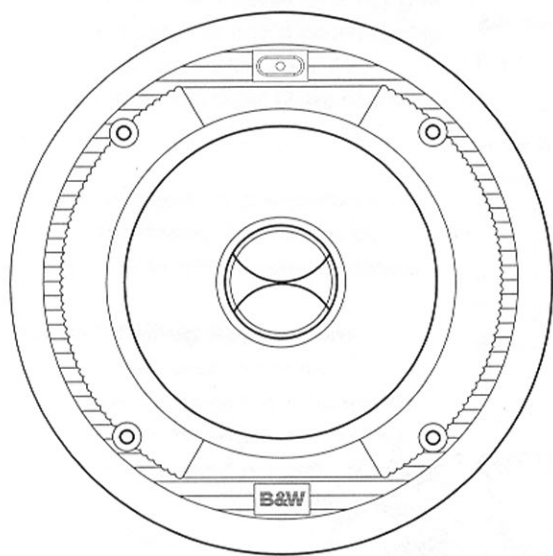


Casa[™] Installation Series

ACM[™] 65, ACM[™] 80 Installation notes



LISTEN AND YOU'LL SEE

Figure 1

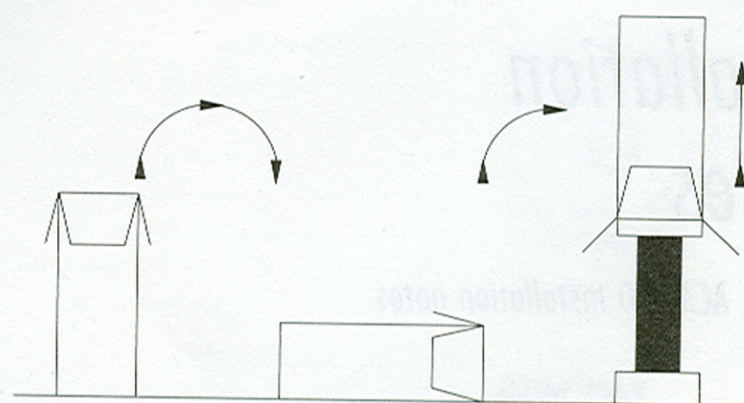
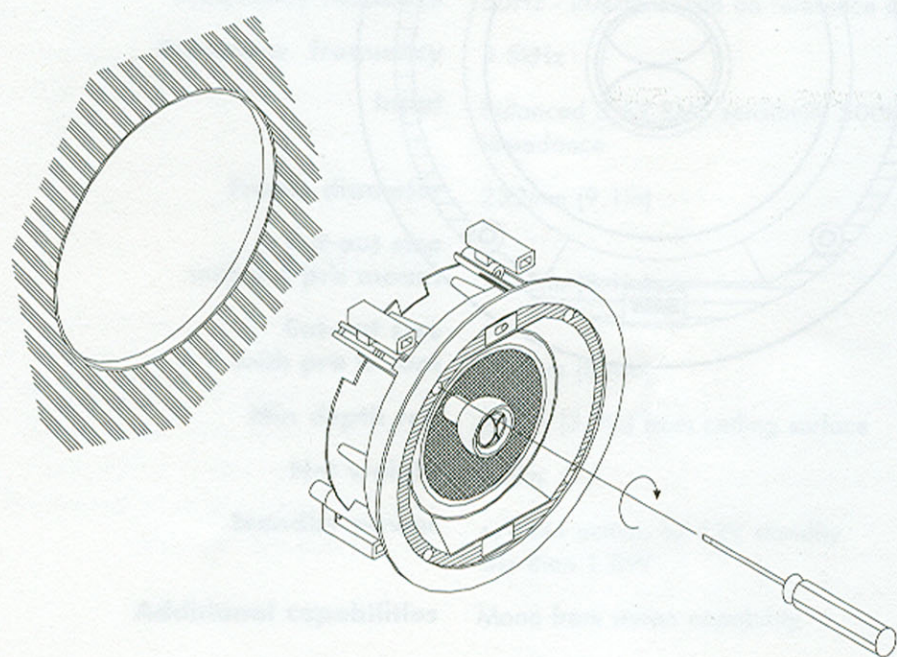


Figure 2



THESE NOTES MUST BE READ IN CONJUNCTION WITH THE CASA INSTALLATION MANUAL. A FULL COPY OF WHICH IS AVAILABLE AT <http://clarity.bwspeakers.com>

INTRODUCTION

Thank you for purchasing B&W Active Ceiling Mount (ACM™) speakers.

Since its foundation in 1966, the continuing philosophy of B&W has been the quest for perfect sound reproduction. It is our policy to make sure the advanced features pioneered on one product are incorporated into others we manufacture. The ACM™ range incorporates woven Kevlar® cone mid/bass drive units for lowest coloration and maximum definition.

However, no matter how good the speakers themselves, they must work well in the listening room and time spent on planning the installation will reap the reward of many hours listening pleasure. Please read through this manual fully. It will help you optimise the performance of the system.

UNPACKING

(figure 1)

- Fold the top carton flaps right back and invert the carton and contents.
- Lift the carton clear of the contents.
- Remove the inner packing from the product.

Check the contents:

- 2 x Frame/baffle with drive unit, amplifier and swing out dogs
- 2 x Loudspeaker grille
- 1 x Alignment template
- 2 x Paint mask

We suggest you retain the packaging for future use. Remove the grilles from the frames and, to avoid damage, keep them in their plastic bags (and preferably in the carton) away from the work area until you are ready to fit them.

POSITIONING – NEW CONSTRUCTION VERSUS RETROFIT

Check that there is no conflict with other

ceiling installations (pipe work, air conditioning, powercabling etc.). In existing construction, use a stud-finding tool to map the area accurately and a pipe detector to scan the proposed installation position. Avoid installing the speakers in the same cavity of the ceiling as flimsy ducting, which may be induced to rattle. The speakers are designed to operate satisfactorily in a wide range of cavity volumes, ideally above 15 litres (0.5 cu ft).

The speakers are balanced for half-space mounting (i.e. flush in a ceiling or soffit). Placement near a wall/ceiling junction or in a corner is to be avoided as it may give rise to too much bass and a boomy quality to the sound. If possible, keep the speakers more than 0.5m (20in) from the ceiling edges.

The following sections give guidance on optimum positioning, but this may be modified in line with domestic constraints.

Normal Ceiling Applications

For distributed sound, mount the loudspeakers in the ceiling. The spacing will depend on the height of the ceiling and the level of sound required. More speakers played at a lower volume will give better clarity.

Warning: the ACM™ speakers produce a static magnetic field that extends outside the speaker boundary. As such they should not be placed within 0.5m (20in) of equipment that may be affected by such a field, e.g. Cathode Ray Tubes in TVs and Personal Computers.

DAMPING THE CAVITY

Loosely fill the whole section of the ceiling cavity with wadding. Fibreglass and mineral wool matting supplied for heat insulation are suitable, but not closed cell foam or expanded polystyrene. Check there is no debris that may fall into the speaker (especially in ceiling mount situations).

IMPORTANT: YOU SHOULD CHECK THAT THE INSTALLATION ITSELF AND THE MATERIALS YOU USE MEET THE LOCAL FIRE AND BUILDING REGULATIONS.

FITTING THE FRAME

New Construction

Fit the separately available pre-mount kit (PMKc65 for ACM™ 65, PMKc80 for ACM™ 80.) to the studding before the drywall panels are fitted, following the instructions supplied with the kit. The drywall panels should be fitted up to the pre-mount frame and plastered over.

Existing Construction

Push out the slots in the template provided. Position the template on the ceiling as required. Mark along the inside edges of the slots and cut out the aperture neatly.

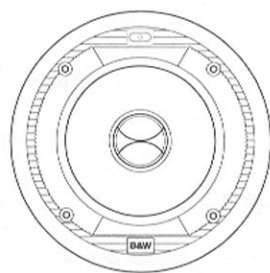
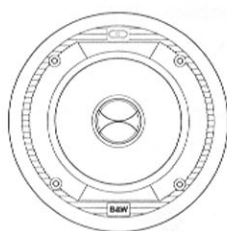
All Methods

(figure 2)

Position the frame in the ceiling and screw in the 4 screws visible from the front of the frame. These screws swing out clamping dogs that locate behind the drywall. Ensure that they have located properly and tighten the screws. A certain amount of flexing of the frame is allowed to take up the unevenness in the mounting surface, but do not over tighten the screws as excessive distortion of the frame may occur.

CUSTOMISING

The frame and grille have paintable white semi-matte finish, ready if necessary to be refinished to match your own decor. Fit the paint mask before re-finishing. Do not refinish the drive units or baffle area behind the grille. Avoid touching the drive units, as damage may result.



ACM™65

Description	2-way coaxial ceiling mount active speaker system
Drive units	1x 165mm (6.5 in) Kevlar® mid/bass 1x 25mm (1in) metal dome high-frequency
Amplifier power	25W
Frequency range	-6db at 50Hz and 30kHz
Frequency response	55Hz - 20kHz $\pm$ 3dB on reference axis
Crossover frequency	3.5kHz
Input	Balanced 3.5V RMS sensitivity 500k impedance
Frame diameter	232mm (9.1in)
Cut-out size without pre mount	206mm (8.1in)
Cut-out size with pre mount	213mm (8.4in)
Min depth req	95mm (3.8in) from ceiling surface
Net weight	0.6kg
Standby power	+/- 24v active, +/-12V standby less than 1.0W
Additional capabilities	Mono from stereo capability

ACM™80

Description	2-way coaxial ceiling mount active speaker system
Drive units	1x 200mm (8in) Kevlar® mid/bass 1x 25mm (1in) metal dome high-frequency
Amplifier power	30W
Frequency range	-6db at 36Hz and 30kHz
Frequency response	40Hz - 20kHz $\pm$ 3db on reference axis
Crossover frequency	3.5kHz
Input	Balanced at 3.5V RMS sensitivity 500k impedance
Frame diameter	280mm (11in)
Cut-out size without pre mount	254mm (10in)
Cut-out size with pre mount	261mm (10.3in)
Min depth req	100mm (4in) from ceiling surface
Net weight	1.9kg
Standby power	+/- 24V active, +/- 12V standby Less than 1.0w
Additional capabilities	Local input, subzone capability



LISTEN AND YOU'LL SEE

Kevlar is a registered trademark of DuPont. E & OE.

B&W Loudspeakers Ltd. reserves the right to amend details of the specification without notice in line with technical developments.
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