# **Desono**<sup>™</sup> CM Ceiling Loudspeaker

# **Installation & Operation Guide**





## **MODELS**

CM20DTS CM30DTD CM60DTD

## PRODUCT DESCRIPTION

The Desono CM ceiling loudspeakers deliver crystal clear audio for all your public address and background music needs. The sealed back can and bass reflex port give a controlled sound performance in any ceiling structure. The ultra-slim housing with minimal built-in depth has been tuned to optimize bass and midrange performance while maintaining sonic consistency. The matching sound image allows combining various models in the same room or area.

All models have a tool-free rotatable 16 ohm and 70/100 volt power selector on the front. Designed with the installer in mind, they can be blind-mounted from below the ceiling, and feature a magnetic grille for easy toolless installation and removal and can also be painted to match the room decor. Additionally, the tap switch is located on the face of the loudspeaker, so adjustments can be made without requiring ceiling access.

Desono CM ceiling loudspeakers are an ideal choice for a multitude of environments that demand superior speech intelligibility and full range music reproduction.

### **FEATURES**

- Ceiling loudspeaker with back can for controlled sound performance in any ceiling structure
- Tuned bass reflex port for optimised low-frequency performance
- 4.25" LF driver for CM20DTS and CM30DTD, both with 1" tweeter
- 6.5" LF driver for CM60DTD, with 1" tweeter
- 60 W dynamic power handling for CM20DTS, 80 W for CM30DTD and 120 W for CM60DTD
- Thin-edge loudspeaker grille for elegant integration
- · Easy grille mounting with integrated neodymium magnets
- Grille safety wire prevents grille from falling during and after installation
- · Paintable in any RAL color
- · Included tile bridge support rails prevent ceiling tile sagging
- · Quick installation with two fast screwing loudspeaker clamps
- Minimal built-in depth with uncompromised acoustical performance
- · Loudspeaker overload protection for a 24/7 failsafe operation
- Front panel selection of 16 ohm or 100V/70V operation allows for easy power adjustment without removing the loudspeaker from the ceiling or moving connection wires
- Enhanced cable management with incorporated strain relief and cable guidance along with provision for a cable gland
- In & Link connection with permanent pass through on the euroblock connector allows easy daisy chaining of multiple loudspeakers
- · Two seismic safety tabs for connecting safety cables



## **SUPPLIED ITEMS**

Unpack the contents and confirm following items are included:

- · Loudspeaker x 2
- Thin-edge grille x 2
- Tile rail x 4
- Tile rail spacer x 4
- Cutout template x 2
- · Important safety instructions x 1

Loudspeaker wires and safety cables are not included.

## INSTALLATION INSTRUCTIONS

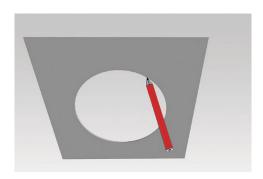


**CAUTION:** Biamp is not responsible for damages resulting from the negligent installation of any loudspeaker.

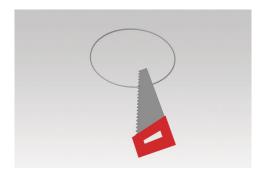


**WARNING:** Make sure that the mounting structure is capable of safely supporting the loudspeaker's weight.

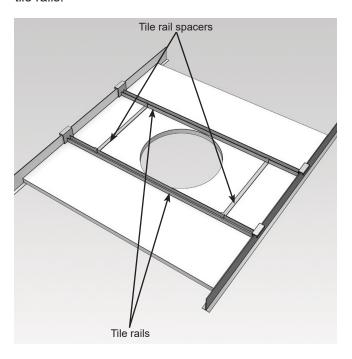
1. Use the cutout template to mark the mounting hole.



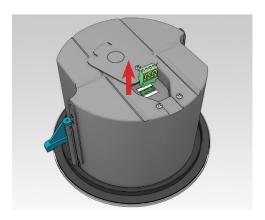
2. Cut the mounting hole. Make sure there are no cables or other obstructions behind the mounting panel to avoid damaging power cables or other infrastructure.



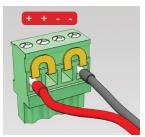
 Insert the two tile rails through the cut hole and place them on the ceiling surface near the opening. Insert the tile rail spacers in the hole and clip them on the tile rails.

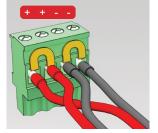


4. Open the connection box on the back of the loudspeaker and remove the euroblock connector.



5. Pull the loudspeaker wires through the mounting hole and connect them to the euroblock terminal.





wiring: single cable

wiring: daisy-chained to next unit



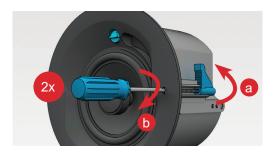
Use wire ferrules when stranded wire is used.

 Remove the grille from the loudspeaker. The grille is connected to the loudspeaker frame with a detachable wire for installer convenience and to serve as a grille safety restraint.

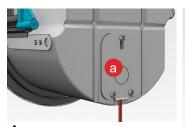




7. Turn the mounting clamps inwards (a) and tighten the screws slightly to secure them in the inward position (b).



8. Insert the euroblock connector in the connection box on the back of the loudspeaker and close the cover. This cover acts as a strain relief plate for the cable and retainer for the euroblock connector. Use the knockout (a) of 22mm (0.87 inch) on the cover if the installation requires the use of a cable gland (b).



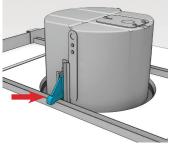




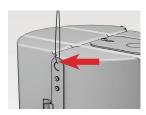
WARNING: Only use a non-conductive cable gland.

 Insert the loudspeaker into the hole and rotate the mounting clamp screws outwards to secure the speaker in place. Align the clamps with the tile rails and do not overtighten the mounting clamp screws.





 Attach a safety cable to one or both provided seismic safety tabs to secure the back can to the building structure.





#### WARNING:

Follow applicable building regulations when installing this loudspeaker. Otherwise the unit could fall, resulting in personal injury or death.



**WARNING**: Install the safety cable with as little slack as possible. If the safety cable is too long it may snap from excessive strain if the loudspeaker falls.

11. Set the power selector on the front of the loudspeaker to the required position. The selector switch allows for power adjustment without requiring ceiling access.





**WARNING**: Set the power selector prior to applying audio and only change the setting while the audio amplifer is shut off.



**CAUTION**: The 16 ohm setting is not compatible with 70 volt or 100 volt line amplifiers.



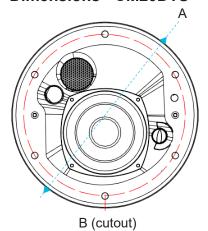
**CAUTION**: The highest 70 volt power setting is not compatible with 100 volt line amplifiers, only with 70 volt line amplifiers.

12. Install the grille on the loudspeaker. The grille is held in place by magnets.

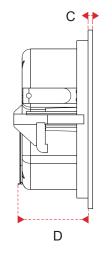
The grille may be painted to match decor. See the painting instructions on page 6.



# **Dimensions - CM20DTS**

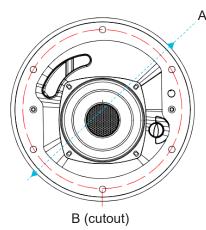


	mm	inch
Α	223	8.780
В	193	7.598

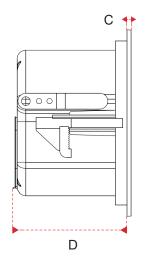


	mm	inch
С	5	0.197
D	84	3.307

# **Dimensions - CM30DTD**

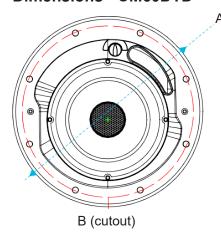


	mm	inch
А	223	8.780
В	193	7.598

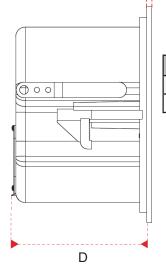


	mm	inch
С	5	0.197
D	131	5.157

# **Dimensions - CM60DTD**



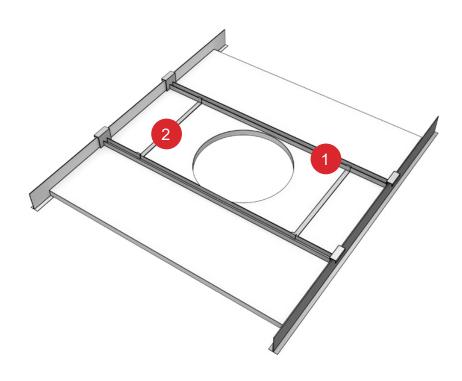
	mm	inch
А	258	10.157
В	232	9.134

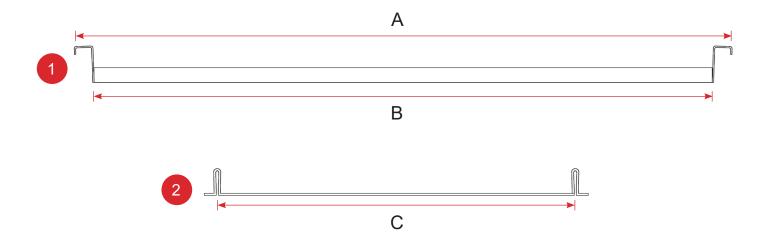


С

	mm	inch
С	5	0.197
D	157	6 181

# Dimensions - tile rail and tile spacer





	mm	inch
Α	627 ± 5	24.685 ± 0,197
В	594	23.385
C (CM20DTS / CM30DTD)	190	7.480
C (CM60DTD)	228	8.976



## PAINTING INSTRUCTIONS

The grille may be painted to match room decor. Remove the scrim material (cloth) prior to painting.

- 1. Purchase a citrus-based label/adhesive remover spray (PRF Label Off®, Goo Gone® or similar).
- 2. Pull the grille away from the cabinet. Do not bend the grille.
- Gently pry the logo from the grille using a nonmetallic tool, or fully mask the logo. Use a sharp knife to trim the masking material close to the edges of the masked areas.
- 4. Remove the grille cloth (scrim material) by spraying all of the fabric with the adhesive remover.
- 5. Wait a few minutes to allow the fabric to fully absorb the spray.
- 6. Carefully peel off the grille cloth, taking care not to rip or stretch the fabric.
- 7. Once the cloth and logo have been removed, some glue residue may remain on the grille. If so, apply additional adhesive remover to remove the glue.
- 8. Thoroughly clean and degrease the grille before painting. Do not use a solvent (see Cautions above).
- 9. Paint the grille with several light coats of spray paint. Do not clog the grille perforations with paint.
- 10. Allow the paint to fully dry and cure.
- Reattach the grille cloth. Use a light coat of simple contact adhesive. Avoid clogging the grille perforations with any adhesive.
- 12. Press and smooth the cloth on the grille.
- 13. Reattach the logo if required.
- Attach the grille to the back can per the installation instructions.

CAUTION: NEVER use abrasives, gasoline, kerosene, acetone, methyl ethyl ketone (MEK), paint thinner, harsh detergents or other chemicals on the loudspeaker. These chemicals and agents may permanently damage the finish. Some are also toxic and highly flammable.

**IMPORTANT**: Do not bend or damage the grille on removal or reinstallation.

**IMPORTANT**: Blocking the grille holes with paint or getting any paint on the drivers or internal parts will affect loudspeaker performance and void the warranty.

## **CONTACT US**

Email: support@biamp.com

Web: support.biamp.com

Warranty: biamp.com/legal/warranty-information

Safety & Compliance: biamp.com/compliance

