KLIPSCH PERMANENT INSTALLATIONS

HOP

KI-102-SMA-II | KI-115-SMA-II | KI-172-SMA-II | KI-215-SMA-II | KI-262-SMA-II | KI-272-SMA-II | KI-362-SMA-II | KI-396-SMA-II



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IMPORTANT SAFETY INSTRUCTIONS

- 1. READ these instructions.
- 2. KEEP these instructions.
- 3. HEED all warnings.
- 4. FOLLOW all instructions.
- 5. DO NOT use this apparatus near water.
- 6. CLEAN ONLY with dry cloth or lightly damped cloth.
- 7. DO NOT block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. DO NOT install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. ONLY USE attachments/accessories specifically designed for this application



- 10. USE only with a cart, stand, tripod, bracket, or table specifically designed for this application, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 11. DO NOT expose this apparatus to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the apparatus.
- 12. DO NOT modify or alter in any way.
- 13. SWITCH OFF amplifier prior to connecting speakers.
- 14. DO NOT hang or suspend any items from this apparatus.

The exclamation point, within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

The lightning flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to persons.

WARNING: No naked flame sources – such as candles – should be placed on the product.

WARNING: Neglect to follow the safety and installation instructions may cause malfunctions resulting in property damage and personal injury or death.

WARNING: Installation must be done by qualified personnel to appropriate standards and/or building codes.



WARNING: Do Not Open! Risk of Electrical Shock. Voltages in this equipment are hazardous to life. No user-serviceable parts inside. Refer all servicing to qualified service personnel.



Klipsch recommends that only qualified personnel install its loudspeaker systems. In addition to the load ratings of speaker enclosure pickup points, rigging hardware and array configurations, the safety and integrity of any installation depends on the strength and suitability of the attachment location. At all times, make sure that the equipment and rigging point locations are inspected and meet all load requirements with a large margin of safety. Check all rigging components for defects and corrosion as per their manufacturer's recommendations.

Be sure that adequate safety factors are observed, including verifying the load rating and stress capabilities of attachment hardware, including all nuts, bolts, brackets and straps. Klipsch additionally recommends backup retaining straps and/or cinched wirerope for an added measure of safety.

Installations and attachment locations that could present a safety harzard should be checked and certified as safe by a professional structural engineer.

After assembly of the components on each speaker system, but before operation, be sure that all bolts and nuts are double-checked for proper seating and tightness. Due to the weight and size of the components involved, potential damage could occur if devices were to become unattached. The KI Series of products are for use as a "Single Mount Array", or SMA. The suspension hardware is intended for applications requiring suspension of an individual loudspeaker.

The multiple suspension points are available to add flexibility to the mounting options, but NOT intended to be used as suspension points for other loudspeakers.



KI-102-SMA-II



KI-172-SMA-II

KI-102-SMA-II | KI-172-SMA-II

The optional SB-102 accessory bracket is specifically designed for the KI-102-SMA-II and KI-172-SMA-II loudspeaker systems. The bracket provides up to four attachment points to the securing surface and two attachment points to the speaker. When installing the bracket, the attachement point (2" x 4" stud, Unistrut, "I" beam, etc.) must be made with bolts that will securely hold the bracket to the mounting surface, which must be load-rated to hold the speaker safely in place.

After the bracket is installed, mount the speaker to the bracket by first removing the factory-attached screws on the top and bottom of the speaker. The bracket comes with two 1/4" 20-thread knobs and washers, which will attach the bracket to the speaker. Slide the speaker over the bracket and align the hole in the bracket with the threaded hole in the speaker. Attach the knob screw and washer provided, and secure the screw. Do the same to the bottom. Adjust the angle of the speaker to the desired location and tighten both knob screws.

On the KI-172-SMA-II, additional internal mounting bolts are installed for the attachment of readily available Omnimount[®] and other compatible brackets. Before completing any installation using these devices, be sure that all hardware is firmly attached and tightened, as recommended.



KI-262-SMA-II



KI-362-SMA-II



KI-272-SMA-II



KI-396-SMA-II



KI-115-SMA-II



KI-262-SMA-II | KI-272-SMA-II | KI-362-SMA-II KI-396-SMA-II | KI-115-SMA-II | KI-215-SMA-II

The KI-396-SMA-II, KI-362-SMA-II, KI-262-SMA-II utilize sixteen 3/8" -16 threaded suspensions points with the KI-272-SMA-II and KI-115-SMA-II using twelve and four suspension points respectively. The locations for these threaded mounting points are compatible with readily available commercial rigging bars.

For the KI-115-SMA-II, Klipsch recommends use of the four rear panel suspension points for face-down orientation.

Internal metal brackets that distribute the load to adjacent enclosure panels back each individual mounting point.

Klipsch recommends that only professional-grade rigging components, appropriately rated straight bolts and welded eye bolts are used. Additionally, safety backup straps or wirerope should be installed for added measure of rigging safety.

VISIT KLIPSCH.COM/PRO TO VIEW SPECIFICATION SHEETS FOR INDIVIDUAL FLY POINT LOCATIONS BY MODEL.

EASE data is available on all KI series speakers at KLIPSCH.COM/PRO. Klipsch urges users to refer to this data when determining how specific speaker systems should be installed for optimum performance. Although toed-out suggestions for coverage patterns are suggested below, these loudspeakers do not necessarily have to be toed-out when installed in an array. There can be pattern overlap, which will increase output in that region, although with lobing side effects.



NOTE: EACH SPEAKER SHOULD BE SUSPENDED INDIVIDUALLY WHEN FORMING THE LOUDSPEAKER ARRAY.

The KI-102-SMA-II, KI-362-SMA-II and KI-396-SMA-II systems have horizontal coverage patterns of 90°. The side panels are angled at 22.5°, so two speakers tightly aligned create a 45° angle between the axes. As this accounts for only half of an individual speaker's total coverage angle, the speakers would need to be toed-out to 90° (included angle), to provide the smoothest pattern and 180° of total coverage.

The KI-262-SMA-II has a 60° coverage pattern, with side panels angled at 22.5°. Two enclosures tightly aligned create an angle of 45 degrees, and therefore would need to be toed out an additional 15 degrees (included angle) to form a 60° angle between axes, creating 120° total coverage.

The KI-172-SMA-II and KI-272-SMA-II are asymmetrical enclosures, and therefore offer multiple mounting angle options. Note that their coverage patterns are the same as the KI-102-SMA-II and KI-262-SMA-II, respectively.

Please refer to the EASE data on KLIPSCH.COM/PRO for specific coverage pattern information on the KI-115-SMA-II and KI-215-SMA-II low-frequency enclosures. The KI-215-SMA-II matches the KI-362-SMA-II enclosure form. Klipsch recommends that power provided to the speakers not exceed the values indicated in the specifications by more than 3dB. If continuous power or thermal ratings are exceeded, the internal protective KLIP circuit will shut down the high- or high/mid-frequency sections. These will remain shutdown until input power is reduced significantly. The KLIP circuit monitors continuous average power. Although unlikely, it is possible to create a situation where extreme transient signals could damage componenet diaphragms before triggering the KLIP protection circuit. (KI-396-SMA-II does not feature KLIP circuit driver protection) USE CAUTION WITH HIGH POWER!

Damage can also occur due to distortion generated from underpowering, i.e. overdriving with too little power. Klipsch recommends that amplifier headroom be based on values 3dB above the maximum speaker power ratings, or twice the published numerical power rating of the speaker. For example, the KI-102-SMA-II is rated at 200 watts continuous. A 3dB continuous headroom factor would suggest a 400-watt amplifier.

KI-362-SMA-II VARIPOINT™ ADJUSTMENT



The KI-362-SMA-II three-way loudspeaker system provides for pattern adjustment by rotating the position of the high- and midfrequency VariPoint module. To accomplish this, first determine the desired orientation of the Varipoint module. This should be established before the speaker is suspended. While the speaker is on its back, remove the eight #10 24-thread screws attaching the high- and mid-frequency horn module to the front baffle. Rotate the baffle to the desired position and reattach. Make sure that the screws are fastened tightly. The module can be adjusted in 45° increments, to eight possible positions.

DO NOT ATTEMPT THIS OPERATION WHILE THE SPEAKER IS UPRIGHT!

INPUT CONNECTIONS



All KI products feature a simple 2 pt. barrier strip input.



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