

# **100508**

# **User Manual**

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**4x4 HDMI Matrix Switch, 4K/60**

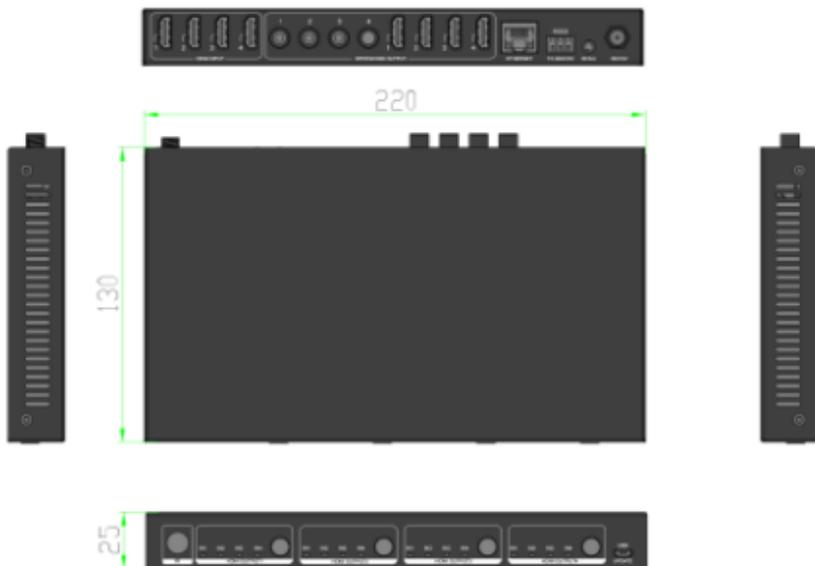
# Overview

This product is a 4 in 4 out HDMI Matrix with Ultra HD up to 4k60 4:4:4 8bit HDR and HDCP2.2. It reliably distributes four HDMI source signal to four HDMI displays. Also provide audio de-embedded via coaxial port for each HDMI port. All output port support 4K scale down to 1080P.

The product can be controlled by front panel buttons, IR, RS232, and IP/web UI. Also we provide API commands for your control system.

It is ideal for applications such as Home theatre, offices, school, conference rooms, shopping malls, hotels and museums, which require manage multiple sources and distribute an HDMI source signal to multiple displays.

# PRODUCT PHOTO



# INTRODUCTION

## FEATURES

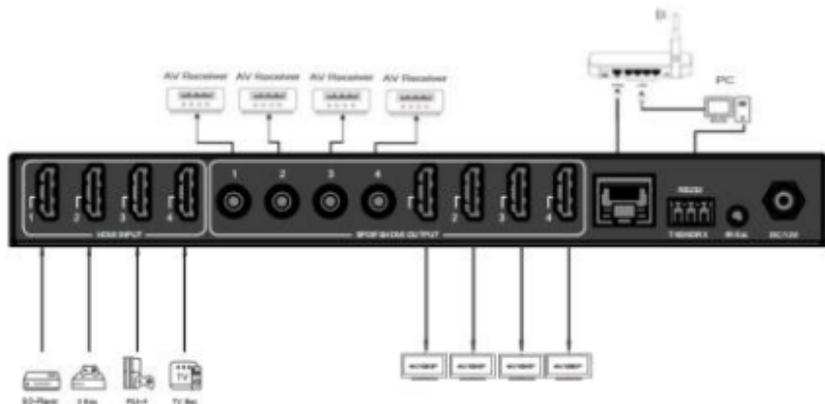
- Distributes four HDMI sources signal to four HDMI displays
- HDMI2.0 with 4K@60 4:4:4 8bit and HDCP 2.2 compliant
- Support HDR 10 and Dolby version
- Support 4K scale down to 1080P
- Support remote control, button, RS232, Telnet & Web GUI
- Support Audio DE-embed, coaxial audio out without display
- Support 3D, Support deep color 30bit, 36bit
- Support Blue-Ray 24/50/60fs/HD-DVD/xvYCC
- Digital audio format, pass through as DTS-HD/Dolby-trueHD/  
LPCM7.1/DTS/Dolby-AC3/DSD, Dolby Atoms, and all other HDMI  
standard formats
- Support signal retiming, No loss of quality
- No driver required, Plug and play, Installs in minutes

## **SPECIFICATIONS:**

- 1) HDMI version..... HDMI 2.0
- 2) HDCP version.....HDCP2.2
- 3) HDMI resolution.....24/50/60fs/4K\*2K/1080p  
/1080i/720p/576p/576i/480p/480i
- 4) Support video format .....24bit/30bit,36bit deep color
- 5) Support audio format.....DTS-HD/  
Dolby-trueHD/LPCM7.1/DTS/Dolby-AC3/DSD/Dolby Atoms
- 6) Max bandwidth.....600MHz
- 7) Max baud rate.....6Gbps
- 8) Input/Output TMDS signal ..0.5~1.5Volts p-p(TTL)
- 9) Input/Output DDC signal ..... 5Volts p-p (TTL)
- 12) Max working current.....1.5A
13. Power adapter format.. .....Input:AC (50HZ  
, 60HZ) :100V-240V; Output: DC12V/2A
- 14) Operatin2g Temperature range..... (-15 to +55°C)
- 15) Operating Humidity range.....5 to 90%RH (No Condensation)
- 16) Dimension (L x W x H).....220\*130\*25(mm)
- 17) Weight.....380g

## Operating and Connecting:

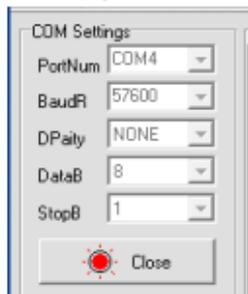
1. Connect one cable from each HDMI source devices to HDMI input.
2. Connect one cable from each display (monitor or projector) to the HDMI outputs.



# Setting

## RS232 control

Advanced user may need to control the matrix via RS232, connect a PC or control system. Professional rs232 serial interface software (e.g. UART Assist) may be needed as well. Before executing API commands through RS232, ensure the RS232 port of the matrix and control PC are set correctly.



See below are main commands for control

Note: All commands need typing 'enter' at the end.

Command	Function
EZH	System help, it will show all commands
EZSTA	Show System Status
EZS RST	Reset to Factory Defaults
EZS DEBUG MODE1 EN	Set Cascade Mode Enable (Turn OFF HDCP)
EZS DEBUG MODE1 DIS	Set Cascade Mode Disable (Turn ON HDCP)
EZS OUTx VS INy	Set Output x To Input y {x=[0~4](0=ALL), y=[1~4]}

EZS OUTx EXA EN	Set Ex-Audio Output Enable {x=[0~4](0=ALL)}
EZS OUTx EXA DIS	Set Ex-Audio Output Disable {x=[0~4](0=ALL)}
EZS OUTx STREAM ON	Set Output x Stream ON {x=[0~4](0=ALL)}
EZS OUTx STREAM OFF	Set Output x Stream OFF{x=[0~4](0=ALL)}
EZS INx EDID y	Set Input x EDID{x=[0~4](0=ALL), y=[0~32]}
EZS HIP xxx.xxx.xxx.xxx	Set Host IP Address to xxx.xxx.xxx.xxx
EZG HIP	Get Host IP Address

More details for EDID list and IP setting, please send "EZH" to get help list.

## IP control

Connect the USB or RS232 to PC, using the RS232 interface to send command "EZG HIP", you will get the IP address of the matrix.

Make sure your PC and the matrix on the same network.

Typing in the IP address in a browser

Note: please begin with http://

**e.g:** You get a IP address 192.168.101.20

please typing in http:// 192.168.101.20

And you will see four sections

Sense Switch, select inputs for each output.

The screenshot shows the 'Sense Switch' configuration page. At the top, there are four tabs: 'Sense Switch', 'Audio Setting', 'GPIO Manager', and 'System Setting'. The 'Sense Switch' tab is active. Below the tabs, there is a title 'Sense Switch' and a 4x4 grid of buttons. The grid is labeled with 'OUT1' through 'OUT4' on the left and 'IN1' through 'IN4' on the top. The 'ON' button for 'OUT2' and 'IN2' is highlighted in dark grey, indicating it is selected. The 'ON' button for 'OUT3' and 'IN3' is highlighted in light grey, indicating it is also selected. The other buttons are in a light grey state. At the bottom of the page, there is a footer that reads 'Model: G-SENSOR-01 V1.00'.

	IN1	IN2	IN3	IN4
OUT1	ON	ON	ON	ON
OUT2	ON	ON	ON	ON
OUT3	ON	ON	ON	ON
OUT4	ON	ON	ON	ON

Audio Setting, turn on/off audio breakout

The screenshot shows the 'Audio Setting' configuration page. At the top, there are four tabs: 'Sense Switch', 'Audio Setting', 'GPIO Manager', and 'System Setting'. The 'Audio Setting' tab is active. Below the tabs, there is a title 'Audio Setting' and a 4x2 grid of buttons. The grid is labeled with 'OUT1' through 'OUT4' on the left and 'ON' and 'OFF' on the top. The 'ON' button for 'OUT1' is highlighted in dark grey, indicating it is selected. The 'ON' buttons for 'OUT2', 'OUT3', and 'OUT4' are highlighted in light grey, indicating they are also selected. The 'OFF' buttons are in a light grey state. At the bottom of the page, there is a footer that reads 'Model: G-SENSOR-01 V1.00'.

	ON	OFF
OUT1	ON	OFF
OUT2	ON	OFF
OUT3	ON	OFF
OUT4	ON	OFF

EDID Manage, select EDID for each input, there are more than 40 kinds of EDID options.



System setting, set IP address and alias name.



# Scaler setting

Press the output select button for 3 seconds until the LED flash 3times, the output port scaler function will be on and will make 4K signal scale down to 1080p.

Press the output select button for 3 seconds until the LED flash 1times and the output port scaler function will be off.

For example

You want to make output1 port scaler on.

You need to press the output1 select button for 3 seconds until the LED flash 3times, the output1 port scaler function will be on and will make 4K signal scale down to 1080p.

Press the output1 select button for 3 seconds until the LED flash 1 times and the output1 port scaler function will be off.

## **Packing List:**

1. HDMI Matrix x1
2. Power supply x1
3. Mount ear x2
4. IR extender cable x1
5. Reusable Cable Ties x2
6. product manual x1
7. IR remote