USER MANUAL

4K HDMI Matrix 4x4
JHM29/4X4

Enjoy vivid video world

Product Introduction:

   This HDMI matrix is a 4-by-4 HDMI true matrix. It allows any source (Blue-Ray player, HD DVD player, satellite receiver, game system, etc.) to be shown on the any of the four displays simultaneously, no matter the source is HDCP or not. It suppots RS232 remote control.

   HDMI matrix 4x4 has the ability of equalization and amplification to ensure HDMI signal's transmission through long cable without quality loss.This HDMI matrix offers solutions for digital entertainment center, HDTV retail and show site, HDTV, STB, DVD and projector factory, noise, space and security concerns, data center control, information distribution, conference room presentation, school and corporate training environments.

1.Features :

- Support HDMI 1.4
- Support 3D
- Support high definition resolutions 4Kx2K,1080p, 1080i, 720p and other standard video formats
- Support audio format DTS-HD/Dolby-trueHD/LPCM/DTS/DOLBY-AC3/DSD
- Via RS-232 control,the machine can upgrade the software, the input and the output can be switched by computer
- The four outputs could show the same or different source simultaneously

2.Physical interface diagram :
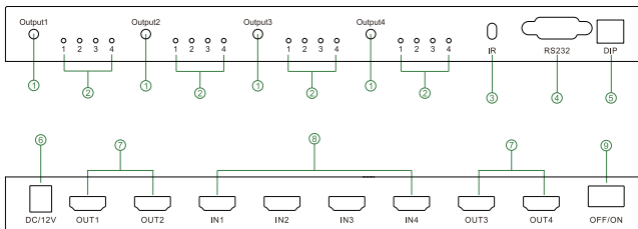
1: Output selection
2: LED indicator of Input for each output selection
3: IR port
4: RS232 port
5: EDID
6: DC/12V
7: HDMI Output 1-4 port
8: HDMI Input 1-4 port
9: Power switch

3.Typical Application:

① PS3
DVD player
Set top box
PC

HDMI Cable

IR RX — The machine remote control

HDMI
Matrix 4x4

HDMI Cable

②

①is 4 HDMI singal source input, connect ① to HDMI Matrix 4x4 via HDMI cable,
and then connect the HDMI Matrix to 4 TVs② by HDMI cable
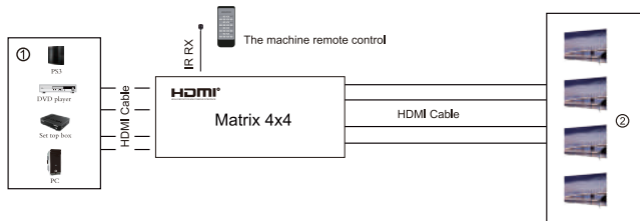
4.IR Control Application:

Blue-Ray Player

HDMI Cable

IR RX — The machine remote control

Output1 Output2 Output3 Output4
1 2 3 4   1 2 3 4   1 2 3 4   1 2 3 4   IR   RS232   DIP

Output1 Output2 Output3 Output4
1 2 3 4   1 2 3 4   1 2 3 4   1 2 3 4   IR RS232 DIP

HDMI Cable

Remote Monitor
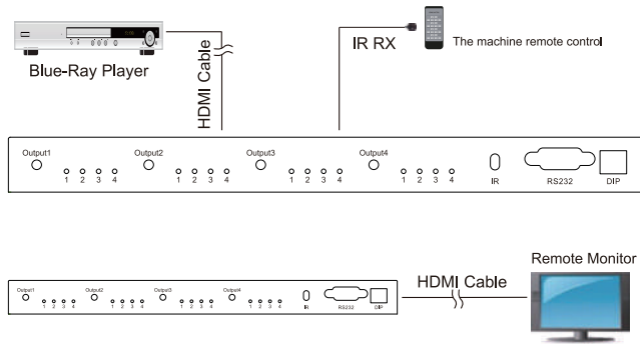
5.RS232 remote control:

Com port setting

Baud rate	9600 bps
Data bits	8 bits
Parity	None
stop bits	1 bit
Flow control	None

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.
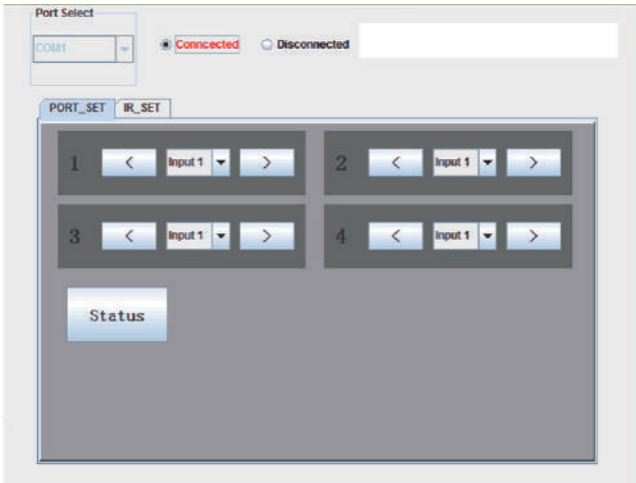
6.Application scenario

1：Projects
2：Hotels、Villa、Video Wall Controller

Hotels

Video Wall Controller

7.EDID setting:

Position 1	Position 2	Position 3	Function
0	0	0	3D 4Kx2K 2CH(Note1)
0	0	1	3D 1080P stereo 2CH (Note 2)
0	1	0	2D 1080P stereo 2CH (Note 3)
0	1	1	2D 1080I stereo 2CH (Note 4)
1	0	0	2D 1080P 5.1CH(Note 5)
1	0	1	2D 1080P 7.1CH(Note 6)
1	1	0	3D 1080P stereo 2CH(Note 7)
1	1	1	2D 1080P DVI(Note 8)

Note1: The matrix will use the embedded 4Kx2K-stereo 2ch EDID When the DIP switch
is in this mode
Note2: The matrix will use the embedded 1080P-stereo 3D compatible EDID when the
DIP switch is in this mode.
Note3: The matrix will use the embedded 1080P-stereo 2ch EDID when the DIP switch is
in his mode.
Note4: The matrix will use the embedded 1080i-stereo 2ch EDID when the DIP switch is
in this mode. This setting can be used when the TV set is an old model that can
not support 1080P.
Note5: The matrix will use the embedded 1080P-5.1 EDID when the DIP switch is in this
mode.
Note6: The matrix will use the embedded 1080P-7.1 EDID when the DIP switch is in this
mode.
Note7: The matrix will use the embedded 1080p-2.0 3D EDID when the DIP switch is in
this mode.
Note8: The matrix will use the embedded 1080p-2.0 2D DVI of EDID when the DIP
switch is in this mode

1: How to reset EDID to factory default setting?
  Because the default EDID is 4K, 3D and stereo. If you want to reset EDID, you can
  change the DIP switch and power on the matrix.

2: How to set the EDID of AVR which is 7.1 audio to the special input port where
   connected a BD player?
1) Set DIP to '101'.
2) Connect the AVR to one of the output ports. For example, connect to output1.
3) Power on the matrix. Select the source of the AVR (for example input2) to the input
   port which is connected to BD-player.

8.Specification:

HDMI resolution…………......…........................4K/1080p/1080i/720p/576p/576i/480p
Support color format …………….......…………..…………. …...........................8/10/12bit
Support audio format……...………DTS-HD/Dolby-trueHD/LPCM7.1/DTS/Dolby-AC3/DSD
Max baud rate………………….......…………………………………….…… …...10.2GBPS
Input and output TMDS signal…………....…......…………………….…….. 0.5~1.5Volts p-p
Input and output DDC signal…………….......…………………………..5Volts p-p (TTL)
Input cable distance……. …………………………......………..≤10m HDMI AWG26
Output cable distance…………………………...≤10m AWG26 HDMI standard cable
Max working current…………………………....…………………………………………1.5A
Power adapter format …………...……input:AC(50HZ, 60HZ) 100V-240V;output: DC12V/2A
Operating Temperature range……....……………………….……………… (-15 to +55℃)
Working humidity range………………..…………….…………5 to 90%RH (No Condensation)
Dimension (L x W x H)………………......…………….…………… 276x143x26(mm)
Weight…..………………………………......…………………….………………….....720.5g

9.Operating and Connecting：

1：Connect HDMI cable from HDMI source device into HDMI matrix input port
2：Connect HDMI cable from HDMI matrix Output port into display
3：Connect 12V External power adapter to the HDMI matrix
4：How to use RS-232 port?
   Through RS - 232 port you can update software and monitor the state of the input and output signals. And can switch signals. When connects the computer, customer can easily switch the signals via computer.

Notes：

Please use correctly and maintenance properly, to ensure product performance and work properly
1：Should Stay away from damp, high temperature, dusty, corrosion and oxidation gas environment in order to avoid damage
2：All parts should avoid strong vibration, no collision tapping and drop fall, to avoid damage.
3：Do not touch the unit power adapter plugs with wet hand
4：Unplug the adapter plug from the power socket, please hold the plug, don't pull the power cord
5：please turn off the power supply when not use the machine.(unplug the power adapter plug when not use for a long time)
6：Please do not open the machine cover, do not touch any device in the machine.
7：Please use the power adapter provided or approved by the manufacturer.

The Package includes:

1. HDMI Matrix   1PCS
2. IR Remote Control   1PCS
3. IR cable   1PCS
4. 12V/2A DC Power adapter   1PCS
5. User Manual   1PCS