

EL-4KHDBT-RX-40-IR

User Manual



Thank you for purchasing this product.

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.



Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lightning strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Safety And Performance Notice

The transmission distances of HDMI over UTP cables are measured using TE CONNECTIVITY 1427071-6

EIA/TIA-568-B termination (T568B) of cables is recommended for optimal performance.

To minimize interference of the unshielded twisted pairs in the CAT5e/6 cable do not run the HDBaseT/Cat5e/6/6a cabling with or in close parallel proximity to mains power cables.

Do not substitute or use any other power supply other than the enclosed unit, or a ELAN approved replacement.

Do not disassemble either the Transmitter or Receiver units for any reason. Doing so will void the manufacturer’s warranty.

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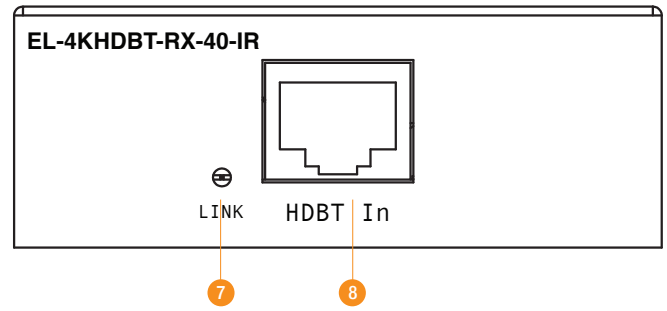
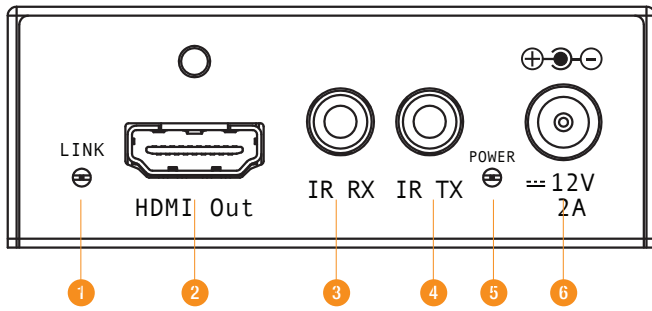
Introduction

The ELAN line of HDBaseT products offers market leading features at an outstanding value. The EL-4KHDBT-RX-40-IR is an industry leading 4K HDBaseT™ solution delivering HDMI with HDCP2.2 support, bi-directional IR and PoH (PoE) up to lengths of 40m at 4K (70m at 1080p) over a single CAT cable.

Features:

- Advanced HDBaseT technology offering uncompressed video and audio with zero latency
- Extends HDMI up to a distance of 70m over a single CAT cable
- Supports 4K UHD video up to 40m (3840 x 2160 @30Hz 4:4:4, 4096 x 2160 @24Hz 4:4:4, and 4K @60Hz 4:2:0)
- Supports all industry standard video resolutions including VGA-WUXGA and 480i-4K
- Supports 3D signal display
- Supports all known HDMI audio formats including Dolby TrueHD, Dolby Atmos, Dolby Digital Plus and DTS-HD Master Audio transmission
- Bi-directional IR pass-through
- Supports bi-directional PoH (Power over HDBaseT™) to power Receiver from the Transmitter
- HDCP 2.2 compliant

Panel Description EL-4KHDBT-RX-40-IR



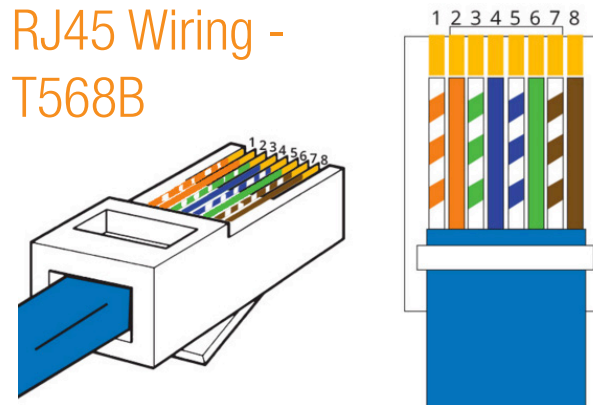
- 1 HDMI indicator
- 2 HDMI output
- 3 IR Receiver jack (Sensor input)
- 4 IR Transmitter jack (Emitter output)

- 5 Power indicator
- 6 DC power input
- 7 HDBaseT connection indicator
- 8 HDBaseT input

Terminating HDBaseT CAT cable

It is important that the interconnecting CAT cable between the ELAN HDBaseT products is terminated using the correct RJ45 pin configuration. The link CAT cable **MUST** be a 'straight' (pin-to-pin) CAT cable and it is advised that this is wired to the T568B wiring standard as this format is less prone to EMI (Electro-Magnetic Interference).

When installing CAT cables it is advised that you use the best possible CAT cable quality possible. HDMI distribution products will only work if used with CAT5e standard cable or above. ELAN recommends using a CAT6 cable for your installations, especially when running over longer distances, in areas of high EMI, or for 4K signal distribution.



Understanding the Receiver signal status lights

The ELAN EL-4KHDBT-40-IR extender solution includes a status LED indicator on the Receiver product to show all connections are active and to help diagnose possible problems.

Understanding the status lights:

Receiver:

- The HDMI signal link light will be off when there is no connection with a display/sink
- The HDMI link light will be on when there is an active connection with a display
- The HDBaseT link light will be off when there is no CAT cable/active HDBaseT connection on the RJ45 HDBaseT input
- The HDBaseT link light will blink if there is an unstable connection between the Transmitter/Matrix and Receiver
- The HDBaseT link light will be lit when a CAT cable is connected to the HDBaseT RJ45 output on the Transmitter/Matrix and an active connection is achieved with the Receiver.

Infrared Distribution

The ELAN range of HDBaseT products include multiple options for control and routing of IR.

IMPORTANT: The ELAN HDMI Platinum, Matrix, & HDBaseT product lines utilize a 5 volts to power an IR Receiver on the IR Input and include an EL-4KACC-IR-CAB, 3.5mm Mono to 3.5mm Stereo 5v to 12v IR converter cable. This cable is required when using 12v IR products from Xantech, Niles, and SpeakerCraft.

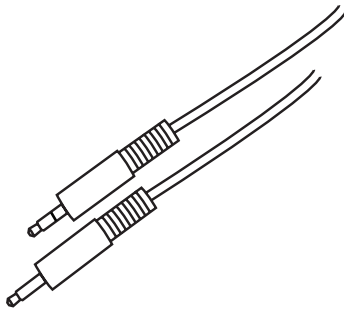
Each ELAN Matrix and HDBaseT extender kit is supplied with all necessary IR hardware required and includes:

IR Control Cable - EL-4KACC-IR-CAB

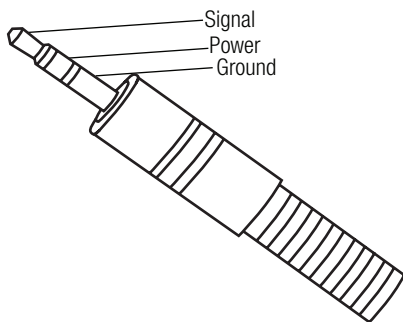
ELAN IR Control cable 3.5mm Mono to 3.5mm Stereo for linking third party IR Receivers to ELAN Platinum, Matrix, and HDBaseT HDMI Series products.

Compatible with 12v IR third party products.

Note: Cable is directional as indicated

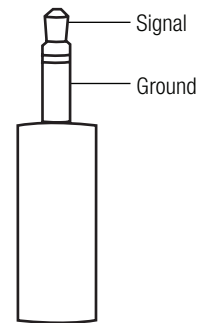


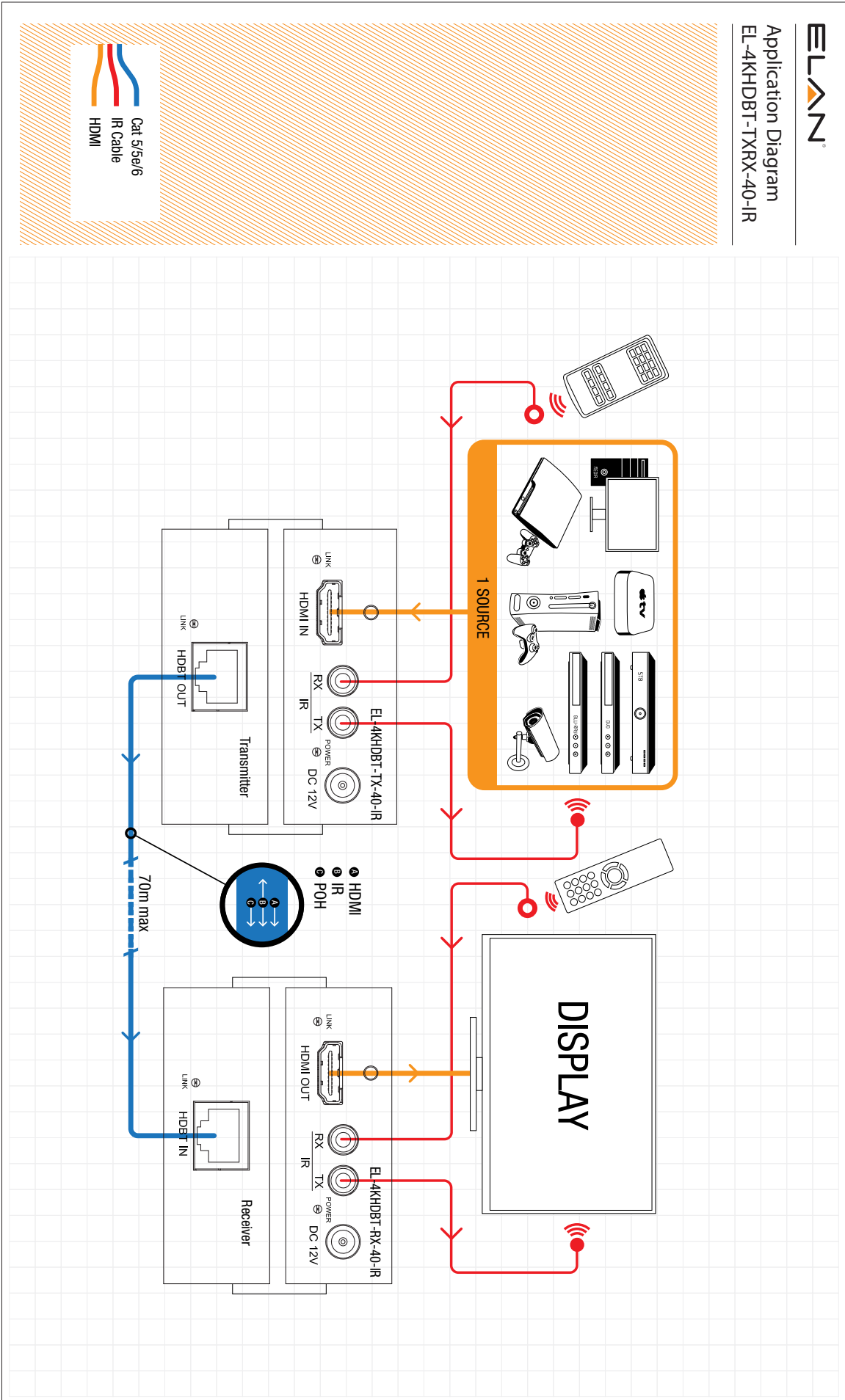
IR Receiver - Stereo 3.5mm



Infrared 3.5mm Pin-Out

IR Emitter - Mono 3.5mm





Specifications

EL-4KHDBT-RX-40-IR

Video input: 1x HDBaseT RJ45 connector

Video output: 1x HDMI Type A, female

IR input: 1x 3.5mm stereo jack

IR output: 1x 3.5mm mono jack

Mounting kit included

Dimensions excl connections (W x D x H): 110mm x 108mm x 27mm

Shipping weight (Kit): 0.4 kg

Power: 12V/2A DC, screw type connector

Operating temperature: 32°F to 104°F (0°C to 40°C)

Storage temperature: -4°F to 140°F (-20°C to 60°C)

Package Contents

EL-4KHDBT-RX-40-IR (when sold individually)

- 1 x EL-4KHDBT-RX-40-IR
- 1 x Mounting bracket set
- 1 x User manual

Maintenance

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzene to clean this unit.

Certifications

FCC Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION - changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CANADA, INDUSTRY CANADA (IC) NOTICES

This Class B digital apparatus complies with Canadian ICES-003.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

CANADA, AVIS D'INDUSTRY CANADA (IC)

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003.

Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.

CORRECT DISPOSAL OF THIS PRODUCT

This marking indicates that this product should not be disposed with other household wastes. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.



Notes

Notes

ELAN®



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