

4 Way HDMI UHD+ Switch - # 15491



Operation Manual

Introduction

This 4 by 1 4K UHD HDMI Switcher is a brand new high performance design for the next generation of audio/video equipment. It allows a single HDMI output to switch between 4 HDMI sources. This unit provides a high level of audio and video performance with support for resolutions up to 4K@60Hz and high definition digital audio formats such as LPCM 7.1 (with sampling rates up to 192kHz), Bitstream pass-through. The included auto switching functionality allows for the possibility of hands-free, user friendly, operation. Control is provided via front panel buttons, IR remote, RS-232.

Applications

- Demo Room Displays
- Hotel Lobby Information Displays
- Showrooms and Demo Rooms
- Public Commercial Displays
- Home Theaters

Features

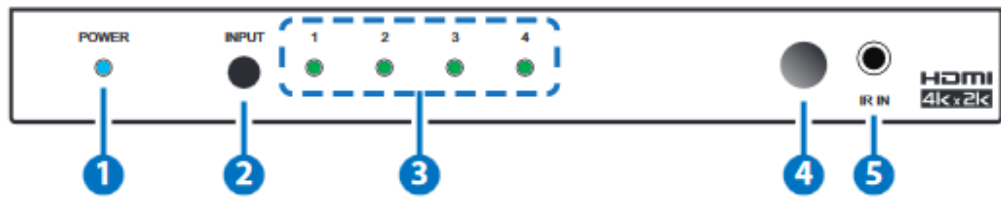
- HDMI 2.0 and DVI 1.0 compliant
- HDCP 2.2 compliant
- 4 HDMI inputs and 1 HDMI output
- 3D signal support (with 3D source and compatible 3D TV)
Supports 4K UHD resolutions up to 4096x2160@60Hz (YUV 4:4:4, 8-bit)
Pass-through of high definition audio including LPCM up to 7.1, and Bitstream
- CEC pass-through
- Support Internal/External EDID management

System Requirements

- HDMI source equipment such as media players, video game consoles or set-top boxes.
- HDMI receiving equipment such as HDTVs, monitors or audio amplifiers.
- The use of "Premium High Speed HDMI" cables is highly recommended.

Operation Controls and Functions

Front Panel



1. POWER LED:

This LED will illuminate to indicate the unit is on and receiving power.

2. INPUT:

Press this button to sequentially switch through the available inputs.

Long press input key until LED start to flicking, then release the input key will execute factory default.

3. 1~4:

The illuminated LED indicates which source is currently selected.

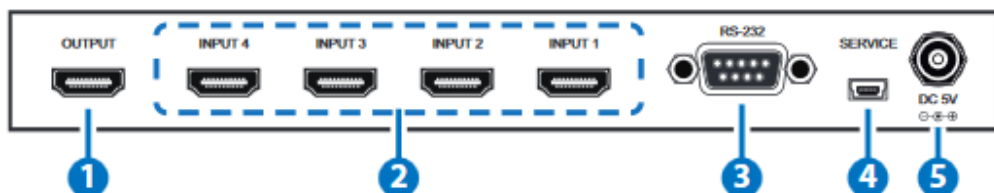
4. IR Window:

Accepts IR signals from the included IR remote for control of this unit only.

5. IR IN:

Connect to the provided IR Extender to extend the IR control range of the unit. Ensure that the remote being used is within direct line-of-sight of the IR Extender.

Rear Panel



1. OUTPUT:

Connect to HDMI TVs, monitors or amplifiers for digital video and audio output.

2. INPUT 1~4:

Connect to HDMI source equipment such as media players, game consoles or set-top boxes.

3. RS-232:

Connect directly to your PC/laptop to send RS-232 commands to control the unit.

4. SERVICE:

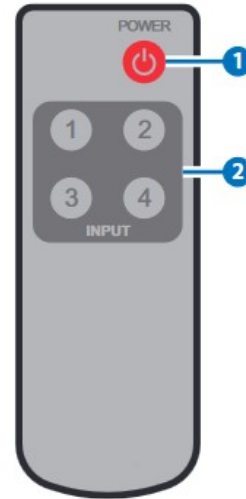
This slot is reserved for firmware update use only.

5. DC 5V:

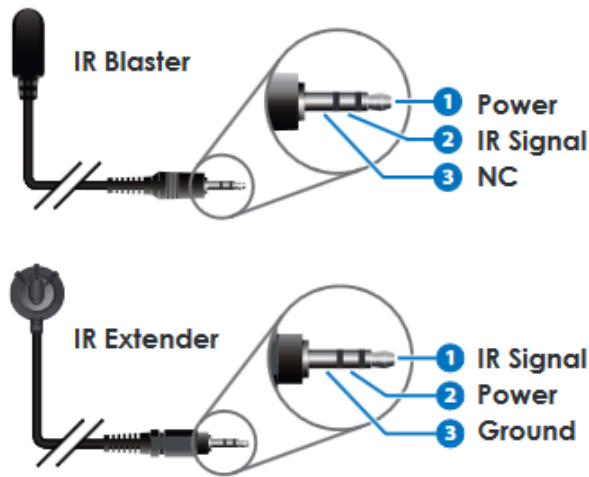
Plug the 5V DC power adapter into the unit and connect it to an AC wall outlet for power.

Remote Control

1. **POWER:**
No function
2. **INPUT 1~4:**
Press any of these buttons to switch to the corresponding input.



IR Cable Pin Assignment



RS-232 Protocols

Matrix	
PIN	Definition
1	NC
2	Tx
3	Rx
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC



Remote Controller	
PIN	Definition
1	NC
2	Tx
3	Rx
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

Baud Rate: 115200bps
Data bit: 8 bits
Parity: None
Flow Control: None
Stop Bit: 1

RS-232 Commands

Command Name	Description	Parameters
OUT N	SET/SHOW CURRENT INPUT SELECTION	OUT N, N=1~4 (INPUT), N=0 (MUTE), N=? (STATUS)
SOURCEDET	SHOW INPUT INFORMATION	NONE
SINKINFO	SHOW SINK INFORMATION	NONE
HDCPIN N1 N2	SET/SHOW INPUT HDCP STATUS	HDCPIN N1 N2, N1=1~4 (INPUT), N2=1~3, N=? (STATUS) 1:FOLLOW IN 2:FOLLOW OUT 3:APPLE MODE
EDIDMODE N	SET/SHOW EDID MODE	EDIDMODE N, N=1~2, N=? (STATUS) 1:ALL 2:APPOINT
EDIDALL N	SET/SHOW EDID ALL SELECTION	EDIDALL N, N=1~7, N=? (STATUS) 1:FHD/2CH 2:FHD/MCH 3:UHD/2CH 4:UHD/MCH 5:UHD+/2CH 6:UHD+/MCH 7:SINK
EDIDIN N1 N2	SET/SHOW EDID INPUT SELECTION	EDIDIN N1 N2, N1=1~4 (INPUT), N2=1~7, N1=? (STATUS) 1:FHD/2CH 2:FHD/MCH 3:UHD/2CH 4:UHD/MCH 5:UHD+/2CH 6:UHD+/MCH 7:SINK
AUTOSWITCH N	SET/SHOW AUTO SWITCHING MODE	AUTOSWITCH N, N=0~1, N=? (STATUS) 0:OFF 1:ON
ECHO N	SET/SHOW COMSOLE AUTO ECHO	ECHO N, N=0~1, 0:OFF, 1:ON, N=?

Factory Default Settings

	MODE	(STATUS
FADEFAULT	SET UNIT TO FACTORY DEFAULT	NONE
VER	SHOW UNIT FIRMWARE VERSION	NONE
REBOOT	SYSTEM REBOOT	NONE
?	SHOW DESCRIPT OF COMMAND	NONE
HELP	SHOW DESCRIPT OF COMMAND	NONE

Factory Default Settings

Factory Default Settings	
OUT	INPUT 1
EDID MODE	ALL Mode
EDID	FHD/2CH
HDCP	Follow Out
AutoSwitch	OFF
ECHO	ON

Specifications

Input Ports	4 x HDMI, 1 x IR, 1 x RS232, 1 x Mini USB (Service), 1 x RJ45 (Control),
Output Ports	1 x HDMI
Supported Resolutions	VGA~WUXGA, 480i~1080p@60Hz 4K@24/25/30/50/60HZ(YUV 4:4:4) 3M(4K@60Hz, YUV 4:4:4 8bit)
HDMI Cable I/O Distance*	5M (4K@60Hz, YUV 4:2:0, 8-bit) 10M (1080p@60Hz, 8-bit)
IR Frequency	30~50kHz
Baud Rate	115200 bps
Power Supply	5VDC/2.6A (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human Body model: ± 8kV (air-gap discharge) ± 4kV (contact discharge)
Chassis Material	Metal
Silkscreen color	Black
Dimensions	213.5mm × 25mm × 108mm (W×H×D)
Weight	608g
Operating Temperature	0 °C ~40 °C/32 °F~104 °F
Storage temperature	-20 °C~60 °C/-4 °F~140 °F
Relative Humidity	20~90% RH (no condensation)
Power Consumption	6.6 W

DVI AND HDMI SUPPORTED RESOLUTIONS (HZ)	Input	Output
640x480@60/72/75/85	√	√
800x600@56/60/72/75/85	√	√
1024x768@60/70/75/85	√	√
1280x1024@60	√	√
1366x768@60	√	√
1600x1200@60	√	√
1920x1080@60	√	√
1920x1200@60	√	√
720x576i@50	√	√
720x480i@59.94/60	√	√
720x480p@59.94/60	√	√
720x576p@50	√	√
1280x720p@50/59.94/60	√	√
1920x1080i@50/59.94/60	√	√
1920x1080p@23.97/24/25/29.97/30/50/59.94/60	√	√
3840x2160@24/25/30/50/60	√	√
4096x2160@24/25/30/50/60	√	√
3840x2160@60_420	√	√
4096x2160@60_420	√	√

Connection Diagram

