

Genelec DSP System Selection

Introduction

This DSP System Selection guide prevents monitors being used in rooms that are too large or at listening distances that are too long. The recommendation allows larger monitors to be used if the customer desires.

Selecting the Right Model

Use the following chart as a guide for product and system selection and follow these three simple steps:

1. Calculate the room volume and find the highest row in the table column 'Room Volume up to' that is not smaller than your room volume.
2. Measure the listening distance to the center of the listening area and find the highest row in the table column 'Listening Distance up to' that is not shorter than your listening distance.
3. If there are two different rows selected in the previous two steps, select the models from the row that is lowest in the table, i.e. the larger system of the two if there are two different lines recommended.

Note:

a) If space or finances are limited, rear/side monitors can be compromised slightly by selecting the next sized model down in the range (use 8240A's instead of 8250A's).

Room Volume up to m ³ (ft ³)	Listening Distance up to m (ft)	Typical Listening Distance m (ft)	Front Speakers Stereo & LCR	Side/Rear Speakers (per ch.)	Subwoofers for 2 channel Stereo ¹⁾	Subwoofers for 5 channel Surround
75 (2,600)	2.0m (6' 6")	1.3m (4' 3")	8130A	8130A	SE7261A	SE7261A
85 (3,000)	2.2m (7' 2")	1.4m (4' 7")	8240A	8240A	7260A	7270A or 2 x 7260A
95 (3,400)	2.3m (7' 6")	1.5m (4' 11")	8250A	8250A	7270A or 2 x 7260A	7271A or 2 x 7270A ²⁾
115 (4,100)	3.0m (9' 10")	2.0m (6' 6")	8260A	8260A, 8250A	7271A or 2 x 7270A	7271A or 2 x 7270A

Table Notes:

¹⁾ If the system is planned to be eventually upgraded to surround, it is recommended to select the subwoofer model from the '5-channel surround' column for future SPL compatibility. In addition, selecting the larger of the two subwoofers will give additional headroom and lower distortion in a stereo system.

²⁾ Additional subwoofers of the same type may be required in a larger room with bass heavy program material.

> The column labeled "Typical Listening Distance" is, in our experience, the average distance between the loudspeaker and the listening position in studio control rooms.

> The column labeled "Listening Distance up to" is, in our experience, a maximum distance up to which the listener will receive accurately the direct sound. Beyond this point, chances are that the reflected sound becomes higher than the direct sound, degrading sound reproduction accuracy.