

DATA SHEET

SP540A MULTI-LOCATION SPEAKER SYSTEM

- Recreational Facilities
- Transportation Terminals
- Convention Centers
- Correctional Facilities
- Warehouse/Factories
- Community Halls
- Gymnasiums
- Sports Arenas
- Shopping Malls
- Super Stores
- Restaurants
- Theatres
- Schools
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FULL FIDELITY - FOR BOTH VOICE AND MUSIC

The KDM SP540A is a full fidelity (40 Hz to 15 kHz) Multi-location Speaker System. The KDM SP540A tuned port enclosure contains a highly efficient 12" woofer matched to two compression horns and drivers. The frequency spectrum of the woofer and horns is determined by an internal crossover network that is optimized to maximize performance. This combination ensures full fidelity reproduction from an extremely compact multi-location speaker system.

HIGH SENSITIVITY - 101 dB PER WATT PER METER

The KDM SP540A is extremely sensitive with a Sound Pressure Level (S.P.L.) of 101 dB per watt at 1 meter. As a result, very little amplifier power is required to obtain the required sound pressure levels. At maximum RMS input power the KDM SP540A can produce 124 dB S.P.L. at one meter.

HIGH POWER HANDLING - 200 WATTS RMS / 400 WATTS PEAK

The KDM SP540A can withstand input power of 200 watts RMS. The KDM SP540A also contains a built-in, self -resetting thermal protective circuit. This protects the high frequency drivers from excessive and distorted (10% T.H.D.) input levels.

WIDE COVERAGE AREA - 180° X 120°

The KDM SP540A provides coverage over a 180° Horizontal and 120° Vertical plane. These wide dispersion characteristics will permit a large area to be covered by a single KDM SP540A.

SMALL AND COMPACT - 16 INCHES HIGH x 19½ INCHES DEEP / 82 LBS

The KDM SP540A is only 16 inches (40.6 cm) high x 19½ inches (49.5 cm) deep and weighs 82 lbs (37.2 kg). The KDM SP540A can be installed in low ceiling areas and close to lights without casting shadows as well as mounted on walls with very little protrusion from the wall. The low weight permits suspension using readily available hardware such as closed link chains, wire rope, etc. The combination of small dimensions and low weight permits the KDM SP540A to be shipped inexpensively..



Technical Specifications

Frequency Response:	40 Hz to 15 kHz ± 10 dB (on axis) 50 Hz to 12 kHz ± 6 dB (on axis)
Optimum Power:	50 to 120 watts RMS total.
Power Handling:	200 watts RMS total, 400 watts peak, (Total Harmonic Distortion less than 10%)
Impedance:	8 ohms nominal.
Dispersion:	180° Horizontal, 120° Vertical. ± 6 dB Level 100 Hz to 10 kHz.
Sensitivity:	101 dB/watt/meter on axis, pink noise 100 Hz to 10 kHz averaged.
Maximum S.P.L.:	124 dB RMS / 127 dB Peak at 1 meter.

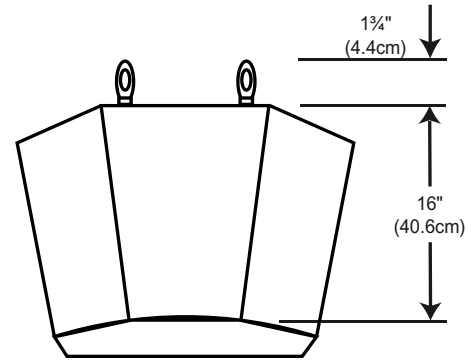
Octasound Speakers and Sound System Modules are manufactured by the award winning company KDM Electronics Inc. With over 25 years of experience, KDM can design a turn-key sound system to meet or exceed your sound requirements.

by KDM Electronics

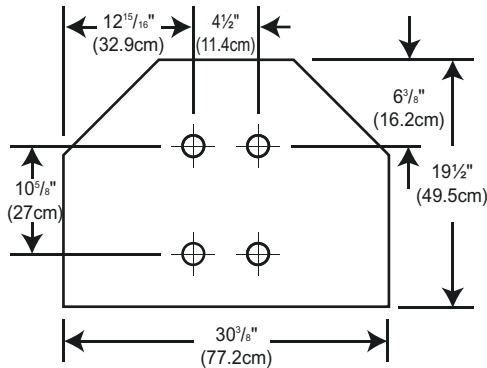
SP540A MULTI-LOCATION SPEAKER SYSTEM

Physical Specifications

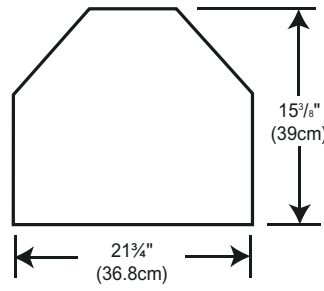
Temperature Range:	-20°C to 55°C (-4°F to 131°F)
Humidity Range:	0% to 100% Non Condensing
Dimensions:	See Diagrams (Not to Scale, Tolerance $\pm 1/4"$)
Weight:	68 lbs (30.1 kg)
Material:	Exterior Treated Wood Composite Panel
Mounting Hardware:	Top Panel: Four 1 1/2" Eye Nuts, 3/4" I.D. Eye 1/4 x 20 Thread Rear Panel: Four 1 1/2" Eye Nuts, 3/4" I.D. Eye 1/4 x 20 Thread
Shipping Weight:	78 lbs (35.4 kg)
Shipping Dimension:	32" (81.3cm) L x 24" (61cm) W, x 20" (50.8cm) H



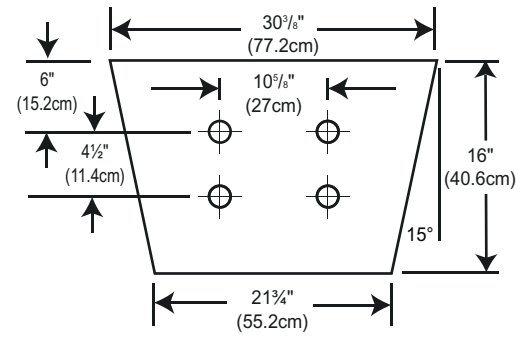
Front View



Top View and Mounting Hardware Dimensions



Bottom View



Rear View and Mounting Hardware

Architects and Engineers Specifications

The loudspeaker shall be a two-way speaker system containing a 12" (305 mm) diameter, low frequency driver, with a 3" (76 mm), 8 ohm voice coil, and a magnet weight of 120 ounces (3.4 kg) minimum, plus, two high frequency 9" x 9" (230 mm x 230 mm) wide dispersion exponential compression horns & drivers with a 1 3/4" (44 mm) voice coil manufactured in CCAW (Copper Clad Aluminum Wire) Kapton® former and a barium ferrite magnet that weighs of 24 ounces (665 g) minimum and contains an injected phase plug optimized to eliminate undesirable phase cancellations. The horns and drivers shall have a 1" (25mm) throat diameter, titanium diaphragm and Kapton® bobbin to reduce overheating and voice coil rub. These components shall all be contained within a tuned port bass enclosure. The sensitivity shall be 101 dB per watt per meter. The overall speaker system shall contain one crossover network that separates the low and high frequency spectrum at a crossover point of 2 kHz $\pm 15\%$. The internal crossover shall have a built in thermal protective circuit to prevent damage from occurring at power levels up to 400 watts of peak power. The overall speaker system shall be capable of withstanding power levels up to 200 watts RMS, with a total harmonic distortion of less than 10%. The total impedance of the speaker system shall be 8 ohms nominal. The speaker shall contain a perforated metal speaker grill to protect the bass speaker. The enclosure shall be manufactured from 3/4" (19 cm) moisture resistant wood composite with all joints secured with waterproof glues. A sealant, primer and durable industrial textured finish shall be applied to the enclosure. All exposed metal must be aluminum, stainless steel, plated or painted. Four 1 1/2 inch eye nuts shall be provided for mounting on the top cover and four 1 1/2 inch eye nuts shall be provided for mounting on the rear panel. The complete speaker shall weigh a maximum of 82 lbs. (37.2 kg), with the following maximum dimensions: top width 30 3/8" (77.2 cm), bottom width 21 1/4" (55.2 cm) and height 16" (40.6 cm) + 1 3/4" (4.4 cm) for mounting hardware. **The loudspeaker shall be KDM Electronics Incorporated Model SP540A.**

Ordering Information

SP540A - XX (where **XX** specifies color). **WH** = White Low Sheen Splatter Finish (Standard)

Other colors and Veneers available upon request. Example: BK = Black, OV = Oak Veneer

.....KDM Electronics Incorporated reserves the right at any time to make changes in product design, components and specifications, as may be warranted by progress in technology.



Octasound
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