

# Kole Audio KLE Woofers

Congratulations on your purchase of one of the finest woofers available for your vehicle today.

Adding affordable bass to your system was never easier with Kole Audio's KLE Series woofers. Kole Audio's engineers used the combination of a Polypolne cone and a rubber progressively slanted surround to give you dependable affordability in a woofer that can be used in a sealed or ported enclosure.

Please take a few moments to fill out the warranty card and review this manual before installing this woofer for proper connections and box sizes.

## Design Features

Heavy-Gauge, Specially Designed Steel Baskets  
Blue Polypolne Cones w/Raised Conical Dust Caps  
Progressively Slanted Butyl Rubber Surround  
Single 4-ohm, 4-Layer Kapton Voice Coils  
Black Spider  
Chrome Front & Back Plates  
Rubber Magnet Cover  
Chrome Push Terminals

SPL:	10" – 91 dB	12" – 92 dB
Magnet size:	10"- 55oz.	12" – 60oz.
Voice Coil size:	10" – 2.0"	12" – 2.0"
RMS Power (watts):	10" –250	12" – 300
MAX Power (watts):	10" – 500	12"- 600

## Thiele / Small Parameters

	<u><b>KLE-10</b></u>	<u><b>KLE-12</b></u>
Fs	31.3 Hz	31.9 Hz
Vas	1.05 Cu. Ft.	1.86 Cu. Ft.
Qms	5.235	2.97
Qes	0.472	0.638
Qts	0.4325	0.525
Xmax	0.315"	0.315"

## Recommended box sizes

Model	Sealed Box Size	Ported Box Size	Tune Freq.	# of Ports	Port (dia x length)
KLE-10	.5 cubic feet	1.6 cubic feet	35 Hz	1	3" x 8.25"
KLE-12	1.0 cubic feet	3.0 cubic feet	38 Hz	1	3" x 3"

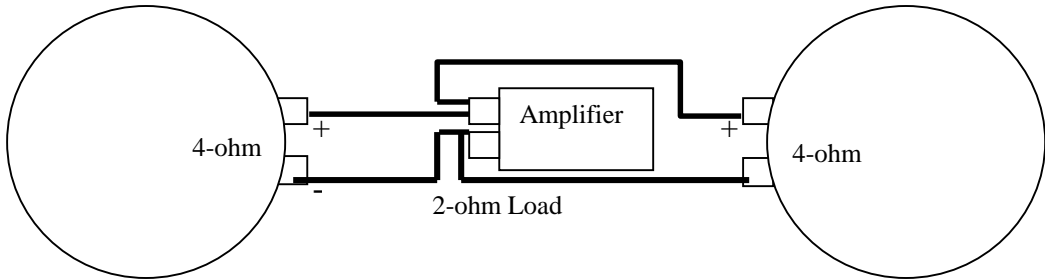
## Building the Enclosure

- Determine the dimensions of your enclosure.
- Be certain the box dimensions that you have designed will fit in the location you have chosen in your vehicle. Sometimes making a cardboard box with the same outside dimensions is helpful.
- It is recommended to use  $\frac{3}{4}$  inch thick MDF (medium density fiberboard) for your box.
- Use a “T” square to verify precise right angle cuts before you assemble the box.
- Use high quality wood glue and screws to assemble the box to guarantee an airtight box that will not come apart due to excess vibration and pressure.
- It is recommended for sealed enclosures to stuff the interior of the box about 50 – 75% fiberglass insulation or Dacron fiberfill for increased sound damping and woofer performance.
- For ported enclosures, it is recommended to staple 1” thick fiberglass insulation to the interior walls of your box.
- Use slide on connectors for spade style connectors or bare wire for push and screw terminals. Do not solder the wires to the factory connectors as this may cause damage to the voice coil or tinsel lead and may void your warranty.

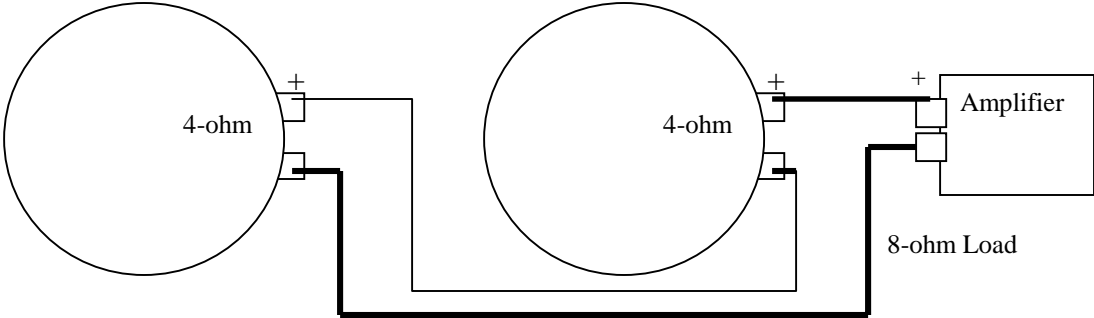
## Recommended wiring

The following page will give you a few different options to match the impedance of the woofers to the impedance capability of the amplifier. Please look and follow the diagrams closely to insure maximum woofer performance.

### Parallel Voice Coil Configuration



### Series Voice Coil Configuration



### Series-Parallel Voice Coil Configuration

