

HDMI Matrix System

iM88 -4K HDMI Matrix

User Manual



### Brief Introduction

iM88 HDMI matrix with 12V power adapter for multiple HDMI sources to multiple display devices by different routing. With high reliability, low power consumption, high bandwidth (support HDMI 1.4) features, iM88 can achieve up to 8x8 size. User can control the matrix operation by panel buttons, PC serial port and RJ45 (local area network). The input/output routing status can be displayed on the LCM.

### User Control

#### 1. Front Panel



#### Single Button:

**Digital Button:** 1, 2, 3, 4, 5, 6, 7, 8 respectively corresponding with HDMI output 1-8.

Loop press digital  $n$  ( $n=1..8$ ), User can select HDMI output  $n$  routing status and displayed on the LCM.

**LOCK:** Lock or unlock the button operation, if locked, the Lock Led will lighted.

#### Combination Button:

**SAVE +  $n$ :** Save the current routing status to item  $n$  ( $n=1,2,3,4,5,6,7,8$ )

**RECALL +  $n$ :** Recall item  $n$  routing status to current display ( $n=1,2,3,4,5,6,7,8$ )

**EDID + 1:** Auto parse EDID;

**EDID + 2:** Manual EDID operation by PC tool;

**LCM display:**

LCM displayed with two horizontal lines and eight vertical lines. Horizontal line 1 shows HDMI input ports, Horizontal line 2 shows HDMI output port. Each vertical line shows the routing status.

**2. Back panel**



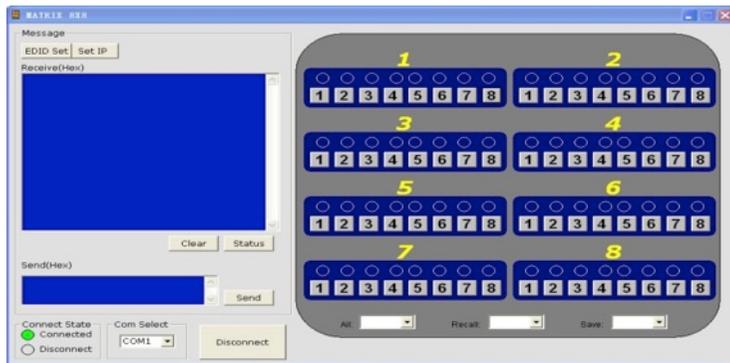
INPUTS: HDMI input 1,2,3,4,5,6,7,8 which connected to source devices

OUTPUTS: HDMI output 1,2,3,4,5,6,7,8 which connected to sink devices

RS232: PC Tool control,serial port

RJ45: PC Tool control,RJ45(local area network) port

**PC tool user guide-RS232**

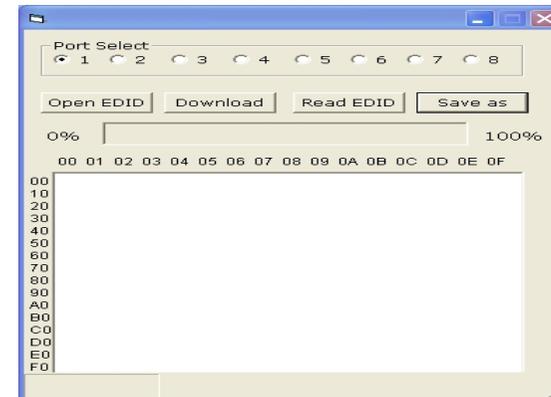


- 1) Connect the PC and iM44 matrix with RS232 cable
- 2) Select the right com port for PC
- 3) Press **Connect** button, if succeeded, the corresponding display will be green
- 4) To select the input source for HDMI out port 1,user can

press the option of below option



- 5) **All:** The drop-down menu to select a input source which will be routed to all HDMI output port (A,B,C,D)
- 6) **Save:** The drop-down menu to save the current routing status to item N
- 7) **Recall:** The drop-down menu to recall the item N routing status to current display
- 8) **EDID Set:** Press this button, the sub menu as below



**Port select:** select input or output port which will do edid operation

**Open EDID:** open one EDID file

**Download:** Write EDID data to the selected HDMI port(input)

**Read EDID:** Read EDID data from the selected HDMI port (output)

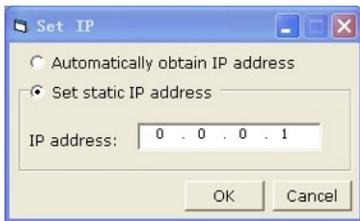
**Note:**

When read EDID from the Sinks, please make sure the cable between Matrix and Sinks (such as TV) connected well, and can normally display.

### PC tool user guide-RJ45:



When select **Automatically obtain IP address**, user can find the IP address with **netfinder**.After get the IP address,user can enter the IP address on the IE browser,and login.**Before use netfinder,please confirm the Firewall of the computer is turn off.**



Set static IP address: Manual set the IP address;

After get the IP address,user can enter the IP address on the IE browser,and login

Enter the password“000000000”, then user can use below operation interface to control the input/output routing



**iM88 Parameters**

Electrical parameters	
Interface	HDMI-A
HDMI version	HDMI1.4
Bandwidth	300MHz
Resolution	Up to 4Kx2K@30Hz
Clock Jitter	<0.15 Tbit (1080p@60)
RiseTime	<0.3Tbit (20%--80%)
RiseTime	<0.3Tbit (20%--80%)
Transmission Delay	5ns
Amplitude	T.M.D.S +/- 0.4Vpp
Differential impedance	100±15ohm
RS232 control	
Baud rate and protocol	Baud rate: 9600,data bit: 8, stop bit: 1,No parity checking
Power	
Max Consumption	20W
Adapter	12V/3A
Matrix Mechanical dimensions	
Size(mm)	430(L)X220(W)X44 (H)
Weight	3Kg

**Accessories List**

Item	Quantity
Power Adapter 12V/3A	1
RS232 Cable	1
User Manual	1
Matrix	1

**Troubleshooting and Maintenance**

- 1) When flicker or flash point on the screen, please check if the connection is reliable, whether the source is a standby or replace the HDMI cable
- 2) When user can 't control matrix with PC, please check if com port No. is wrong settle on the PC tool
- 3) When the POWER led not lighted and no picture displayed,please check if the power adapter connected well and if the power switch in OFF.