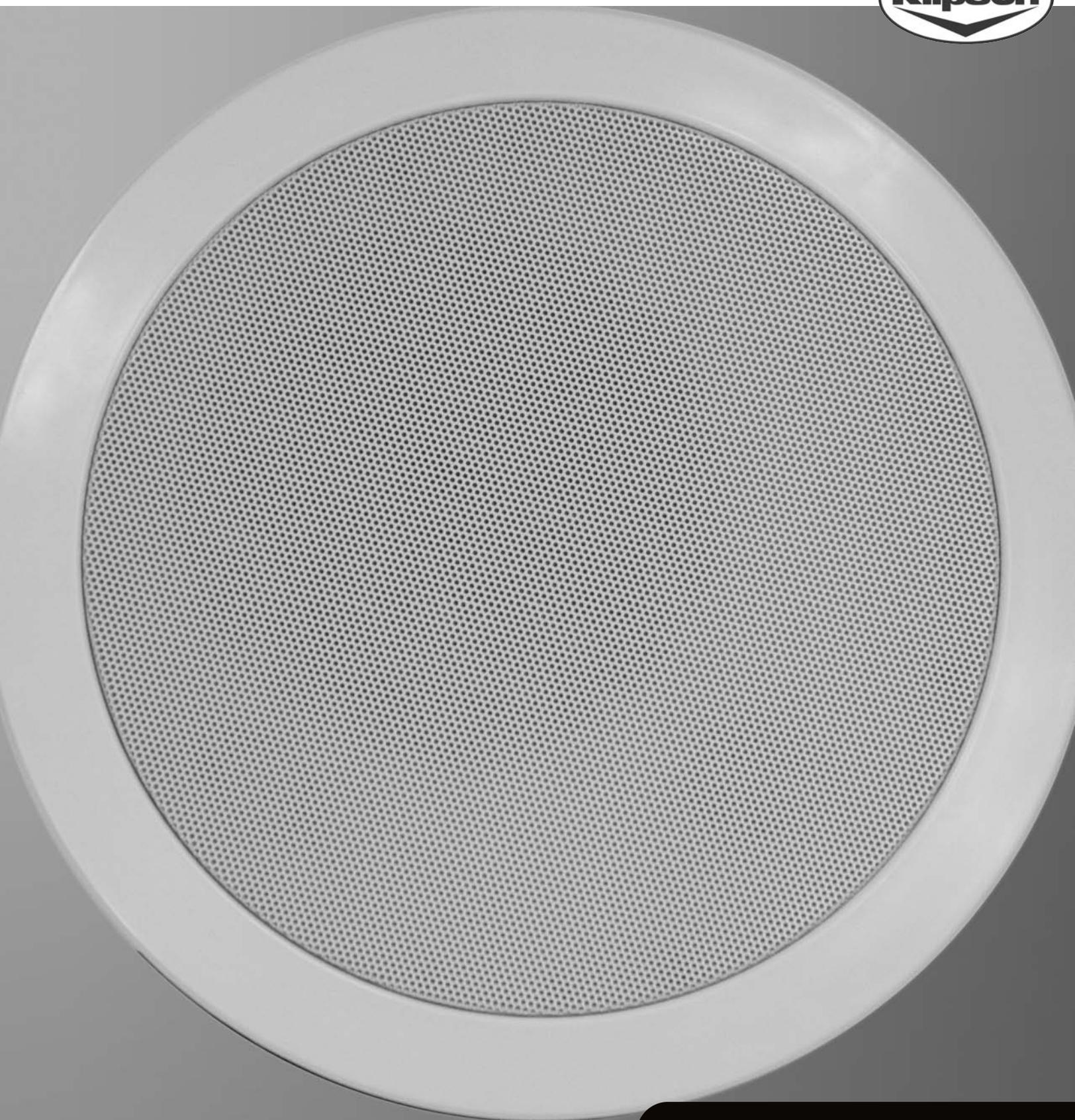


**IC-400-T, IC-525-T & IC-650-T**  
**IN-CEILING LOUDSPEAKERS**



**OWNER'S MANUAL AND WARRANTY**

# IC-400-T, IC-525-T & IC-650-T

Thank you for purchasing your Klipsch IC-400-T, IC-525-T or IC-650-T in-ceiling speakers.

The IC-400-T, IC-525-T and IC-650-T in-ceiling speakers have been designed for music reinforcement applications. Unobtrusive, these loudspeakers are engineered for easy, versatile installation.

The IC-400-T, IC-525-T and IC-650-T feature an internal transformer for 70V/100V distributed-line systems. The transformer taps are selected using a rotary switch located conveniently under the grille. For applications where 8 ohm operation is required, the transformer can be by-passed by using an optional connection located on the back input terminal and selectin 8 Ohm on the front switch.

Before installing your speakers take a moment to check the contents of the cartons and make sure nothing has been damaged in transit.

## Contents Description

Contents Description	QUANTITY
Speaker Modules	2
Grille	2
Reinforcement Ring	2
Rails	4
Cardboard Cutout Template and Paint Mask	2
Screws (Attach Rails to Reinforcement Ring)	8
<sup>3</sup> / <sub>4</sub> " Adapter Fittings	2

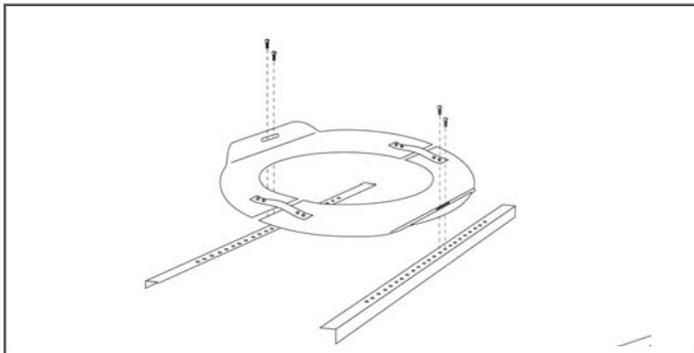
## Installation Guidelines

The IC-400-T, IC-525-T and IC-650-T include a tilebridge for use when installing the loudspeaker into suspended ceilings or wherever additional reinforcement of the ceiling material is required. The tilebridge and loudspeaker are designed such that installation may be accomplished where access above the ceiling is not possible or may be difficult.

## Installation

1. The tilebridge is composed of three parts—a reinforcement ring and two rails. The two rails should be attached to the reinforcement ring using the four included screws as shown below.

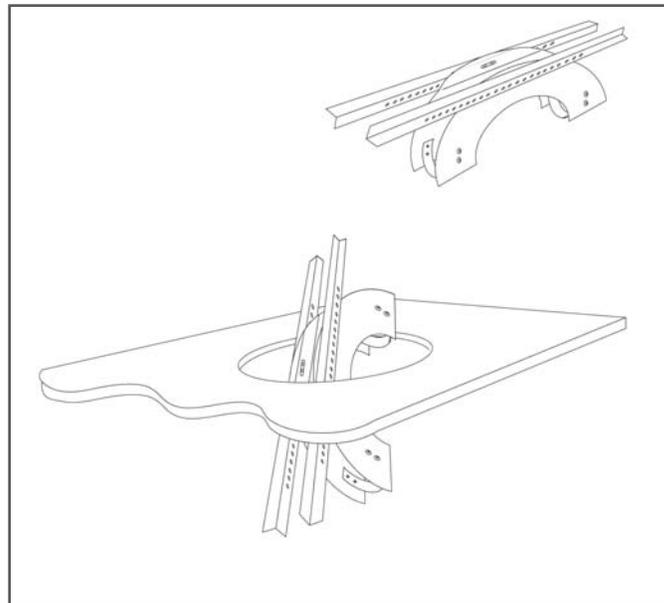
**Caution: Be sure to comply with any and all building codes in your area.**



2. To install your IC-400-T, IC-525-T or IC-650-T cut out a hole in the ceiling using either the cardboard cutout template provided with your speakers or consult the measurements below. Pull wiring through hole.

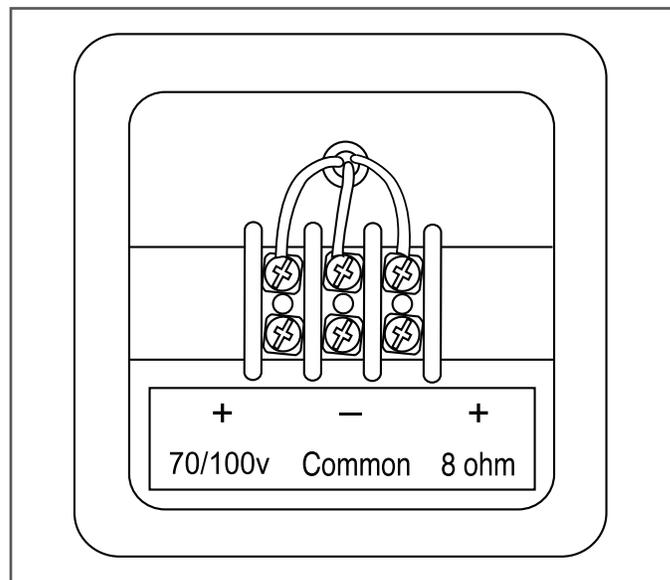
IC-400-T, IC-525-T	9.125" Round
IC-650-T	10.125" Round

3. To install the tilebridge, fold the rail side of the ring back upon itself using the spring tensioner on the reinforcement ring to allow insertion into the cutout hole. Once it is inserted into the cutout hole, release the reinforcement ring such that it unfolds back to its normal position. Position tilebridge over cutout hole, and insure that the tile rails rest on the t-grid struts.

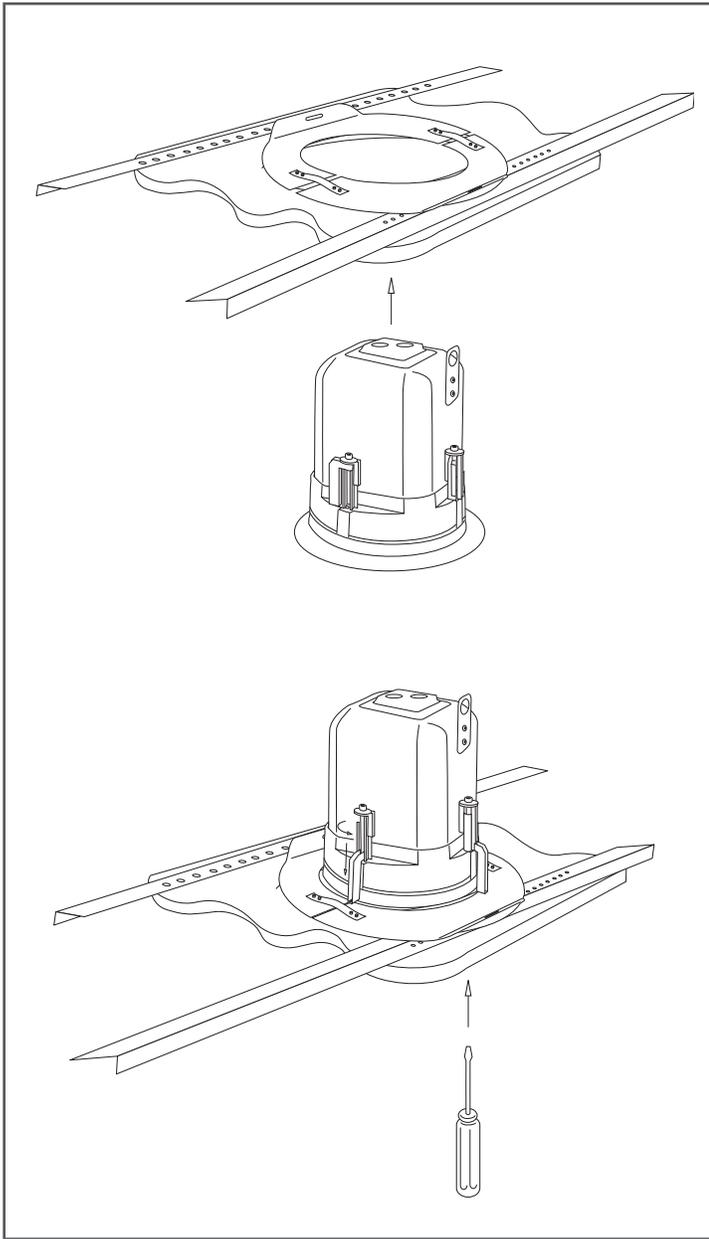


4. The wiring compartment is intended as a termination point for the audio circuit. Access to this compartment is gained by removing the terminal cover located on the back of the speaker. The terminal cover will accept the appropriate conduit/wire adapter (provided). Feed wires through conduit/wire adapter and connect to the input terminal according to the desired operation mode. Be sure to observe proper polarity. Replace the terminal cover and tighten the conduit/wire adapter to secure the wire.

**Caution: When connecting 70V or 100V distributed line systems, take care to ensure proper terminal connection. Connection to the low impedance terminal could result in speaker damage, amplifier damage, or both.**



5. Insert the speaker into the cutout hole. With a #2 Phillips screwdriver, tighten the four dog clamps until they are seated securely against the ceiling surface. Do not overtighten.

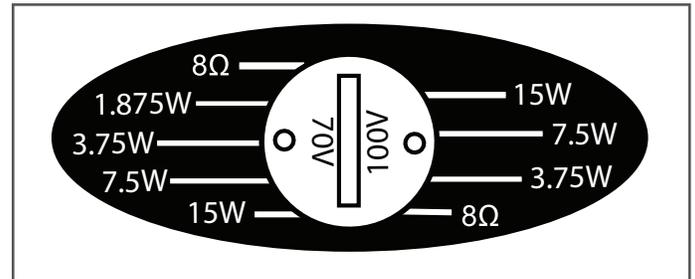


6. For installations using 70v/100v input connection, set the switch on the front panel to the desired setting. For applications where 8 Ohm impedance is desired, the switch should be set to 8 Ohms. Note: The speaker comes from the factory set at the lowest output setting (highest impedance).

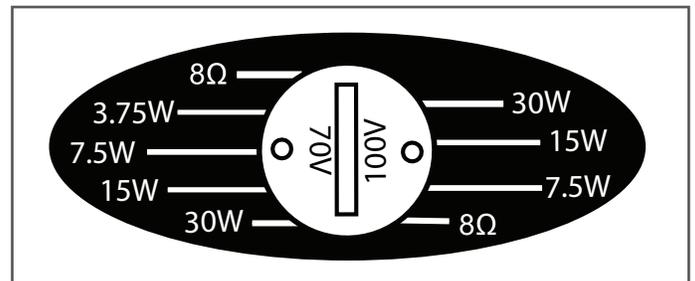
7. Using the flat of your hand, insert grille into speaker frame making sure it is securely seated and flush.

### Seismic Tab

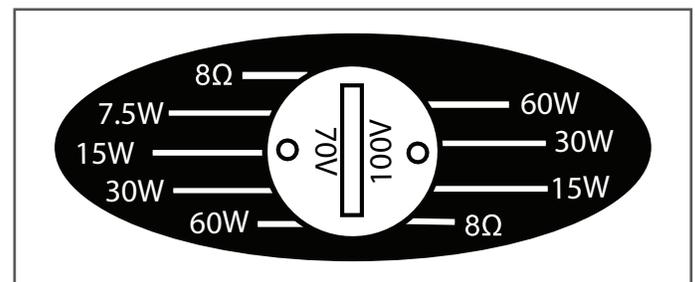
A seismic tab, located on the back of the speaker, is used as a secondary security point. Some construction codes may require its use. To utilize the seismic tab, run a support wire from a secure point in the ceiling and attach it to the tab. Be sure to consult the construction codes in your area. Klipsch recommends the use of this tab in all installations as a secondary means of support.



IC-400-T tap selectable



IC-525-T tap selectable



IC-650-T tap selectable

**IC-400-T, IC-525-T & IC-650-T SPECIFICATIONS**



**IC-400-T**

FREQUENCY RESPONSE	70-20k Hz +/- 4 dB
CONT. POWER HAND.	50 watts (14.5V)
CALC MAX CONT. OUTPUT @ 1M	100 dB
SENSITIVITY 2.83 V/1M	86dB
COVERAGE	80 degrees
DI	8 dB
Q	6.3
NOMINAL IMPEDANCE	8 ohms, min 4.2 ohms when switch is set to 8 ohm position
DIAMETER	9"
CUTOUT DIAMETER	9.125"
OVERALL DEPTH	8.313"
MOUNTING DEPTH	8"
WEIGHT	6.25 lbs.
INPUT CONNECTORS	Terminal Strip
TRANSFORMER TAPS	70V: 15W, 7.5W, 3.8W, 1.9W    100V: 15W, 7.5W, 3.8W
FINISHES	Black and White
TRANSDUCERS	5" WOOFER AND 1" TITANIUM DIAPHRAGM COMPRESSION DRIVER ON A 2" ROUND TRACTRIX HORN
ENCLOSURE TUNING	Vented Via A 1" Tractrix port



**IC-525-T**

FREQUENCY RESPONSE	65-20k Hz +/- 4 dB
CONT. POWER HAND.	65 watts (16.5V)
CALC MAX CONT. OUTPUT @ 1M	104 dB
SENSITIVITY 2.83 V/1M	89dB
COVERAGE	105 degrees
DI	6.5 dB
Q	4.5
NOMINAL IMPEDANCE	8 ohms, min 4.2 ohms; switch set in 8 ohm position
DIAMETER	9"
CUTOUT DIAMETER	9.125"
OVERALL DEPTH	9.188"
MOUNTING DEPTH	8.875"
WEIGHT	8.25 lbs.
INPUT CONNECTORS	Terminal Strip
TRANSFORMER TAPS	70V: 30W, 15W, 7.5W, 3.8W    100V: 30W, 15W, 7.5W
FINISHES	Black and White
TRANSDUCERS	5.75" WOOFER AND 1" TITANIUM DIAPHRAGM COMPRESSION DRIVER ON A 3.5" ROUND XT MODIFIED TRACTRIX HORN
ENCLOSURE TUNING	Vented Via A 1" Tractrix port



IC-650-T

FREQUENCY RESPONSE	50-20k Hz +/- 4 dB
CONT. POWER HAND.	80 watts (18.8 V)
CALC MAX CONT. OUTPUT @ 1M	106 dB
SENSITIVITY 2.83 V/1M	90dB
COVERAGE	105 degrees
DI	6.5 dB
Q	4.5
NOMINAL IMPEDANCE	8 ohms, min 4.4 ohms; switch set in 8 ohm position
DIAMETER	10"
CUTOUT DIAMETER	10.125"
OVERALL DEPTH	10.938"
MOUNTING DEPTH	10.625"
WEIGHT	11.25 lbs.
INPUT CONNECTORS	Terminal Strip
TRANSFORMER TAPS	70V: 60W, 30W, 15W, 7.5W      100V: 60W, 30W, 15W
FINISHES	Black and White
TRANSDUCERS	6.5" WOOFER AND 1" TITANIUM DIAPHRAGM COMPRESSION DRIVER ON A 3.5" ROUND XT MODIFIED TRACTRIX HORN
ENCLOSURE TUNING	Vented Via A 1" Tractrix port

## Klipsch Limited Warranty

KLIPSCH, AUDIO TECHNOLOGIES ("KLIPSCH") warrants this product to be free from defects in materials and workmanship (subject to the terms set forth below) for a period of five (5) years from the date of purchase. During the Warranty period, KLIPSCH will repair or replace (at KLIPSCH's option) this product or any defective parts (excluding electronics and amplifiers). For products that have electronics or amplifiers, the Warranty on those parts is for a period of two (2) years from the date of purchase.

To obtain Warranty service, please contact the KLIPSCH authorized dealer from which you purchased this product. If your dealer is not equipped to perform the repair of your KLIPSCH product, it can be returned, freight paid, to KLIPSCH for repair. Please call KLIPSCH at 1-800-KLIPSCH for instructions. You will need to ship this product in either its original packaging or packaging affording an equal degree of protection.

Proof of purchase in the form of a bill of sale or receipted invoice, which is evidence that this product is within the Warranty period, must be presented or included to obtain Warranty service.

This Warranty is invalid if (a) the factory-applied serial number has been altered or removed from this product or (b) this product was not purchased from a KLIPSCH authorized dealer. You may call 1-800-KLIPSCH to confirm that you have an unaltered serial number and/or you purchased from a KLIPSCH authorized dealer.

This Warranty does not cover cosmetic damage or damage due to misuse, abuse, negligence, acts of God, accident, commercial use or modification of, or to any part of, the product. This Warranty does not cover damage due to improper operation, maintenance or installation, or attempted repair by anyone other than KLIPSCH or a KLIPSCH dealer which is authorized to do KLIPSCH warranty work. Any unauthorized repairs will void this Warranty. This Warranty does not cover product sold AS IS or WITH ALL FAULTS.

REPAIRS OR REPLACEMENTS AS PROVIDED UNDER THIS WARRANTY ARE THE EXCLUSIVE REMEDY OF THE CONSUMER. KLIPSCH SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY LAW, THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PRACTICAL PURPOSE.

Some states do not allow the exclusion or limitation of incidental or consequential damages or implied warranties so the above exclusions may not apply to you. This Warranty gives you specific legal rights, and you may have other rights, which vary from state to state.





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