

4K60 & Ultrawide HDMI KVM Extender with USB 3.2 over CAT6a (40m/130ft)

Put the Workstation in the Rack and Everything Else on the Desk — 4K60 4:4:4, 32:9 Ultrawide Support & USB 3.2 at 2.5Gbps

MPN: EXT-HDMIKVM4K-40M



PRODUCT SUMMARY

Puts the workstation in the rack and everything else on the desk — over one CAT6a cable. The EXT-HDMIKVM4K-40M extends uncompressed 4K60 4:4:4 video, USB 3.2 Gen 1 peripherals at 2.5Gbps, analog audio and RS-232 up to 40m/130ft, so the host machine can live in a conditioned closet while the display, keyboard, mouse, camera and drives stay at the operator position. Both units are metal-enclosed, draw 29.4W combined, and run from a single 24V supply connected at either end via bi-directional PoC — the right choice for control rooms, edit bays and clinical workstations where USB peripheral performance matters more than raw cable distance.

An HDMI loop out on the transmitter drives a local monitor at the same time the receiver drives the remote display, and three downstream ports at the far end — two USB-A and one USB-C — take modern peripherals without adapters. Ultrawide operator desks are supported natively at 5120×1440 (32:9) and 3440×1440 (21:9), both at 60Hz 4:4:4. RS-232 pass-through, an ASCII command set and 25 EDID presets make it specifiable into a control system rather than a fixed point-to-point link. Its defining advantage is USB bandwidth: at 2.5Gbps it carries more than five times what USB 2.0 extension delivers, which is the difference between a 4K room camera or an external drive working at the far end and not.

1 PRODUCT OVERVIEW

DESIGNED FOR

Commercial AV integrators and IT/AV managers building operator positions — control rooms, dispatch and NOC/SOC desks, broadcast and post-production edit bays, clinical reading rooms, trading floors, and secure or industrial environments — where the host machine must be racked away from the user but the full desktop experience has to stay intact at the desk.

THE CHALLENGE

Extending a workstation to a remote desk normally forces a compromise. HDMI-only extenders carry the picture but leave the peripherals behind. HDMI KVM extenders that do carry USB are almost universally USB 2.0 at 480 Mbps or USB 1.1, which is enough for a keyboard and mouse but fails on 4K cameras, touch displays and external drives — a limitation KanexPro's own EXT-HDMIKVM70M FAQ has to hedge on twice. The alternative is two boxes and two cable runs: a video extender plus a separate USB 3.0 extender, at roughly \$650 and double the infrastructure.

THE KANEXPRO ADVANTAGE

It is the only extender in the KanexPro line — and one of very few at any price — that carries uncompressed 4K60 4:4:4 video and genuine USB 3.2 at 2.5 Gbps over a single CAT6a run. Against the internal alternative, EXT-HDMIKVM70M, it delivers more than 5× the USB bandwidth plus HDCP 2.3, HDMI loop out, RS-232/API control and native ultrawide support, trading 30m of reach. Against the external field, WyreStorm's EX-100-KVM costs \$918 and delivers 190 Mbps USB with 4K60 only at 4:2:0; Black Box's ACU1700A is USB 2.0 and HDMI 1.4 4K60 4:2:0; Tripp Lite's B127A-1A1-BCBH is USB 1.1. None pair full-chroma 4K60 with real USB 3.x.

2 PRODUCT POSITIONING

EXT-HDMIKVM4K-40M is the HDMI KVM extender for integrators building operator desks who need full-speed USB 3.2 peripherals and uncompressed 4K60 4:4:4 at the far end without paying for a second extender box and a second cable run.

CHANNEL FIT

Rep and dealer-direct first. This SKU carries 47.2% at dealer but only 34.0% at distribution before landed cost, and duty exposure on Chinese origin compresses that further — push it through reps and direct e-commerce, and treat distribution as overflow rather than the primary channel until origin or FOB cost improves.

DEAL SIZE & SALES CYCLE

\$600 single-position deals through e-commerce and dealer-direct; \$3,000–\$18,000 for multi-position control room, dispatch and edit-suite rollouts of 5–30 links. Sales cycle is 2–6 weeks for single units, 2–4 months where it is written into a control-room or healthcare bid.

COMMON OBJECTIONS

"Only 40m?" — the most common, answered by pointing at EXT-HDMIKVM70M for longer runs and reframing on USB. "Why not the cheaper Tripp Lite at \$361?" — because its USB is 1.1, which will not run a 4K camera or an external drive. "Does it do 5 Gbps?" — no, 2.5 Gbps; be direct about it rather than letting it surface after the sale.

WIN / LOSS THEMES

Wins where a camera, touch panel or storage device has to work at the far end, where the buyer is comparing against a \$918 WyreStorm, and where a control programmer needs RS-232 and EDID control. Loses on runs over 40m, on price against sub-\$400 USB 2.0 boxes when the buyer only needs keyboard and mouse, and against AV-over-IP when the customer wants any-to-any switching rather than a fixed link.

TOP USE CASES TO CLOSE

- 1 Control room and dispatch operator positions — hosts racked centrally for cooling, security and serviceability, with 32:9 ultrawide displays and full USB at the desk. This is where the ultrawide support and USB 3.2 both matter at once, and where no competitor spec sheet matches.
- 2 Broadcast and post-production edit bays — workstation noise and heat out of the suite, with 4K reference monitoring at full 4:4:4 chroma and external media drives running at usable speed at the operator position.

4 APPLICATIONS

**Control Rooms & Dispatch**

Operator positions where the host machines are racked centrally for cooling, physical security and serviceability. The extender delivers 4K60 4:4:4 or 32:9 ultrawide video to the desk with keyboard, mouse, headset and storage all running at full USB 3.2 speed, so the operator experience is indistinguishable from a local machine.

**Broadcast & Post-Production**

Edit bays and colour suites where workstation noise and heat cannot sit in the room. Uncompressed 4K60 4:4:4 preserves reference-grade chroma to the monitor while external media drives and control surfaces stay usable at the operator position over the same cable.

**Healthcare & Clinical Workstations**

Reading rooms, exam rooms and lab benches where the PC belongs in a tech closet for infection control and noise. USB 3.2 at the far end supports imaging peripherals, card readers and external storage that USB 2.0 extension cannot service reliably.

**Trading & Financial Desks**

Dealing positions running 32:9 or 21:9 ultrawide displays with the compute racked in a conditioned room. Full 4:4:4 chroma at 5120×1440 keeps dense text and grid data sharp, which chroma-subsampled extenders cannot deliver.

**Industrial & Clean Rooms**

HMI and inspection stations where the PC must sit in a protected cabinet or outside a controlled space. The metal enclosure, RS-232 pass-through and single-supply bi-directional PoC suit cabinet installs, and the HDMI loop out drives a supervisory monitor at the machine.

**Classrooms & Lecterns**

Instructor positions where the source PC is secured in a lectern or rack and the projector or display is at the front of the room. The transmitter loop out feeds a confidence monitor at the lectern while the receiver drives the main display, with document cameras and touch panels on the far-end USB ports.

5 WHO THIS IS FOR

Corporate AV

Government & Judicials

Healthcare

Broadcast

Education

Enterprises

Ideal User

Commercial AV integrator or design engineer, 5–20 years in the trade, specifying point-to-point extension into fixed installations. Comfortable with HDCP, EDID and RS-232; evaluates on spec-sheet accuracy and support responsiveness rather than brand marketing. Frequently also the person who gets the call when a USB peripheral does not enumerate at the far end.

Project Types

Corporate AV · Government & Judicials · Healthcare · Broadcast · Education · Enterprises

Typical Buyer

Specifying integrator or design engineer selects; procurement executes against the bill of materials. On larger control-room and healthcare projects an AV consultant writes the performance spec, which is where the USB 3.2 and RS-232 line items decide inclusion.

6 KANEXPRO PRODUCT COMPARISON

How EXT-HDMIKVM4K-40M sits against the adjacent KanexPro extenders, and which one to specify when it is not the right fit.

MODEL	BEST FOR	HOW IT DIFFERS
EXT-HDMIKVM70M	Value tier HDMI KVM extender, 70m	Direct sibling and the upgrade path. 70M reaches 30m further and costs \$200 less but carries USB 2.0, HDCP 2.2, IR instead of RS-232, and lists no ultrawide or loop out. Sell 70M on distance and HID; sell this on USB throughput and control.
EXT-HDBT3ARC-100M	HDBaseT 3.0 HDMI extender with eARC, USB 2.0 and Gigabit Ethernet, 100m	Higher tier at \$799.95, wins on distance, eARC audio return and an Ethernet channel. Its USB is 2.0 — specify it when the job needs eARC or a network drop at the far end, not when it needs USB throughput.
EXT-4KHD150M2	Long-range 4K HDMI extender, 150m	Distance specialist at \$499.95 with HDMI loop and IR, but carries no USB at all. Specify it when only the picture has to travel.
EXT-USB3100M	USB 3.0 extender over CAT6 HDBaseT, 100m, no video	The full 5 Gbps option, but USB only. Pair it with a video extender when a job genuinely needs sustained 5 Gbps — the two-box configuration this SKU is designed to replace under 40m.
EXT-USBCPD4K-40M	USB-C BYOD variant on the same platform, 40m	Same receiver and link, but a USB-C transmitter with 100W PD for laptop BYOD rooms instead of an HDMI/USB-B transmitter for fixed workstations. Choose by source: laptop at a table, or a workstation in a rack.

Sell 70M on distance and HID; sell this on USB throughput and control.

7 FREQUENTLY ASKED QUESTIONS

Why not just use the EXT-HDMIKVM70M — it goes further and costs \$200 less?

Choose the 70M when the run is over 40m or the far end only needs a keyboard, mouse or PTZ camera. Choose this one when the far end needs real USB throughput: 2.5 Gbps versus USB 2.0's 480 Mbps is the difference between a 4K room camera or an external drive working and not. It also adds HDCP 2.3, HDMI loop out, RS-232 with an ASCII API, and ultrawide support the 70M does not list.

Does it support 5 Gbps USB 3.0?

No. It is USB 3.2 Gen 1 running at up to 2.5 Gbps, and the manual states plainly that it does not support 5 Gbps operation. That is still more than five times USB 2.0 extension. If a job genuinely requires a sustained 5 Gbps, use a dedicated USB extender such as EXT-USB3100M alongside a video extender.

Why is it more expensive than the \$361 Tripp Lite kit that also does 4K60 and 230ft?

The Tripp Lite B127A-1A1-BCBH carries USB 1.1 at the far end. It will run a keyboard and mouse and nothing demanding. If the desk needs a camera, a touch panel or a drive, that kit cannot do the job at any distance.

What cable does it need, and can we reuse the CAT5e already in the wall?

No. It requires CAT6a, U/FTP, 23AWG minimum, terminated straight-through — not crossover. Shielded terminations at both ends are recommended, and solid-core cable at the upper end of the range. Reusing CAT5e is the most common cause of link instability on this class of product.

Can it drive two displays?

Yes, in a specific way. The HDMI loop out on the transmitter drives a local monitor at the source position while the receiver drives the remote display, so one source feeds two screens with no splitter. It is not a matrix — the two outputs show the same source.

Does it really do 5K?

It supports 5120×2160 at 50Hz with full 4:4:4 chroma, and at 60Hz with 4:2:0. It does not support 5120×2880, the 27-inch 5K resolution used by Apple Studio Display and LG UltraFine. For ultrawide desks, 5120×1440 and 3440×1440 both run at 60Hz 4:4:4, which is the configuration most operator positions use.

Can a control system drive it?

Yes. RS-232 passes through end to end for third-party control, and a separate ASCII command set over the SERVICE port handles HDCP mode, EDID selection, output source and USB port power, with 25 EDID presets including auto, copy-from-sink and two user-defined slots.

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