



DS-0102

UHD HDMI Scaler/Splitter

User Manual



1. Introduction

Overview

- DS-0102 is a 1x2 UHD HDMI splitter with UHD Scaler Inside, reliably distributes one HDMI source to 2 HDMI displays and supports HDMI 2.0 and HDCP 2.2.
- DS-0102 integrated a strong video scaling engine, can do up/down scaling from 720p to 3840x2160@60Hz and display on HDMI output port 2.
- HDMI output port 1 will directly pass the source to downstream
- It also provides EDID management which provides multiple EDID options for various resolutions output, and HDCP management which authenticates HDCP encryption between all devices, ensuring the HDMI source reliably outputs correct content for display.
- Additional features, includes input cable equalization and signal regeneration compensation, which reduces the need for additional signal conditioning equipment by compensating for signal loss when using long input cable or cascading multiple units.

Key Features

- Distributes one HDMI sources to 2 displays
- 4K up/down scaling on HDMI output port 2
- Full 4K@60Hz 4:4:4 HDMI 2.0 and HDCP 2.2 compliant
- Supports High-Dynamic-Range (HDR) image
- Independent switch for EDID selections
- Independent switch for Resolution selections with HDMI output port 2
- Support Toslink and Ø3.5mm jacket audio output

Note: When displaying HDMI 4Kx2K/HDR signal, equivalent source signal, output display and HDMI cables are required in order to secure the best image display. It is suggested to use High Speed HDMI cable for 6G HDMI2.0 signal.

Key Benefits

- Threaded power port for locking or standard 5V DC connection
- Front panel LED indication for I/O and Power connectivity
- Automatic input cable equalization and signal regeneration compensation
- Flexible HDCP and Resolution option with HDMI output

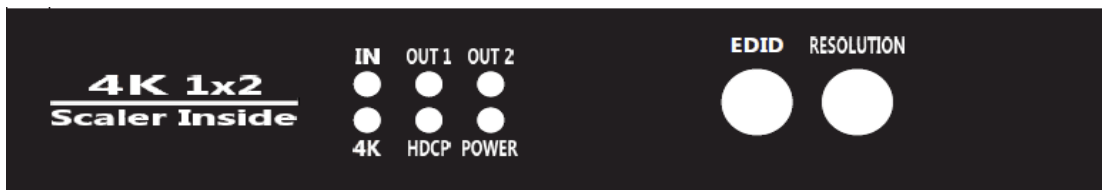
2. Specification

Technical	
Input	1 x HDMI IN (Type A female connector)
Output	2 x HDMI OUT (Type A female connector) 1 x TOSLINK, Spdif audio output 1 x Ø3.5mm jacket, L/R audio output
HDMI	HDMI 2.0/HDCP 2.2
Input/output Resolution support	<p>INPUT: 640x480@60Hz, 800x600@60Hz, 1024x768@60Hz, 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1200@60Hz. 480p,576p,720p,1920x1080i,1920x1080p, 3840x2160@24Hz/25Hz/30Hz/50Hz/60Hz, 4096x2160@24Hz/25Hz/30Hz/50Hz/60Hz.</p> <p>OUTPUT 1/BYPASS Follow Input</p> <p>OUTPUT 2/SCALING 1920x1080@60Hz, 3840x2160@30Hz, 3840x2160@60Hz, 1280x720@60Hz, 1024x768@60Hz, 1366x768@60Hz, 1280x1024@60Hz, 1920x1200@60Hz, 1280x1024@60Hz/DVI, 1920x1080@60Hz/DVI</p>
Input Video Level	0.5~1.2 Vp-p
Input DDC Signal	5 Vp-p
Maximum Data Rate	18 Gbps
Max Pixel Clock	600 MHz
General	
Operating Temperature	0 to 40°C (32 to 108 °F)
Storage	-20 to 70°C (-4 to 158 °F)

Temperature	
Humidity	10% to 90%, non-condensing
Power Supply	DC 5V/3A
ESD Protection	Human-body Model: ±8kV(Air-gap discharge)/±4kV(Contact discharge)
Main Unit Size	143mm x 83mm x 26mm
Package Size	220mm x 196mm x 54mm
Product Weight	0.35kg
Certification	CE, FCC, RoHS

3. Panel Layout

- Front Panel

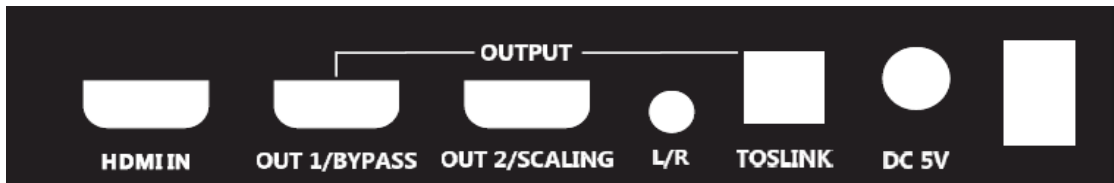


LEDs	Name	Description
1	IN	ON: An HDMI source is connected to the splitter
		OFF: No HDMI source is connected to the splitter
2	OUT 1	ON: Display is connected to HDMI output port 1
		OFF: No display is connected to HDMI output port 1
3	OUT 2	ON: Display is connected to HDMI output port 2
		OFF: No display is connected to HDMI output port 2
4	4K	ON: 4K signal input
		OFF: None 4K signal input
5	HDCP	ON: There is HDCP encryption with input signal
		OFF: None HDCP encryption with input signal
6	POWER	ON: The splitter is power on
		OFF: The splitter is power off

EDID Switch	
Position	Descriptions (EDID on input port)
0	Copy EDID from OUT1
1	1920x1080@60Hz
2	3840x2160@30Hz
3	3840x2160@60Hz
4	1280x720@60Hz
5	1280x1024@60Hz
6	1920x1200@60Hz
7	Reserved
8	Reserved
9	Reserved

Resolution Switch	
Position	Descriptions(Resolution on Out 2)
0	1920x1080@60Hz
1	3840x2160@30Hz
2	3840x2160@60Hz
3	1280x720@60Hz
4	1024x768@60Hz
5	1366x768@60Hz
6	1280x1024@60Hz
7	1920x1200@60Hz
8	1280x1024@60Hz,DVI
9	1920x1080@60Hz,DVI

- Rear Panel



ID	Name	Description
1	HDMI IN	Connects to HDMI source device
2	OUT 1	HDMI OUT 1/BYPASS
3	OUT 2	HDMI OUT 2/SCALING
4	L/R	Ø3.5mm jacket, analog audio output
5	TOSLINK	5V DC power input, threaded port for standard or locking connection

4. Bottom Mark

Use the switch on bottom side can select the HDCP mode on output ports

EDID		RESOLUTION	
Position	EDID with input port	Position	Resolution with Out 2
0	Copy from OUT 1	0	1920x1080@60Hz
1	1920x1080@60Hz	1	3840x2160@30Hz
2	3840x2160@30Hz	2	3840x2160@60Hz
3	3840x2160@60Hz	3	1280x720@60Hz
4	1280x720@60Hz	4	1024x768@60Hz
5	1280x1024@60Hz	5	1360x768@60Hz
6	1920x1200@60Hz	6	1280x1024@60Hz
7	Reserved	7	1920x1200@60Hz
8	Reserved	8	1280x1024@60Hz,DVI
9	Reserved	9	1920x1080@60Hz,DVI

