User Manual

TL-DA18-HD2

1x8 HDMI 4K Splitter with HDCP 2.2

Version: TL-DA18-HD2_161031

Preface

Read this user manual carefully before using this product. Pictures shown in this manual are for reference only, slight differences may be evident on the real product.

This manual is only for operation instruction only, not for any maintenance usage.

Trademarks

Product model and logo are trademarks. Any other trademarks mentioned in this manual are acknowledged as the properties of the trademark owner. No part of this publication may be copied or reproduced without prior written consent.

FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.

SAFETY PRECAUTIONS

To insure the best experience from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Unpack the equipment carefully and save the original box and packing material for possible future shipment

- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.

- Do not dismantle the housing or modify the module. It may result in electrical shock or burns.

- Using supplies or parts not meeting the products' specifications may cause damage, deterioration or malfunction.

- Refer all servicing to qualified service personnel.

- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.

- Do not put any heavy items on the extension cable in case of damage.

- Do not remove the housing of the device as opening or removing housing may expose you to dangerous voltage or other hazards.

- Install the device in a place with proper ventilation to avoid damage caused by overheat.

- Keep the module away from liquids.

- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.

- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

- Unplug the power cord when left unused for a long period of time.

- Information on disposal for scrapped devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.

1. Introduction

TL-DA18-HD2 is a 1x8 HDMI splitter with HDMI 2.0 and HDCP 2.2 compliance, and reliably distributes one HDMI source signal to 8 HDMI displays.

It supports HDMI 2.0 specification features including data rates up to 18Gbps 4K@60Hz video, and automatic HDCP 2.2 compatibility.

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.

1.1 Features

- Distributes one HDMI sources to 8 HDMI displays
- Full 18Gbps HDMI 2.0 and HDCP 2.2 compliant
- Automatic HDCP 2.2 compatibility
- Independent DIP switch for EDID management
- Multiple splitters can be cascaded to expand distribution
- RS232 port for firmware update
- Threaded power port for locking or standard DC 12V connection
- Front panel LED indication for I/O and Power connectivity
- Automatic input cable equalization and signal regeneration compensation
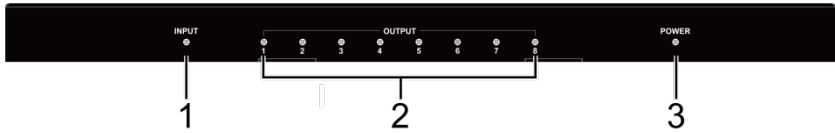
1.2 Package List

- ✓ 1 x TL-DA18-HD2
- ✓ 1 x Power Adapter (DC 12V 1.5A)
- ✓ 1 x User manual QR Card
- ✓ 1 x Mounting brackets (Pair)
- ✓ 1 x Phoenix male connector (3 Pin 3.5mm)

📖 Check whether all the items listed above are included in your package. If not, contact your dealer.
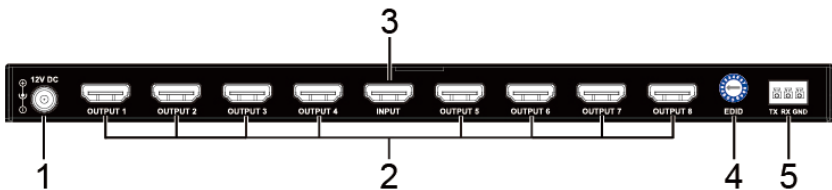
2. Appearance

Front Panel

No.	Name	Description
1	Input LED	ON: An HDMI source is connected to the splitter.
		OFF: No HDMI source is connected to the splitter.
2	Output LED	ON: HDMI display is connected to the splitter.
		OFF: No HDMI display is connected to the splitter.
3	Power LED	ON: The splitter is on.
		OFF: The splitter is off.

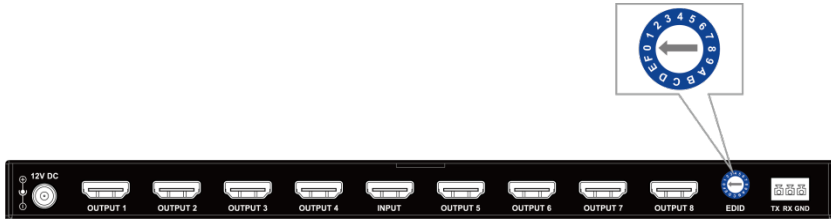Rear Panel

No.	Name	Description
1	12V DC	12V DC power input, threaded port for standard or locking connection
2	HDMI OUT1~8	Connects to HDMI display devices
3	HDMI IN	Connects to HDMI source device
4	EDID	Choose different EDID modes
5	RS232	For firmware update

📖 Pictures shown in this manual are for reference only.

3. Appearance

EDID (Extended Display Identification Data) is data generated from each display in the system to communicate the capabilities of the device. The splitter features an EDID copy mode that can be used when the EDID does not meet the installation requirements. The EDID mode has several options available to encourage device communication.
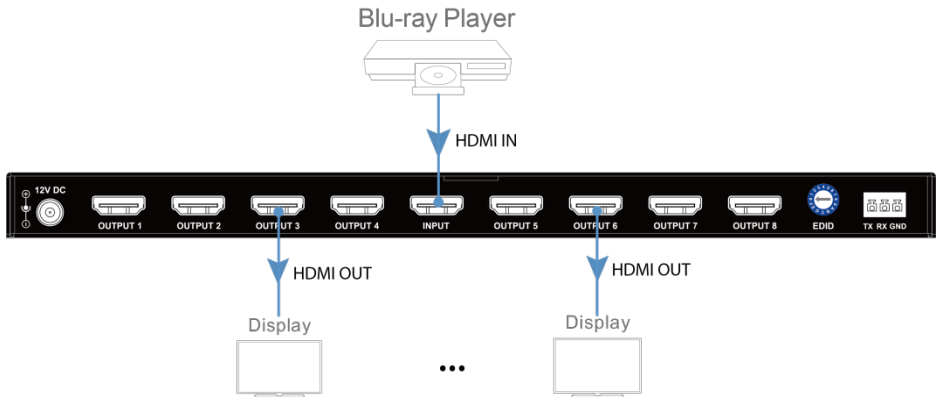

Note: Repower the device to make the change effective.

Position	Descriptions
0	Copy EDID from HDMI output1 (default setting)
1	1080i, 2CH Audio
2	1080i, Dolby/DTS5.1
3	1080i, HD Audio
4	1080P, 2CH Audio
5	1080P, DOLBY/DTS5.1
6	1080P, HD Audio
7	3D, 2CH Audio
8	3D, DOLBY/DTS5.1
9	3D, HD Audio
A	1280x1024 DVI
B	1920x1080 DVI
C	1920x1200 DVI
D	4K@30HZ ,2CH Audio
E	4K@60HZ ,2CH Audio

Note: If failed to copy EDID, the device will output 1080p with stereo audio.

4. System Connection

The figure below illustrates a typical connection that can be utilized with TL-DA18-HD2:

Step1. Connect an HDMI source (e.g. a Blu-ray DVD) to **INPUT** port of TL-DA18-HD2;

Step2. Connect HDMI displays (e.g. a LCD TV) to **OUTPUT** ports of TL-DA18-HD2;

Step3. Plug DC 12V 1.5A power adapter into the power port of TL- DA18-HD2.

1) System should be installed in a clean environment with proper temperature and humidity.

2) All of the power switches, plugs, sockets and power cords should be insulated.

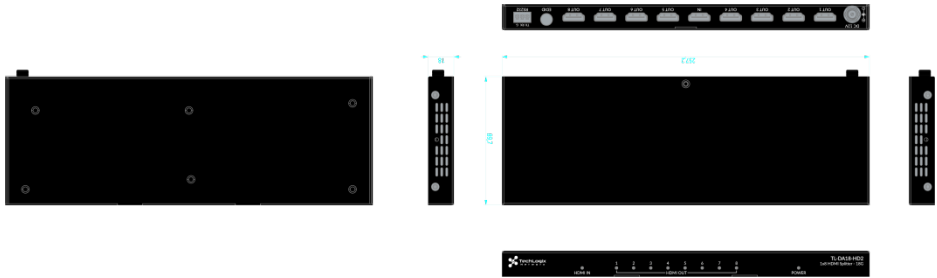3) All devices should be connected before power on.

5. Specification

Technical	
Input	1 x HDMI IN (Type A female connector)
Input Signal Type	HDMI 2.0 HDCP 2.2
Input Resolution Support	VESA: 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. SMPTE: 720x480p@59.94Hz/60Hz, 720x576p@59.94Hz/60Hz, 1280x720p@23.98Hz/24Hz/25Hz/29.97Hz /30Hz/50Hz/59.94Hz/60Hz, 1920x1080i@50Hz/60Hz, 1920x1080p@23.98Hz/24Hz/25Hz/29.97H z/30Hz/50Hz/59.94Hz/60Hz 3840x2160@24Hz/25Hz/30Hz/50Hz/60Hz , 4096x2160@24Hz/25Hz/30Hz/50Hz/60Hz .

Input Video Level	0.5-1.2 V p-p
Maximum Pixel Clock	600 MHz
Output	8 x HDMI OUT (Type A female connector)
Output Signal Type	HDMI 2.0 HDCP 2.2
Output Resolution Support	VESA: 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. SMPTE: 720x480p@59.94Hz/60Hz, 720x576p@59.94Hz/60Hz, 1280x720p@23.98Hz/24Hz/25Hz/29.97Hz/30Hz/50Hz/59.94Hz/60Hz, 1920x1080i@50Hz/60Hz, 1920x1080p@23.98Hz/24Hz/25Hz/29.97Hz/30Hz/50Hz/59.94Hz/60Hz 3840x2160@24Hz/25Hz/30Hz/50Hz/60Hz, 4096x2160@24Hz/25Hz/30Hz/50Hz/60Hz.

General	
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	10% to 90%, non-condensing
ESD Protection	Human-body Model: ±8kV(Air-gap discharge)/ ±4kV(Contact discharge)
Power Supply	DC 12 V/1.5 A
Power Consumption (Maximum)	8W (4K@60Hz)
Device Dimension (W x H x D)	257.2mm x 18mm x 89.7mm/ 10.13" x 0.71" x 3.53"
Product Weight	0.58kg / 1.28lbs
Certification	CE, FCC

Use quality HDMI cable to connect the devices to ensure preferred transmission effect.

6. Panel Drawing

7. Troubleshooting & Maintenance

Problems	Causes	Solutions
Color loss or blurry/ double image on HDMI display	Poor quality of the HDMI cable	Change for qualified HDMI cable.
Power led is off, operations don't work	No power	Power up the unit
	Poor contact of power port	Make sure power adapter is properly seated
No output on the display	Source/ Display is off	Turn on the source/ display
	Poor contact of HDMI ports	Check the HDMI ports one by one to make sure they're properly seated.

📖 If your problem persists after following the above troubleshooting steps, seek
further help from authorized dealer or our technical support.

8. After-sales Service

If there appear some problems when running the device, please check and deal with the problems referenced in this user manual.

4) **Product Limited Warranty:** We warrant that our products will be free from defects in materials and workmanship for **three years.**   Please see warranty page posted on www.tlnetworx.com for more info.

5) **What the warranty does not cover:**
   - Warranty expiration.
   - Factory applied serial number has been altered or removed from the product.
   - Damage, deterioration or malfunction caused by:
     - Normal wear and tear
     - Use of supplies or parts not meeting our specifications
     - No certificate or invoice as the proof of warranty.
     - The product model showed on the warranty card does not match with the model of the product for repairing or had been altered.
     - Damage caused by force majeure.
     - Non-authorized service
     - Other causes which does not relate to a product defect
   - Delivery, installation or labor charges for installation or setup of the product

6) **Technical Support:** Email to our after-sales department or make a call, please inform us the following information about your cases.
   - Product version and name.
   - Detailed failure situations.
   - The formation of the cases.

Remarks: For any questions or problems, please try to get help from your local distributor.