

PSP-104

IAdea 4-Port True 4K Advanced HDMI Splitter Solution







Package content:



Smart splitter



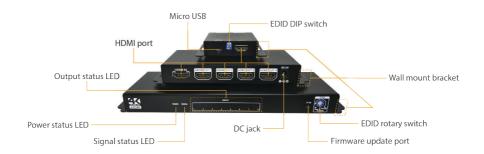
Power adapter



Instruction Sheet

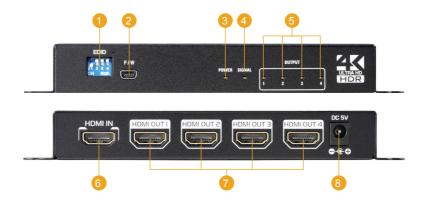


Physical views and features:









- **EDID Mode:** Choose splitter performance by adjusting DIP switch. (See next page for DIP switch settings)
- **Mini-USB Port:** Support for firmware update.
- 3 Power LED: Visible light indicates splitter is ready for use.
- **Signal LED:** Visible light indicates input is recognized by splitter.
- **Output LED:** Indicators which corresponds to each HDMI-Out.
- **HDMI-In:** Input to connect splitter to a HDMI source.
- **HDMI-Out 1-4:** Outputs to HDMI-compatible displays.
- **5 V DC Port:** Input to connect splitter to the 5 V DC power supply.



DIP Switch	Working Mode
√1 2 3 4	Ultra HD (4K2K @ 60) - 8 / 10 / 12 bit 3D HDR video & 7.1 CH audio
√1 2 3 4	Ultra HD (4K2K @ 60) - 8 / 10 / 12 bit 3D HDR video & 2 CH audio
√1 2 5 4	Ultra HD (4K2K @ 30) (4K2K @ 60 4:2:0) - 8 bit 3D HDR video & 7.1 CH audio
↓1 2 3 4	Ultra HD (4K2K @ 30) (4K2K @ 60 4:2:0) - 8 bit 3D HDR video & 2 CH audio
√1 2 3 4	Full HD (1080p @ 60) - 12 bit 3D video & 7.1 CH audio
√1 2 3 4	Full HD (1080p @ 60) - 8 bit 2D video & 2 CH audio
√1 2 3 4	Learning EDID from output 1
	Automatic EDID analysis learning mode
↓1 2 3 4	(Detect and analyze the EDID content of the all connected HDMI-compatible displays and the display with the highest resolution will be used as the main EDID reference for all incoming HDMI-compatible displays)

Off $[\uparrow]$ On $[\downarrow]$

DIP Switch	Firmware Update Mode
2 3 4	Splitter undergoing firmware update via Mini-USB port

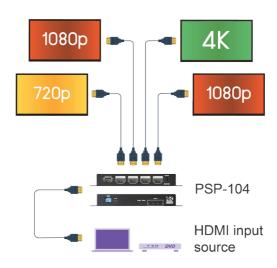
Off [↑] On [↓]



Installation:

How to broadcast one HDMI signal to four HDMI-compatible displays?

- 1 Power down all devices intended for use, including the HDMI-compatible displays which will be connected to HDMI-Out 1-4.
- 2 Connect the HDMI-compatible displays to HDMI-Out 1-4.
- 3 Connect the splitter to a HDMI source, such as a Blu-ray Disc player, to the HDMI-In.
- 4 Connect the splitter to the supplied 5 V DC power supply.
- 5 Power on the connected HDMI-compatible displays.
- 6 Power on the connected HDMI source.





Troubleshooting:

To ensure proper video outputs from the splitter, the user needs to make sure the following splitter implementation requirements are satisfied:

- 1 Connected HDMI-compatible displays support Full HD videos.
- 2 Connected HDMI-compatible display with the lowest resolution must be connected to HDMI-Out 1.
- Restart the splitter after every adjustment made to the EDID DIP switch.

If the splitter continues to project inaccurate video outputs, even when the requirements above are satisfied, the users are recommended to go through the steps below to troubleshoot this issue.

Set to Full HD (1080p @ 60) - 8 bit 2D video & 2 CH audio

- Set the DIP switch to "[pin1, pin2, pin3, pin4] = $[\uparrow -\downarrow -\uparrow -\downarrow]$ "
- 2 Restart the splitter.



Set to Learning EDID from output 1

- Set the DIP switch to "[pin1, pin2, pin3, pin4] = $[\uparrow \uparrow \downarrow \downarrow]$ "
- 2 Restart the splitter.
- 3 Splitter will automatically learn EDID settings.





To update splitter firmware, follow the steps below:

1 Set DIP switch to firmware upgrade mode



- 2 Save the firmware file (.bin) and update software in a folder.
- 3 Connect the splitter to PC via Mini-USB port.
- 4 Execute the update software and the splitter will automatically start updating its firmware.
- When the "Success" notification appears, firmware update is complete and the update software will close automatically.
- 6 Restart the splitter and it will be ready for use.

Important Information:

- 1 HDR = High Dynamic Range
- The video bandwidth of 4K2K @ 60 4:2:0 10 bits (HDR) is 384 MHz, and the 4K2K @ 60 4:4:4 8 bits is 594 MHz.
- 3 PSP-104 does not support the following functions:
 - 1 Resolution downscaling from 4K2K @ 60 4:2:2 to 1080p.
 - 2 4K2K @ 60 4:2:2 to 4K2K @ 60 4:2:0.
 - 3 Frame rate conversion.
- 4 PSP-104 can bypass 4K HDR data content but, CANNOT process it and make HDR content completely fit into 1080p.



Technical Specification:

PSP-104 Functions			
HDMI compliance	HDMI 2.0a		
HDCP compliance	HDCP 2.2 / 1.4		
Input	HDMI x 1		
Output	HDMI x 4		
HDMI connector	Type A (19-pin female)		
Video bandwidth	Single-link 600 MHz (18 Gbps)		
Video support	HDR 4K2K @ 60 (4:2:0 10 bits)		
video support	/ 4K2K @ 60 (4:4:4 8 bits)		
Audio support	DTS-HD Master Audio, Dolby TrueHD Dolby Digital,		
Addio Support	DTS, DVD-Audio, LPCM, SACD, MPCM		
DIP switch	EDID mode selection		
ESD protection	Human body level		
ESD protection	(± 15 kV air-gap discharge & ± 8 kV contact discharge)		
Firmware update	Via Mini-USB port		



PSP-104 Mechanical				
Dimension				
System	135 mm x 62 mm x 20 mm (5.3" x 2.4" x 0.8")			
Package	264 mm x 170 mm x 77 mm (10.4" x 6.7" x 3")			
Weight				
System	230 g (0.508 lb)			
Package	773 g (1.708 lb)			
Housing	Metal enclosure			
Power supply	5 V / 2 A DC			
Power connector	Power adapter			
Power consumption	4 W (max)			
Operation temperature	0 ~ 40° C (32 ~ 104° F)			
Storage temperature	-20 ~ 60° C (-4 ~ 140° F)			
Humidity	20 ~ 90 % RH (no condensation)			
Accessory	Instruction sheet			





IAdea Headquarters

3F, No.21, Lane 168, Xiangshan Road Taipei, Taiwan 114

Phone: +886-2-2791-1110 Fax: +886-2-2791-1170 Email: sales@IAdea.com

IAdea America Corp.

20 Fairbanks, suite 170 Irvine, CA 92618 USA

Phone: +1-949-305-6489 Email: us-sales@IAdea.com