PS128A

1080p HDMI Splitter 1:8

With RS-232 control & HDMI v1.4 3D Video Format Support

Installation Guide

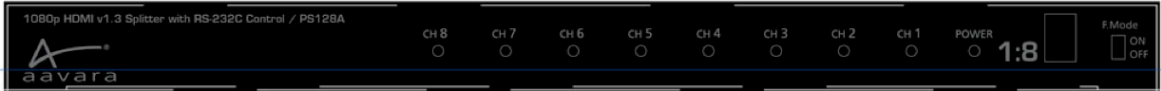Rev 1.1

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Chapter 1

1.1 Introduction

Aavara® PS128A is a HDMI 1080p distribution hub that sends the same HDMI video input to eight HDMI HDTV digital screens. It support HDMI v1.4 3D Video Format, RS-232 control, Two Splitter Modes. PS128A is a flexible solution to integrate multiple displays in signage, video wall or demo shelf.

1.2 Features

- HDMI Specification 1.3b Compliant
- Support HDMI v1.4 Video Format (Side by Side, Top and Bottom, Frame Packing)
- Support HDMI 36-bit Deep Color & x.v.Color wide color gamut
- Supports 480i, 480p, 576i, 576p, 720p, 1080i and 1080p resolution
- Splitter Mode Dip Switch:
  - Mode 1   (default) Greatest Common Video & Audio Format among all displays connected.
  - Model 3   Following Output 1 display, video source will do EDID handshaking with Output 1 display only. Which Signage and Demo on retail shelf application, so any other display plug-in or unplug to PS128A HDMI Output 2 ~ 8 won't affect other display, no black out for reheadshake for whole Splitter System. Also can ensure the output video resolution and audio format as expecting.
- Rs-232 command control from PC or other control panel.
- Splits one HDMI signal input to eight HDMI displays/TV/projectors
- Daisy Chain up to 3 layers /512 displays (8 x 8 x 8)
- Audio support Dolby® TrueHD & DTS-HD™ lossless 7.1 digital surround & Lip Sync
- DVI Specification 1.0 Compliant
- HDCP Rev1.2 specification Compliant
- 1U Rack Mount included for Easy Management
- Screw hole ready for HDMI cable with screw to solid fix on splitter
- Solid Socket design to hold HDMI connector contact tight for shock & vibration resist
- Kensington Lock slot for security.
- Plug-and-Play. Installs in seconds

1.3 Technical Specifications

Model No.	PS128A
HDMI Source Input	HDMI Single Link, TMDS x 1
HDMI Display Output	HDMI Single Link, TMDS x 8

Interface	Front Panel:
	- Splitter Mode Dip Switch:
	    - Off M1 Greatest Common Video & Audio Format among all displays connected.
	    - On M3 Following Output 1 display, video source will handshaking with Output 1 display only.
	- Power Switch, Power LED indicator, HDMI Output Connection LED Indicator
	Rear Panel:
	- Kensington Lock slot , DC Power Jack, USB port for firmware update,
	- HDMI Input Connector x 1
	- HDMI Output Connector x 8

Video Bandwidth	225 MHz
Single Link Range	480i, 480p, 576i, 576p, 1080i, 1080p
HDCP Function	HDCP Rev. 1.2 Compliant
Cable Length	5M (in and Out respectively)
Operation temperature	+5ºC to +35ºC
Storage temperature	-20ºC to +60ºC
Humidity Range	5% to 90% RH
Signal Rate	6.75Gbps
Power Adapter	5 V DC
Enclosure	Metal
Dimension (mm)	342(W) x 163(D) x 27(H) mm
Net Weight (g)	1.7 Kg

Chapter 2

2.1 Installation

1. Optional. Installed 1U Rack Mount Kit if needed.
2. Plug 5V wall-mounted power supply into the wall outlet.
3. Plug 5V power supply into the HDMI Splitter's power DC jack.
4. Connect the HDMI cable from the HDMI device into the HDMI Splitter Input.
5. Connect the HDMI cable from your HDMI Splitter Output 1 to your first Display (LCD TV or projector).
6. Repeat step 2 till all your displays are connected to the HDMI Splitter output port.
7. Optional. You may adjust the splitter mode to M1 or M3 for fitting you application requirement.
   - Mode 1   (default) Greatest Common Video & Audio Format among all displays connected.
   - Model 3   Following Output 1 display, video source will do EDID handshaking with Output 1 display only. Which Signage and Demo on retail shelf application, so any other display plug-in or unplug to PS128A HDMI Output 2 ~ 8 won't affect other display, no black out for re-handshake for whole Splitter System. Also can ensure the output video resolution and audio format as expecting.
8. Power on the HDMI Splitter.
9. Power on your HDMI Display.
10. Power on your HDMI Source.
11. Optional. Use Kensington Lock cable to lock
12. Optional. Connect RS-232 between PC or control panel to PS128A. Rs-232 command list as in this installation guide.

2.2 RS-232 Command List

RS-232 Boud Rate setting: 57,600 bps

Function	Command Code	Function	Command Code
Discrete Power Off	cir 0x20	Output1	cir 0x01
Discrete Power On	cir 0x21	Output2	cir 0x02
Power Toggle	cir 0x22	Output3	cir 0x03
All LEDs Off	cir 0x23	Output4	cir 0x04
All LEDs On	cir 0x24	Output5	cir 0x05
Get Status	cir 0x25	Output6	cir 0x06
Disable All outputs	cir 0x12	Output7	cir 0x07
Enable All outputs	cir 0x09	Output8	cir 0x08

Chapter 3

3.1 Troubleshooting

Problem	Solution
HDMI Splitter does not work	1. Make sure the 5V power is plugged in the HDMI Splitter 1:8. 2. Check to see if the LED light is on.
No Signal or poor picture	1. Make sure your video display is HDCP compliant. 2. Plug your HDMI cable to source and display directly, if there is no signal or poor picture, please change another cable. 3. Make sure all HDMI connectors are tightly secured to all HDMI ports. 4. Turn off all equipments and restart all equipments.

※ If the HDMI Splitter has HDCP compliant issue, please contact your video source device and display/projector seller
for HDCP compliant.

3.2 F/W Upgradable:

New Version firmware is upgradable through USB from any of your USB devices.