User

**CSUB** Manual | Compact Active Subwoofer







### When using this electronic device, basic precautions should always be taken, including the following:

- 1 Read all instructions before using the product.
- 2 Do not use this product near water (e.g., near a bathtub, washbowl, kitchen sink, in a wet basement or near a swimming pool etc). Care should be taken that objects do not fall into liquids and liquids would not be spilled on the device.
- **3** Use this device when you are sure that it has a stable base and it is fixed securely.
- 4 This product may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult with otorhinolaryngologist.
- 5 The product should be located away from heat sources such as radiators, heat vents, or other devices that produce heat.
- 6 Note for power connections: for pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible.
- 7 The power supply should be undamaged and never share an outlet or extension cord with other devices. Never leave device plugged into the outlet when it is not being used for a long period of time.
- Power disconnection: when the power cord connected to the power grid is connected to the machine, the standby power is turned ON. When the power switch is turned ON, the main power is turned ON. The only operation to disconnect the power supply from the grid, unplug the power cord.

- 9 Protective Grounding An apparatus with class I construction shall be connected to a power outlet socket with a protective grounding connection.
  Protective Earthing - An apparatus with class I construction shall be connected to a mains socket outlet with a protective earthing connection.
- 10 The lightning flash with an arrowhead symbol, with an equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage' within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



11 The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



- 12 There are some areas with high voltage inside, to reduce the risk of electric shock do not remove cover of the device or power supply. The cover should be removed by the qualified personnel only.
- 13 The product should be serviced by qualified service personnel if:
  - The power supply or the plug has been damaged.
  - Objects have fallen into or liquid has been spilled on the product.
  - The product has been exposed to rain.
  - The product has been dropped or the enclosure damaged.



DO NOT OPEN

To reduce the risk of electric shock, do not remove screws. No user-serviceable parts inside. Refer servicing to qualified service personnel. To reduce the risk of fire, electric shock or product damage, do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

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# Before you start

CSUB is a compact active subwoofer for installation in home or public address systems. It features 10" low frequency driver, 200 W rated Class-D power amplifier, RCA line level input, 100 V level input, selectable crossover point, phase and volume controls.

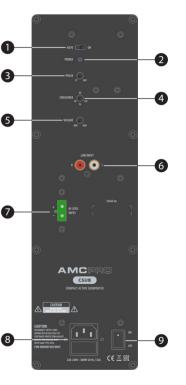
### **FEATURES**

- Ready to pick up audio from 100 V lines
- DSP based EQ correction
- Built in audio limiter
- Standby mode
- Class-D amplifier and switching power supply
- · Compact cabinet with 10" woofer

## Operation

### Rear Panel | CSUB

- 1. Power mode switch
- 2. LED power indicator
- 3. Phase degree selector
- 4. Crossover frequency selector
- 5. Volume control
- 6. Line level input
- 7. 100 V level input
- 8. Power plug socket and fuse box
- 9. Power button





## Operation

### Rear panel functions

#### POWER MODE SELECTOR

CSUB has two modes designed to control the main power supply. "AUTO" mode sets the subwoofer's power supply to standby if MCU can't detect an audio signal within 20 minutes. This function can be eliminated by setting the power mode selector to position "ON". In this setting, the subwoofer power supply always stays active. Subwoofer needs about 5 seconds to wake up from standby.

#### POWER INDICATOR

Bi-color LED indicates subwoofer status. Red color indicates standby mode. Green color means that CSUB is active and ready to play audio.

#### PHASE CORRECTION

Potentiometer designed to smoothly adjust audio signal phase in  $0^{\circ}$  – 180° range. This setting depends on the acoustic environment, we are recommending starting the system with a  $0^{\circ}$  value and adjusting it later if necessary to have the best bass performance in the chosen sweet spot.

#### CROSSOVER

Option to adjust DSP low pass filter settings. This adjustment takes impact to reproduced frequency and can be set in the 40 – 120 Hz range.

#### VOLUME

Subwoofers' volume potentiometer. Set the volume level according to your environment and needs.

#### LINE INPUT

RCA-type audio input, designed for line-level signal.

#### HI-LEVEL INPUT

Hi-level audio input is designed for direct connection to the 100V background music audio system line. This input is galvanic isolated inside the subwoofer and has a specially designed DSP setting to recover low-frequencies, lost in constant voltages audio lines.

NOTE: subwoofer has two audio inputs linked to different DSP settings. This DSP correction is based on an auto-detection circuit designed to detect which audio input is used. Do not use RCA and Hi-level input at the same time to prevent EQ correction switching from one DSP preset to another.

#### MAIN POWER CONNECTOR

Power connector with built-in fuse holder. The fuse specification is listed on the rear panel.

#### POWER SWITCH

Switch subwoofer ON or OFF.

## General Specifications

CSUB Compact Active Subwoofer

Technical Specifications	CSUB		
Rated output power	200 W		
Max power consumption	300 W		
Stand by power consumption	3 W		
Power supply	~ 220-230 V, 50 Hz		
Driver dimensions	10" (254 mm)		
Frequency Response	35 Hz - 150 Hz		
Crossover point	40 Hz - 120 Hz		
Inputs	1 x Stereo RCA, 1 x Mono hi-level input		
RCA input sensitivity	-14dBu		
RCA input impedance	10 kΩ		
Cooling	Passive cooling		
Material	Laminated MDF		
Colour	Black (RAL 9017)		
Dimensions (H x W x D)	44 x 430 x 245 mm		
Weight	10.6 kg		

The specifications are correct at the time of printing this manual. For improvement purposes, all specifications for this unit, including design and appearance, are subject to change without prior notice.

Notes				