Opera Callas Diva 2016

How to properly open the packages

Note: To secure the base of the diffuser you need an Allen key 8 mm.
A single speaker weighs over 50 kg so it is not recommended to try to go it alone. Ask for help to a friend (preferably two).

Caution:
in the rear of the speaker, upwards, are positioned the two tweeters that form the dipole. Be careful not to damage the domes while handling the diffuser

The Opera Diva Callas in 2016 are packed individually. They are protected by a cardboard box and stratocel.

First, open the box

Place the box in the vertical

Remove the first protective layer and extract the metal base which is inserted on the side

Lift out of the box.

These are the "caps" to close the reflex ducts. You will find a box that contains the spikes and screws to secure the base. To mount the bases proceed as follows:

Remove the base from Stratocell

Now prepare the metal base and screw the 4 spikes. The spikes and screws are found in the box. Note: The Allen key is not provided.

Lift the lower part of the speaker, remove the protection stratocel and place it under the speaker to hold it up. Raise the cover to uncover the base of the speaker.

Fix the metal base to the bottom of the cabinet using the screws provided. Once you fixed the base the diffuser can be placed vertically.

Now you can set up the speaker and remove the cover.

Save the shipping box and all parts in stratocel because they are indispensable for any warranty repairs. The speakers can be received by Opera only if packaged with the original packaging. The original packaging is the most appropriate way to protect the speakers during any move.

Connect the speakers to the amplifier

The rear connections are similar to those of the model Grand Callas.

Switch: The model Diva does not have an equalization switch Connectors:

High: Front and rear dipole tweeters
Low: woofer and midrange

The rear panel is designed for bi-amplification. When the speaker arrives at your home it is ready to be connected to the amplifier via a single cable (in fact there are metal bridges that connect the two positive and negative terminals). The red color identifies the positive terminals.

Place the speakers in the environment: the distance between the speakers, trim and tilt

The two speakers in the pair are identical. So there is a diffuser "right" and a speaker "left." As is known, the low frequency performance depends on the position of the speakers and in particular by the distance from the side and

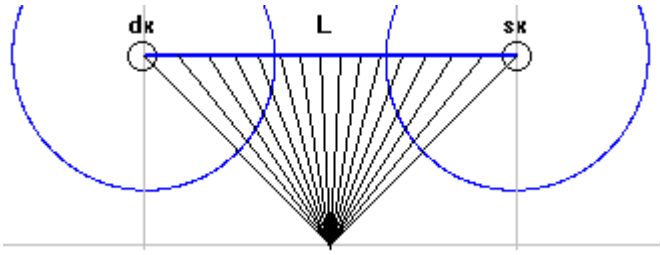
bottom walls. First of all let's see how to arrange the speakers to have a correct stereophonic image then we will see how to adjust the low frequency response.

There are general rules that must be respected: the typical distance between the left and right speaker goes from 2 to 3 meters (minimum of 1.5 meters, maximum 4). The maximum distance between the speakers depends on the available space and personal taste. The listening position should be equidistant from the left and right speakers to form an isosceles triangle with the listening position at the top and the base of the top speakers.

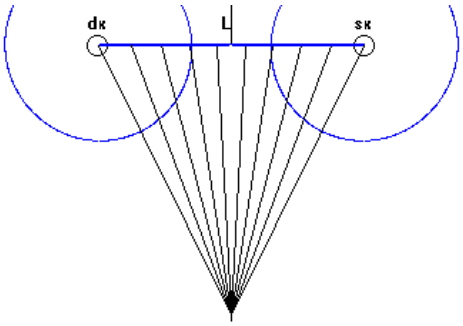
The speakers should be oriented to converge toward the listening position. The distance between the speakers should not be too much greater than the distance of the listening point. The position still has to be experienced as a function of the listening and even of personal taste.

The presence of the rear tweeter does not prevent to approach the diffuser to the rear wall: the minimum is a few centimeters.

The most suitable distance between the left and right speakers depends on the kind of listened to music. If you mainly listen to music for large orchestra it is convenient enlarge the speakers and bring the point of listening to "give space" to all instruments. If you listen to a folk-singer who sings accompanying himself on the guitar, or piano alone, the speakers can be approached. The closer the speakers and the stereo effect diminishes (on the other hand increases the area of isotipica area). While listening to a single instrument the stereo effect is relative.

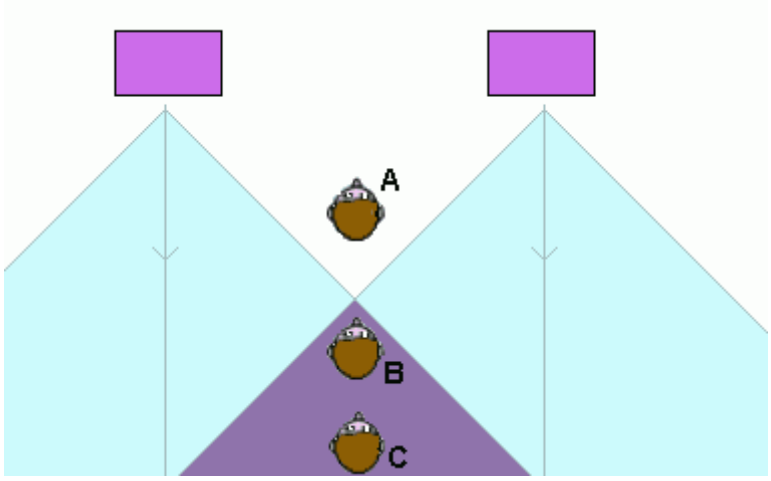


Speaker distance: 3 meters
Distance of the listening position: 1.5 meters
Recognizable number of positions: 16
(One every 6 degrees of horizontal displacement)



Speaker distance: 2 meters
Distance of the listening position: 2 meters
Recognizable number of positions: 10
(One every 6 degrees of horizontal displacement)

Defined as the distance between the speakers, these may be arranged parallel to the rear wall or oriented towards the listening point. Orientation and distance of the speakers to your listening determine many aspects of reproduction beginning with the response to the medium high frequencies, the ratio of direct sound and reflected sound, the amount of lateral reflections, playing the central channel, the ITG.

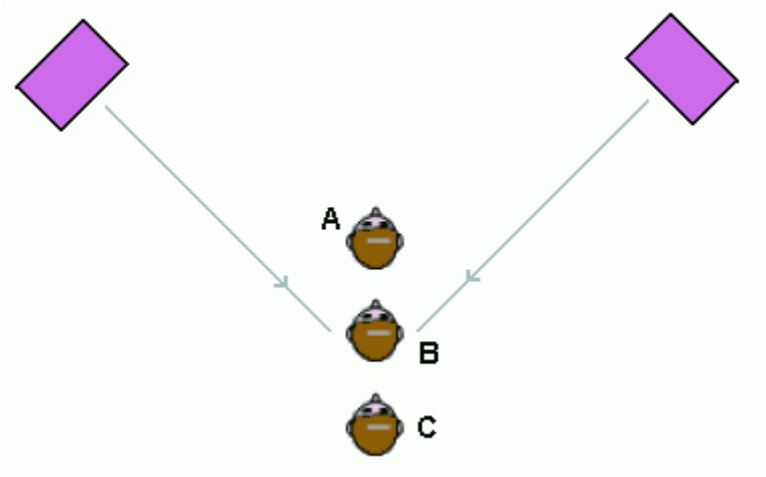


A
The perception of the central channel is penalized. Very limited lateral reflections. Prevalence of direct sound to medium-low frequency (which are non-directional).

B
Adequate center channel. Limited lateral reflections. Prevalence of direct sound.

C
Correct center channel. More lateral reflections. Still increasing the distance of the listening position decreases the direct sound and the reflected sound increases.

Loudspeakers parallel to the rear wall



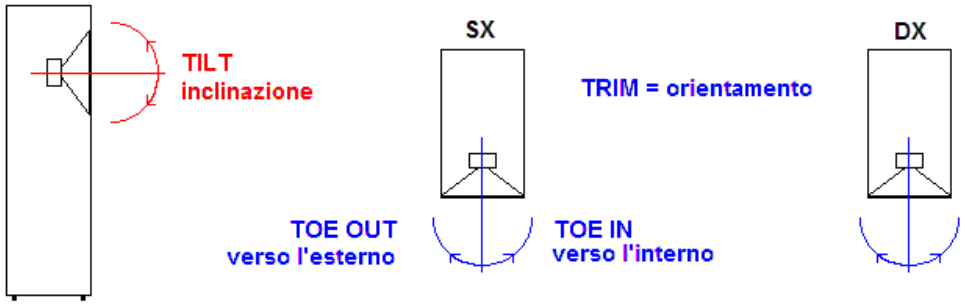
A
Convergence behind the listener: the perception of the center channel may be penalized.

B
Convergence on the listener's head: sound similar to that of the advanced file of the stalls, high clearest range.

C
Convergence front of the listener: the virtual stage moves away (and isotipica area widens). Greater sense of depth. Limited lateral reflections. Best ITG. Recommended position.

Speakers geared toward the listening point

To empirically determine the best orientation of the speakers you can use listening to the voice or trumpet (or of a "small" source, limited in space and fairly directional).

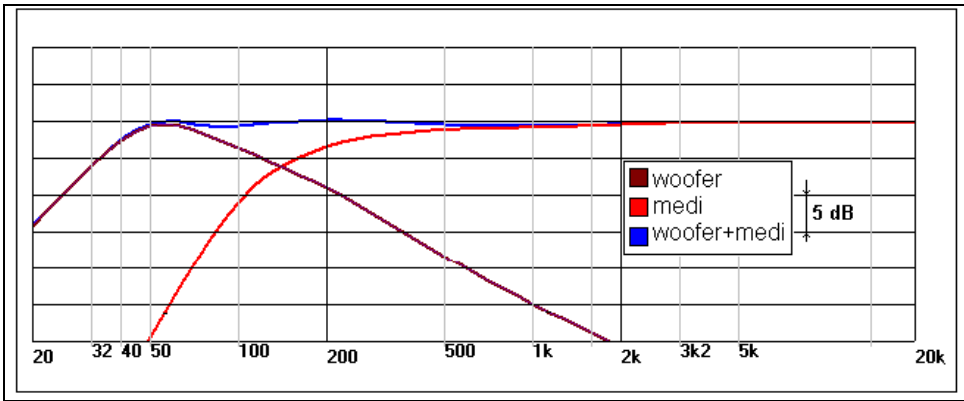


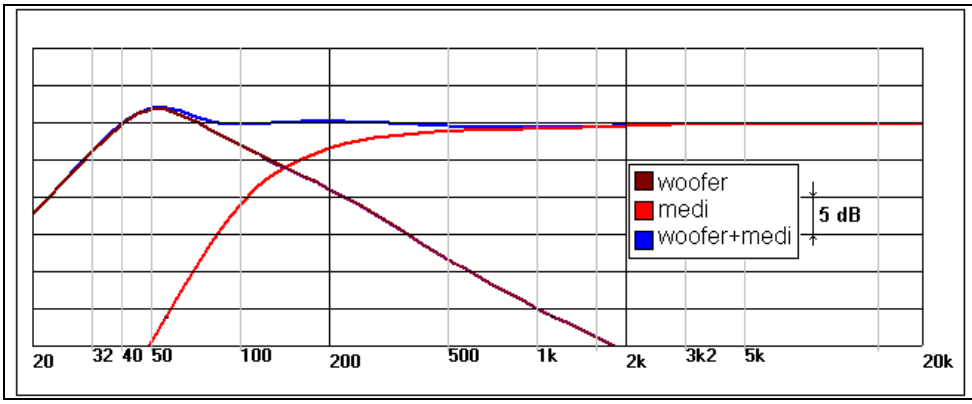
Place the speakers in the environment: low-frequency response

In principle, the best location to be found experimentally by trying different speaker arrangements. Often, however, the environment presents the constraints and limitations (for example, you can not move the furniture, there are doors and windows, etc.). The Opera Diva Callas 2016 speakers allow you to modify the low-frequency response by moving the tuning frequency of the reflex system. To do that, close one, two or all conducted with the plugs supplied.

Callas Diva has three reflex ducts on the rear side. If at least one of the conduits is open, the diffuser operates in reflex mode. When the ducts are all closed, the speaker operates as a sealed box.

Start with all ducts closed and then remove them one at a time. As an indication, quite generally, the "closed box" configuration is suitable when the speakers are very close to the walls and especially the corners of the room.

	closed box speaker near the walls **(1)**



reflex

diffuser away from the walls or listening at low level

(2)

Break-in:

Dynamic loudspeakers require a period of operation during which stabilize the characteristics. The parts subject to this process are the suspension and the diaphragms of the midrange, woofer and tweeter. The sound of the speaker, after a few tens of hours of operation, becomes more natural. This break-in period may last a few days and depends on how, and how much, the speakers are used.
Listening at low volume involves a longer break-in.

Switched on and off

First, make sure the volume of the amplifier is at zero. Turn on the source and the amplifier. Start with a low-volume listening for a few minutes. This serves to dry the moisture in the speakers and also to check if everything is working properly. Adjust the volume to the desired level never exaggerate.
To switch off the system, bring the volume to zero, turn off the amplifier and therefore the source.

Environment

The first and basic requirement of your space is a low noise. If necessary, install double-glazed windows, insulate the bins and reduce noise coming from the heating and ventilation systems.
Three dB reduction in the noise level correspond to duplicate the amplifier power.