



EARC-EX165-K

**HDMI™ eARC/ARC Audio Extender
- 165ft (Cat6)**

USER MANUAL

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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 service life of your equipment.

Registration Page

Please activate your warranty by registering our product through the link below - <https://www.orei.com/pages/warranty-registration>

Technical Support

Need Help?

Our experienced Technical Support Team is here for you to answer your questions, give technical advice or help troubleshoot your project to get you installed on time and on budget. Call, email or chat with us now.

OREI Live Technical Support Hours

US team (US/Canada/Mexico): Monday-Friday, 9 a.m. - 5 p.m. Central Time
Support Email - info@orei.com | **Support Number** - 877-290-5530

Introduction

The EARC-EX165-K audio extender enables you to transmit HDMI ARC/eARC audio signals over a single CAT6/7 cable, reaching up to 50m (165ft). Effortlessly link your ARC/eARC-compatible TV to a distant ARC/eARC AVR system. It works with audio formats including LPCM 2.0/5.1/7.1CH, DD, DD+, DTS, Dolby TrueHD, DTS-HD MA, Dolby Atmos, LPCM 2.0CH, Dolby 5.1CH, and DTS 5.1CH. It features CEC and bi-directional IR control. Its compact design allows simple, flexible installation—perfect for enhancing any home theater system.



Features & Package Contents

Features

1. Extend HDMI eARC/ARC audio signals up to 50m (164ft)
2. Audio formats:
eARC: LPCM 2.0/5.1/7.1CH, DD, DD+, DTS, Dolby TrueHD, DTS-HD MA, Dolby Atmos
ARC: LPCM 2.0CH, Dolby 5.1CH, DTS 5.1CH
3. CEC and bi-direction IR control
4. Compact design flexible installation

Package Contents

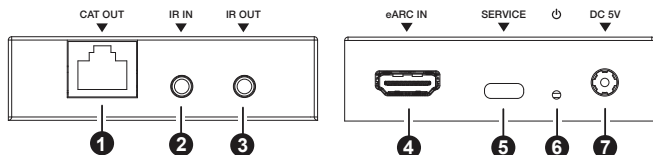
1.	EARC-EX165-K (Transmitter)	1 pcs
2.	EARC-EX165-K (Receiver)	1 pcs
3.	5V IR Blaster Cable (1.5m)	1 pcs
4.	5V IR Wideband Receiver Cable (1.5m)	1 pcs
5.	Power Adapter	2 pcs
6.	User Manual	1 pcs

Specifications

Technical	
Supported Audio Formats	eARC: LPCM 2.0/5.1/7.1 ch, DD, DD+, DTS, Dolby TrueHD, DTS-HD MA, Dolby Atmos ARC: LPCM 2.0CH, Dolby 5.1CH, DTS 5.1CH
Transmission Distance	50m/164ft over CAT5e/6 cable
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Transmitter	Input: 1× IR IN [3.5mm audio jack] 1× eARC IN [HDMI Type A, 19-pin female] Output: 1× CAT OUT [RJ45] 1× IR OUT [3.5mm audio jack] Control: 1× SERVICE [USB Type C, upgrade port]
Receiver	Input: 1× IR IN [3.5mm audio jack] 1× CAT IN [RJ45] Output: 1× eARC OUT [HDMI Type A, 19-pin female] 1× IR OUT [3.5mm audio jack] Control: 1× SERVICE [USB Type C, upgrade port]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	L: 68mm / 2.67in; W: 74mm / 2.91in; H: 20mm / 0.78in
Weight	Transmitter/Receiver: 142g / 5.0oz
Power Consumption	Transmitter: 0.95W (Max); Receiver: 1.6W (Max)
Power Supply	Input: AC 100-240V 50/60Hz Output: DC 5V/1A (US/EU standard, CE/FCC/UL certified)
Operating Temperature	32~104°F / 0~40°C
Storage Temperature	-4~140°F / -20~60°C
Operating Humidity	20%~80% relative humidity, non-condensing
Storage Humidity	10%~90% relative humidity, non-condensing

Operation Controls and Functions

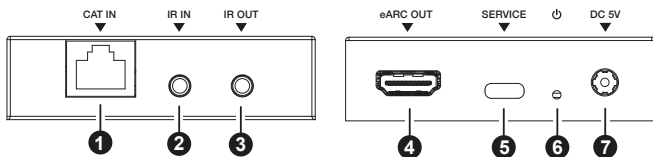
Transmitter



No.	Name	Function Description
1.	CAT OUT	Connect a CAT 6/7 cable. The other end connects to the Receiver.
2.	IR IN	Connect the included IR receiver cable.
3.	IR OUT	Connect the included IR blaster cable.
4.	eARC IN	HDMI audio input port that connects to a TV with an eARC/ARC port.
5.	SERVICE	USB-C port, used for firmware upgrade and debugging.
6.	Power LED	The green LED will light up when the Transmitter is powered on.
7.	DC 5V	Connect the included power adapter.

Operation Controls and Functions

Receiver

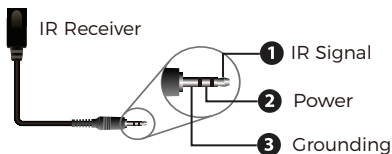


No.	Name	Function Description
1.	CAT IN	Connect a CAT 6/7 cable. The other end connects to the Transmitter.
2.	IR IN	Connect the included IR receiver cable.
3.	IR OUT	Connect the included IR blaster cable.
4.	eARC OUT	Connect an audio device such as an eARC soundbar, AVR, etc.
5.	SERVICE	USB-C port, used for firmware upgrade and debugging.
6.	Power LED	The green LED will light up when the Receiver is powered on.
7.	DC 5V	Connect the included power adapter.

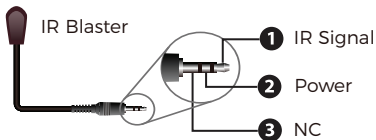
IR Pin Definition



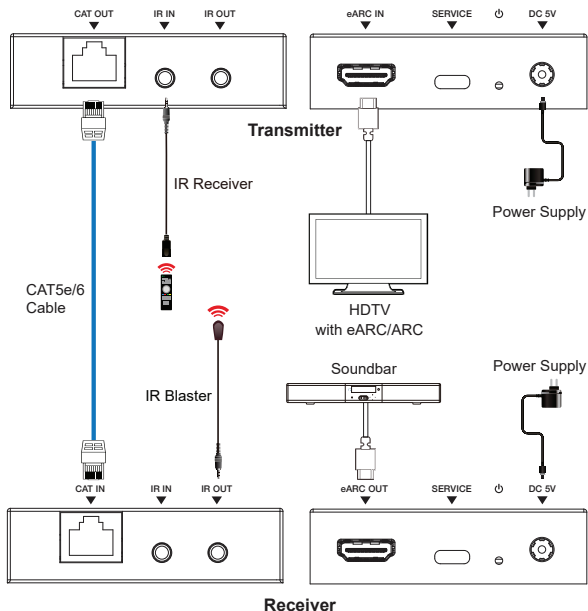
IR RECEIVER



IR BLASTER



Application Example



HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

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FAQ & Troubleshooting

1. How do I connect my ARC/eARC TV to my ARC/eARC Soundbar/AVR that is in my media closet?

The ARC/eARC port of the TV would connect to the eARC IN on the Transmitter unit and the ARC/eARC port of the Soundbar/AVR would connect to the eARC OUT on the Receiver unit.

2. I am unable to get audio from my soundbar/AVR.

Check the following:

1. Is ARC/eARC enabled on the TV?
2. Check if the audio format is set to a compatible one in the TV settings.
3. Make sure you are using HDMI 2.1 cables.

Still have some questions?

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