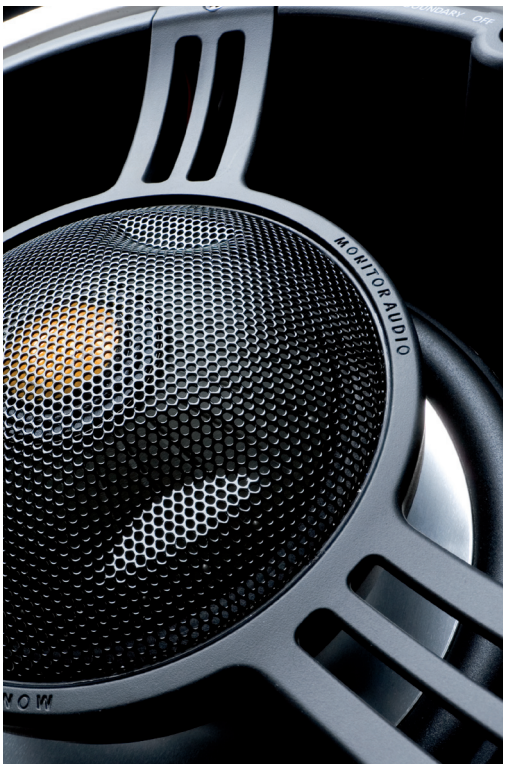
Installation Guide
200 Series



MONITOR AUDIO®

Installation guide

200 Series

The 200 Series models utilise C-CAM® bass drivers and a higher spec version of the C-CAM® gold dome tweeter. These models offer higher grade performance, and greater flexibility.

The renowned C-CAM® (Ceramic Coated Aluminium Magnesium alloy) cone maximises the potential of the driver mechanism. C-CAM® is an innovative alloy material that exhibits ideal mechanical properties for use in high performance loudspeaker cones and diaphragms.

The pivoting tweeter is based on Monitor Audio's famous 25mm gold C-CAM® dome. Improvements to the surround and motor system have extended the frequency response to beyond 30 kHz, so that it is ready to exploit digital cinema and audio formats.

For the LCR models a unique Inverted Dual Concentric (IDCTM) pivoting mid-range/tweeter module provides up to 18 degrees of movement, allowing the sound to be directed towards the desired listening zone. These models offer superior performance and flexibility over typical 2-way or fixed angle speaker designs.

The high frequency level control together with boundary compensation control facilitates a wider range of possible adjustments. See page 3.

Introduction

Please read this installation guide carefully before proceeding.

NOW AVAILABLE: Pre-construction brackets. These are for use when installing any Custom Installation product before the plaster board/ rock wall, is fitted. They show the location of the speakers to the builder, allow pre-wiring and give them a solid secure edge to cut around. Please ask your dealer about these brackets and to confirm which is correct for your installation.

PLEASE CHECK YOU HAVE THE FOLLOWING ITEMS IN THIS KIT BEFORE PROCEEDING:

- 1 x Complete speaker & tweeter assembly.
- 1 x Grille (which can be painted).
- 1 x Mounting cut out template (in packaging).
- 1 x Plastic paint mask (for covering the baffle while painting the frame).
- 1 x Self adhesive grille membrane scrim (to be attached to the inside the grille after it has been painted).
- 1 x Guarantee card in this manual.

Prior to Installation Check the Following:

- Please check the minimum depth of the product (according to the specifications sheet) is correct for the assembly to fit into recess.
- The fixing clamps require a minimum of 25mm (1 Inch) of surface area around the cut-out hole to ensure a secure fixing!
- Series 200 loudspeakers are splash and moisture proof, so they can be used in bathrooms, pool areas, etc. DO NOT allow them to be in constant contact with water/ moisture.
- The fixing clamps will operate on ceilings with a minimum thickness of 9mm (3/8 Inches) to a maximum depth of 32mm (1¼ Inches).
- Do not attempt to fix these speakers to your ceiling if you are unsure of your ability to provide a secure and safe fixing. IF IN DOUBT CONTACT YOUR LOCAL AUTHORISED MONITOR AUDIO DEALER.
- Ensure that there are no water pipes, air ducts or electricity cables running immediately behind the cut out area!
- Please work from secure steps or scaffold and avoid trailing wires for your safety and those around you.
- Always turn off the amplifier or other devices in the system when connecting these speakers.

Installation procedures

Painting

NOTE: If you are choosing to paint your In-Ceiling loudspeaker, we recommend you do this prior to installation by following these simple steps:

1. Remove the membrane scrim from the inside of the grille (do not fit grille to speaker frame).
2. Place paint mask over the speaker baffle.
3. Paint both the frame and the grille at the same time and with the same batch of paint (if they are to be the same colour).
4. When they are both dry, remove the paint mask from the baffle, and place the spare membrane scrim (in the packaging) into the inside of the grille.
5. Your product(s) are now ready to install, including fitting the grille. Please refer to step 4 below.

Using Pre-Construction Brackets

If the holes have been pre-cut, simply refer to step 4 onwards (below) for full fitting instructions.
If pre-construction brackets have been used prior to the fixing of plaster board/ sheet rock and the holes have not been cut, locate the pre-construction brackets and cut around the inside edge of the bracket. Locate the speaker cable, connect to the sprung terminals and fit the speaker. Refer to the fitting instructions below (step 4 onwards).
To fine-tune the speakers please refer to the high frequency control and boundary compensation details below

Using the Fixing Template

1. Use template to locate position of cut out. The adhesive backing allows for repositioning a number of times.
2. Draw around diameter of the template.
3. Remove template and cut hole.
4. Locate speaker cable and connect by pushing the terminals in and releasing to clamp the cables.
5. Fit back box into prepared hole and tighten fixing clamps. These will move outwards automatically upon tightening! DO NOT OVER TIGHTEN! Once contact is made 2-3 turns are all that is required.
6. To fine-tune the speakers please refer to the high frequency control and boundary compensation details below.

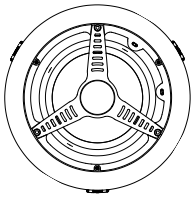
High Frequency control

The factory H.F setting provides a flat or odB level, which will suit the majority of typical installations.
Setting the switch in the +3dB position will add brightness and additional clarity to the system. This may be effective in a room with a large amount of soft furnishings.
Setting the switch in the -3dB position will reduce the brightness and provide a duller sound. This may be effective in a room with a few of soft furnishings, or in an installation with a wooden floor.

Boundary Compensation control

The bass drivers are optimised to work in a large closed cavity, with minimal damping. This should provide a natural roll off characteristic that will ensure optimum performance and bass extension. However, it may be necessary in certain installations to locate the speaker close to a corner apex of the ceiling. In this situation the bass region will become accentuated and un-even, resulting in un-suitable balance characteristics. The effect is similar to placing a conventional hi-fi speaker in the corner of a room. The boundary compensation provides a gentle roll off character whilst preserving the extreme low frequency output. The switch position is either in or out.

C265



C-CAM® Tri-Grip

Frequency Response
60Hz - 30 Hz

Impedance (nominal)
6 Ohms

Sensitivity (1W@1M)
88.5dB

Maximum SPL
108 dBA

Power Handling (R.M.S)
75 W

Recommended Amp
10 - 75 W

Driver
1 x 6.5" C-CAM®'cone bass driver
1 x 1" C-CAM® pivoting gold dome tweeter

Overall Diameter
250mm (9 13/16 inch)

Overall Depth
117 mm (4 10/16 inch)

Cut-out Hole Diameter
211mm (8 5/16 inch)

Mounting Depth
112 mm (4 7/16 inch)

Controls
+3db / 0dB / -3dB High Frequency level switch &
boundary compensation switch

Fixing Type
3 position Tri-Grip dog fixings

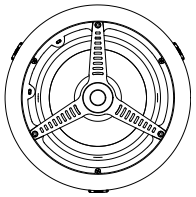
Cable Connection
Gold plated 'push' type terminals

Construction Material
Mineral filled ABS plastic (UL-94 V0)

Pre-construction Bracket
CB6 (Purple)

Weight Kg (lb)
2.9Kg (6.39 lbs)

C280



C-CAM® MMP®II Tri-Grip

Frequency Response
50Hz - 30 Hz

Impedance (nominal)
6 Ohms

Sensitivity (1W@1M)
90dB

Maximum SPL
111.6 dBA

Power Handling (R.M.S)
120 W

Recommended Amp
15 - 120 W

Driver
1 x 8" C-CAM® cone bass driver
1 x 1" C-CAM® pivoting gold dome tweeter

Overall Diameter
286mm (11 1/4 inch)

Overall Depth
124 mm (4 14/16 inch)

Cut-out Hole Diameter
247mm (9 3/4 inch)

Mounting Depth
119 mm (4 11/16 inch)

Controls
+3db / 0dB / -3dB High Frequency level switch
& boundary compensation switch

Fixing Type
3 position Tri-Grip dog fixings

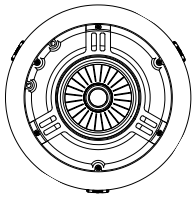
Cable Connection
Gold plated 'push' type terminals

Construction Material
Mineral filled ABS plastic (UL-94 V0)

Pre-construction Bracket
CB8 (Green)

Weight Kg (lb)
3.8 Kg (8.38 lbs)

C265-LCR



C-CAM® IDC™ Tri-Grip

Frequency Response
60 Hz - 30 Hz

Impedance (nominal)
6 Ohms

Sensitivity (1W@1M)
88.5 dB

Maximum SPL
108 dBA

Power Handling (R.M.S)
85 W

Recommended Amp
10 - 85 W

Crossover Frequency/Slope
Bass low pass: 250 Hz @ 6 db/Octave
Mid: 250 Hz @ 6 db/Octave &
3 KHz @ 12 dB/Octave
H.F. 3 KHz @ 12 dB/Octave

Driver
1 x 6.5" C-CAM® cone bass driver
Dual concentric module housing:-
1 x 4" C-CAM® 'inverted' mid-range driver (IDC™)
1 x 1" (25mm) C-CAM® gold alloy dome tweeter

Overall Diameter
250 mm (9 13/16 inch)

Overall Depth
152 mm (6 inch)

Cut-out Hole Diameter
211 mm (8 5/16 inch)

Mounting Depth
147 mm (5 13/16 inch)

Controls
+3db / 0dB / -3dB
High Frequency level switch &
Boundary compensation switch

Fixing Type
3 position Tri-Grip dog fixings

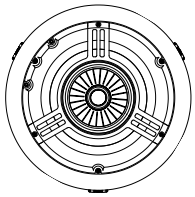
Cable Connection
Gold plated 'push' type terminals

Construction Material
Mineral filled ABS plastic (UL-94 V0)

Pre-construction Bracket
CB6 (Purple)

Weight Kg (lb)
3.46 Kg (7.7 lbs)

C280-LCR



C-CAM® IDC™ Tri-Grip

Frequency Response
50 Hz - 30 Hz

Impedance (nominal)
6 Ohms

Sensitivity (1W@1M)
90 dB

Maximum SPL
111.6 dBA

Power Handling (R.M.S)
120 W

Recommended Amp
15 - 120 W

Crossover Frequency/Slope
Bass low pass: 250 Hz @ 6 db/Octave
Mid: 250 Hz @ 6 db/Octave &
3 KHz @ 12 dB/Octave
H.F. 3 KHz @ 12 dB/Octave

Driver
1 x 8" C-CAM® cone bass driver
Dual concentric module housing:-
1 x 4" C-CAM® 'inverted' mid-range driver (IDC™)
1 x 1" (25mm) C-CAM® gold alloy dome tweeter

Overall Diameter
286 mm (11 1/4 inch)

Overall Depth
159 mm (6 4/16 inch)

Cut-out Hole Diameter
247 mm (9 3/4 inch)

Mounting Depth
154 mm (6 1/16 inch)

Controls
+3db / 0dB / -3dB
High Frequency level switch &
Boundary compensation switch

Fixing Type
3 position Tri-Grip dog fixings

Cable Connection
Gold plated 'push' type terminals

Construction Material
Mineral filled ABS plastic (UL-94 V0)

Pre-construction Bracket
CB8 (Green)

Weight Kg (lb)
4.4 Kg (9.7 lbs)

Declaration of Conformity

We, Monitor Audio Ltd.
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Rayleigh
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SS6 7XL
England

CE

Declare in own responsibility, that the products described in this manual are in compliance with technical standards:
EN 50082-1 : 1998
EN 55013 : 2001
EN 50020 : 2002

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MONITOR AUDIO®