

# Artcoustic<sup>ACC</sup>

## CPH-10 SUBWOOFER OWNERS MANUAL



[www.artcoustic.com](http://www.artcoustic.com)

# *Welcome to the world of Artcoustic!*

Congratulations with your purchase of the Artcoustic CPH-10 Subwoofer.

The CPH-10 has an efficient design, producing a fast, dynamic bass response and exceptional musical authority, easily integrated into any smaller Artcoustic system.

The CPH-10 Sub is a low resonance frequency bass reflex design, which ensures powerful and clean bass, with low distortion, all within a remarkably small in-room installation space.

The CPH-10 Sub features a single high-quality 10" bass unit, fitted within a specially tuned, elegant and contemporary cabinet, offering vertical and horizontal floor placement and as well an aesthetic pleasing on wall solution for installs where floor space is premium.

This new design technology allows superb output performance to be possible in a cabinet much smaller than would otherwise be required, alongside improved F3 and F6 points, operating all the way down to 30Hz.

Thank you for purchasing an Artcoustic product.

All the best,  
The Artcoustic Team

# CPH-10 SUBWOOFER FEATURES

## CPH-10 Subwoofer Features

### Woofers:

- Extra-long excursion woofer
- Aluminum short circuiting ring
- 4-layer voice coil
- Anodized aluminum for improved heat dissipation, combined with reduced distortion motor

### Design:

Artcoustic Low resonance frequency bass reflex design

## PDA1000 Amplifier features

PDA1000 only occupies a 1U rack space and weight as little as 2.8 kg making it an ideal choice in a already crowded equipment rack.

2 x 450 watt 8 ohm and 1000 watt single channel bridged

- Input sensitivity control
- Signal presence, clip and protection indicator
- balanced Input via XLR
- Stable performance down to 4 ohms.
- Auto turn on, turn off - signal sensing
- Crossover, low-pass, full range, 100 Hz. and 400 Hz. 24 dB. per octave
- Crossover, hi-pass, full range, 100 Hz. and 400 Hz. 24 dB. per octave
- ASOF (Artcoustic Subwoofer Continued Filter) Slam, depth 1 and depth 2
- High current bi-polar technology
- Extended protection circuit

# SPECIFICATIONS

## Specifications CPH-10 Subwoofer

### Transducer:

LF 1 x 10 inch cones

### Connection:

Single Amped Gold Plated Push Terminals

### Performance:

Operating Range 30 Hz to 250 Hz

Nominal Beamwidth omni directional

Axial Sensitivity (half space SPL) LF 92 dB

Input Impedance Nominal Minimum 8 ohms

Maximum Power Handling 200 Watt

Calculated Axial Output Limit (half space SPL) Average Peak LF 108dB

Weight 9 kg

Dimensions without front baffle H: 350 W: 350 D: 186 mm

### Finish:

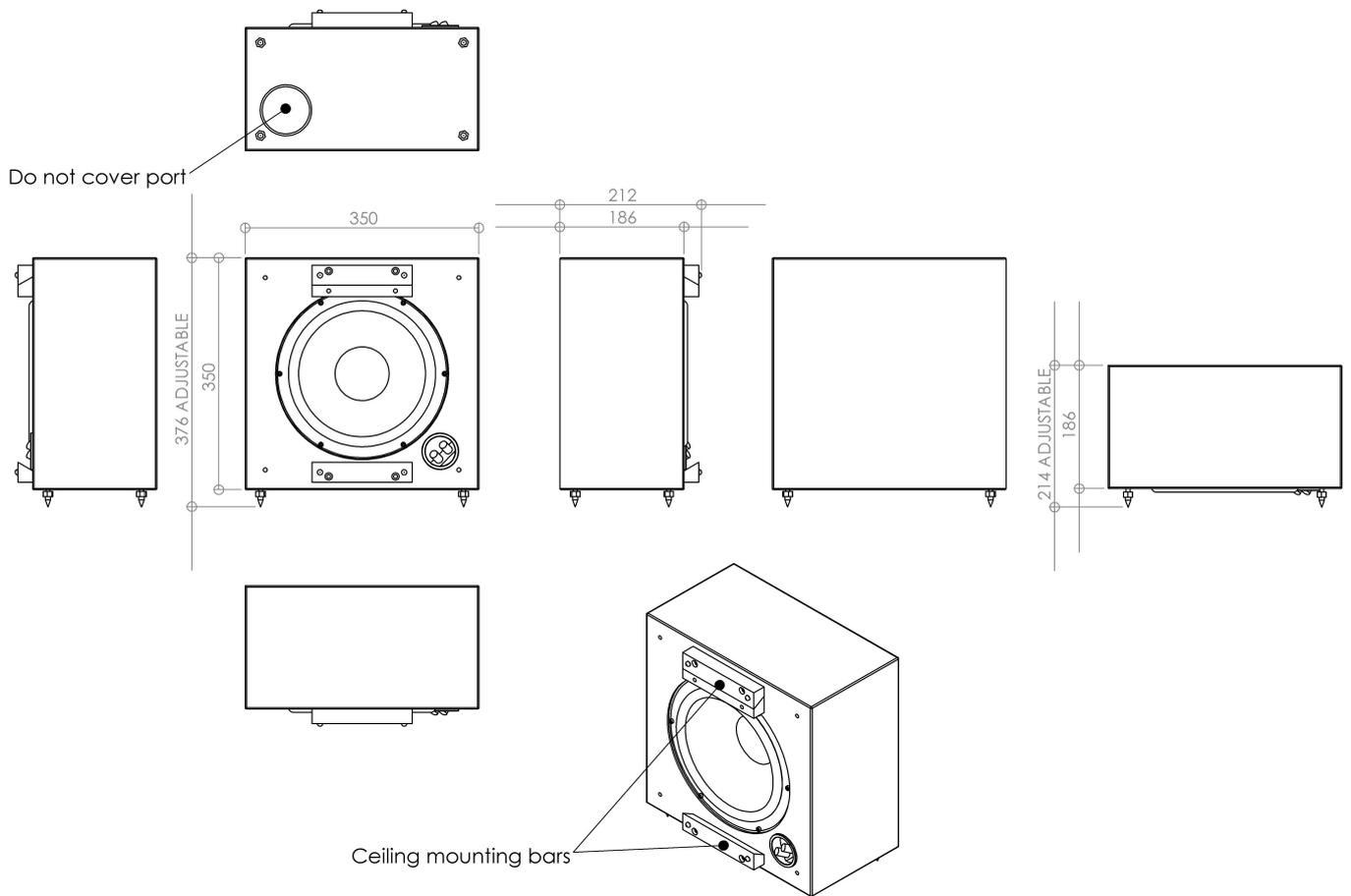
Front Baffle Cabinet: Black, White, RAL, NCS, Tikkurila, Gloss.

Back Box, fabric covered, Black

## CPH-10 Subwoofer

The CPH-10 subwoofer delivers amazing bass, ideal for 2.1 channel multi-room, Hi-Fi applications and fixed installations in general. Employing one 10" woofer, capable of reproducing low frequency signals accurately and effortlessly right down to 30Hz. The CPH-10 subwoofer is ideal for use in high-end installations where sound quality is paramount, for larger rooms, or where a higher SPL is required, use multiple units.

# CPH-10 SUBWOOFER SCHEMATICS



# PDA1000 FEATURES

## Small size and weight

PDA1000 only occupies a 1U rack space and weight as little as 2.8 kg making it an ideal choice in a already crowded equipment rack.

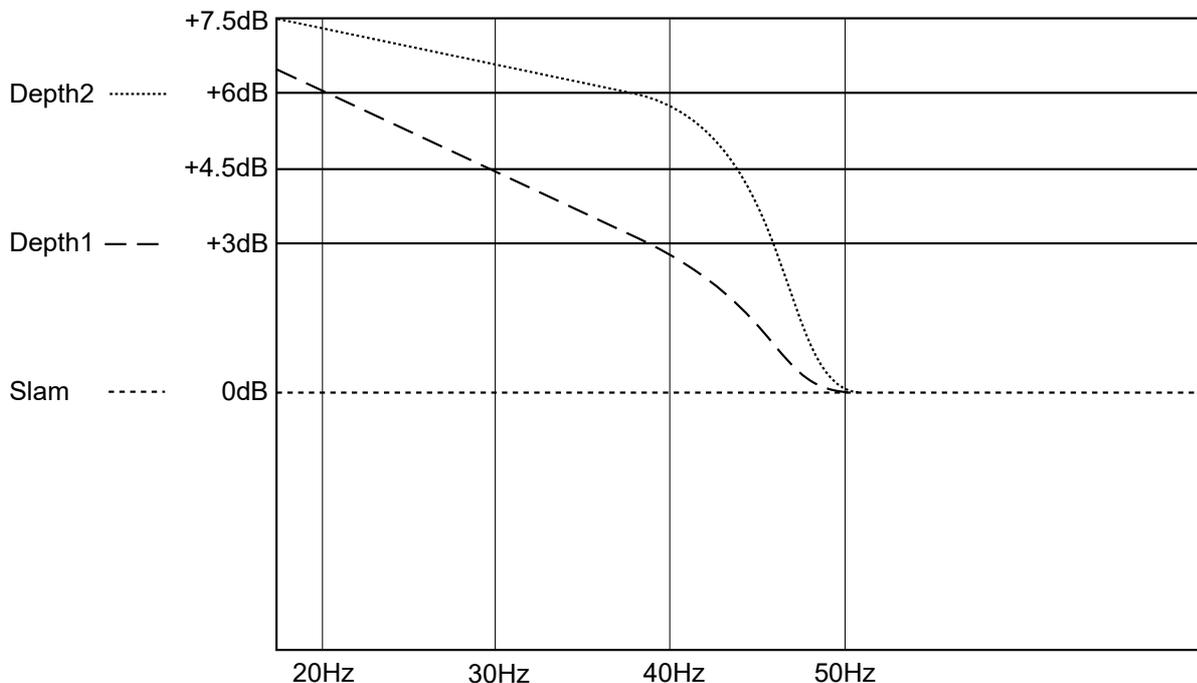
## Incredible class D amplifier performance

2 x 450 watt 8 ohm and 1000 watt single channel bridged

## Convenient features

- Input sensitivity control
- Signal presence, clip and protection indicator
- balanced Input via XLR
- Stable performance down to 4 ohms.
- Auto turn on, turn off - signal sensing
- Crossover, low-pass, full range, 100 Hz. and 400 Hz. 24 dB per octave
- Crossover, high-pass, full range, 100 Hz and 400 Hz 24 dB per octave
- ASOF (Artcoustic Subwoofer Optimized Filter) Slam, depth 1 and depth 2
- High current bi-polar technology
- Extended protection circuit

ASOF EQ. Filters and filter slopes 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 IWS-10 CPH-10 and Impact 1. The Depth 1 setting, mainly enhances the very deep frequencies, below 35 Hz. 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 45 Hz and down. This setting is optimised for cinema and public address installations.

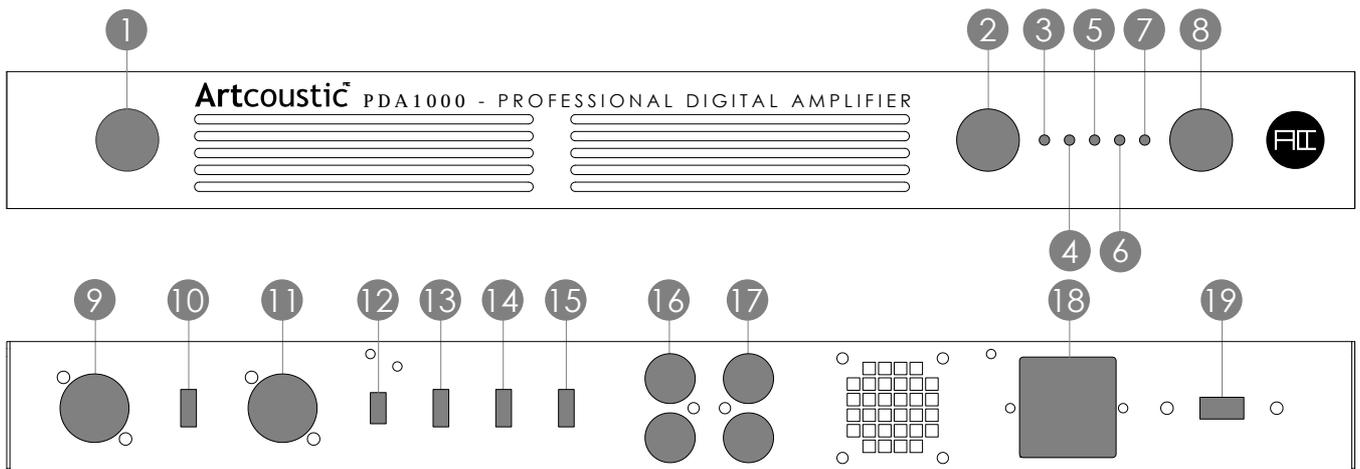
# SPECIFICATIONS

## PDA1000 Technical Specification

Stereo 2 x 450 watt 8 ohm  
Bridged 1 x 1000 watt 8 ohm

Max Power Consumption: 1300 watt / 3400 BTU/H

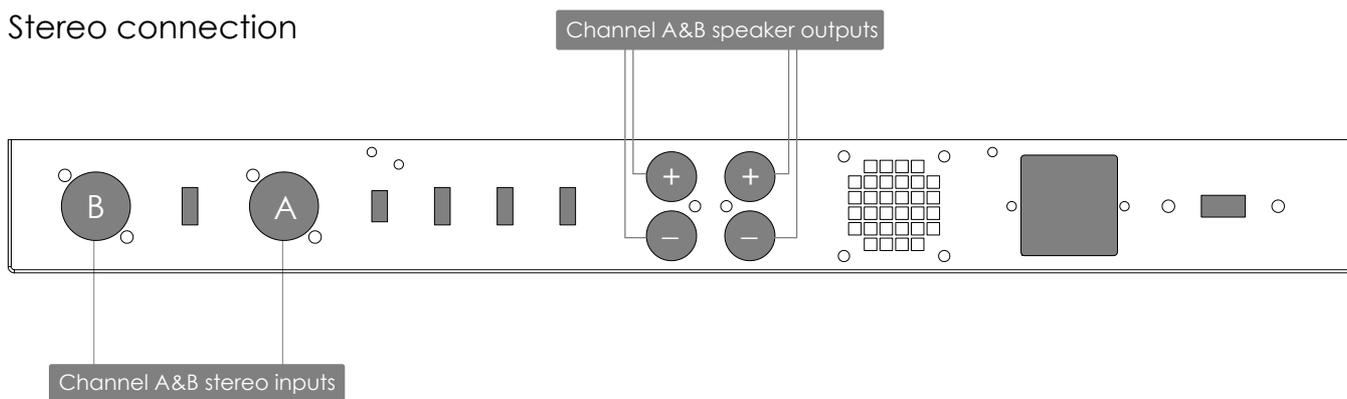
- Full range: 20 Hz-20 KHz  $\pm$  0.5 dB
- Low-pass: 20 Hz-100 Hz 24 dB/oct 20 Hz-400 Hz 24 dB/oct
- Hi pass: 100 Hz-20 KHz 24 dB/oct 400 Hz-20 kHz 24 dB/oct
- S/N Ratio: >103 dB
- THD (at 1 watt into 8 ohms 1KHz): <0.05%
- Damping factor: >300
- Input impedance: 20 Kohms balanced
- Maximum input level: 7 V
- Load impedance: 4-8 ohm
- Input sensitivity: (0 dB)
- Power supply: 115 V/230 V-50/60 Hz
- Input terminal: XLR
- 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



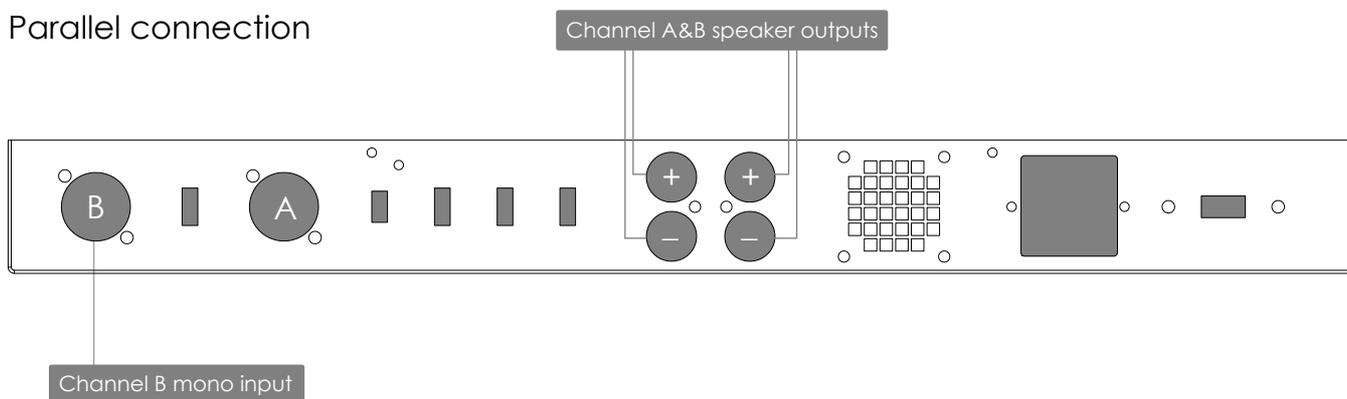
1. On/Off Switch
2. Channel A Volume Control
3. Channel A Signal Indicator
4. Channel A Clip Indicator
5. Power On Indicator
6. Channel B Clip Indicator
7. Channel B Signal Indicator
8. Channel B Volume Control
9. Channel B XLR Balanced Input (Bridged Input)
10. Input Setting, Parallel, Stereo and Bridged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

# CONNECTIVITY

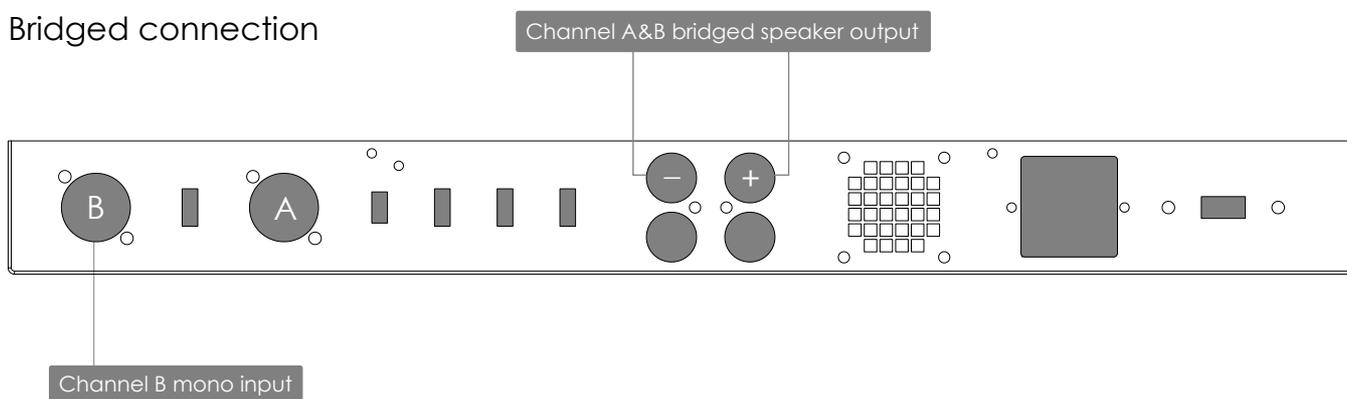
Stereo connection



Parallel connection



Bridged connection



# SAFETY INSTRUCTIONS

## SAFETY:

- 1.□ Do not use this product near water.
- 2.□ Clean rear panel only with dry cloth.
- 3.□ Do not block any ventilation openings.
- 4.□ Do not install near any heat sources, such as radiators, heat registers, stoves.
- 5.□ If wall mounted, make sure sufficient rawl plugs and matching screws are being used.

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.

## WARNING:

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

- 1.□ Do not place product filled with liquids such as vases on the product .
- 2.□ Do not open product. There are no user-serviceable parts inside.
- 3.□ Always use the power supply shipped with this product, using a power supply with wrong □ voltage or polarity, can damage the electronic

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.

## WARRANTY:

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

Is valid from the date of purchase for a period of 3 years for passive loudspeakers, 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 only valid for the original owner. It is not transferable.

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 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 UK Ltd.

For damages caused by faulty or unsuitable ancillary equipment

For damages caused by accidents, lightning, water, fire heat, war, public disturbances or any other cause beyond the reasonable control of Artcoustic UK Ltd. And its appointed distributors.

If it is found necessary to return the product for repair, you may be given a Return Merchandise Authorization. You should not return the product without this authorization, if given.

To validate your warranty, you will need to produce the original sales invoice or other proof of ownership and date of purchase.