

4K HDMI Extender (50m) with eARC & S/PDIF Audio Return

Extend 4K60 Video and TV Audio over a Single CAT6/6a Cable — Dual-Mode eARC/S/PDIF, Bi-Directional IR, EDID Management

MPN: EXT-HD4KEARC-50M



1 PRODUCT OVERVIEW

DESIGNED FOR

AV integrators designing 4K distribution systems for corporate conference rooms, residential home theaters, education classrooms, and hospitality guest rooms where the display must return audio to a remote AVR or soundbar.

THE CHALLENGE

Standard 4K HDMI extenders carry video but strip the audio return path — forcing integrators to run a second cable or add a standalone ARC/eARC extractor. This increases BOM, conduit usage, and labor on every project.

THE KANEXPRO ADVANTAGE

Single CAT6 cable carries both 4K60 video forward AND eARC/S/PDIF audio return simultaneously. Dual-mode eARC/S/PDIF dial switch serves both modern eARC TVs and legacy S/PDIF soundbars in one SKU. 4-mode EDID DIP eliminates handshake troubleshooting without software tools.

2 PRODUCT POSITIONING

EXT-HD4KEARC-50M is the single-cable 4K video + eARC audio extender for AV integrators who need clean 4K/Atmos distribution in AV-rack-to-display runs without running a second return cable or adding an audio extractor.

3 SALES ANALYSIS

CHANNEL FIT

Two-tier distribution (distributor → rep → integrator) is primary. Amazon B2B/B&H secondary for residential contractors. CEDIA rep channel is highest-margin segment.

DEAL SIZE & SALES CYCLE

\$199–\$600 per line item (1–3 units typical). Bundle with AUD-DEBEDEARC-4K or EXT-HD4KEARC-70M pushes to \$350–\$800. Sales cycle: 1–3 weeks residential; 3–6 weeks corporate/education tenders.

COMMON OBJECTIONS

1. 'AV Access is cheaper' — counter with S/PDIF + EDID DIP not on AV Access. 2. 'We already have a CAT extender' — add audio return without re-pulling cable. 3. 'Does 4K60 4:4:4 work at 50m?' — yes, Cat6 required.

WIN / LOSS THEMES

Win: legacy soundbar projects needing S/PDIF fallback; integrators in KanexPro ecosystem; new CAT6 construction. Loss: price-sensitive online channel where OREI/AV Access win on \$90–\$130 price point alone.

TOP USE CASES TO CLOSE

- 1 Conference room AV rack-to-display: 4K video + eARC audio return to soundbar over 50m CAT6. Single-cable pitch closes against any dual-cable competitor spec.
- 2 Residential home theater: equipment room to display with Dolby Atmos return to AVR. S/PDIF fallback handles legacy soundbars in renovation projects — eliminates need for a separate ARC extractor SKU.

4 APPLICATIONS



Conference Room Integration

AV integrators tackling boardroom upgrades run a single CAT6 from the rack to the display over 50m. The extender carries 4K video forward and returns eARC audio to the soundbar — eliminating a second cable pull.



Home Theater Installation

Residential multi-room deployments place source equipment in a utility closet while delivering 4K HDR + Dolby Atmos audio return to a remote theater display. Dual-mode eARC/S/PDIF accommodates new and legacy TVs in the same SKU.



Classroom AV Systems

K-12 and university AV teams extend a central media server to a classroom display over existing CAT6. The 4-mode EDID DIP resolves handshake issues with mixed equipment pools — no software, no service call.



Hospitality In-Room Display

Hotel AV integrators routing head-end content to guest room displays benefit from single-cable distribution. CEC pass-through enables room control to manage the display over the same cable, reducing hardware per room.



Digital Signage Networks

Centralized media players reach lobby, retail, and corridor displays up to 50m away. Compact metal enclosure with mounting ears allows discrete above-ceiling or behind-display installation.



AV Rack to Control Room Display

Broadcast and control room environments route 4K monitoring feeds with audio return to a room audio system. Bi-directional IR preserves source control from the display end without a dedicated IR cable run.

5 WHO THIS IS FOR

AV Integrator

CEDIA Residential

Corporate AV

Education AV

Hospitality AV

Digital Signage

Ideal User

Mid-level AV integrator (3–10 yrs experience), specifying SKUs for RFQs at CEDIA-member residential firms or corporate AV integrators (\$2M–\$15M annual revenue).

Project Types

Corporate / Conference Rooms · Residential Home Theater · K-12 & Higher Education · Hospitality · Digital Signage · Broadcast / Control Room

Typical Buyer

AV system designer or project lead. Procurement via distributor rep relationships (Anixter, Diversified) or direct KanexPro. Amazon B2B for smaller residential contractors.

6 KANEXPRO PRODUCT COMPARISON

EXT-HD4KEARC-50M is the entry point in KanexPro's eARC extender lineup. Use the table to match the right product to project distance, audio requirements, and control needs.

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
EXT-HD4KEARC-50M	Existing ≤50m CAT6 runs, eARC + S/PDIF, budget-conscious	4K60, dual-mode eARC/S/PDIF, 4-mode EDID, IR/CEC, compact	This product. Best value for standard 50m installs.
EXT-HD4KEARC-70M	Runs 50–70m, RS-232 control required	HDBaseT 3.0, 70m, RS-232 pass-through, eARC	Longer distance, higher cost. Use when > 50m or RS-232 needed.
AUD-DEBEDEARC-4K	Audio extraction only, no video extend needed	eARC/ARC extraction at display	No video extension — pair with a standard extender when video path is already handled.

Default spec: EXT-HD4KEARC-50M for ≤50m CAT6 runs. Upgrade to EXT-HD4KEARC-70M for longer runs or RS-232 control. Add AUD-DEBEDEARC-4K when audio extraction only (no video) is needed.

7 FREQUENTLY ASKED QUESTIONS

Q: Why not use a standard 4K extender + separate ARC extractor?

A: Two cables, two power supplies, two extra SKUs. EXT-HD4KEARC-50M carries video forward and audio return on one CAT6 cable — cutting labor and BOM for the audio return path.

Q: The AV Access 4KEX70-eARC is \$130 cheaper — why KanexPro?

A: 4KEX70-eARC has no S/PDIF output, no EDID DIP switch, and no dual power supply kit. For projects with legacy soundbars, KanexPro eliminates a separate extractor — lower total BOM.

Q: What cable is required? Will Cat5e work?

A: Cat6 or Cat6a required for 4K60 4:4:4 at 50m. Cat5e is not recommended — field failures increase significantly at 50m on competing products per integrator reports.

Q: Does it support HDCP 2.2 for streaming devices (Apple TV, Fire TV, Netflix 4K)?

A: Yes — HDCP 2.2 end-to-end. Compatible with all major streaming devices and UHD Blu-ray players. HDCP 1.4 legacy sources also supported.

Q: How does the EDID DIP switch work?

A: 4 modes: 1) copy sink EDID, 2) 4K60 2CH audio, 3) 4K60 5.1CH audio, 4) copy sink video + S/PDIF audio profile. Use Mode 3 or 4 when the source drops to stereo despite a 5.1-capable AVR.

Q: Can it run without the included power supplies (PoE from switch)?

A: No. Requires 5V/2A DC adapters (included, one per unit). PoE/PoC from network switch not supported. Both adapters are in the box.

Q: EXT-HD4KEARC-50M vs EXT-HD4KEARC-70M — which to spec?

A: EXT-HD4KEARC-70M uses HDBaseT 3.0 for runs 50–70m with RS-232 pass-through. EXT-HD4KEARC-50M is the right choice for standard ≤50m CAT6 runs at a lower price point.