

SMARTVOX-II-50



Vertical Line Array Loudspeaker

SMARTVOX-II-50 is a vertical line array speaker that uses a linear spaced speaker arrangement in combination with passive phase shifting, passive power shading and filtering, to obtain a constant directivity index for multiple frequencies. The fixed Azimuth angle of -12 degrees allows the SMARTVOX-II-50 to be placed vertical against any surface, resulting in more clarity and lower reverberant field. Therefore, with a much higher 'direct-to-reverb' ratios has led to a higher intelligibility figure (STI).

The ordinary line-arrays radiates a cylindrical wave front that moves in a straight line from its source. Due to this, the normal column needs to be tilted forward to obtain good coverage of the listening area (figure 1). For most of the installation, it is required to focus the soundwaves in a forward direction into the audience area and avoid the annoying reflections from other surfaces. The loudspeakers in general will produce sound forwards and backwards especially for the lower frequencies. Therefore, the soundwaves will be reflected by the backwall. These waves are mirrored by the mounting angle of the array and will fill the environment with unwanted artificial reverberation energy, leading to lower direct-to-reverb ratio and to a poor intelligibility. By directing the beam of a loudspeaker using passive phase-shifting, power-shading and filtering technique for constant directivity, the SMARTVOX-II-50 can place in vertical position against its surface (figure 2), reducing any additional attributed energy to the reverberant field, resulting in more clarity and a much higher intelligibility.

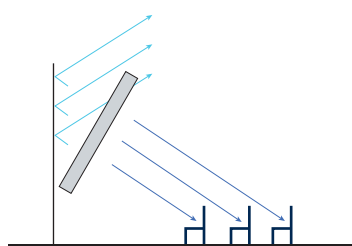


Figure 1

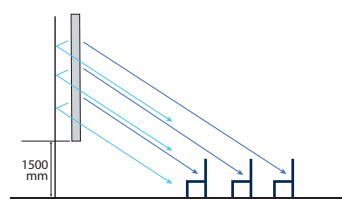
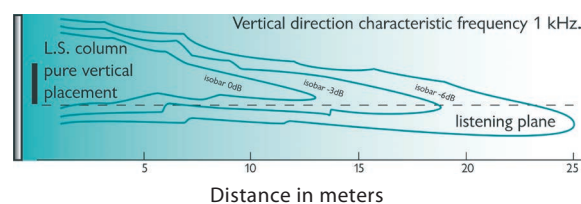


Figure 2

FEATURES

- Filtering based on Messenger Pro's patent algorithm
- Wide dispersion
- Linear spaces speakers
- Constant sound level
- Lower reverberant field
- Precise sound direction pattern in vertical placement



SMARTVOX-II-50

Vertical Line Array Loudspeaker

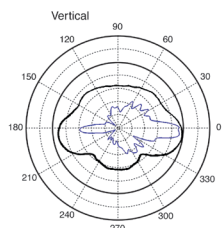
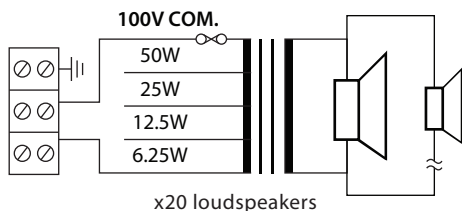
ELECTRICAL

- Voltage: 50/70/100 volts
- Max. power consumption: 50W
- Frequency response: 200 ~ 10k
- Horizontal coverage: 120 degrees
- Q factor/Di: 14.1/11.5 dB
- SPL @ 1k Hz, 1W/1M: 90.2 dB

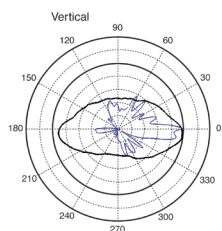
MECHANICAL

- Dimensions (H x W x D): 1415.75 x 100.39 x 152.1 mm
(55.74 x 3.95 x 5.99 inch)
- Weight: 9.3 kg (20.5 lbs)
- Colour: RAL 9016
- Finish: Aluminum with stainless steel bracket

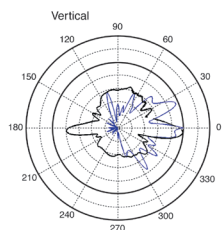
CIRCUIT DIGRAM



Octaveband 250 Hz
Octaveband 2000 Hz



Octaveband 500 Hz
Octaveband 4000 Hz



Octaveband 1000 Hz
Octaveband 8000 Hz

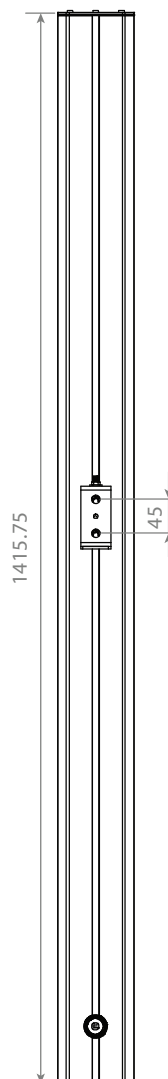
ENVIRONMENTAL

- Operating temperature: -5 °C ~ +55 °C (+23 °C ~ +131 °C)
- Storage temperature: -40 °C ~ +70 °C (-40 °C ~ +158 °C)
- Relative humidity: 20% to 95%
- Air pressure: 600 to 1100 hPa

ORDERING INFORMATION

- SMARTVOX-II-50: Vertical Line Array Loudspeaker

BACK VIEW



TOP VIEW

