### **Kole Audio KMX Woofers**

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

The KMX is designed for the serious SPL enthusiast. Our engineers developed a new finished aluminum dust cap to aid in thermal transfer and also help to lower the resonant frequency. The aluminum dust cap is direct-coupled to the voice coil former, and serves to draw 50% of the heat away from the voice coil to the dust cap, thus acting as a voice coil heatsink. This "heatsink" action serves to maintain the strength of the bond between the cone and the voice coil by preventing adhesive breakdown due to thermal buildup. This revolutionary dust cap allows the woofer to handle 56% more power without sacrificing sensitivity. Your competition will never know what hit them.

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**

Two Piece, Die-cast Aluminum Basket

Non-Pressed Paper Cone with Aluminum Dust Cap

Large Roll Treated Foam Surround

Woven "Through-the-Spider" Tinsel Leads

**Dual CONEX Spiders** 

Dual 2-ohm Voice Coils

1-piece rubber gasket

Black/Yellow Wrinkle Coat with Diamond Cut Finish

**Heavy Duty Connectors** 

SPL: 10" – 89 dB 12" – 90 dB 15" – 92 dB Magnet size: 10"- 170 oz. 12" –270 oz. 15" – 270 oz.

BASV/Kapton hybrid 18 awg voice coil:

10" - 3" 12" - 3" 15" - 4"

RMS Power (watts): 10" - 700 12" - 800 15" - 1000

MAX Power (watts): 10" - 1400 12" - 1600 15" - 2000

#### Thiele / Small Parameters

	<b>KMX-10</b>	<u>KMX-12</u>	<b>KMX-15</b>
Fs	35.2 Hz	27.39 Hz	29.6 Hz
Vas	0.48 Cu. Ft.	1.45 Cu. Ft.	1.79 Cu. Ft.
Qms	5.27	5.13	4.685
Qes	0.479	0.418	0.484
Qts	0.439	0.3867	0.439
Xmax	0.473"	0.473"	0.748"

#### Recommended box sizes

Model	Sealed Box Size	Ported Box Size	Tune Freq.	# of Ports	Port (dia x length)
KMX-10	NA	1.75 cubic feet	40 Hz	1	4" x 11"
KMX-12	NA	2.4 cubic feet	40 Hz	1	4" x 8.5"
KMX-15	NA	3.0 cubic feet	40 Hz	2	4" x 11.25"

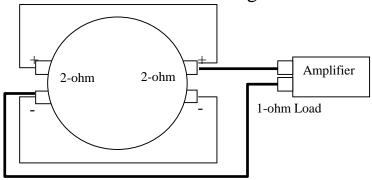
## Building the Enclosure

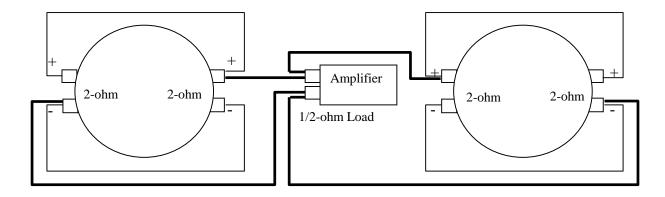
- Determine the dimensions of your enclosure.
- Be certain the box dimensions that you have designed will fit in the location you have chosen in your vehicle. Sometimes making a cardboard box with the same outside dimensions is helpful.
- It is recommended to use ¾ inch thick MDF (medium density fiberboard) 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% full of 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

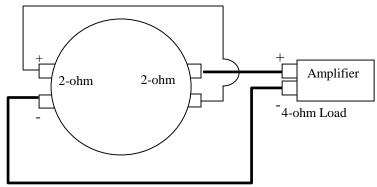
The following page will give you a few different options to match the impedance of the woofers to the impedance capability of the amplifier. Please look and follow the diagrams closely to insure maximum woofer performance.

# Parallel voice coil configuration





# Series voice coil configuration



# Series/Parallel voice coil configuration

