PCE122IR

HDMI Over Single Coaxial Splitter/Extender

w/ IR Pass-Thru

User Guide

WWW.AAVARA.COM

AAVARA INNOVATION CORP.

Rev 1.0

TABLE OF CONTENTS

Chapter 1 Introduction

Aavara® PCE122IR HDMI over Single Coaxial Extender is offering 100M HDMI 1080p video with audio transmission to simplify installations. Coaxial cable is very suitable for both in-door and out-door deploy, plus PCE122IR ultra long distance ultra high video quality transmission makes PCE122IR the perfect solution for both signage and residential AV applications. The PCE122IR also boasts built-in 1 to 2 Coaxial Splitter in Sender and One Coaxial Cascade output in Receiver which brings greater flexibility as it supports up to 5 layers cascade across 600M more HD video and audio transmission, for 10 connected TVs, displays or projectors or more. The BNC connector design also ensures a solid coaxial cable connection for vibration and shock resisting.

1.1 Features

- 100M 1080p video transmission with HD audio.
- 1 to 2 Coaxial Splitter built-in in Sender for two Receivers connectivity.
- One Coaxial Cascade output built-in in Receiver for further extension.
- 5 layers Cascadable for up to 600M video transmissions and up to 10 TV/Display/Projector connected. Or more is possible.
- 38KHz IR control signal pass-thru to control video source from TV/Display side.
- Support HDMI 10-bit Deep Color.
- Serial digital video transmitter for 1080i/p and 720p HD video.
- HDCP Rev1.1 specification Compliant.
- HDMI 1.3 Compliant.
- Plug-and-play. Installs in seconds.

1.2 Content of Package

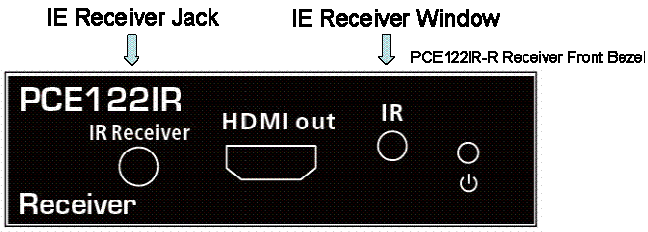
(1) PCE122IR-S Sender or PCE122IR-R Receiver
(2) IR Emitter Cable (in Sender Box) or IR Receiver Cable (in Receiver box)
(3) 75 Ohm BNC Terminator (in Receiver Box only)
(4) 5V DC Power Supply
(5) Quick Start Guide

1.3 Technical Specifications

	Sender	Receiver
Item Name	PCE122IR-S	PCE122IR-R
Input Connector	HDMI Type A x 1	Coaxial BNC x 1 IR Receiver Jack x 1
Output Connector	Coaxial BNC x 2 (1 to 2 Splitter) IR Emitter Jack x 1	HDMI Type A x 1 Coaxial BNC x 1 (Cascade Out)
Video Bandwidth	2.97Gb/s data rates	
Resolution	HD 720p, 1080i, 1080p Standard Timing DVI 1920x1080@60Hz (need DVI to HDMI adapter, not included) DVI 1280x720@60Hz (need DVI to HDMI adapter, not included)	
Max. Distance by Cable & Resolution	1080p 100M by RG6U (3 GHz certificated)	
IR Pass-Thru	38 KHz	
Dimension	92.4 x 117.8 x 29 (mm)	
Weight	300g	
Operating Temperature	+0 to +40°C (+32°to 104°F)	
Operating Humidity	10% to 85% (Non-condensing)	
Storage Temperature	-20°to +60°(+20°to +140°F)	
External Power Supply	5VDC / 2A	
Power Consumption	5 Watts(Max)	

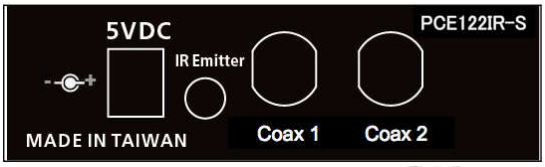
1.4 Panel Layout:

Receiver Front Panel

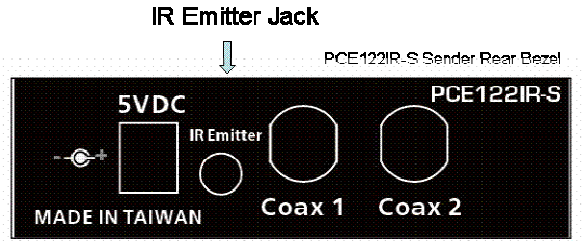


Receiver Rear Panel

Sender Front Panel



Sender Rear Panel



1.5 IR Cable Installation

Chapter 2 Installation

One Sender to One Receiver/HDTV configuration:

1 Connect HDMI cable between video source's HDMI output port and HDMI input of PCE122IR-S Sender.

2 Connect one 75 Ohm RG6U Coax cable between Coax 1 output port of PCE122IR-S Sender and Coax in input port of PCE122IR-R Receiver.

3 Connect HDMI cable between input port of HDTV/display and the PCE122IR-R Receiver's HDMI output.

4 Plug in IR Emitter Cable into IR Emitter Jack of PCE122IR-S Sender and toward to IR Receiver Window of Video Source Device. Plug in IR Receiver Cable into IR Receiver Jack of PCE122IR-R Receiver and toward to IR remote location.

Notice! Be sure IR receiver not toward to any fluorescent light tube or lamp.

5 Connect the included 5V DC power supplies to PCE122IR Sender and Receiver.

6 Power on the HDTV Display and PCE122IR-R Receiver, then Video Source and PCE122IR-S Sender.

For Multiple Receivers/HDTVs configuration:

1 Splitter mode: Connect one 75 Ohm RG6U Coax cable between Coax 2 output port of PCE122IR-S Sender and Coax in input port of Receiver 2.

2 Cascade mode: Connect one 75 Ohm RG6U Coax cable between the Coax cascade output port of Receiver 1 and Coax in input port of Receiver 3.

3 Repeat Step 4 to connect all Receivers with Coax cables in Cascade mode.

4 Connect HDMI cables between input port of each HDTV display and each Receiver's HDMI output port.

5 Connect the included 5V DC power supplies to all Sender and Receivers.

6 Power on the HDTV displays and PCE122IR-R Receivers, then video source and PCE122IR-S Sender.