

B&W Bowers&Wilkins

600 Series



**AVAILABLE AT
DIGITAL CINEMA**

683

684

Owner's Manual



Figure 1

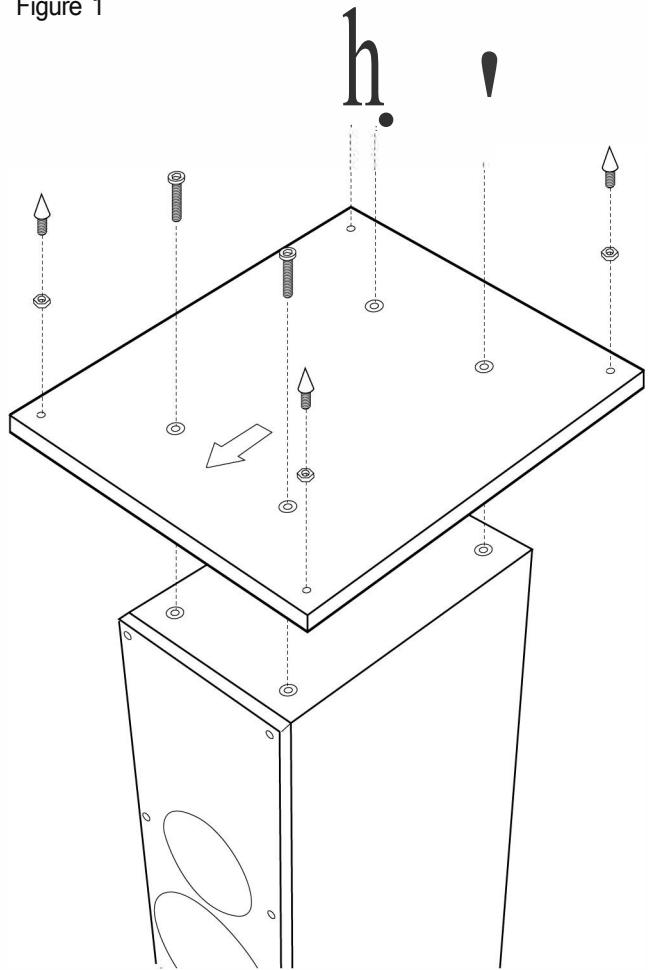


Figure 2a

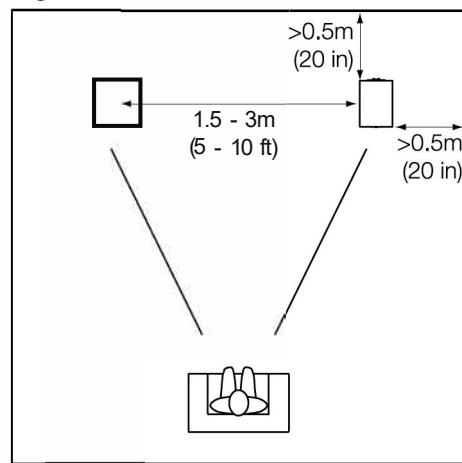


Figure 2b

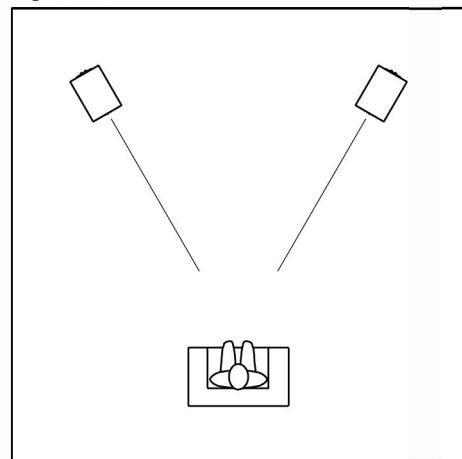


Figure 3a

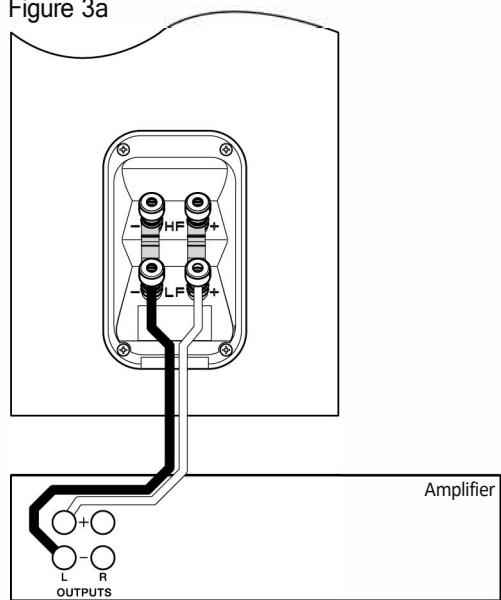


Figure 3b

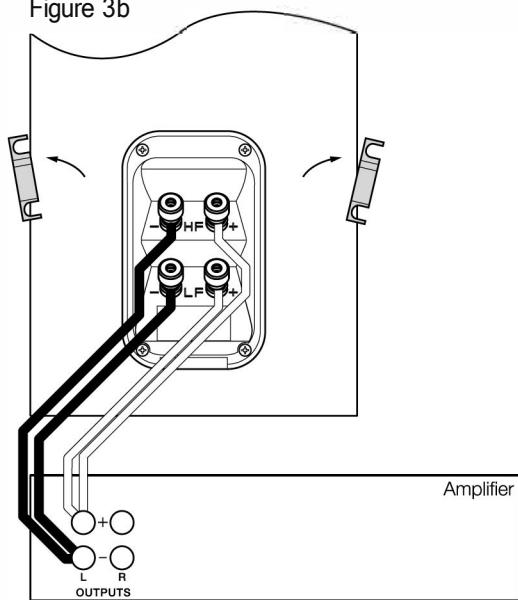
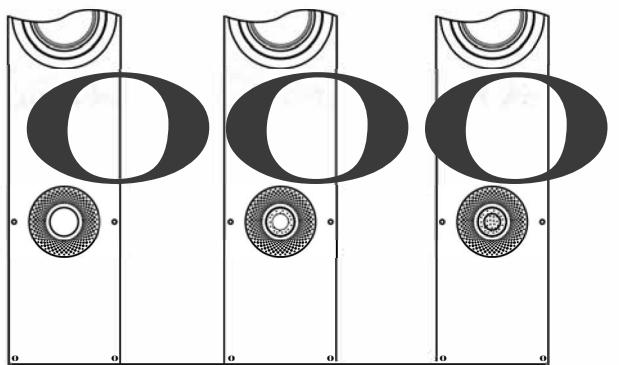


Figure 4

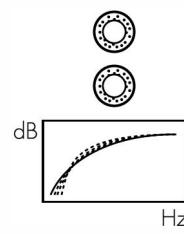
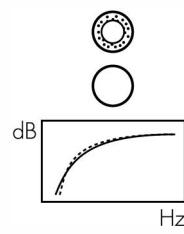
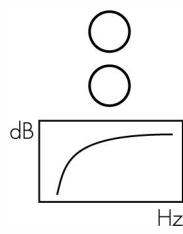
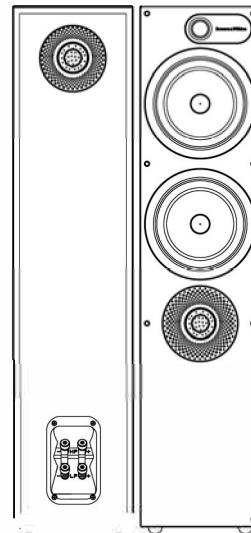
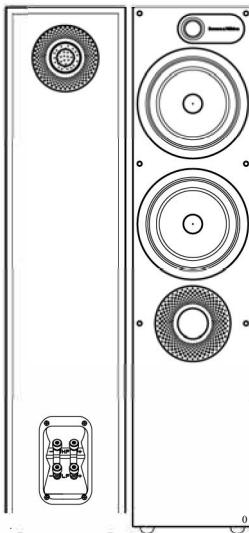
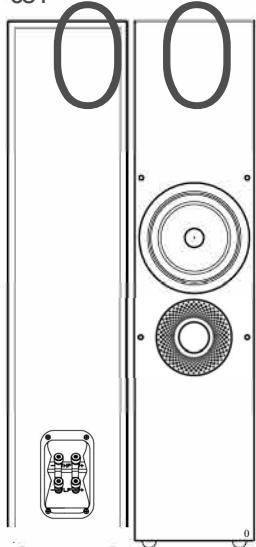
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dB | dBi | dB | dBi

Hz Hz Hz

684



dB*i*/| 0

dB*i*/|

Hz

Hz

English Owner's manual

Dear customer,

Thank you for choosing B&W. 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:

- 1 Plinth
- 4 M6 alien screws
- 1 M6 alien key
- 1 Foam plug (683 only)
- 2 Foam plugs (684 only)
- 1 Accessory pack containing:
 - 4 M6 spike feet
 - 4 M6 rubber feet
 - 4 Lock nuts (10mm across flats)

Speaker Installation

The speakers are intended to be floor mounted only. It is important to ensure the speakers stand firmly on the floor using the plinth and, whenever possible, the spike feet. To attach the plinth, stand the speaker on its top taking care not to damage the cabinet or the drive units during handling. Align the plinth with its attachment holes in the underside of the cabinet ensuring that the arrow on the underside of the plinth points forwards. Secure the plinth using the four screws supplied. Tighten the screws using the alien key supplied.

The spike feet are designed to pierce carpet and rest on the floor surface. Initially, screw the lock nuts onto the spikes enough to leave the nuts floating just above the carpet when the spikes are resting on the floor beneath. Screw the spikes fully into the threaded inserts in the base of the plinth. Return the speaker to the upright, again, taking care to avoid damage during handling. Figure 1 illustrates attachment of the plinth and spike feet.

If the cabinet rocks when placed in position on the floor, unscrew the two spikes that do not touch the floor until the cabinet rests firmly without rocking. Finally, lock all the nuts against the plinth. It may be more convenient to fit and adjust the spike feet after speaker positioning has been optimised.

If there is no carpet and you wish to avoid scratching the floor surface, use either a protective metal disc (a coin perhaps) between the spike and the floor or use the supplied rubber feet. Fit the rubber feet by screwing one into each of the holes in the underside of the plinth.

The grilles fitted to the front of speakers may be removed if desired. Take care however not to touch the moving parts of the drive units as damage may result.

Speaker Positioning

Adjustment of speaker position following initial installation will probably further improve the sound quality and is usually worthwhile.

In either stereo or home theatre installations try to ensure that the immediate surroundings of each speaker are similar in acoustic character. For example, if one speaker is adjacent to bare walls while the other is adjacent to soft furnishings and curtains, both the overall sound quality and the stereo image are likely to be compromised.

Conventional Stereo Systems

To begin with, the speakers should be positioned between 1.5m (5 ft) and 3m (10 ft) apart at two corners of an equilateral triangle completed by the listening area at the third corner. The speakers should be approximately 0.5m (20 in) away from the back wall, and at least 0.5m (20 in) away from any side walls. Figure 2a illustrates this arrangement.

Home Theatre Systems

If the speakers are to be used for the front channels in a home theatre system they should be placed closer together than for 2-channel audio because the surround channels tend to widen the image. Positioning the speakers within approximately 0.5m (20 in) of the sides of the screen will also help keep the sound image in scale with the visual image. As with conventional stereo positioning, the speakers should ideally be approximately 0.5m (20 in) away from the back wall, and at least 0.5m (20 in) away from any side walls.

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.

There are 2 linked pairs of terminals on the back of the speaker. For conventional connection the terminal links should remain in place (as delivered) and just one pair of terminals connected to the amplifier. For bi-wire connection the terminal links should be removed and each pair of terminals connected to the amplifier

independently. Bi-wiring can improve the resolution of low-level detail. Figures 3a and 3b illustrate conventional and bi-wire connection.

Ensure that positive terminals on the speaker (marked + and coloured red) are connected to the positive output terminal on the amplifier and that negative terminals on the speaker (marked - and coloured black) are connected to the negative output terminal on the amplifier. Incorrect connection can result in poor imaging and loss of bass.

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.

Fine Tuning

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

Moving the speakers further from the walls will generally reduce the volume of bass. Space behind the speakers will also help to create an aural impression of depth. Conversely, moving the speakers closer to the walls will increase the volume of bass. If you want to reduce the volume of bass without moving the speakers further from the wall, fit the foam plugs in the port tubes as illustrated in Figure 4.

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 position of the speakers or the listening position can have a profound effect on how these resonances affect the sound. Try moving the listening position or locating the speakers along a different wall. The presence and position of large pieces of furniture can also influence resonance modes.

If the central image lacks focus, try moving the speakers closer together or angling them inward so that they point at a location just in front of the listening position. Figure 2b illustrates speakers angled inwards.

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.

Ensure that the speaker stands firmly on the floor. Use carpet piercing spikes if appropriate and adjust them to take up any unevenness.

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:

- i 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.

Franc;ais

Manuel d'utilisation

Cher Client,

Nous vous remercions d'avoir choisi B&W. Veuillez lire soigneusement ce manuel avant de déballer et d'installer vos enceintes acoustiques. Il vous aidera à obtenir les performances optimales. B&W est distribué dans plus de 60 pays dans le monde entier, par l'intermédiaire de distributeurs spécialement sélectionnés ; ceux-ci pourront vous aider à résoudre d'éventuels problèmes ignorés par votre revendeur.

Information sur la protection de l'environnement



Tous les produits B&W sont conçus en conformité totale avec les normes internationales concernant l'interdiction d'utilisation de certaines substances dangereuses (RoHS) dans les équipements électriques et électroniques, ainsi que la possibilité de recyclage des matériaux utilisés (WEEE, pour Waste Electrical and Electronic Equipment). Ces symboles indiquent la compatibilité avec ces directives, et le fait que les appareils peuvent être correctement recyclés ou traités dans le respect total de ces normes. Consultez l'organisme officiel de votre région pour le traitement des produits.

Verification du contenu de l'emballage

Vérifiez que le carton contienne bien :

- 1 base
- 4 vis alien M6
- 1 clé alien M6
- 1 tampon en mousse (683 uniquement)
- 2 tampons en mousse (684 uniquement)
- 1 carton d'accessoires contenant :
 - 4 pieds-pointes M6
 - 4 pieds en caoutchouc M6
 - 4 écrous de blocage (10 mm)

Installation des enceintes

Ces enceintes sont prévues pour être directement posées sur le sol. Il est important de vous assurer que les enceintes sont parfaitement équilibrées sur le sol en utilisant la base fournie et, partout où cela est possible, les pointes de découplage. Pour fixer la base, retournez l'enceinte en prenant garde de ne pas endommager son ébénisterie ou ses haut-parleurs. Alignez la base avec les trous prévus dans le socle de l'enceinte, en vérifiant que la flèche gravée sur la base soit bien dirigée vers l'avant. Fixez la base définitivement en serrant les quatre vis fournies. Serrez fermement ces vis avec la clé alien également fournie.

Les pointes de découplage sont conçues pour transpercer la moquette et prendre directement appui sur le sol dur. Commencez par visser complètement les écrous sur le filetage de chaque pointe. Vissez ensuite chaque pointe dans le filetage prévu à cet effet sous la base de l'enceinte. Retournez ensuite l'enceinte dans sa position normale, en prenant bien

soin de ne pas vous blesser ou d'endommager quoi que ce soit avec les pointes durant cette operation. La Figure 1 illustre la fixation de la base et de ses pointes de decouplage.

Si l'enceinte n'est pas totalement stable lorsque posee dans sa position definitive sur le sol, devisez legerement les deux pointes qui ne touchent pas le sol jusqu'a ce que l'enceinte devienne parfaitement stable et verticale. Enfin, revissez eventuellement les ecrous pour qu'ils prennent appui sur la base. Il est conseille d'effectuer ce dernier reglage des pointes apres que la position de chaque enceinte ait ete soigneusement etablie et optimisee.

Si le sol n'est pas recouvert de moquette et/ou que vous ne souhaitez pas endommager le revetement de sol, utilisez une piece metallique protectrice entre chaque pointe et le sol (une piece de monnaie peut parfaitement convenir), ou bien utilisez les pieds en caoutchouc tournis, a la place des pointes. Vissez alors chaque pied en caoutchouc dans les inserts filets presents sous la base de l'enceinte.

Les grilles frontales de chaque enceinte peuvent etre retirees si vous le desirez. Prenez soi de ne jamais toucher aucune des pieces mobiles des haut-parleurs, qui pourraient sinon etre irremediablement endommages.

Choix de la position

Le reglage de la position des enceintes au moment de leur installation est susceptible d'améliorer grandement les résultats sonores, et constitue donc une premiere etape essentielle.

Ou'il s'agisse d'une installation stereophonique ou multicanal Home Cinema, faites en sorte que l'environnement acoustique de chaque enceinte soit le plus identique possible, dans son caractere sonore. Par exemple, si une des enceintes est placee pres d'un mur lisse et nu, tandis que l'autre se trouve proche d'epais tissus et tapis, la qualite et l'équilibre stereophonique finaux risquent fort d'etre compromis.

Systèmes stereophoniques conventionnels

Comme base de depart, placer les deux enceintes eloignees entre 1,5 et 3 metres l'une de l'autre, formant ainsi les deux angles d'un triangle equilateral dont le troisieme angle sera la position d'ecoute privilegée. Les enceintes seront également eloignees d'environ 50 centimetres du mur arriere et des murs lateraux. La Figure 2a illustre une telle installation.

Systèmes Home Cinema

Si les enceintes sont utilises en tant qu'enceintes frontales d'un systeme Home Cinema, elles doivent etre plus rapprochees l'une de l'autre que dans le cas d'une installation stereophonique traditionnelle, car les enceintes Surround arriere ont tendance a agrandir l'image sonore generale. Positionnez les deux enceintes a environ 0,50 metre de chaque cote de l'écran, afin de conserver une image sonore en rapport avec l'image video. Comme pour les systemes stereophoniques, eloignez les enceintes d'au moins 0,50 metre du mur arriere, et aussi des murs lateraux.

Champs magnetiques

Les haut-parleurs a l'interieur de l'enceinte generent des champs magnetiques qui peuvent s'étendre au-delà du coffret de l'enceinte. Nous vous recommandons donc de tenir éloignés d'au moins 50 centimètres des enceintes les appareils sensibles a ces champs magnetiques (televisions et moniteurs informatiques a tube cathodique CRT, cassettes et bandes magnetiques audio et video, cartes magnetiques, etc.). Les écrans de type plasma et LCD ne sont pas atteints par ces champs magnetiques.

Branchements

Tous les branchements doivent être effectués les appareils étant tous éteints.

Il y a deux paires de prises reunies entre elles a l'arriere de chaque enceinte. Pour les branchements classiques, les connexions reliant les prises (comme installe a la livraison) doivent imperativement rester en place, une seule paire de prises étant alors reliée a l'amplificateur. En cas de bi-cablage, les liens seront retirés, et chaque paire de prises sera alors reliée a l'amplificateur de maniere independante. Ce principe de bi-cablage permet d'améliorer la resolution et la qualite des plus fins details. Les figures 3a et 3b illustrent les principes du mono et du bi-cablage.

Branchez la prise « positif » de l'enceinte (prise de couleur rouge, avec le repere " + ") sur la prise de sortie enceinte « positif » de l'amplificateur, et branchez la prise " negatif " (prise de couleur noire, avec le repere " - ") sur la prise « negatif » de l'amplificateur. Le non-respect de cette polarité plus/mains entraîne une image stereophonique degradee et une perte dans le grave.

Demandez conseil a votre revendeur pour le choix du cable utilise. L'impédance totale de charge ne doit jamais etre interieure au minimum recommande dans les specifications, et le cable doit presenter une faible inductance, afin d'éviter toute attenuation des fréquences aigues.

Reglage fin

Avant de proceder a ces reglages, verifiez que tous les branchements sont correctement effectués, dans toute l'installation, et fermement securises.

Decaler les enceintes par rapport aux murs de la pièce a généralement pour effet de reduire le niveau general du grave. Un espace suffisant derrière les enceintes acoustiques permet également d'améliorer la sensation de profondeur de la reproduction sonore. Inversement, un rapprochement des enceintes par rapport aux cloisons de la pièce entraîne une augmentation du niveau du grave. Pour reduire le niveau de grave sans modifier la position des enceintes, utilisez les tampons de mousse fournis dans les events de decompression, comme montre figure 4.

Si vous desirez reduire sensiblement le niveau de grave sans pour autant modifier la position des enceintes par rapport aux murs, placez un des tampons de mousse dans l'event de decompression. Pour acceder aces events, retirez la grille frontale des enceintes en la tirant doucement vers l'avant.