100508

User Manual

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.
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........................................ HDCP 2.2
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/
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) Operating 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.

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

Audio Setting, turn on/off audio breakout
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 3 times, 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 1 times 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 3 times, 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