

User Manual

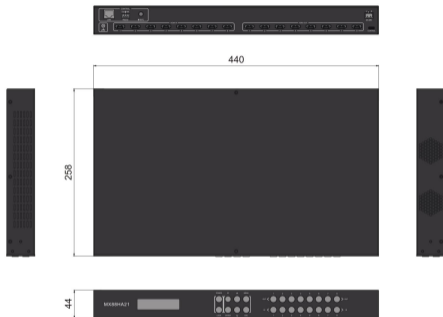
Overview

This HDTV MX88HA21 is a 8in 8out HDMI Matrix with Ultra HD upto 8k60Hz 4:2:0 8bit, 8k30Hz 4:4:4 8bit, HDR and HDCP2.2. It reliably distributes eight HDMI source signal to eight HDMI displays.

The HDTV MX88HA21 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

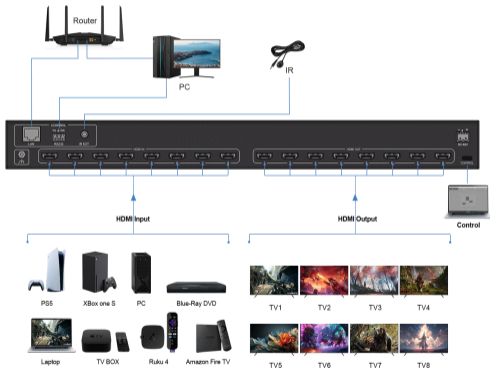
- Distributes eight HDMI sources signal to eight HDMI displays. It supports 8K/4K and 1080P output simultaneously.
- HDMI2.1 with 8K@60Hz 4:2:0,8K@30Hz 4:4:4 and HDCP 2.2 compliant
- Support HDR 10 and Dolby vision.
- Support remote control, button, RS232, IP control
- Support 3D, Support deep color 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 Atmos, 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 2.1
- 2) HDCP version.....HDCP2.3
- 3) HDMI resolution.....8K@60Hz 4:2:0/8K@30Hz 4:4:4/4K60Hz/1080p
- 4) Support video format24bit/30bit,36bit deep color
- 5) Support audio format.....DTS-HD/Dolby-trueHD/Dolby Atmos
- 6) Input/Output TMDS signal0.5~1.5Volts p-p(TTL)
- 7) Input/Output DDC signal 5Volts p-p (TTL)
- 8) Max working current.....3.5A
- 9)Power adapter format.....Input: AC (50HZ
, 60HZ) 100V-240V; Output: 12V/5A
- 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).....440*256*45(mm)
- 17) Weight.....3Kg

Operating and Connecting:

1. Connect one cable from 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 CAS EN	Set Cascade Mode Enable (Turn OFF HDCP)
EZS CAS 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 VIDEOy	Set Output VIDEO Mode {x=[0~8](0=ALL),y=[1,2](1=Bypass Mode,2=4K->2K)}
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 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.

Sense Switch	Video Setting	EDD Manage	System Setting					
Sense Switch								
OUT1	IN1	IN2	IN3	IN4	IN5	IN6	IN7	IN8
OUT2	IN1	IN2	IN3	IN4	IN5	IN6	IN7	IN8
OUT3	IN1	IN2	IN3	IN4	IN5	IN6	IN7	IN8
OUT4	IN1	IN2	IN3	IN4	IN5	IN6	IN7	IN8
OUT5	IN1	IN2	IN3	IN4	IN5	IN6	IN7	IN8
OUT6	IN1	IN2	IN3	IN4	IN5	IN6	IN7	IN8
OUT7	IN1	IN2	IN3	IN4	IN5	IN6	IN7	IN8
OUT8	IN1	IN2	IN3	IN4	IN5	IN6	IN7	IN8
ALL	IN1	IN2	IN3	IN4	IN5	IN6	IN7	IN8

Scaler setting

Sense Switch	Video Setting	EDD Manage	System Setting
Video Scale Mode			
OUT1	No	8K/4K-2K	
OUT2	No	8K/4K-2K	
OUT3	No	8K/4K-2K	
OUT4	No	8K/4K-2K	
OUT5	No	8K/4K-2K	
OUT6	No	8K/4K-2K	
OUT7	No	8K/4K-2K	
OUT8	No	8K/4K-2K	
Output Stream			
OUT1	ON	OFF	
OUT2	ON	OFF	
OUT3	ON	OFF	
OUT4	ON	OFF	
OUT5	ON	OFF	
OUT6	ON	OFF	
OUT7	ON	OFF	
OUT8	ON	OFF	

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

The screenshot shows the 'EDID Manage' tab in a configuration interface. It features a grid of eight input ports, labeled IN1 through IN8. Each port has a dropdown menu currently set to '0K 2CH' and an 'Apply' button to its right. The tabs at the top are 'Sense Switch', 'Video Setting', 'EDID Manage' (highlighted in red), and 'System Setting'.

System setting, set IP address and alias name.

The screenshot shows the 'System Setting' tab in a configuration interface. It is divided into two main sections: 'IP Setting' and 'Port Alias Setting'.

IP Setting

MAC Address	90:80:30:40:90:40
Host IP Address	192.168.1.239
Subnet Mask	255.255.255.0
Router IP Address	192.168.1.1
TCP Port	23

Buttons: DHCP Static IP

Port Alias Setting

OUT1	OUT1	IN1	IN1
OUT2	OUT2	IN2	IN2
OUT3	OUT3	IN3	IN3
OUT4	OUT4	IN4	IN4
OUT5	OUT5	IN5	IN5
OUT6	OUT6	IN6	IN6
OUT7	OUT7	IN7	IN7
OUT8	OUT8	IN8	IN8

Packing List:

1. HDMI Matrix x1
2. Power supply x1
3. Mount ear x2
4. product manual x1
5. IR remote X1