

4K60 HDMI/USB-C 1x4 Video Wall Controller

Compact 4K Video Wall Processor with 8 Display Modes, Audio De-embedding & RS-232 Control

MPN: VW-HDUSBC1X4



1 PRODUCT OVERVIEW

DESIGNED FOR

AV integrators, digital signage installers, and IT managers deploying multi-screen displays in retail, corporate, education, and worship environments

THE CHALLENGE

Setting up a video wall from a single source typically requires an expensive matrix processor or relies on budget consumer splitters with no RS-232 control, limited EDID management, and no USB-C support — leaving a gap for mid-market professional installations.

THE KANEXPRO ADVANTAGE

The VW-HDUSBC1X4 is one of the few compact 4K60 video wall controllers with both HDMI and USB-C inputs, full RS-232 integration, HDCP 2.2, and optical/analog audio extraction in a desktop form factor under \$300.

2 PRODUCT POSITIONING

VW-HDUSBC1X4 is the compact 4K60 video wall controller for AV integrators and signage installers who need flexible multi-display layouts from HDMI or USB-C sources without the cost and complexity of enterprise-grade matrix processors.

3 APPLICATIONS

Retail Digital Signage

Deploy a 2x2 or 1x4 video wall behind storefronts or checkouts. Reconfigure layouts seasonally via IR remote or RS-232 without rewiring.

Corporate Lobby / Reception

Display branded content across four screens. USB-C input lets visiting executives plug in and present directly to the wall.

House of Worship / Events

Run a 1x4 or 4x1 wall behind the stage for lyrics, schedules, or live feeds. RS-232 control from the tech booth.

QSR Menu Boards

Deploy four displays in a 4x1 horizontal strip as a digital menu board. 4K60 input ensures crisp menu graphics.

Control Room / Security

Display a panoramic camera feed or map across a 2x2 wall. RS-232 integration allows automated mode switching on alerts.

Education / Training Rooms

Display wide-format content across multiple screens. USB-C accommodates modern laptops; audio routes to PA via optical output.

4 WHO THIS IS FOR

AV Integrators

Digital Signage

Corporate AV

Education

Worship

Retail

Ideal User

AV integrator / installer, IT manager, facilities manager, digital signage consultant

Project Types

Retail signage, corporate lobby/reception, education lecture halls, house of worship, hospitality, QSR menu boards

Typical Buyer

Integrator specs product; end-client IT/facilities team approves. Price, RS-232 control, and HDCP compliance are key decision factors.

5 KANEXPRO PRODUCT COMPARISON

How VW-HDUSBC1X4 fits within the KanexPro product line for multi-display applications:

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
VW-HDUSBC1X4	Small video walls (1–4 displays)	4K60 in, 8 wall modes, USB-C + HDMI	Compact single-source controller; desktop form factor
VW-SP1X44K	Legacy 1×4 video walls	Cascadable to 3×3, bezel correction	Larger rack-mount; HDMI-only; older HDMI 1.4 chipset
MMX-4X4VW	Multi-source video walls	4×4 matrix + video wall + seamless switching	Four HDMI inputs; enterprise-grade; higher price
SP-HDMI2X4-8K	Multi-source distribution	48Gbps 8K 2×4 matrix splitter	Matrix splitter, not video wall; independent downscaling

Best fit: Single-source 1×4 video walls where USB-C input, compact form factor, and RS-232 control are required.

6 FREQUENTLY ASKED QUESTIONS

Q: What video wall layouts are supported?

Eight configurations: 1×1 (single display), 2×1, 3×1, 4×1, 1×2, 1×3, 1×4, and 2×2. Bezel compensation adjusts the image across display bezels.

Q: Can I connect a USB-C laptop directly?

Yes — the USB-C input accepts video from any USB-C/DP Alt Mode laptop at up to 4K@60Hz 4:4:4. No dongle required.

Q: How do I control it from a room control system?

Via RS-232 (3-pin phoenix connector, 115200 baud). The full ASCII command set covers power, input, wall mode, resolution, rotation, bezel, EDID, and audio mute.

Q: Does it extract audio?

Yes — optical (S/PDIF) for Dolby Digital and DTS 5.1, plus analog L/R (RCA) for stereo. Audio can be routed to external amplifiers or PA systems.

Q: What is the maximum HDMI cable length?

8m (26ft) at 4K60, 10m (32ft) at 4K24, 15m (49ft) at 1080p60 with Premium High Speed HDMI cables.