

# SMARTVOX-II-30 SMARTVOX-II-60



## Vertical Line Array Loudspeaker

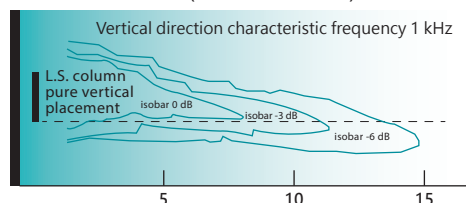
SMARTVOX-II-30/60 is a vertical line array speaker that uses a linear spaced speaker arrangement in combination with passive phase shifting, passive power shading and filtering, to obtain a constant directivity index for multiple frequencies. The fixed Azimuth angle of -12 degrees allows the SMARTVOX-II-30/60 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-30/60 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.

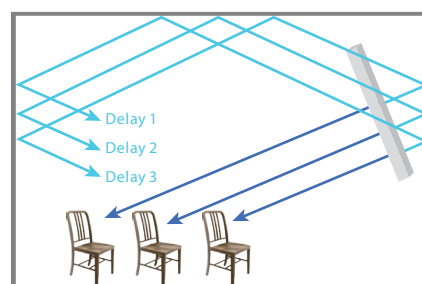
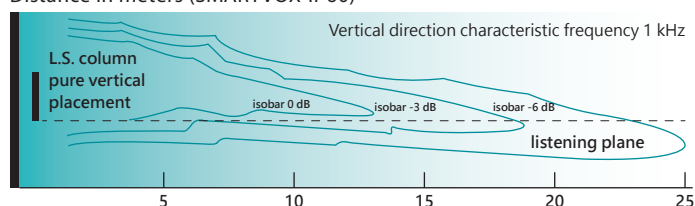
### FEATURES

- Filtering technique based on Messenger Pro™ patent algorithm
- Wide dispersion coverage
- Constant sound level and precise sound direction pattern in vertical placement
- With higher 'direct-to-reverb' ratios, and lead to a higher intelligibility gure (STI)
- Built-in 50V/70V/100V transformer

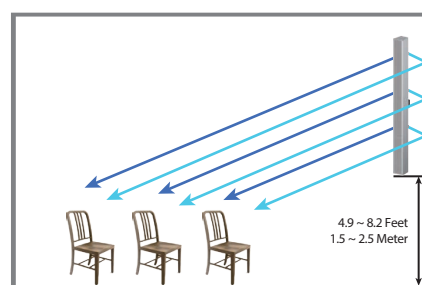
Distance in meters (SMARTVOX-II-30)



Distance in meters (SMARTVOX-II-60)



Sound Field of  
Ordinary Column Line Array (figure 1)



Sound Field of  
SMARTVOX-II-30/60 Line Array (figure 2)

# SMARTVOX-II-30 / SMARTVOX-II-60

## Vertical Line Array Loudspeaker

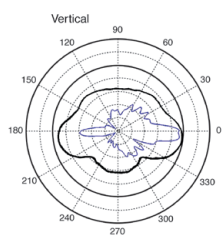
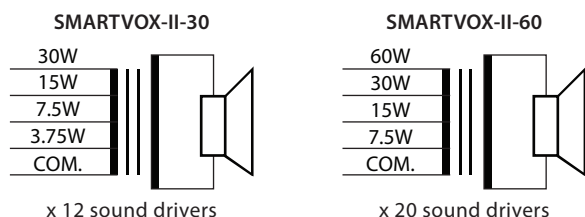
### ELECTRICAL

- Voltage: 50/70/100 volts
- Max. power consumption
  - SMARTVOX-II-30: 30W
  - SMARTVOX-II-60: 60W
- Frequency response: 200 Hz ~ 10 kHz
- Horizontal coverage: 120 degrees
- Q factor/Di: 14.1/11.5 dB
- SPL @ 1W/1M, test signal bandwidth 200 ~ 10 kHz
  - 30W: 87.7 dB
  - 60W: 90.2 dB

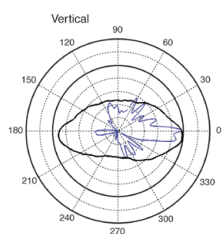
### MECHANICAL

- Dimensions (H x W x D)
  - SMARTVOX-II-30: 847 x 100 x 152 mm (33 x 4 x 6 inch)
  - SMARTVOX-II-60: 1416 x 100 x 152 mm (56 x 4 x 6 inch)
- Weight
  - SMARTVOX-II-30: 6.9 kg (15.2 lbs)
  - SMARTVOX-II-60: 9.3 kg (20.5 lbs)
- Colour: RAL 9016
- Finish: Aluminum with iron bracket

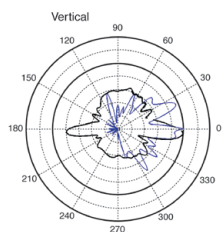
### CIRCUIT DIGRAM



Octaveband 250 Hz  
Octaveband 2000 Hz



Octaveband 500 Hz  
Octaveband 4000 Hz



Octaveband 1000 Hz  
Octaveband 8000 Hz

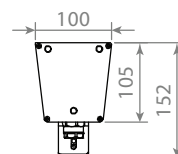
### ENVIRONMENTAL

- 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-30: Vertical Line Array Loudspeaker/30W
- SMARTVOX-II-60: Vertical Line Array Loudspeaker/60W

### TOP VIEW



### BACK VIEW

