CV-571-TX & RX SP-50221

HDMI Extender & Splitter over IP

User Manual



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















rev: 120403 Made in Taiwan



The CV-57I-TX & RX and SP-5022I HDMI extender and Splitter over IP has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the CV-57I-TX & RX and SP-5022I 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.



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INTRODUCTION

The CV-57I-TX & RX HDMI extender over IP boosts up your video/audio transmission distance up to 100m (330ft) in HDTV 1080p format. With only one cost effective Cat.5/5e/6 cable, users can readily extend 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 or DVI enabled TV sets or LCD PC monitors. Besides CV-57I-TX & RX also supports HDCP and this flexibility makes HDCP compliant DVD players or PS3 transmit utmost high quality video and audio with a greater distance at the minimal cost, when integrating several components apart.

The SP-5022I 1x2 HDMI Splitter/Repeater over IP with Local Out allows you to distribute the HDMI/DVI video source to 3 separate HDTV displays including two remotely cascade outputs via Cat-5/5e cost effective cable. This splitter offers the most flexible solution by which the high definition video and high quality audio can be transmitted to different local locations through HDMI cables and also to the next stage over a long distance without degrading the quality. The cascade ability allows pure digital video and audio broadcast station by station and therefore make extending HDMI compliant video and audio anywhere feasible.

The CV-57I-TX & RX is also a HD video distribution solution for digital signage. With SP-5022I, CV-57I-TX & RX can also support s a 10 layer "daisy-chain" for up to 1000M or even longer.

FEATURES

- Support HDMI 1.3
- DVI 1.0 Compliant
- Resolution up to 1080p or WUXGA (1920x1200) with 7.1 ch Audio
- Extends up to 100m(330ft) of output Cat.X solid UTP cable under Full HD (1080P)
- Wall mounting housing design for easy and robust installation
- Allows cascading

SPECIFICATIONS

Model Name		CV-57I		SP-5022I	
Technical		CV-57I[Tx]	CV-57I[Rx]		
Role of usage		Transmitter [TX]	Receiver [RX]	1x2 Distribution Amplifier Transciver	
HDMI compliance		HDMI 1.3			
HDCP compliance		Yes			
Video bandwidth		Single-link 225MHz [6.75Gbps]			
Video support		480i / 480p / 720p / 1080i / 1080p60			
HDMI over UTP transmission [24-bit]		Full HD (1080p)-100m (330ft) [CAT.X]			
Audio support		Surround sound (up to 7.1ch) or stereo digital audio			
Signal Equalization		N/A			
Input TMDS signal		1.2 Volts [peak-to-peak]			
Input DDC signal		5 Volts [peak-to-peak, TTL]			
ESD protection		Human body model — ±8.8kV [air-gap discharge] & ±4.4kV [contact discharge]			
PCB stack-up	р	4-layer board [impedance control — differential 100Ω ; single 50Ω]			
Input		1x HDMI	1x RJ45	1x RJ-45	
Output		1x RJ45	1x HDMI	1x HDMI + 2x RJ-45	
HDMI connector		Type A [19-pin female]			
RJ45 connector		WE/SS 8P8C with 2 LED indicators			
Mechanical					
Housing		Metal enclosure			
Dimensions [L x W x H]	Model	70 x 115 x 26mm [2.7" x 4.5" x 1"]		70 x 128 x 26mm [2.7" x 5" x 1"]	
	Package	140 x 200 x 75mm [5.5" x 7.9" x 3"]			
	Carton	420 x 400 x 300mm [1'5" x 1'4" x 11.8"]			
Weight	Model	270g [9.5oz]		302g [10.6oz]	
	Package	488g [17.2lbs]		520g [18.3 oz]	
Fixedness		Wall-mounting case with screws			
Power supply		5V 2A DC		5V 4A DC	
Power consumption		1.5 Watts 7.		7.5 Watts	
Operation temperature		0~40°C [32~104°F]			
Storage temperature		-20~60°C [-4~140°F]			
Relative humidity		20~90% RH [no condensation]			

PANEL DESCRIPTIONS

Transmitting unit ► CV-57I-TX

Front Panel Rear Panel



- 1. HDMI IN: Connects to a HDMI source with a HDMI male-male cable
- 2. Power LED Indicator: Power LED indicator
- 3. Signal LED Indicator: Signal LED indicator
- 4. +5V DC: Connect to 5V DC power supply
- 5. HDMI Signal OUT: RJ-45 Network connector

Receiving unit ► CV-57I-RX

Front Panel

Rear Panel



- 1. **HDMI OUT:** Connect to a HDMI display with a HDMI male-male cable.
- 2. Power LED Indicator: Power LED indicator
- 3. Signal LED Indicator: Signal LED indicator
- 4. +5V DC: Connect to 5V DC power supply
- 5. HDMI Signal IN: RJ-45 Network connector

Front Panel

Rear Panel



1. HDMI OUT: Connect to a HDMI display with a HDMI male-male cable.

2. Power LED Indicator: Power LED indicator

3. Signal LED Indicator: Signal LED indicator

4. +5V DC: Connect to 5V DC power supply

5. HDMI Signal OUT 1-2: RJ-45 Network connector

6. HDMI Signal IN: RJ-45 Network connector

PACKAGE CONTENTS

CV-57I-TX

- 1x CV-57I-TX
- 1x DC 5V 2A wall wart
- 1x User Manual

CV-57I-RX

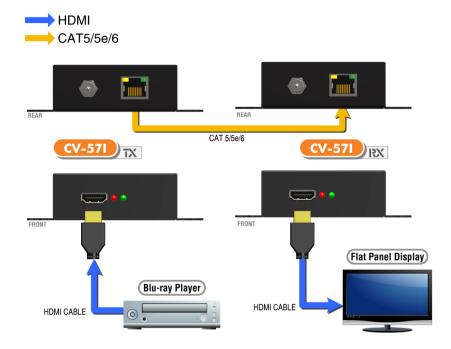
- 1x CV-57I-RX
- 1x DC 5V 2A wall wart
- 1x User Manual

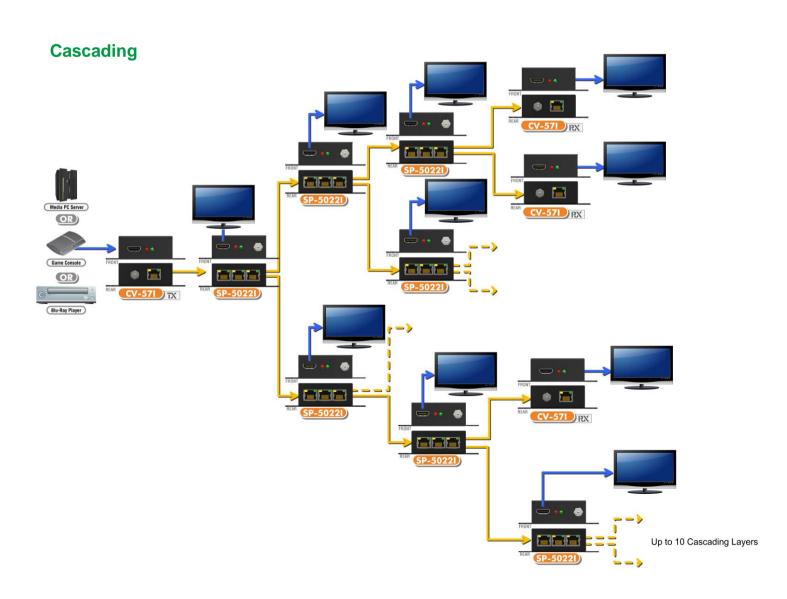
SP-5022I

- 1x SP-5022I
- 1x DC 5V 4A wall wart
- 1x User Manual

CONNECTION DIAGRAM

1 to 1





NOTICE

- 1. When adjusting the signal level on the receiver unit, please dial the rotary control switch from MIN to MAX 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 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 for better performance.
- 6. To reduce the interference among the unshielded twisted pairs of wires in Cat-5/5e/6 cable, one can use shielded STP cables to improve EMI problems, which is worsen in long transmission.
- 7. Because the quality of the CAT5/6 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.



WARRANTY

The SELLER warrants the CV-57I-TX & RX and SP-5022I HDMI extender and Splitter over IP 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-57I-TX & RX and SP-5022I features and specifications is subject to change without further notice.