

4K HDMI Audio Embedder

Insert Optical or Analog Audio into Any HDMI 2.0 Signal

MPN: HAECOAX4



1 PRODUCT OVERVIEW

DESIGNED FOR

AV integrators, IT/AV managers, and installers who need to insert external audio from microphones, mixers, or PA systems into an HDMI signal chain — for conference rooms, classrooms, live events, and broadcast workflows.

THE CHALLENGE

Many HDMI sources output video and audio together, but deployments often require audio from an external source — a room microphone, portable mixer, or PA processor. Without an audio embedder, integrators need an external matrix switcher or expensive DSP to combine audio into the HDMI feed.

THE KANEXPRO ADVANTAGE

Accepts three audio inputs (HDMI pass-through, Toslink S/PDIF, and 3.5mm analog) and embeds the selected source into the HDMI 2.0b stream — fully transparent to the display or recorder. Front-panel dial switch enables instant source switching. 10-bit HDR and HDCP 2.2 pass-through maintained.

2 PRODUCT POSITIONING

The HAECOAX4 is the 4K HDMI audio embedding solution for integrators who need to insert external audio — from microphones, mixers, or PA systems — into any HDMI signal chain without dedicated AV processing infrastructure.

3 APPLICATIONS



Conference Rooms

Insert wireless mic RX audio into the HDMI feed to the room display and recording system — no external audio interface required.



Classrooms

Connect PA system Toslink output to embed room audio into the projector HDMI chain — teacher controls audio independently.



Live Events

Embed live mix from a digital mixing console's optical output into the HDMI record feed for archive-quality audio.



Broadcast / Capture

Insert program audio from an optical audio interface into the HDMI signal to a capture card for frame-accurate sync.



Digital Signage

For players without audio outputs, insert zone audio from a local automation system via S/PDIF or analog into the HDMI display feed.



DVI Integration

Use a DVI-to-HDMI adapter on a video-only DVI source, then embed external audio via Optical or Line In.

4 WHO THIS IS FOR

AV Integrators

IT/AV Managers

Conference Room Specialists

Live Event Technicians

Broadcast Engineers

Ideal User

AV integrator or IT/AV manager responsible for conference rooms, classrooms, or event venues requiring audio insertion into existing HDMI infrastructure.

Project Types

Corporate conference rooms, education, live event production, broadcast, digital signage, hospitality

Typical Buyer

AV system designer, IT infrastructure manager, or A/V coordinator — procurement through AV distribution or direct from KanexPro.

5 KANEXPRO PRODUCT COMPARISON

HAECOAX4 is the only audio embedder in the KanexPro audio family — it inserts audio INTO an HDMI signal, the opposite of extractors.

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
HAECOAX4	Inserting external audio into HDMI	HDMI 2.0b, 3 audio inputs, dial switch	Embedder — inserts Optical or Analog into HDMI OUT
HAECOAX3	Extracting audio FROM HDMI	HDMI 2.0b, Optical + L/R outputs	Extractor — opposite direction to HAECOAX4
AUD-DEBED-8K	Extracting 8K audio from HDMI	HDMI 2.1, ARC, Optical + L/R	Extractor — 8K and ARC capable
AUD-EARC-8K	eARC audio extraction	HDMI 2.1, eARC, 4 simultaneous outputs	Extractor — soundbar and amplifier focus

Recommend HAECOAX4 when the installation requires inserting audio from a microphone receiver, PA system, or processor into an existing HDMI video chain.

6 FREQUENTLY ASKED QUESTIONS

Q: What is the difference between HAECOAX4 and HAECOAX3?

HAECOAX4 embeds audio INTO HDMI (audio inserter). HAECOAX3 extracts audio FROM HDMI (audio extractor). They serve opposite roles.

Q: Can it mix HDMI audio with an external source?

No — the dial switch selects one source at a time (HDMI, Optical, or Line). Use an upstream audio mixer if mixing is required.

Q: Does the Optical input support Dolby Atmos?

No — Optical (S/PDIF) is limited to LPCM 2CH, Dolby Digital, and DTS 5.1CH.

Q: Can I use it to add audio to a DVI source?

Yes — use a DVI-to-HDMI cable on the DVI source, then embed audio via Optical or Line In.

Q: What audio sampling rates are supported?

Up to 192kHz for LPCM stereo. Optical: LPCM 2CH, Dolby Digital, DTS 5.1CH at standard rates.

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