

5W, 15W, & 30W High-Efficiency Digital Switching Self-Amplified Horns

Models SAH5, SAH15 & SAH30



Description The SAH5, SAH15, and SAH30 powered horn loudspeakers employ digital switching amplifier technology resulting in low DC current draw and low heat dissipation. This means fewer power supplies, longer cable runs, and the capacity to work at higher ambient temperatures when compared to conventional analog self-amplified horn speakers.

The horn loudspeakers can be positioned in any orientation (rotate, tilt, or swivel). The shape of the horn flare provides a controlled dispersion of sound for better intelligibility.

They can be used in any environment, indoors or outdoors, without affecting sound quality.

- Features**
- 5-, 15-, and 30-watt models with built-in amplifiers
 - All models operate from 24V DC power source
 - Digital switching amplifier technology provides low DC current draw and heat dissipation compared to conventional analog amplifiers
 - Low heat dissipation allows units to operate with continuous background music and in higher ambient temperatures than conventional analog self-amplified horn speakers
 - Excellent extended frequency response from 1.6" diameter voice coil and 90mm, 12-ounce magnet structure (SAH5 and SAH15) or 100mm, 16-ounce magnet structure (SAH30)
 - Predictable dispersion pattern over the full frequency range ensures excellent intelligibility and ease of layout
 - 3 ways to position speaker (rotate, tilt, and swivel)
 - Weatherproof, UV-protected plastic housing
 - Simple and secure cast aluminum swivel mount
 - Screw terminal strip for easy wire connections
 - Indexed volume control knob
 - Easily removable access cover
 - Slot in the base allows strapping to be used as a means of mounting the horn to electrical boxes (mounting strap included)
 - Mountable to an I-beam flange using Bogen's BC1 beam clamp (not included)
 - Two-Year Warranty

Understanding Current Units

Self-Amplified paging systems are made up of equipment that consume or provide operating current. To operate properly, the system needs to provide at least as much 24V current as it consumes.

Each product has a Current Units number. This number is either positive, negative, or zero to indicate how much current it provides or consumes from the system.

Note: 1 CU = 50 mA



Provides
System Current



Consumes
System Current



No Draw
on the System

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Technical Specifications	SAH5	SAH15	SAH30
Typical Current Consumption:	4 CU (200 mA)	9 CU (450 mA)	17 CU (850 mA)
Power Supply Voltage (nominal)	24V DC	24V DC	24V DC
Max. Power Rating:	5W	15W	30W
Max. Sound Level:	119 dBspl	124 dBspl	127 dBspl
Input Sensitivity:	125 mVrms	125 mVrms	125 mVrms
Frequency Response:	275 Hz - 14 kHz	275 Hz - 14 kHz	275 Hz - 14 kHz
Input Impedance:	2k ohms	2k ohms	2k ohms
Dispersion:	120° x 90°	120° x 90°	120° x 90°
Dimensions (W x H x D):	10- ⁵ / ₈ " x 12" x 11- ¹ / ₂ "	10- ⁵ / ₈ " x 12" x 11- ¹ / ₂ "	10- ⁵ / ₈ " x 12" x 11- ¹ / ₂ "
Weight:	6 lb.	6 lb.	6 lb.

Architect and Engineer Specifications

The SAH5, SAH15, and SAH30 shall be self-amplified horn loudspeakers. All loudspeakers shall operate from a 24V DC (nominal) power source. All models shall employ digital switching amplifier technology to provide low DC current draw and heat dissipation.

The shape of the horn flare shall provide a controlled dispersion of sound for better intelligibility.

All models shall include a screw terminal strip and a volume control knob located under a removable access cover.

The SAH5, SAH15, and SAH30 shall include a simple to use and secure cast aluminum swivel mount and a mounting strap to permit mounting to electrical boxes. All shall be capable of being positioned in any orientation (rotate, tilt, or swivel).

All models shall be comprised of weatherproof, UV-protected plastic housing.

All models shall be mountable to an I-beam flange using Bogen's BC1 beam clamp (not included).

Product dimensions of all models shall be 10-⁵/₈" W x 12" H x 11-¹/₂" D. Product weight for all models shall be 6 lb.

SAH5

The SAH5 shall be a 5-watt self-amplified horn loudspeaker. The typical current consumption shall be 4 CU (200 mA). The loudspeaker shall operate from a 24V DC (nominal) power source. The maximum output level shall be 119 dBspl. The input sensitivity shall be 125 mVrms. The frequency response shall be 275 Hz - 14 kHz. The input impedance shall be 2k ohms. The dispersion shall be 120° x 90°.

SAH15

The SAH15 shall be a 15-watt self-amplified horn loudspeaker. The typical current consumption shall be 9 CU (450 mA). The loudspeaker shall operate from a 24V DC (nominal) power source. The maximum output level shall be 124 dBspl. The input sensitivity shall be 125 mVrms. The frequency response shall be 275 Hz - 14 kHz. The input impedance shall be 2k ohms. The dispersion shall be 120° x 90°.

SAH30

The SAH30 shall be a 30-watt self-amplified horn loudspeaker. The typical current consumption shall be 17 CU (850 mA). The loudspeaker shall operate from a 24V DC (nominal) power source. The maximum output level shall be 127 dBspl. The input sensitivity shall be 125 mVrms. The frequency response shall be 275 Hz - 14 kHz. The input impedance shall be 2k ohms. The dispersion shall be 120° x 90°.

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