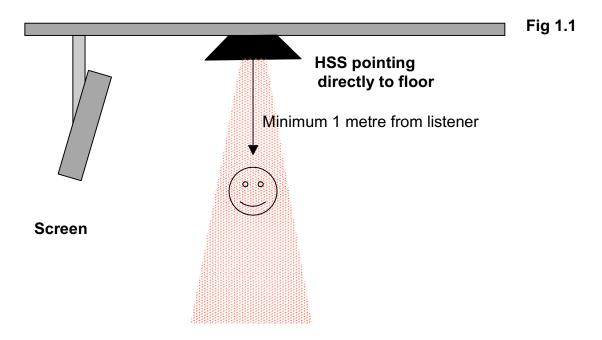
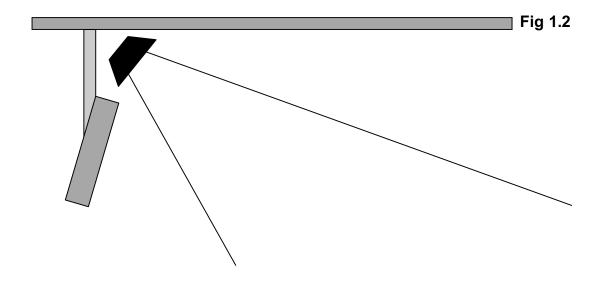
## **HSS Directional speakers system Installation Guidelines**

## **HSS Speaker positioning: Direct Mode**



- Correct Installation of the HSS is crucial to maximise it's performance and ensure audio is zoned, minimising any reflections.
- If the site is small we recommend installing the speaker pointing directly down towards the floor, creating a smaller sound footprint and reducing the reflective area. **Fig 1.1**
- Take into consideration any other possible reflective materials that may bounce the sound into unwanted areas, however, a small amount of ambient noise (general shop chatting, background music, air con etc) will easily help mask the reflective sound spots.
- Other materials around the proximity of the speakers may help absorb reflections and create a very focused sound beam when customers walk under the speakers.
- Reflections can also be reduced by adjusting the volume at source.
   Because HSS sound is created all along it's beam it is perceived by the listener that the sound is being generated by their ears, almost like virtual headphones. In smaller sites with less ambient noise reducing the volume

will help minimise reflections yet still maintain an audible localised area of sound.



- In larger sites or spaces HSS can be angled above a screen (Fig 1.2).
   This creates a larger sound footprint, capturing customers at extended distances.
- If angling the speaker this way be aware of any reflective flat surfaces or corners that may be in line with the HSS sound beam.
- Consider using PIR triggers or beam break sensors if you are not planning
  to use continuous looping audio. This will help keep the overall sound
  under control and minimise the risk of reflections being audible in the
  room. Be aware some PIR's will trigger at further distances, beam break
  sensors can define a much more localised trigger point. You may be able
  to get the audio to trigger only when someone is underneath the speaker
  itself.

- During installation or when a room is much quieter you may hear reflections occurring when audio is playing through HSS. Remember that ambient noise will help mask these reflections when people and visitors are present.
- Various suitable mounting brackets are available for HSS 3000 or your own Bespoke mounting may be used. 2 Mounting bolts are located on the rear back plate of the HSS 3000 unit.

This is a guide only. Every HSS install needs to be planned with a thorough site survey prior to fixing.