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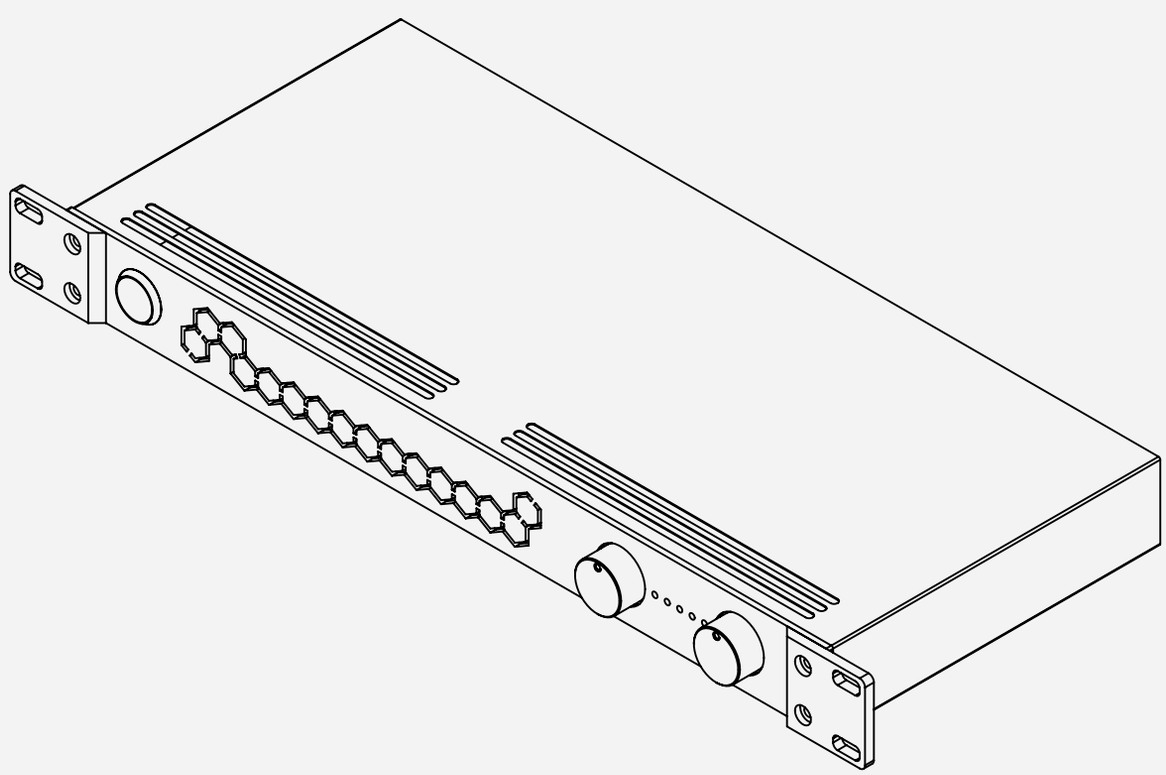
Artcoustic

CPH-1000D AMPLIFIER

Owners manual



WELCOME TO THE WORLD OF ARTCOUSTIC

The Artcoustic CPH-1000D is a professional 2-channel, digital amplifier which performs smoothly and accurately, even in the most demanding conditions.

Designed in-house, the CPH-1000D offers incredible 2-channel, or bridged single-channel performance, in a rack mountable chassis, just 1U high. It combines high performance with a silent and speed efficient, dual-fan cooling system making it a suitable solution for almost any application.

Use it in recording studios, or commercial applications such as bars, restaurants & hotels, as well as high quality Hi-Fi and home cinema systems.

It features two amp modules with a total of 450 Watt, 8 ohms per channel, or bridged, single-channel 1000 Watt, 8 ohms. It has been optimized to complement all the Artcoustic subwoofers' impedance and tonality, making it the perfect match with amazing detail, control and dynamics.

Thank you for purchasing an Artcoustic product.

All the best,
The Artcoustic Team

FEATURES

CPH-1000D

INCREDIBLE CLASS D AMPLIFIER PERFORMANCE

2 x 450 Watt 8 ohms and 1000 Watt single channel bridged.

COVENIENT FEATURES

INPUT SENSITIVY CONTROL

SIGNAL PRESENCE, CLIP AND PROTECTION INDICATOR

STABLE PERFORMANCE DOWN TO 4 OHMS

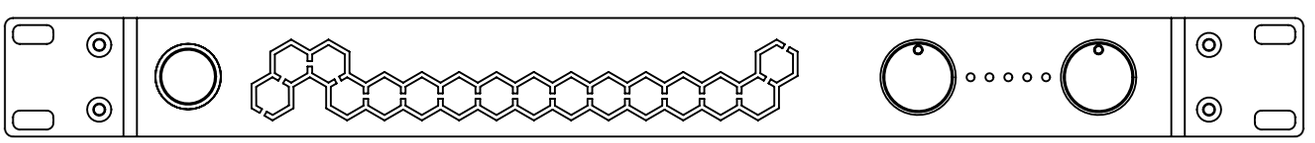
AUTO TURN ON, TURN OFF - SIGNAL SENSING 60 MINUTES

CROSSOVER, LOW-PASS, FULL RANGE, 80 HZ AND
120 HZ 24 DB PER OCTAVE

ASOF (ARTCOUSTIC SUBWOOFER OPTIMIZED FILTER) SLAM,
DEPTH 1 AND DEPTH 2

HIGH CURRENT BI-POLAR CLASS D TECHNOLOGY

EXTENDED PROTECTION CIRCUIT



SMALL SIZE AND WEIGHT

CPH-1000D only occupies a 1U rack space and weighs as little as 2.8 kg
making it an ideal choice in an already crowded equipment rack.

SPECIFICATIONS

CPH-1000D

Full range: 20 Hz - 20 KHz ± 0.5 dB
Low-pass: 80 Hz 24 dB/oct 120 Hz 24 dB/oct
S/N Ratio: >103 dB - THD (at 1 watt into 8 ohms) 1KHz <0.05%
Damping factor: >300 - Input impedance: 20 Kohms balanced
Maximum input level: 7 V
Load impedance: 4-8 ohms
Input sensitivity: (0 dB)
Power supply: 115 V/230 V-50/60 Hz
Input terminal: RCA
Output terminal: Binding post
Protection: Heat, over current, Short and DC
Dimensions (H x W x D) : 44 x 430 x 180 mm
Weight: 2.8 Kg

STEREO

Load	4Ω	8Ω	12Ω	16Ω
Power	500W+500W	450W+450W	240W+240W	180W+180W

BRIDGED

Load	4Ω	8Ω	12Ω	16Ω
Power	not recommended	1000W	800W	600W

MAX POWER CONSUMPTION

1300W - 3400BTU/H

OPERATING RANGE
20 Hz — 20 kHz
± 0.5 dB

S/N RATIO

103 dB

LOW PASS

80 Hz 24 dB/oct
120 Hz 24 dB/oct

LOAD IMPEDANCE

4-8 ohms

POWER SUPPLY

DC 115V/230 50/60 Hz

DIMENSIONS

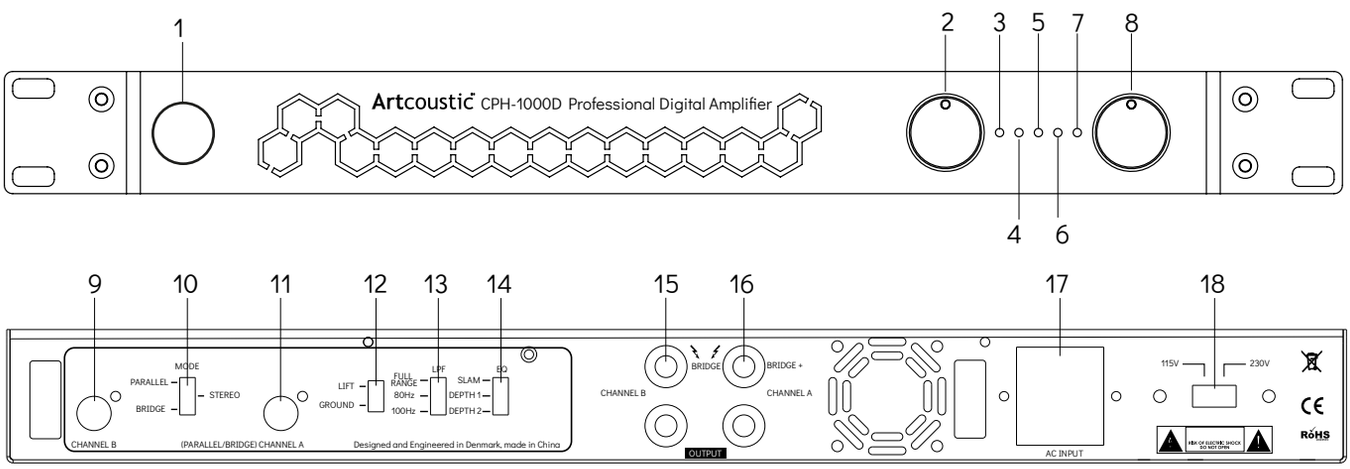
H: 44 W: 430 D: 180 mm

WEIGHT

2.8 kg

OVERVIEW

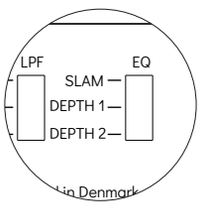
CPH-1000D



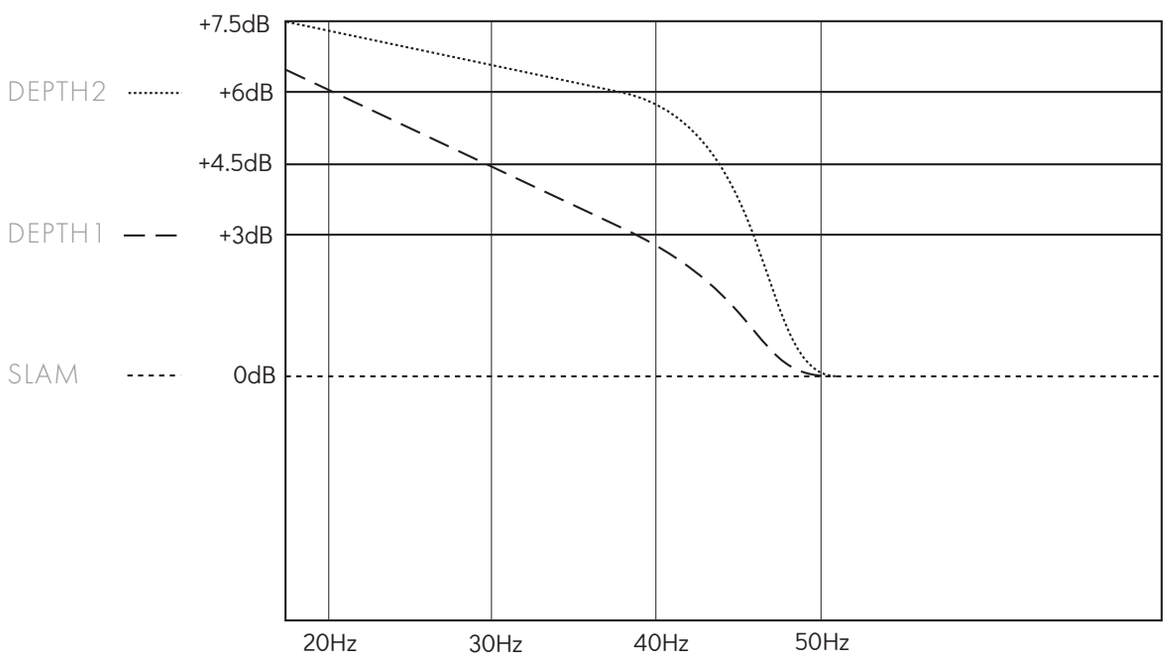
1. On/Off Switch
2. Channel A Volume Control
3. Channel A Signal Indicator
4. Channel A Clip Indicator
5. Power On Indicator
6. Channel B Clip Indicator
7. Channel B Signal Indicator
8. Channel B Volume Control
9. Channe B RCA input
10. Input Setting, Parallel, Stereo and Bridged
11. Channel A input (Bridged and Parallel)
12. Ground Lift
13. Low-Pass Filter
14. ASOF EQ
15. Channel B Speaker Outputs
16. Channel A Speaker Outputs
17. AC Power Socket/FUSE
18. Voltage Selector (Check correct voltage)

SETUP

Ensure the input setting switch is moved to the correct position for the application.
The EQ switch is designed specifically for Artcoustic subwoofers. A good starting point Depth 1



ASOF EQ. FILTERS AND FILTER SLOPE EXPLAINED



SLAM

Flat response with no EQ added to the signal. Recommended setting for environments where less dynamics and lower distortion is required.

DEPTH 1

EQ slope optimized for smaller Artcoustic subwoofer models, such as SUB Z-IWS, SUB Z and SUB 1 subwoofer. The Depth 1 setting, mainly enhances the very deep frequencies, below 35Hz.
This setting is good for installations with main focus on 2-channel music reproduction.

DEPTH 2

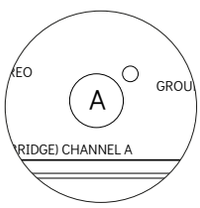
EQ slope optimized for the medium to large Artcoustic subwoofers .The Depth 2 setting has a more conservative slope and a 10 Hz higher entry point, enhancing frequencies from around 45Hz and down.
This setting is optimised for cinema and public address installations.

SETUP

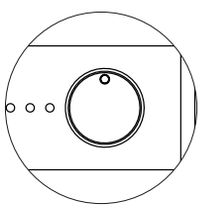
Please check the following settings are in place on the back of the amplifier when using with any Artcoustic subwoofer.

PARALLEL AND BRIDGED SETTING

INPUT A AND B - CH B on the front of the amplifier will be the subwoofer gain. Set to 12 (clock face) on the dial as a good starting point.

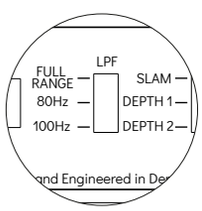


detail A
Input A and Input B



detail B
Channel B Volume Control

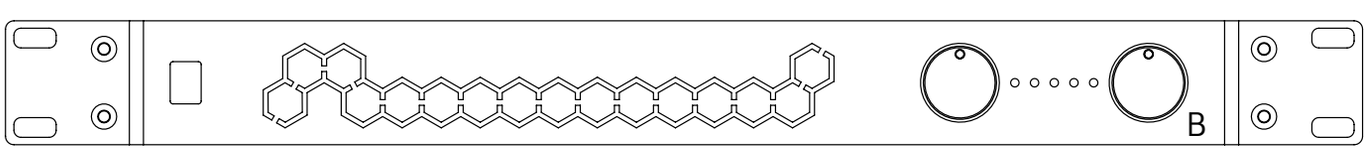
LOW PASS - Bypass (you're using the crossover in the AV processor - set speakers to 'small', crossover at 80-120Hz).



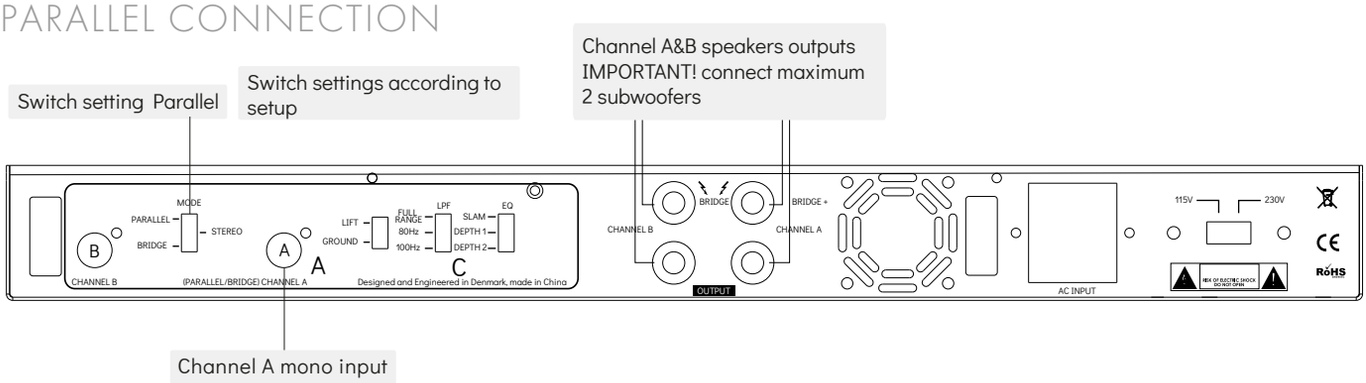
detail C
Low Pass Filter Switch

EQ - Slam For flat response, Depth 1 and Depth 2 for extended bass response. Slam is a good default. For Depth 1 and Depth 2, check sub is ok at higher volumes as more energy is used with the EQ settings in place.

Allow space above the amplifier to allow for heat to escape. Do not cover.



PARALLEL CONNECTION

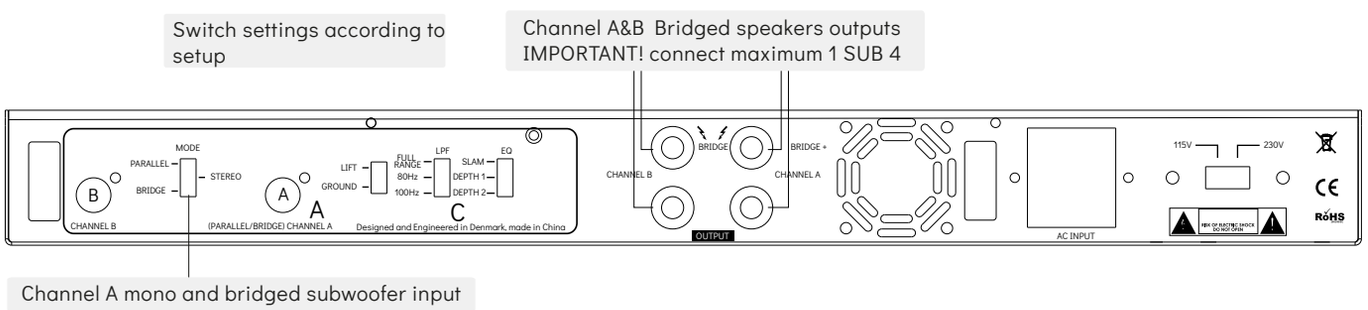


SETUP

Please check the following settings are in place on the back of the amplifier when using with any Artcoustic subwoofer.

BRIDGED CONNECTION SUB 4

IMPORTANT ! BRIDGED SETTINGS IS FOR SUB 4 ONLY



SIGNAL SENSING TROUBLESHOOTING

If your amplifier doesn't switch on at low play back level:

1. please make sure you have checked the above settings including EQ setting default set to slam.

If you still experience a none-responsive amplifier, or amplifier shut down at low playback level, we recommend the following.

2. To set front sensitivity dial as described at fig.1 and at the same time increase subwoofer output level within your receiver speaker settings.

3. For further signal sensing sensitivity, set the front dial as described in fig. 2 and at the same time further increase subwoofer output within your receiver speaker settings.

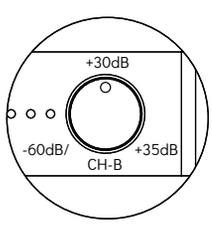


fig 1.

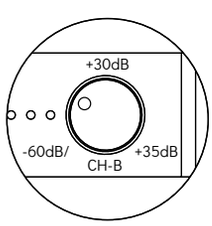
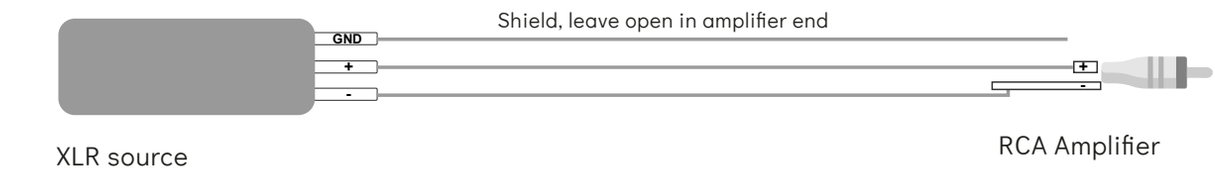


fig 2.

CONNECTIVITY

SEMI BALANCED INTERCONNECTION

Use a two core and single shield interconnection cable, terminate shield in source endonly, leave the shield open in receiving amplifier end.



XLR source

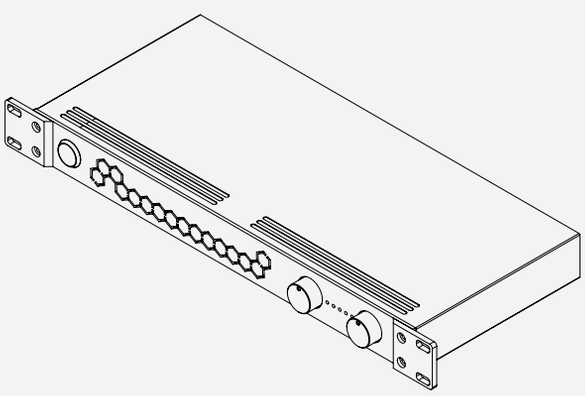
RCA Amplifier

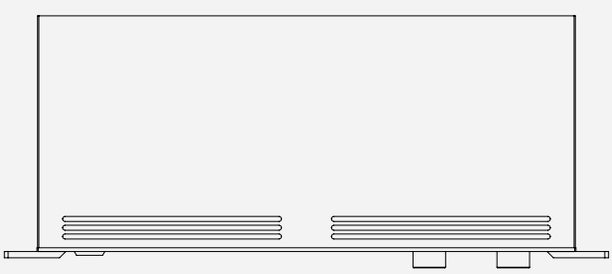
RCA source

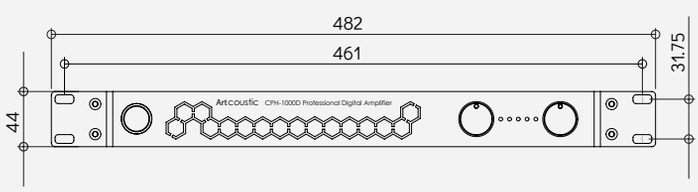
Shield, leave open in amplifier end

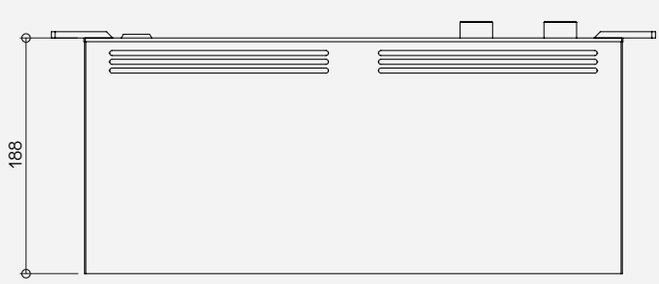
RCA Amplifier

SCHEMATICS









CPH-1000D Amplifier

dimension are in mm

SAFETY INSTRUCTIONS

SAFETY

Do not use this product near water

Clean rear panel with dry cloth only

Do not block any ventilation opening

Do not install near any heat sources

If wall-mounted, ensure the use of matching screws and rawl plugs

Refer all servicing to qualified service personnel. Servicing is required when the product has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the product, the product has been exposed to rain or moisture, does not operate normally or has been dropped.

To completely disconnect unit power from the AC mains, disconnect the unit's power cord from the mains socket.

Note: If the Artcoustic subwoofer is placed on a thick carpet blocking the air outlet, we recommend to use the special Artcoustic carpet spikes.
Not included as standard, please order separately.

WARNING

This product complies with Part 15 of the FCC Rules.
Its operation is subject to the following two conditions:

- This product may not cause harmful interference.

- This product must accept any interference received, including interference that may cause undesired operation.

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

To reduce the risk of fire and electric shock do not expose this product to rain or moisture.

Do not place product filled with liquids such as vases on the product.

Do not open product. There are no user-serviceable parts inside.

Always use the power supply shipped with this product.
Using a power supply with wrong voltage or polarity, can damage the electronics.

WARRANTY

IS APPLICABLE

Is valid only for products purchased from an authorised Artcoustic retailer or dealer.

Is valid from the date of purchase for a period of 3-years for passive loudspeakers, and 2-years for powered loudspeakers and electronics.

Is limited to the repair of the equipment (which could be a repair or replacement at our discretion, neither of which affects your original warranty).

Neither transportation, nor any other costs, nor any risk for removal, transportation and installation of products is covered by this warranty.

IS NOT APPLICABLE

Will not be applicable in cases other than defects in materials and/or workmanship at the time of purchase and will not be applicable:

- For deterioration of component parts, the nature of which is to become worn or depleted with use, such as batteries.
- For damages caused by incorrect installation, connection or packing.
- For damages caused by accidents, lightning, water, fire heat, war, public disturbances or any other cause beyond the reasonable control of Artcoustic and its appointed distributors.
- For damages caused by any use other than correct use described in the user manual, negligence, modifications, or use of parts that are not made or authorized by Artcoustic

If it is found necessary to return the product for repair, you will be given a form to fill out and return. You should not return the product without previous acceptance. To validate your warranty, you will need to produce the original sales invoice or other proof of ownership and date of purchase.