

4K 8x9 HDMI Matrix Switch

Model: CH8830K_B

Ultra HD 4K@30Hz Transmission | 8x9 HDMI I/O | Independent Audio Output | Multi-Control (APP/Web/RS-232) | Scene Storage

一、Product Overview

CH8830K_B is a professional-grade 8x9 HDMI matrix switcher engineered for stable signal distribution between 8 HDMI input sources (e.g., PCs, notebooks, Apple TV, DVD players) and 9 HDMI display devices (e.g., monitors, projectors, TVs). It supports ultra-high-definition 4K@30Hz (3840×2160) video transmission, along with high-quality audio formats like LPCM 7.1CH and Dolby True HD.

Equipped with independent audio output, versatile control options, and scene storage functions, it eliminates complex operation steps and ensures reliable audio-visual performance. Ideal for scenarios such as multi-screen conference rooms, home entertainment centers, commercial exhibition halls, and educational facilities, it meets diverse professional signal management needs.

二、Key Feature Highlights

1. 4K Ultra HD HDMI Transmission

- Supports maximum resolution of **3840×2160@30Hz** (4K Ultra HD) and backward compatibility with lower resolutions (1080P@60Hz, 1080P 3D@60Hz, 720P, 480P) to match mainstream display devices.
- Supports Deep Color with 48/36/30/24-bit color depth, delivering vivid and detailed visual effects.

2. 8×9 HDMI I/O & Independent Audio Output

- 8 HDMI input ports (standard Type A, 19-pin female) and 9 HDMI output ports (standard Type A, 19-pin female) for flexible cross-switching (1-to-1, 1-to-many, or multi-to-multi signal distribution).
- Dedicated **3.5mm analog audio output** (1 channel) for independent audio separation, supporting scenarios where audio needs to be routed to external speakers separately.

3. Versatile Control Options

Offers 5 flexible control methods to adapt to different usage scenarios:

- **2-button physical control:** Simplified operation—press the input number first, then the output number to complete switching; supports quick cancellation of selected ports.
- **IR Remote Control:** For short-range wireless operation (battery not included).
- **3×RS-232 Interfaces:** 2 male + 1 female ports for industrial-grade stable control, enabling linkage with next-level equipment.
- **Web UI Control:** Access via TCP/IP (RJ45 port) and browser for remote configuration and operation.
- **Mobile APP Control:** Supports Android and iOS devices for wireless remote management, enhancing convenience.

4. Scene Storage & Quick Recall

- Stores up to **8 groups of preset scenes** (e.g., specific input-output mappings for meetings, presentations, or home viewing).
- Enables one-click recall of saved scenes, eliminating the need for repeated manual switching and improving work efficiency.

5. Independent EDID Management

- Each HDMI port is equipped with **independent manual EDID configuration**, ensuring precise matching between input sources and display devices.
- Avoids signal distortion or incompatibility caused by mismatched EDID information, guaranteeing stable audio-visual output.

6. Professional Rack-Mountable Design

- Complies with **19-inch standard rack specifications**, suitable for centralized installation in server rooms or equipment racks.
- Compact and durable structure, saving space while ensuring stable operation in professional environments.

三、 Detailed Specification Table

Model Name	CH8830K_B
Input	8×HDMI (Type A, 19-pin female)
Output	9×HDMI (Type A, 19-pin female); 1×3.5mm Analog Audio
Supported	Max. 3840×2160@30Hz; Backward compatible with 1080P@60Hz,

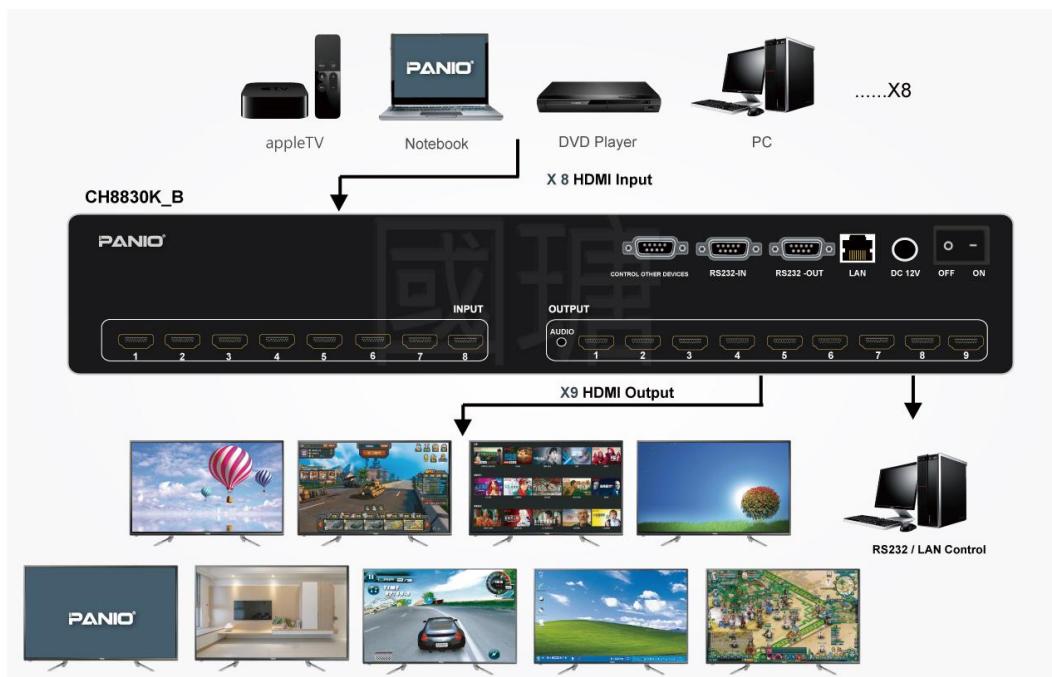
Resolution	1080P 3D@60Hz, 720P, 480P
Color Depth	48/36/30/24-bit (Deep Color)
Audio Formats	LPCM 7.1CH, Dolby True HD, Dolby Digital, DTS-HD Master Audio
Control Interfaces	2×RS-232 (Male, D-Sub 9-pin); 1×RS-232 (Female, D-Sub 9-pin); 1×RJ45 (TCP/IP)
Control Methods	2-button physical control, IR remote control, 3×RS-232, Web UI, Android/iOS APP
ESD Protection	Human body discharge mode: ±8kV (air-gap discharge); ±4kV (contact discharge)
Video Transmission Distance (Max.)	Up to 5m per input/output (standard HDMI cable); Total length (input+output) ≤10m; Use optical HDMI cable for longer distances
Chassis Design	19-inch standard rack-mountable
Dimensions	440mm × 150mm × 44mm (L×W×H)
Weight	2kg
Power Supply	DC 12V/2A

四、Important Notes for Use

- Cable Requirement for 4K@30Hz:** To ensure stable 4K@30Hz signal transmission, use certified 4K HDMI cables. Inferior cables may cause signal loss, screen distortion, or no output.
- Device Compatibility Caution:** Do not cascade uncertified switchers, distributors, or converters. Such connections may lead to signal interference or equipment malfunctions.
- Power Supply Requirement:** Use only the original certified DC 12V/2A adapter provided in the package. Non-original adapters may damage the device or cause unstable operation.
- Remote Control Battery Note:** The IR remote control does not include batteries (due to shipping safety regulations). Please prepare appropriate batteries separately for use.
- Cable Length Limitation:** The total length of input and output HDMI cables must not exceed 10m. For distances beyond 10m, use optical HDMI cables to avoid signal attenuation.

6. **Scene Settings Saving:** Save frequently used scene configurations via the Web UI or physical buttons. Unsaved settings will be lost after the device is powered off.

Diagram



五、Package Contents

Item	Quantity	Remarks
CH8830K_B Matrix Unit	1 unit	
DC Power Adapter (12V/2A)	1 unit	
IR Remote Control	1 unit	Battery not included
User Manual	1 piece	

Core Advantages Summary

- ✓ 4K@30Hz ultra HD transmission with 24–48-bit Deep Color for clear, vivid visuals
- ✓ 8×9 HDMI I/O + 3.5mm independent audio output for flexible signal distribution

- ✓ 5 control methods (button/remote/RS-232/Web UI/APP) for convenient operation
- ✓ 8 preset scenes for one-click recall, saving configuration time
- ✓ Independent EDID per port to avoid signal incompatibility
- ✓ 19-inch rack-mountable design for professional centralized installation
- ✓ TV-grade switching chip for fast, efficient signal transitions without delays