



HDMI Distribution Amplifier

User Manual

Model : HE04SEK

1x4 Out HDMI Distribution Amplifier CAT5e Extender Kit



Introduction

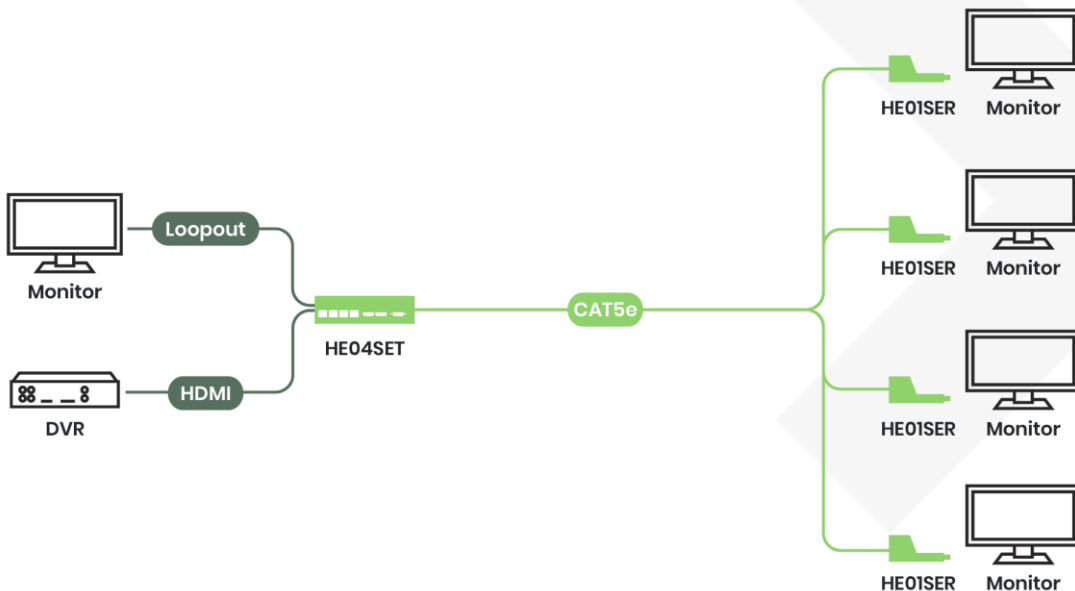
HE04SEK is an HDMI distribution extender that can use CAT5e cables to not only extend one HDMI but also split it into 4 HDMI signal for remote displays. Its RX units don't require external power supplies. and have built-in HDMI connectors that allow the RX to directly connect to HDMI devices. TX is an expandable unit that can stack another TX to get 1 HDMI input and up to 12 HDMI outputs and can display one HDMI video at different HDMI displays at the same time. It's a perfect solution for sports bar, churches, conference rooms, classrooms, and security rooms...etc.

Features

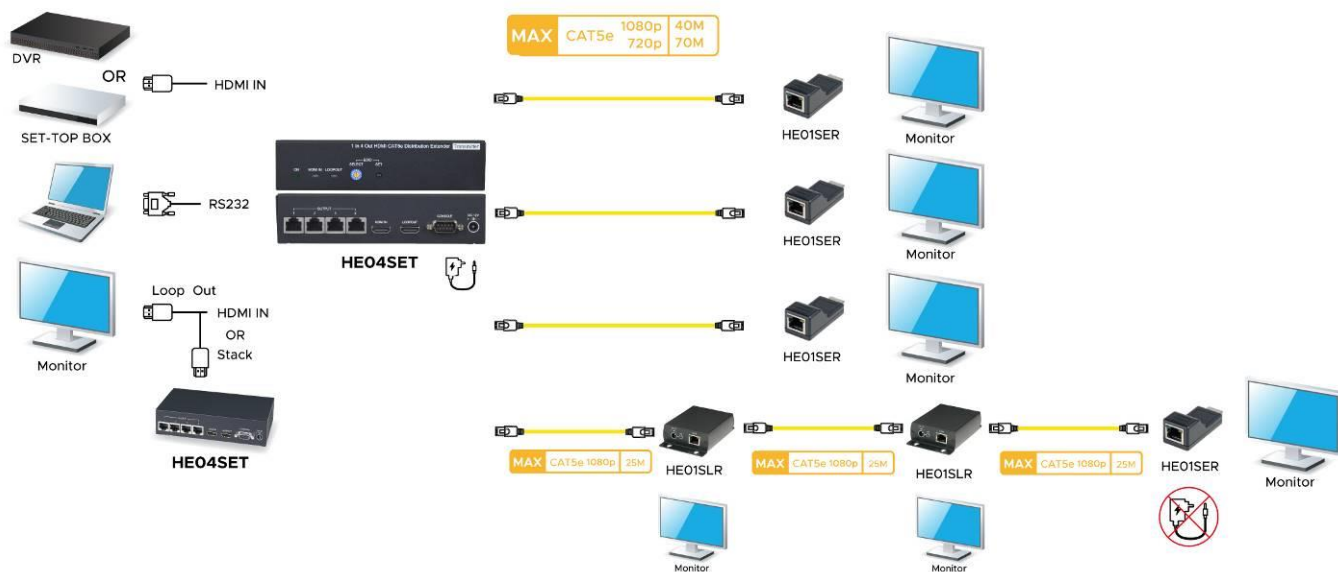
- Resolution up to 1080p@60Hz.
- Signal extension up to 70M.
- No external power required for RX unit.
- Built-in loop out port at TX unit for an extra HDMI display.
- Stackable for another TX for 1 in 8/ 12 out.
- Supports RS232, CEC, EDID management.

Installation View

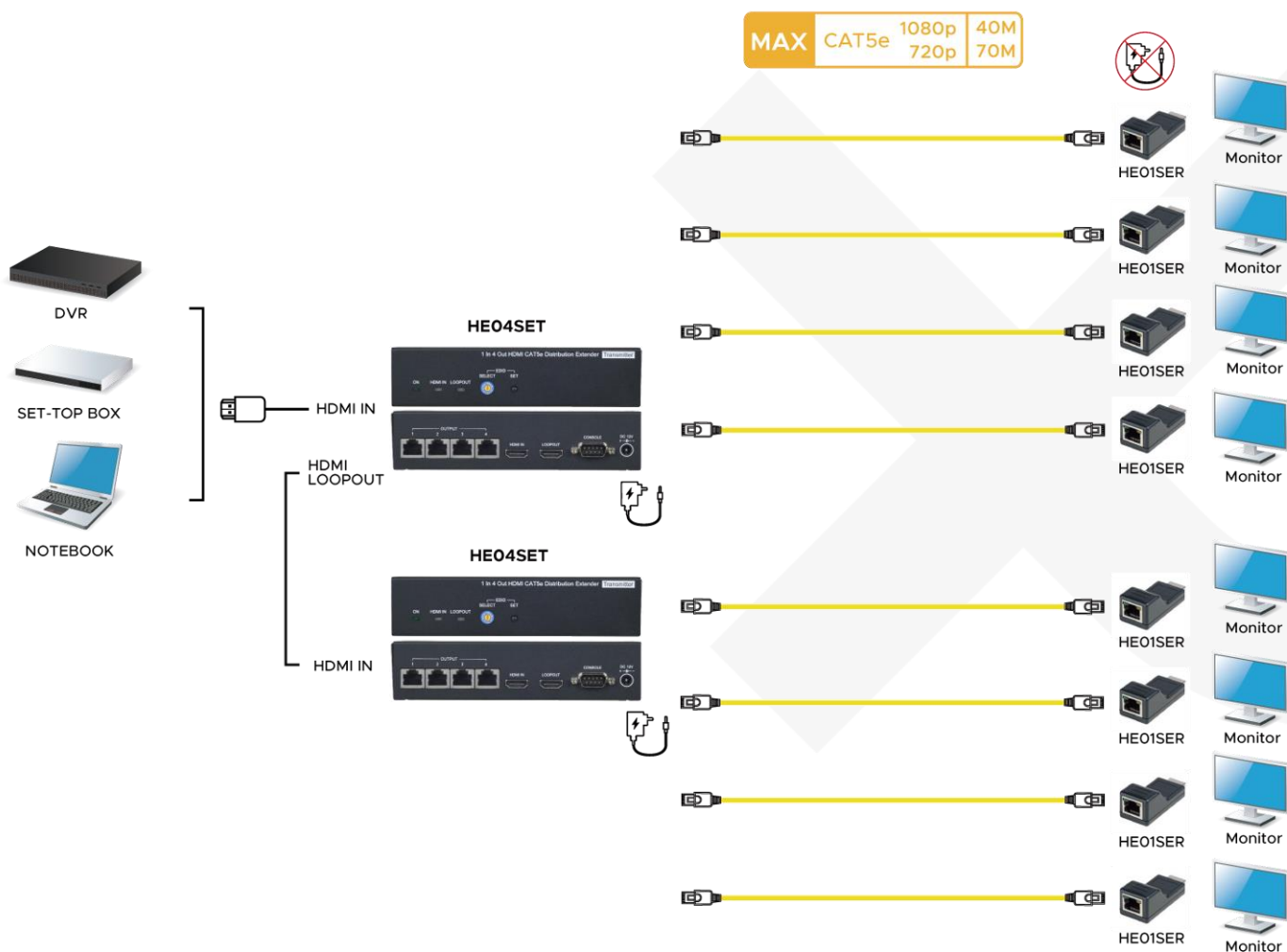
Extends and distributes 1 HDMI source to remote 4 HDMI displays.



Works with chainable receiver HE01SLR (Max. 3pcs) to get extra transmission distance and outputs.

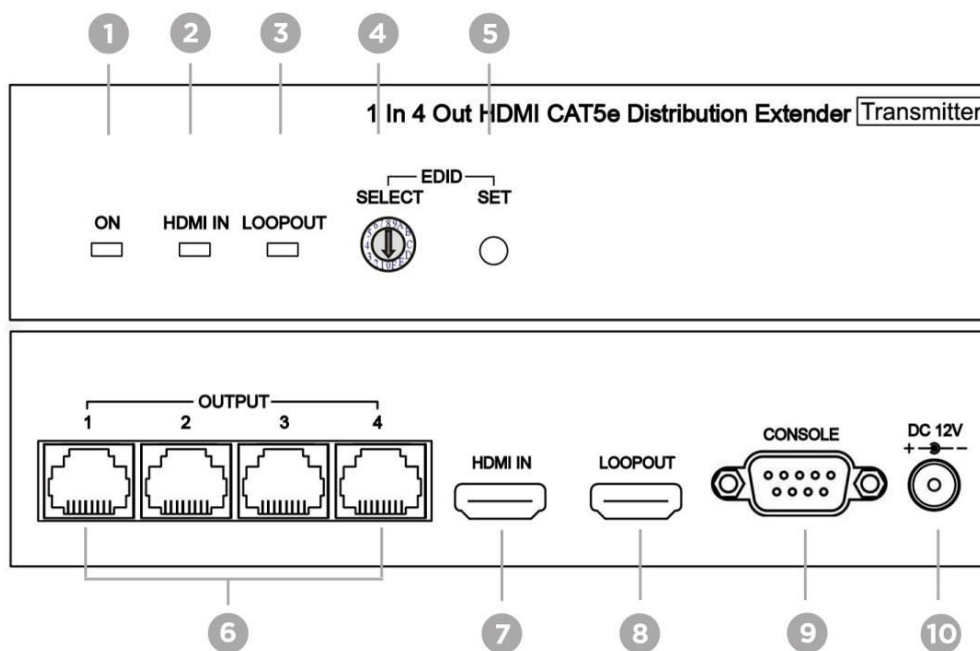


Stack to another HE04SET through HDMI loop out port to get configuration of 1 in 8 out.



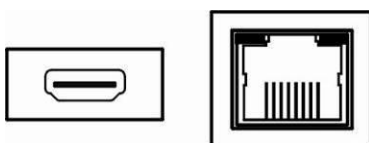
Panel Review

HE04SET



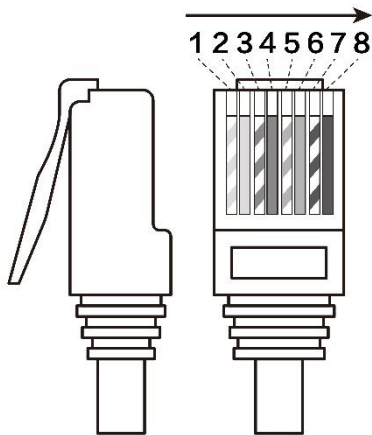
No.	Interface	Description
1	Green LED	Green light indicates “ON” status.
2	Blue LED	Blue light indicates “HDMI IN” is connected to HDMI source.
3	Blue LED	Blue light indicates “LOOPOUT” is connected to HDMI display.
4	Rotary Switch	To select EDID by rotating the switch from 0 to F. (please refer to EDID setting)
5	SET Button	Press 1 second to copy selected EDID.
6	Output 1~4	Connects to remote receivers (HE01SER, HE01SLR) with CAT5e cables. (please refer to Note 2~4)
7	HDMI Input	Connects to HDMI source with HDMI cable.
8	Loop Out	Connects to HDMI display or another HE04SET with HDMI cable. (please refer to Note 1)
9	Console	Connects to RS232 control device with DB9(F) cable for controlling HE04SET or updating firmware. (please refer to RS232 setting)
10	Power Input	Connects to DC12V 1A adapter.

HE01SER



No.	Interface	Description
1	Green LED	Green light indicates receiving power and video signals.
2	Yellow LED	Yellow light indicates no signal input or receiving an unsupported format.

RJ45 Pinout

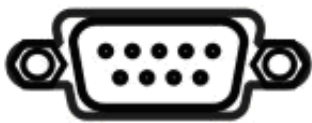


(PIN TIA/EIA-568B)	
PIN	Wire Color
1	Orange-white
2	Orange
3	Green-white
4	Blue
5	Blue-white
6	Green
7	Brown-white
8	Brown

RS232 Configuration

Wiring

Terminal setting: **57600bps (8-N-1)**



Pin	Definition
2	TX
3	RX
5	GND


Pins not shown in the table have no connection.

RS232 Commands

Command	Description
OFF 1 (Enter)	OUTPUT 1 OFF
OFF 2 (Enter)	OUTPUT 2 OFF
OFF 3 (Enter)	OUTPUT 3 OFF
OFF 4 (Enter)	OUTPUT 4 OFF
OFF 5 (Enter)	HDMI LOOPOUT OFF
ON 1 (Enter)	OUTPUT 1 ON
ON 2 (Enter)	OUTPUT 2 ON
ON 3 (Enter)	OUTPUT 3 ON
ON 4 (Enter)	OUTPUT 4 ON
ON 5 (Enter)	HDMI LOOPOUT ON

EDID Configuration

Step 1: Refer to EDID table and find the number of which EDID is needed. (0~F)

Step 2: Rotate the rotary dip switch arrow  to the selected number.

Step 3: Click "SET" button and the two blue LEDs will flash quickly.

Step 4: Wait for HE04SET to restart, and the process of EDID setting is done.

EDID Table

Number	EDID
0	Customize EDID #1
1	Customize EDID #2
2	1024x768
3	1280x720
4	1280x1024
5	1366x768
6	1600x900
7	1680x1050
8	1920x1080
9	1920x1200 RGB LPCM 2CH
A	720p 50Hz LPCM 2CH
B	720p 60Hz LPCM 2CH
C	1080p 50Hz LPCM 2CH
D	1080p 60Hz LPCM 2CH
E	1080p 50Hz MULTI
F	1080p 60Hz MULTI

Customize EDID Settings

Step 1: Connects display and loop out port through HDMI cable.

Step 2: Press and Hold "SET" button for approximately 3 seconds, and the two blue LEDs will flash.

Step 3: Wait for HE04SET to reboot, and finish the EDID copy.

Caution

- When connect HDMI display with loop out port, please make sure HDMI cable connects to the Input 1 of HDMI display.
- It is recommended using UTP cable.
- When using the STP cable, the transmission distance might be shorter. (CAT6a: 25-30M, CAT7:25-40M)
- The cable must be straight, do not roll the cable to avoid crosstalk interference.
- The wiring must be away from any equipment with electromagnetic wave, i.e.: mobile phone, microwave, radio equipment, fluorescent lamp, high voltage power lines.
- HE04SEK isn't networking device, please do not connect with Ethernet device to avoid damages.

Package Includes

No.	Item	Amount
1	HE04SET	x 1 pc
2	HE01SER	x 4 pcs
3	DC12V 1A Power Supply	x 1 pc
4	Rubber pad	x 4 pcs
5	Screws/ Screw Plugs	x 2 sets

Specification:

ITEM NO.	HE04SET	HE01SER
Support		
Compliance	HDMI 1.4, CEC	
Max. Video Resolution	1080p@60Hz	
Max. Transmission Distance	40M at 1080p over CAT5e or better cable	
RS232 Baud Rate	57600 bps	
Audio Format	AC3, DTS, Dolby TrueHD, DTS-HD	
Ports & Interfaces		
Video Input	1 x HDMI Type A	1 x RJ45
Video Output	4 x RJ45	1 x HDMI Type A
Video Loop-out	1 x HDMI Type A	-
RS232 Interface	1 x DB9 Female	-
Power Interface	1 x Power Jack	1 x Micro USB
Power		
Power Supply	DC 12V 1A	-
Power Consumption	96W 0.8A	320mA
Ambient Temperature		
Operation	0 to 70°C	
Storage	-20 to 125°C	
Humidity	Up to 95%	
Physical Characteristics		
Dimensions	167 x 101 x 40mm	57.5 x 24 x 20.2mm
Weight	460g	20g