FireNEX-COAX-S800™ User's Manual

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Table of Contents

1.0 Introduction
2.0 Package Contents
3.0 System Requirements
4.0 Specifications
5.0 Features
6.0 Using the FireNEX-COAX-S800™
7.0 Frequently Asked Questions
8.0 Optional Accessories

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1.0 Introduction

Congratulations on your purchase of the Newnex FireNEX-COAX-S800™ repeater. The Newnex FireNEX-COAX-S800™ repeater is the newest in IEEE1394 technology. The FireNEX-COAX-S800™ is capable of sending IEEE1394 signals over bus power across a COAX cable at a repeater-to-repeater distance of 60 meters up to 800Mbps. The FireNEX-COAX-S800™ is IEEE1394b compliant and is backward compatible with IEEE1394a devices.

2.0 Package Contents

- Two FireNEX-COAX-S800™ repeaters
- One User's Manual

* Standard 75Ω COAX cable, AC/DC adapter, and standard IEEE1394b/firewire copper cables could be ordered separately from Newnex Technology Corp.

3.0 System Requirements

- PC with IEEE1394b host controller card installed
- Windows 98 SE and later versions
- Mac OS X or later versions
- Linux- with current kernels

8.0 Optional Accessories

P/N: FireNEX-Power

Optional 12V power adapter. Shown is USA Style plug. Power adapter with plug styles for other countries are available on the market or order as a special item from Newnex Technology Corp.

P/N: RG6-N-xxx

Optional standard 75Ω COAX cable. Various lengths available on the market or order as a special item from Newnex Technology Corp.

7.0 Frequently Asked Questions

What is the maximum speed of the FireNEX-COAX-S800™?

The FireNEX-COAX-S800™ can support up to the maximum speed of 800Mbps.

What is the length that the FireNEX-COAX-S800™ can support?

The FireNEX-COAX-S800™ will support up to the maximum length of 60 meters with RG6 COAX cables. Using other 75Ω cables can reduce the maximum length.

Do I have to use two FireNEX-COAX-S800™ repeaters to make it work?

Yes, a pair of FireNEX-COAX-S800™ is needed for the IEEE1394 over COAX cable extension. Both FireNEX-COAX-S800™ units can act as either the transceiver or the receiver.

Which FireNEX-COAX-S800™ connects to the host system and which FireNEX-COAX-S800™ connects to the device?

The host system and the devices can be connected to either FireNEX-COAX-S800™ units.

4.0 Specifications

- Dimensions: 79mm x 30mm x 60mm
- Weight: 140g
- Power Input: 8V-19V
- Optional Power Adapter: AC Input: 100V ~240V 50/60Hz
  DC Output: 12V, 1A
  DC Jack: 5.5mm x 2.1mm
- Temperature Range: Up to 50° C
- Power Consumption: (DC12V/0.24A) 2.9W
- Maximum length (repeater-to-repeater): 60 meters (with RG6 cables)

5.0 Features

- Bus power through both 9 pin ports
- Bus power through the standard 75Ω BNC port
- COAX Cable Bus Power: When a 12V adapter is only connected to the repeater on the host side, attention must be paid when bus-powering the device and other repeater through the COAX cable.

  The maximum length of the COAX cable for this bus-power set-up depends on the power consumption of the device. For example, to sufficiently power the other repeater and a device like an industry camera that consumes 2.9W of power the length of the COAX shall be no longer than 60 meters.

When using a longer cable or a device with higher power consumption, a voltage adapter greater than 12V may be needed.

- Compliant with IEEE1394a and IEEE1394b specifications
- Data transfer rate at 100/200/400/800Mbps
- Two 9-pin IEEE1394 bilingual copper ports with industrial locking screws
- One standard 75Ω BNC port
- Reach up to a repeater-to-repeater distance of 60 meters using a standard 75Ω COAX cable
- RoHS compliant

6.0 Using the FireNEX-COAX-S800™

It is important to follow the installation instructions in order for your FireNEX-COAX-S800™ to operate properly:

1. Connect the two repeaters using a standard 75Ω COAX cable.

- Use a standard 75Ω COAX cable

2. Connect the device to one repeater using a 9 pin port.

3. Connect the host to the other repeater using a 9 pin port.

4. Connect the external DC power adapter, if needed.

5. Operate the IEEE1394 device just like it is directly connected to the host system.

There is one green power LED on the front panel. It illuminates green when the FireNEX-COAX-S800™ is powered.

There is one orange activity LED. When the LED is blinking, there is no BNC connection. A solid LED indicates the two repeaters are connected through the BNC port.

Make sure that the LED on each repeater illuminates ***solid green and orange*** when the two repeaters are connected through the COAX cable. (If you do not see a solid light for the LEDs after several attempts to make power connections to the repeaters, or if the activity light isn't solid when the two repeaters are connected through the COAX cable, please either call (408) 986-9988 or email support@newnex.com for assistance.)

The FireNEX-COAX-S800™ should be stored in a dry place with air-flow. Do not place the FireNEX-COAX-S800™ on top of equipment that produces heat.