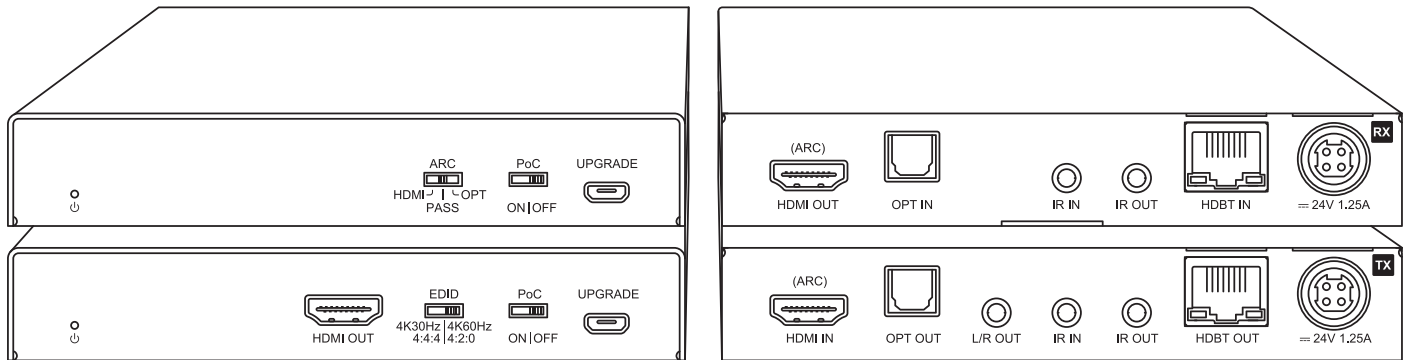


# HEX70ARC-KIT

## Quick Reference Guide



## Introduction

The HEX70ARC-KIT 4K HDBaseT™ ARC extender set offers market leading features for the custom installation industry. The product delivers HDMI, ARC, Optical Audio Return, Bi-directional IR and Bi-directional PoC up to lengths of 70m.

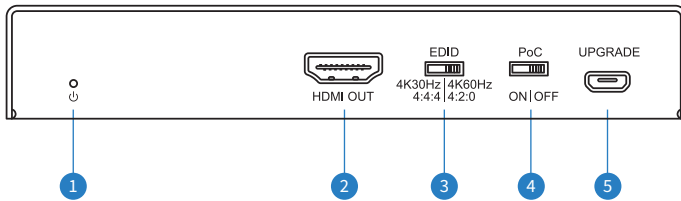
### FEATURES:

- Advanced HDBaseT™ technology offering uncompressed video and audio with zero latency
- Extends HDMI 1080p up to a distance of 70m over a single CAT cable
- Features 1 x HDMI loop-out on HEX70ARC-TX for integrating local displays or cascading to multiple devices
- 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 ARC (Audio Return Channel) from connected display via HDMI ARC or optical digital input\*
- Supports bitstream passthrough of multichannel surround sound including object-based audio formats in line with HDMI specifications
- Bi-directional IR pass-through
- Supplied with Blustream IR receiver and emitter
- Supports bi-directional PoC (Power over Cable) to power extenders from either transmitter or receiver end
- HDCP 2.2 compliant with smart EDID management

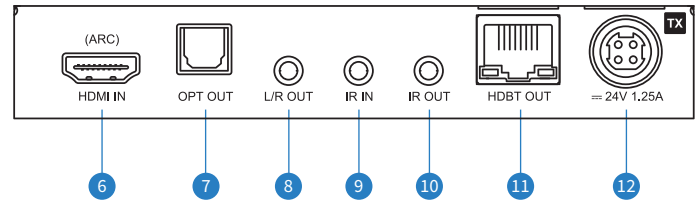
\* Please note: When using an eARC display, only 2 channel PCM audio is supported.

## TX Panel Descriptions

Front



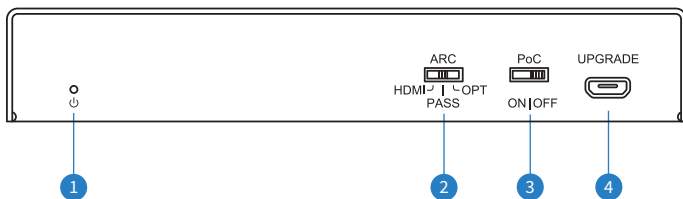
Rear



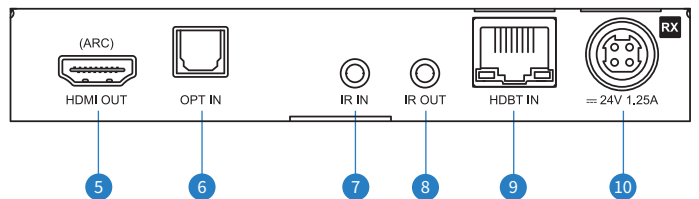
- ❶ Power status indicator
- ❷ HDMI Output (loop) - connect to local HDMI display
- ❸ EDID switch - select between 4K30Hz 4:4:4 or 4K 60Hz 4:2:0
- ❹ Power over Cable (PoC) switch (ON / OFF) - to enable / disable PoC being sent from the transmitter
- ❺ Upgrade - micro-USB port for firmware upgrade of product
- ❻ HDMI (ARC) Input - connect to source device, or HDMI audio processor (AVR)
- ❼ Optical Output - connect to audio amplification or distribution device
- ❽ L/R Output - audio breakout from receiver ARC signal
- ❾ IR Input - connect to Blustream 5V 3.5mm IR receiver or from control processor
- ❿ IR Output - connect to Blustream 5V 3.5mm IR emitter
- ⓫ HDBaseT™ output
- ⓬ 24V/1.25A DC power input 4-pin DIN connector

## RX Panel Descriptions

Front



Rear



- ❶ Power status indicator
- ❷ ARC switch - select how audio is to be managed
- ❸ Power over Cable (PoC) switch (ON / OFF) - to enable or disable PoC being sent from the receiver
- ❹ Upgrade - micro-USB port for firmware upgrade of product
- ❺ HDMI (ARC) output - connect to HDMI display
- ❻ Optical Input - connect to optical output of display
- ❼ IR Input - connect to Blustream 5V 3.5mm IR receiver
- ❽ IR Output - connect to Blustream 5V 3.5mm IR emitter
- ⓫ HDBaseT™ input
- ⓬ 24V/1.25A DC power input 4-pin DIN connector

## Terminating the Interconnecting HDBaseT™ CAT Cable

It is important that the interconnecting CAT cable between the Blustream 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. Blustream recommends using a CAT6 (or better) cable for your installations, especially when running over longer distances, in areas of high EMI, or for 4K signal distribution.

## Understanding the HDBaseT™ Signal Status Lights

The Blustream HDBaseT™ extender solutions include status LED indicators on both the Transmitter and Receiver products to show all connections are active and to help diagnose possible problems.

### Understanding the RJ45 connector status lights on both TX and RX units

- The orange HDBaseT™ link light will be off when there is no CAT cable / active HDBaseT™ signal on the RJ45 HDBaseT™ connection
- The orange HDBaseT™ link light will blink if there is an unstable connection between the Transmitter and Receiver
- The orange HDBaseT™ link light will be lit when a CAT cable is connected to the HDBaseT™ RJ45 output on the Transmitter and an active connection is achieved with the input of the Receiver
- The green HDBaseT™ HDCP light will be off when no video signal is being transmitted between Transmitter and Receiver
- The green HDBaseT™ HDCP light will flash when there is video signal without HDCP being transmitted
- The green HDBaseT™ HDCP light will be on when there is video signal with HDCP being transmitted
- The power link light will be off when no power is connected to either the Transmitter or Receiver unit
- The power link light will be on when power is connected directly to either of the units and fed remotely to the other side of the link

## Using ARC / Optical Audio Return

Depending on the position of the switch on the front of the HDBaseT™ receiver unit, the HEX70ARC-KIT allows for audio from either HDMI (ARC) or Optical (S/PDIF) to be returned from RX to TX when watching a device input locally to the display, or when using the display as a source device.

### Switch Position:

See below the combinations of input and output connections on both transmitter and receiver units and how audio return is managed through the HEX70ARC-KIT:

**Please Note:** Video and audio from transmitter to receiver is not affected by the switch position.

Analogue out only supports 2ch PCM audio signals.

When using an eARC display, only 2 channel PCM audio is supported.

Switch Position	HDBaseT™ Receiver	HDBaseT™ Transmitter	CEC Pass-through
HDMI	HDMI ARC In	HDMI ARC, Optical & Analogue Out	Blocked
PASS	HDMI ARC In	HDMI ARC, Optical & Analogue Out	Enabled
OPT	Optical In	Optical & Analogue Out	Blocked

# Specifications

## HEX70ARC-TX

- **Video Input Connectors:** 1 x HDMI Type A, female
- **Video Output Connectors:** 1 x HDBaseT™ RJ45 connector, 1 x HDMI Type A, female
- **Audio Output Ports:** 1 x Optical (S/PDIF), 1 x 3.5mm L/R analogue audio
- **IR Input Port:** 1 x 3.5mm stereo jack
- **IR Output Port:** 1 x 3.5mm mono jack
- **Product Upgrade:** 1 x Micro-USB, female
- **Casing Dimensions (W x D x H):** 135 x 84 x 21mm

## HEX70ARC-KIT

- **Power Supply:** 1 x 24V/1.25A DC, 4-pin DIN connector
- **Box Dimensions (W x D x H):** 248 x 151 x 103mm
- **Shipping Weight:** 1kg
- **Operating Temperature:** 32°F to 104°F (-5°C to +55°C)
- **Storage Temperature:** -4°F to 140°F (-25°C to +70°C)

**NOTE:** Specifications are subject to change without notice. Weights and dimensions are approximate.

## HEX70ARC-RX

- **Video Input Connectors:** 1 x HDBaseT™ RJ45 connector
- **Video Output Connectors:** 1 x HDMI Type A, female
- **IR Input Port:** 1 x 3.5mm stereo jack
- **IR Output Port:** 1 x 3.5mm mono jack
- **Product Upgrade:** 1 x Micro-USB, female
- **Casing Dimensions (W x D x H):** 135 x 84 x 21mm

# Package Contents

## HEX70ARC-KIT

- 1 x HEX70ARC-TX and 1 x HEX70ARC-RX
- 1 x 24V/1.25A DC Power Supply
- 1 x IR Emitter
- 1 x IR Receiver
- 2 x Mounting Bracket Sets
- 1 x Quick Reference Guide

# 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.

## 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.