

Set up guide for The Genesis 400 System

Positioning

Set the speakers approximately where you want them in the room. We recommend that the loudspeakers be placed so they fire into the long dimension of the room. As measured from the wall behind the loudspeakers, we suggest placing your Genesis 400's about 20% into the room. Example: if the length of the room is twenty feet (seven and three quarter meters) the 400's should be about four feet from the wall.

Typical distances between the two speakers are six to seven feet (approximately two and a half meters). Typical distance to sit away from the speaker is eight to nine feet (three and a half meters).

We suggest you toe in the speakers. This means that you should angle the speakers towards the listener. Point them directly at your listening position. This will help focus the center image.





Connect your amplifier

Use a high quality speaker cable to connect your power amplifier with the set of binding posts on the back of the Genesis 400. Hook up your power amplifier. The top connector is + (plus or red) and the bottom is - (minus or black).

You will notice a control on the back of the speaker next to where you connected the speaker cables. This is a volume control for the front tweeter. Turning this control clockwise will increase the level of the front tweeter. Use this control if you need a bit more treble. Start with this control at the one o'clock position.



At this point, you are ready to play the system.

Roughing the system in

We suggest that you start with a single vocal with instrumental accompaniment because the sound of the human voice is more easily recognizable than many instruments and is the least complex sound to deal with.

- 1. If the vocal appears to be larger than life, you should first check the system volume. Is it a volume that would be appropriate for someone actually singing in your room? If there is too much volume the artist will appear too big and the opposite is true for too little volume. If the volume is set correctly and the image is still too big, toe the speakers in a little more or place them closer together and re-listen. Repeat this process till you have it right.
- 2. If you are not getting enough front to back depth (the sound is not sufficiently behind the speaker) pull the speakers **away** from the wall a little bit at a time (closer to the listening position). If you do not have them pulled far enough away, you may not have enough front to back depth. Find the best compromise for your room, your tastes and your space requirements
- 3. If you are not getting proper focus on the voice, you may place the left and right speaker closer together or add a small amount of toe in until you have a properly defined center image. If the speakers are too far apart you will lose the side image and if they are too close together, or have too much toe in, you will have too small a center stage. We recommend you begin with six to seven feet apart as measured from tweeter to tweeter.

When properly set up very little sound should appear to come directly from the speaker, instead, the sound stage should extend far beyond the left and right edge of the loudspeakers and they should have tremendous front to back depth. When the recording is close miked (when the instrument or performer is very close to the recording microphone) the music may appear to come directly from the loudspeaker. This is normal. Typically, however, the sound should appear to be detached from the loudspeakers.

A simple rule of thumb to follow is that focus will be achieved by placing the speakers closer together or farther apart, and also by varying the amount of toe in and front to back depth can be adjusted by the distance from the rear of the speaker and the wall.

The Refinement stage

After following the rough setup guide above, your speakers should sound great. However a little more work over a period of time can put the finishing touch on your system. To help in this goal we share with you here some of our observations in setting up Genesis loudspeakers.

Note: One rule of thumb you should always keep in mind. Make one change at a time! Make each change separately and note the difference - by listening - with each adjustment. One of the biggest mistakes we find customers making is too many changes at once. Make one change, then listen.

1. A common problem we find with many setups is a tendency to separate the speakers too far from each other. This gives an unnaturally wide soundstage between the two speakers, and creates problems beyond the unnatural width of the center stage. The key problem is a lack of soundstage information beyond the left and right sides of the speakers. Another is improper focus of instruments and voices which is typically "corrected" by the user with too much toe in. Yet another problem is a lack of mid bass energy. In order for the appropriate amount of mid bass energy to be present, the speakers should be close enough together to achieve proper "coupling" of the mid bass coupler. Coupling is desirable in the lower frequencies and simply means that the left and right drivers "work together" as opposed to working separately.

In order to achieve what the speaker is capable of we suggest you focus your efforts on a proper **balance** of soundstage elements that includes information beyond the left and right sides of the speakers, front to back depth well behind the speaker, excellent focus of instruments and voices with proper vertical information and mid bass fill.

A Genesis loudspeaker system correctly set up, can and should provide a soundstage that is wall to wall and with pinpoint focus, the speakers disappearing completely on a recording containing such information.

- 2. If you find that the sound is not spacious enough or you are not getting enough front to back depth, pull the speaker away from the wall behind the loudspeaker (closer to the listening position). This is typically preferable to separating the two speakers too far and will almost always give you better depth and soundstage information. A word of caution, however, if you move the speaker too far from the wall you may lose focus or deep bass.
- 3. If you find there isn't enough deep bass, your remedy is to move the speakers farther from you (closer to the wall behind them). This will increase the coupling of the woofers to the room. Do this procedure in small increments (approximately one inch at a time) and return often to the recordings you have used to adjust the front to back depth and soundstage properties of your system. It is easy, yet unproductive, to go too far in one direction. One word of caution, never place the speakers closer than one foot to the wall.

A good balance between proper low bass extension and a deep and spacious soundstage needs to be established to optimize your new speaker's performance.

Room Treatment

No room is perfect. To optimize your sonic presentation it may be helpful to treat your room. Here are some guidelines;

- 1. This loudspeaker is a dipole and therefore there is sound coming from both the front and the back of the speaker. How the wall behind the loudspeaker is treated or not treated is important. Generally speaking, Genesis loudspeakers prefer a live wall behind the loudspeaker and a dead wall be hind the listener. By these terms we mean the amount of reflected sound. A typical wall of glass, brick, cement or drywall material is a reflective surface. A heavily curtained or sound proofed wall would be considered a "dead wall" or a non reflective wall. A normal thin curtain across a window causes only a small amount of absorption of the high frequencies.
- 2. Because the speaker is a dipole it is less sensitive to the side walls. However, as a rule of thumb, it is a good idea to keep the speaker as far away from the side walls as is practical. With this in mind, it may be helpful to add some damping material or diffuser panels to the point of first reflection. This is a point on the side walls between the listener and the loudspeaker. It is where the sound from the loudspeaker first hits the side wall, then bounces to the listener. This reflection is undesirable because it is slightly delayed from the original sound. This point on the side wall can be easily determined with the help of a second person and a mirror.

Sitting in your listening position have an assistant hold a mirror up on the side wall. Move the mirror along the wall until you can see the tweeter. This is the point of first reflection. A diffuser (see your dealer), an absorptive material or even a piece of furniture can help break up this point of first reflection.

Mastering the refinements of the system

Fine tuning an audio system is an art that will take time and patience. It can be one of the more rewarding learning experiences you will have in the pursuit of music and its enjoyment.

One of the best pieces of advice we can offer is that you take advantage of the ear's ability to identify similarities in sound. This ability is useful in fine tuning your system because if every recording you listen to has a similarity of sound (too much or too little of a certain frequency for instance) then you can be fairly certain that you have yet to perfect your setup. Keep at it and remember to enjoy your music as you work on perfecting your setup.