1 by 8 HDMI to CAT6 Splitter ID #743

Operation Manual

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Introduction

The 1 by 8 HDMI to CAT6 1.3 splitter when used with CAT6 to HDMI receivers it will allows user to distribute a HDMI source through CAT6 cable over 45 meters. This solution provides a direct input of one HDMI to a looped output of HDMI and 7 CAT6 outputs – a smart way to link and display a single source to 8 different screens simultaneously. Alternatively, the HDMI output can also be treated as an extender to connect to another HDMI splitter or cascade with other unit in multiple layers. This unit allows user to transmit HDMI signal via CAT6 without compression over long distance. The HDMI to CAT6 splitter also incorporates functions like EDID, System Reset, Deep color and IR systems.

Applications

- One HDMI extension source with multi CAT6 to HDMI displays and one HDMI loop through output
- Home entertainment integration
- Multi-task project presentation
- Showroom Display
- Advertising display control
- System installation control

System Requirements

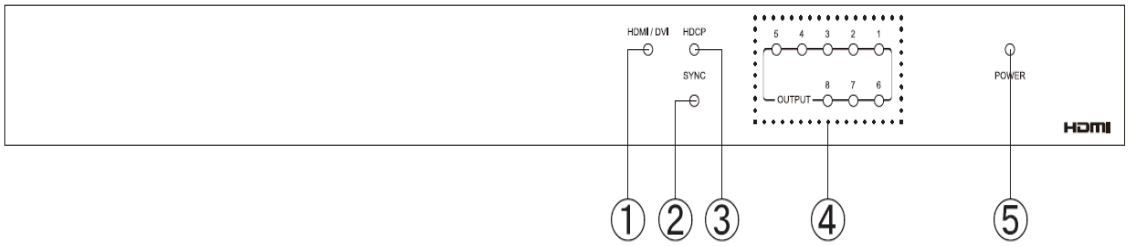
- Input source equipment(s) with HDMI Cable(s).
- Output display device(s) with HDMI cables and or CAT 6 to HDMI receiver with HDMI cable to display.

Features

- HDMI 1.3, HDCP1.1 and DVI1.0 compliant
- Deep color video up to 12bit, 1080p@60Hz
- One HDMI source connection to one HDMI output and seven CAT6 to HDMI - allowing users to link up to eight displays simultaneously
- HDCP keysets allows each output to work independently when connecting to a HDMI display
- 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 SXGA (1280 x 1024) and 480i to 1080p.
- Selects EDID from TV mode or STD mode (this splitter)
- Deep color setting of 8 bit or 12 bit
- IR remote control
- System Reset function
- CEC Bypass

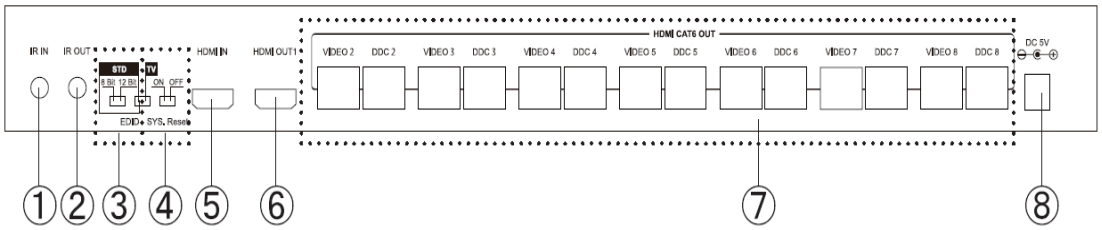
Operation Controls and Functions

Front Panel



1. **HDMI/DVI indicators:** When LED illuminate this means the input source is with HDMI content and when the input source is DVI the LED will not illuminate.
2. **HDCP indicators:** When the input source is with the HDCP protection the HDCP LED will illuminate.
3. **SYNC Indicator:** The LED will illuminate when the device detected source's signal.
4. **Output LED1~8:** The LED will illuminate when output display is connected with power on.
5. **Power LED:** The LED will illuminate when power is on.

Rear Panel



1. **IR IN:** This slot is to connect with the IR receiver cable included in the package and use the existing source's remote controls to control source equipments.
2. **IR OUT:** This slot is to connect with the IR blaster cable included in the package and place it in front of the sources for infrared signal sending.
3. EDID Control Switcher: Switch the EDID between STD & TV. Switch to STD to use built-in EDID or switch to TV to use TV's EDID. Default factory setting is on TV, leave as it is when picture is displayed properly.

Note:

1. When EDID switch to TV, the unit will detect the first HDMI output sink's EDID and record in the unit. If the first detected output sink is DVI it will pass to next source until the first HDMI source been detected. The detection priority is HDMI v1.3 > HDMI v1.2 > DVI.
2. When EDID switch to STD the unit will use built-in EDID which supports:
Video → 1080p 8-bit or 12-bit (max)

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Audio → PCM 2CH

3. The EDID selection will only activate when the unit is re-plug and power on.

4. System Reset: Switch to "ON", the system will send the internal CEC to the display within 8~10 minutes to force all the displays to switch to HDMI 1 input port. Meanwhile, the source's CEC will not functional to the system. When switch to "OFF", the system reset function will be terminate. Factory default is on "OFF".

5. HDMI input: This slot is for connecting the source equipment with HDMI cables.

6. HDMI output: This slots is for connecting the display with HDMI Cable.

Note:

A. Cable tested with CAT-6E / 23AWG / Solid and therefore, cable with different specification may result in different distance.

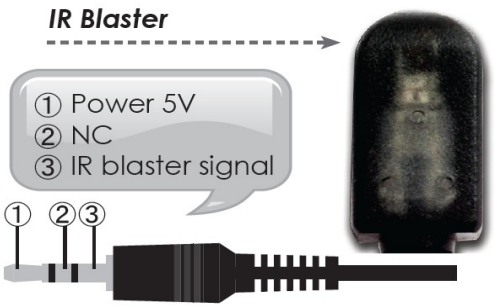
B. Cable distance tested with equipment PS3 40G, and 37" SamSung 12 bit LCD TV.

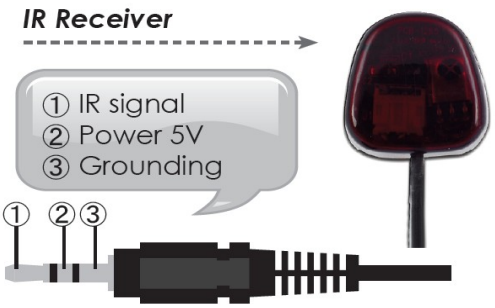
C. Figures provided in this manual are reference figures only, actual figures may depend on source and display use with cable specification.

7. Video/DDC 2~8: These slots allow you connect to the HDMI displays with CAT6 to HDMI receiver. When more than one output are connected, the HDMI outputs play identical video signal simultaneously.

8. Power: This slot is to plug the 5VDC power supply included in the package into the unit and connect the adaptor to an AC wall outlet.

IR Pin Definitions





Note: The frequency on both IR Receiver & Blaster can support 20~60KHz.

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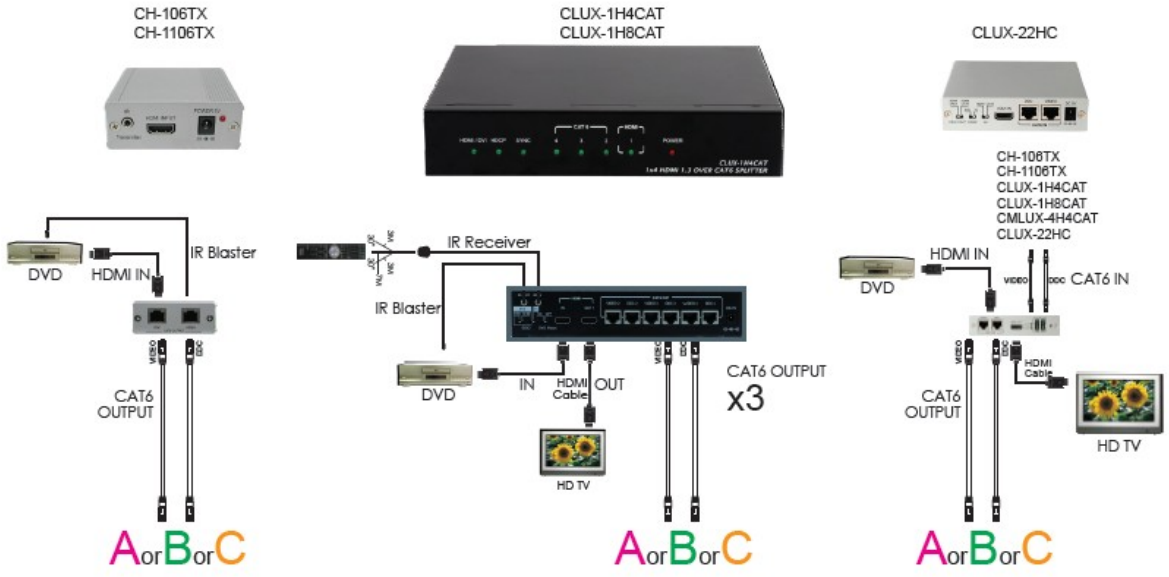
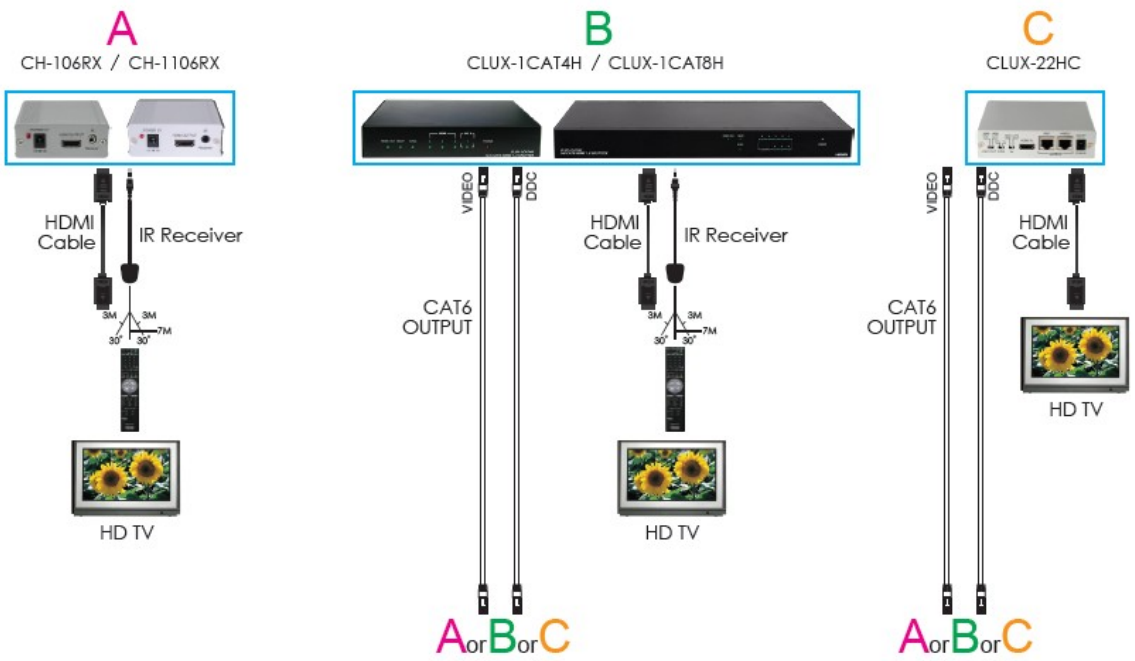
RJ-45 Pin Definitions

Pin	Video	DDC
1	TX2+	DDC Bus Clock
2	TX2-	NC
3	TX1+	DDC Bus Data
4	TX0+	Power 5V
5	TX0-	GND
6	TX1-	IR IN
7	TXC+	HPD
8	TXC-	CEC

Installation





Specifications

Frequency Bandwidth	2.25Gbps (single link)
Input Ports	1 x HDMI female port (Type A connector)
Output Ports	7 x CAT6 output Video/7 x CAT6 output DDC 1 x HDMI female port (Type A connector)
EDID	STD / TV
HDMI Audio Output	PCM2, 5.1, 7.1, Dolby 5.1, DTS 5.1, DD+, D-TrueHD, DTS-HD
HDMI Cable In	1080p 8-bit (15M), 12-bit (10M)
HDMI Cable Out	1080p 8-bit (15M), 12-bit (10M)
CAT6 Cable Out	1080p 8-bit (45M), 12-bit (15M)
HDMI Resolution	480i, ~ 1080p 50/60, 1080p 24, VGA ~ SXGA
IR Frequency	20 ~ 60KHz
ESD Protection	Human body model: ± 8kV (air-gap discharge) ± 4kV (contact discharge)
Power Supply	5VDC/6A (US/EU standards, CE/FCC/UL certified)
Dimensions (mm)	436(W) x160(D) x 44(H)
Weight(g)	2130
Chassis Material	Metal
Silkscreen Color	Black
Power Consumption	20W
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 (non-condensing)

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