

4-Screen Video Wall Controller

Model: HW2240K

High-Res Input Support | Multiple Stitching Modes | Bezel Compensation | 180° Screen Rotation | Audio Separation

■ Product Overview

HW2240K is a dedicated 4-screen video wall controller designed for seamless multi-display integration. It enables flexible signal management between dual HDMI input sources (e.g., notebooks, cameras, 4K players) and up to 4 HDMI display devices (e.g., monitors, projectors), making it ideal for scenarios like conference rooms, commercial exhibition halls, monitoring centers, and retail digital signage.

Compliant with HDMI 1.4b and HDCP standards, it supports ultra-high input resolutions up to 7680x1080 (e.g., 1x4 configuration) and 4K per HDMI input channel. Featuring a **pure hardware design**, it achieves plug-and-play functionality without requiring additional software installation. Key capabilities such as adjustable bezel compensation, 180° individual screen rotation, and audio separation output ensure a natural, customizable, and stable multi-screen visual experience.

■ Key Feature Highlights

1. Multiple Video Wall Stitching Modes

Supports 7 preset practical configurations to adapt to different display layouts:

- 1x2, 1x3, 1x4 (horizontal arrangements)
- 2x1, 3x1, 4x1 (vertical arrangements)
- 2x2 (2x2 grid arrangement)

Equipped with advanced image edge processing technology to reduce display movement issues during multi-screen splicing, ensuring smooth visual continuity.

2. Dual HDMI 2.0 Inputs with High-Resolution Support

- 2 HDMI input interfaces (Type A), each supporting up to 4K resolution for high-quality signal sources.
- Accommodates diverse high-resolution input configurations, including:
 - 1x3 (5760x1080), 1x4 (7680x1080)
 - 2x2 (3840x2160), 2x1 (2160x1920)
 - 3x1 (3240x1920), 4x1 (4320x1920)
 - 1080P (1920x1080) and other mainstream resolutions.

3. Adjustable Bezel Compensation

Enables precise adjustment of display gaps caused by screen bezels. This function eliminates visual breaks between adjacent screens, creating a seamless and integrated video wall effect.

4. 180° Individual Screen Rotation

Allows independent 180° rotation for each connected display. This flexibility supports inverted or side-mounted installation scenarios (e.g., vertical signage), expanding application possibilities.

5. Audio Separation & User-Friendly Design

- 3.5mm audio output port: Separates audio signals from HDMI inputs for convenient connection to external speakers or audio systems.
- Built-in volume adjustment: Enables direct audio level control without additional equipment.
- Pure hardware architecture: No software installation required, ensuring fast startup and stable operation.

6. Flexible Control Methods

Dual control options to meet different operational needs:

- IR Remote Control: Supports long-distance operation (range not specified, designed for daily convenience).
- Front Panel Buttons: Enables direct on-device adjustment for quick configuration.

■ Detailed Specification Table

Model Name	HW2240K
Compliance	HDMI 1.4b, HDCP
Inputs	2 × HDMI (Type A, supports 4K per channel)
Outputs	4 × HDMI (for video wall displays); 1 × 3.5mm (for audio separation)
Input Resolution	1920x1080, 1920x2160, 1920x3240, 1920x4320, 3840x2160 (30Hz), 3840x1080, 5760x1080, 7680x1080
Output Resolution	Up to 1920x1080 @ 60Hz

Video Wall Configurations	1x2, 1x3, 1x4, 2x2, 2x1, 3x1, 4x1
Control Interfaces	IR Remote Control; Front Panel Buttons
HDMI Cable Length	Input & output: Up to 5m per cable (4K-compliant); Total length (input+output) ≤ 10m
Power Supply	Input: Not specified; Output: DC 12V / 1.5A (certified original adapter recommended)
Dimensions	240mm × 154mm × 28mm (L×W×H)

■ Important Notes for Use

- Cable Requirement:** Use 4K-compliant HDMI cables for signal transmission. Inferior cables may cause signal loss, distortion, or no display.
- Total Cable Length Limit:** The combined length of input and output HDMI cables must not exceed 10 meters. For longer distances (> 10m), use optical HDMI cables to avoid signal attenuation.
- Avoid Unauthorized Serial Connection:** Do not connect uncertified switchers, distributors, or converters in series, as this may disrupt signal stability and compatibility.
- Power Supply Safety:** Use only the original certified DC 12V/1.5A power adapter. Non-original adapters may cause device damage or safety hazards.
- Remote Control Battery:** The IR remote control does not include batteries (for shipping safety). Please prepare compatible batteries separately before use.
- Compatibility Notification:** When using the device with other third-party equipment, inform the manufacturer in advance to verify compatibility and prevent operational issues.

■ Package Contents

Item	Quantity	Remarks
HW2240K Video Wall Controller Unit	1 unit	
DC Power Adapter (12V/1.5A)	1 unit	
IR Remote Control	1 unit	Battery not included

User Manual

1 piece

Core Advantages Summary

- ✓ 7 preset video wall modes (1x2 to 4x1, 2x2) for flexible display layouts
- ✓ Dual HDMI 2.0 inputs, supporting up to 4K per channel and 7680x1080 high-res input
- ✓ Adjustable bezel compensation for seamless multi-screen visuals
- ✓ 180° individual screen rotation for diverse installation scenarios
- ✓ Pure hardware design (plug-and-play) with no software installation needed
- ✓ Flexible control via IR remote or front panel buttons
- ✓ 3.5mm audio separation output for independent audio management