

# Speaker System Selection Guide

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.

Note: these recommendations are for the **smallest** system that can be expected to give a good theatrical experience. Larger systems offer more impact and headroom, so do not hesitate to select larger models in the range than those indicated. The main concern when up rating the system is to keep it in balance, so do not select a **HT330A** for the front wall and have **6020A**'s for sides and rears!

Room Volume up to m <sup>3</sup> (ft <sup>3</sup> )	Listening Distance up to m (ft)	Typical Listening Distance m (ft)	Front Loudspeakers	Side and Rear Loudspeakers (per channel)	Subwoofer
55 (2,000)	2.0m (7)	1.5 (5)	6010A	6010A	5040A
65 (2,300)	2.4m (8)	1.8 (6)	6020A	6020A	5050A
70 (2,500)	3.0m (10)	2.2m (7.2)	AIW25	AIW25	5041A, HTS3B
85 (3,000)	3.7m (12)	2.8m (9.2)	HT206B, AIW25	HT206B, AIW25	5041A, HTS3B
115 (4,000)	4.9m (16)	3.5m (11.5)	HT208B, AIW26	HT206B, HT208B, AIW26, AIW25	HTS4B
140 (5,000)	5.5m (18)	4.5m (15)	HT210B	HT208B, HT210B, AIW26, 2x AIW25	2x HTS4B
175 (6,200)	6.5m (21)	5m (16.4)	HT312B, AOW312B	HT208B, HT210B, AIW26	2x HTS4B
250 (8,800)	7.6m (25)	6.2m (20.4)	HT315B, HT320BC	HT210B, 2x AIW26	HTS6
370 (13,000)	8.5m (28)	7m (23)	HT324A, HT324AC	HT312B, AOW312B, 3x AIW26	2x HTS6 *
500 (17,600)	10.0m (33)	8.0m (26.3)	HT330A	HT315B, 2x AOW312B, 4x AIW26	2x HTS6 *
850 (30,000)	15.5m (50)	11m (36)	1035B, 1036A	HT315B, 2x AOW312B, 4x AIW26	3x HTS6 *

- 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.
- The column labeled "**Typical Listening Distance**" is, in our experience, the average distance between the front loudspeakers and the center of the listening area.
- (\*) This assumes that the system is bass managed at 40 Hz. A higher crossover frequency may require more subwoofers.

**Loudspeaker Selection Examples:**

1. If the room is 5 m (16½') wide, 9 m (29½') long and 3 m (10') high, then the room volume is 135 m<sup>3</sup> (4900 ft<sup>3</sup>). This limits the loudspeaker selection to **HT210B or larger**. If the listening distance is then measured to be say 5 m (16' 5") then the selected front loudspeakers are confirmed as being **HT210B or larger**.

2. If the room is 6 m (19½') wide, 14 m (46') long and 2.5 m (8') high, then the room volume is 210 m<sup>3</sup> (7200 ft<sup>3</sup>). This limits the loudspeaker selection to **HT315B or larger**. If the listening distance is then measured to be say 8 m (26'3") then the selected front loudspeakers should then be **HT324A or larger** as the **HT315B** should only be used up to 7.6 m (25').

If there are any doubts about product selection for a particular room then please contact GENELEC for advice. It is better to get the job right first time so there are no problems after the room is finished as unnecessary fixes affect the reputation of the installer and GENELEC.

