



PULSEAUDIO™

HDMI AUDIO

EXTRACTOR

with eARC and ARC



PART NUMBER PA-EARCX

Extracts audio signals from an HDMI source signal

vanco1.com | 800.626.6445

DEAR CUSTOMER

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.

THIS PRODUCT IS 100% INSPECTED AND TESTED IN THE UNITED STATES TO VERIFY PERFORMANCE PARAMETERS.

WARNING

1. Do not install or place this unit in a built-in cabinet, or other confined space without adequate ventilation.
2. To prevent risk of electrical shock or fire hazard, due to overheating do not obstruct unit's ventilation openings.
3. Do not install near any source of heat, including other units that may produce heat.
4. Do not place unit near flames.
5. Only clean unit with a dry cloth.
6. Unplug unit during lightning storms or when not used for an extended period of time.
7. Protect the power cord from being walked on or pinched, particularly at the plugs.
8. Use unit only with accessories specified by the manufacturer.
9. Refer all servicing to qualified personnel.

◦ FEATURES

The PulseAudio PA-EARCX is an HDMI audio extractor which can de-embed or break out audio from an HDMI 4K HDR display equipped with Audio Return Channel (ARC) and/or Enhanced Audio Return Channel (eARC). Break out audio from the HDMI signal to a soundbar, A/V Receiver, or amplifier without affecting the HDMI 2.0 output to the main display. Features two HDMI outputs, one for video capable of passing 18 Gbps, 4K@60Hz with HDR content, while the second HDMI output is dedicated for extracting ARC/eARC audio. For extracting audio from the latest 4K and eARC components, the PA-EARCX is the perfect solution.

◦HDMI Audio Extractor with eARC

Part # PA-EARCX

- Extracts audio signals from an HDMI source signal
- Supports Enhanced Audio Return Channel (eARC) and ARC
- Passes 4K@60Hz 4:4:4 resolution
- Supports HDR (High Dynamic Range) with HDR10, HDR10+, Dolby Vision formats
- Dolby and DTS format pass-through such as Dolby TrueHD, Dolby Digital Plus, Dolby Atmos and DTS-HD Master Audio
- HDMI 2.0b and HDCP 2.3 compliant
- Supports 18Gbps video bandwidth
- Built-in Equalizer
- Support CEC functionality
- Advanced EDID management
- Dimensions: 2.5" W x 2.75" D x 1.5" H (65mm W x 70mm D x 27mm D)

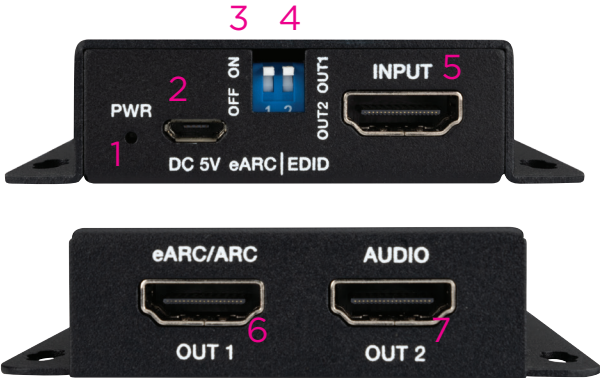
◦ PACKAGE CONTENTS

- (1) PulseAudio PA-EARCX Audio Extractor
- (1) USB Cable (USB-A to Micro USB)
- (1) USB Power Adapter
- (1) Product Manual

◦ SPECIFICATIONS

HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.3/1.x
Video Bandwidth	18 Gbps
Video Resolution	Up to 4k2k@60Hz 4:4:4
Color Depth	8-bit, 10-bit, 12-bit (1080p@60Hz); 8-bit (4K2K@60Hz YUV4:4:4); 8-bit,10-bit,12-bit (4K2K@60Hz YCbCr 4:2:2/4:2:0
Color Space	RGB 4:4:4, YCbCr 4:4:4/4:2:2/4:2:0
HDMI Audio Formats	PCM 2.0, LPCM 5.1 / 7.1, Dolby Digital, Dolby Digital plus, Dolby TrueHD, Dolby Atmos, DTS 5.1, DTS ES 6.1, DTS HRA, DTS HD Master, DTS:X
ESD Protection	Human body model — ±8kV (air-gap discharge) & ±4kV (contact discharge)
Input	1x HDMI Type A [19-pin female]
Output	2x HDMI Type A [19-pin female]
Housing	Aluminum Enclosure
Color	Black
Dimensions	2.5" W x 2.75" D x 1.5" H (65mm W x 70mm D x 27mm D)
Weight	0.18 lb (83g)
Power Supply	USB 5V / 500mA
Power Consumption	1.75W (Max)
Operation Temperature	32 - 104°F / 0 - 40°C
Storage Temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no condensation)

◦ PANEL DESCRIPTIONS



No.	Name	Function Description
1	Power LED	Illuminates red when powered on
2	DC 5V	Connect included 5V power supply port Connect included 5V USB adapter for power
3	eARC Switch	Dip switch to turn on/off eARC functionality: In the ON position, the audio going to HDMI output 2 (OUT 2) will output the eARC/ARC audio from the display In the OFF position, the audio going to HDMI output 2 (OUT 2) will output audio from the HDMI source (INPUT)
4	EDID Switch	Dip switch to adjust for any compatibility issues: EDID setting: Switch to "OUT1" / "OUT2" position, the unit will copy the corresponding EDID from the device connected to OUT1/ OUT2 port. If the copy fails, it will use the internal EDID of the default 1080p 2CH format.
5	INPUT Port	Connect to an HDMI source
6	eARC/ARC OUT 1	Connect to an HDMI display with eARC and/or ARC Note that some displays have a specific HDMI port for ARC/eARC, ensure you plug the HDMI cable from the PA-EARCX to that designated HDMI port. Additionally, some ARC/eARC equipped displays must have the feature activated within its own menu
7	AUDIO OUT 2	This is the output that extracts/de-embeds audio, connect to a soundbar, A/V receiver, or external amplifier

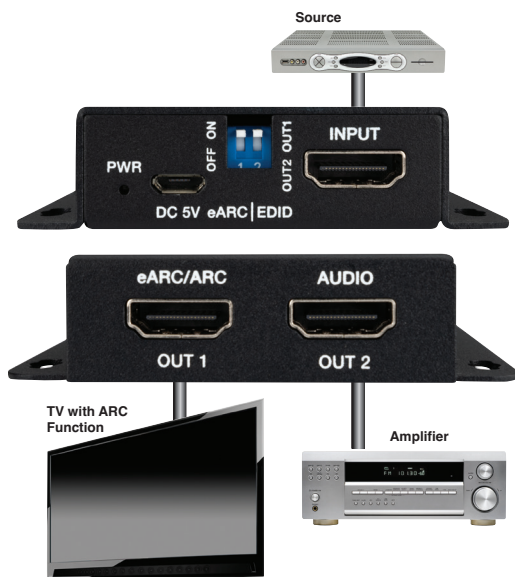
◦ CONNECT AND OPERATE

1. Connect an HDMI source to the HDMI input
2. Connect an eARC/ARC enabled HDMI display to HDMI Output 1
3. Connect a soundbar, A/V receiver (AVR), external amplifier, etc. to HDMI Output 2 (Audio only)
4. Select the EDID to be copied from Output 1 or Output 2
5. Connect the included USB power cable and adapter

a. At this point check for correct video and audio formats on the display

b. Check the audio extraction to ensure they are outputting the desired format

NOTE: CEC and eARC/ARC needs to be available enabled for the product to work correctly. Reference the instructions/user manual of the HDMI display to enable eARC/ARC.



◦ SAFETY AND NOTICE

The PA-EARCX has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipment, the PA-EARCX should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit
- Do not attempt to service this unit yourself, except where explained in this manual
- Provide proper ventilation and air circulation and do not use near water
- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface
- Use only the power adapter and power cords and connection cables designed for this unit
- Do not use liquid or aerosol cleaners to clean this unit
- Always unplug the power to the device before cleaning

◦ TECHNICAL SUPPORT

In case of problems, please contact Vanco Technical Support by dialing 1-800-626-6445. You can also email technical support issues to techsupport@vanco1.com. When calling, please have the Model Number, Serial Number (affixed to the bottom of the unit) and Invoice available for reference during the call. Please read this Instruction Manual prior to calling or installing this unit, since it will familiarize you with the capabilities of this product and its proper installation. All active electronic products are 100% inspected and tested to insure highest product quality and trouble-free installation and operation. The testing process utilizes the types of high-definition sources and displays typically installed for entertainment and home theatre applications. For additional information please visit www.vanco1.com.

◦ LIABILITY STATEMENT

Every effort has been made to ensure that this product is free of defects. The manufacturer of this product cannot be held liable for the use of this hardware or any direct or indirect consequential damages arising from its use. It is the responsibility of the user and installer of the hardware to check that it is suitable for their requirements and that it is installed correctly. All rights are reserved. No parts of this manual may be reproduced or transmitted by any form or means electronic or mechanical, including photocopying, recording or by any information storage or retrieval system without the written consent of the publisher. Manufacturer reserves the right to revise any of its hardware and software following its policy to modify and/or improve its products where necessary or desirable. This statement does not affect the legal rights of the user in any way.

◦ LIMITED WARRANTY

With the exceptions noted in the next paragraph, Vanco warrants to the original purchaser that the equipment it manufactures or sells will be free from defects in materials and workmanship for a period of two years from the date of purchase. Should this product, in Vanco's opinion, prove defective within this warranty period, Vanco, at its option, will repair or replace this product without charge. Any defective parts replaced become the property of Vanco. This warranty does not apply to those products which have been damaged due to accident, unauthorized alterations, improper repair, modifications, inadequate maintenance and care, or use in any manner for which the product was not originally intended.

Items integrated into Vanco products that are made by other manufacturers, notably computer hard drives and liquid crystal display panels, are limited to the term of the warranty offered by the respective manufacturers. Such specific warranties are available upon request to Vanco. A surge protector, power conditioner unit, or an uninterruptible power supply must be installed in the electrical circuit to protect against power surges.

If repairs are needed during the warranty period the purchaser will be required to provide a sales receipt/sales invoice or other acceptable proof of purchase to the seller of this equipment. The seller will then contact Vanco regarding warranty repair or replacement.

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