivered across the coaxial network.

MoCA Protected Setup (MPS)

By default, MoCA encryption is disabled to ensure that the individual devices can “see” each other. If you would like to enable MPS, you will need to login to the firmware loaded on the Adapter. To do this, enter the following URL in a web browser on a computer connected via Ethernet to the Adapter:

http://192.168.144.200

Connecting the Adapters

You will be asked to login. The user name is “admin" and the password is “screenbeam”. Once you have enabled MoCA encryption, you can use the MPS push button to synchronize the encryption password on each MoCA 2.5 adapter connected via coaxial cable.

Using a Coaxial Splitter

If the coaxial port is already being used by another device (a set-top box, for example), follow these steps:

1. Disconnect the coaxial cable from the connected device. Leave the other end connected to the coaxial wall outlet.
2. Get a 2-way coaxial splitter (not included).
3. Connect the coaxial cable disconnected in step 1 to the single (“In”) port on the coaxial splitter.
4. Connect a coaxial cable (not included) to one of the dual (“Out”) ports on the coaxial splitter.
5. Connect the other end of the coaxial cable from step 4 to the coaxial port on the device (disconnected in step 1).
6. Connect another coaxial cable (not included) to one of the dual (“Out”) ports on the coaxial splitter.
7. Connect the other end of the coaxial cable from step 6 to the coaxial port of the Adapter.

When complete, the setup should look similar to the inset diagram in the figure on the preceding page.

Connecting the Adapters

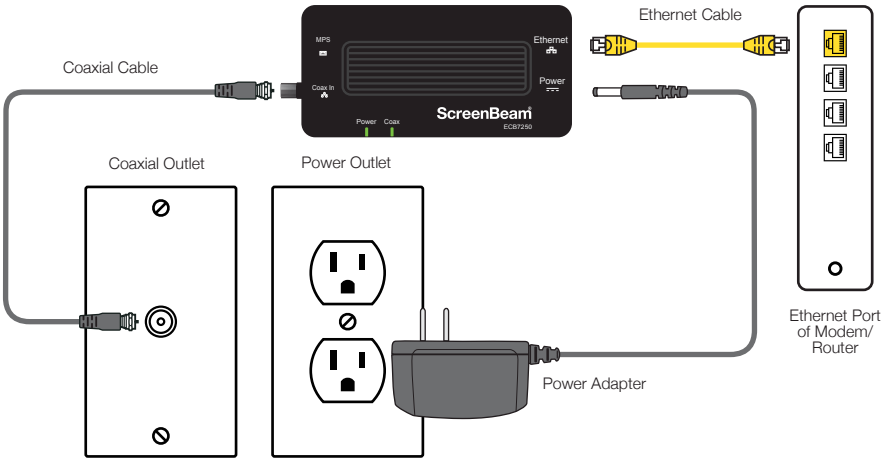
If necessary, additional Adapters can be placed at locations around the home or office that need an Ethernet Internet connection, but currently only have a coaxial port.

To connect additional Adapters:

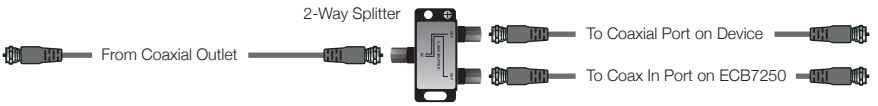
1. Connect a coaxial cable to a nearby coaxial outlet.
2. Connect the other end of the coaxial cable to the Coax In coaxial port on the side of the Adapter.
3. Connect one end of an Ethernet cable to the Ethernet port of the modem/router.
4. Connect the other end of the Ethernet cable to the Ethernet port on the side of the Adapter.
5. Plug the provided power adapter into the Power port on the side of the Adapter.
6. Plug the other end of the power adapter (external, 5V DC, 2A, made by APD, model #WB-10E05FU) into an electrical outlet.

Connecting the Adapters

When complete, the setup should look similar to the figure below:



If Coaxial Port is Being Used buy Another Device:



The device connected to the Ethernet port is now connected to the Internet via the coaxial network. Repeat this process to install additional Adapters throughout the home.

Connecting the Adapters

If the coaxial port is already being used by another device (a set-top box, for example), follow these steps:

1. Disconnect the coaxial cable from the connected device. Leave the other end connected to the coaxial wall outlet.
2. Get a 2-way coaxial splitter (not included).
3. Connect the coaxial cable disconnected in step 1 to the single (“In”) port on the coaxial splitter.
4. Connect a coaxial cable (not included) to one of the dual (“Out”) ports on the coaxial splitter.
5. Connect the other end of the coaxial cable from step 4 to the coaxial port on the device (disconnected in step 1).
6. Connect another coaxial cable (not included) to one of the dual (“Out”) ports on the coaxial splitter.
7. Connect the other end of the coaxial cable from step 6 to the coaxial port of the Adapter.

When complete, the setup should look similar to the inset diagram in the figure on the preceding page.

Specifications

Model Number	ECB7250 (MoCA 2.5 Network Adapter)
IP	LAN MoCA (v. 2.5; up to 2.5 Gbps throughput) LAN Ethernet Port 10/100/2500 (1)
LAN Connections	Coax In Frequency Range - Extended D-band: 1125MHz ~1675MHz;
LED Indicators	Power, Coax
Power	External, 5V DC, 2A, 1.3 mm diameter connector plug Made by APD, model #WB-10E05FU
Regulatory	FCC, UL 60950-1, CUL, IC
Environmental	
Ambient temperature	0ºC to 40ºC (32ºF to 104ºF)
Storage temperature	-20ºC to 85ºC (-4ºF to 185ºF)
Operating humidity	10% to 85% non-condensing
Storage humidity	5% to 90% non-condensing

Note: Specifications are subject to change without notice.

Notices

Warranty

This product has a one-year Limited Hardware Warranty and 90-day free software updates from date of purchase.

Local Law

This Limited Warranty Statement gives the customer specific legal rights. The customer may also have other rights which vary from state to state in the United States, from province to province in Canada, and from country to country elsewhere in the world.

To the extent that this Limited Warranty Statement is inconsistent with local law, this Statement shall be deemed modified to be consistent with such local law. Under such local law, certain disclaimers and limitations of this Warranty Statement may not apply to the customer.

Go to https://www.screenbeam.com/warranty-consumer for more information.

Important Safety Instructions

Basic safety precautions should always be followed to reduce the risk of fire, electrical shock, and personal injury, including the following:

- Do not use this product near water – for example, near a bathtub, kitchen sink, laundry tub, or swimming pool, or in a wet basement; only clean with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus including amplifiers that produce heat.
- Do not use the telephone to report a gas leak in the vicinity of the leak.

Notices

- Use only the power cord and batteries indicated in this manual if applicable. Note: you may need to reword for batteries or adapters.
- Do not dispose of batteries in fire, as they may explode – check with local codes for possible special disposal instructions if applicable.

Coaxial Cable

If applicable, the coaxial cable screen shield needs to be connected to the Earth at the building entrance per ANSI/NFPA 70, the National Electrical Code (NEC), in particular Section 820.93, “Grounding of Outer Conductive Shield of a Coaxial Cable,” or in accordance with local regulation.

FCC Class B 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 and correct the interference by implementing one or more of the following measures:

- Reorient or relocate the device;
- Increase the separation between the equipment and receiver;
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected (applicable only to powerline products);
- Consult the dealer or an experience radio or television technician for help.

Notices

Declaration of Conformity for Products Marked with the FCC logo–USA Only

This device complies with Part 15 of the FCC Rules license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference;
2. This device must accept any interference received, including interference that may cause undesired operation of the device.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by ScreenBeam Inc., may void the user's authority to operate the equipment.

Declaration of Conformity for Products Marked with the Industry Canada (IC)–Canada only

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause harmful interference;
2. This device must accept any interference received, including interference that may cause undesired operation of the device.

ScreenBeam®

Contact Information

For questions regarding your product or the FCC/Industry Canada declaration, contact:

ScreenBeam Inc.
220 Devcon Drive, San Jose, CA 95112

Technical Support

Go to retailsupport.screenbeam.com for product support, updates, and more information including:

- Firmware updates
- Troubleshooting
- Registration
- FAQs