

CM5EH Instruction manual



# CM5EH manual



#### Introduction

- Please read this manual carefully before using the product. This
  will give you the necessary product and installation instructions
  to assure a seamless installation and non-compromised overall
  sound quality.
- The CM5EH is a modern and very competitive built-in loudspeaker, featuring a dual power 100 Volt speaker line transformer as well as a direct 8 ohms connection, allowing you to connect up to 2 speakers in parallel per  $4\Omega$  stable amplifier channel. Easy to integrate in high quality BGM systems, this speaker offers a soundstage, unheard in this price range.
- For 100 Volt use, the CM5EH is equipped with a high quality 3/6 Watt 100 Volt transformer. Therefore, the speaker can be used in almost every application requiring BGM sound levels.
- CM5EH is the ideal speaker for background music distribution and has a very good speech intelligibility factor, making it your number one choice. In the office, the bathroom or the local library...
- The housing and grille are made from high quality ABS, with mounting clamps (which don't require any tools!) for the chassis and foolproof grille mounting. The woofer has a moisture proof coating and reinforced paper cone.

# Safety precautions

- Keep this manual for future reference.
- When making the hole in your mounting panel to mount the APart CM5EH speaker, make sure there is sufficient clearance behind the panel (no obstructions like A/C channels, power lines etc).
- Take care of your speaker wires; they should be free of damage. Damaged speaker wires may result in poor sound quality and can damage amplifiers.
- Only use accessories specified by the manufacturer.
- Make sure the mounting panel can support the speaker's weight.
- Use a sufficient amount of speakers to avoid death-spots.
- No mains power shall be connected to the loudspeakers, doing so will damage the speaker.
- This apparatus should only be serviced by qualified personnel.
   If not serviced by qualified personnel, warranty might be void.
- Use cable of the right gauge, certainly for long runs.
- Use cables with clear color indication and maintain polarity throughout the whole system.
- Avoid loud feedback from microphones, as it can damage your speaker.

- Please check the the packaging for any kind of damage upon reception of the goods. If the packing is damaged, please contact your local dealer before opening it.
- Please note that this speaker is meant for indoor use only!

### Recommended applications

- Bathrooms.
- Hallways.
- Boutiques.
- Board rooms & Offices.

# Connecting the speaker to a 100 Volt speaker line

The speaker can be connected to 100 Volt speaker lines and has a power of 3 or 6 Watts. Select 3 or 6 Watts, according to the application. Never connect the 3 and 6 Watt wires simultaneously!

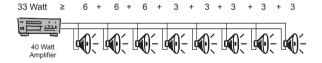
Transformer wires are color-coded:

Black = common. Connect to 100 Volt speaker line common (ground)

Red = 3 Watt, connect to 100 Volt speaker line positive (plus)

Yellow = 6 Watt, connect to 100 Volt speaker line positive (plus)

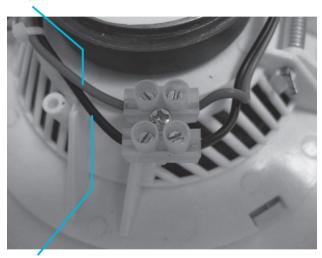
In 100 Volt systems, total system power is the sum of all speakers in the system, e.g.



The 100 Volt amplifier output power must be equal or higher than the total speaker power!

# Connecting the speaker to a Low-Z amplifier

First, disconnect the red and black wires from the transformer to the speaker interconnection:



Connect the Low-Z speaker wire to the free end of the connector. Black wire = common (ground), red wire is speaker + wire. The impedance of the speaker is 8 ohms. You can connect two speakers in parallel on a standard 4 ohm capable amplifier.

# Mounting the loudspeaker

The loudspeaker is very easy to install, due to the simple mounting system which does not require any tools, with 2 hidden spring loaded clamps. Open the clamps with 2 hands, carefully slide the speaker in place and release the clamps while positioning the speaker in the middle of the cut-out. Cut-out diameter is 160 mm.

# Technical specifications:

Speaker type	5 inch coated paper cone
Rated power RMS	6 W – 3 W @ 100 V
Rated RMS power Lo-Z	15 W
Music power Lo-Z	30 W
Nominal impedance	1666 Ohms/6 W/100 V – 3333 Ohms/3 W/100 V - 8 Ohms/ Low-Z
Frequency range	100 – 18000 Hz
Sensitivity	89 dB spl 1W/1m
Dispersion at 1 kHz	160°
Dispersion at 4 kHz	90°
Chassis color	white
Chassis type	plastic
Grille material	plastic

Removable grille	yes
Fixing type	spring loaded clamps
IP classification	54
Dimensions outside Ø	187 mm
Dimensions cutout Ø	160 mm
Mounting depth	45 mm
Total depth including mounting frame and grille	50 mm
Speaker weight	0.5 kg

# Warranty info

Apart-Audio warrants this product to be free of defects in material and workmanship for a period of one year for parts and for a period of one year for labor from the date of original end-user purchase. This warranty is valid only for the original end-user and cannot be transferred.

During the warranty period, Apart-Audio or one of its authorized service partners shall either repair or replace any product that proves to be defective upon inspection by Apart-Audio or its authorized service representative, free of charge.

This warranty does not include damages or product faults due to abuse, misuse or faulty installation.

Notes			



#### developed by

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Apart-Audio specifications are subject to change without notice.

