

PureLink

UHDS-41R Owner's Manual

4 x 1 HDMI 2.0 Ultra HD/4K HDR Switch



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Package Contents

Please make sure all of the following items are included in the package:

- 1) 1 x UHDS-41R
- 2) 1 x 5V/1A Power Adapter
- 3) 1 x 38KHz IR Rx cable
- 4) 1 x Optical Converter Header (for SPDIF audio output)
- 5) 1 x IR remote
- 6) 1 x Owner's manual

Manual version	Release date
1.1	5/05/2017

General Specification

PureLink's UHDS-41R HDMI switch allows up to four (4) HDMI 2.0 digital video sources (with audio) to share one video display (with audio).

Our unique switch allows easy switching between different digital video sources (with audio) with auto switching by input signal detection, remote control unit, with a manual toggle button in front and/or via RS232 port.

It is perfect for home theater systems and commercial application as well. No more hassles of manually plugging in different HDMI connectors to view different video sources (e.g., Blu ray, Satellite receiver, Computer, TiVo, etc)

Model	UHDS-41R
Input Signal	HDMI single link, 4 ports
Output Signal	HDMI single link
Bandwidth	18 Gbps
Supporting Display Resolutions	Resolution up to Ultra HD 4K 4096 x 2160 @50/60Hz (RGB 4:4:4 YCbCr 4:4:4, 4:2:2, 4:2:0)
Connector Type	4 x HDMI inputs 1 x HDMI output 1 x IR 1 x RS232 1 x Analog audio out 1 x DC power jack
HDCP Support	HDCP 2.2
ESD Protection Human Body Model	± 8kV (air-gap discharge) ± 4kV (contact discharge)
Conformations	HDMI version 2.0 DVI version 1.0
Power Rating	DC +5V , 1A
Power Consumption	Max 2.5W
Dimension (WxDxH)	7.1" x 3.3"x 0.5"/ 180 x 85 x 11.6 (mm)
Weight	0.6 Lbs(0.3Kg)

Operation and Reliability Specification

1. Operating Environment

Temperature : 32F ~ 104F (0°C ~ 40°C)
Humidity : 10% ~ 80%
Altitude : 3,000m Max.

2. Transit Environment

Temperature : -13F ~ 140F (-25°C ~ 60°C)
Humidity : 5% ~ 95%
Altitude : 15,000m Max.

3. Storage Environment

Temperature : -4F ~ -140F (-20°C ~ 60°C)
Humidity : 5% ~ 95%
Altitude : 3,000m Max.

4. Reliability

MTBF: 90% at over 50,000 hours aging test

- In compliance with LCD Monitor reliability test standard

Main Features

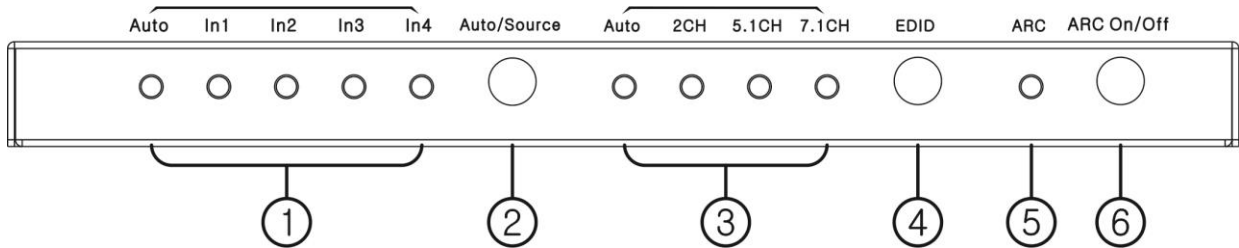
1. Ultra HD/4K resolution support up to 4K60Hz (4:4:4 pixel format)
2. HDMI 2.0 & HDCP v2.2 support
3. High Dynamic Range (HDR) 10 bits support
4. BT2020 color representation
5. Auto-switching
 - Automatic input switching by signal detection
6. ARC – Audio Return Channel
 - Allows ARC-enabled TVs to transmit audio back to an AV receiver
7. Easy control methods
 - Manual toggle button
 - IR remote
 - RS232C
 - Auto switching by input signal detection
8. Full 3D compatibility (up to 1080p)
9. Supports Dolby TrueHD, Dolby Digital Plus and DTS-HD Master audio, LPCM
10. Auto EDID management
11. DVI and Displayport support via HDMI ports with adapters (sold separately)
12. Compact and Robust Module Design

Installation and Connection Instructions

1. Connect your video source's HDMI output port to the HDMI switch's HDMI input port using standard HDMI cables (not included). Make sure all your HDMI sources and the display is turned off before connecting the cables.
2. Connect your HDMI display's HDMI input port to HDMI switch's HDMI output port. Make sure your HDMI display is turned off before connecting the cables.
3. Plug the 5V power supply into the switch's power input port.
4. Plug the 5V wall mount power supply into the wall outlet.
5. Turn on your display.
6. Turn on your video sources.
7. Use your remote control unit to switch channels. Or use the select button on the front panel of the switch to change channels.

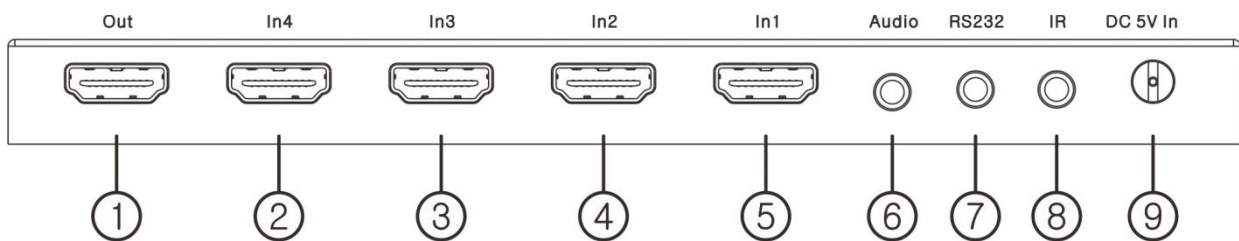
UHDS-41R Specification

Front Panel



- ① Input switching status LED indicator
- ② Input Select button
 - Press and hold for two (2) seconds to select between auto switching mode and manual switching mode
 - When it's on manual switching mode, press to switch inputs
- ③ EDID mode status
 - Auto: communicate EDID from the display that is connected on the output
 - 2 CH : Video EDID from the display connected the output + 2 Ch audio
 - 5.1 CH: Video EDID from the display connected the output + 5.1 Ch audio
 - 7.1 CH: Video EDID from the display connected the output + 7.1 Ch audio
- ④ EDID select button
 - Press to select between EDID mode
- ⑤ ARC status LED
- ⑥ ARC function on/off button

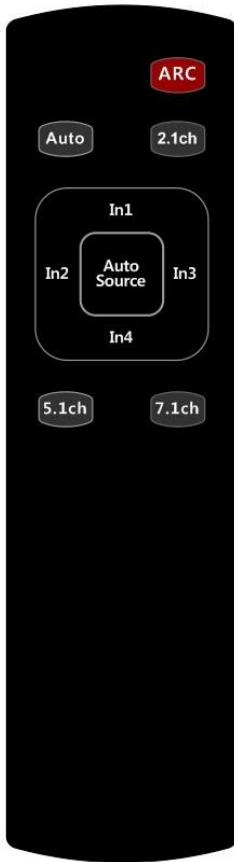
Rear Panel



- ① HDMI output
- ② ③ ④ ⑤ HDMI inputs
- ⑥ Audio output (De-embedding)
- ⑦ RS232 port

- ⑧ IR extension port
- ⑨ DC 5V input port

IR remote



ARC: Press to enable/disable ARC function

Auto/2.1ch/5.1ch/7.1ch: Press these buttons to select EDID mode

Auto Source: Press to select between auto switching mode and manual switching mode

In1/In2/In3/In4: Press to select inputs

RS232

Communication Setting

Baud rate: 19200

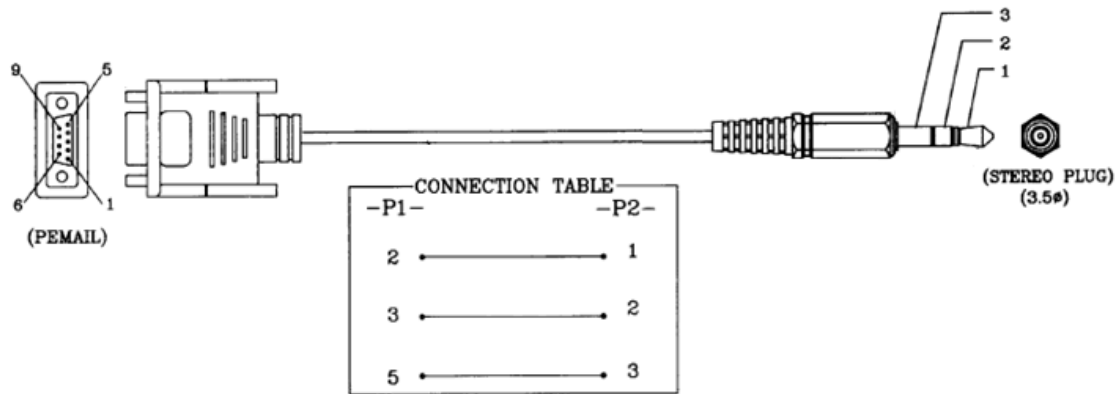
Data bits: 8

Parity : None

Stop bits : 1

Flow control : None

Cable pinout



Command protocols

Command Protocols		
	Command	Feedback
Input switching command		
Input 1	IN1!	OK
Input 2	IN2!	OK
Input 3	IN3!	OK
Input 4	IN4!	OK
Input Auto switching		
On	ONAUTO!	OK
Off	OFFAUTO!	OK
Audio EDID switch		
Audio auto	A1!	OK
Stereo Audio 2.0	A2!	OK
Dolby/DTS 5.1	A3!	OK
HD Audio 7.1	A4!	OK
ARC		
On	ONARC!	OK
Off	OFFARC!	OK

HDMI Connector Pin Assignments

HDMI port	Pin No.	Description	Remarks
HDMI 19pin	1	TMDS DATA 2P	
	2	TMDS DATA 2 Shield	
	3	TMDS DATA 2M	
	4	TMDS DATA 1P	
	5	TMDS DATA 1 Shield	
	6	TMDS DATA 1M	
	7	TMDS DATA 0P	
	8	TMDS DATA 0 Shield	
	9	TMDS DATA 0M	
	10	TMDS Clock P	
	11	TMDS Clock Shield	
	12	TMDS Clock M	
	13	CEC	
	14	RESERVED	
	15	DDC Clock	
	16	DDC DATA	
	17	GND	
	18	+5v	
	19	Hot Plug Detect	

Warranty

Manufacturer's Warranty (3-Years)

PureLink warrants this UHDS-41R switch to be free from defects in workmanship and materials, under normal use and service, for a period of three (3) year from the date of purchase from PureLink or its authorized resellers.

If the product does not operate as warranted during the applicable warranty period, PureLink shall, at its option and expense, execute one of the following as necessary:

1. Repair the defective product or part
2. Deliver to customer and equivalent product or part to replace the defective item
3. Refund to customer the purchase price paid for the defective product

All products that are replaced become the property of PureLink. Replacement products may be new or reconditioned. Repaired or replacement products or parts come with a 90-day warranty or the remainder of the warranty period. Dtrovision shall not be responsible for any software, firmware, information, or memory data loss of contained in, stored on, or integrated with any products returned to Dtrovision for repair under warranty.

3.1 Customer Service

Any customer service inquiries can be submitted electronically through the Q&A form on our website (www.purelinkav.com).

For immediate assistance please contact us at (201) 488-3232 to reach our customer care or tech support team.