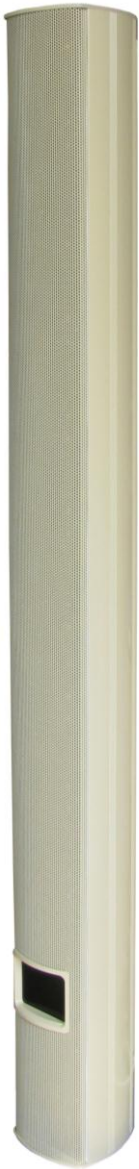# DSP1501 Phased Array Speaker

Features

➤ Acoustically simulate the directivity from different shapes
➤ Active column speaker with built-in digital signal amplifier
➤ AUX signal input and voltage power signal input
➤ Adjustable volume tone and other parameters
➤ Wide Frequency range:100Hz-20kHz
➤ LED screen display
➤ Operate with infrared remote controller
➤ Compact size, easy installation
➤ High electro-acoustic sensitivity
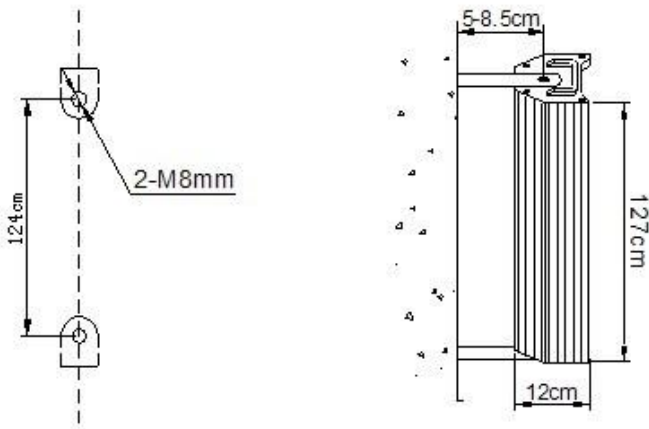
Description

The phased-array sound column is a new type of public address speaker. By applying the electronic and digital signal processing (DSP) technologies, it can simulate the directivity from different shapes of sound columns, while the inherent performances of the sound column will not be affected, e.g. rated power, range of effective frequency response and max sound pressure level.

With DSP technologies, we can operate with the remote controller to change the directivity of speaker system at some extent. This is suitable for loud speaking in a hall where the building acoustics is poor (especially long reverberation time). This product is most suitable for the hardware (sound box, DSP processor) of the loudspeaker system in sports venues (where the volume is large, the building acoustics is poor, the reverberation time is long and the sound is muddy), so that it can be combined with special software to make the controllable sound cover useful area (auditoria, etc) correctly and prevent it from diffusion to useless area (e.g. ceiling, door or window). In this case, it can reduce the investment in acoustic decorations in venues and decrease the energy loss caused by loudspeaker system. This leads to reduced investment in both the acoustic decorations and sound system in the sports venue.
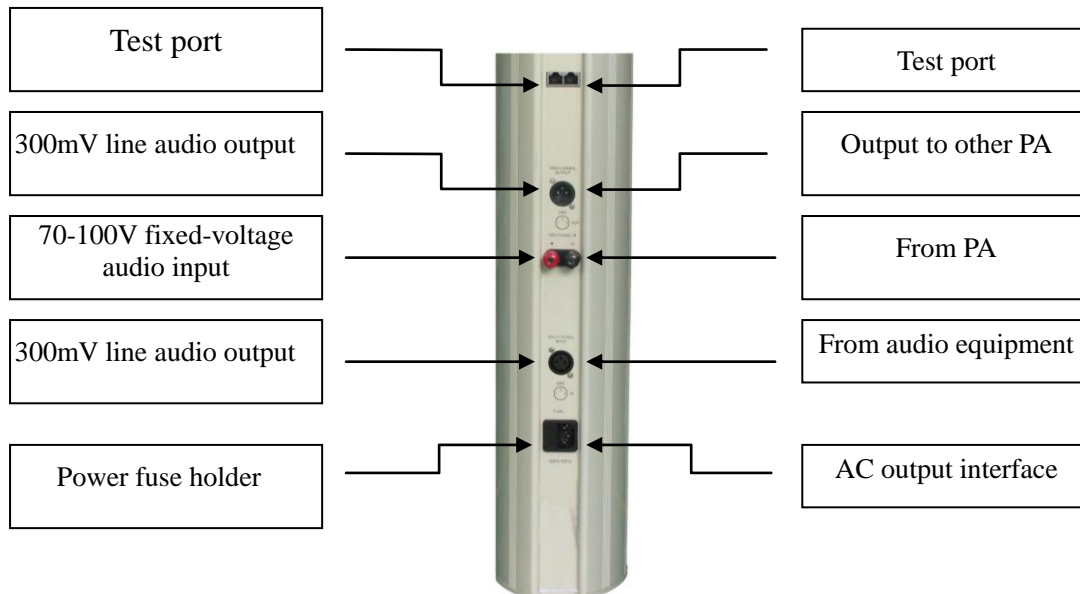
Specification

Model	DSP1501
Power	100W
Effective Frequency Range	100Hz - 20kHz
Radiation Angle In The Vertical	120 °
Radiation Angle In The Horizontal	30 °
Main Lobe Adjustment In The Focus	5m – 200m; -5m - -200m
Main Lobe Adjustment In The Horizontal	-60 °- +60 °
Speaker Dimensions (L*W*H)	4'' x 10
Sensitivity/Max Sound Pressure Level	98 dB(1m, 1w) / 118 dB
Input sensitivity	300Mv / 70-100V
Power Supply	AC220V (+10%, -20%), 50Hz
Net Weight	12.5kg
Size (L*W*H)	1300 x 160 x 110 (mm)

Installation Schematics

1. Select a proper position to install the column speaker, and fix with two ø8mm screws. Then mount the bracket and fix the sound column as shown on the right figure.
2. Connect the wire correctly as described in Section 5. Check if the sound column is secure and confirm that the connection is correct. Then, insert the power cable of sound column into AC electric grid.

Description of Back Ports

Test port		Test port
300mV line audio output		Output to other PA
70-100V fixed-voltage audio input		From PA
300mV line audio output		From audio equipment
Power fuse holder		AC output interface

1. Mute key
2. Sensitivity selection key (Sensitivity)
3. Volume / Setting Key (V+, V-)
4. Directivity / Setting Key (AN+、AN-)
5. Setting Confirmation Key (EQ)
6. Focus adjustment key (FOCUS+, -)
7. Treble adjustment key (TREBLE+, -)
8. Bass adjustment key (BASS+, -)
9. On/OFF Key (Note: The ON/OFF key can only switch off the current play status, but it cannot switch off the power of sound column). To switch off the power supply, please remove the power plug on sound column)