

# Specification

**Product Name:** 4K 8x8 HD Seamless Matrix Switcher

**Product Model:** HY-MH0808W

**Document Version:** A/1 (2024.4.15)

**Production Department:** Product Department

## 1、Product Overview

### 1.1 Product Image



## 2、Functional Parameters

1. Utilizes a card-based structure and fully digital circuitry, supporting 8 channels of audio and video signal input and output.
2. Supports full HD signals with adjustable output resolution, real-time seamless switching with no black screens or delays.
3. Supports resolutions up to 4K@60Hz, 4K@30Hz, and adaptive resolutions of 1920×1200@60Hz and below.
4. Equipped with a 160×32 high-brightness LCD display to show operational status in real-time.
5. Features a 4-channel card design for flexible configuration, supporting DVI, VGA, AV, HDMI, SDI, HDBaseT, YPbPr, fiber optics, and network cards, with support for frequency multiplication, line multiplication, and SCALER functions.
6. Input cards support audio embedding, while output cards support audio de-embedding, allowing simultaneous output of analog and digital audio through HDMI and 3.5mm audio connectors.
7. Provides single-screen and splicing mode display options, supporting 9 scene save and recall functions.
8. Complies with HDCP standards, supports HDMI 2.0, and is backward compatible with HDMI 1.3A, ensuring proper display of content-protected media.
9. Includes digital buffering and signal compensation circuitry, with automatic gain adjustment and long-distance transmission distortion compensation.

10. Features 15 switching buttons and 3 working status indicators for direct switching control, with fast switching operation and various button color options for user convenience.
11. Maximum bandwidth of 500MHz (-3dB), with a switching speed of up to 210 ns.
12. Transmission delay of 5ns, with a maximum horizontal delay of 90ns and vertical delay of 158ns.
13. Includes an infrared receiver module supporting infrared remote control switching functions.
14. Supports various control interfaces with strong compatibility, including third-party control via RS-232 or RS485 serial ports, infrared, network TCP/IP, and UDP signals.
15. Supports subtitle display, allowing subtitle content to be changed via network and serial ports, with independent subtitles for each video input. Supports Chinese and English languages, with options for static or scrolling subtitles, adjustable background color, and transparent backgrounds.
16. Provides splicing functionality, compatible with splicing processors, supporting large screen splicing for standard TVs, LCD monitors, and DLP displays.
17. Includes a volume control feature, allowing independent volume adjustment for each audio output. Provides a serial protocol for volume control via computers, central control systems, and third-party devices, with digital volume indication on display devices.
18. Each output channel can independently adjust brightness, contrast, saturation, sharpness, and color temperature gain and compensation.
19. Supports extended intelligent voice control with up to 9500 voice commands. The voice recognition system does not require internet connectivity or online updates, ensuring the confidentiality of meetings and control.
20. Includes power-off memory function with 现场断电保护功能 and automatic restoration to the pre-power-off state upon restart.
21. Features automatic detection of input synchronization signals.
22. Supports one-button quick query function to check the matrix switching status.
23. Supports RS-485 extension keyboard operation or professional PC software for fast switching settings.
24. Includes 2 RS-232 communication interfaces for matrix cascading, computer control, or programmable central control system control.
25. Provides 1 network port for remote control via Ethernet, supporting up to 8 simultaneous user

connections.

26. Includes a central control module with an app that supports wireless control via iPhone, iPad, Android tablets, and smartphones.

27. Supports browser web control across all platforms, including Harmony, Linux, Windows, and iOS. Users can modify input and output channel names on the web page for easy memory.

28. Supports extended network preview, allowing viewing of all input signal video images via app and computer software.

29. Extended intelligent voice control with up to 9500 voice commands, with a voice recognition system that does not require internet connectivity or online updates, ensuring meeting and control confidentiality.

30. Includes an international power supply and voltage regulation system (AC100V~240V) to ensure safe and stable operation under unstable voltage conditions.

### 3、 Technical Parameters

Input Slots	2
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Channels per Card	4
Input Card Types	Video, VGA, YPbPr, DVI, HDMI, SDI, Fiber Optic, Network
Output Card Types	Video, VGA, YPbPr, DVI, HDMI, Fiber Optic, Network
Channels per Card	4
Serial Control Interface	RS-232, 9-pin female D-type connector
Baud Rate and Protocol	Baud Rate: 9600, Data Bits: 8 bits, Stop Bits: 1, No Parity Bit
Serial Port Structure	2=TX, 3=RX, 5=GND

Power Supply	AC100V~240V, 50/60Hz adaptive power supply
Control Methods	Supports RS-232, infrared remote control, panel buttons, and network (optional)
Operating Environment	Indoor
Color	Black
Installation Method	Suitable for 19-inch standard rack