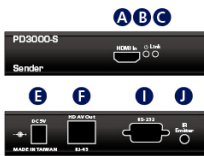




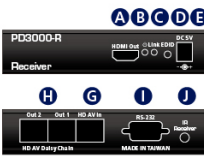
PD3000

HDMI Over Cat5e Daisy Chain Broadcaster w/ IR & RS-232 Pass-Thru

Sender



Receiver



IR Emitter cable



**Plug into Sender's
IR Emitter Port only**

IR Receiver cable



**Plug into Receiver's
IR Receiver Port only**

- A** Sender: HDMI Input from Video Source
Receiver: HDMI Output to Display/TV/Projector
- B** Power LED Indicator
- C** Link Status LED Indicator
- D** EDID Copy Button / Show OSD
- E** 5V Power Adapter DC input
- F** Sender: HD AV Output RJ-45 Port
- G** Receiver: HD AV Input RJ-45 Port
- H** Receiver: HD AV Daisy Chain Output RJ-45 Port 1 & Port 2
- I** RS-232 DB-9 port
- J** Sender: IR Emitter Jack Receiver: IR Receiver Jack

Specification

HDMI Video Resolution	480p, 576p, 720p, 1080i/p
HDMI PC Resolution	Up to 1920x1200@60Hz
HDMI Audio	Stereo, Up to 192KHz
HDMI Specification	v1.3 Compatible
DVI Specification	v1.0 Compatible
HDCP Specification	v1.1 / 1.2
Cable Distance	Point to Point 100M by Cat5e
Max. Displays Connected	Suggest under 100 Displays
Max. Daisy Chain Layer	Suggest under 10 Layers
IR Pass-Thru	20~60KHz Full Range
RS-232 Pass-Thru	Up to 115,200bps
Power Adapter	DC 5V
Power Consumption	5W
Dimensions (L x W x H)	Sender 120 x 122 x 27mm Receiver 135 x 122 x 27mm
Weight	325g
Optional Accessory (Self Separately)	1. Wall Mounting kit 2. Mounting kit secured & locked with TV/Display Mount

* for more information, please visit Aavara.com

1080p Video

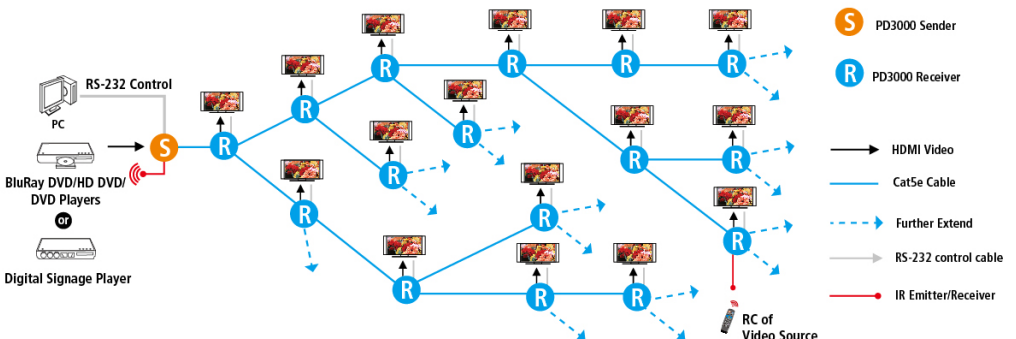
HD Audio

DVI 1920x1200

Multi-Layer Tree Chain Topology

100M Point to Point

1 to Many Tree Topology Distribution



Installation

- 1 Connect HDMI/DVI Video Source to PD3000-S Sender with HDMI cable/adaptor.
- 2 Connect All HDMI/DVI displays/TVs/Projectors to each PD3000-R Receiver with HDMI Cable/adaptor.
- 3 Connect PD3000-S Sender to PD3000-R Receiver by Cat5e Cable. And, connect PD3000-R Receiver to next PD3000-R Receiver by Cat5e Cable. Until all PD3000-R Receivers connected by daisy/tree chain to PD3000-S Sender.
- 4 Optional IR Control Pass-Thru Setup:
Install IR Emitter to Sender and toward Video Source, IR Receiver to Receiver and toward IR remote location.
- 5 Install Power adapters to all Sender and Receivers..
- 6 Power On Video Source and video Output .
- 7 Power on Display/TV/Projectors and select correct HDMI/DVI input from PD3000-R Receiver, start to show video .

IR Control Pass-Thru

When using IR Control pass-thru, Receiver will keep occupying IR channel for 2 seconds after last IR Control command issued. So IR control pass-thru on other Receiver will need to wait 2 seconds after previous Receiver IR Control pass-thru issued.

Copy Display EDID to Sender

Keep Pushing Receiver EDID button, Unplug and Plug-in DC power to reboot Receiver, Release EDID button till screen show OSD "EDID copy success". Receiver will send Display EDID to Sender for ensuring correct video format output from video source.

Keyboard	HEX Code
Ctrl+c	0 x 03
Ctrl+x	0 x 18
Ctrl+z	0 x 1A

Troubleshooting

Problem	Solution
No Video	● Make sure Cat5e cables are well connected from Sender to Receiver and further Receiver daisy chain. ● Check power indicator and make sure all DC power adapters had well connected to Sender and Receivers, and well plugged into power socket. ● Make sure all HDMI cables are well connected between HDMI video source and Sender, Display and Receiver. ● Use Copy Display EDID function (instruction above) to improve compatibility.
RS-232 Pass-Thru don't work	● Make sure Broadcasting mode or Unicasting setting is correctly. And, make sure right mode chosen and setting. ● Make sure the baud rate setting on Sender and Receiver are correct, and matching to control panel/PC and display/TV/projector RS-232 port setting. ● If RS-232 command from Receiver to Sender got issue, wait for 5 sec. then issue command at Receiver side again. Only one Receiver can transmit RS-232 at same time. The Receiver will keep occupying RS-232 return channel 5 sec. after last transmission, then other receiver can take over RS-232 return channel. or, use Unicast mode.
IR Pass-Thru don't work	● Make sure IR emitter cable had been well plugged into IR emitter Jack on Sender. And, toward IR receiver window of video source. ● Make sure IR receiver cable had been well plugged into IR receiver jack on Receiver. And, toward IR Remote control location. ● Make sure the line of sight between IR receiver cable and IR remote control has nothing to block the IR signal. Avoid any light source flashing on IR receiver. Especially fluorescent lamps or tubes. ● Be sure plug-in IR Emitter cable and IR Receiver cable into Sender and Receiver before it power on. ● Wait for 3 sec. ,then press IR remote control again.

RS-232 Command Pass-Thru Setting

Connect RS-232 cables between PC and Sender, Display and Receivers. **First Time to use, set RS-232 Baud Rate @115,200bps and Flow Control Off on PC COM port and assign RS-232 at Broadcast or Unicast mode.** Setup RS-232 Baud Rate @ 115,200 bps on PC and open RS-232 communication with Sender.

RS-232 Broadcast to all Displays/Projectors

Command:

socat5 b [Host baud rate*] [Client baud rate**]

ie. socat5 b 115200 9600

*Host: PC Baud Rate **Client: Display Baud Rate setting

***Sender can send RS-232 command to multiple receivers at same time. Only one Receiver can feedback to Sender at one time. The Receiver will keep occupying RS-232 return channel 5 sec. after last transmission, then other receiver can take over RS-232 return channel.

RS-232 Unicast to specific one Display/Projector

Command:

socat5 u [Host baud rate] [Client baud rate] [ID0] [ID1] [DEPTH]

ie. If OSD show ID 0 0 DEPTH 2, and Display baud rate is 9,600bps. socat5 u 115200 9600 0 0 2

*To Press the Receiver's EDID button and display will show ID and DEPTH info of this receiver.

**If you choose another Receiver that Sender want to transfer, press the EDID button of original Receiver, its info change to "Unicast Not me". It means this Receiver can't transfer data to host and receive data from host.

Change between Broadcasting and Unicast mode, and baud rate setting

In PC RS-232 Console press **ctrl+c**, **ctrl+x**, **ctrl+z** or Send Char (0x03), (0x18), (0x1A) in sequence twice, it shows Press Enter, then enter Command mode.

When "boot#" shows, issue broadcast or unicast command to change and enter the RS-232 Pass-Thru mode.

Reset Sender baud rate when forget previous setting

Unplug network cable in the Sender, then reboot by unplug and plug-in DC power. Waiting for 4~5 seconds, set PC baud rate @ 115200 bps and open Com port. Then, key in **ctrl+c**, **ctrl+x**, **ctrl+z** or Send Char (0x03), (0x18), (0x1A) in sequence twice (the network cable unplug). Currently, Sender is back to Command mode temporarily. Now, you can plug-in network cable and reconfigure the baudrate you want.