

SPL ML Woofers

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

“Sound Quality with an SPL punch” is the best way to describe the ML line of woofers. If you listen to many different styles of music that require your system reproduce not only tight accurate bass, but loud ground pounding bass, this is the woofer for you. We use a spun aluminum cone for deep accurate bass and a large motor structure for high power handling to give you every thing you need.

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

Cast aluminum basket		
Black wrinkle finish w/ Diamond cut		
Spun Aluminum cone		
Chrome front & back plate		
Large rubber slant surround		
One piece, 360° rubber gasket		
Black spider		
Woven tinsel lead through spider		
Chrome screw terminals		
Dual 4ohm voice coil		
SPL:	10” – 91 dB	12” – 92 dB
Magnet size:	10”- 160oz.	12” – 160oz.
ASV voice coil:	10” - 2”	12” - 2.5”
Power (RMS watts):	10” – 1200	12” – 1200

Thiele / Small Parameters

	<u>ML-10</u>	<u>ML-12</u>
Fs	36.74 Hz	33.52 Hz
Vas	1.0 Cu. Ft.	1.53 Cu. Ft.
Qms	2.94	3.41
Qes	0.702	0.469
Qts	0.5668	0.4121
Xmax	0.3”	0.3”

Recommended box sizes

Model	Sealed Box Size	Ported Box Size	Tune Freq.	# of Ports	Port (dia x length)
ML-10	.5 cubic feet	1.4 cubic feet	33 Hz	1	3" x 11.5"
ML-12	.75 cubic feet	1.7 cubic feet	32 Hz	1	3" x 10"

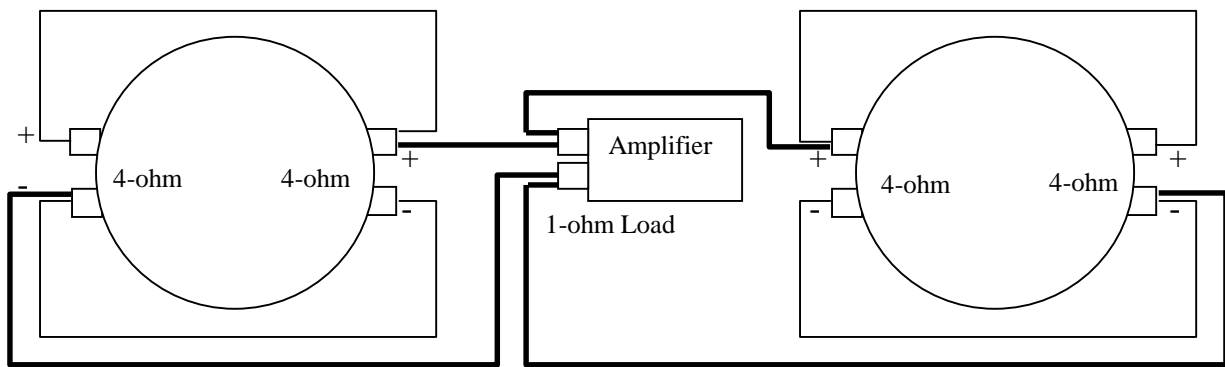
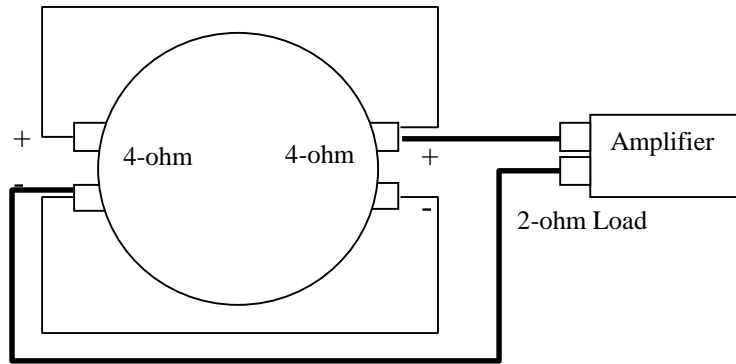
Building the Enclosure

- 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.

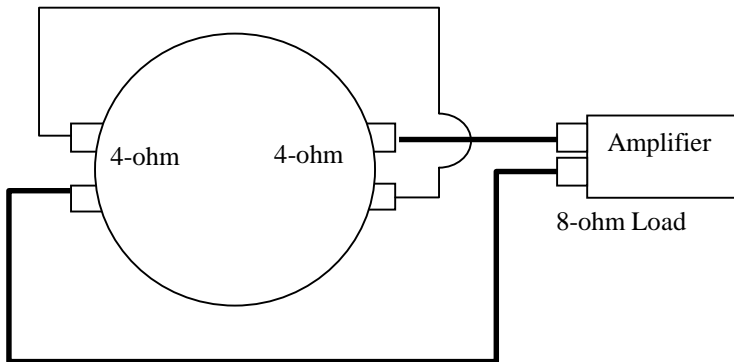
Recommended wiring

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

