



AVAILABLE AT
DIGITAL CINEMA

CT7.5 LCRS
Installation Instructions



Figure 1

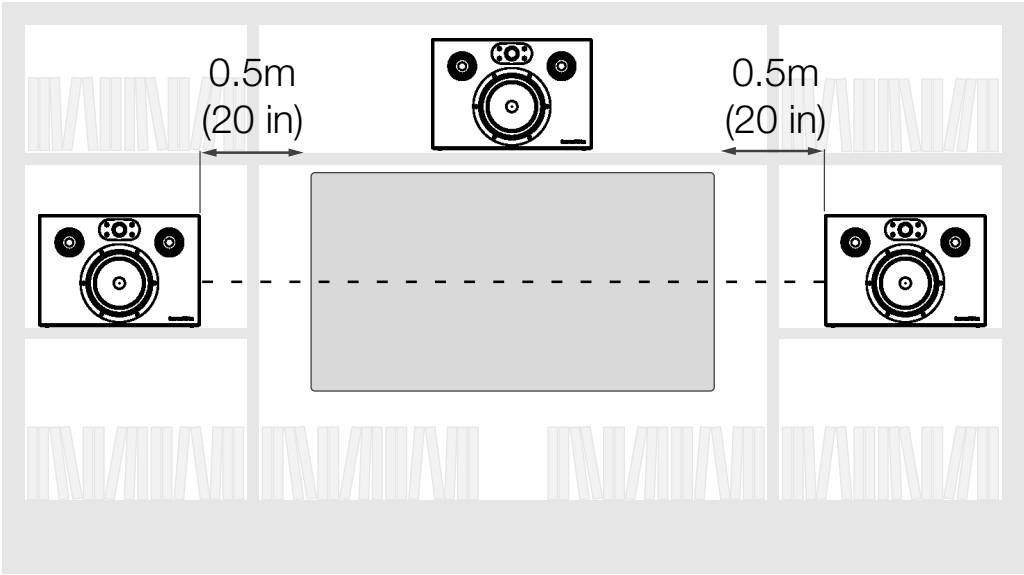


Figure 2

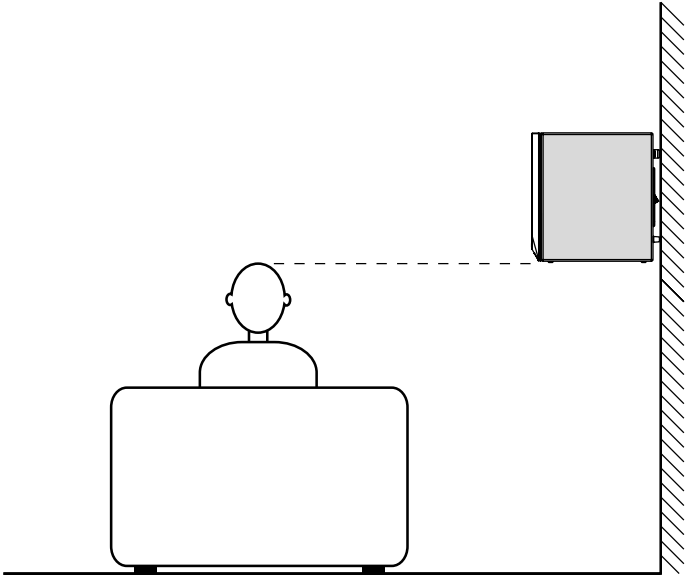


Figure 3

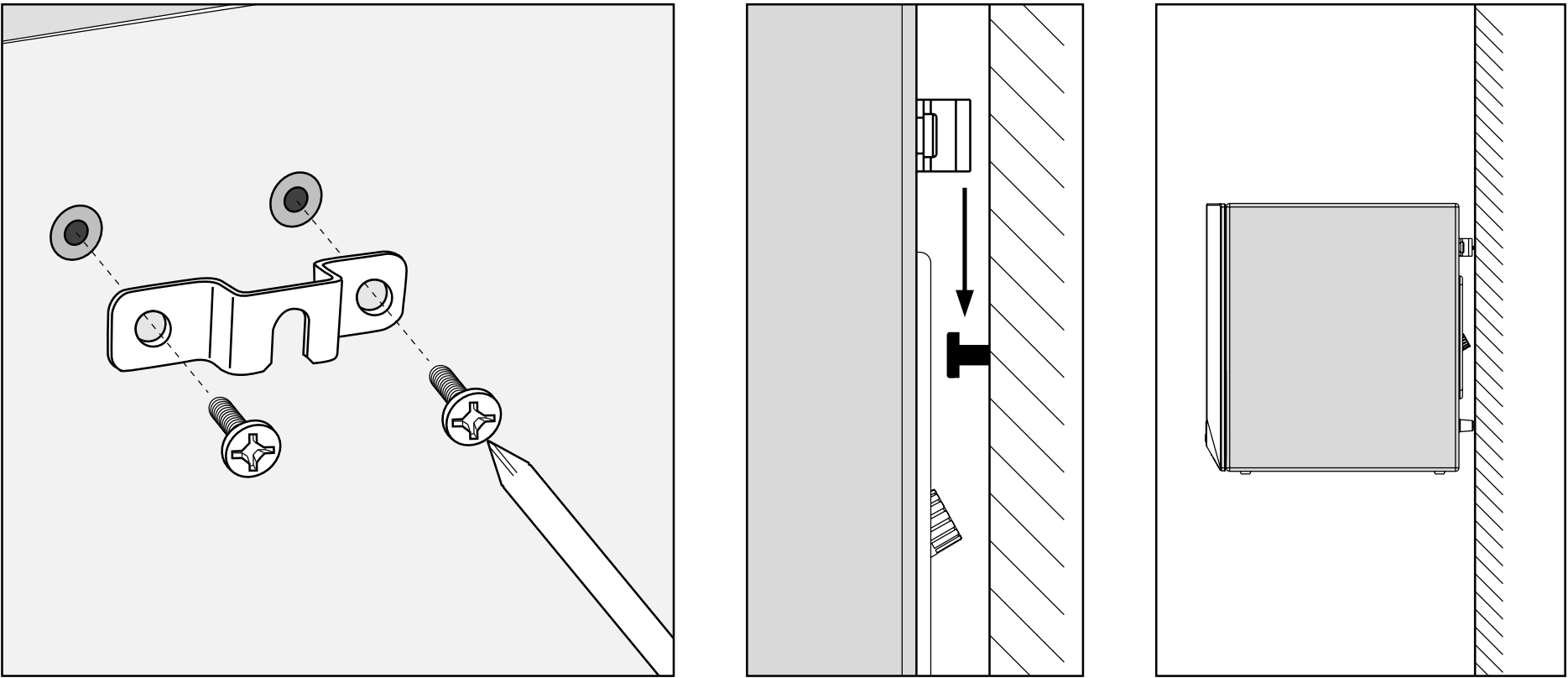


Figure 4

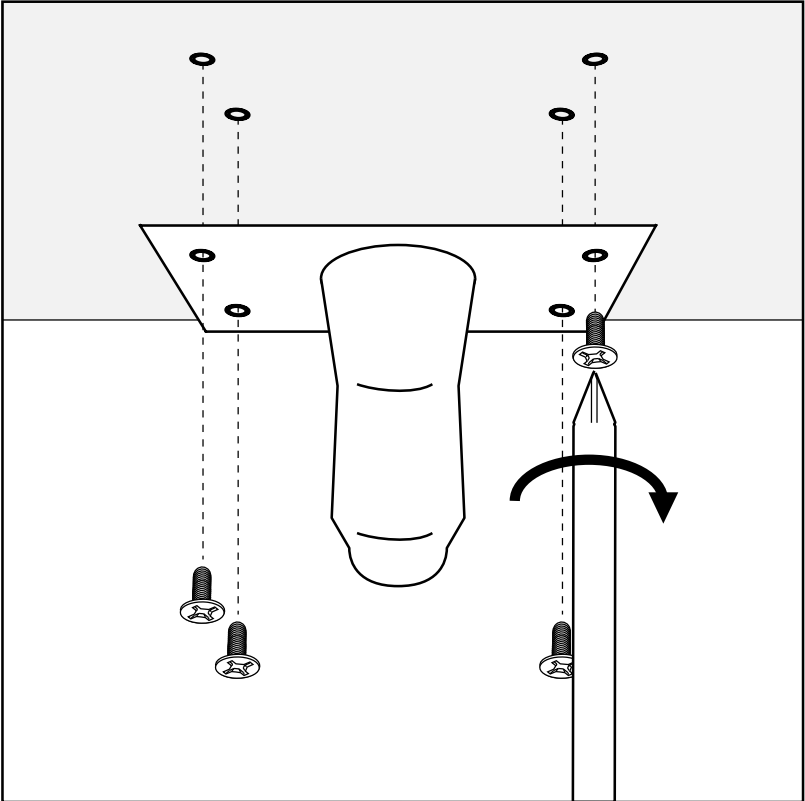
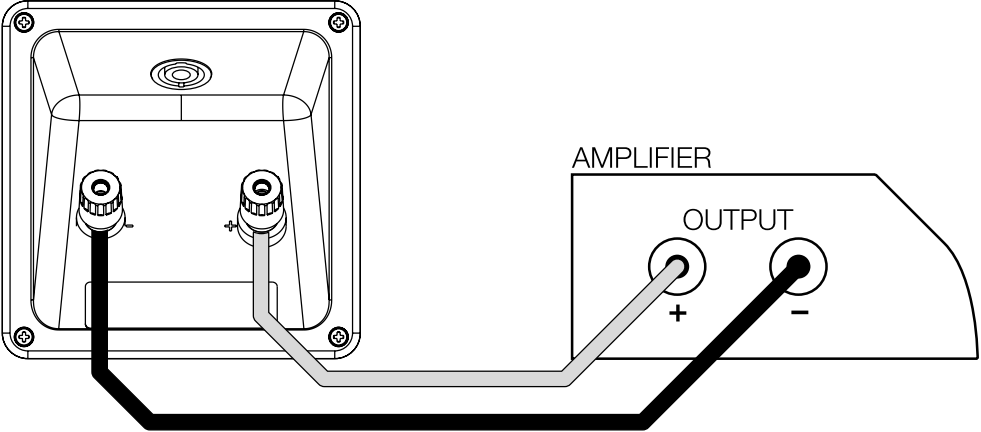


Figure 5a



be at least 3 mm
smaller!

Figure 5b

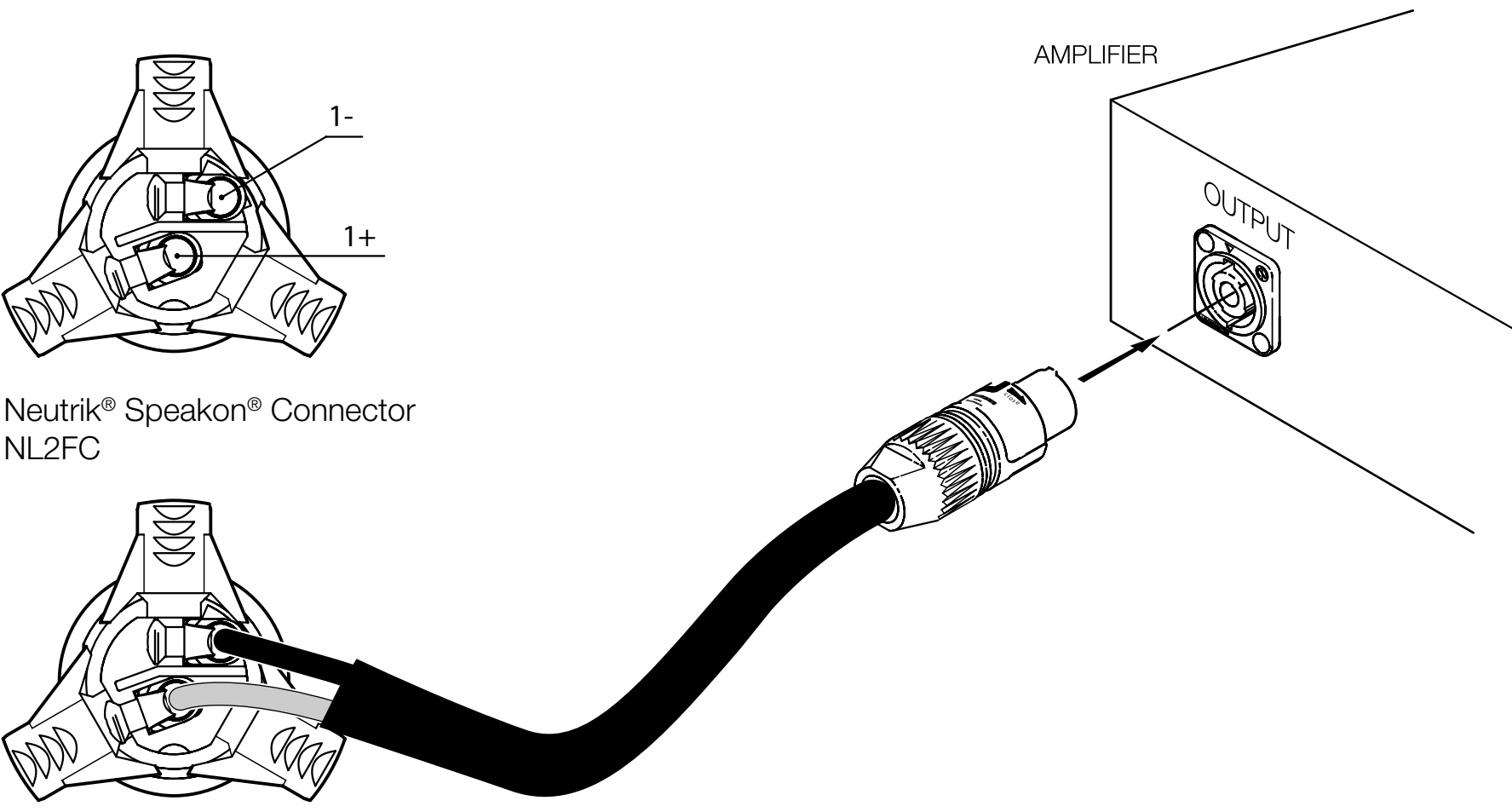
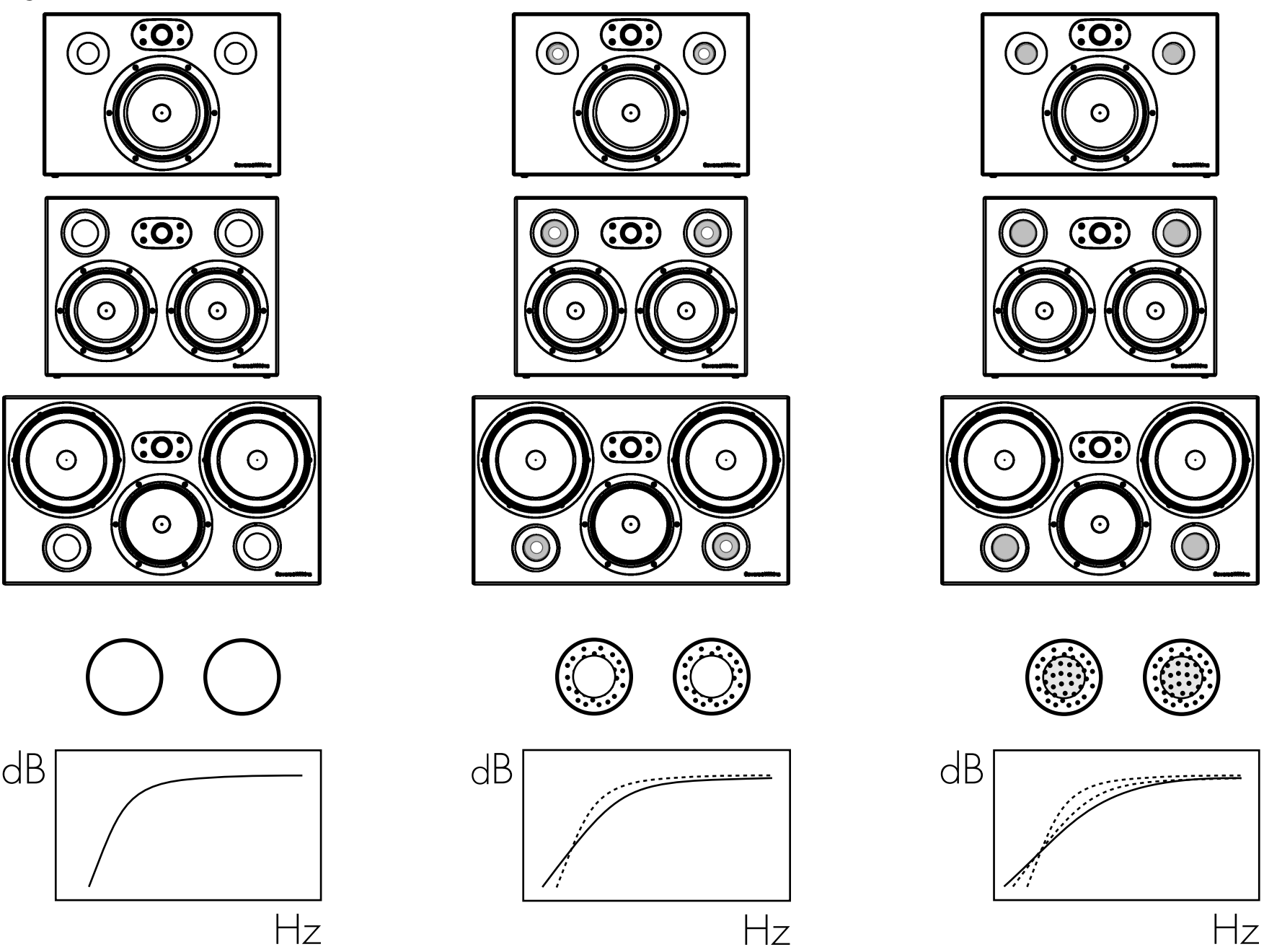


Figure 6



English

Installation manual

Dear customer,

Thank you for choosing Bowers & Wilkins. Please read this manual fully before unpacking and installing the product. It will help you to optimise its performance. B&W maintains a network of dedicated distributors in over 60 countries who will be able to help you should you have any problems your dealer cannot resolve.

Environmental Information



All B&W products are designed to comply with international directives on the Restriction of Hazardous Substances (RoHS) in electrical and electronic equipment and the disposal of Waste Electrical and Electronic Equipment (WEEE). These symbols indicate compliance and that the products must be appropriately recycled or processed in accordance with these directives. Consult your local waste disposal authority for guidance.

Carton Contents

Check in the carton for:

- 4 Adhesive rubber feet
- 2 Adhesive rubber spacers
- 2 Port plugs
- 1 Speakon® plug
- 2 Wall brackets
- 4 M6 bolts

Speaker Installation

CT700 Series speakers can either be installed within existing or custom designed home theatre system cabinets, or wall mounted using a variety of brackets.

If the speakers are to be installed within a cabinet it is important to ensure that it is capable of carrying their weight and that it is structurally sound. Significant vibration of the cabinet panels may seriously affect the subjective performance of the speakers. Figure 1 illustrates the installation of three CT700 Series speakers in a home theatre cabinet showing the recommended dimensions between the speakers and space around them.

Adhesive rubber feet are supplied for attachment to the underside of the speakers in order both to protect the cabinet finish and to reduce vibration. Attach one adhesive foot at each underside corner of the speakers.

If gaps wider than approximately 20mm (3/4 inch) remain around a speaker when it has been installed in a cabinet, the acoustic performance will be improved if the gaps are filled. Use carefully cut pieces of upholstery or acoustic foam to fill the gaps as far back as is practical and flush with the front panel of the speaker. Only use foam with an appropriate fire safety rating.

CT700 Series speakers can also be wall mounted using one of two methods.

Wall Brackets:

The speakers incorporate 4 M6 tapped inserts in their back panels for attachment of the two brackets supplied. Always use both brackets. Use the supplied M6 bolts to attach the brackets to the back of the speaker. The two supplied adhesive rubber spacers can be used to cushion the speaker against the wall. Figure 3 illustrates use of the brackets. Before using the brackets ensure that the wall and fixings are capable of supporting the weight of the speaker. B&W can accept no liability for any failure of wall and/or fixings.

Ball-joint Brackets:

The speakers incorporate 4 M6 tapped inserts in their undersides that enable the speakers to be wall-mounted using adjustable ball-joint style mounting brackets designed for 127mm x 69.9mm (5 in x 2.75 in) mounting hole centres. Your dealer or local B&W distributor will be able to advise you on the selection of appropriate brackets.

To attach a ball-joint style bracket to a CT700 Series speaker first securely attach the socket plate to the underside of the speaker. Figure 4 illustrates this procedure.

Once the socket plate is attached to the speaker, the assembly may be connected to the ball component attached to the wall. Ensure that the manufacturer's instructions for attaching the bracket to the wall are followed correctly and that the wall and fixings are capable of supporting the weight of the speaker. B&W can accept no liability for any failure of wall and/or fixings.

Regardless of the style of installation take care when lifting the speakers into position. They are unwieldy and heavy and best handled by two people working together.

The black fabric grilles are attached by magnets and may be removed if desired. Take care not to touch the drive units when removing or replacing the grilles.

Speaker Positioning

CT700 Series speakers used for the front left and right channels in a home theatre system should be positioned one either side of the screen on the horizontal centre-line. They should be within approximately 0.5m (20 in) of the sides of the screen to help keep the sound image in scale with the visual image. See Figures 1 and 2.

A CT700 Series speaker used for the centre channel in a home theatre system should be positioned centrally either directly above or below the screen. In the case of acoustically transparent screens, the centre channel speaker should be positioned centrally behind the screen.

CT700 Series speakers used for the surround channels in a home theatre system should be positioned above and to either side or behind the listening position.

Stray Magnetic Fields

The speaker drive units create stray magnetic fields that extend beyond the boundaries of the cabinet. We recommend you keep magnetically sensitive articles (CRT television and computer screens, computer discs, audio and video tapes, swipe cards and the like) at least 0.5m (20 in) from the speaker. LCD and plasma screens are not affected by magnetic fields.

Connections

All connections should be made with the equipment switched off.

CT700 Series speakers have a pair binding post connection terminals and one Neutrik® Speakon® connection socket on their rear panels. The binding post terminals provide quick and easy connection of stripped wires while the Speakon socket provides a more secure and reliable connection method.

If the binding post terminals are to be used, connect the positive cable to the red terminal and the negative cable to the black terminal. Incorrect connection can result in poor imaging and loss of bass. Figure 5a illustrates use of the binding post terminals

If the Speakon® option is to be used, disassemble the Speakon® plug as shown in Figure 5b, connect the positive cable to the terminal marked +1 and the negative cable to the terminal marked -1. Incorrect connection can result in poor imaging and loss of bass. Once the plug is reassembled it can be inserted into the socket and locked by twisting clockwise.

Ask your dealer for advice when selecting speaker cable. Keep its total impedance below the maximum recommended in the speaker specification and use a low inductance cable to avoid attenuation of high frequencies.

Neutrik® and the names of Neutrik® products referenced herein are either trademarks and/or service marks of Neutrik®.

Fine Tuning

Before fine tuning, make sure that all the connections in the installation are correct and secure.

If the bass seems uneven with frequency this will most probably be due to resonance modes in the listening room. Even small changes in the listening position can have a profound effect on how these resonances affect the sound. Try moving the listening position. The presence and position of large pieces of furniture can also influence resonance modes. If you want generally to reduce the volume of bass fit the foam plugs in the speakers' port tubes as illustrated in Figure 6.

If the sound is too bright, increasing the amount of soft furnishing in the room (heavier curtains for example) may help balance the sound. Conversely, reducing the amount of soft furnishing may help brighten a dull sound.

Some rooms suffer from “flutter echoes” – echoes that “bounce” between parallel room boundaries. Flutter echoes can colour the sound of the speakers in the room. Test for flutter echoes by standing in the middle of the room and clapping your hands. Flutter echoes

can be reduced by placing irregular shaped items or non-reflective surfaces, bookshelves, rugs or pictures for example, on one of the offending walls or floor.

Running-in Period

The performance of the speaker will change subtly during the initial listening period. If the speaker has been stored in a cold environment, the damping compounds and suspension materials of the drive units will take some time to recover their correct mechanical properties. The drive unit suspensions will also loosen up during the first hours of use. The time taken for the speaker to achieve its intended performance will vary depending on previous storage conditions and how it is used. As a guide, allow up to a week for the temperature effects to stabilise and 15 hours of average use for the mechanical parts to attain their intended design characteristics.

However, longer run-in periods (as long as a month) have been reported and there is evidence to suggest that this has little to do with the speaker changing and more to do with the listener getting used to the new sound. This is especially so with highly revealing speakers such as these where there may be a significant increase in the amount of detail compared with what the listener has previously been used to; the sound may at first appear too “up front” and perhaps a little hard. After an extended period of time the sound will seem to mellow, but without losing clarity and detail.

Aftercare

The cabinet surfaces usually only require dusting. If you wish to use an aerosol or other cleaner, remove the grille first by gently pulling it away from the cabinet. Spray aerosols onto the cleaning cloth, not directly onto the product. Test a small area first, as some cleaning products may damage some of the surfaces. Avoid products that are abrasive, or contain acid, alkali or anti-bacterial agents. Do not use cleaning agents on the drive units. The grille fabric may be cleaned with a normal clothes brush whilst the grille is detached from the cabinet. Avoid touching the drive units, especially the tweeter, as damage may result.

Limited Warranty

This product has been designed and manufactured to the highest quality standards. However, if something does go wrong with this product, B&W Group Ltd. and its national distributors warrant free of charge labour (exclusion may apply) and replacement parts in any country served by an official B&W distributor.

This limited warranty is valid for a period of five years from the date of purchase or two years for electronics including amplified loudspeakers.

Terms and Conditions

- 1 The warranty is limited to the repair of the equipment. Neither transportation, nor any other costs, nor any risk for removal, transportation and installation of products is covered by this warranty.

- 2 This warranty is only valid for the original owner. It is not transferable.
- 3 This warranty will not be applicable in cases other than defects in materials and/or workmanship at the time of purchase and will not be applicable:
 - a. for damages caused by incorrect installation, connection or packing,
 - b. for damages caused by any use other than correct use described in the user manual, negligence, modifications, or use of parts that are not made or authorised by B&W,
 - c. for damages caused by faulty or unsuitable ancillary equipment,
 - d. for damages caused by accidents, lightning, water, fire heat, war, public disturbances or any other cause beyond the reasonable control of B&W and its appointed distributors,
 - e. for products whose serial number has been altered, deleted, removed or made illegible,
 - f. if repairs or modifications have been executed by an unauthorised person.
- 4 This guarantee complements any national/regional law obligations of dealers or national distributors and does not affect your statutory rights as a customer.

How to claim repairs under warranty

Should service be required, please follow the following procedure:

- 1 If the equipment is being used in the country of purchase, you should contact the B&W authorised dealer from whom the equipment was purchased.
- 2 If the equipment is being used outside the country of purchase, you should contact the B&W national distributor in the country of residence who will advise where the equipment can be serviced. You can call B&W in the UK or visit our web site to get the contact details of your local distributor.

To validate your warranty, you will need to produce the warranty booklet completed and stamped by your dealer on the date of purchase. Alternatively, you will need the original sales invoice or other proof of ownership and date of purchase.

EU DECLARATION OF CONFORMITY

We,

B&W Group Ltd.

whose registered office is situated at

Dale Road, Worthing, West Sussex, BN11 2BH, United Kingdom

declare under our sole responsibility that the products:

CT7.3 LCRS

CT7.4 LCRS

CT7.5 LCRS

complies with the EU Electro-Magnetic Compatibility (EMC) Directive 89/336/EEC, in pursuance of which the following standards have been applied:

EN 61000-6-1 : 2001

EN 61000-6-3 : 2001

EN 55020 : 2002

EN 55013 : 2001

and complies with the EU General Product Safety 2001/95/EC, in pursuance of which the following standard has been applied:

EN 60065 : 2002

This declaration attests that the manufacturing process quality control and product documentation accord with the need to assure continued compliance.

The attention of the user is drawn to any special measures regarding the use of this equipment that may be detailed in the owner's manual.

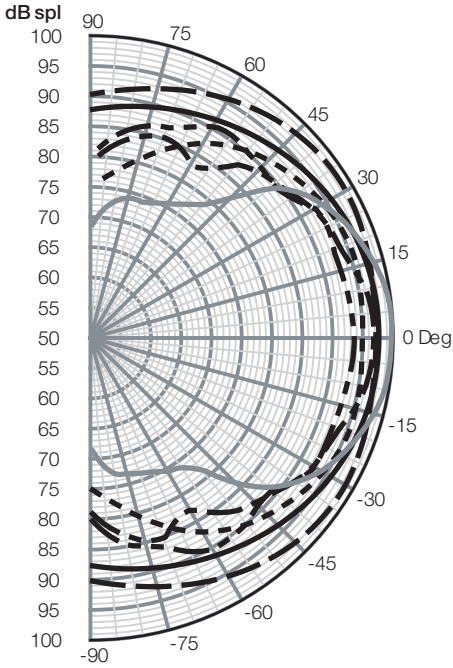
Signed:

A handwritten signature in black ink, appearing to be 'G Edwards', written over a horizontal line.

G Edwards
Executive Vice President, Operations
B&W Group Ltd.

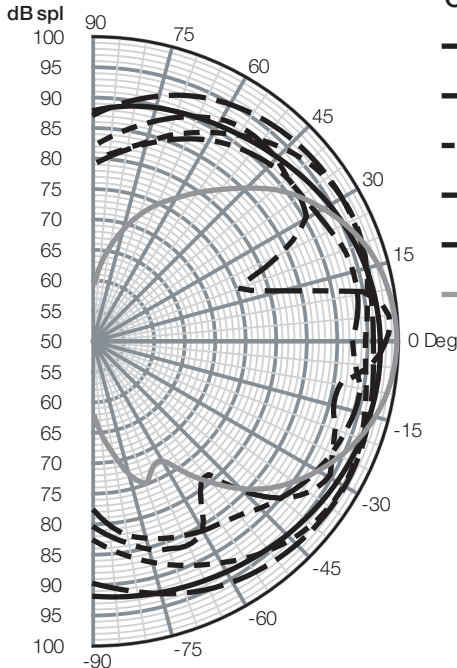
CT7.3

Horizontal Polar Plot



Curve	Freq	BW	Q	DI
	500.00	122	3.0	4.7
	1.00k	173	2.1	3.2
	2.00k	111	3.2	5.1
	4.00k	75	4.8	6.8
	8.00k	136	2.6	4.2
	16.00k	62	5.8	7.7

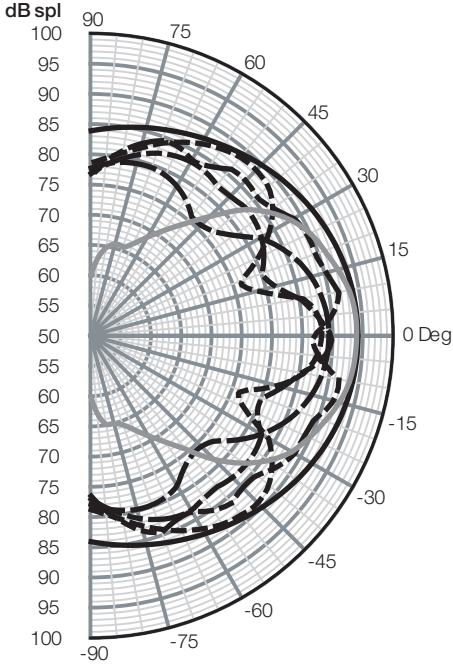
Vertical Polar Plot



Curve	Freq	BW	Q	DI
	500.00	145	2.5	3.9
	1.00k	169	2.1	3.3
	2.00k	135	2.7	4.3
	4.00k	18	19.8	13.0
	8.00k	135	2.7	4.3
	16.00k	56	6.4	8.1

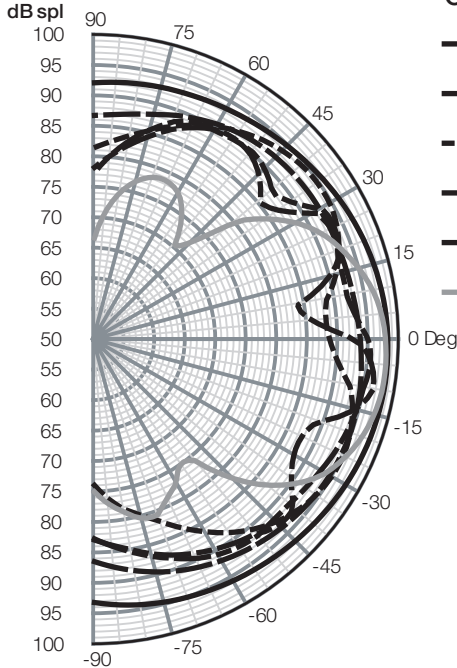
CT7.4

Horizontal Polar Plot



Curve	Freq	BW	Q	DI
	500.00	115	3.1	5.0
	1.00k	56	6.4	8.1
	2.00k	25	14.1	11.5
	4.00k	24	15.2	11.8
	8.00k	162	2.2	3.5
	16.00k	60	6.0	7.8

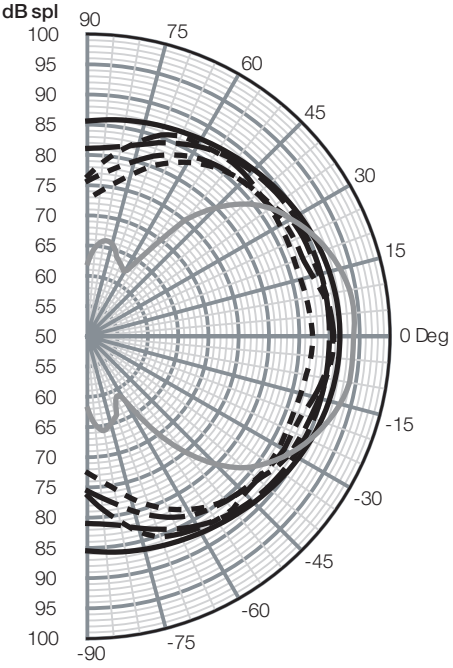
Vertical Polar Plot



Curve	Freq	BW	Q	DI
	500.00	180	2.0	3.0
	1.00k	164	2.2	3.4
	2.00k	151	2.4	3.8
	4.00k	24	15.2	11.8
	8.00k	100	3.6	5.6
	16.00k	55	6.6	8.2

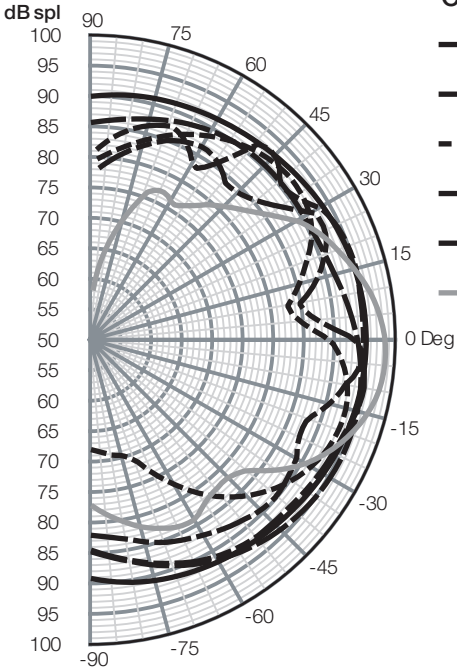
CT7.5

Horizontal Polar Plot

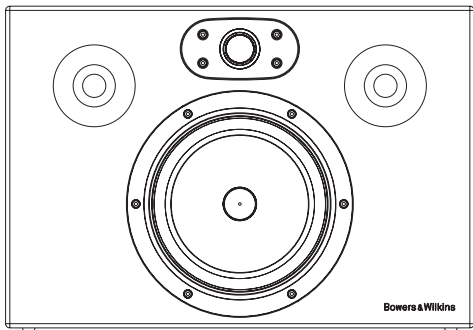


Curve	Freq	BW	Q	DI
	500.00	180	2.0	3.0
	1.00k	140	2.6	4.1
	2.00k	133	2.7	4.3
	4.00k	118	3.0	4.8
	8.00k	144	2.5	4.0
	16.00k	64	5.7	7.5

Vertical Polar Plot



Curve	Freq	BW	Q	DI
	500.00	180	2.0	3.0
	1.00k	153	2.4	3.7
	2.00k	56	6.4	8.1
	4.00k	22	16.5	12.2
	8.00k	124	2.9	4.6
	16.00k	49	7.3	8.7



CT7.5 LCRS

Technical features	Nautilus™ tube-loaded tweeter Kevlar® brand fibre bass/midrange Flowport™ Magnetically attached grille
Description	2-way vented-box system
Drive units	1x ø25mm (1 in) cloth dome high-frequency 1x ø180mm (7 in) woven blue Kevlar® bass/midrange
Frequency range	-6dB at 48Hz and 28kHz
Frequency response	55Hz - 22kHz ±3dB on reference axis
Dispersion	Within 2dB of reference response Horizontal: over 60° arc Vertical: over 10° arc
Sensitivity	92dB spl (2.83V, 1m)
Harmonic distortion	2nd and 3rd harmonics (90dB, 1m) <1% 100Hz - 20kHz
Nominal impedance	8Ω (minimum 4.6Ω)
Crossover frequency	4kHz
Recommended amplifier power	50W - 120W into 8Ω on unclipped programme
Max. recommended cable impedance	0.1Ω
Dimensions	Height: 305mm (12 in) Width: 444mm (17.5 in) Depth: 265mm (10.5 in) Depth including grille: 288mm (11.3 in)
Net weight	11.5kg (25.3 lb)

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