

SPL45

2 Ohm Nominal
Coaxial Speaker
OWNER'S MANUAL

SOUNDSTREAM[®]
T E C H N O L O G I E S

SPL 45 Coaxial Speaker

Congratulations on your purchase of the Soundstream SPL 45 Coaxial Speaker. When used with a high quality 2 ohm rated power amplifier, the SPL 45 will provide exceptional performance.

As with all high quality car audio components, professional installation is recommended. Your dealer's knowledge and experience can ensure a problem-free, cosmetically integrated installation. If you plan on installing the SPL 45 speaker yourself, please review this Owner's Manual first before attempting installation. In addition, it's a good idea to keep the manual for future reference.

SPL 45 Serial Number _____

Date of Purchase _____

Date of Installation _____

Dealer's Name _____

Before beginning your installation, please check to see that the number of parts contained in your box match the list below:

Hardware

8 each - 1" #8 sheet metal screws (for mounting SPL 45)

Connectors

4 each - 1/4" tab female Gold insulated slip-on connectors

FEATURES

SPL 45 Midrange / Woofer

The SPL 45 is an excellent performer with a combination of high sensitivity, solid bass *and* smooth response throughout the audible range.

- **Lightweight Cone** designed for good rigidity and high sensitivity
- **2 Ohm Voice Coil** for increased voltage sensitivity and higher output

Hard Dome Neodymium Tweeter

The SPL 45's coaxially mounted tweeter is a high performance 13mm Neodymium tweeter designed to deliver outstanding high frequency reproduction.

- **13mm Polyimide dome for improved power handling and linear response**
- **Ferrofluid-immersed Voice Coil** enhances heat dissipation
- **Vented Aluminum Voice Coil Former** for superb heat dissipation and high power handling

Passive Crossover Network

- The crossover consists of **high quality, 2 pole design** for improved power handling, lower distortion and better imaging
- **Acoustic Summation** design combines the crossover with the speaker's natural roll-off for a steeper slope and increased power
- **Dynamic tweeter protection** allows for improved power handling and continuous output

2 Ohm Nominal System Impedance

The 2 Ohm impedance design of the SPL 45 system provides an overall **3 dB increase in output** compared to a 4 Ohm design.

- Effectively a **doubling of Sound Pressure Level** -- with the same voltage input
- **More stable, phase coherent load** than two 4 Ohm speakers



LOCATION AND MOUNTING

- The first step in a successful installation is thorough planning. Choose the location for your speaker components carefully. Follow these suggestions to ensure proper imaging and the best performance:
- Choose a location that offers the least obstruction of sound to your ears.
- Always check behind the chosen mounting locations to make sure that there are no obstructions (e.g., trunk springs, gas tank, window tracks) or wires in the way, as well as to make sure that there is ample support on which to mount the components.

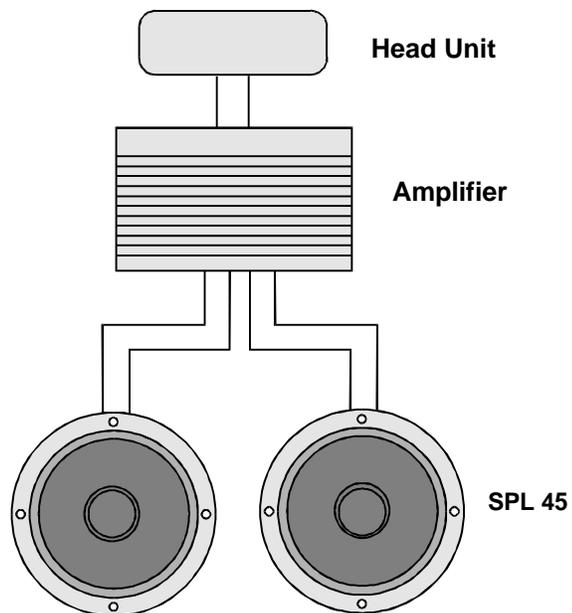
INSTALLING THE SPL 45

The SPL 45 can be mounted on the front or rear of a panel; gaskets are provided for both options. The bolt hole configuration will fit a variety of American, European and Asian OEM patterns making it ideal for direct placement. Best performance is achieved when the speaker is securely mounted to a door panel or rear deck. There should be no gaps between the speaker and the mounting surface, as this will impair its low frequency performance. Be certain that both the panel and the speaker are securely mounted to prevent unwanted vibration.

- 1) Mark the speaker location by using the template provided.
- 2) Cut the opening and debur the edges with a file.
- 3) Hold the speaker in place against the mounting surface and mark the mounting bolt holes.
- 6) Drill the appropriate size hole for the screws provided.
- 7) Place the SPL 45 into the trim ring, make the speaker wire connections, then install the speaker/trim ring assembly to the panel using

WIRING SPL 45 Wiring Diagram

The figure below shows wiring for the SPL 45 speaker. It is important to make sure that all connections are in phase; that is positive (+) is connected to positive (+), and negative (-) is connected to negative (-) since an out-of-phase connection will cause a dislocated image and low bass output. We suggest using premium cable. The connectors provided with this system will accommodate wire from 12 gauge to 16 gauge.



SPECIFICATIONS

SPL 45 Specifications

Frequency Response	80 Hz - 20,000 Hz \pm 3dB
Sensitivity	92 dB SPL at 1 meter (2.83 Volts) 98 dB SPL at .5 meter (2.83 Volts)
Continuous Power Handling	40 watts
Peak Program Power Handling	80 watts
Nominal Impedance	2 Ω
Crossover Slope Rate	12 dB/octave ASC

Hard Dome Tweeter

Frequency Response	5000 Hz - 20,000 Hz \pm 3dB
Sensitivity	92 dB SPL at 1 meter (2.83 volts)
Nominal Impedance	4 Ω
Nominal Tweeter Diameter	13mm

Dimensions

Nominal Driver Diameter	4 1/4"
Mounting Cut-Out Diameter	3 3/4"
Mounting Depth	2 1/8"

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