

# TABLE OF CONTENTS

## HD-TVI/AHD/HDCVI/CVBS Transmission

Twisted Pair Solution .....	01
Coaxial Cabling Solution .....	05
Fiber Optical Solution .....	07
Converter .....	07
Video Interference Solution .....	09
Video /Data/ Power Surge Protector .....	11

## IP/PoE Transmission

IP/PoC Extender/Repeater .....	12
PoE Extender/Repeater .....	14
PoE Injector/Splitter/Switch .....	14
IP/PoE Surge Protector .....	17

## SDI Transmission

HD/SD-SDI Extender .....	18
3G/HD/SD-SDI Distribution Amplifier .....	18
12G/6G/3G/HD/SD-SDI Converter .....	19
3G-SDI Surge Protector .....	19

## HDMI/DVI/VGA KVM Matrix over IP Transmission

HDMI/DVI/VGA KVM Matrix over IP with Video Wall Solution .....	20
--	----

## HDMI Transmission

HDMI over CAT5e Extender .....	23
HDMI over HDBaseT Transmission (Extender, Tools) .....	24
HDMI over IP Extender .....	27
HDMI over Fiber Optic Extender .....	28
HDMI over Coaxial Transmission .....	29
HDMI Distribution Amplifier/ Distribution Amplifier CAT5e Extender .....	30
HDMI Switcher /Matrix Switcher /Matrix Switcher with HDBaseT Extender .....	31
HDMI Tools (Audio Extractor/Scaler/Converter/Repeater/Surge Protector) .....	33

## DisplayPort /DVI Transmission

DisplayPort CAT5e Extender .....	35
DVI CAT5e Extender .....	35
DVI Distribution Amplifier/ Switcher/ Repeater/ Converter .....	36

## VGA/Composite Video Transmission

VGA CAT5e Extender .....	37
VGA KVM CAT5e Extender .....	38
VGA Distribution Amplifier/Distribution Amplifier CAT5e Extender .....	38
VGA Converter .....	40
Composite Video CAT5e Extender .....	40

## Audio Transmission

Microphone .....	41
Audio Extender/Isolator/Converter .....	41
Bluetooth Digital Amplifier .....	42
Speaker Selector .....	43

## IR/USB/Data Transmission

IR CAT5e Extender/Repeater/Cable .....	44
USB CAT5e Extender .....	45
Data Converter/ Repeater/ Extender/Distributor .....	46

## Power Center

Power Converter/Distributor .....	47
Power Supply/Adapter .....	47
Power Surge Protector .....	48

## Accessories

Cables/Tools/Connectors .....	49
-------------------------------	----

## Rotary Switch .....

51

# APPENDIX

I. Converter .....	52
--------------------	----

II. Surge Protector .....	53
---------------------------	----

III. Video/Audio Interference Solution .....	54
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## Twisted Pair Solution

### HD-TVI/AHD/HDCVI/CVBS Twisted Pair Transmission Chart

Transmitter	Receiver	HD-TVI			AHD			HDCVI			CVBS
		720p	1080p	4K	720p	1080p	4K	720p	1080p	4K	
Passive	Passive	150M	150M	150M	200M	200M	200M	400M	250M	250M	400M
Passive	Active	300M	250M	N/A	500M	450M	300M	400M	300M	250M	600M
Active	Passive	200M	200M	300M	500M	400M	350M	400M	300M	250M	600M
Active	Active	400M	400M	N/A	600M	500M	N/A	600M	400M	250M	900M

## Passive Type

### TTP111HD HD-TVI/AHD/HDCVI/CVBS Video Balun

BNC male to screw terminal. To send HD-TVI / AHD / HDCVI / CVBS signals.

- Passive, no power required.

#### 【Specification】

Cable: CAT5e UTP or higher

Max transmission distance: (4K) HD-TVI 150M, AHD 200M, HDCVI 250M  
 (1080p) HD-TVI 150M, AHD 200M, HDCVI 250M  
 (NTSC/PAL) CVBS 400M



TTP111HD

### TTP111HDL HD-TVI/AHD/HDCVI/CVBS Video Balun with Pigtail

Identical to TTP111HD, but with 10cm mini coaxial cable for easy mounting behind DVR.

- Passive, no power required.

#### 【Specification】

Cable: CAT5e UTP or higher

Max transmission distance: (4K) HD-TVI 150M, AHD 150M, HDCVI 250M  
 (1080p) HD-TVI 150M, AHD 150M, HDCVI 250M  
 (NTSC/PAL) CVBS 400M



TTP111HDL

### TTP111HDLK HD-TVI/AHD/HDCVI/CVBS Video Balun Kit

Blister package, include TTP111HD and TTP111HDL



TTP111HDLK

### TTP111V HD-TVI/AHD/HDCVI/CVBS Video Balun RJ45 Connector

Identical to TTP111HD, but with RJ45 connector for easily plugging in.

#### 【Specification】

Cable: CAT5e UTP or higher

Max transmission distance: (4K) HD-TVI 100M, AHD 200M, HDCVI 200M  
 (1080p) HD-TVI 100M, AHD 150M, HDCVI 200M  
 (NTSC/PAL) CVBS 300M



TTP111V

### TTP111VLH HD-TVI/AHD/HDCVI/CVBS Video Balun Weatherproof

To send HD-TVI / AHD / HDCVI / CVBS signals with 25cm mini coaxial cable

- Weatherproof IP65
- Built-in a highly balanced mode of video transmission for extra interference immunity.
- Perfectly work with outdoor camera and DVR

#### 【Specification】

Cable: CAT5e UTP or higher

Max transmission distance: (4K) HD-TVI 100M, AHD 200M, HDCVI 200M  
 (1080p) HD-TVI 100M, AHD 150M, HDCVI 200M  
 (NTSC/PAL) CVBS 300M



TTP111VLH

### TTP111AV Composite Video & Audio CAT5e Extender

To send composite video and audio (RCA) over one CAT5e cable

- Passive, no power required.

#### 【Specification】

Cable: CAT5e UTP or higher

Max transmission distance: (NTSC/PAL) CVBS 300M



TTP111AV

# HD-TVI/AHD/HDCVI/ CVBS Transmission

## TTP111HDPK HD-TVI/AHD/HDCVI/ CVBS Video & Power Balun

To send HD-TVI/AHD/HDCVI/ CVBS video and power (3 pairs) over one CAT5e cable.

### 【Specification】

Cable: CAT5e UTP or higher  
 Power connector:  $\varnothing 2.1\text{mm} \times 5.5\text{mm}$   
 Max transmission distance: (4K) HD-TVI 100M, AHD 250M, HDCVI 200M  
 (1080p) HD-TVI 100M, AHD 150M, HDCVI 200M  
 (NTSC/PAL) CVBS 300M



TTP111HDP

TTP111HDPJ

## TTP111HDP-LK HD-TVI/AHD/HDCVI/ CVBS Video & Power Balun

Identical to TTP111HDPK, but with 12cm mini coaxial cable for easy mounting

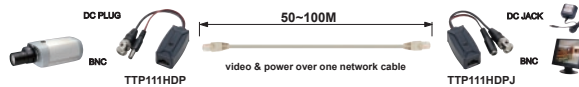
### 【Specification】

Cable: CAT5e UTP or higher  
 Power connector:  $\varnothing 2.1\text{mm} \times 5.5\text{mm}$   
 Max transmission distance: (4K) AHD 150M, HDCVI 100M  
 (1080p) HD-TVI 100M, AHD 150M, HDCVI 200M  
 (NTSC/PAL) CVBS 300M



TTP111HDP-L

TTP111HDPJ-L



## TTP111VPC HD-TVI/AHD/HDCVI/ CVBS Video & Power Transceiver for DC12V Camera

To send video and power (2 or 3 pairs) over CAT5e cable with regulated DC12V output.

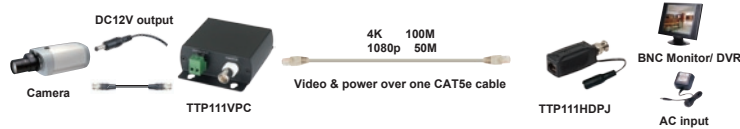
- Built-in AC to DC12V regulated power converter, 1000mA max. .
- Work with TTP111HDPJ or TPP016VPD for 16 channel video

### 【Specification】

Cable: CAT5e UTP or higher  
 Power connector: 2 pin terminal block  
 Max transmission distance: (4K) HD-TVI 100M, AHD150M, HDCVI 100M  
 (work with TTP111HDPJ) (1080p) HD-TVI 50M, AHD 50M, HDCVI 50M  
 (NTSC/PAL) CVBS 300M



TTP111VPC



## TTP111HDPD-RJ45-K HD-TVI/AHD/HDCVI/ CVBS Video & Power & Data Balun

To send HD-TVI/AHD/HDCVI/ CVBS video and power (2 pairs) and data over one CAT5e cable

### 【Specification】

Cable: CAT5e UTP or higher  
 Power connector:  $\varnothing 2.1\text{mm} \times 5.5\text{mm}$   
 Max transmission distance: (4K) HD-TVI 100M AHD 250M HDCVI 200M  
 (1080p) HD-TVI 100M AHD 150M HDCVI 200M  
 (NTSC/PAL) CVBS 300M



TTP111HDPD-RJ45

TTP111HDPD-RJ45

## TTP414HD 4 Port HD-TVI/AHD/HDCVI/ CVBS Video Balun

Identical to TTP111HD, but with 4 ports.

- RJ45 connector or push pin terminal selection

### 【Specification】

Cable: CAT5e UTP or higher  
 Max transmission distance: (4K) HD-TVI 150M, AHD 150M HDCVI 250M  
 (1080p) HD-TVI 150M, AHD 150M HDCVI 250M  
 (NTSC/PAL) CVBS 400M



TTP414HD

TTP414HD

## TPP016HD 16 Port HD-TVI/AHD/HDCVI/ CVBS Video Transceiver in 1U Rack

Identical to TTP111HD, but with 16 channel in 1U rack mounting panel.

- RJ45 connector or screw terminal selection

### 【Specification】

Cable: CAT5e UTP or higher  
 Max transmission distance: (4K) HD-TVI 150M, AHD 150M HDCVI 250M  
 (1080p) HD-TVI 150M, AHD 150M HDCVI 250M  
 (NTSC/PAL) CVBS 400M



TPP016HD

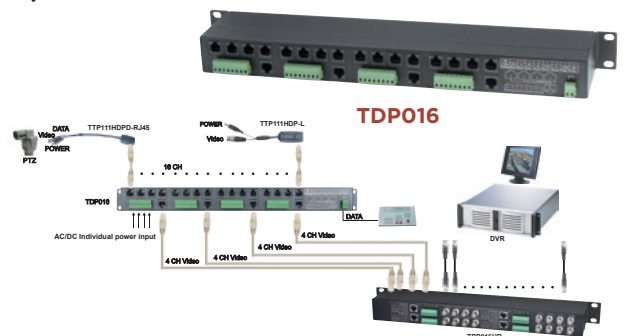
## TDP016 16 Port Cable Integrator (Video, Power, Data) in 1U Rack

To integrate cables between 16 pair of video balun or transceiver into a panel.

- Built-in surge protection on data.
- Built-in PTC fuse 1.1Amp for overcurrent protection.
- Use with TTP111HDP (video and power balun) at camera side.
- Use with TTP111HDPD-RJ45 (video, power, data balun) at the camera side.
- Use with TPP016HD at control room.

### 【Specification】

Cable: CAT5e UTP or higher  
 Pass-through signals: Video, Power, Data



TDP016

## AC24V/DC12V High Power Type

### TPP016VPD 16 Port HD-TVI/AHD/HDCVI/CVBS Video, AC24V Power, Data Hub in 1U Rack

Integrate and send video and AC24V power, RS485 data over a single CAT5e cable.

Each port output current up to 1.1A for camera, total output up to 10A.

- Built-in to avoid current overload.
- Built-in PTC fuse for overcurrent and resettable protection on each port.
- Use with TTP111HDP / TTP111HDP-L to send video, AC24V power.
- Use with TTP111HDPDJ-RJ45 to send video, AC24V power, RS485 data
- Use with TTP111VPC to send video, regulated DC12V power.

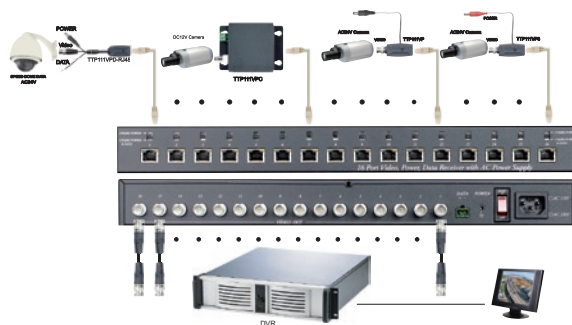
#### 【Specification】

Cable: CAT5e UTP or higher

Max video transmission distance: (5MP) HD-TVI 150M  
 (4MP) AHD 200M  
 (1080p) HD-TVI, AHD 150M HDCVI 250M  
 (NTSC/PAL) CVBS 400M



TPP016VPD



### TTP111VPDC HD-TVI/AHD/HDCVI/CVBS Video, DC12V Regulated Power, Data Transmitter

To send HD-TVI/AHD/HDCVI/CVBS signals and regulated DC12V power over one UTP CAT5e cable.

- Built-in power detection with power output DC12V regulated 1.5A at 300 meters.
- Built-in fan for lowering operating temperature.
- Built-in ESD and surge protection.
- Use with TTA111VPDR, TTA414VPDR.

#### 【Specification】

Cable: CAT5e UTP or higher

Max video transmission distance: (1080p) HD-TVI 250M, AHD 250M, HDCVI 350M  
 (NTSC/PAL) CVBS 400M



TTP111VPDC

### TTA111VPDR 1 Port HD-TVI/AHD/HDCVI/CVBS Video, DC12V Regulated Power, Data Receiver

Use with TTP111VPDC to send video and power, data from DVR side over one UTP CAT5e cable.

- Built-in ESD and surge protection.

#### 【Specification】

Cable: CAT5e UTP or higher

Power input: AC100-AC240V.

Max video transmission distance: (1080p) HD-TVI 250M, AHD 250M, HDCVI 350M  
 (NTSC/PAL) CVBS 400M



TTA111VPDR

### TTA414VPDR 4 Port HD-TVI/AHD/HDCVI/CVBS Video, DC12V Regulated Power, Data Receiver

Identical to TTA111VPDR, but with 4 port video, power, data receiver hub.

- Built-in fan for lowering operating temperature.

#### 【Specification】

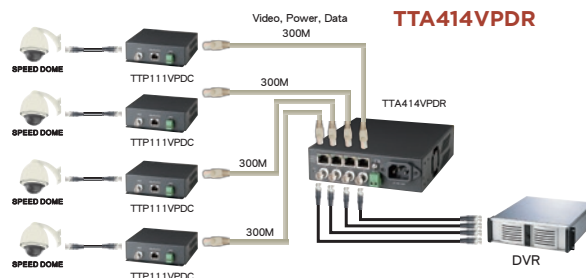
Cable: CAT5e UTP or higher

Power input: AC100-AC240V.

Max video transmission distance: (1080p) HD-TVI 250M, AHD 250M, HDCVI 350M  
 (NTSC/PAL) CVBS 400M



TTA414VPDR



### TPN002 1U 19" Rack Mounting Panel

Standard 1U rack for 2 pieces of TTA414VPDR

#### 【Specification】

Wide: 19-inch (482mm), Height: 1.75-inch (44mm)



TPN002

## Active Type

### TTA111VT Analog Video UTP Active Transmitter

To send a composite video (CVBS) signal up to 1500 meters over UTP cable.

- Built-in L, M, and H high frequency video gain.
- Built-in transient protection and ground lifting.

**【Specification】**

Cable: CAT5e UTP or higher  
 Max video transmission distance: (720p) AHD 800M  
 CVBS 1500M (with active TTA111VR or TPA016)  
 CVBS 600M (with passive TTP111HD)



TTA111VT

### TTA111VR Analog Video UTP Active Receiver

To receive a composite video (CVBS) signal up to 1500 meters over UTP cable.

- 2 adjustments for color gain and brightness.
- Built-in transient protection and ground lifting.

**【Specification】**

Cable: CAT5e UTP or higher  
 Max video transmission distance: (720p) AHD 800M  
 CVBS 1500M (with active TTA111VT)  
 CVBS 600M (with passive TTP111HD)



TTA111VR

### TPA016 16 Port Active Receiver Hub in 1U Rack Mounting Panel

Built-in 16 port TTA111VR active receivers in 1U 19" rack mounting panel.

- 2 adjustments for color gain and brightness of each port.
- Built-in transient protection and ground lifting.
- Built-in a highly balanced mode of video transmission for extra interference immunity.

**【Specification】**

Cable: CAT5e UTP or higher  
 Max video transmission distance: CVBS 1500M (with active TTA111VT)  
 CVBS 600M (with passive TTP111HD)



TPA016

### TPN009 19" 2U Rack Mounting Panel

Standard 2U Rack for up to 9 piece of TTA111VT/TTA111VR.

**【Specification】**

Wide: 19-inch (482mm), Height: 3.5-inch (88mm)



TPN009

### TTA111HDT HD-TVI/AHD/HDCVI/CVBS UTP Active Transmitter

To amplifier and send HD-TVI/AHD/HDCVI/CVBS over CAT5e cable.

- Built-in L, M, and H high frequency video gain.
- Built-in transient protection and ground lifting, damaging voltage spike problems are eliminated.

**【Specification】**

Cable: CAT5e UTP or higher  
 Max transmission distance: (4K) HDCVI 250M  
 (1080p) HD-TVI 500M AHD 600M, HDCVI 600M  
 (NTSC/PAL) CVBS 900M



TTA111HDT

### TTA111HDR HD-TVI/AHD/HDCVI/CVBS UTP Active Receiver

To amplifier and receive HD-TVI/AHD/HDCVI/CVBS over CAT5e cable.

- Built-in middle frequency, high frequency and brightness adjustment.
- Allow using one power adapter for multiple receivers.

**【Specification】**

Cable: CAT5e UTP or higher  
 Max transmission distance: (4K) HDCVI 250M  
 (1080p) HD-TVI 500M AHD 600M, HDCVI 600M  
 (NTSC/PAL) CVBS 900M



TTA111HDR

### TPN008 19" 2U Rack Mounting Panel

Standard 2U Rack for up to 8 piece of TTA111HDT/TTA111HDR or CD102HD/CA101HD.

**【Specification】**

Wide: 19-inch (482mm), Height: 3.5-inch (88mm)



TPN008

## Coaxial Cabling Solution Distributor/Distribution Amplifier

### CD102HD 1 x 2 HD-TVI/AHD/HDCVI/CVBS Video Distributor

1 video input to 2 video output.

- Built-in TVS protection

**【Specification】**

Resolution: up to 4K



CD102HD

### CD102A 1 x 2 CVBS Video Distribution Amplifier

1 video input to 2 video output with amplifier function

- 10dB adjustable image gain.
- HF compensation.
- Sharpness and brightness adjustment

**【Specification】**

Transmission distance: 1000 meters (RG59)



CD102A

### CD104HD 1 x 4 HD-TVI/AHD/HDCVI/CVBS Video Distributor

1 video input to 4 video output.

- Support UTC data control (Up The Coax).
- Built-in TVS protection.

**【Specification】**

Resolution: up to 4K



CD104HD

### CD108HD 1 x 8 HD-TVI/AHD/HDCVI/CVBS Video Distributor

1 video input to 8 video output.

- Support UTC data control (Up The Coax).
- Built-in TVS protection.

**【Specification】**

Resolution: up to 4K



CD108HD

### CD408HD 4 x 8 HD-TVI/AHD/HDCVI/CVBS Video Distributor

4 video input to 8 video output.

- Support UTC data control (Up The Coax).
- Built-in TVS protection.

**【Specification】**

Resolution: up to 4K



CD408HD

### CD816HD 8 x 16 HD-TVI/AHD/HDCVI/CVBS Video Distributor in 1U Rack

8 video input to 16 video output.

- Built-in TVS protection.

**【Specification】**

Resolution: up to 4K



CD816HD

### CD1632HD 16 x 32 HD-TVI/AHD/HDCVI/CVBS Video Distributor in 1U Rack

16 video input to 32 video output.

- Built-in TVS protection.

**【Specification】**

Resolution: up to 4K



CD1632HD

## CD1632A 16 x 32 CVBS Video Distribution Amplifier

16 video input to 32 video output with amplifier function

- 10dB adjustable image gain.
- HF compensation.
- Sharpness and brightness adjustment

**【Specification】**

Transmission distance: 1000 meters (RG59)



CD1632A

## CD1664HD 16 x 64 HD-TVI/AHD/HDCVI/CVBS Video Distributor in 2U Rack

16 video input to 64 video output. (16 sets 1 in 4 out video distributor)

- Support UTC data control (Up The Coax)
- Built-in TVS protection.

**【Specification】**

Resolution: up to 4K



CD1664HD

## Amplifier

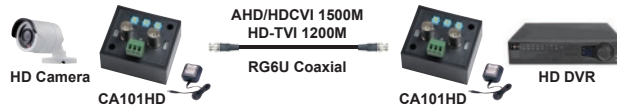
### CA101HD HD-TVI/AHD/HDCVI/CVBS Video Amplifier

To boost HDTV/AHD/HDCVI/CVBS signals for longer distance over coaxial cable.

- Built-in middle frequency, high frequency and brightness adjustment.

**【Specification】**

Max transmission distance: (1080p) HD-TVI 600M, AHD 800M, HDCVI 800M (NTSC/PAL) CVBS 600M



CA101HD

### CA101 CVBS Video Amplifier

To boost CVBS signal for longer distance over coax cable.

- 10dB adjustable image gain.
- HF compensation.
- Sharpness and brightness adjustment

**【Specification】**

Max transmission distance: 1000 meters (RG59)



CA101

## Video & Power over One Coaxial Cable

### CA101HDP HD-TVI/AHD/HDCVI Video & Power over One Coaxial Cable

To send HD-TVI/AHD/HDCVI video and power over one coaxial cable.

**【Specification】**

Max transmission distance: HD-TVI 300M, AHD 400M HDCVI 400M, CVBS 400M.  
 Power input: DC 24V-DC40V  
 Power output: DC12V  
 Power adapter: DC24V or DC40V (Item no.: CA101HDP-DC40V).



CA101HDPDPT



CA101HDPDPR

### CA101VP CVBS Video & Power over One Coaxial Cable

To send CVBS video and power over one coaxial cable.

**【Specification】**

Max transmission distance: 800M  
 Power input: AC 18-35V, DC24-56V  
 Power output: DC12V  
 Power adapter: DC24V, DC48V, DC56V



CA101VPR



CA101VPR

DC24V/DC48V/DC56V power adapter option



## Fiber Optical Solution

### HD401F HD-TVI/AHD/HDCVI/CVBS with RS485 Fiber Optical Extender

To send HD-TVI/AHD/HDCVI/CVBS and RS485 data signal over fiber optical cable.

- Digital and non-compression coding technology
- Plug and play.

**【Specification】**

Cable: Single or Multi mode Fiber with FC (Ferrule Connector)  
 Max resolution: 1080p  
 Max transmission distance: 20KM (Single mode), 2KM (Multi-mode)



### HD401F4 4 Port HD-TVI/AHD/HDCVI/CVBS with RS485 Fiber Optical Extender

Identical to HD401F, but support 4 video input and 4 video output.



### HD401F8 8 Port HD-TVI/AHD/HDCVI/CVBS with RS485 Fiber Optical Extender

Identical to HD401F, but support 8 video input and 8 output.



## Converter

### AD001UHD4 4K HD-TVI/AHD/HDCVI to 4K HDMI Converter with Loop Out

To convert 4K HD-TVI/AHD/HDCVI signal to 4K or 1080P HDMI monitor.

- HD loop out support UTC data control (Up The Coax).
- Support both up and down scale function

**【Specification】**

Input	Resolution	HD-TVI	AHD	HDCVI
	4K (8MP)	12.5/15 FPS	15 FPS	N/A
	5MP	12.5/20 FPS	20 FPS	N/A
	4MP	25/30 FPS	15/25/30 FPS	25/30 FPS
	1080p	25/30 FPS	25/30 FPS	25/30 FPS
Output	Resolution	HDMI		
	4K	30Hz		
	1080p	60Hz		



### AD001HD4 HD-TVI/AHD/HDCVI/CVBS to HDMI/VGA/CVBS Converter with Loop Out

To convert HD-TVI/AHD/HDCVI/CVBS signal to HDMI/VGA/composite video with loop out

- 3 outputs (HDMI,VGA,CVBS) be displayed simultaneously.
- 3 functions of BNC connector: loop lut, composite video out, second camera input port.
- Built in PIP (Picture in Picture) under 2 camera input mode.
- Built in underscan adjustment for composite output.
- Built in OSD (on screen display) for easy operation

**【Specification】**

Input	Resolution	HD-TVI	AHD	HDCVI	CVBS
	1080p	25/30FPS	25/30FPS	25/30FPS	N/A
	720p	25/30/50/60FPS	25/30/50/60FPS	25/30/50/60FPS	N/A
	NTSC/PAL	N/A	N/A	N/A	50/60Hz
Output	Resolution	HDMI	VGA	CVBS	
	1080p	50/60Hz	50/60Hz	N/A	
	1080i	50/60Hz	50/60Hz	N/A	
	NTSC/PAL	N/A	N/A	50/60Hz	



## AD001HDE HD-TVI/AHD/HDCVI/CVBS to HDMI/VGA/CVBS Selection Converter with Loop Out

Identical to AD001HD4, but only 1 output port (HDMI, VGA, composite video) can be selected at once.

- Support HD Loop out

### 【Specification】

Input	Resolution	HD-TVI	AHD	HDCVI	CVBS
	1080p	25/30FPS	25/30FPS	25/30FPS	N/A
	720p	25/30/50/60FPS	25/30/50/60FPS	25/30/50/60FPS	N/A
	NTSC/PAL	N/A	N/A	N/A	
Output	Resolution	HDMI	VGA	CVBS	
	1080p	50/60Hz	50/60Hz	N/A	
	1080i	50/60Hz	50/60Hz	N/A	
	NTSC/PAL	N/A	N/A	50/60Hz	



AD001HDE

## AD001HD1 HD-TVI/AHD/HDCVI to CVBS Converter with Loop Out

To convert HD-TVI/AHD/HDCVI signal to composite video.

- HD loop out support UTC data control(Up The Coax).
- Built-in OSD for easy operation.

### 【Specification】

Input	Resolution	HD-TVI	AHD	HDCVI
	1080p	25/30FPS	25/30FPS	25/30FPS
	720p	25/30/50/60FPS	25/30/50/60FPS	25/30/50/60FPS
Output	Resolution	CVBS		
	NTSC/PAL	50/60Hz		



AD001HD1

## AD001W HD-TVI/AHD/CVBS to CVBS Converter with APP Viewer

To convert AHD/HD-TVI signal to composite video.

To view the video from camera on smart phone as camera tester.

- Built-in Wi-Fi module, allow user to use APP viewing live video from camera.
- Support HD loop out

### 【Specification】

Input	Resolution	HD-TVI	AHD	CVBS
	1080p	25/30FPS	25/30FPS	N/A
	720p	25/30/50/60FPS	25/30/50/60FPS	N/A
	NTSC/PAL	N/A	N/A	50/60Hz
Output	Resolution	CVBS		
	NTSC/PAL	50/60Hz		



AD001W



## AD001H CVBS to VGA Converter with Loop Out

To convert composite video to VGA monitor

- Support loop out
- Auto detection of NTSC/PAL system.
- Built-in video auto gain function for good quality picture.
- Built-in OSD(on screen display) for easy adjustment. (Resolution、Brightness、Contrast、Saturation、Hue)
- Built-in ESD protection.

### 【Specification】

Input	Resolution	CVBS
	NTSC/PAL	50/60Hz
Output	Resolution	VGA
	1280x1024	60Hz



AD001H

## AD001HH CVBS to HDMI/VGA Scaler Converter

To convert composite video to HDMI/VGA/CVBS monitor

- 3 outputs can be displayed simultaneously
- Built-in OSD (on screen display) for easy adjustment. (Resolution、Brightness、Contrast、Saturation、Hue)
- Built-in stereo audio input and output.

### 【Specification】

Input	Resolution	CVBS		
	NTSC/PAL	50/60Hz		
Output	Resolution	HDMI	VGA	CVBS
	1920x1080	60Hz	60Hz	N/A
	NTSC/PAL	N/A	N/A	50/60Hz



AD001HH

## Video Interference Solution

Before Use



After Use



## Video Ground Loop Isolator

### GL001 Coaxial Video Ground Loop Isolator

To eliminate ground loop which leads to distortion of video such as tearing, cross talk, rolling

- No power required.
- Built-in TVS

**【Specification】**

Video format: CVBS

Connector: BNC male to BNC male 75Ω



GL001

### TGP001 Twisted Pair Ground Loop Isolator

Identical to GL001, but with BNC male to 2 pin terminal connectors.



TGP001

### GL001H High Performance Coaxial Video Ground Loop Isolator

To eliminate ground loop which leads to distortion of video such as tearing, cross talk, rolling

- Low video loss
- No power required.
- Built-in TVS

**【Specification】**

Video format: CVBS

Connector: BNC male to BNC male 75Ω

Bandwidth: 20Hz -11MHz (-3dB)



GL001H

### TGP001H High Performance Twisted Pair Ground Loop Isolator

Identical to GL001H, but with BNC male to terminal block with 20cm mini coaxial cable.



TGP001H

### GB001 Coaxial Video Ground Loop Isolator Built-in Video Balun

Identical to GL001, but built-in video balun for video balance and extra interference rejection



GB001

### GL001HDP HD-TVI/AHD/HDCVI/CVBS Ground Loop Isolator

To eliminate ground loop which leads to distortion of video such as tearing, cross talk, rolling

- No power required.
- Support high resolution up to 4K

**【Specification】**

Video format: HD-TVI, AHD, HDCVI, CVBS

Connector: BNC male to BNC female 75Ω

Bandwidth: 25Hz ~ 50MHz ( -3dB )



GL001HDP

### GL001HD Active HD-TVI/AHD/HDCVI/CVBS Ground Loop Isolator

Identical to GL001HDP, but with lower video loss and longer transmission distance

- Active type
- Built-in TVS protection

**【Specification】**

Video format: HD-TVI, AHD, HDCVI, CVBS

Connector: BNC female to BNC female 75Ω

Bandwidth: 25Hz ~ 50MHz ( -3dB )



GL001HD

## Power Ground Loop Isolator

### GL001HP HD-TVI/AHD/HDCVI/CVBS Power Isolator 600mA

To eliminate ground loop which is caused by power cables laid together with video/data cables.

- Support UTC data control (Up The Coax)

**【Specification】**

Power Input: DC12V-DC24V  
Power Output: DC12V 600mA



GL001HP

### GL001HP-1A HD-TVI/AHD/HDCVI/CVBS Power Isolator 1A

Identical to above GL001HP, but support power output to 1A.



GL001HP-1A

## Video Transformer Filter

Before Use



After Use



### CB001VH Coaxial Balun for DVR

Built-in a highly balanced mode of video transmission, which is immune to interference from these, and other sources of noise: Data signals, other video signals, nearby power, ringing telephones, fluorescent lights, transformers, and more...

**【Specification】**

Video format: CVBS  
Connector: BNC male to BNC female 75Ω



CB001VH

### TVB001 Twisted Pair Video Balun

Eliminate interference under long range cabling caused by "Impedance matching", add TVB001 at "connecting point" between two-wire connections for compensation.

**【Specification】**

Video format: CVBS  
Connector: twisted pair



TVB001

## High Frequency Interference Blocker

Before Use



After Use



### CHB001HM High Frequency Interference Blocker Solution

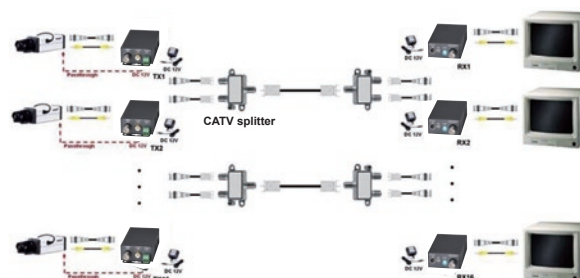
To eliminate high frequency interference on NTSC/PAL Video.

16 channels video or video & audio transmits over one coaxial cable

- Perfect solution for elevator, high voltage, heavy power interference.

**【Specification】**

Max transmission distance: 400 meters (RG59)



CHB001HMT



CHB001HMR

## Surge Protector

### SP009 HD-TVI/AHD/HDCVI/CVBS Surge Protector SP009T UTP HD-TVI/AHD/HDCVI/CVBS Surge Protector

To provide surge protection for HD-TVI, AHD, HDCVI, CVBS devices.

**【Specification】**

Connector: BNC male to BNC female (SP009), terminal to terminal (SP009T).  
Resolution: up to 4K  
Response time: < 1ns  
Insertion loss: 0.8dB(42MHz)

Max discharge current: 15kA  
Breakdown voltage: 6V



SP009

SP009T

### SP002 HD-TVI/AHD/HDCVI/CVBS Surge Protector (F Connector)

To provide surge protection for video

**【Specification】**

Connector: F male to F female.

Resolution: up to 4K  
Response time: < 1ns  
Insertion loss: < 0.2dB

Max discharge voltage: 4kV  
Breakdown voltage: AC/DC 130V



SP002

### SP003 HD-TVI/AHD/HDCVI/CVBS & Data Surge Protector (RJ45 Connector)

To provide surge protection for video and data, two pairs protection (Brown, Green)

**【Specification】**

Connector: RJ45 to RJ45.

Resolution: up to 4K  
Response time: < 1ns  
Insertion loss: < 0.2dB

Max discharge voltage: 4kV  
Breakdown voltage: AC/DC 12V



SP003

### SP004 UTP Data Surge Protector

To provide surge protection for data

**【Specification】**

Connector: terminal to terminal

Resolution: up to 4K  
Response time: < 1ns  
Insertion loss: < 0.2dB

Max discharge voltage: 4kV  
Breakdown voltage: AC40V/DC 56V



SP004

### SP004VPD UTP HD-TVI/AHD/HDCVI/CVBS Video & Power & Data Surge Protector

To provide surge protection for video and AC/DC power

**【Specification】**

Connector: terminal to terminal

Resolution: up to 4K  
Response time: < 1ns  
Insertion loss: < 0.2dB

Breakdown voltage( power): AC40V/DC56V  
Breakdown voltage (video): AC/DC 12V

Max discharge voltage: 4kV



SP004VPD

### SP005 HD-TVI/AHD/HDCVI/CVBS & Data Surge Protector

To provide surge protection for video and data

**【Specification】**

Connector: BNC female & terminal to BNC female & terminal

Resolution: up to 4K  
Response time: < 1ns  
Insertion loss: < 0.2dB

Max discharge voltage: 4kV  
Breakdown voltage: AC/DC 12V



SP005

### SP001P Power Surge Protector

To provide surge protection for AC/DC power

**【Specification】**

Connector: terminal to terminal

Response time: < 1ns  
Insertion loss: < 0.2dB

Max discharge voltage: 4kV  
Breakdown voltage: AC40V/DC56V



SP001P

### SP001VP HD-TVI/AHD/HDCVI/CVBS & Power Surge Protector

To provide surge protection for video and AC/DC power

**【Specification】**

Connector: 3 pin terminal & BNC female to 4 pin terminal & BNC female.

Resolution: up to 4K  
Response time: < 1ns  
Insertion loss: < 0.2dB

Breakdown voltage( power): AC40V/DC56V  
Breakdown voltage (video): AC/DC 12V

Max discharge voltage: 4kV



SP001VP

### SP001VPD HD-TVI/AHD/HDCVI/CVBS & Power & Data Surge Protector

To provide surge protection for video, AC/DC power, and data

**【Specification】**

Connector: RJ45 to RJ45.

Resolution: up to 4K  
Response time: < 1ns  
Insertion loss: < 0.2dB

Max discharge voltage: 4kV  
Breakdown voltage: AC/DC 12V



SP001VPD

### SP016HD 16 Channel HD-TVI/AHD/HDCVI /CVBS Surge Protector in 1U Rack

### SP016HDT 16 Channel UTP HD-TVI/AHD/HDCVI/ CVBS Surge Protector in 1U Rack

To provide 16 channels surge protection for HD-TVI, AHD, HDCVI, CVBS devices.

- Perfect for DVR.

**【Specification】**

Connector: 16 BNC female to 16 BNC female (SP016HD)

16 terminal to 16 terminal (SP016HDT)

Resolution: up to 4K  
Response time: < 1ns  
Insertion loss: < 0.2dB

Max discharge current: 15kA  
Breakdown voltage: 6V



SP016HD



SP016HDT

## IP/PoC Transmission Distance & Data Rate Chart

Item No.	Support Mode	Max. Distance (m)	Input/Output DC Voltage				Data Rate of Distance (Mbps)											
			DC In	DC Out	PoE In	PoE Out	100 M	125 M	180 M	200 M	300 M	400 M	500 M	600 M	1000 M	1200 M	1800 M	
IP01(RG59)	IP	200	X	X	x	x	100	10	10	10	X	X	X	X	X	X	X	
IP01(RG6U)	IP	300	X	X	x	x	100	10	10	10	10	X	X	X	X	X	X	
IP01H	IP	200	5	X	X	X	10	10	10	10	X	X	X	X	X	X	X	
IP02DK (Coaxial)	IP	2000	5	X	X	X	90	80	80	80	50	49	48	45	40	30	20	
IP02DK (CAT5e)	IP	1200	5	X	X	X	90	90	90	80	50	47	45	40	30	20	X	
SR01	IP	120	5	X	X	X	1000	1000	X	X	X	X	X	X	X	X	X	
IP02E	IP	500	5	X	X	X	36	28	28	28	25	23	21	X	X	X	X	
IP02EP	PoC	500	48	5/12	X	X	36	28	28	28	25	23	21	X	X	X	X	
IP07M	PoC	500	24-56	12	x	x	72	72	72	72	72	72	51	42	15	x	x	

## IP over Coaxial/IP over Coaxial with Power (PoC) Extender

### IP01 Passive IP over Coaxial Extender

To send IP camera signal over existing coaxial cable.

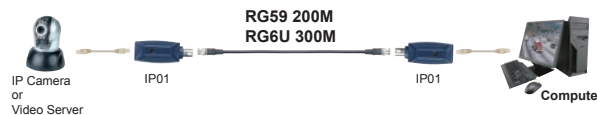
- No power required.
- Optional Model: IP01H (4 port)

#### 【Specification】

Max transmission distance: 300M over RG6U , 200M over RG59  
 Link speed: 10Mbps(100-300M), 10/100Mbps (less than 100M)



IP01



### IP01H Ethernet Switch with 4 Port BNC and 1 Port RJ45

To receive up to 4 ports IP signal from IP01 to BNC port, and RJ45 connect to NVR

- BNC terminal support link speed 10Mbps
- RJ45 terminal support link speed 10/100Mbps( auto-detection)

#### 【Specification】

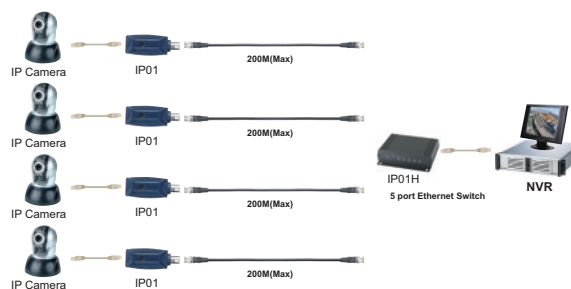
Max transmission distance: 200M over RG59  
 Link speed of BNC terminal: 10Mbps  
 Link speed of RJ45 terminal: 10/ 100Mbps (auto-detection)



IP01H

### IP01K 4 Channel IP over Coaxial Kit

Package included: IP01 x 4pcs, IP01H with power adapter x 1pcs



### IP02E Hybrid IP & Analog Video over Coaxial Extender

To extend both analog video and IP video over one coaxial cable up to 500M.

#### 【Specification】

Max transmission distance: 500M  
 Link speed: 10/100 Mbps



IP02ET

IP02ER



## IP02DK IP over Coaxial/CAT5e Extender

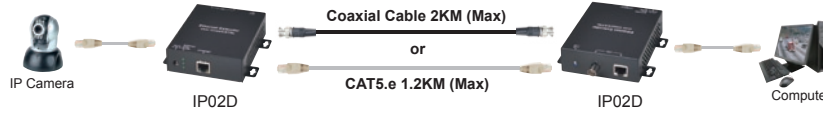
To extend signal of IP camera or any TCP/IP devices for long distance up to 2KM.

- Dual cabling selection: coaxial or CAT5e

**【Specification】**

Max transmission distance: 2,000M(Coaxial) 1,200M (CAT5e)

Link speed: 10/100 Mbps



IP02D



IP02D

## IP02EP IP & Power over Coaxial Extender

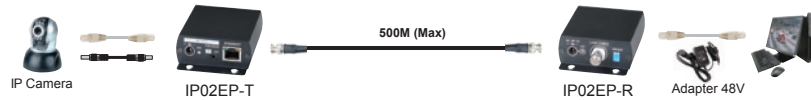
To extend both IP camera signal and power over existing coaxial cable.

**【Specification】**

Max transmission distance: 500M

Link speed : 10/100 Mbps

Power output: DC5V 2.0A(Max) or DC12V 1.0A (Max)



IP02EPT



IP02EPR

## IP07M Chainable IP & Power over Coaxial/Two Wire Extender

To extend both IP camera signal and power over coaxial cable or any two wire cable.

Support chainable/ series/star configuration.( up to 4 IP cameras in one configuration).

**【Specification】**

Max transmission distance: 1500M

Link speed: 10/100 Mbps

Power output: DC12V 1.0A(Max)

Power input: DC48V/40W: SWP480830

DC56V/70W:SWP551260



IP07M

## SR01 LAN Repeater

To extend IP signal and data signal over CAT5e cable up to 120M

Using multiple repeater to get long transmission distance.

**【Specification】**

Max transmission distance: 120M

Link speed: 10/100/1000 Mbps



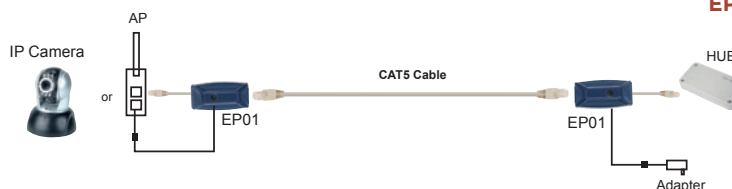
SR01

## EP01 Easy PoE - Passive

To send power to remote device over pairs of EIA-568B(RJ45 PIN DEFINE).

**【Specification】**

Max transmission distance: depends on the power supply, cable type.



EP01



EP01

## PoE Transmission Distance/Date Rate Chart

Item No.	Support Mode	Max. Distance (M)	Input/Output DC Voltage				Data Rate of Distance (Mbps)										
			DC In	DC Out	PoE In	PoE Out	100M	125M	180M	200M	300M	400M	500M	600M	1000M	1500M	
IP01P(RG6U)	POE	150	X	X	56	56	100	10	10	10	10	X	X	X	X	X	
IP02P(RG59)	POE	125	48	x	56	56	100	100	X	X	X	X	X	X	X	X	
IP02P(RG6U)	POE	180	48	x	56	56	100	100	100	X	X	X	X	X	X	X	
IP03P	POE	600	56	12	56	56	71	71	71	71	71	71	71	65	26	40	
IP04	POE	120	X	X	48	48	1000	1000	X	X	X	X	X	X	X	X	
IP04X	POE	120	X	X	56	56	1000	1000	X	X	X	X	X	X	X	X	
IP04X90	POE	120	X	X	56	56	1000	1000	X	X	X	X	X	X	X	X	

## PoE Extender/Repeater

### IP01P PoE over Coaxial Extender

To extend PoE signal over coaxial cable.

#### 【Specification】

- Max transmission distance: 150M(RG6U)
- Link speed : 10/100 Mbps
- PoE compliance: IEEE802.3af, IEEE802.3at



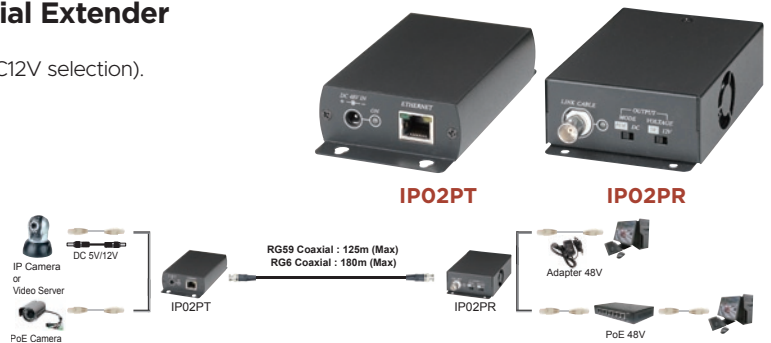
### IP02P High Performance PoE over Coaxial Extender

To extend PoE signal over coaxial cable.

- Built-in splitter for providing DC power to IP camera (DC5V, DC12V selection).
- Power can be provided from PoE devices or power adapter.

#### 【Specification】

- Max transmission distance: 180M(RG6U)
- Link speed : 10/100 Mbps
- PoE compliance: IEEE802.3af



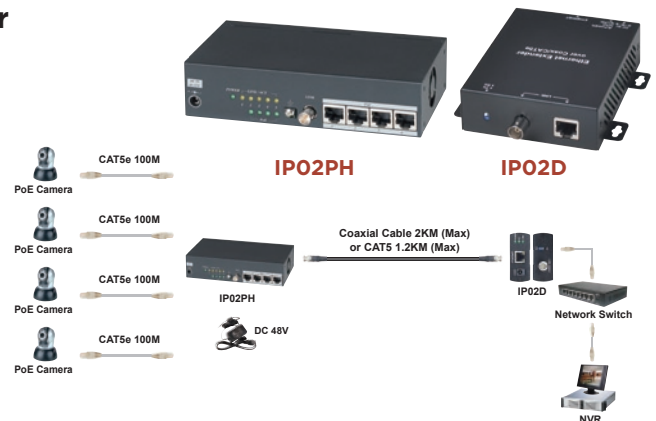
### IP02PHK 4 Port PoE Camera Long Range Extender

To extend 4 port IP/PoE signal over one coaxial or CAT5e cable.

- Package includes: IP02PH x 1, IP02D x1
- IP02PH supports auto-detect for detecting PoE or non-PoE devices

#### 【Specification】

- Cable: Coaxial or CAT5e
- Max transmission distance: 2,000M(Coaxial), 1,200M(CAT5e)
- Link speed : 10/100 Mbps
- PoE compliance: IEEE802.3af



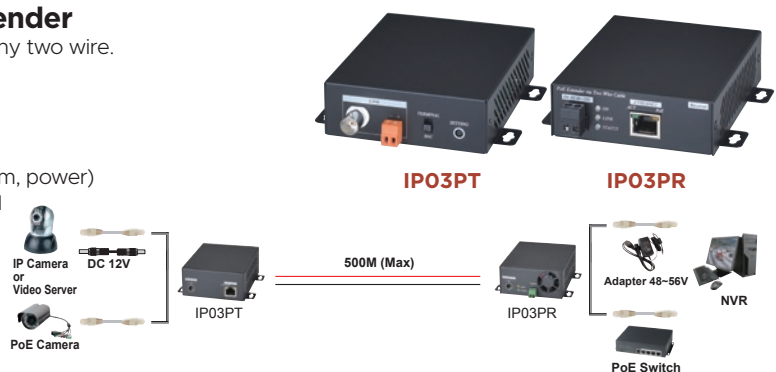
### IP03P PoE over Coaxial/Two Wire Extender

To extend Ethernet and PoE signal over one coaxial on cable or any two wire.

- Power can be provided from PoE devices or power adapter.
- Built-in splitter for providing DC12V power to IP camera
- Provide high power PoE to PTZ cameras over long distances.

#### 【Specification】

- Cable: Coaxial cable or any two wire(UTP, telephone, bell, alarm, power)
- Max transmission distance: PoE: 600M, Ethernet signal: 1000M
- Link speed : 10/100 Mbps
- PoE compliance: IEEE802.3af, IEEE802.3at





## PoE Repeater

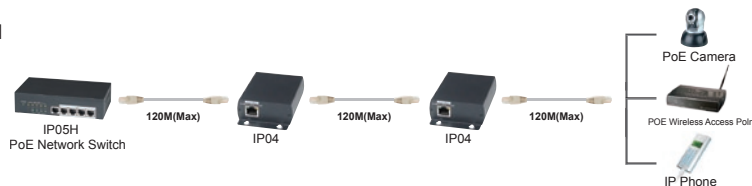
### IP04 15W PoE Repeater

To extend PoE signal beyond 100M over CAT5e cable.

- Allow to chain multiple repeaters for long distance transmission.
- No external power required.

#### 【Specification】

Max transmission distance: 120M  
Link speed : 10/100/1000 Mbps  
PoE compliance: IEEE802.3af



IP04

### IP04X 30W High Power PoE Repeater

Identical to IP04, but support high power up to 30W.

#### 【Specification】

Max transmission distance: 120M  
Link speed : 10/100/1000 Mbps  
PoE compliance: IEEE802.3af, IEEE 802.3at



IP04X

### IP04X90 90W Ultra High Power PoE Repeater

Identical to IP04, but support high power up to 90W.

- Perfect for remote outdoor PoE camera.
- Built-in external power input port for getting sufficient power from power adapter after a long distance run.

#### 【Specification】

Max transmission distance: 120M  
Link speed : 10/100/1000 Mbps  
PoE compliance: IEEE802.3af, IEEE802.3at, PoE+, LTPoE++



IP04X90

## PoE Injector/Splitter/Switch

### IP05E (IP05IE+IP05SE) 15W PoE Injector & Splitter

To send power to PoE equipment

To split a PoE signal into separated power and Ethernet data and provide power to non-PoE device

- Adjustable DIP switch for 5V, 9V, and 12VDC output (IP05SE)

#### 【Specification】

Link speed : 10/100 Mbps  
PoE compliance: IEEE802.3af  
Power input: 100 ~ 240 VAC  
Power output: DC5V, DC9V, DC12V Max. 19W (IP05SE)



IP05SE



IP05IE

### IP06 (IP06I+IP06S) 30W High Power PoE Injector & Splitter

Identical to IP05E, but support up to 30W

- Adjustable DIP switch for DC5V, DC12V output (IP06S)

#### 【Specification】

Link speed : 10/100/1000 Mbps  
PoE compliance: IEEE802.3af, IEEE802.3at  
Power input: 100 ~ 240 VAC  
Power output: DC5V, DC12V Max. 25W (IP06S)



IP06S



IP06I

### IP06I90 90W Ultra High Power PoE Injector

To send ultra high power 90W to PoE equipment

Work with IP06S60 (PoE splitter) for non-PoE device or IP04X90 (PoE repeater) for long distance application

- Built-in overload and overheat protection.

#### 【Specification】

Link speed : 10/100/1000 Mbps  
PoE compliance: IEEE802.3af, IEEE802.3at, LTPoE++  
Max power output: 90W  
Optional power adapter: DC48V 40W (SWP480830S)  
DC56V 90W (SWP561600S)



IP06I90

## IP06S60-12 60W Ultra High Power PoE Splitter DC12V Output

Work with IP06I90 and output DC12V 5A (60W) power to non-PoE device.

- Built-in overload and overheat protection.

### 【Specification】

Link speed : 10/100/1000 Mbps

PoE compliance: IEEE802.3af, IEEE802.3at, LTPoE++

Max power output: 60W



IP06S60-12

## IP06S60-24 60W Ultra High Power PoE Splitter DC24V Output

Identical to IP06S60-12, but with DC24V power output.

### 【Specification】

Max power output: 58W

## IP06H 5 Port 120W High Power PoE Switch

5Port Gigabit Ethernet Switch with 4 ports of PoE 802.3at supported, total 120W power output

- Auto-sensing for detecting PoE or non-PoE devices.

### 【Specification】

Link speed : 10/100/1000 Mbps

PoE compliance: IEEE802.3af, IEEE802.3at

Max power output: 30W (per port), 120W(total)

Option Model: TPN002 1U 19" Rack Mounting Panel



IP06H

## TPN002U 19" 1U Rack Mounting Panel

Standard 1U Rack for up to 2 pieces of IP06H.

### 【Specification】

Wide: 19-inch (482mm), Height: 1.75-inch (44mm)



TPN002U

## IP08H 8 Port 120W High Power PoE Switch

8Port Fast Ethernet Switch with 8 ports of PoE 802.3at supported, total 120W power output

### 【Specification】

Link speed : 10/100Mbps

PoE compliance: IEEE802.3af, IEEE802.3at

Max power output: 30W(per port), 120W(total)



IP08H

## IP16H 16 Port 250W High Power PoE Switch

16Port Fast Ethernet Switch with 16 ports of PoE 802.3at supported, total 250W power output

### 【Specification】

Link speed : 10/100Mbps

PoE compliance: IEEE802.3af, IEEE802.3at

Max power output: 30W(per port), 250W(total)



IP16H

## IP24H 24 Port 380W High Power PoE Switch

24Port Fast Ethernet Switch with 2 Combo Gigabit UTP/SFP open slots, total 380W power output

### 【Specification】

Link speed : 10/100Mbps(24-port), 10/100/1000Mbps( 2 combo port)

PoE compliance: IEEE802.3af, IEEE802.3at

Max power output: 30W(per port), 380W(total)



IP24H

## IP/PoE Surge Protector

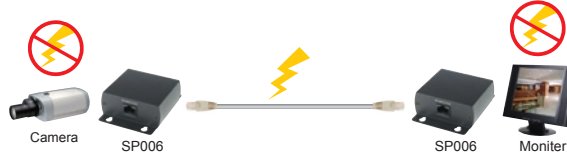
### SP006 Ethernet Surge Protector

To protect Ethernet equipment (four pairs protection) from high voltage surges from nearby lightning strikes.

- Perfect for IP camera, network, PC modem, server

**【Specification】**

Link speed: 10/100Mbps  
 Response time: < 1ns  
 Max discharge voltage: 4kV  
 Insertion loss: < 0.2dB



SP006

### SP006H High Performance 10G Ethernet Surge Protector

Identical to SP006, but support data rate up to 10Gbps

- Perfect for HDBaseT extender and any Ethernet equipment.
- Built-in ESD, EFT (impulse noise) protection.

**【Specification】**

Link speed : 10/100/1000Mbps/10Gbps  
 Response time: < 1ns  
 Max discharge voltage: 6kV  
 Insertion loss: < 0.2dB



SP006H

### SP006P PoE Surge Protector

To protect PoE equipment from high voltage surges from nearby lightning strikes.

- Support Mid-Span PoE and End-Span.

**【Specification】**

Link speed: 10/100Mbps  
 PoE compliance: IEEE802.3af, IEEE802.3at  
 Response time: < 1ns  
 Max discharge voltage: 4kV  
 Insertion loss: < 0.2dB



SP006P

### SP006PH High Performance 1G PoE Surge Protector

To protect 1G PoE equipment from high voltage surges from nearby lightning strikes.

- Support Mid-Span PoE and End-Span.

**【Specification】**

Link speed: 10/100/1000Mbps  
 PoE compliance: IEEE802.3af, IEEE802.3at  
 Response time: < 1ns  
 Max discharge voltage: 4kV  
 Insertion loss: < 0.2dB



SP006PH

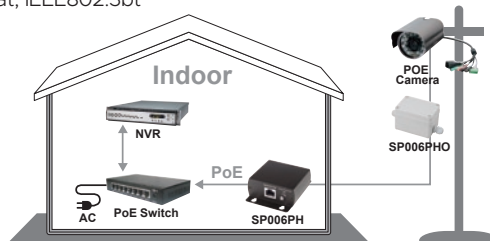
### SP006PHO High Performance Outdoor 1G PoE Surge Protector

To protect outdoor 1G PoE equipment from high voltage surges from nearby lightning strikes.

- Support high power 90W pass-through

**【Specification】**

Link speed: 10/100/1000Mbps  
 PoE compliance: IEEE802.3af, IEEE802.3at, IEEE802.3bt  
 Response time: < 0.7ns  
 Max discharge voltage: 20kV  
 Max discharge current: 10KA  
 Insertion loss: < 0.2dB  
 Water proof rating: IP66



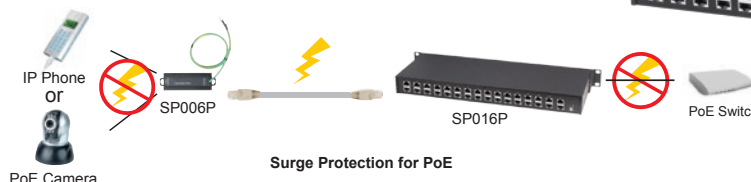
SP006PHO

### SP016P 16 Channel PoE Surge Protector in 1U Rack

To protect up to 16 devices of 1G PoE equipment from high voltage surges from nearby lightning strikes.

**【Specification】**

Link speed: 10/100/1000Mbps  
 PoE compliance: IEEE802.3af, IEEE802.3at  
 Response time: < 1ns  
 Max discharge voltage: 4kV  
 Insertion loss: < 0.2dB



SP016P

## HD/SD-SDI Extender

### SDI06 HD-SDI Coaxial Extender

To extend HD-SDI signal over coaxial cable up to 300M.

- Strengthen HD-SDI signal compatibility with coaxial cable
- Compact size

**【Specification】**

Max transmission distance: 300M  
SDI format: HD-SDI (SMTPE292M)



**SP006H**

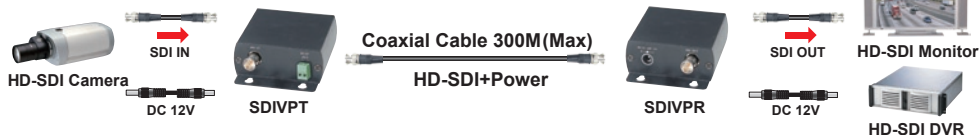
### SDIVP HD-SDI & Power over One Coaxial Extender

To send HD-SDI video and camera power over one coaxial cable.

- Built-in 2KA (8/20uS) surge protection

**【Specification】**

Max transmission distance: 300M  
SDI format: HD-SDI (SMTPE292M)  
Power Input: DC12-DC58V  
Power output: DC12V 1Amp



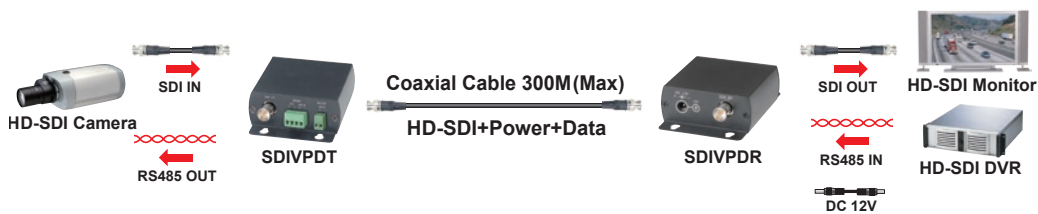
**SDIVPT**



**SDIVPR**

### SDIVPD HD-SDI & Power & RS485 Data over One Coaxial Extender

Identical to SDIVP, but with RS485 data.



**SDIVPDT**



**SDIVPDR**

## 3G/HD/SD-SDI Distribution Amplifier

### SDI04D 1 x 4 3G-SDI Distribution Amplifier

To split one HD-SDI video to 4 HD-SDI output and re-clock amplifier the signals.

**【Specification】**

Max transmission distance: 400M (camera to monitor)  
SDI format: 3G-SDI (SMPTE 424M)HD-SDI (SMTPE292M), SD-SDI (SMPTE 259M)



**SDI04D**



**SDI04D**

## 12G/6G/3G/HD/SD-SDI Converter

### SDI01-12G 12G-SDI to HDMI 2.0 Converter with Audio Embedded/Extract

To convert 12G-SDI signal to HDMI output with stereo audio embed and SDI audio extract function

- Support HDR 10, LPCM 7.1.
- Support SDI loop out

**【Specification】**

SDI format: 12G-SDI, 6G-SDI, 3G-SDI, HD-SDI, SD-SDI  
 Output format: HDMI  
 HDMI resolution: up to 4K 60Hz 4:4:4/4:2:2/4:2:0



SDI01-12G

SDI01-12G



### SDI01 3G/HD-SDI to HDMI Converter with Loop Out

To convert 3G/HD/SD-SDI signal to HDMI.

- Support HDMI 7.1 Channel audio.
- Built-in equalizer to increase the working distance and signal reliability.

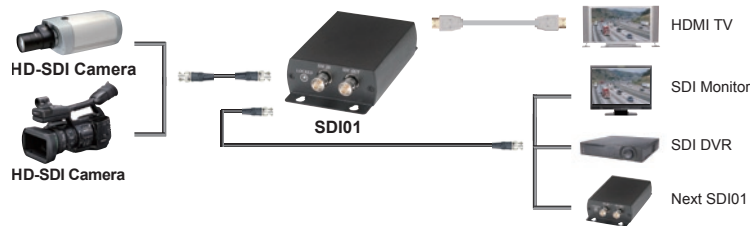
**【Specification】**

SDI format: 3G-SDI (SMPTE 424M), HD-SDI (SMPTE292M), SD-SDI (SMPTE 259M),



SDI01

SDI01



### SDI02 HDMI to 3G/HD-SDI Converter

To convert HDMI signal to 3G/HD/SD-SDI signal

- Support audio LPCM 7.1 Channel.

**【Specification】**

SDI format: 3G-SDI (SMPTE 424M), HD-SDI (SMPTE292M), SD-SDI (SMPTE 259M),



SDI02

SDI02

## 3G/HD/SD-SDI Surge Protector

### SP007 3G/HD-SDI Surge Protector

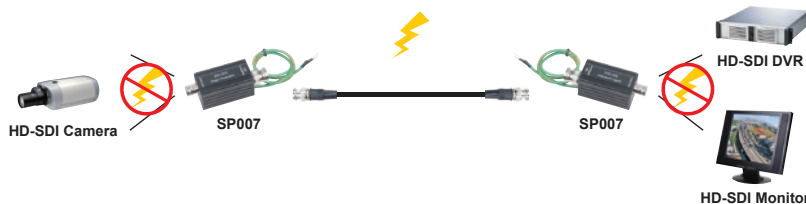
To provide protection for SDI relative devices, such as SDI camera, SDI monitor

**【Specification】**

SDI format: 3G-SDI (SMPTE 424M), HD-SDI (SMPTE292M), SD-SDI (SMPTE 259M),  
 Connector: BNC male to BNC female.  
 SDI transmission rate: 270M ~ 2.97G  
 Response time: < 1ns  
 Max discharge voltage: 8KV  
 Insertion loss: 1.1dB  
 Breakdown voltage( power):DC24V  
 Max discharge current: 10KA



SP007



### SP007L HD-SDI Surge Protector for HD-SDI DVR

Identical to SP007, but with 10cm HD coax cable for mounting behind DVR easily

**【Specification】**

SDI transmission rate: 270M ~ 1.5G



SP007L

## HDMI/DVI/VGA KVM Matrix Switch over IP with Video Wall



ITEM NO.	Video Interface	Resolution	Transmitter	Receiver	USB	RS232	IR	Analog Audio	PoE
HKM02BPT-4K	HDMI	4K 30Hz	√		√	√	√	Bi-Directional	√
HKM02BT-4K	HDMI	4K 30Hz	√		√	√	√	Bi-Directional	
HKM02BT	HDMI	1080p	√		√	√	√	Bi-Directional	
VDKM02BT	VGA/DVI	1920x1200	√		√	√	√	Bi-Directional	
HKM02BPR-4K	HDMI	4K 30Hz		√	√	√	√	Bi-Directional	√
HKM02BR-4K	HDMI	4K 30Hz		√	√	√	√	Bi-Directional	
HKM02BR	HDMI	1080p		√	√	√	√	Bi-Directional	
VDKM02BR	VGA/DVI	1920x1200		√	√	√	√	Bi-Directional	

### • Extend and Distribute Video with Multi Functions

- Video: Supports resolution up to 4K 30Hz  
Support HDCP 2.2 .
- USB: Support 4 ports USB devices (USB 2.0 port x 2, USB 1.1 port x 2)
- RS232: Support full duplex Bi-Directional RS232 extension (baud rate up to 115200)
- IR: Support Bi-Directional IR extension
- Audio: Support Bi-Directional analog audio extension (at unicast mode).  
Support Dolby TrueHD®, DTS-HD Master™, LPCM audio 7.1 channels@192 Khz.
- Extension: Support transmission distance up to 150M over CAT5e cable  
**\*Support SFP optical transceiver for extra longer distance up to 60KM**

### • Video/Audio/USB/IR/RS232 Function Free Routing

Ex. Display video from channel 1, but output the audio from channel 2

### • HDMI/DVI/VGA Signal Mixable and Easy Integration

4K/1080p HDMI, VGA and DVI signals are able to be integrated over a LAN.

### • Flexible and Scalable

Transmitter unit up to 1000 pieces.  
Receiver unit over 60000 pieces

### • Support Video Wall Control up to 8 x16 (128 monitors)

### • Audio Embedded and Extract

Built-in HDMI audio embedded and extract function  
Support HDMI audio and analog audio output at same time, also could be selectable.

### • Low Compression and Ultra Low Latency

Enhance HD quality picture with low latency time 16ms.  
Support quick channel switching.

### • Multiple Controls

Front panel button with 7 Segment Display.  
IR remote control  
Android/iOS APP  
Windows Software  
RS232 Command  
Telnet API command  
External Keypad / Console Box (Custom-made available)

# HDMI/DVI/VGA over IP Transmission

**HKM02BPT-4K** 4K HDMI KVM & USB, RS232 , IR, Audio Transmitter with PoE

**HKM02BPR-4K** 4K HDMI KVM & USB, RS232 , IR, Audio Receiver with PoE

**HKM02BT-4K** 4K HDMI KVM & USB, RS232 , IR, Audio Transmitter

**HKM02BR-4K** 4K HDMI KVM & USB, RS232 , IR, Audio Receiver

- Transmitter built-in HDMI loop out

**【Specification】**

Cable: CAT5e UTP or higher or SFP optical fiber

Resolution: up to 4K 30Hz 4:4:4 (Max)



**HKM02BPR-4K**  
**HKM02BR-4K**

**HKM02BPT-4K**  
**HKM02BT-4K**

**HKM02BT** 1080p HDMI KVM & USB, RS232 , IR, Audio Transmitter

**HKM02BR** 1080p HDMI KVM & USB, RS232 , IR, Audio Receiver

- Transmitter built-in HDMI loop Out

**【Specification】**

Cable: CAT5e UTP or higher

Resolution: up to 1080p 60Hz (Max)



**HKM02BT**

**HKM02BR**

**VDKM02BT** VGA/DVI KVM & USB, RS232 , IR, Audio Transmitter

**VDKM02BR** VGA/DVI KVM & USB, RS232 , IR, Audio Receiver

- Transmitter built-in both DVI and VGA loop out
- Receiver support DVI & VGA output at the same time.

**【Specification】**

Cable: CAT5e UTP or higher

Resolution: up to 1920x1200 60Hz (Max)



**VDKM02BT**

**VDKM02BR**

**TPN002BT** Fit 2 pcs of HKM02BT-4K Transmitter Unit



**TPN002BT**

**TPN003BT** Fit 3 pcs of HKM02BT Transmitter Unit



**TPN003BT**

**TPN002VD** Fit 2 pcs of VDKM02BT Transmitter Unit



**TPN002VD**

**PR1008-5R** 10A 8 Port DC5V Regulated Power Supply in 1U Rack

To send regulated DC5V power to multiple HKM02B, VDKM02B



**PR1008-5R**

**PR816-12R** 8A 16 Port DC12V Regulated Power Supply in 1U Rack

To send regulated DC12V power to multiple HKM02B-4K



**PR816-12R**

**KC01** External RS232 Keypad

Easily switch the channel of receiver



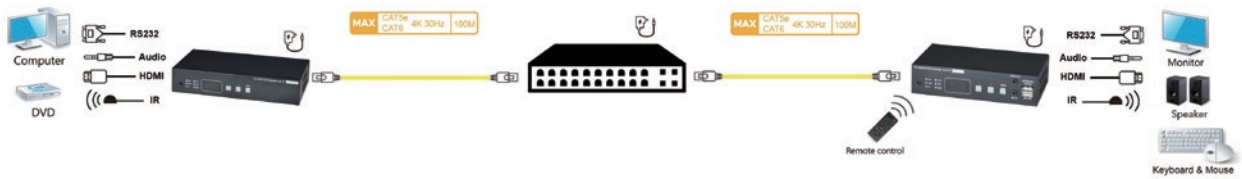
**KC01**

## Application and Installation View

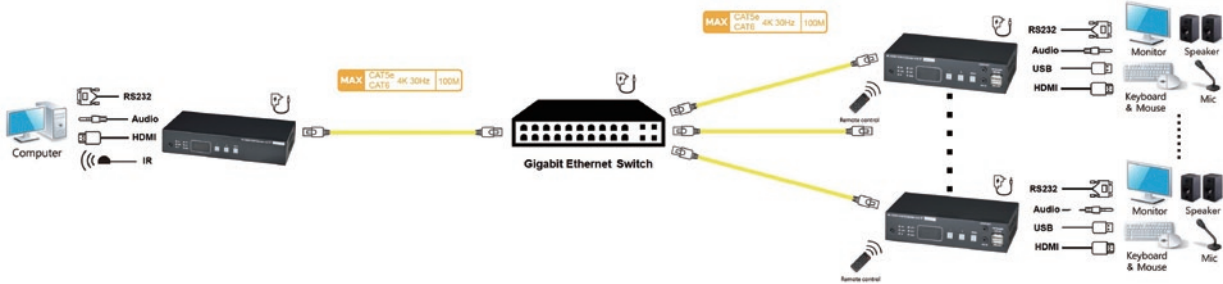
### 【Point to Point】



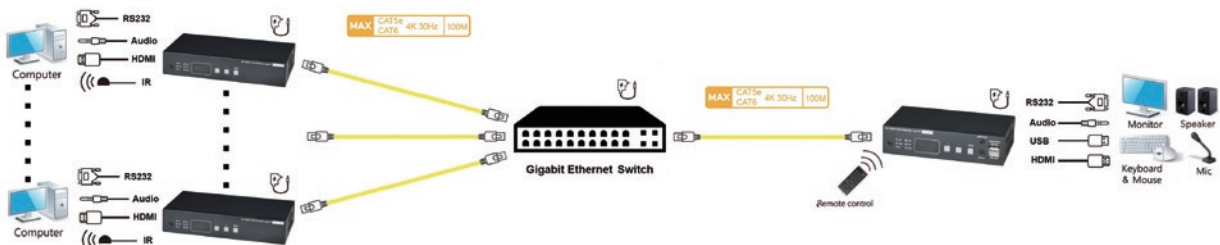
### 【Point to Point with Switch/Repeater in Between】



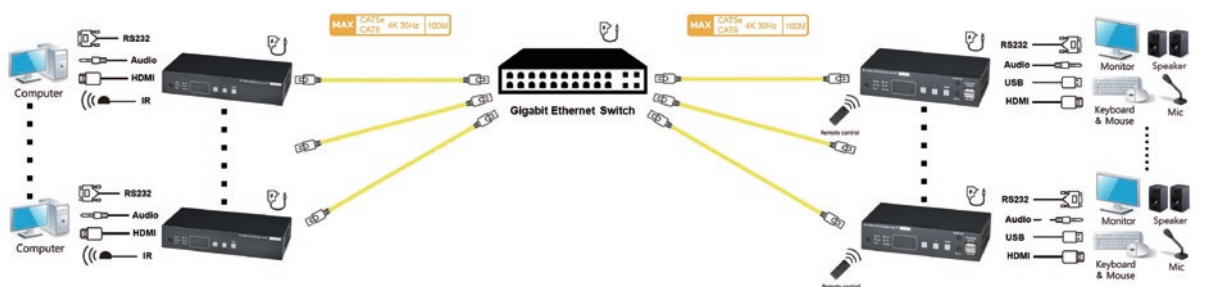
### 【One Sources to Multiple】



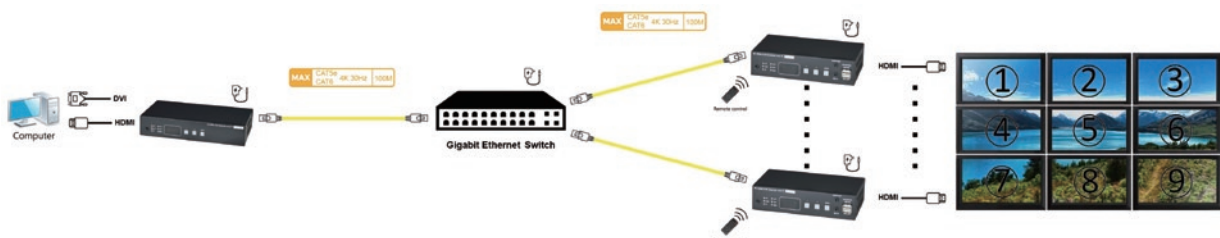
### 【Multiples Sources to One】



### 【Multiples Sources to Multiple】



### 【Video Wall】





## HDMI Extender

### HE01ERK Passive HDMI CAT5e Extender

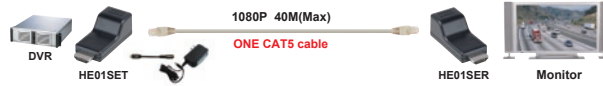
Special design to extend HDMI signal of DVR/NVR over one CAT5e cable

- No external power required.
- Built-in micro USB for external power when HDMI source is not able to provide enough power to the receiver.

**【Specification】**

Cable: CAT5e UTP or higher

Max transmission distance: 1080p 40M  
1080i, 720p 60M



HE01SET



HE01SER

### HE01SE HDMI CAT5e Extender with Passive Reciver

To extend HDMI signal over one CAT5e cable.

- HDMI 1.3 compliant, 3D capable.
- No power required at receiver side.( HE01SER)
- Transmitter unit Built-in EDID auto backup function.

**【Specification】**

Cable: CAT5e UTP or higher

Max transmission distance: 1080p 40M  
1080i, 720p 60M



HE01ST



HE01SER

### HE01S HDMI CAT5e Extender

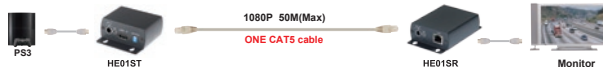
To extend HDMI signal over one CAT5e cable.

- HDMI 1.3, HDCP compliant, 3D capable.
- Transmitter unit Built-in EDID auto backup function.

**【Specification】**

Cable: CAT5e UTP or higher

Max transmission distance: 1080p 50M  
1080i, 720p 60M



HE01ST



HE01SR

### HE01SI HDMI & IR CAT5e Extender

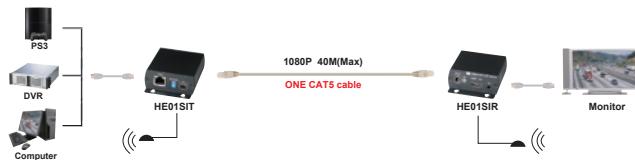
To extend HDMI and IR signals over one CAT5e cable.

- HDMI 1.3 compliant, 3D capable.
- Transmitter unit Built-in EDID auto backup function.
- Support selectable Bi-directional IR transmission.

**【Specification】**

Cable: CAT5e UTP or higher

Max transmission distance: 1080p 40M  
1080i, 720p 60M



HE01SIT



HE01SIR

### HE01SL HDMI CAT5e Extender with Chainable Receiver

To extend HDMI signal over one CAT5e cable.

- Receiver built-in RJ45 loop out, support daisy chain function for another HE01SLR
- HDMI 1.3 compliant, 3D capable
- Auto-equalization, retiming, pre-emphasized video performance.

**【Specification】**

Cable: CAT5e UTP or higher

Max transmission distance: 1080p 30M  
1080i, 70M



HE01ST



HE01SLR

## 4K 60Hz HDMI over HDBaseT Extender

Item no.	Interface	Max Distance @ 1080p 60Hz	Max Distance @ 4K 60Hz 4:2:0	IR	RS232	PoH	Ethernet	ARC	USB
VHE02EIP	VGA/HDMI	70M	40M	✓	✓	✓			
HE02EI	HDMI	70M	40M	✓					
HE02EIP	HDMI	70M	40M	✓		✓			
HE02E	HDMI	100M	100M						
HE02N	HDMI	100M	100M	✓	✓		✓	✓	
HE02P	HDMI	100M	100M	✓	✓	✓	✓		
HE20E	HDMI	150M	100M	✓	✓				
HE23U	HDMI	150M	100M	✓	✓				✓

### VHE02EIP 4K HDMI/VGA Auto-Switching & IR/PoH/RS232 HDBaseT Extender 70M

To send VGA or HDMI signal (auto-selection) over one CAT5e cable.

- Convert and extend VGA& stereo audio signals to HDMI output.
- Uncompressed high definition video up to 4K 60Hz 4:2:0(HDMI).
- HDMI 1.4 and HDCP compliance.
- Support Bi-directional IR, RS232
- Support PoH(Power over HDBaseT), power can be provided from either transmitter or receiver side
- Transmitter unit include wall plate mounting brackets for installing on wall conference table.

**【Specification】**

Cable: CAT5e or higher

Audio format: up to LPCM7.1 @192kHz, Dolby TrueHD, DTS-HD MA

Max transmission distance: HDMI: up to 70M at 1080p 60Hz 12bit

up to 40M at 4K 60Hz YCbCr 4:2:0

up to 40M at 4K 30Hz YCbCr 4:4:4

VGA: up to 70M at 1920 x 1200 60Hz 32bit



### HE02EI 4K HDMI & IR CAT5e Extender 70M

To extend HDMI and IR signal over one CAT5e cable.

- Uncompressed high-definition video
- Support selectable Bi-directional IR extension.
- HDMI 1.4 and HDCP compliance.
- EDID and CEC signals are passed through from the source to the display.

**【Specification】**

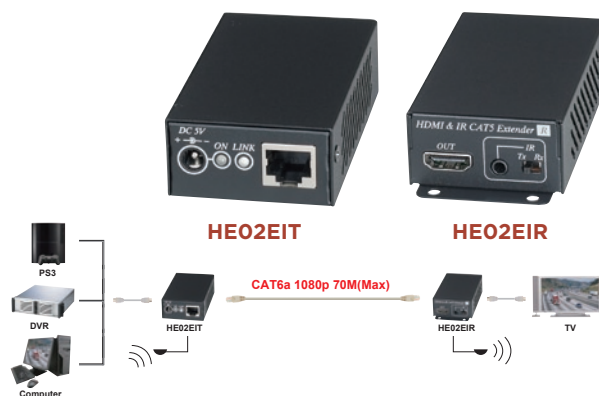
Max Data Rate: 10.2Gbps.

Audio format: up to LPCM7.1 @192kHz, Dolby TrueHD, DTS-HD MA.

Max transmission distance: up to 70M at 1080p 60Hz 12bit

up to 40M at 4K 60Hz YCbCr 4:2:0

up to 40M at 4K 30Hz YCbCr 4:4:4



### HE02EIP 4K HDMI & IR/PoH CAT5e Extender 70M

To extend HDMI and IR signal and power over one CAT5e cable.

- Uncompressed high definition video
- Support PoH (Power over HDBaseT), no external power required at receiver
- Support Bi-directional IR extension: 30-60kHz.
- HDMI 1.4 and HDCP compliance.
- EDID and CEC signals are passed through from the source to the display.

**【Specification】**

Cable: CAT5e or higher

Max Data Rate: 10.2Gbps.

Audio format: up to LPCM7.1 @192kHz, Dolby TrueHD, DTS-HD MA.

Max transmission distance: up to 70M at 1080p 60Hz 12bit

up to 40M at 4K 60Hz YCbCr 4:2:0

up to 40M at 4K 30Hz YCbCr 4:4:4



### HE02E 4K HDMI CAT5e Extender 100M

To extend HDMI signal over one CAT5e cable.

- Uncompressed high definition video
- HDMI 1.4 and HDCP compliance.
- EDID and CEC signals are passed through from the source to the display.

**【Specification】**

Cable: CAT5e or higher

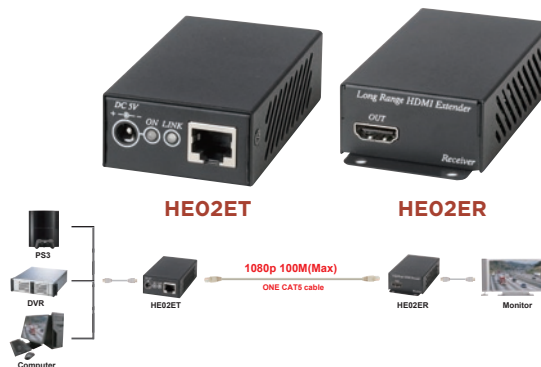
Max Data Rate: 10.2Gbps.

Audio format: up to LPCM7.1 @192kHz, Dolby TrueHD, DTS-HD MA.

Max transmission distance: up to 100M at 1080p 60Hz 12bit

up to 100M at 4K 60Hz YCbCr 4:2:0

up to 100M at 4K 30Hz YCbCr 4:4:4



# HDMI Transmission

## HE02N 4K HDMI & IR/RS232/Ethernet/ARC CAT5e Extender 100M

To extend HDMI, Ethernet, ARC, RS232 and IR signal over one CAT5e cable.

- Uncompressed high definition video.
- HDMI 1.4 and HDCP compliance.
- Support Ethernet extension for connecting the network TV or devices.
- Support ARC or Optical digital audio extension to send TV digital audio back to the amplifier.
- Support Bi-directional IR, RS232 extension
- EDID and CEC signals are passed through from the source to the display.

### 【Specification】

Cable: CAT5e or higher

Max Data Rate: 10.2Gbps.

Audio format: up to LPCM7.1 @192kHz, Dolby TrueHD, DTS-HD MA.

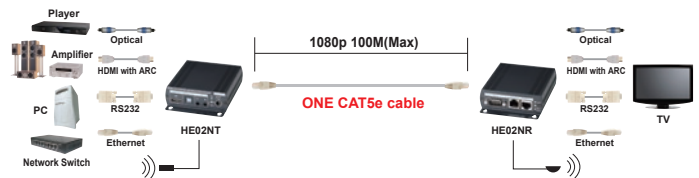
Max transmission distance: up to 100M at 1080p 60Hz 12bit  
up to 100M at 4K 60Hz YCbCr 4:2:0  
up to 100M at 4K 30Hz YCbCr 4:4:4

Ethernet: 10/100Mbps



HE02NT

HE02NR



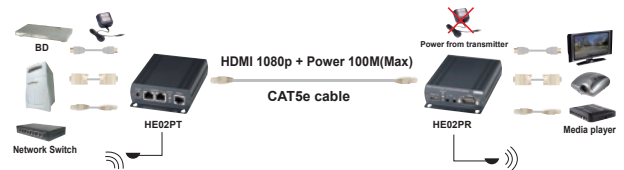
## HE02P 4K HDMI & IR/RS232/Ethernet/PoH CAT5e Extender 100M

Identical to HE02N, but without ARC function, and additional PoH function,



HE02PT

HE02PR



## HE20E 4K HDMI & IR/RS232 CAT5e Extender 100M

To extend HDMI, RS232 and IR signal by HDBaseT 2.0 technology over one CAT5e cable.

- HDMI 2.0 HDCP 2.2 & DVI Compliant.
- Uncompressed high definition video up to 4K 60Hz (YCbCr 4:2:0).
- Bi-directional IR, RS232 extension

### 【Specification】

Cable: CAT5e or higher

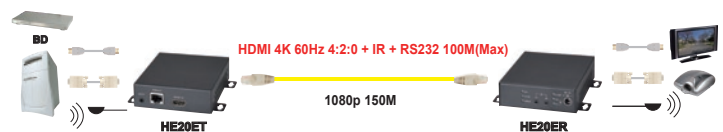
Audio format: up to LPCM7.1 @192kHz, Dolby TrueHD, DTS-HD MA.

Max transmission distance: up to 150M at 1080p 60Hz 8bit  
up to 100M at 1080p 60Hz 12bit  
up to 100M at 4K 60Hz YcbCr 4:2:0  
up to 100M at 4K 30Hz YcbCr 4:4:4



HE20ET

HE20ER



## HE23U 4K HDMI & USB/IR/RS232 CAT5e Extender 100M

To extend HDMI, USB, RS232 and IR signal by HDBaseT 2.0 technology over one CAT5e cable.

- HDMI 2.0, HDCP 2.2 & DVI Compliant.
- Uncompressed high definition video up to 4K 60Hz 4:2:0.
- Bi-directional IR, RS232 extension
- USB support USB 2.0 and USB 1.0 and 1.1.
- Perfect for 4K touch panel, USB camera application.

### 【Specification】

Cable: CAT5e or higher

Audio format: up to LPCM7.1 @192kHz, Dolby TrueHD, DTS-HD MA

Max transmission distance: up to 150M at 1080p 60Hz 8bit  
up to 100M at 1080p 60Hz 12bit  
up to 100M at 4K 60Hz YcbCr 4:2:0  
up to 100M at 4K 30Hz YcbCr 4:4:4



HE23UT

HE23UR



## 4K 60Hz 4:4:4 HDMI over HDBaseT Extender

Item no.	Max Distance @ 1080p 60Hz	Max Distance @ 4K 60Hz 4:4:4	IR	RS232	PoH	HDMI Dual Output	HDMI Local Loop Out
HEO2EIX	70M	40M	✓	✓		✓	✓
HEO2EX	100M	100M	✓	✓		✓	✓
HEO2EIXP	70M	40M	✓	✓	✓		
HEO2EXP	100M	100M	✓	✓	✓		

### HEO2EIX 4K 60Hz 4:4:4 HDMI & IR/RS232 CAT5e Extender 70M

To extend 4K 60Hz HDMI, RS232 and IR signal over one CAT5e cable.

- HDMI 2.0, HDCP 2.2, HDCP 1.4 , DVI Compliant.
- Transmitter built-in local loop out for local display.
- Receiver built-in dual HDMI output for two displays.
- Bi-directional IR, RS232 extension.
- Support CEC, EDID pass through.

**【Specification】**

Cable: CAT5e or higher

Max Data rate: 18Gbps (6Gbps per color)

Audio format: up to LPCM7.1 @192kHz, Dolby TrueHD, DTS-HD MA

Max transmission distance: up to 40M at 4K 60Hz YCbCr 4:4:4  
up to 70M at 1080p 60Hz 12bit:



### HEO2EX 4K 60Hz 4:4:4 HDMI & IR/RS232 CAT5e Extender 100M

Identical to above HEO2EIX, but the transmission distance is longer.

**【Specification】**

Max transmission distance: up to 100M at 4K 60Hz YCbCr 4:4:4  
up to 100M at 1080p 60Hz 12bit



### HEO2EIXP 4K 60Hz 4:4:4 HDMI & IR/RS232/PoH CAT5e Extender 70M

To extend HDMI signal over one CAT5e cable.

- Support PoH(Power over HDBaseT), power can be provided from either transmitter or receiver side
- HDMI 2.0, HDCP 2.2, HDCP 1.4 , DVI Compliant.
- Bi-directional IR, RS232 extension.
- Support CEC, EDID pass through

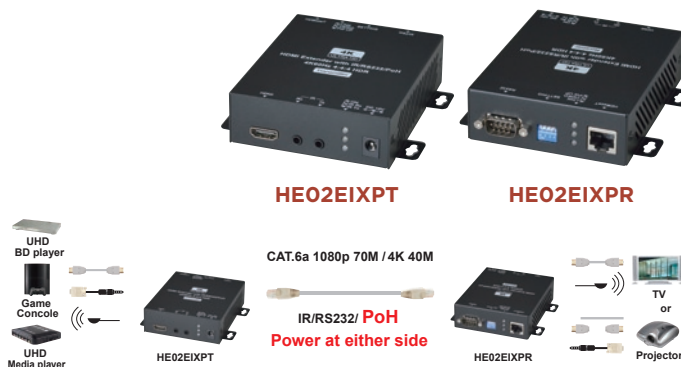
**【Specification】**

Cable: CAT5e or higher

Max Data Rate: 18Gbps (6Gbps per color)

Audio format: up to LPCM7.1 @192kHz, Dolby TrueHD, DTS-HD MA

Max transmission distance: up to 40M at 4K 60Hz YCbCr 4:4:4  
up to 70M at 1080p 60Hz 12bit



### HEO2EXP 4K 60Hz 4:4:4 HDMI & IR/RS232/PoH CAT5e Extender 100M

Identical to above HEO2EIXP, but the transmission distance is longer.

**【Specification】**

Max transmission distance: up to 100M at 4K 60Hz YCbCr 4:4:4  
up to 100M at 1080p 60Hz 12bit



## HDBaseT Tools

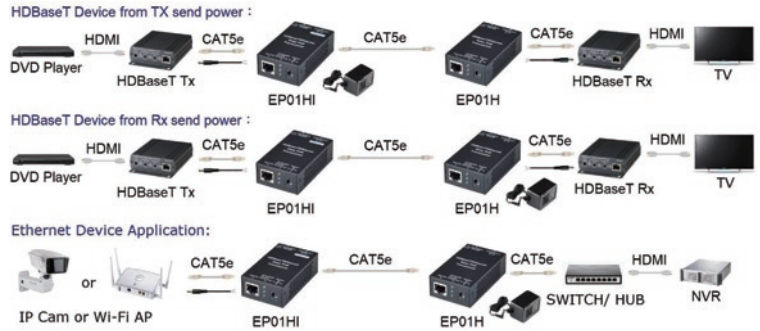
### EP01HK HDBaseT/10G Ethernet Power Injector and Splitter

To send power over CAT5e cable for HDBaseT or non-PoE Ethernet devices.

- Power source could be send either from EP01HI or EP01H (TX or RX) side.
- EP01HI Built-in isolation power to enhance power transmission reliability and safety.
- Package include EP01HI, EP01H, 24V 1.25A adapter

**【Specification】**

Power input: DC24V 1.25A  
 Power output: DC5V 2A  
 Link speed: 10Gbps



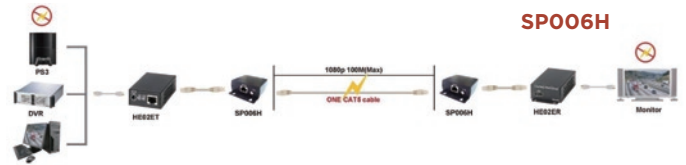
### SPO06H HDBaseT/10G Ethernet Surge Protector

To protect Network equipment (four pairs protection) from high voltage surges from nearby lightning strikes.

- Perfect for HDBaseT extender and any network equipment.
- Built-in ESD, EFT (impulse noise) protection.

**【Specification】**

Link speed : 10/100/1000Mbps/10Gbps  
 Response time: < 1ns  
 Max discharge voltage: 6kV  
 Insertion loss: < 0.2dB



## HDMI over IP Extender

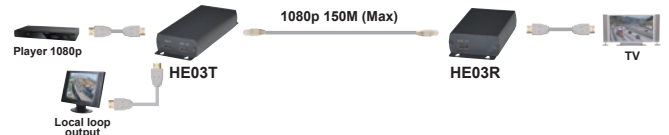
### HE03 HDMI CAT5e Extender with HDMI Loop Out

To extend HDMI signal over one CAT5e cable.

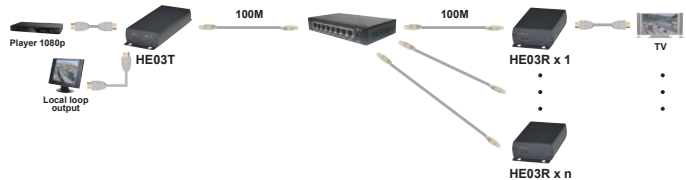
- Economic HDMI over IP Extender.
- Transmitter built-in HDMI local loop out
- HDMI 1.3b and HDCP compliant.
- Optional model: SR01 signal repeater for longer distance application.

**【Specification】**

Cable: CAT5e UTP or higher  
 Max transmission distance: 1080p 120M(CAT5e), 150M (CAT6)  
 Max supported resolution: 1080p



### Support one to multiple outputs via Ethernet switch



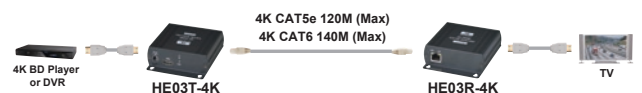
### HE03-4K 4K HDMI CAT5e Extender

To extend 4K UHD HDMI signal over one CAT5e cable.

- HDCP 1.4 compliant.
- Plug and play for easy operation.
- Two receiver for option: HE03R-4K , HE03LR-4K

**【Specification】**

Cable: CAT5e UTP or higher  
 Max transmission distance: 120M(CAT5e), 140M (CAT6)  
 Max supported resolution: 4K 30Hz 4:4:4  
 Audio format: up to LPCM7.1@192KHz.



## HE03LR-4K 4K HDMI CAT5e Distribution Chainable Receiver

To work with HE03T-4KT for multiple outputs and further extension.

- Built-in 1 x HDMI output and 2 x RJ45 output for daisy chain.
- Support output up to 250 displays, Distance up to 2.5KM.

### 【Specification】

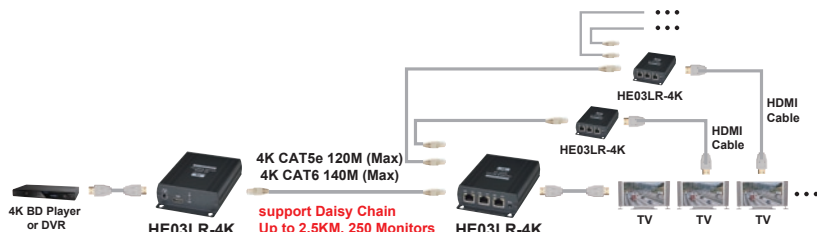
Cable: CAT5e UTP or higher  
 Max transmission distance: 120M(CAT5e), 140M (CAT6)  
 Max supported resolution: 4K 30Hz 4:4:4  
 Audio format: up to LPCM7.1@192KHz.



HE03LR-4K

HE03LR-4K

### One to Multiple Display Application by Daisy Chain



## HKM01E HDMI & USB Keyboard Mouse CAT5e Extender

To extend HDMI and USB keyboard mouse signals over one CAT5e cable.

- Transmitter built-in HDMI loop out.
- Receiver unit built-in USB port x 2 for keyboard and mouse.
- Option model: SR01 signal repeater for longer distance application.

### 【Specification】

Cable: CAT5e UTP or higher  
 Max transmission distance: 150M(CAT5e), 160M (CAT6)  
 Max supported resolution: 1920x1080 60Hz



## HKM01-4K 4K HDMI USB/Audio/RS232/IR CAT5e KVM Extender

To extend HDMI, RS232, IR and USB analog audio signals over one CAT5e cable.

- Transmitter unit Built-in HDMI loop out.
- Receiver unit built-in USB 2.0 port x 4 for extending USB peripheral device.
- HDMI 1.4b and HDCP compliant.
- Support Bi-Directional analog audio transmission, and one directional IR transmission.
- Support SFP for longer distance.

### 【Specification】

Cable: CAT5e UTP or higher  
 Max transmission distance: 120M(CAT5e), 140M (CAT6)  
 Max supported resolution: 4K 30Hz  
 Audio format: up to LPCM7.1@192KHz.



## HDMI over Fiber Optic Extender

### HE01F-4K6G 4K 60Hz HDMI & IR/RS232/USB Fiber Extender

To extend 4K 60Hz HDMI signal with IR/RS232/USB over fiber optic.

- Support HDMI 2.0/HDCP 2.2.
- IR/RS232/USB function selection.
- Support USB keyboard mouse.
- Support Bi-directional IR, Bi-directional RS232

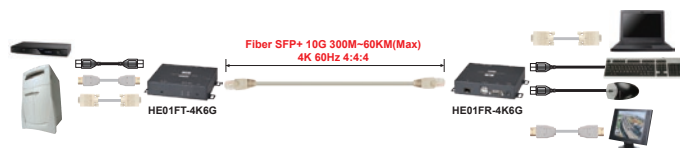
### 【Specification】

Module: SFP+10 Gbps Module  
 Max transmission distance: 60 KM  
 Max supported resolution: 4K 60Hz 4:4:4 8 bit HDR  
 Audio format: up to LPCM7.1@192KHz. Dolby TrueHD



HE01FT-4K6G

HE01FR-4K6G



### HE01F-4K6G-KS 4K 60Hz HDMI & IR/RS232/USB Fiber Extender with Optical Transceiver

Package include: HE01FT-4K6G x 1, HE01FR-4K6G x 1  
 10G SFP+ 2KM single mode optical transceiver x 2



## HDMI over Coaxial Transmission

### HE01C HDMI over Coaxial Extender

To send HDMI signal over single coaxial cable.

- Receiver supports daisy chain function for multiple displays.(HE01CR)
- Support HDMI 7.1 channel audio.

**【Specification】**

Cable: RG59 or higher  
 Max transmission distance: 100M at 1080p  
 Supported resolution: 480i,576i, 720p, 1080i, 1080p.



### HE01CI HDMI & Bi-directional IR over Coaxial Extender

To send HDMI signal & Bi-directional IR over single coaxial cable

- Bi-directional IR extension.
- Support HDMI 7.1 channel audio.

**【Specification】**

Cable: RG59 or higher  
 Max transmission distance: 100M at 1080p  
 Supported resolution: 480i,576i, 720p, 1080i, 1080p.



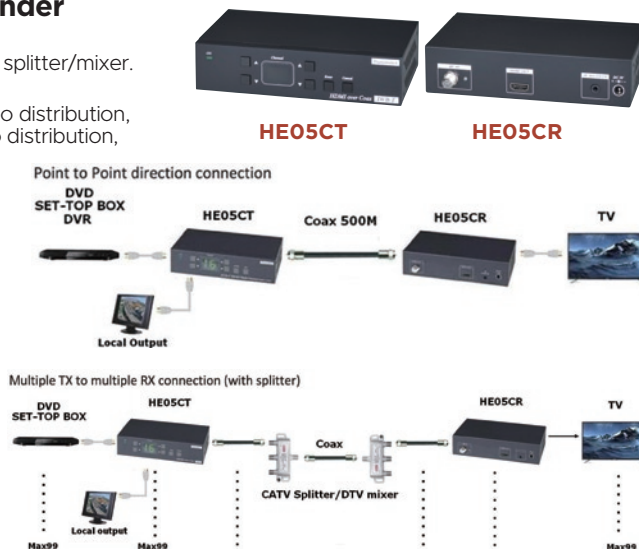
### HE05C HDMI over Coaxial (Digital RF DVB-T) Extender

To send HDMI signal over coaxial cable by DVB-T RF Modulator technology.

- Support multiple inputs to multiple displays application by working with RF splitter/mixer.
- Transmitter built-in HDMI loop out.
- Applications for hotels, hospitals, schools, shops where need meeting video distribution, digital signage, student training broadcasting, DVD/Blue Ray players video distribution, surveillance..etc.

**【Specification】**

Cable: RG59 or higher  
 Max transmission distance: 500M  
 Max supported resolution:1080p 50/60Hz  
 Video encoding: H.264  
 Audio encoding: MPEG2  
 Max channel: 99 channels



## HDMI over CAT5e Extender Wall Plate Type

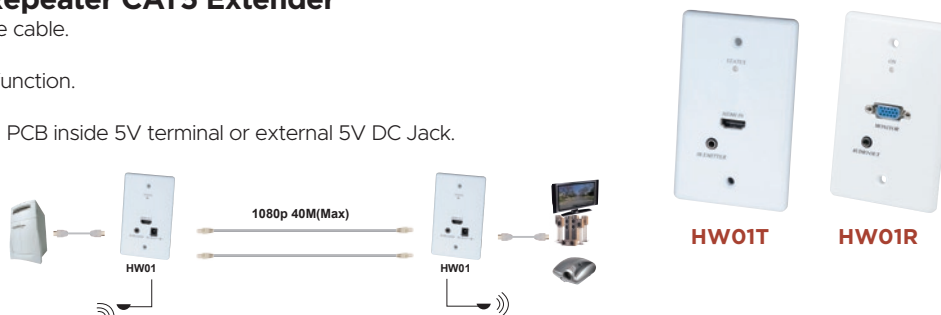
### HW01 Wall Plate HDMI & IR Repeater CAT5 Extender

To extend HDMI and IR signals over two CAT5e cable.

- HDMI 1.3 compliant, HDCP, CEC capable
- Transmitter unit built in EDID auto backup function.
- Support Bi-directional IR transmission.
- Receiver unit power could be sending from PCB inside 5V terminal or external 5V DC Jack.

**【Specification】**

Cable: CAT5e UTP or higher  
 Max transmission distance: 1080p 60M



### HW02 Wall Plate HDMI & IR CAT5e Extender

- Identical to HW01, but wall plate outer dimension is 86 x 86 mm.



## HDMI Distributor Amplifier

### HD02-4K 4K 1 x 2 HDMI Distribution Amplifier

To reclocks and distributes one HDMI input to two identical outputs.

- Support 3D, Deep color 12bit
- Built-in EDID management

**【Specification】**

Resolution: up to 4K 30Hz 4:4:4  
 Audio support: LPCM 7.1、Dolby TrueHD、DTS-HD MA  
 Compliance: HDMI 1.4, HDCP 1.4



HD02-4K

### HAE01 4K 60Hz 1 x 2 HDMI Distribution Amplifier with Audio Extractor & Scaler

To distribute one 4K 60Hz signal to two identical outputs with additional audio extract and scaler function.

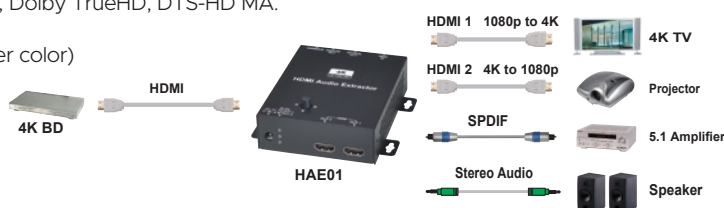
- Supports 1080p upscaling to 4K, 4K downscaling to 1080p
- Supports HDCP 2.2 to HDCP 1.4 conversion
- Supports 4K 4:4:4 to 4:2:0 conversion
- Supports HDMI audio extract
- Support CEC, 3D, HDR10
- Built-in EDID management

**【Specification】**

Resolution: up to 4K 60Hz 4:4:4  
 Audio support: LPCM7.1@192KHz, Dolby TrueHD, DTS-HD MA.  
 Compliance: HDMI 2.0, HDCP 2.2,  
 Max Data rate: 18Gbps (6Gbps per color)



HAE01



### HD04-4K6G 4K 60Hz 1 x 4 HDMI Distribution Amplifier

To distribute one 4K 60Hz HDMI input to four identical outputs.

- Support 3D, HDR10, Deep color 16bit
- Built-in EDID management

**【Specification】**

Resolution: up to 4K 60Hz 4:4:4  
 Audio support: LPCM 7.1、Dolby TrueHD、DTS-HD MA  
 Compliance: HDMI 2.0, HDCP2.2/1.4  
 Max Data rate: 18Gbps (6Gbps per color)



HD04-4K6G

### HD10-4K6G 4K 60Hz 1 x 10 HDMI Distribution Amplifier

To distribute one 4K 60Hz HDMI input to ten identical outputs.

- Support 3D, HDR10
- Built-in EDID learning function.

**【Specification】**

Resolution: up to 4K 60Hz 4:4:4  
 Audio support: LPCM 7.1、Dolby TrueHD、DTS-HD MA  
 Compliance: HDMI 2.0, HDCP2.2/1.4  
 Max Data rate: 18Gbps (6Gbps per color)



HD10-4K6G

## HDMI Distribution Amplifier CAT5e Extender

### HE04SEK 1 x 4 HDMI Distribution Amplifier CAT5e Extender Kit

To distribute and extend one HDMI signal to four remote HDMI displays over CAT5e cables.

- Transmitter built-in HDMI loop out for local display or stack to another HE04SET for multiple displays.
- No power required at receiver side.( HE01SER)
- Built-in EDID management.

**【Specification】**

Resolution: up to 1080p 60Hz  
 Max transmission distance: 70M at 720p  
 40M at 1080p  
 Audio support: LPCM 5.1、Dolby TrueHD、DTS-HD MA  
 Compliance: HDMI 1.4, HDCP 1.4  
 Package include: HE04SET x 1  
 HE01SER x 4



HE01SER

HE04SET





## HDMI Switcher

### HS04 4 x 1 HDMI Switcher

To relock and switch one of the four inputs to one HDMI output.

- Easily control by front panel or IR remote control
- Support Deep color 12bit, 3D
- Built-in auto-scan function. (Automatically switch to next available input, when selected input is not available)
- Built-in auto-jump function. (Automatically switch to new incoming input )

**【Specification】**

Resolution: up to 1080p 60Hz  
 Compliance: HDMI 1.3 / HDCP  
 Audio support: LPCM7.1、Dolby TrueHD、DTS-HD MA  
 Data rate: up to 2.25Gbps



**HS04**

### HM41E 4 x 1 HDMI Seamless Switcher & Multiviewer

To switch seamlessly one of four inputs and five multiview mode to one HDMI output.

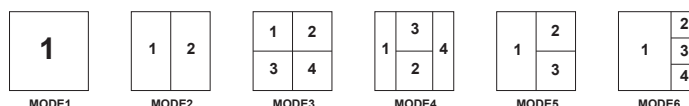
- Support scaler up to 1080p
- Easily control by front panel, IR remote control, RS232
- Support auto-switching function in Mode 1.
- Support different mode display: Quad, picture on picture (POP) and full screen display.

**【Specification】**

Resolution: up to 1080p 60Hz  
 Compliance: HDMI 1.3 / HDCP1.2/ DVI 1.0 complaint  
 Audio support: LPCM2.0



**HM41E**



### HS04-4K6G 4K 60Hz 4 x 1 HDMI Switcher

To switches one of the four inputs to one HDMI output.

- Easily control by front panel or IR remote control or RS232
- Built-in RS232 with PC remote control or firmware updated.
- Support Deep Color 12 Bits, 3D, HDR10
- Built-in auto-scan function. (Automatically switch to next available input, when selected input is not available)
- Built-in auto-jump function. (Automatically switch to new incoming input )

**【Specification】**

Resolution: up to 4K 60Hz 4:4:4  
 Audio support: LPCM 7.1、Dolby TrueHD、DTS-HD MA  
 Compliance: HDMI 2.0, HDCP 2.2/ 1.4  
 Max Data rate: 18Gbps (6Gbps per color)



**HS04-4K6G**

## HDMI Matrix Switcher

### HS42M-4K6G 4K 60Hz 4 x 2 HDMI Matrix Switcher with Audio Extractor & Scaler

To route four HDMI input to two HDMI output with audio extract and scaler.

- Supports 1080p upscaling to 4K, 4K downscaling to 1080p
- Supports HDCP 2.2 to HDCP 1.4 conversion
- Supports 4K 4:4:4 to 4:2:0 conversion
- Support HDMI audio extract (RCA or optical output)
- Support CEC, 3D, HDR10
- Built-in EDID management
- 3 operation mode: Matrix, Splitter and Separation
- Easily control by front panel, IR, RS232.
- Built-in OSD

**【Specification】**

Resolution: up to 4K 60Hz 4:4:4  
 Audio support: LPCM 7.1@ 192KHz、Dolby TrueHD、DTS-HD MA  
 Compliance: HDMI 2.0, HDCP 2.2  
 Max Data rate: 18Gbps (6Gbps per color)



**HS42M-4K6G**



## HSO4M 4 x 4 HDMI Matrix Switcher

To route four HDMI input to four HDMI output

- Flexible control options: front panel buttons, IR remote control, RS232, Web GUI, Telnet, APP
- Front panel LCM & LED display input/output status

### 【Specification】

Resolution: up to 1080p 60Hz 12bit  
 Audio support: LPCM7.1 · Dolby TrueHD · DTS-HD MA  
 Compliance: HDMI 1.4, HDCP 1.4



HSO4M

## HM44 4 x 4 HDMI Seamless Matrix Switcher with Multiview & Video Wall Function

Support four HDMI input to four displays with seamless switching

- Seamless switching without frame loss.
- Support PIP/ POP/Quad multi-view display.
- Support 2x2 video wall.
- Output support up/down scaler function.
- Flexible control options: Front panel buttons, IR remote control, RS232, Web GUI, APP

### 【Specification】

Resolution: up to 1080p 60Hz 12bit  
 Audio support: LPCM7.1 · Dolby TrueHD · DTS-HD MA  
 Compliance: HDMI 1.4, HDCP 1.4



HM44

Multiview Mode



Matrix Mode



Video Wall Mode



## HSO4M-4K6G 4K 60Hz 4 x 4 HDMI Matrix Switcher with Audio Extractor

To route four HDMI input to four HDMI output

- Support ARC function
- Extract audio from HDMI or ARC port to SPDIF output
- Flexible control option: front panel, IR remote control, RS232, Web GUI, Telnet, APP
- Front panel LCM & LED display input/output status

### 【Specification】

Resolution: up to 4K 60Hz 4:4:4  
 Audio support: LPCM7.1@192KHz · Dolby TrueHD · DTS-HD MA · ATMOS · DTS:X  
 Compliance: HDMI 2.0, HDCP 2.2/1.4  
 Max Data rate: 18Gbps (6Gbps per color)



HSO4M-4K6G

## HS10M 4K 10 x 10 HDMI Matrix Switcher

To route 10 HDMI input to 10 HDMI output

- Flexible control options: front panel, IR remote control, RS232, Web GUI, Telnet, APP
- Front panel LCM & LED display input/output status
- In 2U rack

### 【Specification】

Resolution: up to 4K 30Hz  
 Audio support: LPCM7.1 · Dolby TrueHD · DTS-HD MA  
 Compliance: HDMI 1.4, HDCP/1.4



HS10M

## HS10M-4K6G 4K 60Hz 10 x 10 HDMI Matrix Switcher with Audio Extractor

To route 10 HDMI input to 10 HDMI output

- Support ARC function
- Extract audio from HDMI or ARC port to SPDIF output
- Flexible control option: front panel, IR remote control, RS232, Web GUI, Telnet, APP
- Front panel LCM & LED display input/output status
- In 1U rack

### 【Specification】

Resolution: up to 4K 60Hz 4:4:4  
 Audio support: LPCM7.1@192KHz · Dolby TrueHD · DTS-HD MA · ATMOS · DTS:X  
 Compliance: HDMI 2.0, HDCP 2.2/1.4  
 Max Data rate: 18Gbps (6Gbps per color)



HS10M-4K6G

## HDMI Matrix Switcher with HDBaseT Extender

### HE04M 4 x 4 HDMI (HDBaseT) Matrix Switcher

To route four HDMI input to four HDMI outputs and extend the signals to remote HDMI displays over CAT5e cable.

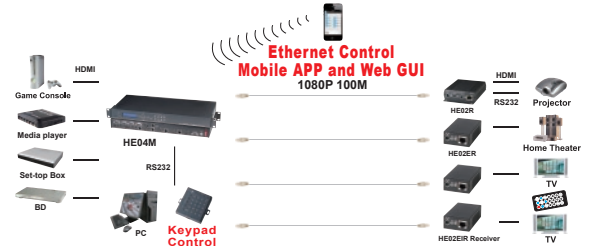
- Uncompressed high-definition video
- Built-in HDMI loop out for local display.
- Support 3D
- Support IR extension function
- Flexible control options: front panel, IR remote control, RS232, Web GUI, Telnet, APP
- Front panel LCM & LED display input/output status
- Receiver optional model:  
HE02EIR: 70m HDMI and IR one-directional  
HE02ER: 100m HDMI  
HE02NR: 100m HDMI, Bi-directional IR and RS232, Ethernet

**【Specification】**

Resolution: up to 1080p 60Hz 12bit  
Audio support: LPCM7.1 · Dolby TrueHD · DTS-HD MA  
Compliance: HDMI 1.4, HDCP, DVI



HE04M



### HE10M 4K 10 x 10 HDMI (HDBaseT) Matrix Switcher

To route ten HDMI input to ten HDMI outputs with 2 HDBaseT receivers and 8 HDBaseT transmitter built-in for extending the signals from HDMI sources or to displays over CAT5e cable.

- 2 of 10 input port built-in HDBaseT receivers
- 8 of 10 output port built-in HDBaseT transmitters
- Support 3D
- Support IR extension function
- Flexible control options: front panel, IR remote control, RS232, Web GUI, Telnet, APP
- Front panel LCM & LED display input/output status
- Optional transmitter, receiver model:  
HE02EIT: 70m HDMI and IR one-directional  
HE02ET: 100m HDMI  
HE02T: 100m HDMI, Bi-directional IR and RS232  
HE02NT: 100m HDMI, bidirectional IR and RS232, Ethernet  
HE02EIR: 70m HDMI and IR one-directional  
HE02ER: 100m HDMI  
HE02NR: 100m HDMI, bidirectional IR and RS232, Ethernet

**【Specification】**

Resolution: up to 4K 30Hz 8bit  
Audio support: LPCM7.1 · Dolby TrueHD · DTS-HD MA  
Compliance: HDMI 1.4, HDCP, DVI



HE10M

## HDMI Tools: Audio Extractor/Converter/Repeater/EDID Emulator/Surge Protector

### HAE01 4K HDMI Audio Extractor & Scaler

To extract HDMI signal to analog or SPDIF or HDMI audio output with additional scaler function.

- Supports 1080p upscaling to 4K, 4K downscaling to 1080p
- Supports HDCP 2.2 to HDCP 1.4 conversion
- Supports 4K 4:4:4 to 4:2:0 conversion
- Supports HDMI audio extract
- Support CEC, 3D, HDR10
- Built-in EDID management

**【Specification】**

Resolution: up to 4K 60Hz 4:4:4  
Audio support: LPCM7.1@192KHz, Dolby TrueHD, DTS-HD MA.  
Compliance: HDMI 2.0, HDCP 2.2,  
Max Data rate: 18Gbps (6Gbps per color)



HAE01

Application 1: 4K HDMI Audio Extractor



Application 2: 4K HDMI Up/Down Scaler with Audio Extractor



### ARC01 HDMI ARC/Digital Audio Bi-directional Converter

To encode digital audio to HDMI ARC(Audio Return Channel)or decode HDMI ARC to digital audio.

- Digital audio support: Coaxial, SPDIF

**【Specification】**

Audio support: PCM2.0, Dolby Digital 5.1, DTS 5.1  
Compliance: HDMI 1.3



ARC01

## HC01 HDMI to Composite Video & Stereo Audio Converter

To convert HDMI or DVI video signals to analog composite video with stereo audio.

- Support stereo audio output.

### 【Specification】

Compliance: HDM 1.3,DVI

Input Resolution: up to 1920 x 1080 60Hz.

Output Resdution: NTSC, PAL 50, 60Hz



HC01

HC01

## HVY01 HDMI to VGA/Component Video & Stereo Audio Scaler Converter

To convert HDMI signal to VGA or component video with stereo audio output.

- Built-in auto memory function.
- Built-in OSD (on screen display) function.

### 【Specification】

Resolution: HDMI: 1080p, VGA: 1920 x 1080, Component Video:1080p.

Compliance: HDMI 1.3,DVI

Audio output: RCA, 3.5mm phone jack



HVY01

HVY01

## HD01 HDMI to DVI & Audio Converter

To convert HDMI signal to DVI with digital/stereo audio output.

- Use as a HDMI Audio Extractor by adding DVI to HDMI adapter.(HD01A)

### 【Specification】

Resolution: up to 1080p 60Hz

Compliance: HDMI 1.3,DVI 1.0, HDCP

Audio output: Coaxial, 3.5mm phone jack(analog)



HD01

HD01

## HR01 HDMI Repeater

To extend 1080P HDMI signal up to 50 meters.

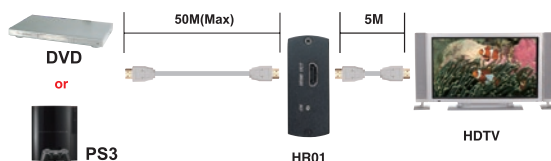
### 【Specification】

Cable: HDMI

Resolution: up to 1080p 60Hz

Max distance:50M

Compliance: HDMI 1.3



HR01

HR01

## HR01-4K6G 4K 60Hz HDMI Repeater with External Power Adapter

To boost 4K 60Hz 4:4:4 HDMI signal for longer transmission .

- Gets power from external adapter which makes better signal boosting performance
- Allow to chain multiple units for long distance
- CEC pass through

### 【Specification】

Cable: HDMI

Resolution: up to 4K 60Hz 4:4:4

Max distance: input 20M/ output 20M

Compliance: HDMI 2.0, HDCP 2.2/1.4

Max Data rate: 18Gbps (6Gbps per color)



HR01-4K6G

## EE01H HDMI EDID Emulator

Allows the source device to read the selected EDID information from the unit default or learned EDID memory

- Support 4 different EDID function: read, write, emulate, by pass
- Support up to 12 sets of default EDID and 3sets of custom-EDID
- Built-in USB port for user to write EDID
- Built-in equalizer for reliable signal quality performance.
- Support 3D

### 【Specification】

Resolution: up to 4K 30Hz, 4096x2160 24Hz

Compliance: HDMI 1.4,HDCP



EE01H

EE01H

## SP008 HDMI Surge Protector

To provide surge protection for HDMI devices

- Compliant IEC61000-4-2,IEC61000-4-4,IEC61000-4-5
- Built-in ESD, EFT (impulse noise) protection.

### 【Specification】

Connector: HDMI female& HDMI female

Response time: < Ns



SP008

## DisplayPort Transmission

### DP02E DisplayPort CAT5e Extender

To extend DisplayPort signal over one CAT5e cable.

- Uncompressed high definition video up to 4K UHD.

**【Specification】**

Resolution: up to 4K 30Hz 4:4:4  
 Max transmission distance: 40M(4K), 70M(1080p)  
 Audio support: LPCM7.1@192KHz, Dolby TrueHD, DTS-HD MA.  
 Compliance: DP 1.2a, HDCP



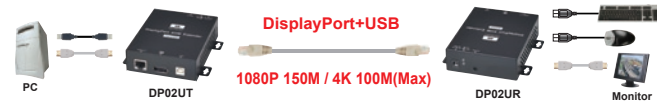
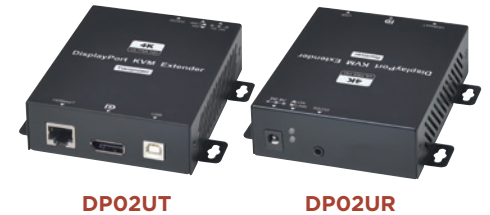
### DP02U DisplayPort USB/RS232 CAT5e KVM Extender

To extend DisplayPort signal with USB/RS232 over one CAT5e cable.

- Uncompressed high definition video up to 4K UHD.

**【Specification】**

Resolution: up to 4K 30Hz 4:4:4  
 Max transmission distance: 100M(4K), 150M(1080p)  
 Audio support: LPCM7.1@192KHz, Dolby TrueHD, DTS-HD MA.  
 Compliance: DP 1.2a, HDCP



## DVI Extender

### DE01ERK DVI CAT5e Extender 70M

To send DVI signal via one CAT5e cable.

- No external power required.
- Built-in micro USB for external power when your DVI source doesn't provide enough power to the receiver.

**【Specification】**

Resolution: up to 1920x1200  
 Max transmission distance: 50M(1920x1200) 70M (1024x768)  
 Compliance: DVI 1.1

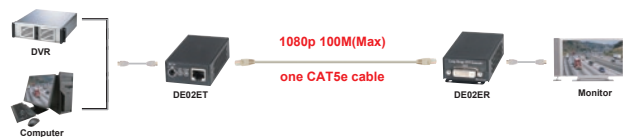


### DE02E DVI Long Range CAT5e Extender 100M

To extend DVI Signal over one CAT5e cable.

**【Specification】**

Resolution: up to 1920x1200  
 Max transmission distance: 100M  
 Compliance: DVI 1.1, HDMI 1.3, HDCP



### DKM01 DVI USB/Audio/RS232 CAT5e KVM Extender

To extend DVI, USB, RS232, and audio signals over one CAT5e cable.

- Transmitter unit built-in DVI loop out for local display.
- Receiver unit built-in 4 port USB for extending USB peripheral device.
- Support Bi-directional analog audio, RS232 extension.
- Support EDID management.

**【Specification】**

Resolution: up to 1920x1200 60Hz  
 Max transmission distance: 140M(CAT6) 120M(CAT5e)  
 Compliance: HDMI 1.4, HDCP  
 Optional model: SR01



## DVI Distribution Amplifier/Switcher

### DD04A 1 x 4 DVI & Stereo Audio Distribution Amplifier

To equalize and reclock 1 DVI signal and stereo audio to four DVI displays and four stereo audio outputs.

**【Specification】**

- Supported resolution: VGA, SVGA, XGA, SXGA, UXGA WUXGA
- DVI cable distance: up to 15M (output/input).



DD04A

### DS02A 2 x 1 DVI & Stereo Audio Switcher

To switch between two DVI inputs with stereo audio

- HDMI, HDCP pass-through
- HDCP pass-through
- Control by front panel or IR remote control.

**【Specification】**

- Supported input resolution: PC:VGA, SVGA, XGA, SXGA, UXGA WUXGA
- HDTV:480i, 576i, 480p, 576p, 720p, 1080i and 1080p 60Hz.



DS02A

### DS04 4 x 1 DVI Switcher

To switch between four DVI inputs

- Control by front panel or IR remote control.

**【Specification】**

- Supported input resolution: PC:VGA, SVGA, XGA, SXGA, UXGA WUXGA
- HDTV:480i, 576i, 480p, 576p, 720p, 1080i and 1080p 60Hz.



DS04

## DVI Tools: Repeater/Converter/EDID Emulator

### DH01 DVI & Audio to HDMI Converter

To convert DVI and audio signals to HDMI signal

- Support EDID learning function and 12 sets of default EDID.
- Support both digital and stereo analog audio
- Support HDMI Audio Embedder

**【Specification】**

- Resolution: up to 1080p 60Hz
- Compliance: DVI 1.0, HDMI 1.3, HDCP 1.4
- Audio input: Digital Coaxial SPDIF, 3.5mm phone jack



DH01

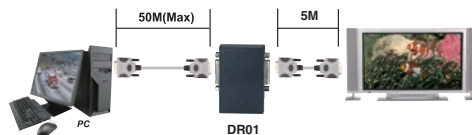
DH01

### DR01 DVI Repeater

To extend DVI signal up to 50 meters.

**【Specification】**

- Resolution: up to 1920x1200 60Hz
- Compliance:,DVI 1.0



DR01

### EE01D DVI EDID Emulator

Allows the source device to read the selected EDID information from the unit default or learned EDID memory.

- Support 4 different EDID function: read, write, emulate, by pass
- Built-in Equalizer for reliable signal quality performance.
- Support up to 12 sets of default EDID and 3 sets of custom-EDID
- Built-in USB port for user to write EDID and receiving power.
- Support DVI Single Link and DVI Dual Link.

**【Specification】**

- Resolution: up to 3840x2400 30Hz
- Compliance: HDMI 1.4,HDCP,DVI 1.3



EE01D

EE01D

## VGA CAT5e Extender

Item No.	Resolution (Max)	Distance (Max)	Audio
VE01P	1280x1024	100M	x
VE01	1600x1200	300M	x
VE01H	1920x1200	70M	x
VE01HA	1920x1200	70M	v
VW01HA	1920x1200	70M	v

### VE01P Passive VGA CAT5e Extender

To send VGA signal over one CAT5e cable

- Passive, no power required.

**【Specification】**

Cable: CAT5e or higher  
 Resolution: up to 1280x1024  
 Max transmission distance: 100M at 800x600



VE01PT

VE01PR

### VE01 Long Range VGA CAT5e Extender

To send VGA signal over one CAT5e cable

- Built-in contrast, brightness adjustment at receiver.

**【Specification】**

Cable: CAT5e or higher  
 Resolution: up to 1600x1200 85Hz  
 Max transmission distance: 300M



VE01T

VE01R

### VE01H High Resolution VGA CAT5e Extender

To extend high resolution VGA signal over one CAT5e cable.

- Receiver unit acquires power from transmitter, there is no external power adapter needed.

**【Specification】**

Cable: CAT5e or higher  
 Resolution: up to 1920x1200 60Hz  
 Max transmission distance: 70M



VE01HT

VE01HR



### VE01HA High Resolution VGA & Stereo Audio CAT5e Extender

Identical to VE01H, but with stereo audio function.

- Audio transmission by digital encoding technology for undistorted sound.

**【Specification】**

Cable: CAT5e or higher  
 Resolution: up to 1920x1200 60Hz  
 Max transmission distance: 70M  
 Audio format: stereo audio



VE01HAT

VE01HAR

### VW01HA High Resolution VGA & Stereo Audio CAT5e Extender Wall Plate Type

Wall plate type of VE01HA

**【Specification】**

Cable: CAT5e or higher  
 Resolution: up to 1920x1200 60Hz  
 Max transmission distance: 70M  
 Audio format: stereo audio  
 Dimension: 70mm x 115mm.



VW01HAT

VW01HAR

## VGA KVM CAT5e Extender

### VKM02 Passive VGA Keyboard Mouse CAT5e Extender

To extend VGA and keyboard mouse over 2 CAT5e UTP cable.

- Transmitter unit built-in virtual DDC to avoid improperly setting at resolution and frequency.
- Transmitter unit built-in sync mode selection for signal stability.
- Receiver unit built-in sync filter level adjustment for signal stability.
- Passive device, not support VGA DDC protocol.

**【Specification】**

Cable: CAT5e or higher  
 Max Resolution: up to 1280x1024  
 Max transmission distance: up to 100M at 800x600



VKM02T

VKM02R

### VKM04 VGA USB/Audio/RS232/IR CAT5e KVM Extender

To extend VGA, stereo audio, RS232, IR and USB signals over one CAT5e cable.

- Transmitter unit built-in VGA loop out for local display.
- Receiver unit built-in USB 2.0 port x 4 for extending USB peripheral device.
- Support Bi-directional analog audio, RS232 extension.
- Support IR one directional extension
- Support EDID management.
- Plug and play for easy operation.

**【Specification】**

Resolution: up to 1920x1200 60Hz  
 Max transmission distance: 140M (CAT6) 120M (CAT5e)  
 Optional model: SR01, IR-CR01



VKM04T

VKM04R

## VGA Distribution Amplifier

### VD04A 1 x 4 VGA & Stereo Audio Distributor

To distribute one VGA and stereo audio signals to four VGA displays and speakers.

- Scalable for multi outputs.

**【Specification】**

Resolution: up to 1920X1200 60Hz



VD04A

## VGA Distribution Amplifier CAT5e Extender

Item No.	Resolution (MAX)	Distance (MAX)	Distribution	Audio
VE02 (VD102)	1600x1200	300M	1 in 2 out	
VE05 (VD105)	1600x1200	300M	1 in 5 out	
VE02AL	1920x1200	300M	1 in 3 out	√
VE05AL	1920x1200	300M	1 in 5 out	√
VE10DAL	1920x1200	300M	1 in 11 out	√

### VE02 1 in 2 out VGA Distribution Amplifier CAT5e Extender

To extend VGA signal over one CAT5e cable with one VGA loop out at transmitter side for local display.

- Dual output: 1xVGA loop out and 1xCAT5e output for remote side.
- Built-in contrast, brightness adjustment at receiver.

**【Specification】**

Cable: CAT5e or higher  
 Resolution: up to 1600x1200 85Hz  
 Max transmission distance: 300M  
 Optional model: VE02DALS



VE02T

VE02T

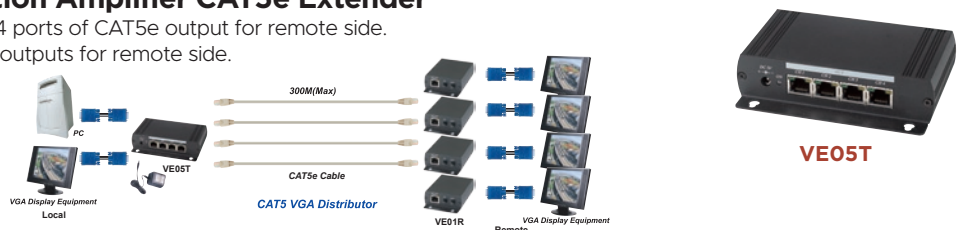
### VE05 1 in 5 out VGA Distribution Amplifier CAT5e Extender

Identical to VE02, but VE05T transmitter with 4 ports of CAT5e output for remote side.

- Five output: 1xVGA loop out and 4xCAT5e outputs for remote side.

**【Specification】**

Cable: CAT5e or higher  
 Resolution: up to 1600x1200 85Hz  
 Max transmission distance: 300M  
 Package include: VE05T x 1, VE01R x 1  
 Optional model: VE02DALS, VE01R



VE05T

### VE01R Long Range VGA CAT5e Receiver

To work with VE02T, VE05T as receiver for remote VGA display.

- Built-in contrast, brightness adjustment

**【Specification】**

Cable: CAT5e or higher  
 Resolution: up to 1600x1200 85Hz  
 Max transmission distance: 300M



VE01R



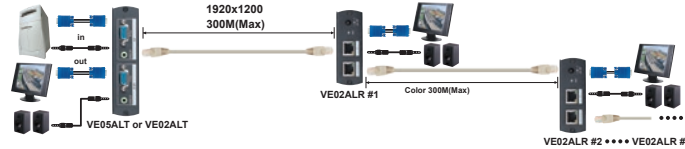
## VE02AL 1 in 3 out VGA & Stereo Audio Distribution Amplifier CAT5e Extender

To distribute and extend one VGA signal over CAT5e cable to two VGA displays with one VGA loop out at transmitter side.

- Three output: 1 x VGA loop out and 2 x CAT5e outputs for remote side.
- Receiver built-in equalization, gain adjustment and support daisy chain function to another receiver.
- Audio transmission by digital encoding technology for undistorted sound.

### 【Specification】

Cable: CAT5e or higher  
 Resolution: up to 1920x1200 85Hz  
 Max transmission distance: 300M  
 Package include: VE02ALT x 1, VE02ALR x 1  
 Optional model: VE02ALR, VE02DALS



VE02ALT

VE02ALR

## VE05AL 1 in 5 out VGA & Stereo Audio Distribution Amplifier CAT5e Extender

Identical to VE02AL, but VE05ALT transmitter with 4 ports of CAT5e outputs for remote side.

- Five output: 1 xVGA loop out and 4 x CAT5e outputs for remote side.

### 【Specification】

Cable: CAT5e or higher  
 Resolution: up to 1920x1200 85Hz  
 Max transmission distance: 300M  
 Package include: VE05ALT x 1, VE02ALR x 1  
 Optional model: VE02ALR, VE02DALS



VE05ALT

## VE10DAL 1 in 11 out VGA & Stereo/Digital Audio Distribution Amplifier CAT5e Extender

Identical to VE02AL, but VE10DAL transmitter with 10 ports of CAT5e outputs for remote side.

- Eleven output: 1xVGA loop out and 10 x CAT5e outputs for remote side.

### 【Specification】

Cable: CAT5e or higher  
 Resolution: up to 1920x1200 85Hz  
 Max transmission distance: 300M  
 Package include: VE10DALx1  
 Optional model: VE02ALR, VE02DALS



VE10DAL

## VE02ALR VGA & Stereo Audio CAT5e Chainable Receiver

To work with VE02ALT, VE05ALT, VE10DAL as receiver for remote VGA display.

- Support daisy chain function to another VE02ALR for extra distance or multiple displays.
- Built-in equalization, gain adjustment.

### 【Specification】

Cable: CAT5e or higher  
 Resolution: up to 1920x1200 85Hz  
 Max transmission distance: 300M



VE02ALR

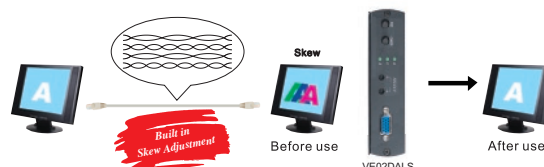
## VE02DALS VGA & Stereo/Digital Audio CAT5e Chainable Receiver - Built-in Skew Corrector

To work with transmitter VE01T, VE02T, VE05T, VE02ALT, VE05ALT, VE10DAL, as receiver with built-in RGB skew corrector for optimizing video performance under long cable run.

- Built-in both stereo and digital audio(coaxial, optical) output
- Support daisy chain function.

### 【Specification】

Cable: CAT5e or higher  
 Resolution: up to 1920x1200 85Hz  
 Max transmission distance: 300M



VE02DALS

## VGA Converter

### VC01 VGA to Composite Video Converter

To convert to VGA signal to composite video

- Dual output: composite video, VGA loop out

**【Specification】**

Input	Resolution (Max)	VGA	
	1024x768	75Hz	
Output	Resolution (Max)	BNC	VGA
	1024x768	N/A	75Hz
	NTSC/PAL	50/60Hz	N/A



VC01

### VH01E VGA & Audio to HDMI Converter

To convert VGA & Stereo/Digital audio to HDMI signal.

- Embed analog stereo or digital audio to HDMI signal.
- Built-in auto-selection on the stereo and digital audio.

**【Specification】**

Input	Resolution (Max)	VGA	
	1920x1200	60Hz	
Output	Resolution (Max)	HDMI	
	1920x1200	60Hz	



VH01E



## Composite Video CAT5e Extender

### CE01TV CATV CAT5e Extender

To send broadband CATV, VHF, VHF and FM signal over CAT5e cable.

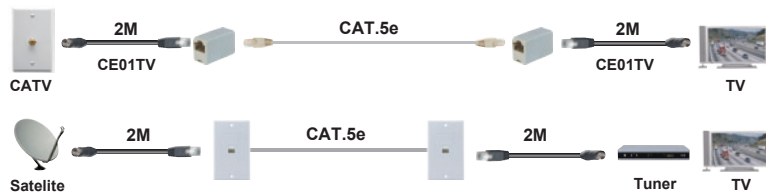
- Shielded RJ45 male with 2M RG6 coax cable.
- Passive type, no external power required.
- Compatible with CATV, satellite receivers, RF splitter and amplifier.

**【Specification】**

Cable: CAT5e or higher  
 Max transmission distance: 30M at 2.4GHz,  
 Bandwidth 40MHz - 2.4GHz.



CE01TV



### CE01A Composite Video & Audio CAT5e Extender

To send composite video and stereo audio over one CAT5e cable

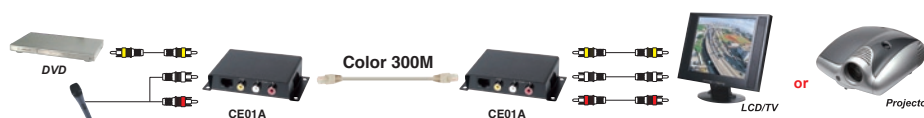
- Passive, no power required.

**【Specification】**

Cable: CAT5e or higher  
 Resolution: up to NTSC/PAL 50/60Hz  
 Max transmission distance: 300M



CE01A



## Microphone

### AA002 Audio Pick Up Box

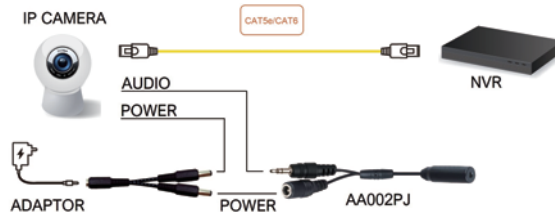
High sensitivity microphone with 45 cm power/audio cable.  
 • Easy to install and ideal for all security surveillance needs.  
**【Specification】**  
 Power input: DC12V  
 Sensitivity: -65dB



AA002

### AA002PJ Audio Pick Up Box with 3.5mm Phone Jack for IP Camera

Identical to AA002 with 3.5mm phone jack connector



AA002PJ

### AA003 Mini Hidden Microphone

High sensitive microphone with 50cm power/audio cable, mini hidden audio board type.  
 • Easy to install and ideal for all security surveillance needs.  
**【Specification】**  
 Power input: DC12V  
 Sensitivity: -66dB±3



AA003

### AA003PJA Mini Hidden Microphone with Volume Control for IP Camera

Identical to AA003, but with 3.5mm phone jack connector and adjustable volume control

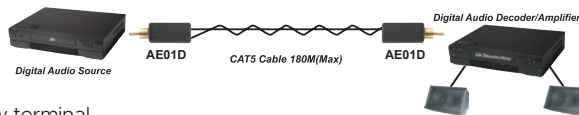


AA003PJA

## Audio Extender

### AE01D Digital Audio CAT5e Extender

To send digital audio over twist pair cable.  
 • Passive, no power required.  
**【Specification】**  
 Cable: UTP CAT5e or higher  
 Audio format: Dolby Digital, DTS  
 Max transmission: 180M  
 Connector: gold-plated SPDIF to 2 pin screw terminal



AE01D

### AE01-T Analog Audio CAT5e Extender

To send analog audio over CAT5e cable up to 600 meters.  
 • Passive, no power required.  
**【Specification】**  
 Cable: UTP CAT5e or higher  
 Bandwidth: 20Hz-20KHz  
 Max transmission: 600M  
 Connector: RCA female to 2 pin screw terminal



AE01-T

### AE02 Stereo Audio CAT5e Extender

To send stereo audio signal over CAT5e cable  
 • Select input of stereo audio or 3.5mm phone jack by dip switch.  
 • Passive, no power required.  
 • Eliminate the audio ground loop problem.  
**【Specification】**  
 Cable: UTP CAT5e or higher  
 Bandwidth: 20Hz-20KHz  
 Max transmission: 600M  
 Connector: dual gold-plated RCA female & 3.5mm phone jack



AE02

## Audio Isolator

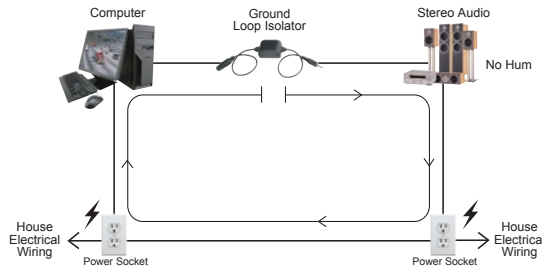
### AE02GL Stereo Audio Ground Loop Isolator

To eliminate the sound of "Hum" from speakers

- Provides superior audio performance.
- Breaks the electrical ground between audio components, no path for current flow.
- Ideal for amplifier and multiple speakers installation.

**【Specification】**

Bandwidth: 20Hz-20KHz  
Connector: 3.5mm jack & plug



AE02GL

### AC01 Analog/Digital Bi-directional Audio Converter

Support digital audio and analog audio bi-directional conversion.

- Support 4 modes of conversion: analog in digital out, digital in analog out, digital coaxial in to SPDIF out, SPDIF in coaxial out

**【Specification】**

Analog audio bandwidth: up to 48KHz  
Digital audio bandwidth: up to 96KHz  
Connector: RCA, Coaxial, SPDIF



AC01

AC01

## Audio Bluetooth Digital Amplifier

### VAB-1231 60W Bluetooth Digital Amplifier kit

2x30W(RMS) left and right channel digital amplifier

- Support multiple control: IR, RS232, front panel button.
- Support loop out function to another 3 units of VAB-1231
- Perfect for microphone broadcast used ex. classroom, conference room, office.

**【Specification】**

Audio input: RCA, 3.5mm jack, 6.3mm jack, Bluetooth.  
Audio output: 4 pin screw connector, loop via 3.5 jack  
Package Included: IR remote, IR cable, power adapter



VAB-1231



### VAI-3106D600 Wall Plate Type Bluetooth Digital Amplifier kit

Identical to VAB1231, but wall Plate type.



VAI -3106D600

## Speaker Selector with Volume Control

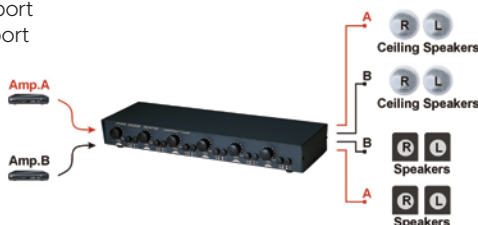
Speaker selector is designed to be used with either 1 or 2 stereo amplifiers to drive up to a maximum 10 pairs of remote speakers without risking damage to your amplifiers. It can safe-guard your valuable amplifier and speakers from damage because of excessively low impedance when all multiple speaker pairs are switched on and playing simultaneously

Speakers can be installed in every room in office or home and have the freedom to lower or increase the speaker volume. Different media can be played on different speakers as well. Speaker selectors with independent volume controls are available in different zones, speaker outputs and channels

### CF-PW150-6V 2 x 6 Matrix Speaker Selector Switcher 150W Volume Control

2x audio source 6-zone 150W speaker selector with independent zone volume control

- Automatic impedance compatible design for protecting valuable amplifier
- Switching ON/OFF independently for each port
- Support 9 section volume control for each port



CF-PW150-6V

### CF-PW150-4

Input(Amplifier): 2 pcs  
Output(Speaker): 4 pairs  
Volume Control: x  
Power handling (RMS): 50W(per speaker pair)  
(Music): 150W(per speaker pair)  
Impedance matching: Automatic



CF-PW150-4

### CF-PW150-6

Input(Amplifier): 2 pcs  
Output(Speaker): 6 pairs  
Volume Control: x  
Power handling (RMS): 50W(per speaker pair)  
(Music): 150W(per speaker pair)  
Impedance matching: Automatic



CF-PW150-6

### CF-PW150-4V

Input(Amplifier): 2 pcs  
Output(Speaker): 4 pairs  
Volume Control: v  
Power handling (RMS): 50W(per speaker pair)  
(Music): 150W(per speaker pair)  
Impedance matching: Automatic



CF-PW150-4V

### CF-PW150-6V

Input(Amplifier): 2 pcs  
Output(Speaker): 6 pairs  
Volume Control: v  
Power handling (RMS): 50W(per speaker pair)  
(Music): 150W(per speaker pair)  
Impedance matching: Automatic



CF-PW150-6V

### CF-PW152-2V

Input(Amplifier): 2 pcs  
Output(Speaker): 2 pairs  
Volume Control: v  
Power handling (RMS): 50W(per speaker pair)  
(Music): 150W(per speaker pair)  
Impedance matching: Manual



CF-PW152-2V

### CF-PW152-4V

Input(Amplifier): 2 pcs  
Output(Speaker): 4 pairs  
Volume Control: v  
Power handling (RMS): 50W(per speaker pair)  
(Music): 150W(per speaker pair)  
Impedance matching: Manual



CF-PW152-4V

### CF-PW152-6V

Input(Amplifier): 2 pcs  
Output(Speaker): 6 pairs  
Volume Control: v  
Power handling (RMS): 50W(per speaker pair)  
(Music): 150W(per speaker pair)  
Impedance matching: Manual



CF-PW152-6V

### CF-PW160-10V

Input(Amplifier): 2 pcs  
Output(Speaker): 10 pairs  
Volume Control: v  
Power handling (RMS): 50W(per speaker pair)  
(Music): 150W(per speaker pair)  
Impedance matching: Manual



CF-PW160-10V

### CF-PW302-4V

Input(Amplifier): 2 pcs  
Output(Speaker): 4 pairs  
Volume Control: v  
Power handling (RMS): 100W(per speaker pair)  
(Music): 300W(per speaker pair)  
Impedance matching: Manual



CF-PW302-4V

### CF-PW302-6V

Input(Amplifier): 2 pcs  
Output(Speaker): 6 pairs  
Volume Control: v  
Power handling (RMS): 100W(per speaker pair)  
(Music): 300W(per speaker pair)  
Impedance matching: Manual



CF-PW302-6V

## IR Extender

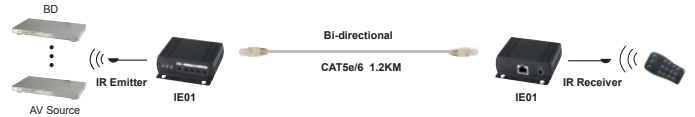
### IE01 IR CAT5e Extender

To carry up to 4 IR (infrared) control signals to devices 1.2KM away over one CAT5e cable.

- Supports up to 4 inputs/outputs.
- Support Bi-directional application.
- The external power is only required at one side, either at transmitter or receiver side.

#### 【Specification】

Cable: CAT5e or higher  
 Max transmission distance: 1.2KM  
 Carrier frequency: 30KHz - 60KHz.  
 Optional model: IR-CT01,IR-CR01  
 Package include: 1 x power adapter, 2 x IR emitter cable(IR-CT01),  
 2 x IR receiver cable (IR-CR01). 2 x IE01.



## IR Repeater

### RPT-104-1



#### 【Specification】

IR Receiver connector: 1x screw  
 IR Emitter connector: 4x jacks (2.1mm)  
 Power input: DC12V 500mA (2.1mm jack)

### RPT-104-7



#### 【Specification】

IR Receiver connector: 1x screw, 1x jack(2.1mm)  
 IR Emitter connector: 4x jacks (2.1mm)  
 Power input: DC12V 500mA (2.1mm jack)

### RPT-204-2



Support up to 2x emitters & 2xblasters

#### 【Specification】

IR Receiver connector: 1x screw, 1x jack(2.1mm)  
 IR Emitter connector: 4x jacks (2.1mm)  
 Power input: DC12V 1.2A (2.1mm jack)

## IR Receiver

### IRC-3060S21 IR Receiver Cable with Plug Connector



#### 【Specification】

Carrier frequency: 30-60 KHz  
 Reception Angle: + / - 45 degree  
 Cable length: 2M

### IRC-3060S06 IR Receiver Cable with Strip End



#### 【Specification】

Carrier frequency: 30-60 KHz  
 Reception Angle: + / - 45 degree  
 Cable length: 2M

## IR Receiver & Blaster

### IRE-30601C30 USB IR Receiver & Blaster



#### 【Specification】

Carrier frequency: 30-60 KHz  
 Reception Angle: + / - 30 degree  
 Cable length: 2M  
 Power: USB (5V DC 500mA)

## IR Emitter (E: Non-blinking, F: Visible Red)

### IEC-3501E-05 IEC-3501F-05 Single IR Emitter



#### 【Specification】

Reception Angle: + / - 45 degree  
 Cable length: 3M  
 Connector: 3.5ø

### IEC-3502E-05 IEC-3502F-05 Dual IR Emitter



#### 【Specification】

Reception Angle: + / - 45 degree  
 Cable length: 3M  
 Connector: 3.5ø

### IEC-0001E-05 IEC-0001F-05 Single IR Emitter



#### 【Specification】

Reception Angle: + / - 45 degree  
 Cable length: 3M  
 Connector: strip and tin end

### COV-101 IR Emitter Cover



Prevents backward transmission from IR emitters (signal loss).

## IR 1 X 4 Repeater Distribution Kit

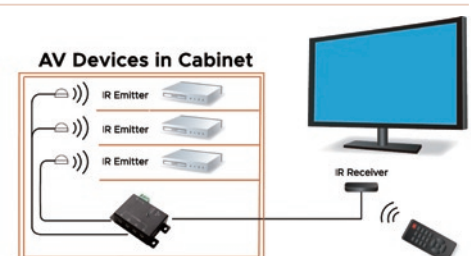
IR Repeater system allows you to control home theater devices located behind cabinet.

### IR104K1

Package included:  
 RPT-104-1 Repeater x 1  
 IRC-3060S06 x 1 IR receiver cable with strip end  
 IEC-3501E-05 x 1 Single IR emitter  
 IEC-3502F-05 x 1 Dual IR emitter  
 DC12V 500mA x 1 Power adapter

### IR104K7

Package included:  
 RPT-104-7 Repeater x 1  
 IRC-3060S21 x 1 IR receiver cable with plug end  
 IEC-3501E-05 x 1 Single IR emitter  
 IEC-3502F-05 x 1 Dual IR emitter  
 DC12V 500mA x 1 Power adapter



## USB CAT5e Extender

Item No.	Support Feature	Distance (Max)
KM03	Keyboard Mouse	600M
UE01	1 port USB 1.1	300M
UE02	4 port USB 2.0	140M
UE03	4 port USB 2.0	60M

### KM03 Keyboard & Mouse CAT5e Extender

To extend keyboard and mouse signals over one CAT5e UTP cable.

- Only receiver unit needs power supply
- Transmission distance less than 30M, no power required for both side.
- Built-in LED indication.

**【Specification】**

Max transmission distance: 600M  
Compliance: USB1.1



### UE01 USB 1.1 CAT5e Extender - Single Port - 70M

Extend one USB device over CAT5e cable.

- Transmission distance less than 50M, there is power supply required for both side.
- Transmission distance more than 50M, external power adapter is required at transmitter unit.

**【Specification】**

Max transmission distance: 300M(low-speed), 70M(full-speed)  
Compliance: USB1.1



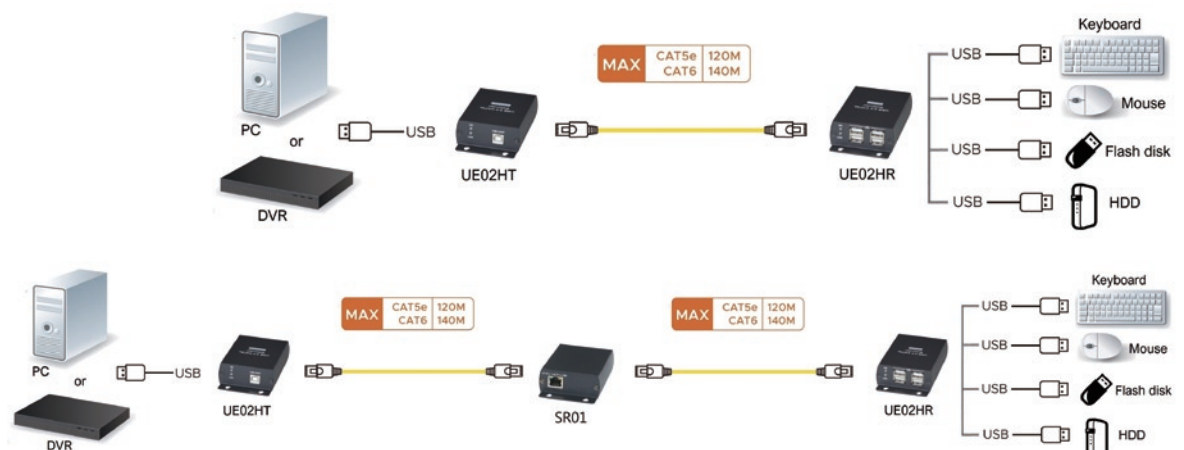
### UE02H USB 2.0 CAT5e Extender - 4 Port USB Hub - 140M

To extend 4 USB devices signals over CAT5e cable.

- Receiver unit is 4-port USB hub
- Supports USB 2.0 devices such as: flash drive, hard drive, keyboard, mouse, camera, printer etc.
- Plug and play for easy operation.

**【Specification】**

Max transmission distance: 140M(CAT6),120M(CAT5e)  
Compliance: USB2.0, 1.1, 1.0  
Bandwidth: 120Mbps  
Optional model: SR01 signal repeater for longer distance application.



### UE03 USB 2.0 Fast CAT5e Extender - 4 Port USB Hub - 60M

To extend 4 USB devices signal at Hi-speed (480Mbps) over CAT5e cable.

- Supports USB 2.0 high-speed and USB 1.1 (low-speed, full speed) devices.
- Receiver unit is 4-port USB hub
- Supports USB 2.0 devices such as USB camera, printer, scanner, USB Ethernet/VGA/ HDMI adapter, mass storage device, keyboard, mouse, etc.

**【Specification】**

Max transmission distance:60M  
Compliance: USB2.0, 1.1, 1.0  
Bandwidth: up to 480Mbps



## Data Converter

### RS001 RS232 to RS485 Converter

To convert RS232 signal to RS485 signal

- Support half-duplex transmission
- No external power required
- Support up to 32 units connected together in RS485 multi drop operation.

**【Specification】**

Baud rate: up to 115200bps  
 Max transmission distance: 1200M  
 Connector: DB9 female, 2 wire terminal block



RS001

### RS003 USB to RS485 Converter

To convert RS485 signal to USB interface.

- No external power required
- Support half-duplex transmission
- Support up to 32 units connected together in RS485 multi drop operation.
- Driver is included in package

**【Specification】**

Baud rate: up to 115200bps  
 Max transmission distance: 1200M  
 Connector: USB Type B, 2 wire terminal block  
 Compliance: USB2.0



RS003

### RS007 RS232/RS422/RS485 to Ethernet (TCP/IP) Converter

To convert RS232/RS422/RS485 signal to Ethernet signal, vice versa.

- Support three operation mode :TCP Server, TCP Client, UDP Mode.
- Support Virtual COM Port.
- Support full duplex transmission.
- Support auto MDI / MDIX.
- Built-in LED indication.

**【Specification】**

Baud rate: 1200- 115200bps  
 Connector: DB9 female, RJ45, terminal block  
 Link speed: 10/100Mbps



RS007

RS007

## Data Repeater/Extender

### RS001R RS485 Data Repeater

To amplifier and boost RS485 signal for long distance transmission.

- Built-in 2.5KV isolation protection.
- Surge protection.

**【Specification】**

Baud rate: up to 115200bps  
 Max transmission distance: 1200M



RS001R

### RS002E RS232 Full Duplex CAT5e Extender

To extend RS232 signal over CAT5e cable.

- Compatible with all RS-232 protocols
- Full-duplex data communication

**【Specification】**

Baud rate: up to 115200bps  
 Max transmission distance: 2000M  
 Transmission Signal: DCD · RX · TX · DTR · DSR · RTS · CTS · RI.



RS002ET

RS002ER

## Data Distributor

### RS004 1 x 4 RS485 Distributor

To distribute RS485 or RS232 signal to 4 x RS485 output.

- Built-in surge protection at each channel.
- Each input/output is isolated.
- Support cascade connection to other RS004/RS008/RS016.

**【Specification】**

Input port: 1 x RS232, 2 x RS485 (3 input are at "stand by" status at the same time)  
 Output port: 4 x RS485  
 Max transmission distance: 1200M



RS004

### RS008 1 x 8 RS485 Distributor in 1U Rack

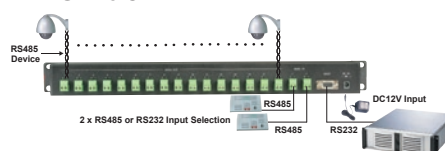
Identical to RS004, but 8 outputs.



RS008

### RS016 1 x 16 RS485 Distributor in 1U Rack

Identical to RS004, but 16 outputs.



RS016



## Power Converter & Distributor Box

### PC500 AC to DC 12V Power Converter 500mA

To convert AC power to DC12V Power with DC plug

- For DC type camera and professional CCTV industry installation.

**【Specification】**

Input power: AC15~26V; DC15~28V.

Output Power: DC12V 500mA regulated.



PC500

### PC2A AC to DC 12V Power Converter 2000mA

Identical to PC500, but with 2000mA output.

**【Specification】**

Input power: AC18~26V; DC18~28V.

Output Power: DC12V 2000mA regulated.



PC2A

### PD009 1 x 9 AC/DC Power Distributor Box

To distribute power to 9 output

- Each port built-in surge protector and PTC fuse rated 1.1A.
- Individual status LED indicators for each port.

**【Specification】**

Input voltage: AC/DC 1-30V.



PD009

## Power Supply in Rack Panel Mounting/Wall Mounting

### PR801 8A 1 Port AC24V Power Supply in 1U Rack

To transform AC120V or 230V to AC24V output

- Built-in NFB to avoid current overloading.
- Built-in toroidal transformer for high efficiency and low operating temperature.

**【Specification】**

Power input: AC 120V or 230V

Power output: AC24V 8A (MAX).



PR801

### PR801-12R 8A 1 Port DC12V Regulated Power Supply in 1U Rack

To transform AC120V or 230V to regulated DC12V output

- Built-in NFB to avoid current overloading.

**【Specification】**

Power input: AC 120V or 230V

Power output: Regulated DC12V 8A (MAX).



PR801-12R

### PR816 8A 16 Port AC24V Power Supply in 1U Rack

To transform AC120V or 230V to 16 port AC24V 0.5A output.

- Built-in NFB to avoid current overloading.
- Built-in PTC fuse for overcurrent and resettable protection on each port.
- Built-in toroidal transformer for high efficiency and low operating temperature.

**【Specification】**

Power input: AC 120V or 230V

Power output: AC24V 8A (Total), each port 1.1A (MAX)



PR816

### PR816-12D 8A 16 Port DC12V Non-Regulated Power Supply in 1U Rack

To transform AC120V or 230V to 16 port of non-regulated DC12V 0.5A output.

- Built-in NFB to avoid current overloading.
- Built-in PTC fuse for overcurrent and resettable protection on each port.

**【Specification】**

Power input: AC 120V or 230V

Power output: DC12V 8A (Total), each port 1.1A (MAX)



PR816-12D

### PR816-12R 8A 16 Port DC12V Regulated Power Supply in 1U Rack

To transform AC120V or 230V to 16 port of regulated DC12V 0.5A output.

- Built-in NFB to avoid current overloading.
- Built-in PTC fuse for overcurrent and resettable protection on each port.

**【Specification】**

Power input: AC 120V or 230V

Power output: Regulated DC12V 8A (Total), each port 1.1A (MAX)



PR816-12R

### PR1008-5R 10A 8 Port DC5V Regulated Power Supply in 1U Rack

To transform AC120V or 230V to 10 port of regulated DC10V 0.5A output.

- Built-in NFB to avoid current overloading.
- Built-in PTC fuse for overcurrent and resettable protection on each port.

**【Specification】**

Power input: AC 120V or 230V

Power output: Regulated DC5V 10A (Total), each port 2A (MAX)



PR1008-5R

### PR1616-12R 16A 16 Port DC12V Regulated Power Supply in 1U Rack

Identical to PR816-12R, but total 16A output

- Built-in fan at front and back panel each for lowering operating temperature.

**【Specification】**

Power input: AC 120V or 230V

Power output: Regulated DC12V 16A (Total), each port 1.1A (MAX)



PR1616-12R

## PW408S 4A 8 Port Dual Power Supply

To transform AC110V or 230V to 8 port of DC12V or AC24V output.

- Built-in PTC fuse rated 1.1A for short protection and auto rework on each port.
- Built-in toroidal transformer for high efficiency and low operating temperature.
- Wall mounting metal box

### 【Specification】

Power input: AC 120V or 230V  
 Power output: DC12V AC24V 4A (Total),  
 each port 1.1A (MAX)  
 Dimension: 224 x 200 x 60 mm



PW408S

## PW408S-12R 4A 8 Port DC12V Regulated Power Supply

Identical to PW408S, but support regulated DC12V output.

### 【Specification】

Power input: AC 120V or 230V  
 Power output: Regulated DC12V 4A (Total),  
 each port 1.1A (MAX)  
 Dimension: 224 x 200 x 60 mm



PW408S-12R

## PW816S-AC24 8A 16 Port AC24V Power Supply

To transform AC110V- 240V to 16 port of AC24V 0.5A output.

- Built-in PTC fuse rated 1.1A for short protection and auto rework on each port.
- Built-in toroidal transformer for high efficiency and low operating temperature.
- Wall mounting metal box

### 【Specification】

Power input: AC 100V- 240V  
 Power output: AC24V 8A (Total),  
 each port 1.1A (MAX)  
 Dimension: 224 x 200 x 60 mm



PW816S-AC24

## PW816S-12R 8A 16 Port DC12V Regulated Power Supply

Identical to PW816S-AC24, but support regulated DC12V output.

### 【Specification】

Power input: AC 100V- 240V  
 Power output: Regulated DC12V 8A (Total),  
 each port 1.1A (MAX)  
 Dimension: 224 x 200 x 60 mm



PW816S-12R

## Power Adapter

### SWP051000 DC5V 1A Switching Power Adapter

#### 【Specification】

Power input: AC 90V- 240V  
 Power output: Regulated DC5V 1A



SWP051000

### SWP052000 DC5V 2A Switching Power Adapter

#### 【Specification】

Power input: AC 90V- 240V  
 Power output: Regulated DC5V 2A



SWP052000

### SWP12500 DC12V 0.5A Switching Power Adapter

#### 【Specification】

Power input: AC 90V- 240V  
 Power output: Regulated DC12V 0.5A



SWP12500

### SWP121000 DC12V 1A Switching Power Adapter

#### 【Specification】

Power input: AC 90V- 240V  
 Power output: Regulated DC12V 1A



SWP121000

### SWP121500 DC12V 1.5A Switching Power Adapter

#### 【Specification】

Power input: AC 90V- 240V  
 Power output: Regulated DC12V 1.5A



SWP121500

### SWP124200 DC12V 4.2A Switching Power Adapter

- Desktop type.

#### 【Specification】

Power input: AC 90V- 240V  
 Power output: Regulated DC12V 4.2A



SWP124200

### SWP241250 DC24V 1.25A Switching Power Adapter

#### 【Specification】

Power input: AC 90V- 240V  
 Power output: Regulated DC24V 1.25A



SWP241250

### SWP480830 DC48V 0.83A Switching Power Adapter

- Desktop type.

#### 【Specification】

Power input: AC 90V- 240V  
 Power output: Regulated DC48V 0.83A



SWP480830

### SWP561600 DC56V 1.6A Switching Power Adapter

- Desktop type.

#### 【Specification】

Power input: AC 90V- 240V  
 Power output: Regulated DC56V 1.6A



SWP561600

## Power Surge Protector

### SPO01P-AC110 AC Power Surge Protection Device Terminal Connector

To provide surge protection for a AC100-120V device.

#### 【Specification】

Connector: Terminal connector to terminal connector.  
 Response time: < 1ns      Max discharge current: 6kA (8x20uS)  
 Max load current: 8A (Max)      Breakdown voltage: 6kV (1.2uS x 50uS)

SPO01P-AC110



### SPO01P-AC220 AC Power Surge Protection Device Terminal Connector

To provide surge protection for a AC220-240V.

#### 【Specification】

Connector: Terminal connector to terminal connector.  
 Response time: < 1ns      Max discharge current: 6kA (8x20uS)  
 Max load current: 4A (Max)      Breakdown voltage: 6kV (1.2uS x 50uS)

SPO01P-AC220



## Cable

**WC414** 4 BNC Male to 4 BNC Male Cable  
100cm

WC414



**WC414-200** 4 BNC Male to 4 BNC Male Cable  
200cm

WC414-200



**WC111-30** BNC Male to BNC Male RG59 Cable  
30cm

WC111-30



**WC101-30** BNC Male to BNC Female RG59 Cable  
30cm

WC101-30



## Tool

### AT001 Twisted Pair Tool Kit

Package include:

- Ratchet modular connector crimping tool crimping tool for 6P2C, 8P8C modular connectors
- Stripper & punch down tool
- Universal coaxial crimping tool,
- RJ45 modular plug (8P8C round solid) x 50pcs
- RJ45 protection cap x 20pcs



AT001

### AT002 Remote Cable Tester

- Connector: RJ45, USB, BNC (CAT5e/CATV/Cable Modem)
- LEDES indications: Short LED  
Connected/25 ohms terminator  
No-Parallel /50 ohms terminator  
No connection / No termination  
Battery good / Battery low  
S, C/1,2,3,4,5,6,7,8, LEDES



AT002

### AT005 Modular Crimping Tool

- For 4,6,8 poles modular connector (RJ45, RJ22) ratchet type.
- This tool is for all necessary tools to cut, strip and crimp modular telephone wires.



AT005

### AT006 Multi-Function Wire Stripper

- The lightweight, compact stripper is simple to operate, provided multifunction and safety.
- Application for stripping coaxial cable and UTP/STP cable.



AT006

### AT007 Splice & Crimp Tool for AP007 UY Connectors

- Designed to seat UG, UR and UY connectors.
- A special stop behind cutout prevents damage to connectors.



AT007

### AT008 Coaxial Crimping Tool

- Application for crimping RG59, RG6U cable.



AT008

### AT012 Compression Tool for APBC01 Compression Connector

- Application for crimping RG59, RG6U, F, RCA, waterproof connectors



AT012

## Parts

### AP001 Modular RJ45 Plug (3 Prongs)

- 8 position 8 contact round solid
- Package include: 100 pcs/bag.



AP001

## AP002 RJ45 Protection Cap

- Provide 5 colors (red, green, yellow blue, grey) for easy identification.
- Package include: 100pcs/bag (20pcs of each color)



AP002

## AP007 UY2 Connector

- Self-stripping, insulated and moisture resistant butt connector for 2 wire solid copper conductor
- Handle 19 to 26AWG solid copper wire
- Insulation O.D. of 0.082 inches ( 2.08mm).
- Package include: 100pcs/box



AP007

## AP008 DC Plug to Terminal Block

- DC plug (male) to removable terminal block.
- Small size for tight spaces.
- DC plug:  $\varnothing 2.1\text{mm} \times 5.5\text{mm}$
- Package include: 10pcs/bag.



AP008

## AP008-F DC Jack to Terminal Block

- DC jack (female) to removable terminal block.
- Small size for tight spaces.
- DC pjack:  $\varnothing 2.1\text{mm} \times 5.5\text{mm}$
- Package include: 10pcs/bag.



AP008-F

## AP009 DC Plug to Strip End

- DC plug (male) to strip end.
- DC plug:  $\varnothing 2.1\text{mm} \times 5.5\text{mm}$
- Power cord: 150mm
- Package include: 10pcs/bag.



AP009

## AP009-F DC Jack to Strip End

- DC jack (female) to strip end.
- DC jack:  $\varnothing 2.1\text{mm} \times 5.5\text{mm}$
- Power cord: 150mm
- Package include: 10pcs/bag.



AP009-F

## Connectors (Package: 100pcs/bag)

### APBC01

HD-SDI/BNC  
Compression  
Waterproof  
(RG59/RG6U)



### APBT11

BNC Male  
Twisted On  
(RG59/RG6U)



### APBC13

BNC Male Crimp  
(RG58/RG59/RG6U/RS174)



### APBC13-SDI

HD-SDI BNC  
Male Crimp  
(RG59/RG6U)



### APB012

BNC Male  
Solderless



### APBC12

BNC Male  
Quick Crimp  
(RG59/RG6U)



### APB310

BNC Male To  
T Adapter  
BNC Female



### APBR01

BNC Female To  
RCA Male



### APBR10

BNC Male To  
RCA Female



### APBR11

BNC Male To  
RCA Male



### APFT11

F Male Twist On  
(RG59/RG6U)



### APFC12

F Male Crimp  
Two Pieces Type  
(RG59/RG6U)



### APBF10

BNC Plug To  
F Jack



### APBB00

BNC Female To  
BNC Female



### APRF10

RCA Male to  
F Female



## Rotary Switch

### RCP20 Series

- Mini products use.
- Can be turned, even without knob.
- Test machines, OA equipment.
- Function selection of signal instrument.



RCP20 Series

### RCL202 Series

- Switching selection with multi-position and multi-pole.
- For general instrument equipment use.
- For military and civilian tele-communication, equipment use.
- Dust and moisture prevents function.
- Gold-plating terminal and contactor for long time use.
- Small size with direct current 1A.
- Resistance to soldering heat: 350+\_10 degree C 3 sec.



RCL202 Series

### RCP203 Series

- Switching selection with multi-position and multi-pole.
- For general instrument equipment use.
- For military and civilian tele-communication, equipment use.
- Dust and moisture prevents function.
- Silver-plating terminal and contactor for long time use.
- Small size with direct current 0.5A.



RCP203 Series

### RCL370 Series

- Hi-end audio volume control.
- Public audio system.
- Data transfer switch.
- Signal selection of multi section, multi-pole, and multi-position electric products.



RCL370 Series

### RCL371 Series

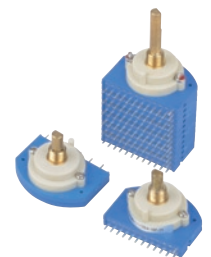
- Hi-End audio volume control.
- Public audio system.
- Function selection of multi-section, multi-pole, multi-position products.
- Computer peripheral product-data transfer switch.
- Communication equipment.
- Function selection of instrument machines.



RCL371 Series

### RCP390 Series

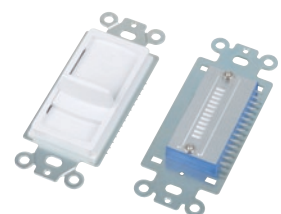
- Hi-End audio volume control.
- Public audio system.
- Function selection of multi-section, multi-pole, multi-position products.
- Data transfer switch.
- Accurate function selection of electronic instrument, medical instruments, etc.
- For PCB mount, saving time and work to wire ring.
- Steady electronic character and life test over 100,000 times.



RCP390 Series

### Slide-SMP261 Series

- Function selection of multi-position products.
- Signal selection of audio.
- Public audio system.
- Light adjustment and volume control.



Slide-SMP261 Series

## Converter

**AD001UHD4**  
4K HD-TVI/AHD/HDCVI  
to HDMI



**AD001HD4**  
HD-TVI/AHD/HDCVI/CVBS  
to HDMI/VGA/CVBS



**AD001HDE**  
HD-TVI/AHD/HDCVI/CVBS  
to HDMI/VGA/CVBS Selection



**AD001HD1**  
HD-TVI/AHD/HDCVI  
to CVBS



**AD001W**  
HD-TVI/AHD/CVBS  
to CVBS  
with APP Viewer



**AD001H**  
CVBS(BNC)  
to VGA



**AD001HH**  
CVBS (BNC)  
to HDMI/VGA  
with Scaler



**VC01**  
VGA to CVBS (BNC)



**VH01E**  
VGA with Audio to HDMI



**SDI01-12G**  
12G-SDI to HDMI 2.0 with  
Audio Embedded/Extract



**SDI01**  
3G/HD-SDI to HDMI



**SDI02**  
HDMI to 3G/HD-SDI



**HC01**  
HDMI to Composite Video  
with Stereo Audio



**HVY01**  
HDMI to VGA/Component Video  
& Audio with Scaler



**HD01**  
HDMI to DVI & Audio  
(HDMI Audio Extractor)



**AC01**  
Analog to Digital Audio  
Bi-directional



**ARC01**  
HDMI to HDMI ARC  
Bi-directional



**DH01**  
DVI & Audio to HDMI  
(HDMI Audio Embedder)



## Surge Protector

**SP009**  
**HD-TVI/AHD/HDCVI/CVBS**  
 BNC male to BNC female



**SP009T**  
**UTP HD-TVI/AHD/HDCVI/CVBS**  
 Terminal to terminal



**SP002**  
**4 in 1 Video (F connector)**  
 F male to F female



**SP003**  
**UTP 4 in 1 Video/Data**  
 RJ45 to RJ45



**SP004**  
**UTP Data**  
 Terminal to terminal



**SP005**  
**4 in 1 Video/Data**  
 BNC female & terminal to BNC female & terminal



**SP001VP**  
**4 in 1 Video/Power**  
 BNC female & terminal to BNC female & terminal



**SP001VPD**  
**4 in 1 Video/Power/Data**  
 BNC female & terminal to BNC female & terminal



**SP004VPD**  
**UTP 4 in 1 Video/Power/Data**  
 Terminal to terminal



**SP016HD**  
**16 Channel HD-TVI/AHD/HDCVI/CVBS**  
 BNC female to BNC female



**SP016HDT**  
**16 Channel UTP HDCVI/HD-TVI/AHD/CVBS**  
 Terminal to terminal



**SP001P**  
**Power AC 40V/DC 56V**  
 Terminal to terminal



**SP001P-AC110**  
**Power AC 110V**  
 Terminal to terminal



**SP001P-AC220**  
**Power AC 220V**  
 Terminal to terminal



**SP007**  
**3G/HD-SDI**  
 BNC male to BNC female



**SP007L**  
**HD-SDI**  
 BNC male with 10cm cable to BNC female



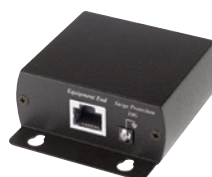
**SP008**  
**HDMI**  
 HDMI female to HDMI female



**SP006**  
**Ethernet**



**SP006H**  
**10G Ethernet/  
 HDBaseT**



**SP006P**  
**PoE**



**SP006PH**  
**1G PoE**



**SP006PHO**  
**Outdoor 1G PoE**



**SP016P**  
**16 Channel 1G PoE**



Before Use



After Use



## Ground Loop Isolator

**GL001HDP**  
HD-TVI/AHD/HDCVI/CVBS  
Video Ground Loop Isolator



**GL001HD**  
Active HD-TVI/AHD/HDCVI/CVBS  
Video Ground Loop Isolator



**GL001HP**  
**GL001HP-1A**  
Power Ground Loop Isolator



**GL001**  
Video Ground Loop Isolator



**GL001H**  
High Performance Video  
Ground Loop Isolator



**GB001**  
Video Ground Loop  
Isolator with Balun



**TGP001**  
UTP Video Ground Loop  
Isolator with Balun



**TGP001H**  
High Performance UTP  
Video Ground Loop Isolator



**AE02GL**  
Stereo Audio Ground  
Loop Isolator



## High Frequency Interference Blocker



**CHB001HMT**

Analog Video High Frequency Interference Blocker

COAXIAL



**CHB001HMR**

## Video Transformer Filter

**CB001VH**  
Filter for DVR



**TVB001**  
UTP Filter





# INDEX

Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
AA002	41	AT006	49	EE01D	36	HE04SEK	30
AA002PJ	41	AT007	49	EE01H	34	HE05C	29
AA003	41	AT008	49	EP01	13	HE10M	33
AA003PJA	41	AT012	49	EP01HK	27	HE20E	25
AC01	42	CA101	6	GB001	9	HE23U	25
AD001H	8	CA101HD	6	GL001	9	HKM01-4K	28
AD001HD1	8	CA101HDP	6	GL001H	9	HKM01E	28
AD001HD4	7	CA101VP	6	GL001HD	9	HKM02BPR-4K	21
AD001HDE	8	CB001VH	10	GL001HDP	9	HKM02BPT-4K	21
AD001HH	8	CD102A	5	GL001HP	10	HKM02BR	21
AD001UHD4	7	CD102HD	5	GL001HP-1A	10	HKM02BR-4K	21
AD001W	8	CD104HD	5	HAE01	30/33	HKM02BT	21
AE01D	41	CD108HD	5	HCO1	34	HKM02BT-4K	21
AE01-T(TTP111A)	41	CD1632A	6	HDO1	34	HM41E	31
AE02	41	CD1632HD	5	HD02-4K	30	HM44	32
AE02GL	42	CD1664HD	6	HD04-4K6G	30	HR01	34
AP001	49	CD408HD	5	HD10-4K6G	30	HR01-4K6G	34
AP002	50	CD816HD	5	HD401F	7	HS04	31
AP007	50	CE01A	40	HD401F4	7	HS04-4K6G	31
AP008	50	CE01TV	40	HD401F8	7	HS04M	32
AP008-F	50	CF-PW150-4	43	HE01C	29	HS04M-4K6G	32
AP009	50	CF-PW150-4V	43	HE01CI	29	HS10M	32
AP009-F	50	CF-PW150-6	43	HE01ERK	23	HS10M-4K6G	32
APB012	50	CF-PW150-6V	43	HE01F-4K6G	28	HS42M-4K6G	31
APB310	50	CF-PW152-2V	43	HE01F-4K6G-KS	28	HVY01	34
APBB00	50	CF-PW152-4V	43	HE01S	23	HW01	29
APBC01	50	CF-PW152-6V	43	HE01SE	23	HW02	29
APBC12	50	CF-PW160-10V	43	HE01SI	23	IE01	44
APBC13	50	CF-PW302-4V	43	HE01SL	23	IEC-0001E-05	44
APBC13-SDI	50	CF-PW302-6V	43	HE02E	24	IEC-0001F-05	44
APBF10	50	CHB001HM	10	HE02EI	24	IEC-3501E-05	44
APBR01	50	COV-101	44	HE02EIP	24	IEC-3501F-05	44
APBR10	50	DD04A	36	HE02EIX	26	IEC-3502E-05	44
APBR11	50	DE01ERK	35	HE02EIXP	26	IEC-3502F-05	44
APBT11	50	DE02E	35	HE02EX	26	IP01	12
APFC12	50	DH01	36	HE02EXP	26	IP01H	12
APFT11	50	DKM01	35	HE02N	25	IP01K	12
APRF10	50	DPO2E	35	HE02P	25	IP01P	14
ARC01	33	DPO2U	35	HE03	27	IP02DK	13
AT001	49	DR01	36	HE03-4K	27	IP02E	12
AT002	49	DS02A	36	HE03LR-4K	28	IP02EP	13
AT005	49	DS04	36	HE04M	33	IP02P	14

# INDEX

Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
IP02PHK	14	RS003	46	SWP241250	48	VDKM02BR	21
IP03P	14	RS004	46	SWP480830	48	VDKM02BT	21
IP04	15	RS007	46	SWP561600	48	VE01(TTA111VGA)	37
IP04X	15	RS008	46	TDP016	2	VE01H	37
IP04X90	15	RS016	46	TGP001	9	VE01HA	37
IP05E	15	SDI01	19	TGP001H	9	VE01P(TTP111VGA)	37
IP06	15	SDI01-12G	19	TPA016	4	VE01R(TTA111VGAR)	38
IP06H	16	SDI02	19	TPN002	3	VE02(VD102)	38
IP06I90	15	SDI04D	18	TPN002BT	21	VE02AL	39
IP06S60-12	16	SDI06	18	TPN002U	16	VE02ALR	39
IP06S60-24	16	SDIVP	18	TPN002VD	21	VE02DALS	39
IP07M	13	SDIVPD	18	TPN003BT	21	VE05(VD105)	38
IP08H	16	SPO01P	11	TPN008	4	VE05AL	39
IP16H	16	SPO01P-AC110	48	TPN009	4	VE10DAL	39
IP24H	16	SPO01P-AC220	48	TPP016HD	2	VH01E	40
IR104K1	44	SPO01VP	11	TPP016VPD	3	VHE02EIP	24
IR104K7	44	SPO01VPD	11	TTA111HDR	4	VKM02	38
IRC-3060S06	44	SPO02	11	TTA111HDT	4	VKM04	38
IRC-3060S21	44	SPO03	11	TTA111VPDR	3	VW01HA	37
IRE-30601C30	44	SPO04	11	TTA111VR	4	WC101-30	49
KC01	21	SPO04VPD	11	TTA111VT	4	WC111-30	49
KM03	45	SPO05	11	TTA414VPDR	3	WC414	49
PC2A	47	SPO06	17	TTP111AV	1	WC414-200	49
PC500	47	SPO06H	17/21	TTP111HD	1		
PD009	47	SPO06P	17	TTP111HDL	1		
PR1008-5R	21/47	SPO06PH	17	TTP111HDLK	1		
PR1616-12R	47	SPO06PHO	17	TTP111HDPD-RJ45-K	2		
PR801	47	SPO07	19	TTP111HDPK	2		
PR801-12R	47	SPO07L	19	TTP111HDP-LK	2		
PR816	47	SPO08	34	TTP111V	1		
PR816-12D	47	SPO09	11	TTP111VLH	1		
PR816-12R	21/47	SPO09T	11	TTP111VPC	2		
PW408S	48	SPO16HD	11	TTP111VPDC	3		
PW408S-12R	48	SPO16HDT	11	TTP414HD	2		
PW816S-12R	48	SPO16P	17	TVB001	10		
PW816S-AC24	48	SR01	13	UE01	45		
RPT-104-1	44	SWP051000	48	UE02H	45		
RPT-104-7	44	SWP052000	48	UE03	45		
RPT-204-2	44	SWP121000	48	VAB-1231	42		
RS001	46	SWP121500	48	VAI-3106D600	42		
RS001R	46	SWP124200	48	VCO1	40		
RS002E	46	SWP12500	48	VD04A	38		