

4K60 HDMI over Fiber Extender Kit (10km/6.2mi)

Send Full 18Gbps 4K60 4:4:4 HDMI Miles Beyond HDBaseT, with HDR and Lossless Audio Pass-Through over LC Fiber
MPN: EXT-HD4KFIB-10KM



Carries 4K60 4:4:4 HDMI, with HDR and lossless multichannel audio, up to 10km (6.2mi) over a single-mode fiber run, far beyond the reach of copper extenders. The kit pairs a compact metal transmitter and receiver, each with a 10G SFP+ fiber port and a USB-C service port, and includes two 5V/1A power supplies. It is the right choice for campuses, venues and control rooms where distance and signal integrity matter more than KVM or control pass-through.

The transmitter takes one HDMI 2.0b source at up to 18Gbps with HDCP 2.2, any VESA resolution, and HDR10, HDR10+, Dolby Vision and HLG pass-through. Audio passes as LPCM 7.1, Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio and DTS:X, and the receiver outputs the same signal to one display. Over multi-mode OM4 fiber, through SFP modules, the same kit reaches up to 300m. Its differentiator is a dedicated point-to-point link: two units and a fiber run, with no network switch in the signal path. Fiber cable is not included.

1 PRODUCT OVERVIEW

DESIGNED FOR

This kit is built for links that copper cannot reach: campus buildings, stadiums and arenas, houses of worship, broadcast and control rooms, medical suites and transit hubs, where one HDMI source has to reach one display up to 10km (6.2mi) away at 4K60 4:4:4 with HDR and lossless audio.

THE CHALLENGE

HDBaseT and Cat6a extenders stop at roughly 100 to 150 metres, and every repeater adds power, cost and a failure point. Beyond that distance the usual answer is an AV-over-IP system with switches and IP configuration, and in electrically noisy environments copper is also exposed to interference.

THE KANEXPRO ADVANTAGE

- Carries 4K60 4:4:4 HDMI 2.0b at up to 18Gbps up to 10km (6.2mi) over single-mode LC fiber, and up to 300m over multi-mode OM4 through SFP modules.
- Passes HDR10, HDR10+, Dolby Vision and HLG, and lossless audio including Dolby TrueHD, Dolby Atmos, DTS-HD Master Audio and DTS:X.
- A dedicated point-to-point link: transmitter, fiber, receiver, with no network switch or IP configuration in the signal path.
- Compact metal units powered from 5V/1A supplies, with a USB-C service port on each for firmware updates.

2 PRODUCT POSITIONING

The 4K60 HDMI fiber extender kit for integrators and campus AV teams who need a point-to-point link up to 10km without giving up 4:4:4, HDR or lossless audio.



1. Campus and Multi-Building AV

Links a lecture hall, auditorium or control room in one building to displays in another over single-mode fiber up to 10km, well past the roughly 100 to 150 metre limit of HDBaseT, carrying 4K60 4:4:4 with HDR and lossless audio.



2. Stadiums and Arenas

Runs a source from a control room or plant room to concourse, suite or field displays across a large venue, on a fiber link that is not exposed to the interference found around lighting, power and broadcast equipment.



3. Houses of Worship

Sends a sanctuary feed to an overflow hall, chapel or broadcast room in a separate building, at full 4K60 with HDR and multichannel audio, with one transmitter and one receiver and a single fiber run.



4. Broadcast and Control Rooms

Moves a program or monitoring feed between a control room and a remote studio, edit suite or transmission point at 4:4:4 chroma, with HDR10, HDR10+, Dolby Vision and HLG passed through unchanged.



5. Medical and Surgical Suites

Carries imaging and surgical-camera video from a room to remote review or teaching displays, using fiber to avoid interference from imaging and surgical equipment and to keep long cable paths through the building simple.



6. Transit Hubs and Digital Signage

Feeds displays across an airport, rail station or large campus signage network from a central player, over fiber runs of hundreds of metres to several kilometres that copper cannot reach.

4 WHO THIS IS FOR

Higher education and corporate campuses

Stadiums

Arenas and live venues

Houses of worship

Broadcast and media facilities

Healthcare

Transportation hubs and digital signage

Ideal User

Senior AV designer or project engineer at a commercial integrator, responsible for the drawings and the bill of materials on multi-building, venue and broadcast projects; comfortable with fiber and SFP optics, budget-conscious, and looking for a link that works out of the box without an IP network design.

Project Types

Higher education and corporate campuses; stadiums, arenas and live venues; houses of worship; broadcast and media facilities; healthcare; transportation hubs and digital signage.

Typical Buyer

The integrator's design lead or project manager approves the product; the end customer's IT or facilities director approves the cable path. Both look for a documented maximum distance, a known signal format and a supplier that answers technical questions.

5 KANEXPRO PRODUCT COMPARISON

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
EXT-HD8K-150M	48Gbps 8K HDMI over HDBaseT extender kit, 150m	48Gbps 8K HDMI over HDBaseT Extender Kit (150m/492ft)	EXT-HD8K-150M (48Gbps 8K HDMI over HDBaseT extender kit, 150m): copper reach ends at 150m and carries 8K; this kit trades 8K for 10km of fiber.
EXT-HDBT3ARC-100M	HDBaseT 3.0 4K HDMI extender kit with eARC and USB 2.0, 100m	HDBaseT 3.0 4K HDMI Extender Kit with eARC and USB 2.0 - 328ft	EXT-HDBT3ARC-100M (HDBaseT 3.0 4K HDMI extender kit with eARC and USB 2.0, 100m): adds eARC and USB over copper to 100m; this kit is HDMI only and goes 100 times further.
EXT-HD4KEARC-70M	4K HDMI/eARC over HDBaseT 3.0 extender, 70m	4K HDMI/eARC over HDBaseT 3.0 Extender (70m)	EXT-HD4KEARC-70M (4K HDMI/eARC over HDBaseT 3.0 extender, 70m): the copper choice inside a building; this kit is the choice once the run leaves the building or exceeds copper limits.

MODEL	BEST FOR	KEY CAPABILITY	HOW IT DIFFERS
EXT-HDMIKVM4K-40M	4K60 and ultrawide HDMI KVM extender with USB 3.2 over Cat6a, 40m	4K60 & Ultrawide HDMI KVM Extender with USB 3.2 over CAT6a (40m/130ft)	EXT-HDMIKVM4K-40M (4K60 and ultrawide HDMI KVM extender with USB 3.2 over Cat6a, 40m): carries USB and keyboard/mouse to 40m; this kit carries video and audio only, but at 10km.

6 FREQUENTLY ASKED QUESTIONS

Q: How far can this kit carry a signal?

Up to 10km (6.2mi) over single-mode LC fiber. Over multi-mode OM4 fiber, through SFP modules, up to 300m is supported.

Q: What do I need to buy besides the kit?

The kit contains a transmitter, a receiver and two 5V/1A power supplies. Fiber cable is not included; the link is made with LC fiber cable between the SFP+ OUT port on the transmitter and the SFP+ IN port on the receiver. The user manual is digital: scan the QR code on the box or open the product page.

Q: Does it carry HDR and multichannel audio?

Yes. It passes HDR10, HDR10+, Dolby Vision and HLG, and LPCM 7.1, Dolby Digital, Dolby TrueHD, Dolby Atmos, DTS, DTS-HD Master Audio and DTS:X, at up to 18Gbps and 4K60 4:4:4.

Q: Does it carry IR, RS-232, USB or KVM?

No. The kit carries HDMI video and audio only. Where control or USB has to travel with the video, a different extender is the right choice.

Q: How is it different from an HDBaseT extender?

HDBaseT extenders run over copper cable and stop at roughly 100 to 150 metres. This kit runs over fiber to 10km and is a dedicated link that needs no network switch or IP setup.

Q: Does it support 8K or 4K120 sources?

No. It is an HDMI 2.0b link at 18Gbps, up to 4096x2160 at 60Hz with 4:4:4 color. Sources above that, such as 8K or 4K120, need a different extender.

Q: How is it powered and updated?

Each unit takes DC 5V/1A from the supplied adapter and draws 3.05W (transmitter) or 2.25W (receiver) at most. Each has a USB-C SERVICE port used for firmware updates.