Artcoustic

CPH-ATiB AND CPH-7 OWNERS MANUAL

www.artcoustic.com

Welcome to the world of Artcoustic!

CPH-ATIB

The new CPH-ATiB (Atmos Theater in a Box) is a true breakthrough product, which comes with an impressive selection of features, only matched by top-end cinema receivers. This 8-channel digital marvel, boast state-of-the-art sound quality and includes all the latest digital control, filters, automatic or manual room correction and digital amplification. Not only is the ATiB an advanced audio and video controller, it also houses a powerful 10-inch subwoofer, with impressive output sufficient for most small to medium spaces.

CPH-ATIB has connectivity features, making is compatible with virtually any device. For loss-less signal, connect it to your digital devices through HDMI, Coaxial, or Optical Digital input and for wireless audio, through the latest Hi-Fi grade, Bluetooth technology. The CPH-ATiB, is equipped with some simple but very handy filters, such as the Artcoustic ASOF sub frequency EQ filter and a flat shelve treble filter, combined with easy-to-use volume and gain controls. It comes with an efficient and easy-to-use digital crossover and EQ, ensuring perfect acoustic integration.

Thank you for purchasing the Artcoustic CPH-ATIB.

All the best,
The Artcoustic Team

Artcoustic
CPH-ATIB-10

Artcoustic
CPH-ATIB-10

Artcoustic
MODEL : ATIB-10
SERIAL
CAUTION
Designed in Denmark made in China
POWER

CPH-ATiB FEATURES

Thank you for choosing ATiB-10

In order to ensure that you can use this product correctly and safely and fully enjoy the best sound quality and effects available, please read this operation manual carefully before connection and operation.

- After unpacking, please confirm if the product is damaged in transit and check if the accessories are complete.

- Adequate space and heat dissipation should be ensured when installing the unit

- Make sure that the device is connected to a power socket with ground connection

- Set voltage selector to correct voltage, according to region, 110 V or 220 V. If voltage selector is set wrong, 110 V in a 220V region, the power supply will be damaged and such damage is not covered by the warranty.

What's in the box.

- ATIB Subwoofer, cinema controller and power amplification unit.
- Power cord
- 14 strands 7 channel 4 m speaker cable **(When sold with CPH-7 only)**
- 7 pcs phoenix speaker connectors
- 1 pcs remote control, including battery
- 4 pcs adjustable spikes
- 1 pcs Wall hanging bracket
- Room calibration setup microphone

High end class D amplifier performance and advanced digital features.

Dolby Atmos 5.1.2
- 7 x 50 watt 8 ohm
- 1 x 100 watt 6 ohm (Subwoofer)
- Subwoofer max. SPL 1m 110 dB

- Full range: 20 Hz - 20 kHz ± 1 dB
- THD = 0.1 %
- Maximum input level: -90 dBV
- Load impedance: 4 - 8 ohm
- Input sensitivity: RCA and jack 950 mV. BT / COAX / HDMI 0 dB
- Wireless Bluetooth
- Power supply: Voltage 110 V / 220 V 50 Hz / 60 Hz Rated power
- Rated power consumption 800 W
- Dimensions: H: 450 x W: 450 x D: 345 mm
- Weight: 19 kg

Convenient features
- Input sensitivity control
- Analogue and digital inputs
- Bluetooth wireless connectivity
- Stereo and subwoofer link out
- Stable performance down to 4 ohms
- Auto turn on, turn off - signal sensing
- Digital Crossover
- Auto room correction software
- Advanced manual EQ
- ASOF (Artcoustic Subwoofer Optimized Filter)
- Extended protection circuit

Features extended

DTS HD Master
DTS Neural:X
Dolby TrueHD
Dolby Atmos
Dolby Surround
Multi-channel Stereo

Max Number of Processing (Pre-amp) Channels 8
Sound Enhancements Mono Block Power Amp Construction (L/R separated)
Discrete Power Amplifier

GUI Overlay on HDMI
3D Signal Pass-through
4K Signal Pass-through / Scaling / GUI Overlay
(Pass-through / GUI Overlay) HDMI Pass-Through in Standby Mode

CEC
Audio Return Channel
Audio delay

HDMI: 3D / 4K / CEC / ARC / InstaPrevue
HDR / HLG / Dolby Vision

RS232 Control
Remote In / Out

Auto Speaker Setup by Microphone IRC (Intelligent Room Calibration)

FL Display
Graphic User Interface – GUI

Firmware Update by USB

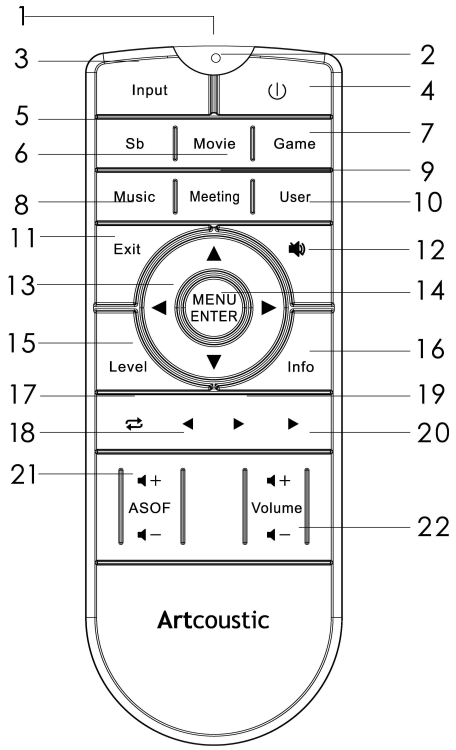
Variable Cross Over
(auto ECO) Auto Power Off
Sleep Timer

Number of Power Amps 8
Power Output (8 ohm, 20 Hz - 20 kHz, 0.08% 2ch Driven)
Speakers (50 W / 8 ohm) SUB (100 W / 6ohm)
Power Output (8 ohm 20 Hz - 20 kHz 0.05 % 2ch Driven)
Power Output (4 ohm 20 Hz - 20 kHz 0.7 % 2ch Driven)

General System Remote Control
Power Consumption in 800 W
Power Consumption ECO On / Off) 25W (auto ECO)
Standby consumption, 2 W (auto standby)

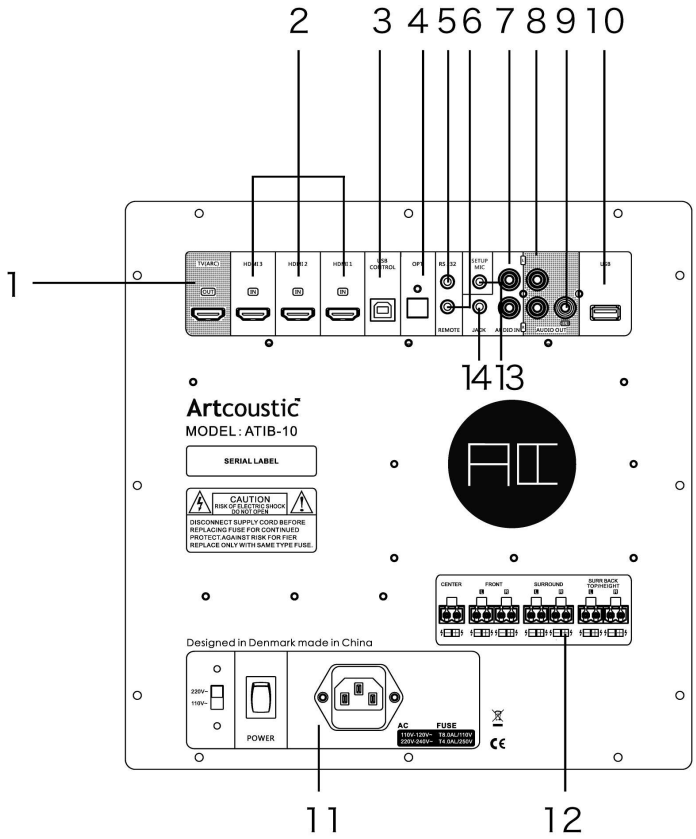
CPH-ATiB OPERATION

Remote control functions



1. Infrared remote launch window
2. Remote control signal indicator
3. Input source selection
4. Standby / wake up key
5. Soundbar key
6. Movie key
7. Game mode key
8. Music mode key
9. Meeting mode key
10. User mode key
11. Exit menu
12. Mute
13. Cursor key: Select menu items
14. Menu / enter key
15. Level key
16. Current play message
17. Playback looping key, short-press to switch cycle mode
18. Previous track
20. Next track
19. Pause / Play
21. ASOF sub filter
22. Volume

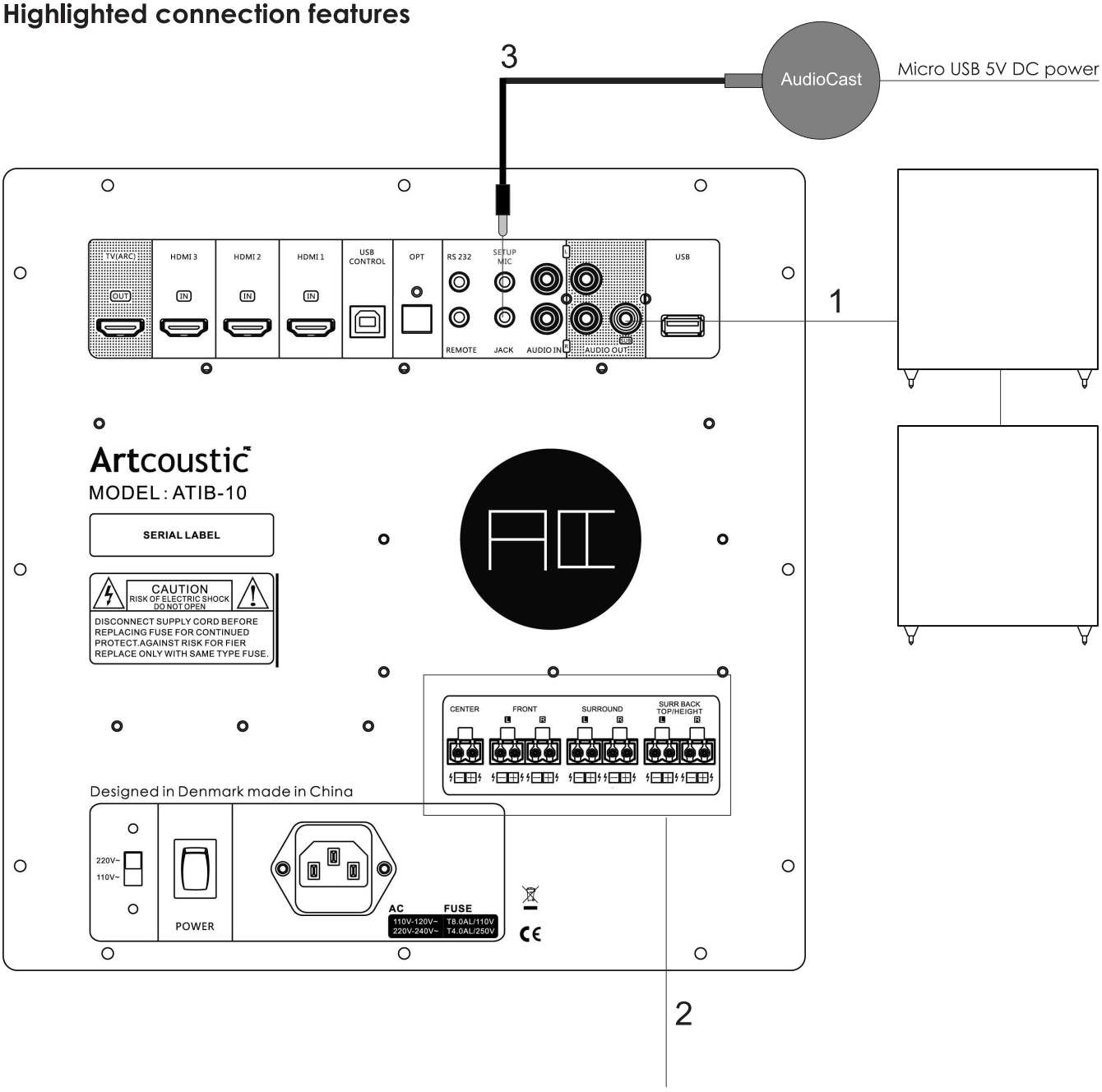
Back panel components and introduction



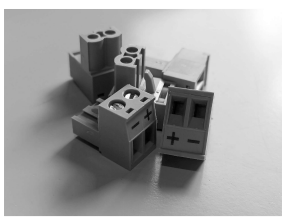
1. ARC HDMI TV output
2. HDMI 2.0 input
3. PC debugging
4. Digital optical input
5. RS232 serial port
6. Infrared remote
7. RCA Audio input
8. RCA Audio output
9. RCA Subwoofer output
10. USB music playback
11. Power switch, power cord, fuse and voltage selector
12. Speaker output
13. Setup mic
14. Jack audio output

CPH-ATiB OPERATION

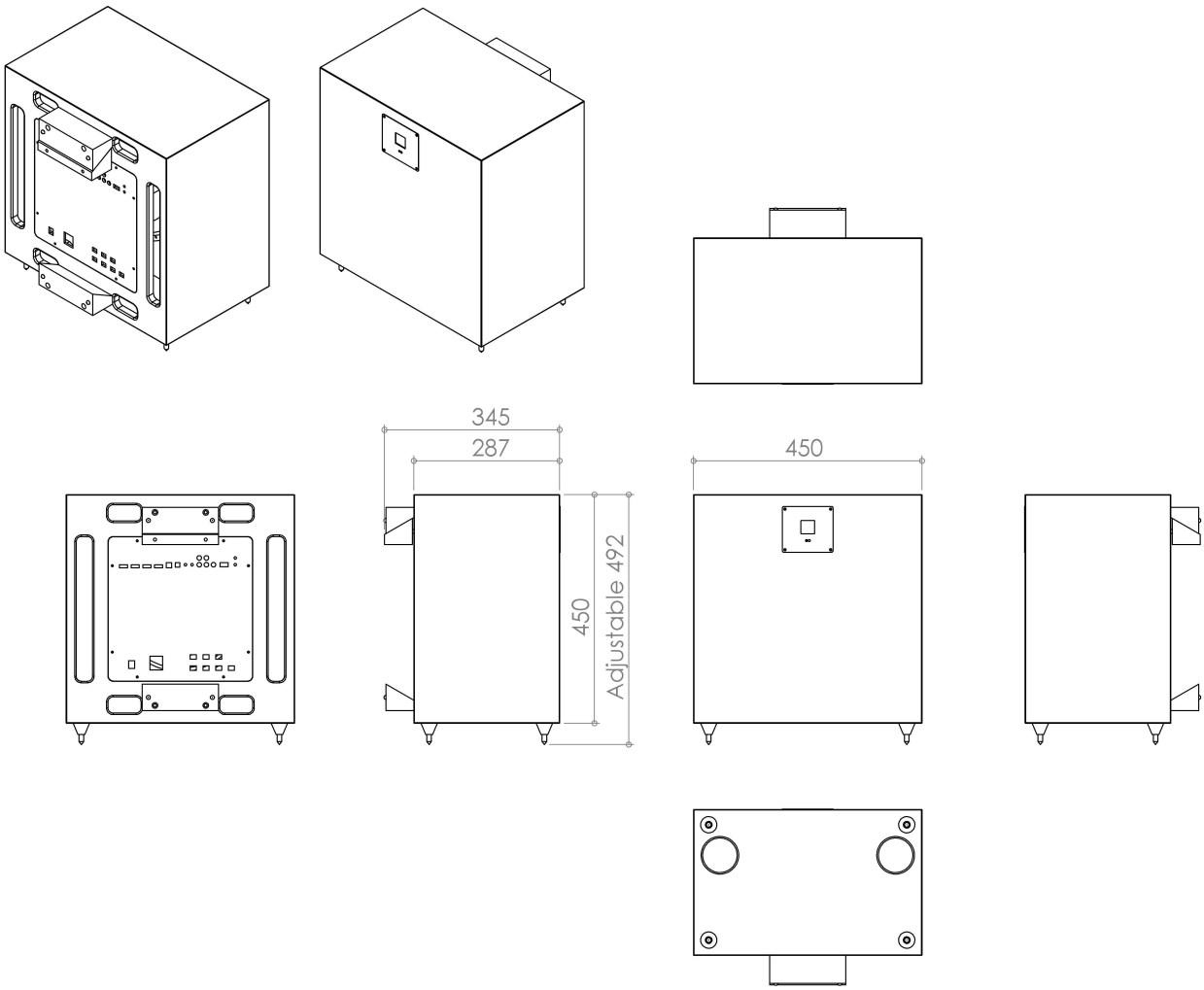
Highlighted connection features



1. RCA Subwoofer link out, use this output in conjunction with additional external active subwoofers
2. Phoenix connectors and special manufactured 4 meters Artcoustic CPH-7 Soundbar, channel-labeled-speaker-cable, for longer cable run, traditional speaker cable should be applied.
3. For latest music Wi-Fi connection, use the audio input mini jack connector, to connect the AudioCast Wi-Fi capsule, or any other similar external Wi-Fi device.

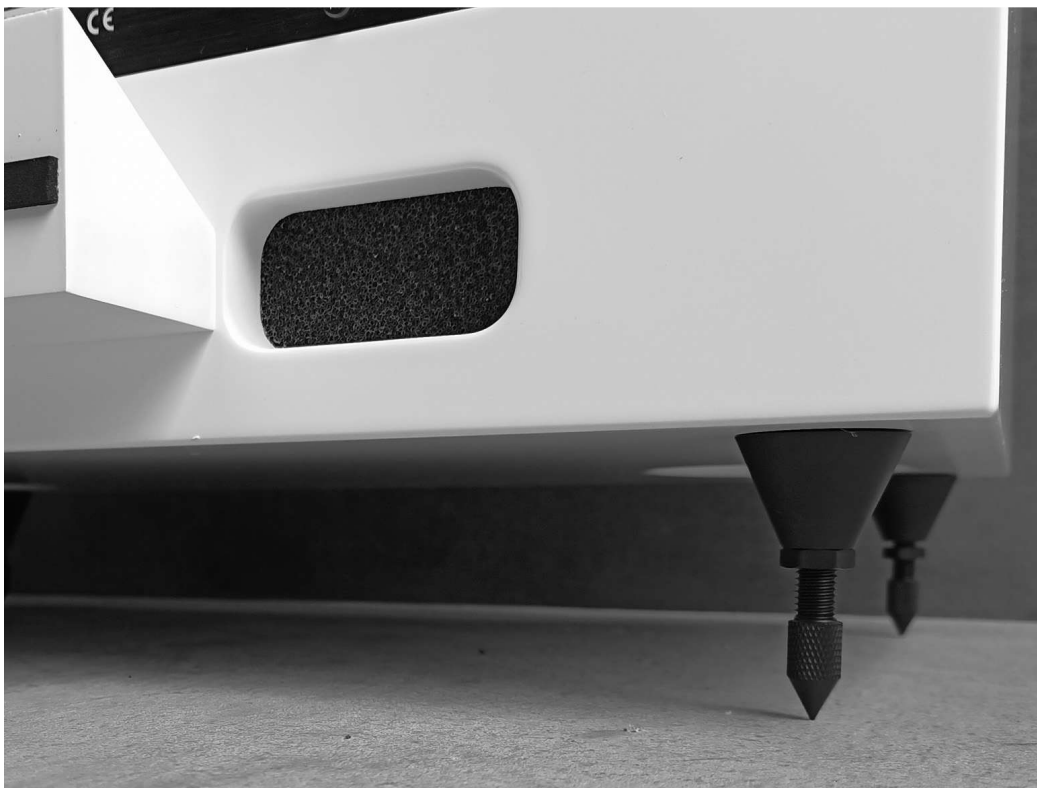


CPH-ATiB SCHEMATICS



Easy to install wall-mount bracket

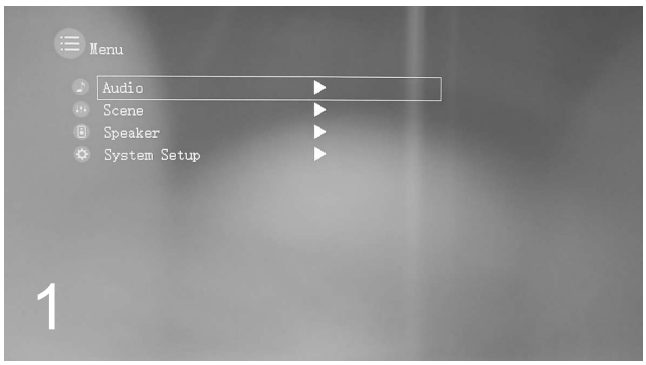
High quality heavy duty adjustable spikes

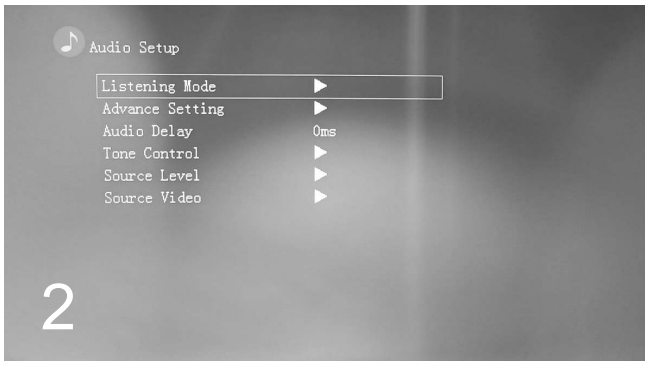


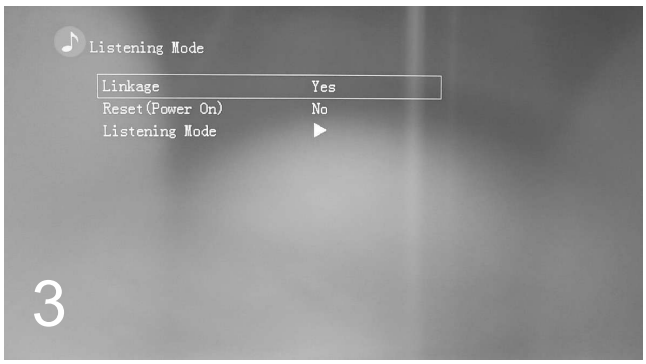
CPH-ATiB QUICK SETUP GUIDE

Advanced settings, sound coding

Auto: Automatically convert any given signal from the input source to a natural multi-channel-track.
Dolby Surround: This mode will extend various sound sources to a natural multi-channel-track, achieved by using the Dolby Surround Upmixer.
Neural X: This mode can extend various sound sources to a natural multi-channel-track achieved by using the DTS Neural X Upmixer.
Dimensional sound: This mode is used to convert dimensional sound output from the main channel loudspeaker.
Stereo: This mode converts any given signal from the input source to a 2.1 stereo track

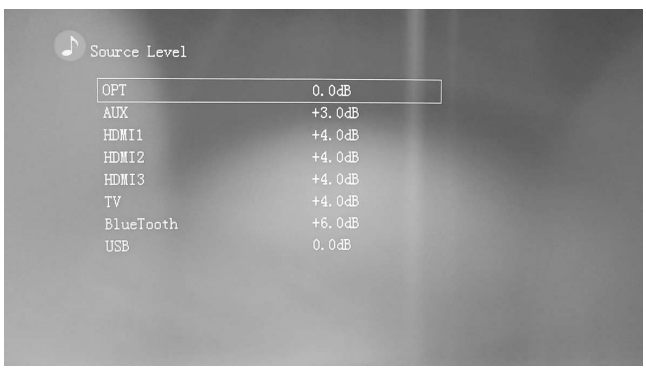






Source input sensitivity

Input source electrical level. When you access multiple playback devices, this setting can balance the electrical level value of all playback devices. Set the electrical level value for all input interfaces in the **"Menu" - "Audio" - "Input Source Level".**



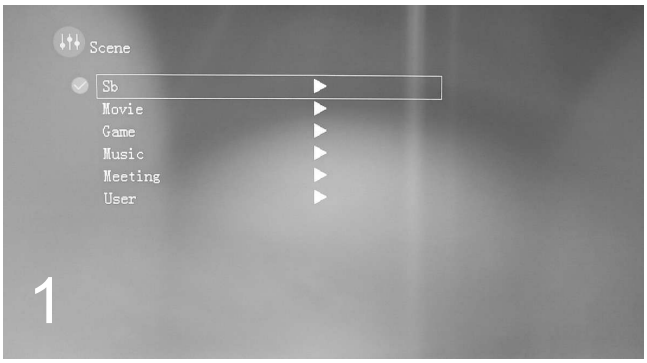
CPH-ATiB QUICK SETUP GUIDE

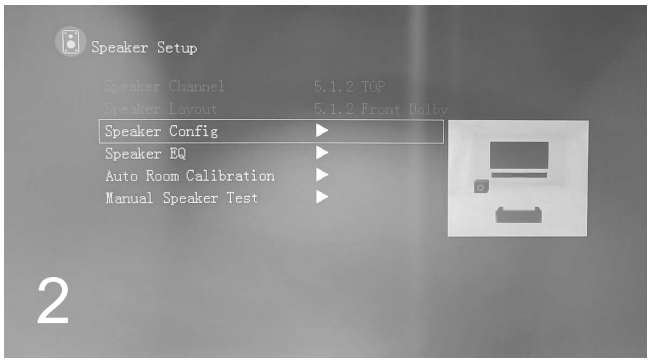
Scene mode settings

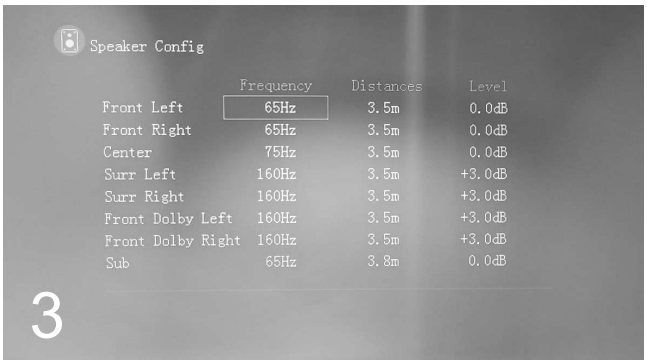
This unit has 6 scene modes to select:
They are **soundbar - music - movie - games - meeting - user**

Each mode has a different sound style. The parameters that can be set for each scene mode include, Music Equalizer, and Volume Settings. When installed with Artcoustic CPH-7 always use the SB (Soundbar setting).

You can select "User-defined" scene mode and enter the menu to set up a desired sound style and store this for your personal listening preferences.

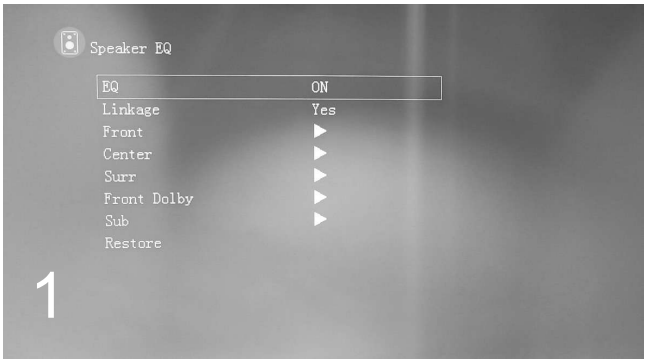


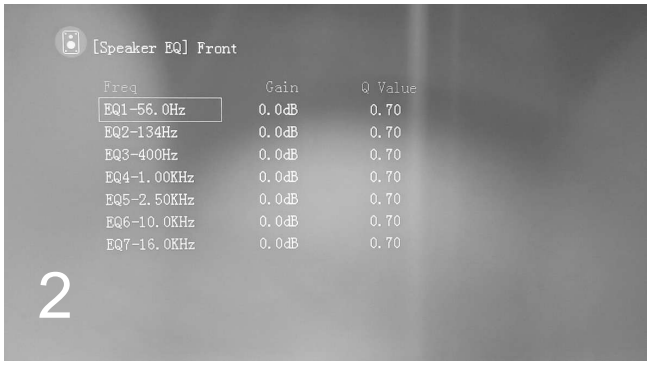




Equalizer

Adjust the frequency-response curve of input source audio signal. This equalizer is a 7 PEQ and its frequency point and Q value can be set individually. In order to enter the equalizer settings, you will be asked for a password. Press the movie remote button 7 times, to enter the password key.

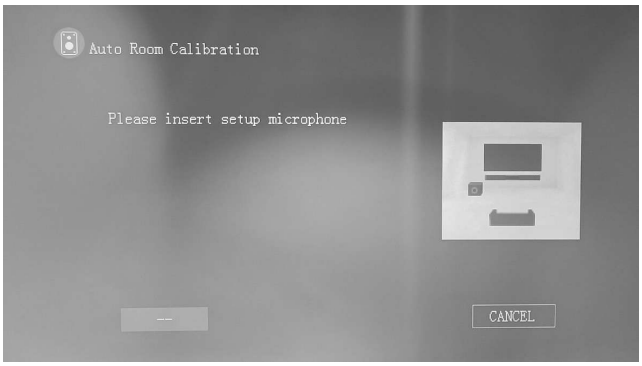




CPH-ATiB QUICK SETUP GUIDE

Auto Room Calibration

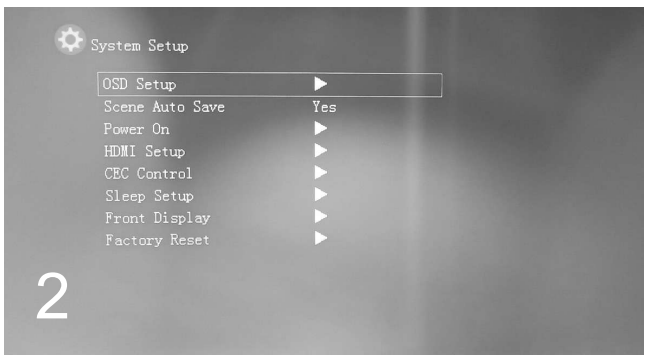
In order to ensure the outmost performance from the ATIB unit we highly recommend always to use the advanced Auto Room Calibration software, simply connect the microphone to the Setup Mic input jack on the rear panel and follow the on-screen instruction.



System settings

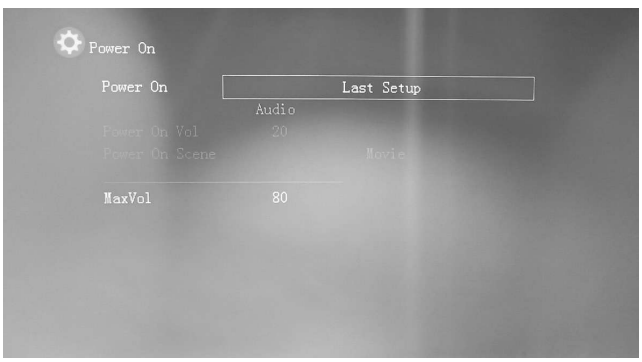
Menu display settings Menu Language: **“Menu” - “system” - “OSD settings” - “language”**, there are Chinese and English to choose from.

Menu Transparency: **“Menu” - “system” - “OSD settings” - “Transparency”**, the range of choice is 0-5



Power-on-preference setting

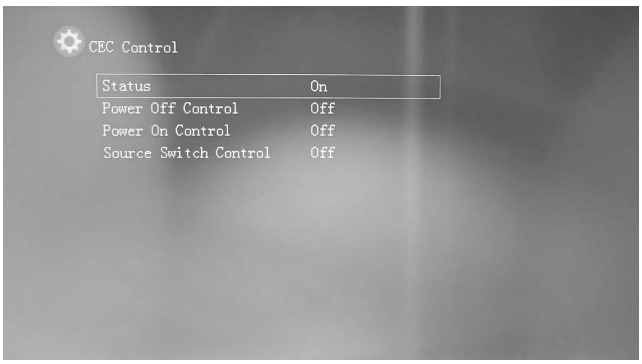
After selecting "System Default" in **"Menu" - "System" - "Power-on-preference"**, you can set the power-on volume and power-on scene.
You can also select "Last Settings" in "Power-on-preference" so that the next time it will appear as previous preference.



CPH-ATiB QUICK SETUP GUIDE

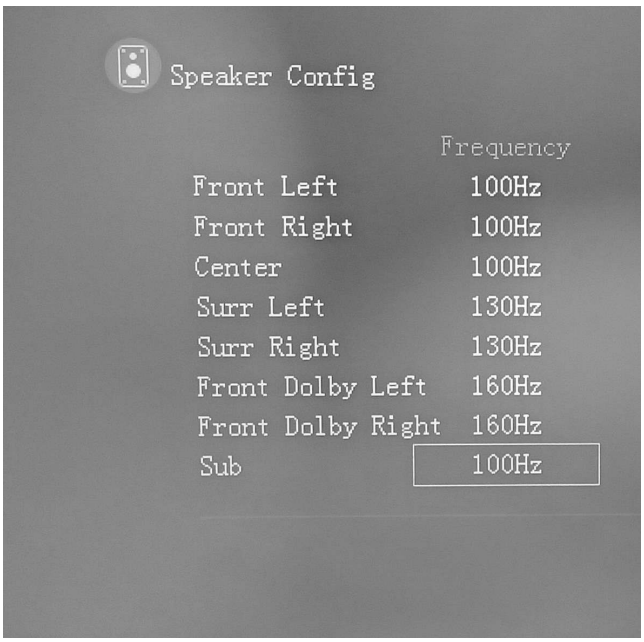
Consumer Electronics Control (CEC)

CEC is a feature of HDMI designed to allow users to command and control devices connected through HDMI[1][2] by using only one remote control. For example, by using the remote control of a television set to control a set-top box and/or DVD player. Up to 15 devices can be controlled. CEC also allows for individual CEC-enabled devices to command and control each other without user intervention

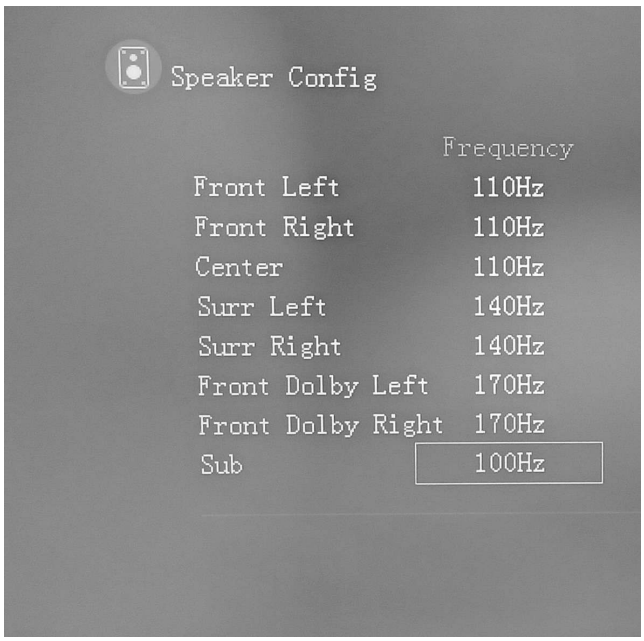


IMPORTANT!

Although the auto room calibration software, is an advanced and very precise tool, we always recommend to check the loudspeaker crossover points manually. Below is the Artcoustic recommendations for residential setup and for commercial setup, such as larger public spaces, which in general requires higher sound pressure levels.



Residential crossover recommendation, subwoofer crossover point 80-100Hz.

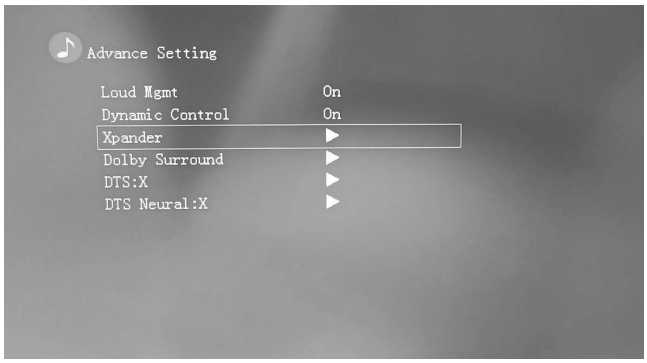


Commercial crossover recommendation, subwoofer crossover point 100-110Hz.

CPH-ATiB QUICK SETUP GUIDE

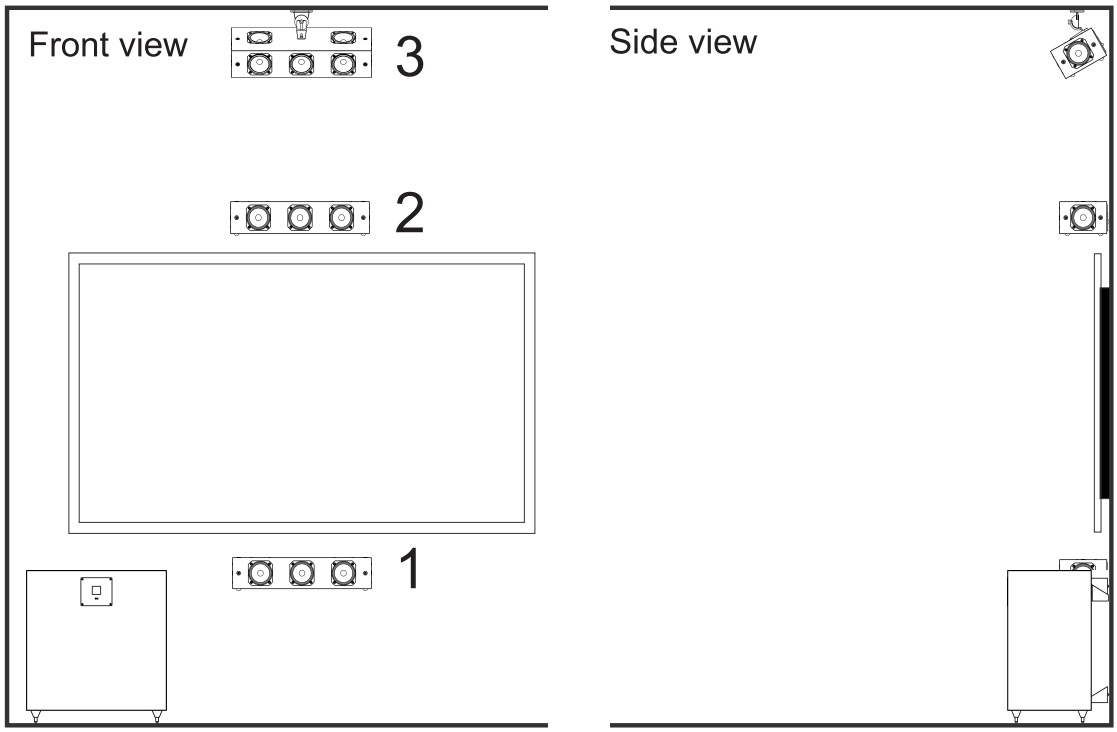
Enhanced effects

For enhanced effects and setup in conjunction with CPH-7 Soundbar, it is highly recommended to use the below Xpander settings. Adjust gain level for desired result.

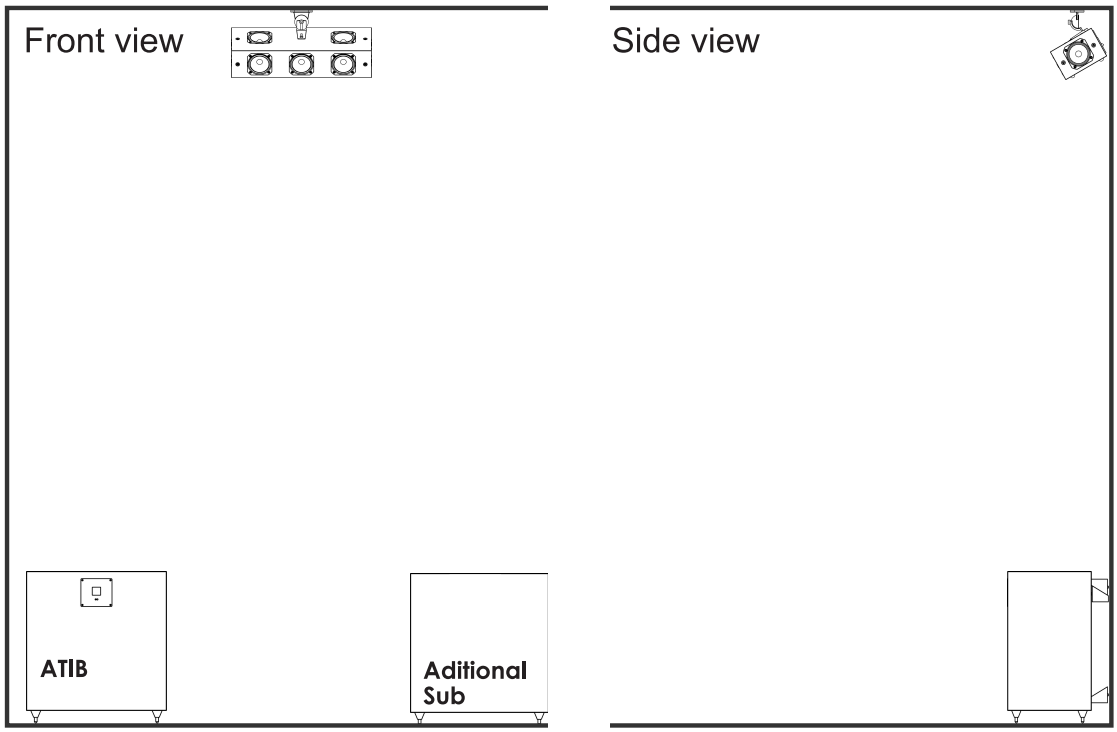


CPH-ATiB / CPH-7 INSTALLATION

CPH-ATiB installed in conjunction with the Artcoustic Dolby Atmos 5.1.2 capable CPH-7 Soundbar.



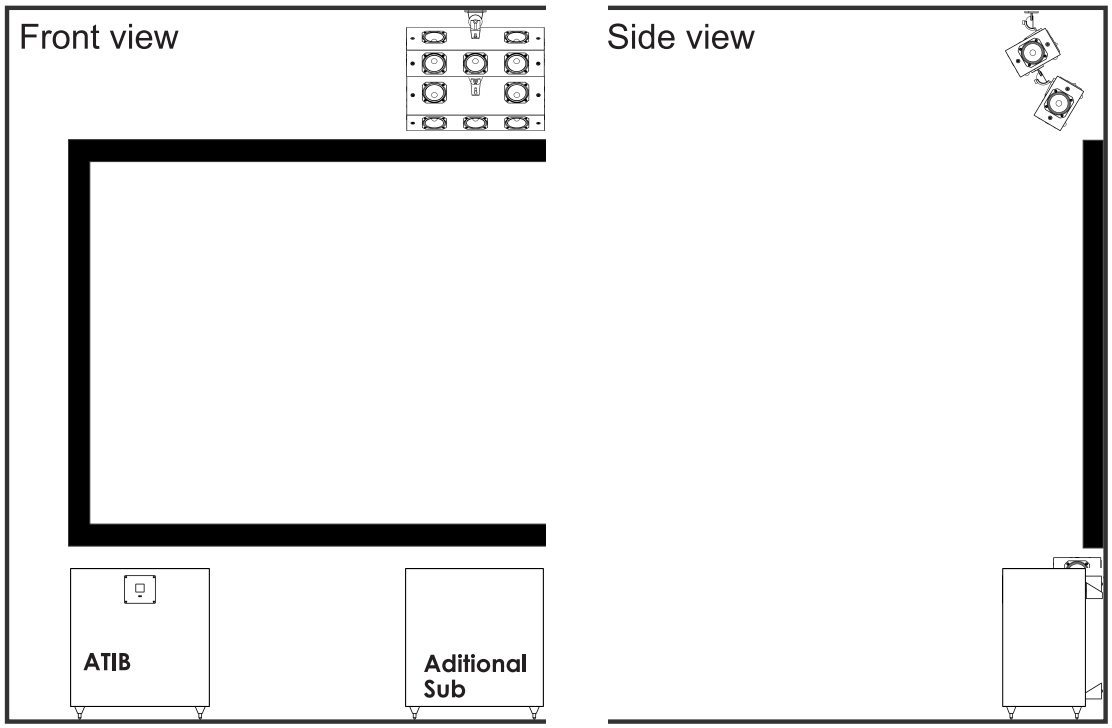
1. Typical residential or meeting room installation, based around an LED TV display, CPH-7 mounted below the screen.
2. CPH-7 mounted above the screen.
3. CPH-7 mounted in the ceiling, using the Artcoustic **Art-GU8T** swivel bracket, ships with safety rope.



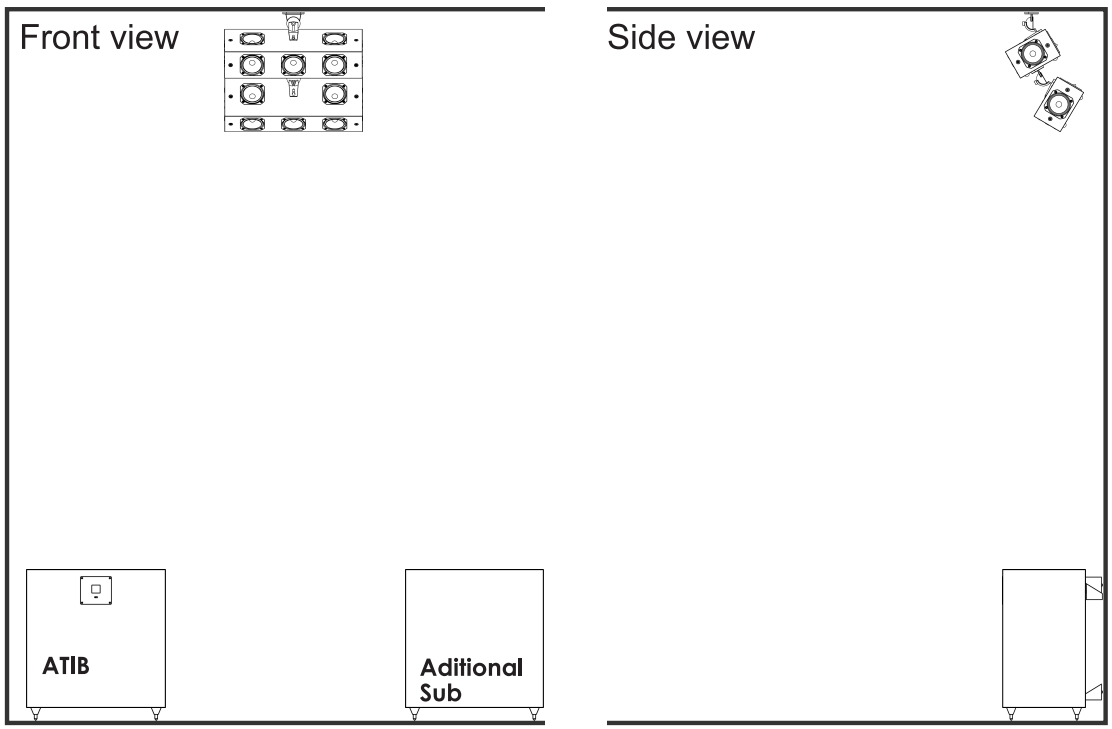
Typical larger room installation, such as bars, restaurants, hotel lobby's etc. CPH-7 mounted in-ceiling, using the Artcoustic **Art-GU8T** swivel bracket, ships with safety rope.
Maximum sound pressure level all channels driven, PCM 2 channel stereo source, up-mixed to multi channel surround sound 116 dB 1m.
Add additional subwoofers, in order to match sound pressure level, recommended Subwoofer output122dB 1m.

CPH-ATiB / CPH-7 INSTALLATION

CPH-ATiB installed in conjunction with the Artcoustic Dolby Atmos 5.1.2 capable CPH-7 Soundbar, angled array.



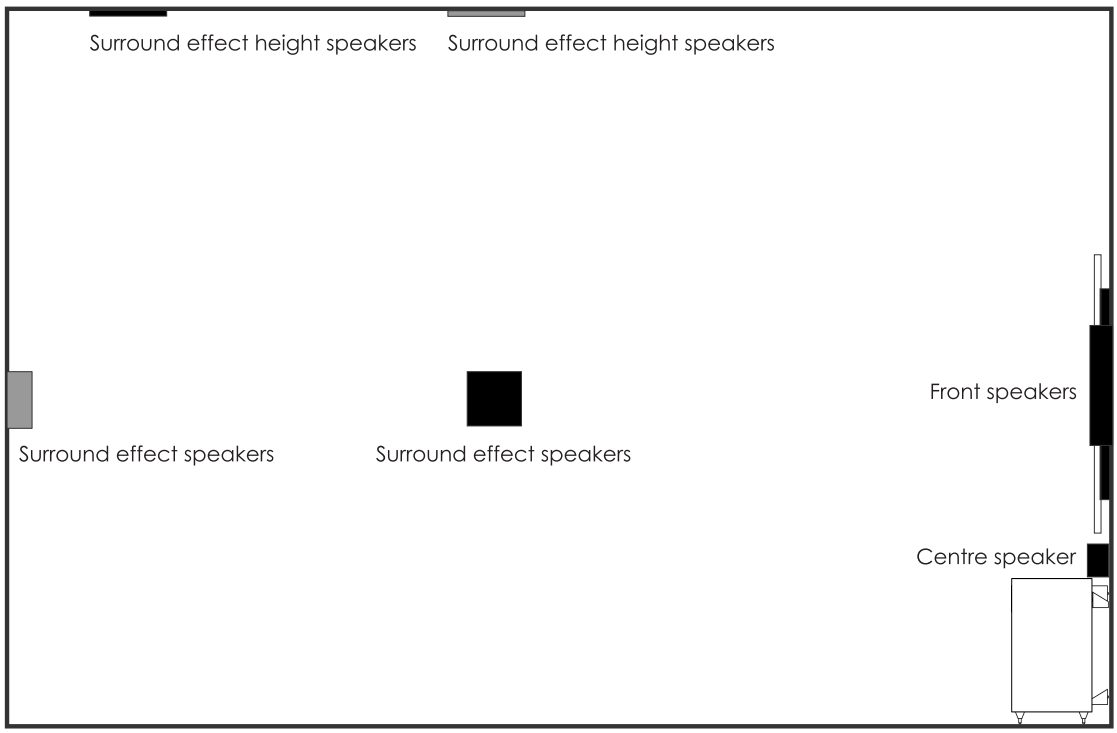
Typical larger projection screen installation, CPH-7 angled and adjustable dispersion pattern array, mounted in-ceiling using the Artcoustic **Art-GU8T** swivel bracket, ships with safety rope.
Maximum sound pressure level all channels driven122 dB 1m.
Add additional subwoofers, in order to match the increased array sound pressure level and according to Dolby Atmos specifications.



Typical larger room installation, such as bars, restaurants, hotel lobby's etc. CPH-7 mounted in-ceiling, using the Artcoustic **Art-GU8T** swivel bracket, ships with safety rope.
Maximum sound pressure level all channels driven, PCM 2 channel stereo source, up-mixed to multi channel surround sound 122 dB 1m.
Add additional subwoofers, in order to match the increased array sound pressure level
Recommended subwoofer output 128 dB 1m.

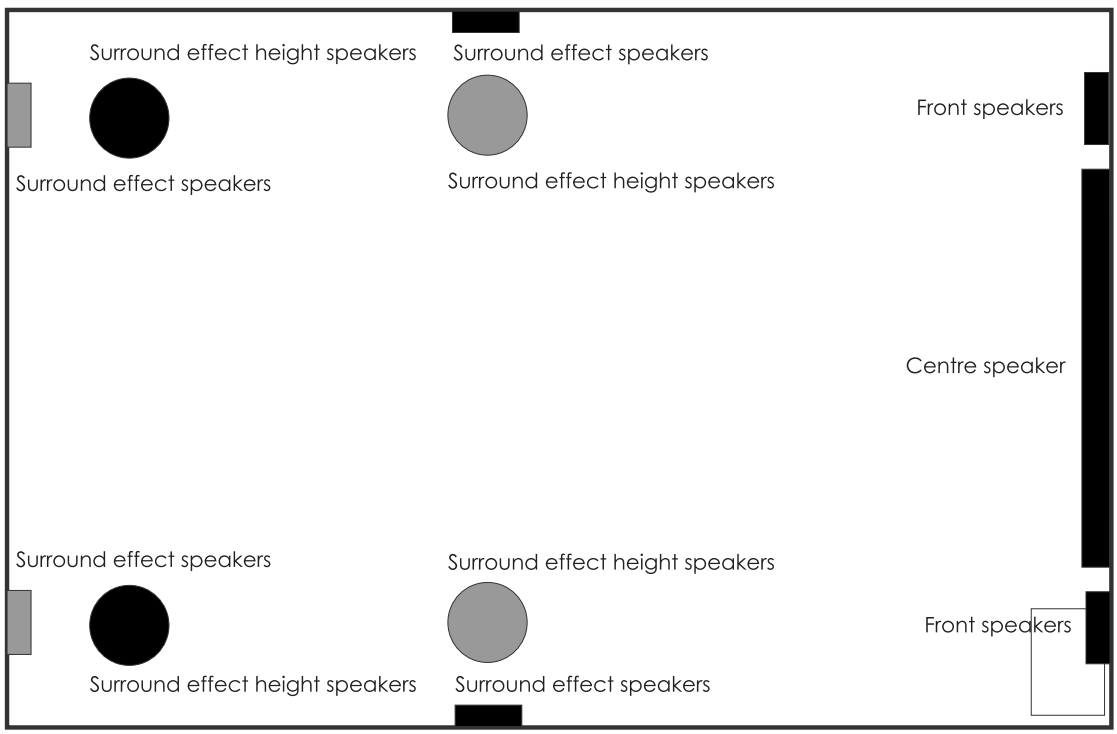
CPH-ATiB INSTALLATION

CPH-ATiB Atmos 5.1.2 installed in conjunction with Artcoustic conventional loudspeakers

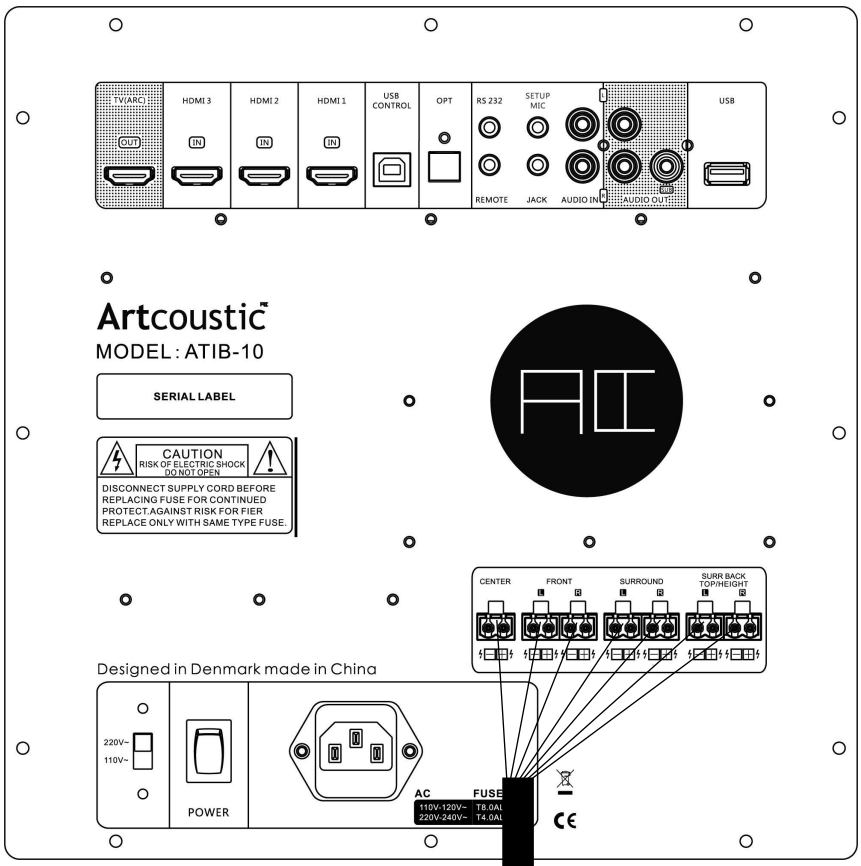


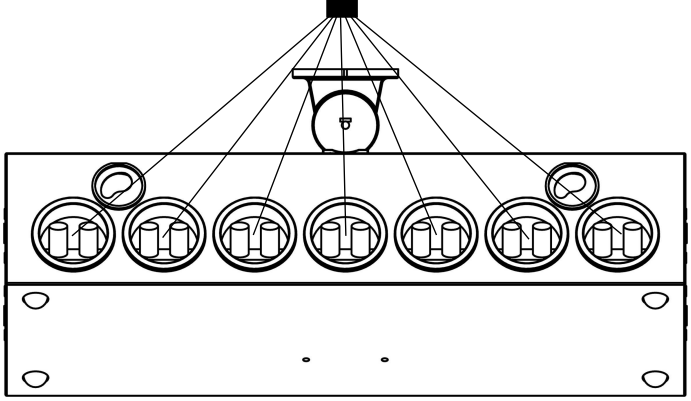
Artcoustic SL or CPH Series loudspeaker, position option 1

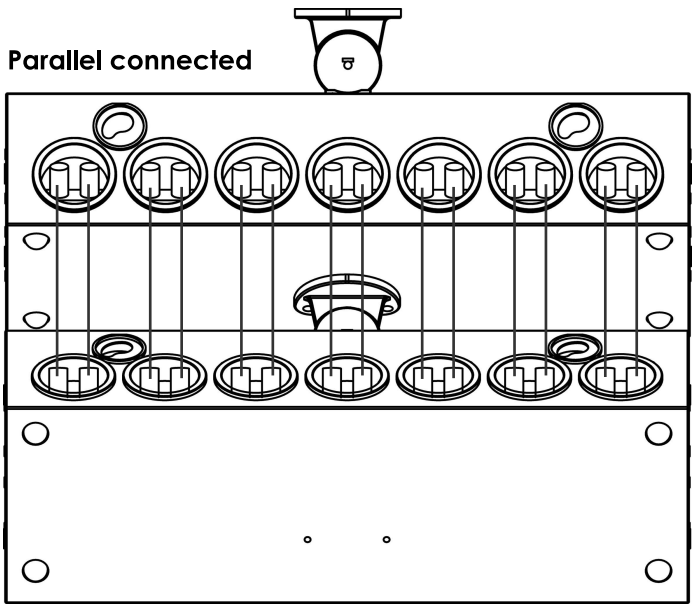
Artcoustic SL or CPH Series loudspeaker, position option 2



CPH-ATiB / CPH-7 INSTALLATION







Parallel connected

Performance single unit:

Operating Range 70 Hz (-3dB) to 20 kHz
Nominal Beamwidth Horizontal 90° Vertical 90°

Sensitivity per channel 1 Watt @ 8 ohm
86 dB Full Space, 89 dB Half Space

Sensitivity **all channels** driven 1 Watt @ 8 ohm
104 dB Full Space, 107 dB Half Space

Long Term SPL per channel 15 Watt
98 dB Full Space, 104 dB Half Space

Short Term (Damage) per channel SPL 45 watt
101 dB Full Space, 107 dB Half Space

Long Term **all channels** driven SPL 113 dB
Full Space, 116 dB Half Space

Short Term **all channels driven** (Damage) SPL 116 dB
Full Space, 119 dB Half Space

Input Impedance Nominal Minimum 8 ohms
Recommended high pass filter 80-110 Hz 24 dB / Octave

Performance array:

Sensitivity per channel 1 Watt @ 4 ohm
92 dB Full Space, 95 dB Half Space

Sensitivity **all channels** driven 1 Watt @ 4 ohm
110 dB Full Space, 113 dB Half Space

Long Term SPL per channel 15 Watt
104 dB Full Space, 107 dB Half Space

Short Term (Damage) per channel SPL 45 watt
107 dB Full Space, 110 dB Half Space

Long Term **all channels driven** 119 dB
Full Space, 122 dB Half Space

Short Term **all channels driven** (Damage) 122 dB
Full Space, 125 dB Half Space

Input Impedance Nominal Minimum 4 ohms
Recommended high pass filter 80-110 Hz 24 dB / Octave

CPH-7

CPH-7

The new CPH-7 Dolby Atmos 5.1.2 7 - channel speaker, is in many ways the pinnacle of the Artcoustic evolution, since Artcoustic designed and engineered the first ever LCR Soundbar. Several decades ago, they have never stopped impressing the market with new and innovative products, constantly breaking down the barriers in between good looking and good sounding speakers.
The CPH-7 has taken this challenge a step further, with an increased focus on the ease of use and an easy plug and play approach to the otherwise hugely complicated cinema market.

With the CPH-7 and in conjunction with the revolutionary CPH-ATIB it has now become possible to setup a fully functional, impressive and professional Atmos 5.1.2 cinema in less than one hour, no complicated installation, no complicated cabling and all this, from only two components.

Enjoy your immersive movie and music experience.

SPECIFICATIONS

Specification CPH-7 Dolby Atmos 5.1.2 Speaker

Transducer:
LF-MF 7 x 3 inch cone

Operating Range 70 Hz (-3dB) to 20 kHz
Nominal Beamwidth Horizontal 90° Vertical 90°

Sensitivity per channel 1 Watt @ 8 ohm
86 dB Full Space, 89 dB Half Space

Sensitivity **all channels** driven 1 Watt @ 8 ohm
104 dB Full Space, 107 dB Half Space

Long Term SPL per channel 15 Watt
98 dB Full Space, 104 dB Half Space

Short Term (Damage) per channel SPL 45 watt
101 dB Full Space, 107 dB Half Space

Long Term **all channels** SPL 113 dB
Full Space, 116 dB Half Space

Short Term **all channels driven** (Damage) SPL 116 dB
Full Space, 119 dB Half Space

Input Impedance Nominal Minimum 8 ohms
Recommended high pass filter 80-110 Hz 24 dB / Octave

Weight 5 kg
Dimensions H: 100 W: 450 D: 150 mm

Finish:
Cabinet: Black, White, RAL, NCS, Tikkurila, Gloss

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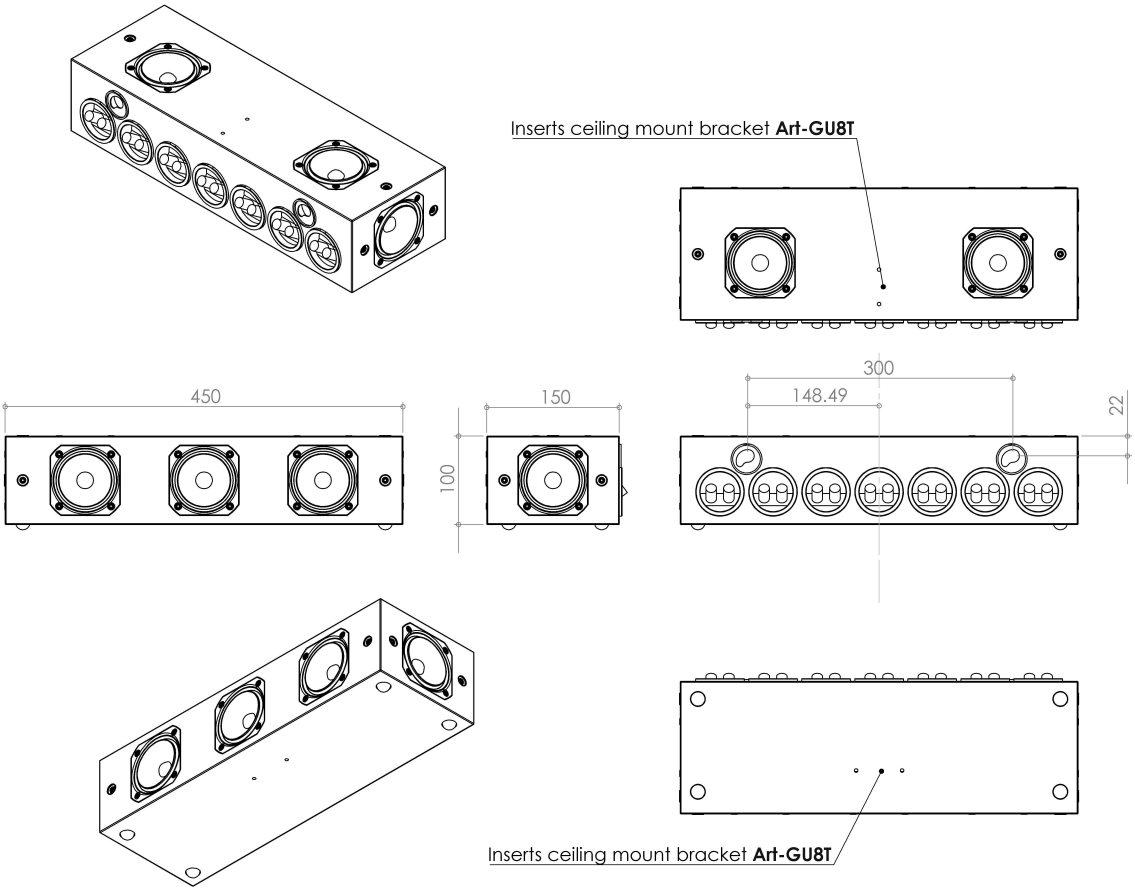
The CPH-7 is a multi source high output, high performance speaker, designed for demanding residential and commercial applications. The CPH-7 multi-channel speaker has been engineered to deliver impressive immersive sound, from one speaker only, utilizing complex digital algorithms and room acoustics, achieving incredible life like movie and music performance.

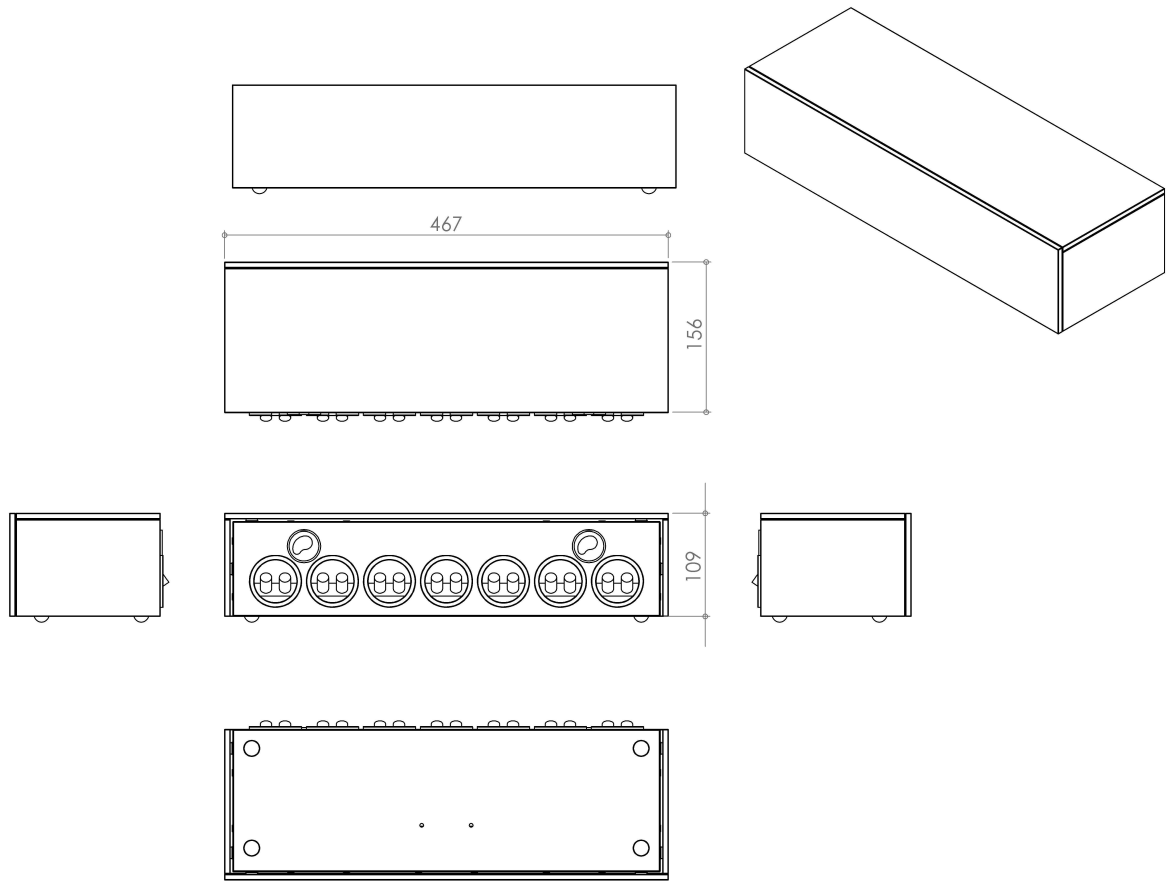
CPH-7 SCHEMATICS

CPH-7 without grilles



CPH-7 SCHEMATICS

CPH-7 with optional grilles, purchased seperately



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.

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.

Artcoustic

www.artcoustic.com