

SPL SPLW Woofers

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

If you want bass that leaves a lasting impression with your friends and neighbors, the SPL Line of woofers does it all. Specifically designed for use in a ported box to give you the ultimate in heart pounding, vision-blurring bass.

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			
Cloth laminated paper cone w/MD6 coating			
Large foam rubber surround			
One piece, 360° rubber gasket			
Conex spider			
Woven tinsel lead through spider			
Chrome screw terminals			
Dual 1ohm voice coil			
Wood gift box w/black vinyl finish			
SPL:	10" – 89 dB	12" – 90 dB	15" – 92 dB
Magnet size:	10"- 270oz.	12" – 340oz.	15" – 340oz.
BASV/Kapton hybrid 18 awg voice coil:			
	10" - 3"	12" - 4"	15" - 4"
Power (RMS watts):	10" – 2200	12" – 2200	15" - 2800

Thiele / Small Parameters

	<u>SPLW-10</u>	<u>SPLW-12</u>	<u>SPLW-15</u>
Fs	30.4 Hz	30.58 Hz	29.0 Hz
Vas	0.6 Cu. Ft.	.925 Cu. Ft.	1.6 Cu. Ft.
Qms	4.19	4.86	4.37
Qes	0.266	0.365	0.352
Qts	0.2503	0.3394	0.326
Xmax	0.5"	0.7"	0.9"

Recommended box sizes

Model	Sealed Box Size	Ported Box Size	Tune Freq.	# of Ports	Port (dia x length)
SPL-10	NA	1.65 cubic feet	45 Hz	2	3" x 9.25"
SPL-12	NA	2.4 cubic feet	40 Hz	2	4" x 16.75"
SPL-15	NA	3.4 cubic feet	40 Hz	2	4" x 10"

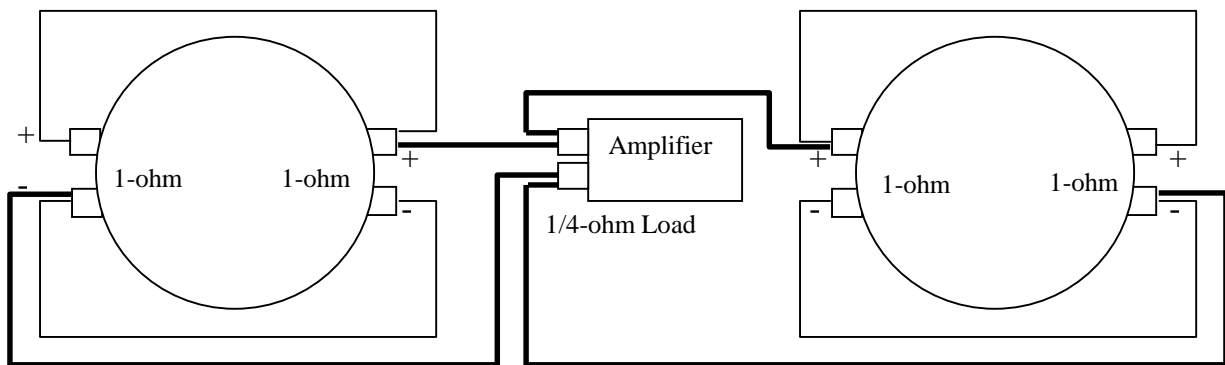
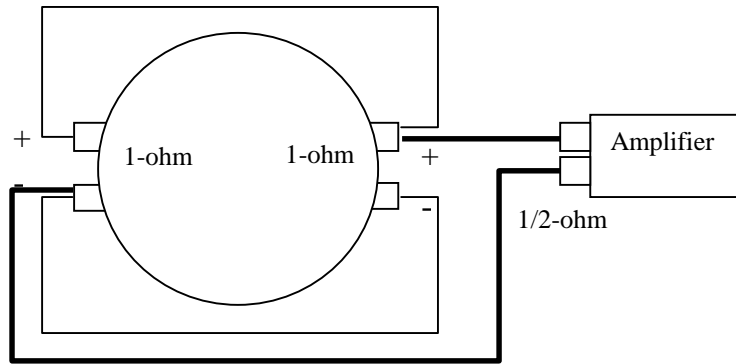
Building the Enclosure

- 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.

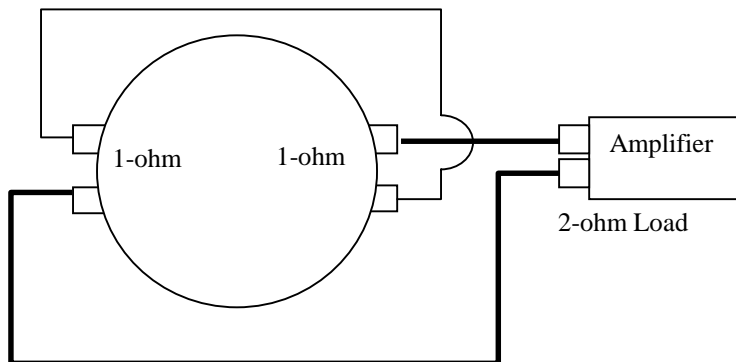
Recommended wiring

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

