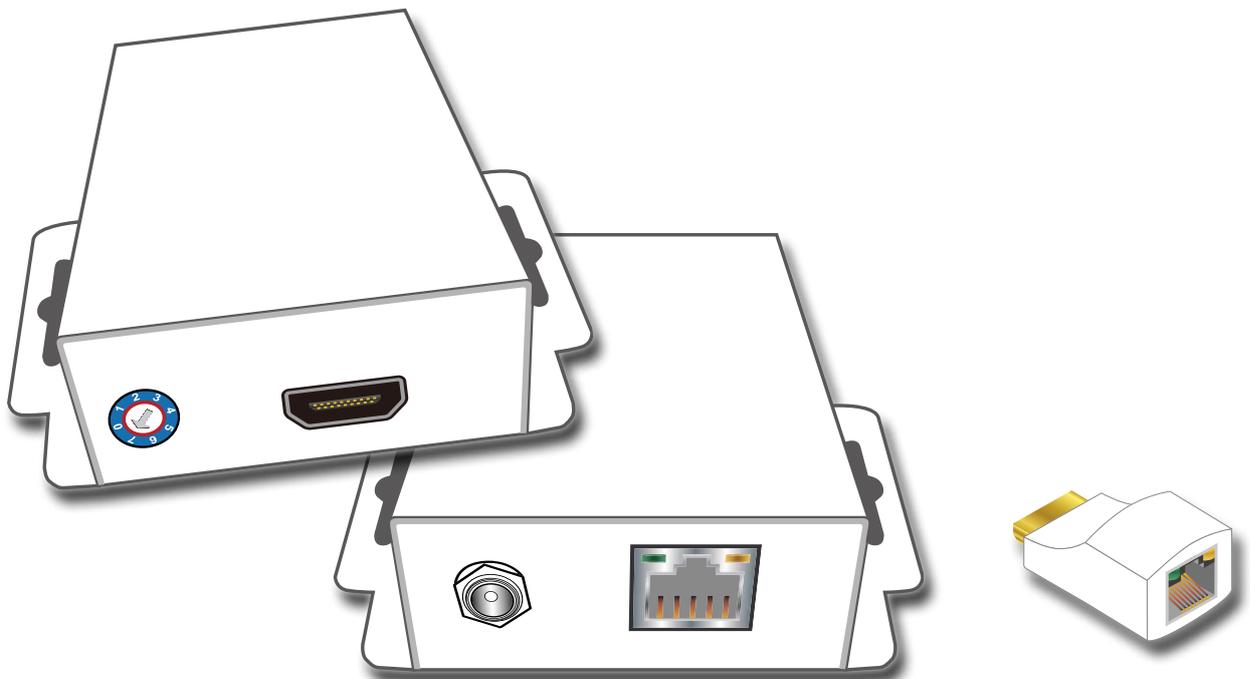# CV-57H

HDMI Extender over Single Cat.X with Direct Plug-in Receiver

7.1 CH AUDIO

CAT.5e/6/7 SINGLE PATENTED

To avoid EMI issue, complete STP Cat6 cable is strongly recommended!

CE

FCC

RoHS Compliance

Blu-ray 3D READY

x.v.Color

dts-HD High Resolution Audio

DOLBY TRUEHD

HDCP HIGH-DEFINITION CONTENT PROTECTION

HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE

dvi digital visual interface

Full HD 1080

WUXGA 1920×1200

rev: 110127
Made in Taiwan

Safety and Notice

The **CV-57H** **HDMI Extender over Single Cat.X with Direct Plug-in Receiver** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **CV-57H** should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit.

- Do not attempt to service this unit yourself, except where explained in this manual.

- Provide proper ventilation and air circulation and do not use near water.

- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface.

- Use only the power adapter and power cords and connection cables designed for this unit.

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

TABLE OF CONTENTS

INTRODUCTION

The **CV-57H** **HDMI Extender over Single Cat.X with Direct Plug-in Receiver** boosts up your video/audio transmission distance up to 25m (80ft) in HDTV 1080i format. With only one cost effective LAN cable, users can directly plug the receiver in to HDTV sources from DVD players, Blu-ray Disc player, PS3, PC, and any other kinds of sources compliant with TMDS to distant display monitors including HDMI/DVI enabled TV sets or LCD PC monitors. This cost effective flexibility makes HDCP compliant DVD players or PS3 transmit high quality video and audio with a greater distance at the minimal cost, when integrating several components apart.

The **CV-57H** includes two units: transmitting (**CV-57H-TX**) and receiving (**CV-57H-RX**) units. The transmitting unit is used to capture the input HDMI/DVI signals and carry the signals through one RJ45 connector into one cost effective Cat-5/5e/6 cable. The transmission distance between the sending and receiving units can be up to 25m (80ft) under HD (720p/1080i) or 15m (50ft) under Full HD (1080p). With direct plug-in to the HDTV, users do not need to have to find a power outlet for the traditional HDMI over CAT5 receiver and can save an HDMI cable with ease of use.

FEATURES

- State-of-the-art Silicon Image (founder of HDMI) chipset embedded for utmost compatibility and reliability
- HDMI 1.3c compliant
- HDCP 1.1 compliant
- Extends the transmission length up to 25m (80ft) from the HDMI sources under HD resolution (1080i or 720p)
- Extends the transmission length up to 15m (50ft) from the HDMI sources under Full HD resolution (1080p)
- Wall mounting housing design for easy and robust installation
- Pure unaltered uncompressed 7.1ch digital HDMI over UTP
- cable transmission
- Perfectly integrated with other HDMI over Cat.X series products

> *i* *The length depends on the characteristics and quality of the cables. Higher resolutions and longer transmission distances require low skew cables (<25ns/100m) for best performance. Unshielded CAT6 with metal RJ45 connectors is recommended.*

PACKAGE CONTENTS

- 1x CV-57H [TX & RX]
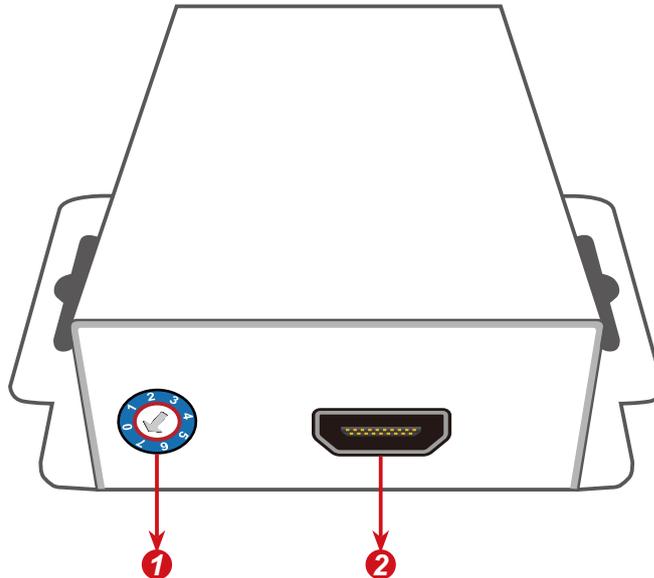- 1x DC 5V 2A wall wart
- 1x User Manual

Model Name	CV-57H	
Technical	**CV-57H[Tx] aka CV-57G-TX**	**CV-57H[Rx] aka CV-715s**
Role of usage	Transmitter [TX]	Receiver [RX]
HDMI compliance	High Speed HDMI - Deep Color & 3D support	
HDCP compliance	Yes	
Video bandwidth	Single-link 225MHz [6.75Gbps]	
Video support	480i / 480p / 720p / 1080i / 1080p60	
HDMI over UTP	Full HD (1080p)-15m (50ft) [CAT5e] / 18m (65ft) [CAT6] HD (720p/1080i)-25m (80ft) [CAT5e] / 30m (100ft) [CAT6]	
Audio support	Surround sound [up to 7.1ch) or stereo digital audio	
Equalization	No	
Input TMDS signal	1.2 Volts [peak-to-peak]	
Input DDC signal	5 Volts [peak-to-peak, TTL]	
ESD protection	[1] Human body model — ±19kV [air-gap discharge] & ±12kV [contact discharge] [2] Core chipset — ±8kV	
PCB stack-up	4-layer board [impedance control — differential 100Ω; single 50Ω]	
Input	1x HDMI	1x RJ45
Output	1x RJ45	1x HDMI
HDMI connector	Type A [19-pin female]	
RJ45 connector	WE/SS 8P8C with 2 LED indicators	
Rotary switch	Mode selection	None
Mechanical		
Housing	Metal enclosure	Plastic molding
Dimensions [L x W x H] — Model	91 x 60 x 26mm [3.6" x 2.4" x 1.0"]	45 x 25 x 22mm [1.8" x 1" x 0.9"]
Dimensions [L x W x H] — Package	270 x 175 x 80mm [10.6" x 6.9" x 3.1"]	
Dimensions [L x W x H] — Carton	450 x 370 x 300mm [1'6" x 1'3" x 1']	
Weight — Model	196g [6.9 oz]	22g [0.8 oz]
Weight — Package	540g [1.2 lbs]	
Fixedness	Wall-mounting case with screws	Direct plug-in
Power supply	5V 2A DC	None
Power consumption	4 Watt [max]	
Operation temperature	0~40°C [32~104°F]	
Storage temperature	-20~60°C [-4~140°F]	
Relative humidity	20~90% RH [no condensation]	

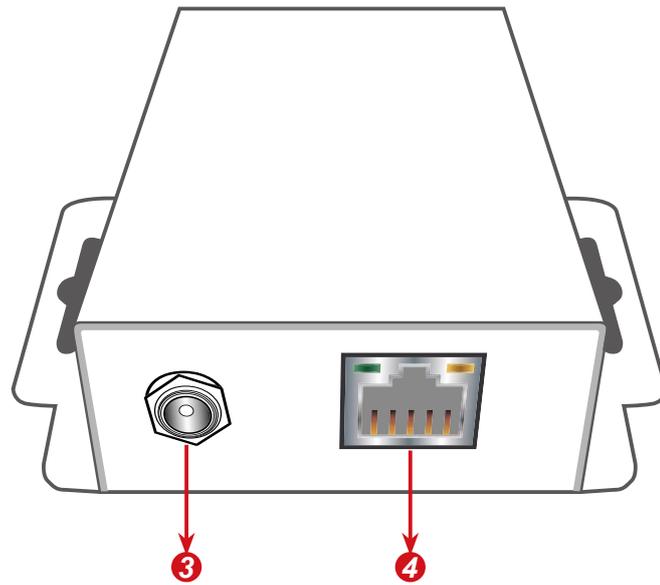# Transmitting unit ► CV-57H-TX aka CV-57G-TX

Front Panel

❶ **MODE:** 0 = [Video] - supports up to HDMI 1.3 output. [Audio] - supports up to 7.1ch output

1 = [Video] - supports up to HDMI 1.3 output. [Audio] - locks to stereo audio output

2 = [Video] - locks to HDMI 1.2 output. [Audio] - supports up to 7.1ch output

3 = [Video] - locks to HDMI 1.2 output. [Audio] - locks to stereo audio output

4 = [Video] - DVI display mode. [Audio] - no audio output

5 = [Safe Mode] - uses default EDID1 with video supported up to 1080p and stereo audio

6 = [Default Mode] - uses default EDID2 with video supported up to 1080p and 7.1ch audio

7 = [EDID Learning Mode] - learns EDID3 from the display

❷ **HDMI IN:** Connects to a HDMI source with a HDMI male-male cable here

---

Note for Auto EDID (Extended Display Identification Data) learning

1 *Please connect the display which you want to read EDID with a HDMI cable to the transmitter's HDMI-IN and turn Mode to 7 so the TX can learn the EDID information from the connected HDTV. The LED on the RJ45-OUT of TX will dim and light again in a few seconds, which indicates the EDID learning process is completed.*

2 *Turn Mode clockwise from Mode 7 to Mode 0 or Mode 1 for desirable audio setting and enjoy the experience. DO NOT let the rotary arrow pass by Mode 6 which will erase the EDID just learned and restore the default EDID.*

3 *If use Mode 6 EDID(1080p),turn Mode clockwise from Mode 6 to Mode 0~4.*
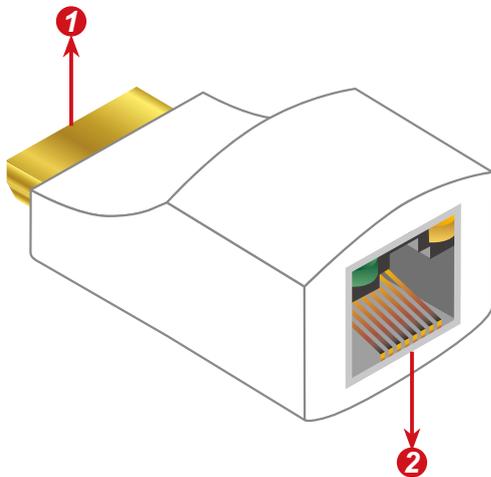*If use Mode 5 EDID(1080p),turn Mode anticlockwise from Mode 5 to Mode 0~4.*

Rear Panel

③ **+5V DC:** Connect to 5V DC power supply.

④ **RJ45-OUT:** Plug in a CAT-5/5e/6 LAN cable that needs to be linked to the RJ45 connector of the receiving unit CV-57H-RX.

Receiving unit ▶ CV-57H-RX aka CV-715s

① **HDMI HDMI output**
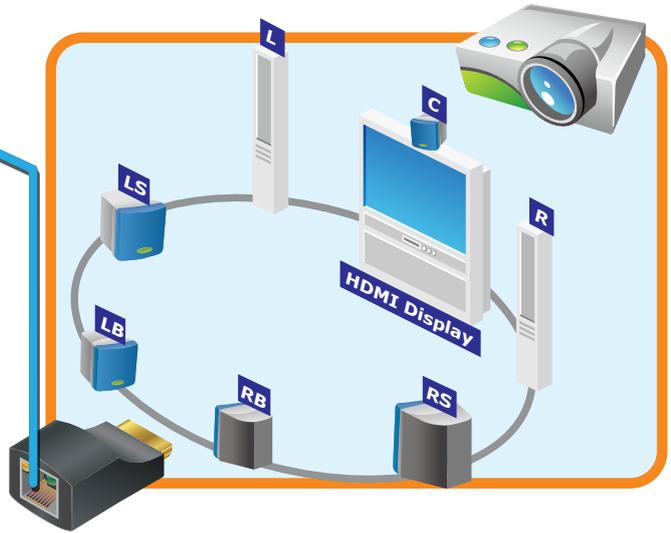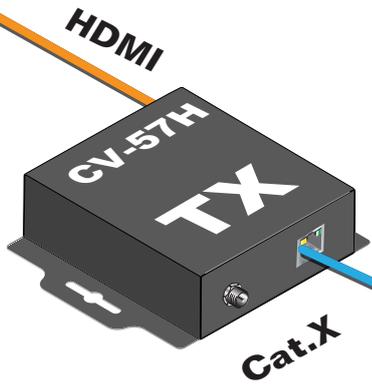**②** **RJ45:** HDMI Signal input

INSTALLATION

1. Connect your HDMI/DVI source (such as a Blu-ray Disc player) to the transmitting unit CV-57H-TX.
2. Plug-in the receiving unit CV-57H-RX to your HDMI display (such as a HDTV or a projector).
3. Connect your CAT-5/5e/6 LAN cable between the transmitting and receiving units.
4. Make sure your CAT-5/5e/6 LAN cable is tightly connected and not loose.
5. Plug in 5V DC power cord to the power jack of the transmitting unit CV-57H-TX.

EDID LEARNING

1. Turn on CV-57H-TX.
2. Turn the Mode of CV-57H-TX **counterclockwise** from 0 (for surround sound) or 1 (for stereo) to 7.
3. Use a HDMI cable to connect CV-57H-TX & the display (better not connect to video source). The LED on the RJ45 of CV-57H-TX will dim and light again, which indicates the EDID learning process is finished.
4. Turn the Mode of CV-57H-TX **clockwise** from 7 to 0 (for surround sound) or 1 (for stereo). *The most important thing is don't let the rotary arrow pass through 6 which will erase the EDID just learned and restore to default EDID.*
5. Connect CV-57H-TX and the video source through a HDMI cable and enjoy the experience.

HDMI

CV-57H

TX

Cat.X

L

C

LS

R

HDMI Display

LB

RB

RS

1. When adjusting the signal level on the receiver unit, please dial the rotary control switch from 7 to 0 and stop turning the rotary switch whenever the audio/video is playing normally. Inappropriate signal level setting may cause overpowering issue that would shorten the product life significantly!

2. If the DVI or HDMI device requires the EDID information, please use CV-1001 or CV-5005H EDID Reader/Writer to retrieve and provide DVI or HDMI display EDID information.

3. All HDMI over CAT5 transmission distances are measured using Belden 1583A CAT5e 125MHz UTP cable and ASTRODESIGN Video Signal Generator VG-859C & VG-870B.

4. The transmission length is largely affected by the type of Cat-5/5e/6 cables, the type of HDMI sources, and the type of HDMI display. The testing result shows solid UTP cables (usually in the form of 300m [1,000ft] bulk cables) can transmit a lot longer signals than stranded UTP cables (usually in the form of fixed length patch cords). Shielded STP cables are better suited than unshielded UTP cables. A solid UTP Cat-5e cable shows longer transmission range than stranded STP Cat-6 cable. For long extension applications, solid UTP/STP cables are the only viable choice.

5. EIA/TIA-568-B termination (T568B) for Cat-5/5e/6 cables is recommended.

6. To reduce the interference among the unshielded twisted pairs of wires in Cat-5/5e/6 cable, one can use double shielded STP cables to improve EMI problems, which is worsen in long transmission.

7. Because the quality of the category cables has the major effect on how long the transmission limit can achieve and how good is the received picture quality, the actual transmission range is subject to one's choice of Cat-5/5e/6 cables. For desired resolutions greater than 1080i or 1280x1024, a Cat-6 cable is recommended.

8. If your HDMI display has multiple HDMI inputs, it is found that the first HDMI input [HDMI input 1] generally can produce better transmission performance among all HDMI inputs.

The SELLER warrants the **CV-57H HDMI Extender over Single Cat.X with Direct Plug-in Receiver** free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surge. This warranty is offered by the SELLER for its BUYER with direct transaction only. This warranty is void if the warranty seal on the metal housing is broken.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables and power adapters are limited to a 30 day warranty and must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. Also, the technical information contained herein regarding the **CV-57H** features and specifications is subject to change without further notice.