



USER MANUAL

DYNAVOICE LOUDSPEAKERS

CHALLENGER SERIES

Introduction

Please read this manual fully before unpacking and installing the product. It will help you to optimize the performance of your speakers.

Unpacking and maintenance

Your speaker should be treated with the same care you would treat a piece of furniture. Use only a piece of soft cloth and a small quantity of warm soapy water to clean the loudspeakers.

Avoid touching the cone of the bass unit or treble dome since this may leave a finger mark or even damage the dome and spoil its performance. After unpacking, we suggest you retain all packing material for future transports.

Running-in period

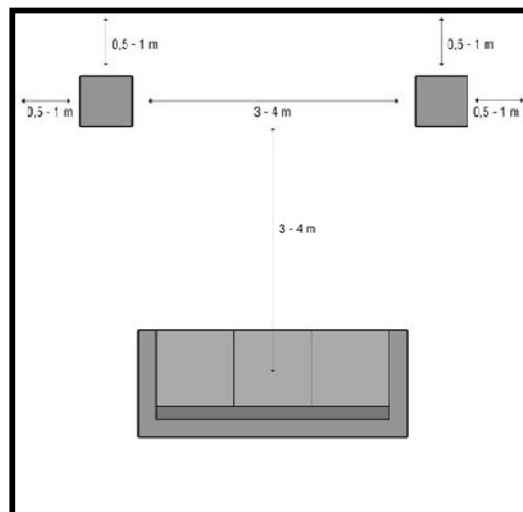
The performance of the speaker will change subtly during the listening period.

Please allow your new speakers to play about 50 hours of music at normal listening level before doing any critical listening.

Room positioning

2-Channel stereo : The performance of a loudspeaker system in a room varies with placement. Ideal

positing of the speakers are 3-4 m apart and preferably at least 0.5-1m away from side and rear walls se fig. 1. Avoid distances from walls that correspond to $1/2$, $1/4$, $1/6$ etc., of the room dimensions. Seek instead odd fractions; $1/3$, $1/5$, $1/7$ etc .to minimize effects of room related resonances.



You will perceive the most accurate sound picture if you listen from a position halfway between the loudspeakers, and three to four meters away. Avoid corner placement as it leads to coloration of the lower frequencies. Image stability and stereo perception is increased if the two speakers are turned slightly towards the listening position. Try this out and listen for best stereo image and centre focus. Objects in the direct sound path can disturb the coherence of the sound picture. Try out different positions before deciding on a final arrangement.

Surround system

Centre speaker positions:

For a front centre speaker position it directly above or below the screen, depending on screen height. Optimum is in the same height as the front speaker sound centre (0.8-1m for floor standing models)

Front right and left speaker:

Place the speaker 0.5-1m from the TV. For large projection screens, space speaker 0.1-0.5m from screen. Try to follow the 2-channel position as close as possible in room for best sound image.

Surround speaker :

Depending on where you sit in the room there are two ways of presenting the sound image. Direct or diffuse surround effect.

Direct is when the speaker point at the listening positions from rear or side walls, in the same height as front and centre speaker.

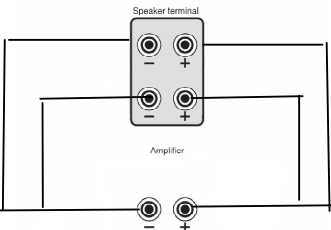
For diffuse sound effect, mount the speaker higher and point them along rear or side wall.

Connections

Make sure to turn off all amplifiers before connecting your new speaker to your system.

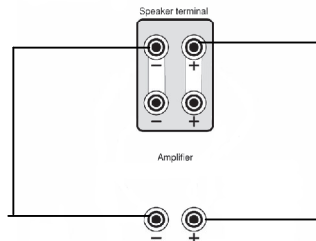
Bi-wiring connection

Some DYNAVOICE speakers have 4-pole terminals allowing bi-wiring. This requires two cables for each speaker and gives an audible improvement. Remove the connectors between low and high sections of the terminal and connect according to the figure below.



Single wire connection bi-wiring terminals

Some DYNAVOICE speakers have 4-pole terminals allowing bi-wiring. When connecting with single wiring, do **NOT** remove the connectors between low and high sections of the terminal and connect to the upper terminals as in the figure below



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X-change - Flexibel

Since everyone has different sound ideals - including audio files - this is also the definition provided with an X-change terminal. Top of the terminal you will find 3 additional gold plated contacts. These are used to fine-tune the critical midrange area after your own taste. You can choose between -2 dB / 0 dB / +2 dB / +4 dB. The fact that this field changes, so the whole character of the speaker. You do not have to therefore change the bass / treble controls on the amplifier to get the sound you prefer.



Power handling

DYNAVOICE recommends using amplifiers within a specific power range. However, the most important thing is that the amplifier has sufficient power reserves for handling peak and transient in the music signal.

The power rating figure of a loudspeaker is a very unprecise figure. Since the energy in the music signal varies, neither peak nor average value is relevant. A power rating of e.g. 100WRMS says only that you can play a continuous tone of 1kHz at this output. It does not mean that you can turn the volume all the way up on a 100W amplifier and expect clear sound and healthy speakers.

The greatest danger to a loudspeaker is distorted signal. Distorsion in the low frequency range produces overtones in the entire spectrum, with an energy that can easily damage the tweeter units. And since a more powerful amplifier can play louder without distorsion, we have the paradox that it is a greater risk to damage speakers by playing loud with a smaller amplifier.

Caution!

If you hear distortion when you increase the volume this is normally a sign of overloading the amplifier and you should immediately reduce the output level.

Use of loudness, bass or treble boost increases the risk for harmful distortion in the amplifier. We recommend that you use these controls with care.