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# VOPEX-C6HD-8LC

## 1 by 8 HDMI to single CAT6 Splitter

### Operation Manual



## • **Safety Precautions**

Please read all instructions before attempting to unpack or install or operate this equipment, and before connecting the power supply. Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through module openings or empty slots, as you may damage parts.
- Do not attach the power supply cabling to building surfaces.
- Do not allow anything to rest on the power cabling or allow it to be abused by persons walking on it.
- To protect the equipment from overheating, do not block the slots and openings in the module housing that provide ventilation.

## • **Revision History**

<i>Version No</i>	<i>Date</i>	<i>Summary of Change</i>
<b>V1</b>	<b>20100621</b>	<b>Preliminary Release</b>
<b>VR2</b>	<b>20100927</b>	<b>Deep Color Output up to 10bit</b>

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## **1. Introduction**

This 1 by 8 HDMI v1.3 to single CAT6 Splitter can simultaneously distribute a single HDMI source to eight displays when connecting with a CAT6 to HDMI receiver. Providing you with an efficient and cost effective way to link your displays, this system uses a direct input of one HDMI source and eight CAT6 outputs that send uncompressed data and allow you to distribute HDMI signals at their full strength and at great distances. Moreover, this device supports 3D signals and includes an LED indicator that shows when you are broadcasting 3D media. The 1 by 8 HDMI to single CAT6 Splitter is the most efficient way to handle your HDMI splitting needs.

## **2. Applications**

- Simultaneously connect to eight HDMI displays with a CAT6 to HDMI receiver.
- Showroom displays
- Advertisement display control
- System installation control
- Educational or presentation display

## **3. Package Contents**

- 1 by 8 HDMI to Single CAT6 Splitter Box
- 5V/3.2A DC power adaptor
- Operation manual

## **4. System Requirements**

- Input devices such as Blu Ray or DVD players with connection cable(s).
- A single CAT6 to HDMI receiver (ST-C6HD-R-130LC) with connection cable(s) and displays.

## 5. Features

- HDMI 1.3, HDCP 1.1 and DVI 1.0 compliant
- Deep color video input up to 12 bits, 1080p@60Hz
- Deep color video output up to 10 bits, 1080p@60Hz
- One HDMI source to eight CAT6 output allows users to simultaneously link eight displays with eight CAT6 to HDMI receivers.
- Transmit a single HDMI source through eight outputs without any signal loss
- Supports LPCM 7.1Ch, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio transmission (Sample Rate: 32-192kHz)
- Supports a wide range of PC and HDTV resolutions from VGA to WUXGA (1920 x 1200) and 480i to 1080p
- Selectable EDID from either the TV or STD mode
- Deep color setting of 8 bits or 12 bits
- Supports 3D signals with an LED indicator

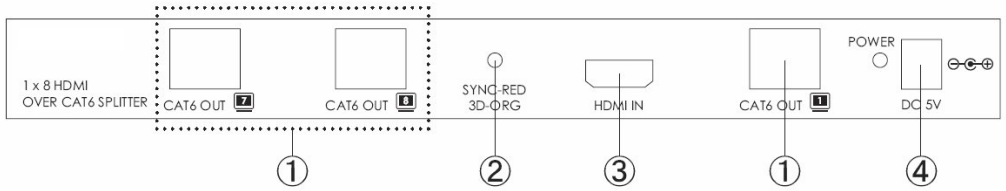
## 6. Specifications

TMDS Clock Frequency	225Mbps
Input Port	1 x HDMI
Output Port	8 x Single CAT6
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 (10M), 12-bit (10M)
CAT6 Cable Out	1080p 8-bit (45M), 10-bit (15M)
HDMI Resolution	480i~1080p 50/60, 1080p 24, VGA~WUXGA
ESD Protection	Human body model: $\pm 8\text{kV}$ (air-gap discharge) $\pm 4\text{kV}$ (contact discharge)
Power Supply	5V/3.2A DC (US/EU standards, CE/FCC/UL certified)
Dimensions (mm)	240 (W) x 103 (D) x 25 (H)
Weight(g)	225
Chassis Material	Metal
Silkscreen Color	Black
Power Consumption	9W
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)

## 7. Operation Controls and Functions

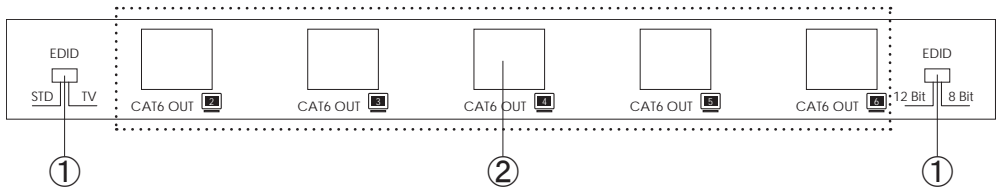
The following sections describe the hardware components of the unit.

### 7.1 Front Panel



- ① CAT6 OUT 7/8/1: These slots are to connect with single CAT6 to HDMI receivers and from the receiver to display with an HDMI cable.
- ② SYNC-RED / 3D-ORG: This LED indicator will turn red when the device detects both an input signal and any output display. When the input signal is 3D, the LED will turn orange.
- ③ HDMI IN: This slot is for connecting the source device with HDMI cables.
- ④ DC 5V: This slot is where you plug the 5V DC power supply into the unit and connect the adaptor to an AC outlet.

### 7.2 Rear Panel



- ① EDID Control Switcher: Switch the EDID between STD & TV. Switch to STD to use the built-in EDID or switch to TV to use the TV's EDID. Default factory setting is on TV, leave as is when the display is working properly. By switching to TV the device will read the first CAT6 outputs EDID and will record it in the unit then have the source send the signal accordingly to the other seven HDMI outputs. EDID under TV supports 3D signals, in order to allow it to be displayed, the display must support 3D.

#### Note:

1. When the EDID is switched to TV, the unit will detect the first CAT6 output's EDID and will record in the unit. If the first detected output source is DVI it will pass on to the next one until the first HDMI is been detected. The detection priority is HDMI v1.4 > HDMI v 1.3 > HDMI V1.2 > DVI.
2. When EDID switches to STD the unit will use built-in EDID which supports:  
Video →1080p 8-bit or 12-bit (max)  
Audio →PCM 2CH

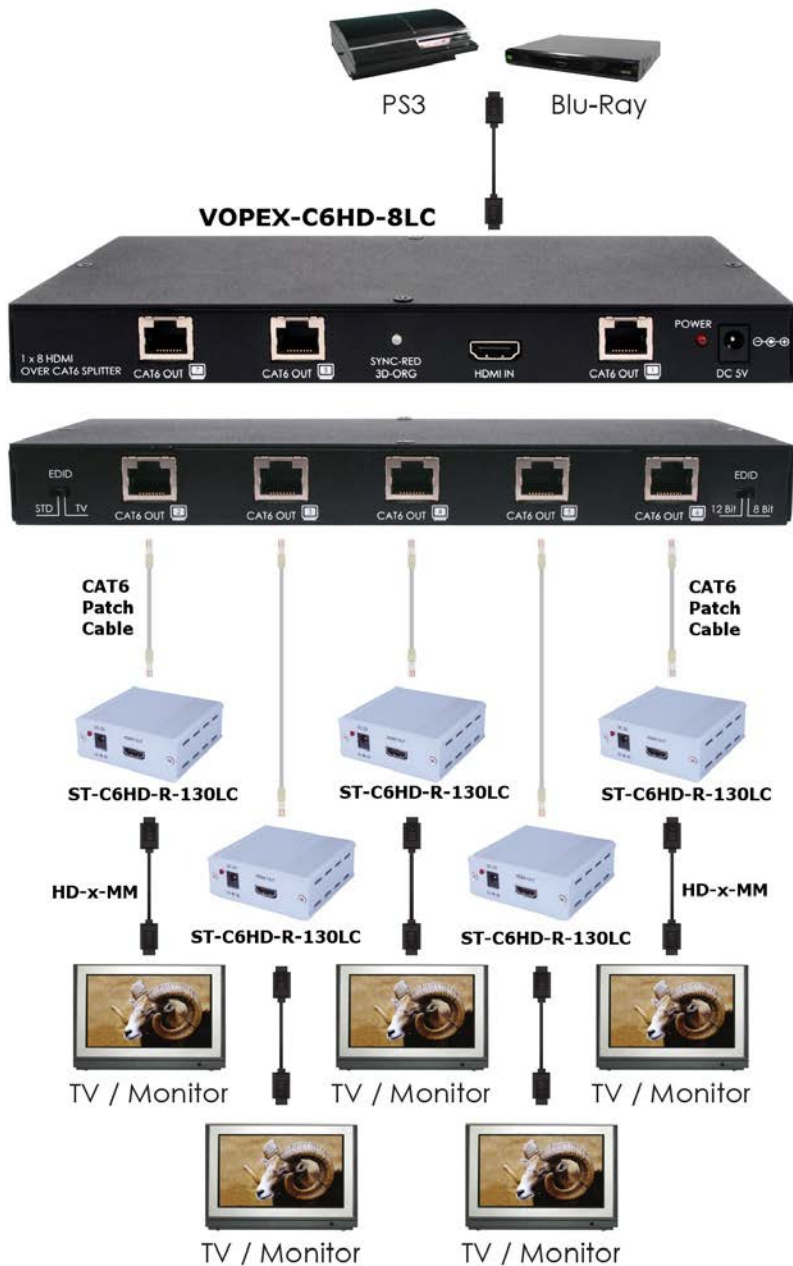
3. The EDID selection will only be activated when the unit is plugged in and powered on.
- ② CAT6 OUT 2~6: These slots are to connect with the displays through single CAT6 to HDMI receiver with connection cables.

**Note:**

- A. This system was tested with CAT-6E/23AWG cables, so if using cables of another type, the performance of this system may be different.
- B. Cable distance tested with a PS3 & 40" Samsung LED 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.



## 8. Connection and Installation



# Acronyms

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## ***Acronym***

## ***Complete Term***

3D	3 Dimension
CAT6 Cable	Category 6 cable
DVI	Digital Visual Interface
EDID	Extended Display Identification Data
HDCP	High-bandwidth Digital Content Protection
HDMI	High-Definition Multimedia Interface