

User Manual

AU-200X

eARC and SPDIF Audio Extender Set



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Version: AU-200X_2022V1.0


Preface

Read this user manual carefully before using the product. Pictures shown in this manual are for reference only. Different models and specifications are subject to real product.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated till November, 2022. In the constant effort to improve the product, we reserve the right to make functions or parameters changes without notice or obligation. Please refer to the dealers for the latest details.

All product function is valid till 11-01-2022.

Trademarks

Product model and logo  are trademarks of U.T.E. electronic GmbH & Co. KG. Any other trademarks mentioned in this manual are acknowledged as the properties of the trademark owner. No part of this publication may be copied or reproduced without the prior written consent.

FCC Statement

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. It 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 commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference.

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.



SAFETY PRECAUTIONS

To ensure the best performance from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Unpack the equipment carefully and save the original box and packing material for possible future shipment.
- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burn.
- Using supplies or parts not meeting the specifications of product may cause damage, deterioration or malfunction.
- Refer all servicing to qualified service personnel.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Do not put any heavy items on the extension cable in case of extrusion.
- Do not remove the housing of the device as opening or removing housing may expose you to dangerous voltage or other hazards.
- Install the device in a place with fine ventilation to avoid damage caused by overheat.
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Unplug the power cord when left unused for a long period of time.
- Information on disposal for scrapped devices: do not burn or mix with general household waste, and please treat them as normal electrical wastes.

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1. Product Introduction

The eARC and SPDIF Audio Extender Set AU-200X includes one Transmitter and one Receiver.

AU-200X is designed to transmits HDMI eARC / ARC and optical digital audio signals up to distance of 200m (eARC/ARC signals up to 100m) via CATx cable.


This audio extender also supports CEC pass-through when HDMI eARC/ARC audio is selected.

1.1. Features

- Extend either eARC/ARC or optical digital audio signals over a single CAT cable.
- Supports eARC/ARC distribution distances up to 100m.
- Supports optical audio distribution distances up to 200m.
- Supports CEC pass-through when HDMI eARC/ARC mode selected.
- Bi-directional PoC (Power over Cable)
- Selection between HDMI eARC/ARC or Optical digital audio via dipswitch on the TX

1.2. Packing List

- | | |
|--------------------------------|--------------------------|
| • 1x Transmitter | • 1x Receiver |
| • 4x TX Plastic Cushions | • 4x RX Plastic Cushions |
| • 2x Power Adapter (12V DC 1A) | • 1x User Manual |

 **Note:** Please contact your distributor immediately if any damage or defect in the components is found.

2. Panel Description

2.1. eARC & SPDIF Audio Transmitter



- ① SPDIF IN: Connect to display for optical audio return.
- ② eARC IN: Connect to eARC/ARC port on local HDMI display.
- ③ SPDIF/eARC: Select between eARC/ARC input port between HDMI or Optical input.
- ④ FW: USB Upgrade Port.
- ⑤ CATx OUT: Cat5e/6 RJ45 Output Port.
- ⑥ DC12V: 12V/1A DC power supply.
- ⑦ LED: Lights green when power is connected.

2.2. eARC & SPDIF Audio Receiver



- ① SPDIF OUT: Connect to AVR or processor for optical audio return.
- ② eARC OUT: Connect to AVR or processor audio return channel input.
- ③ FW: USB Upgrade Port.
- ④ CATx IN: Cat5e/6 RJ45 Input Port
- ⑤ DC12V: 12V/1A DC power supply.
- ⑥ LED: Lights green when power is connected.

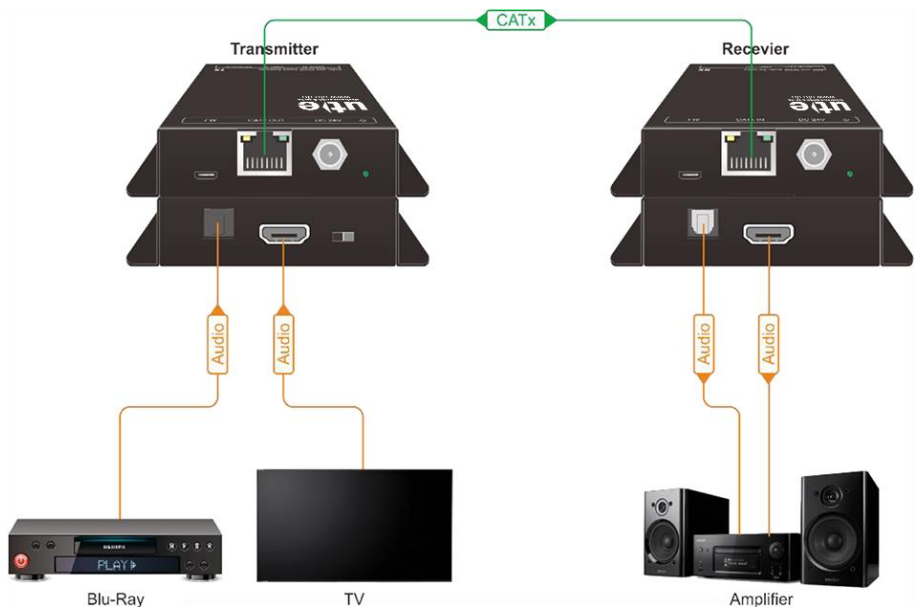
3. System Connection

3.1. Usage Precaution

- Make sure all components and accessories included before installation.
- System should be installed in a clean environment with proper temperature and humidity.
- All of the power switches, plugs, sockets, and power cords should be insulated and safe.
- All devices should be connected before power on.

3.2. System Diagram AU-200X

The following diagrams illustrates typical input and output connections that can be utilized with the eARC & SPDIF Audio Extender Set AU-200X.




4. Technical Specification

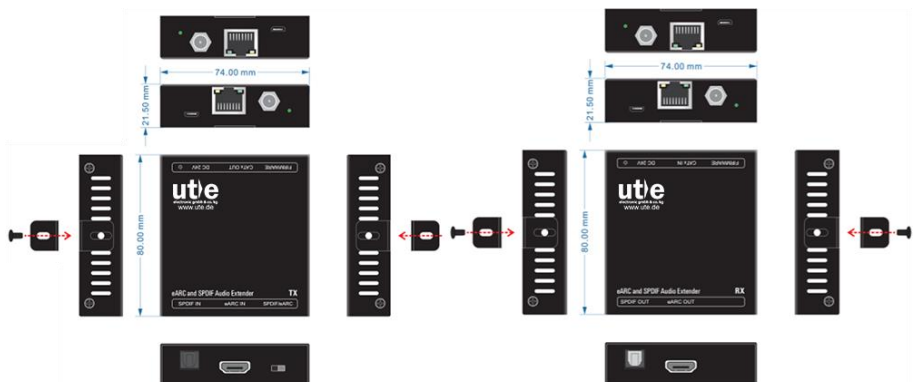
	AU-200XT (Transmitter)	AU-200XR (Receiver)
Interfaces		
Input	(1) SPDIF, (1) eARC IN	(1) Audio-over-CAT/ CATx IN
Input Connector	(1) Toslink, (1) HDMI	(1) RJ45
Output	(1) Audio-over-CAT/ CATx OUT	(1) SPDIF, (1) eARC OUT
Output Connector	(1) RJ45	(1) Toslink, (1) HDMI
Audio Formats		
Input Audio Format	eARC: PCM 2.0/5.1/7.1ch, Dolby Digital Plus, DTS, Dolby TrueHD, DTS-HD MA, Dolby Atmos	
	ARC: PCM 2.0ch, Dolby 5.1ch, DTS 5.1ch	
	Optical: PCM 2.0ch, Dolby 5.1ch, DTS 5.1ch	
Output Audio Format	eARC: PCM 2.0/5.1/7.1ch, Dolby Digital Plus, DTS, Dolby TrueHD, DTS-HD MA, Dolby Atmos	
	ARC: PCM 2.0ch, Dolby 5.1ch, DTS 5.1ch	
	Optical: PCM 2.0ch, Dolby 5.1ch, DTS 5.1ch	
Audio General		
Audio signal types	eARC/ ARC & Digital Audio	
Frequency Response	All audio: 20Hz ~ 20kHz, < ±0.3dB	
Sample Rate	SPDIF: 48/96/192 kHz HDMI: 48/96/192 kHz	
Transmission Distance		
SPDIF Transmission	Up to 200m (CATx) ¹	
eARC Transmission	Up to 100m (CATx)	
Control Interfaces		
Firmware Update	(1) Micro USB	(1) Micro USB

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General		
Operation Temperature	-0 to +40°C	
Storage Temperature	-10 to +50°C	
Humidity	10% to 90% relative humidity, non-condensing	
Power Supply (External PS)	Input:100V~240V AC; Output:12V DC, 1A	Input:100V~240V AC; Output:12V DC, 1A
Power Consumption	2.5W (max) for the complete system	
Enclosure Material	Metal	
Dimension (W*D*H)	80mm x 74mm x 21mm	80mm x 74mm x 21mm

 **Note:** ¹ Optical fiber transmission supports up to 96kHz sampling rate at 200m, and up to 100m at 192kHz.

5. Panel Drawing



6. Customer / After sales Service

Any transport costs are borne by the users during the warranty.

The return of a product to our Customer Service implies the full agreement of the terms and conditions hereinafter. These terms and conditions may be changed without prior notice.

- 1) Product Limited Warranty:** We warrant that its products will be free from defects in materials and workmanship for two years, which starts from the first day you buy this product (The purchase invoice shall prevail).
Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the unit is within the Warranty period must be presented to obtain warranty service.
- 2) Scope**
These terms and conditions of Customer Service apply to the customer service provided for the products or any other items sold by authorized dealer only.
- 3) What the warranty does not cover:**
 - Warranty expiration.
 - Factory applied serial number has been altered or removed from the product.
 - Damage, deterioration or malfunction caused by:
 - Normal wear and tear
 - Use of supplies or parts not meeting our specifications
 - No certificate or invoice as the proof of warranty.
 - The product model showed on the warranty card does not match with the model of the product for repairing or had been altered.
 - Damage caused by force majeure.
 - Servicing not authorized.
 - Any other causes which does not relate to a product defect
 - Delivery, installation or labor charges for installation or setup of the product
- 4) Documentation:** Customer Service will accept defective product(s) in the scope of warranty coverage at the sole condition that the defect has been clearly defined, and upon reception of the documents or copy of invoice, indicating the date of purchase, the type of product, the serial number, and the name of dealer.

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5) Technical Support: Email to our after-sales department or make a call, please inform us the following information about your cases.

- Product version and name.
- Detailed failure situations.
- The formation of the cases.

Remarks: For any questions or problems, please try to get help from your local dealer or our customer support (info@ute.de).



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