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Communication & Electronics LTD

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HIGH-DEFINITION MULTIMEDIA INTERFACE

USER MANUAL

HDMI Matrix 4x4 With Audio (4K@30Hz)

Enjoy the vivid world

Introduction :

The HDMI matrix 4x4 can connect 4 HD signal sources to 4 HD display terminals with optical fiber and stereo headphone output at the same time via HDMI out 1 port. The matrix allows four HDMI devices to be switched or split easily to four HDMI compatible monitors or projectors.

This HDMI matrix support lossless transmitting and are widely used in space and security concerns, data center control, information distribution, conference room presentation, school and corporate training environments.



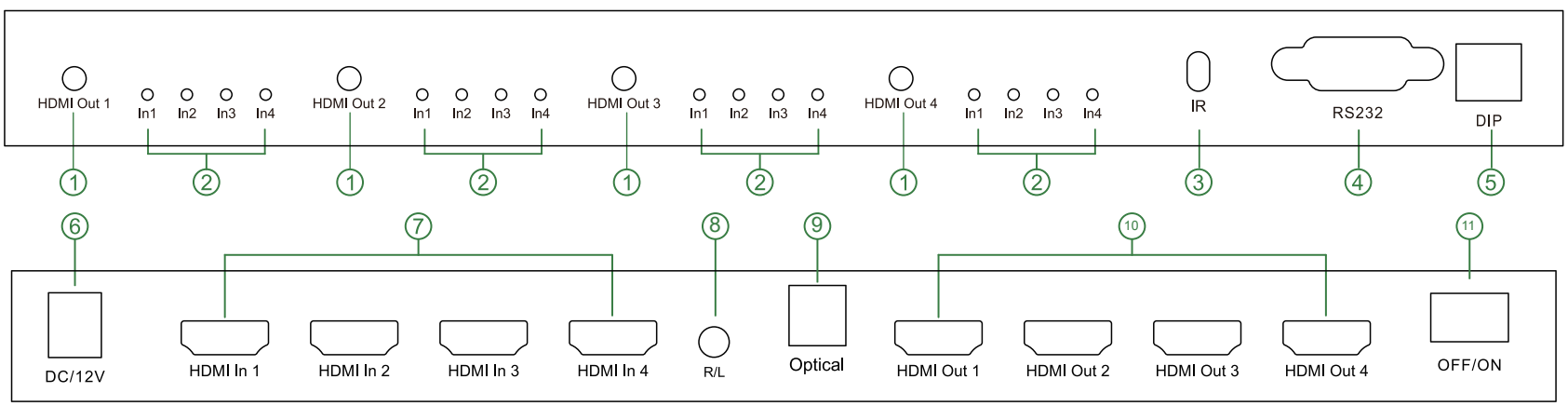
Features :

* Support HDCP1.4;
* Very compact structure;
* Stable and reliable;
* Via HDMI out1, support 3.5mm earphone jack and optical output at same time;
* Economical and cost-effective;
* Support 3D;
* Support IR Remote Control;
* Support RS232 Control;
* The four outputs could show the same or different source simultaneously;

Specifications :

HDMI resolution ..... up to 4K/30Hz
Support video format .....8/10/12 bit deep color
Support audio format DTS-HD/Dolby-trueHD/LPCM7.1/DTS/Dolby-AC3/DSD
Max baud rate 3x3.4Gbps
Input cable distance ..... 4K/30Hz ≤15M AWG26 HDMI standard cable
Output cable distance ..... 4K/30Hz ≤15M AWG26 HDMI standard cable
HDMI Input 4
HDMI Output 4
Max working current 0.6A
Power adapter format ..... Input: AC (50HZ, 60HZ) 100V-240V; Output: DC12V/1A
Operating Temperature range ..... (-15 to +45℃)
Operating Humidity range ..... 5 to 90%RH (No Condensation)
Dimension (L x W x H) ..... 276x143x26 (mm)
Weight 720g

Function Interface Figure:



1: HDMI Out1-4 --- Output selection;
2: In1-4 --- Input LED indicator for each output selection;
3: IR --- IR port;
4: RS232 --- RS232 port;
5: DIP --- EDID;
6: DC/12V --- DC/12V power port;

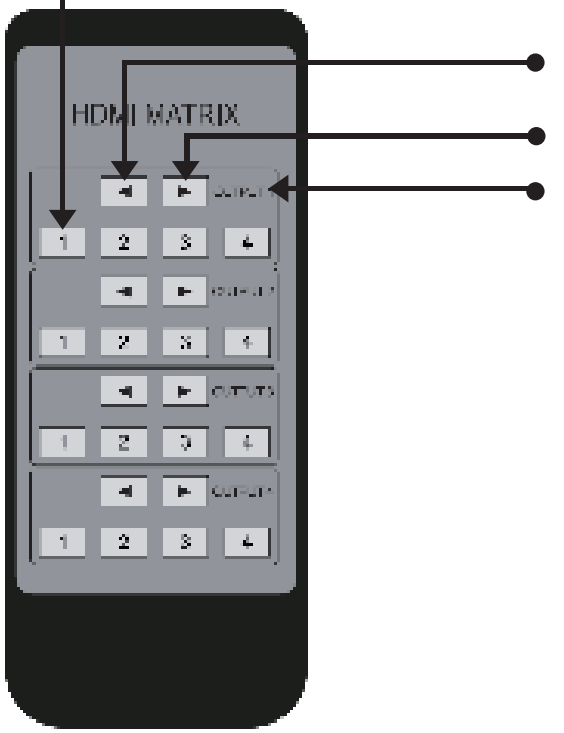
7: HDMI In1-4 --- HDMI Input 1-4 port;
8: R/L --- 3.5MM headphone interface;
9: Optical --- Optical port;
10: HDMI Out1-4 --- HDMI Output 1-4 port;
11: OFF/ON --- Power switch;

EDID setting

Position 1	Position 2	Position 3	Position 4	Function
0	0	0	0	Copy EDID from Output1
0	0	0	1	3D 4K 30HZ 7.1CH
0	0	1	0	3D 4K 30HZ 2CH
0	0	1	1	3D 4K 30HZ 7.1CH
0	1	0	0	2D 1080P stereo 2CH
0	1	0	1	2D 1080P 7.1 CH
0	1	1	0	3D 1080P stereo 2CH
0	1	1	1	2D 1080P DVI

Noted: the dial switch to dial downward is 1, dial upward is 0.

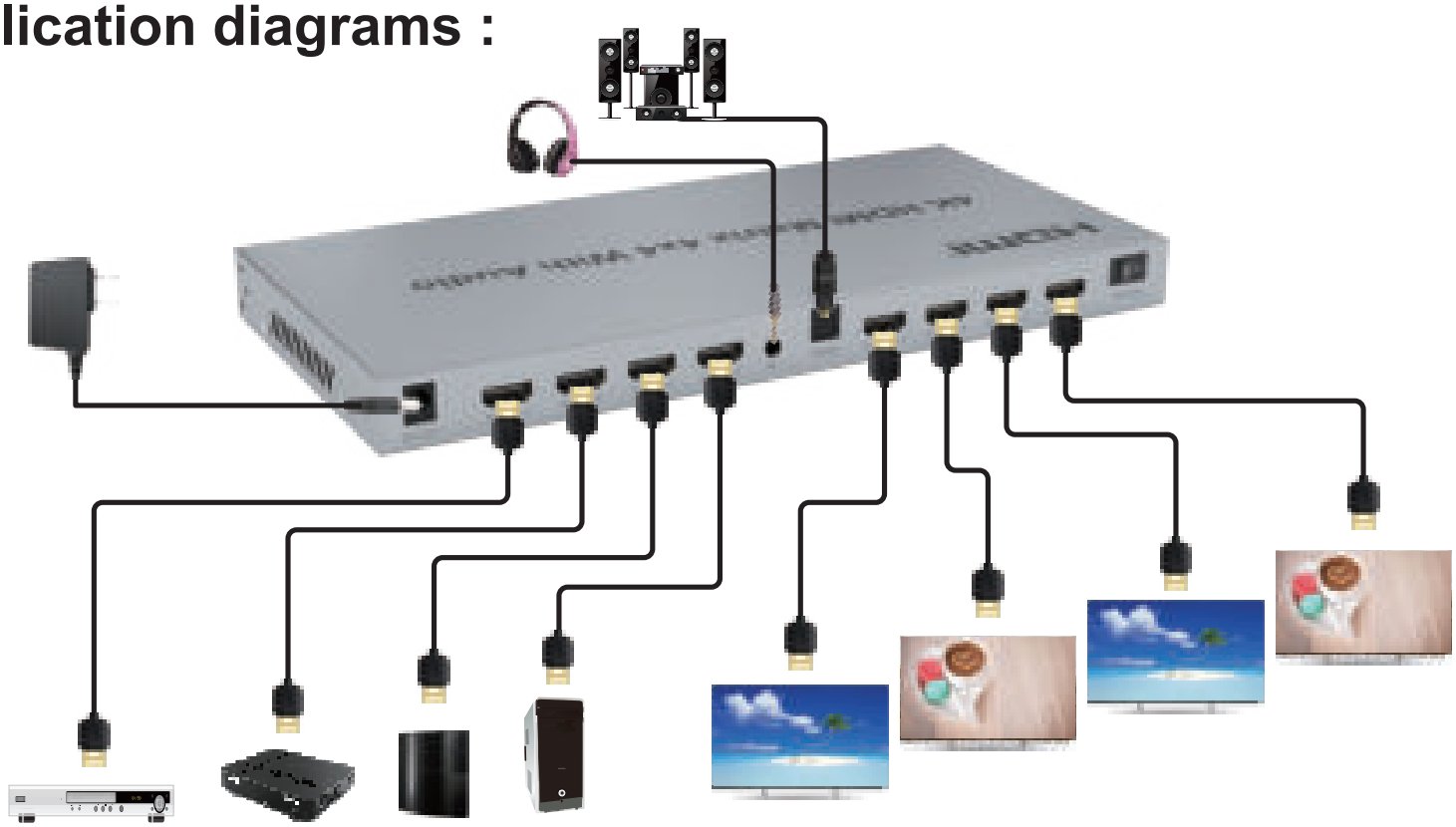
The Remote Control instruction :



①Switch to one specific Input port
②Return to last Input port
③Move forward one Input port
④Output port

4x4 matrix supports IR control and there are four sets of control button to use to switch & control the four Output ports; ②、③ are used to move back or forward one Input port; ① is used to directly switch to one Input port.

Application diagrams :

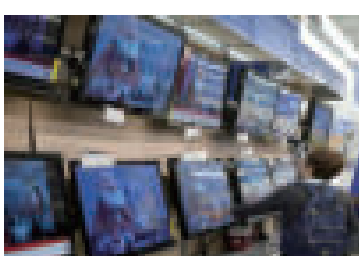


Operating and Connecting :

1. Connect each HDMI source devices and input of HDMI Matrix with HDMI cable.
2. Connect display devices and output of HDMI Matrix with HDMI cable.
3. Connect the audio output to the stereo amplifier via stereo headphones or optical fiber.
4. Connect 12V power supply to the HDMI 4x4 Matrix.
5. Use the IR remote or button control to switch the signal source freely.

NOTE: HDMI port and audio ports are connected according to user needs, not every be connected; but not reversed.

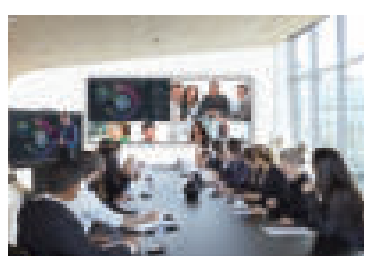
Application scenario :



TV Store



Teaching room



Video Conference

Notes :

Pls use the machine as the instruction listed to keep the long use lifetime of the machine.
1. The machine should be placed at the spot far from the Damp, High-Temperature, Dusty, Erosive, and oxidative environment.
2. All parts will be free from the strong shake, hit, fall.
3. Touching the power adaptor with the wet hands is prohibited.
4. Pls hold the power adaptor head and do not pull the power cord when cut off from the socket.
5. Pls turn the power off when the machine is not used for long time.
6. Pls do not open the cover and do not touch the inside parts.
7. Pls use the original factory power adptor.

Before power on, pls check the connection line carefully. And make sure that all interfaces are normally connected. The common trouble shooting way shows below:

Trouble Description	Cause and Ways to deal with
Non-Power-Connected	1. Check if the power adaptor head is truly and correctly inserted the power socket.
	2. Check the power switch if it is in on status.
No Picture	1. Pls make sure that the TV is on and has been connected with the machine.
	2. Check if the signal source is on and well connected.
	3. Check the system connection quality.
	4. Check if the line is all good quality.
	5. Check the cable quality
Obscure Picture	1. To try again to connect the cable to be free from the unsuccessful connection.
	2. HDMI Cable Quality

Accessories :

1. HDMI Matrix 4X4	1PC	3. 12V power adapter	1PC
2. IR Remote Control	1PC	4. User Manual	1PC

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(seamless switching)

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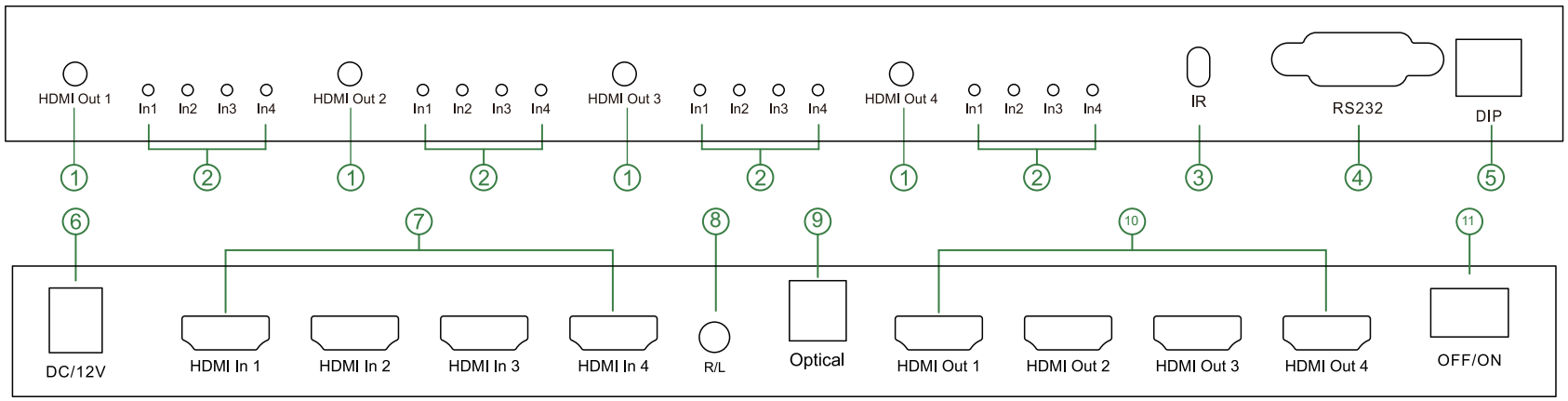
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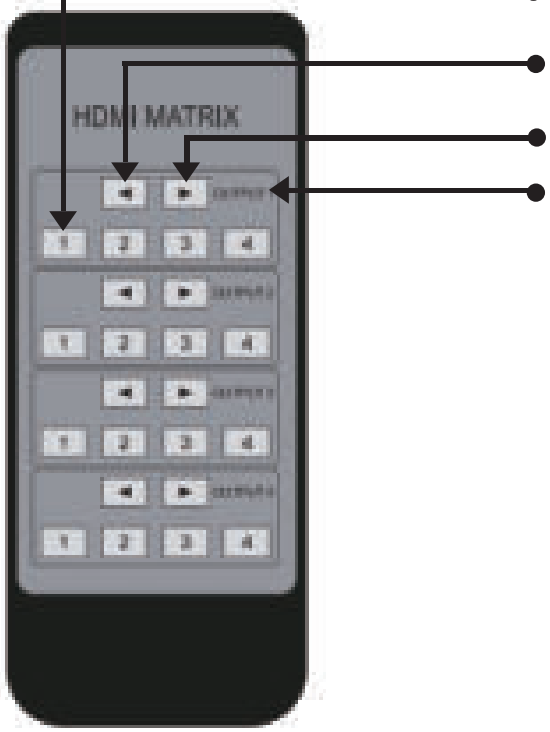
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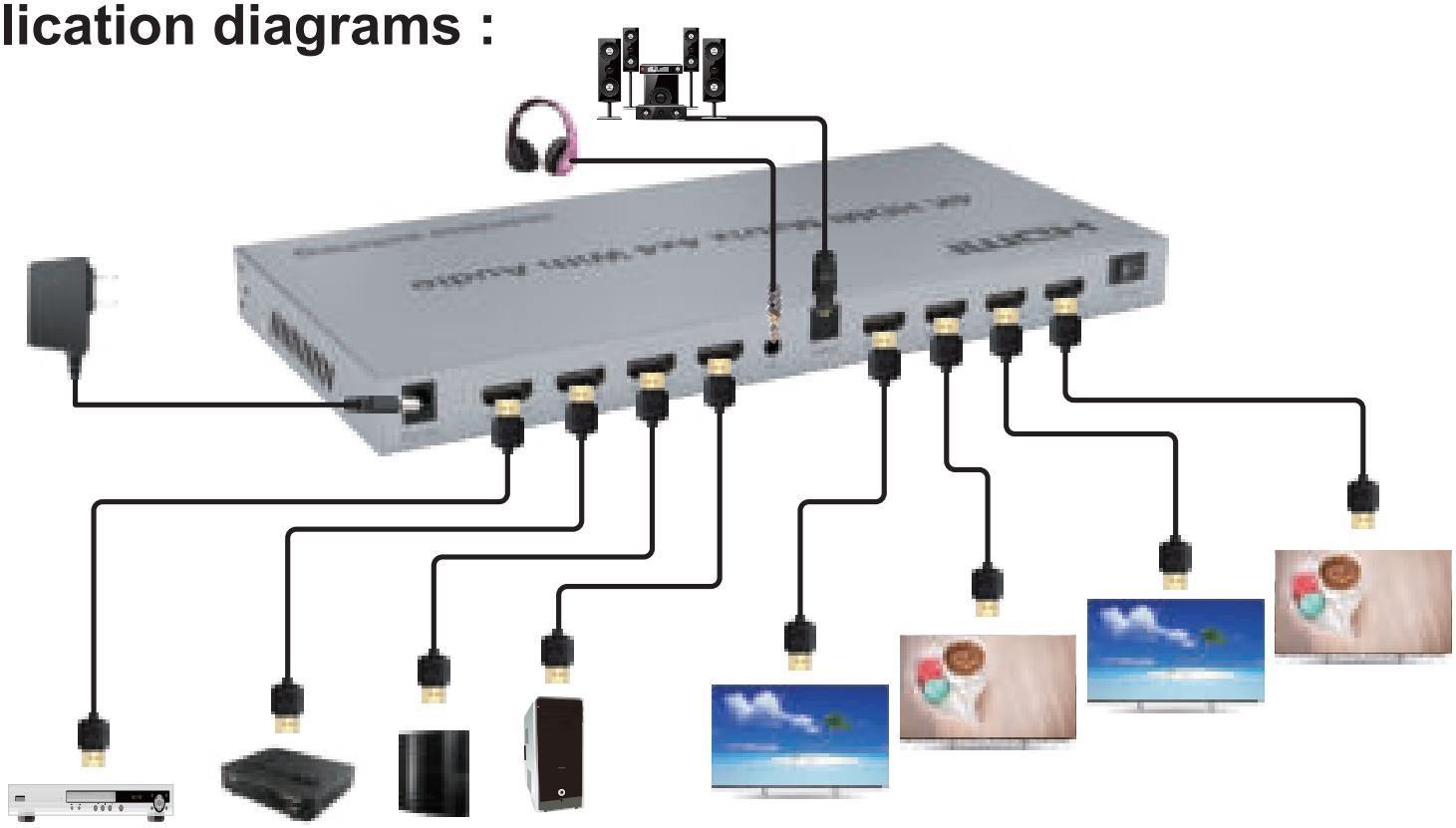
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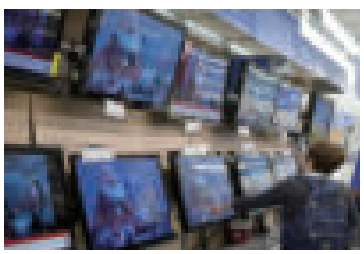


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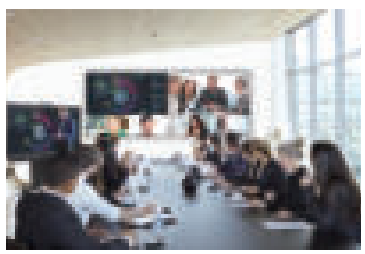
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