## desono<sup>™</sup> C-IC6 Loudspeaker Installation & Operation Guide

# biamp.



#### **Product Description**

The desono<sup>™</sup> C-IC6 is a low-profile, two-way passive coaxial loudspeaker optimized for speech and music reproduction in conferencing applications. The C-IC6 may be used with traditional amplifiers, and also directly integrates with the Tesira® AMP-450BP: a four-channel "backpack" PoE+ amplifier that attaches directly to the C-IC6.

#### Setup and Use

The Tesira software provides an intuitive interface for setup and programming of the AMP-450BP. The information supplied by this manual relates to physical connections and device setup. For more details on software setup, please consult the <u>Tesira Help File</u>.

The C-IC6 conferencing loudspeaker is equipped with a bridge-mounted 165mm, treated paper low-frequency woofer, a separate 25mm soft-dome high-frequency tweeter and a passive crossover/protection circuit network. The coverage angle is 130° and includes a four-position, 5.08 pluggable Euroblock connector and two RJ-45 connectors for audio signal connections.

The C-IC6 speaker supports audio connections via either standard category cable or traditional speaker cable. The loudspeaker includes a tile bridge kit for secure installation in a ceiling. It also features a magnetic grill for tool-less installation and removal. The grille plate is available in white, black or red, and can be painted to match the room decor.

The optionally-available AMP-450BP includes an audio locate feature on the front face that allows installers to validate cabling and connections before the audio system if fully commissioned.

#### Installation

Install away from heat sources, such as vents, radiators, heat registers and stoves. Also avoid installing near water or steam. The conferencing loudspeaker has a secondary support point via chain or wire for connecting to the building structure. Do not exceed the maximum ambient operating temperature of  $32^{\circ} - 95^{\circ}$  (0° -  $35^{\circ}$  C).

The loudspeaker includes a tile bridge installation kit. Detailed installation instructions are on the following pages.

#### Features

- · Low-profile passive speaker, less than 6-inches (153 mm) total depth
- 8-ohm nominal impedance
- 130° coverage angle optimized for low ceilings
- Supports both standard category cables and traditional speaker wiring for audio connections
- Designed for integration with the AMP-450BP (backpack PoE+ amplifier)
- Bridge-mounted 1-inch (25 mm) soft dome tweeter
- 6.5-inch (165 mm) treated paper woofer mechanically isolated from the high frequency driver
- 60W with peak power of 240W
- CE marked, UL listed and RoHS compliant



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#### desono<sup>™</sup> C-IC6 Loudspeaker

- 1. Connector Cover and Hardware
- 2. RJ-45 (x2) and Euroblock Connector
- 3. Hanger Bracket
- 4. Clamp Assembly (x4)
- 5. AMP-450BP (PoE+ amplifier) Attach Points
- 6. Speaker Grille

### Loudspeaker Installation

The C-IC6 loudspeaker is designed to be installed with the included tile bridge kit and may be installed with or without above ceiling access. It is at the discretion of the installer to determine the most practical method of installation while making sure any required safety or regulatory precautions are followed.

Prior to cutting drywall or ceiling tiles, verify speaker wiring location.

#### For drop-ceiling installations, do the steps that follow:

- 1. Locate the center of the tile and use the included tile bridge C-Ring as a template to mark the speaker cutout with a pencil or appropriate implement.
- 2. Cut along the traced line and remove the cutout ceiling material.
- 3. Remove any rough material or other debris from the cutout and in and around the hole.
- 4. Install the two tile bridge rails parallel to each other on either side of the cutout as shown.
- 5. Place the C-Ring over the tile bridge rails as shown.



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- 6. Install the two screws that secure the C-Ring to the tile bridge rails.
- 7. Remove the grille from the loudspeaker and lift it adjacent to the cutout.
- 8. Connect the loudspeaker cabling to the appropriate connections.
- 9. Connect the hanger bracket to a safety chain/cable if required.
- 10. Insert the speaker assembly into the cutout. Tighten the clamp assembly screws so the frame legs rotate and clamp the loudspeaker to the C-Ring and ceiling tile.
- 11. Replace the loudspeaker grille.



#### For drywall ceiling installations, do the steps that follow:

- 1. Use the included tile bridge C-Ring as a template to mark the loudspeaker cutout on the drywall ceiling with a pencil or appropriate implement. The tile bridge rails are not needed for this installation.
- 2. Cut along the traced line and remove the cutout ceiling material.
- 3. Remove any rough material or other debris from the cutout and in and around the hole.
- 4. Insert the C-Ring through the hole. The C-Ring must be manipulated by inserting one end in the cutout and feeding/slightly twisting it until it is above the ceiling/in the plenum space.

- 5. Set the C-Ring in the ceiling cutout.
- 6. Remove the grille from the loudspeaker and lift it adjacent to the cutout.
- 7. Connect the loudspeaker cabling to the appropriate connections.
- 8. Connect the hanger bracket to a safety chain/cable if required.



- 9. Insert the speaker assembly into the cutout. Tighten the clamp assembly screws so the frame legs rotate and clamp the loudspeaker to the C-Ring and ceiling.
- 10. Replace the loudspeaker grille.

#### Wiring

The C-IC6 may be wired to an appropriate amplifier using a Euroblock connector or via the RJ-45 connector to one of biamp's PoE+ amplifiers. The AMP-450BP may be mounted directly to the C-IC6 for convenient installation.





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**PoE+ Amplifier Wiring Examples** 





**Standard Amplifier Wiring Example** 





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