

2x10 HDMI 1.3 Splitter

Operation Manual



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1. Introduction

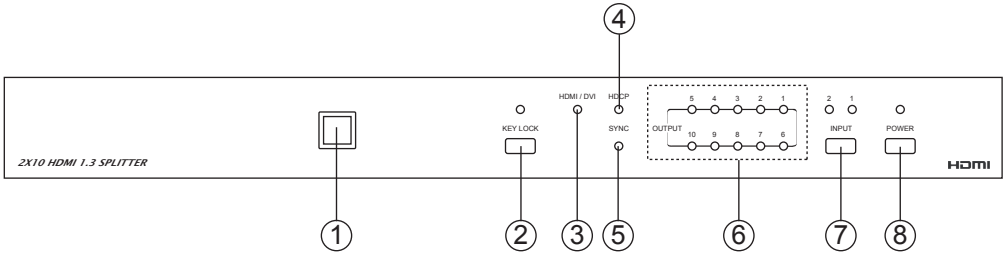
The HDMI v1.3 Distribution Amplifier Series is the most advanced solution to HDMI signal distribution. Each product in this series is compatible to HDMI v1.3 specifications, a cutting edge technology which defines the support to transfer Deep Color (10-bit and 12-bit) video and new lossless compressed (Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio) digital audio, with a high bandwidth up to 225MHz (6.75Gbps). Besides splitting and distributing, the HDMI v1.3 DA series also does signal amplification and equalization, so as to provide high performance I/O of audio and video. Each of the buffered output can run up to 30 meters and can be cascaded.

2. Features

- HDMI 1.3, HDCP1.1 and DVI1.0 compliant Receiver.
- Deep color video up to 12bit, 1080p@60Hz.
- Two HDMI sources to connect up to ten HDMI displays simultaneously.
- HDCP keysets allows each output to work independently when connecting to a HDMI display.
- Splits a HDMI source up to ten outputs without signal loss.
- Supports DVI source and DVI display by using HDMI to/from DVI adaptor cable.
- Supports LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio transmission (32-192kHz Fs sample rate).
- Supports a wide range of PC and HDTV resolutions from VGA to UXGA and 480i to 1080p.
- HDMI cable distance test with 1080p resolution: Input/Output source can run up to 30M/5.1CH.
- Can selected EDID source from TV or this Splitter.
- Full HDCP Compliant.

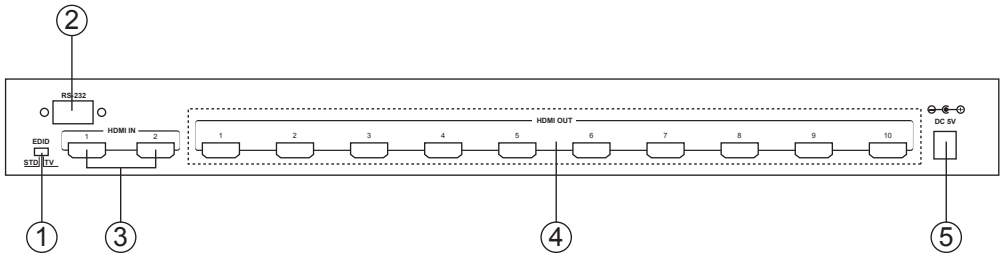
3. Operation Controls and Functions

3.1 Front Panel



- ① Remote Control Sensor.
- ② Key Lock: Press and hold the "Key Lock" button for 5 seconds the system will enter into Key Lock mode. When the system in Key Lock mode the Key Lock LED will illuminate and all buttons will not function.
- ③ HDMI/DVI Indicator: The LED will illuminate when the selected HDMI input source is originally from an HDMI output, the LED will not illuminate when the selected HDMI input source is originally from a DVI output.
- ④ HDCP Indicator: The LED will illuminate when the selected HDMI input source is HDCP-protected.
- ⑤ SYNC Indicator: The LED will illuminate when the selected HDMI IN connects to an HDMI or DVI output correctly.
- ⑥ HDMI output Indicator: The LED will illuminate when the output sources are been connected.
- ⑦ HDMI input Select/Indicator: Press the "Input" button sequentially to switch to your desired input (HDMI 1 or HDMI 2), the LED will illuminate to indicate which input source is selected
- ⑧ POWER Switch/Indicator: Press the "POWER" button to turn on/off the power, the power LED illuminate in green color means the power is turned on, illuminate in red color means the power is turned off.

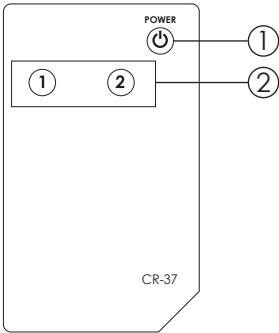
3.2 Rear Panel



- ① EDID Control Jumper: Default factory setting is TV, leave as if the display is properly. Switch to STD to use build-in EDID if the display has problems. When the EDID control jumper in TV selection, the unit will detect the first HDMI output source's EDID and record in the unit. If the first detected output source is DVI it will pass to next source, until the first HDMI been detected.
- ② RS232: 9-pin D-Sub connector for connecting to your PC or other control console for remote control.
- ③ HDMI Inputs 1 and 2: Connect each of the input ports to the HDMI or DVI output of your source equipment such as DVD player or set-top-box.
- ④ HDMI Outputs 1 to 10: Connect each of the output ports to the HDMI display. When more than one output connected, the HDMI outputs play identical video signal simultaneously.
- ⑤ Power: Plug the 5V DC power supply into the this unit and connect the adaptor to AC wall outlet.

4. Remote Control

- ① POWER: Press the button to turn on/off the unit.
- ② Input Select for HDMI: Press '1' to select HDMI 1 input, press "2" to select HDMI 2 input.



3.2 Rear Panel

5. RS-232 Protocol

5.1 Pins definition of modem cable

- The connection between Splitter and remote controller with **RS-232 modem cable**.

Splitter			Remote Controller	
PIN	Definition		PIN	Definition
1	NC	→ ←	1	NC
2	T xD		2	R xD
3	R x D		3	T x D
4	NC		4	NC
5	GND		5	GND
6	NC		6	NC
7	NC		7	NC
8	NC		8	NC
9	NC		9	NC

* RS-232 transmission format:
Baud Rate : 9600 bps
Data Bit : 8 Bits
Parity: None
Stop Bit: 1 bit

5.2 Commands

COMMAND	ACTION
POWER 00	Power Off (standby)
POWER 01	Power On
PORT 01	Select Input 1
PORT 02	Select Input 2

6. Specifications

Frequency bandwidth	2.25Gbps (single link)
Input port	2x HDMI female ports (Type A connector)
Output port	10 x HDMI female ports
Power Supply	5VDC/5A (US/EU standards, CE/FCC/UL certified)
Remote Control	Discrete IR remote
Dimensions (mm)	436(W) x 160(D) x 44(H)
Weight(g)	2000
Chassis Material	Metal
Silk Skin Color	Black
Operating Temperature	Operating from 0°C ~ 40°C

7. Cypress HDMI v1.3 Series:

Product	Description
CLUX-11S	1x1 HDMI V1.3 Repeater
CLUX-12S	1x2 HDMI V1.3 Splitter
CLUX-14S	1x4 HDMI V1.3 Splitter
CLUX-18S	1x8 HDMI V1.3 Splitter
CLUX-21SY	2x1 HDMI V1.3 Switcher
CLUX-31S	3x1 HDMI V1.3 Switcher
CLUX-31SY	3x1 HDMI V1.3 Switcher
CLUX-41SY	4x1 HDMI V1.3 Switcher
CLUX-41AT	4x1 HDMI V1.3 Switcher with Digital Audio
CLUX-42S	4x2 HDMI V1.3 Switcher
CLUX-110S	1x10 HDMI V1.3 Splitter
CLUX-210S	2x10 HDMI V1.3 Splitter
CLUX-210T	2x10 HDMI V1.3 Splitter with Digital Audio



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