

CAPACITOR
SC1/SC2/SC4/SC8
MANUAL

SOUNDSTREAM

Dear Customer,

Congratulations on your purchase of the world's finest brand of car audio amplifiers. At SOUNDSTREAM we are committed to producing musical reproduction at its best, and we are pleased you chose our product. Through years of critical testing procedures and hand craftsmanship, we have created a wide range of products that reproduce music with all the clarity and richness you deserve.

For maximum performance we recommend you have your new SOUNDSTREAM product installed by an Authorized SOUNDSTREAM Dealer. Please read your warranty and retain your receipt and original carton for possible future use.

!! Attention !!

Continuous, excessive exposure to sound pressure levels in excess of 85 dB can cause a loss in hearing. While SOUNDSTREAM sound systems are capable of producing sound pressure levels greater than 85dB, they are also designed for enjoyment at reasonable levels. Please observe all local sound ordinances while listening to your SOUNDSTREAM sound system

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SPECIFICATIONS

Model: SC1

Capacitance ----- 1 farad (1,000,000 micro farad)
Working Surge Voltage-----24 V DC
E.S.R.(Equivalent Series Resistance)-----0.0014 OHM
Capacitance Tolerance----- $\pm 10\%$

Model: SC2

Capacitance ----- 2 farad (2,000,000 micro farad)
Working Surge Voltage-----24 V DC
E.S.R.(Equivalent Series Resistance)-----0.0014 OHM
Capacitance Tolerance----- $\pm 10\%$

Model: SC4

Capacitance ----- 4.0 farad (4,000,000 micro farad)
Working Surge Voltage-----24 V DC
E.S.R.(Equivalent Series Resistance)-----0.0014 OHM
Capacitance Tolerance----- $\pm 10\%$

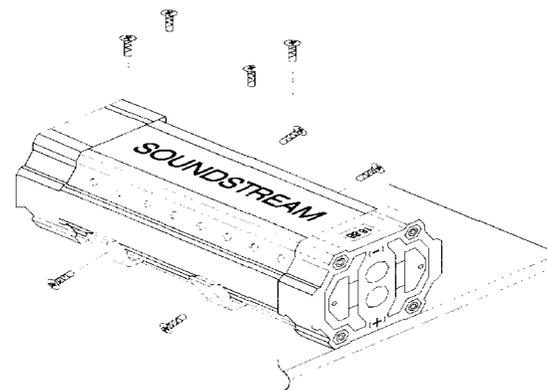
Model: SC8

Capacitance ----- 8.0 farad (8,000,000 micro farad)
Working Surge Voltage-----24 V DC
E.S.R.(Equivalent Series Resistance)-----0.0014 OHM
Capacitance Tolerance----- $\pm 10\%$

INSTALLATION AND MOUNTING

For maximum performance your SOUNDSTREAM Stiffening Capacitor should be mounted as close to your amplifier(s) as possible. A low resistance connection between the amp and the capacitor is required for maximum performance. High resistance connections or long wire lengths reduce the capacitor's effectiveness. Be sure to firmly mount the capacitor to a stationary object in the vehicle. Use caution when selecting a suitable location. Be aware of any hazards that may cause a short circuit, which will damage the capacitor.

Note: You must first attach the mounting tabs to the Stiffening Capacitor before mounting it. Use the supplied hardware shown in the picture to the right. Notice the small mounting screw hole in the capacitor chassis.



BENEFITS OF USING A CAPACITOR

When installed properly, your new stiffening capacitor will provide years of dependable service. There are many benefits of adding a SOUNDSTREAM Stiffening Capacitor. The most significant benefit is the capacitor's ability to improve bass performance in your sound system. This is possible due to the voltage stabilizing affects of the capacitor.

When an audio system needs to deliver an instantaneous bass peak, the vehicle's electrical system cannot provide enough power. This means that the system voltage drops substantially to a point that the amplifiers are unable to produce their rated output power. This is referred to as clipping. When an amplifier clips it will cause distortion and can cause speaker damage.

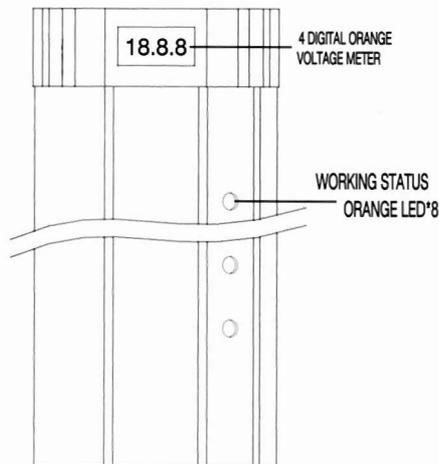
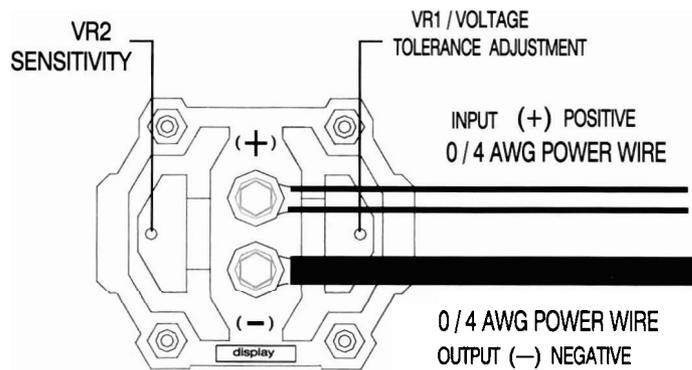
Stiffening Capacitors are able to store large amounts of energy in preparation of these bass peaks. When a bass peak occurs, the stiffening capacitor delivers power to supplement the system voltage and prevent amplifier clipping. This retains amplifier output power, improving bass response and increases speaker longevity.

Another beneficial effect of SOUNDSTREAM stiffening capacitor is their ability to filter the alternating current produced by the vehicle's alternator. This alternating current can cause noise (alternator whine) in the audio system. A SOUNDSTREAM Stiffening Capacitor will help reduce or eliminate this "alternator whine" in most cases.

SOUNDSTREAM recommends at least 1 Farad of capacitance per 500 watts of amplifier output. This is a general rule of thumb and may be adjusted up or down depending on the efficiency and design of the amplifiers being used. There is no harm in having more than enough capacitance.

The Features:

- Multi 4 digital 8 character hi-end Orange display DC voltage meter that can measure 0.01 DCV range.
- Discharging status Orange flash LED line on metal case beside
- Reverse pole connecting PCB buzz warning function. If the capacitor is connected incorrectly by reversing the positive and negative wires during the installation process the PCB will issue a 45 second noise to warn you.
- Over voltage limit and low battery voltage limit warning. When the system voltage peaks over 17.5 DCV or LESS than 10 DCV. The buzzer on the PCB will issue an audible noise warning.
- lowest inner E.S.R. and largest moment discharge power.
- Positive/ Negative 0/4 gauge pole connecting power ring terminal.
- Hi-end chrome plated metal case



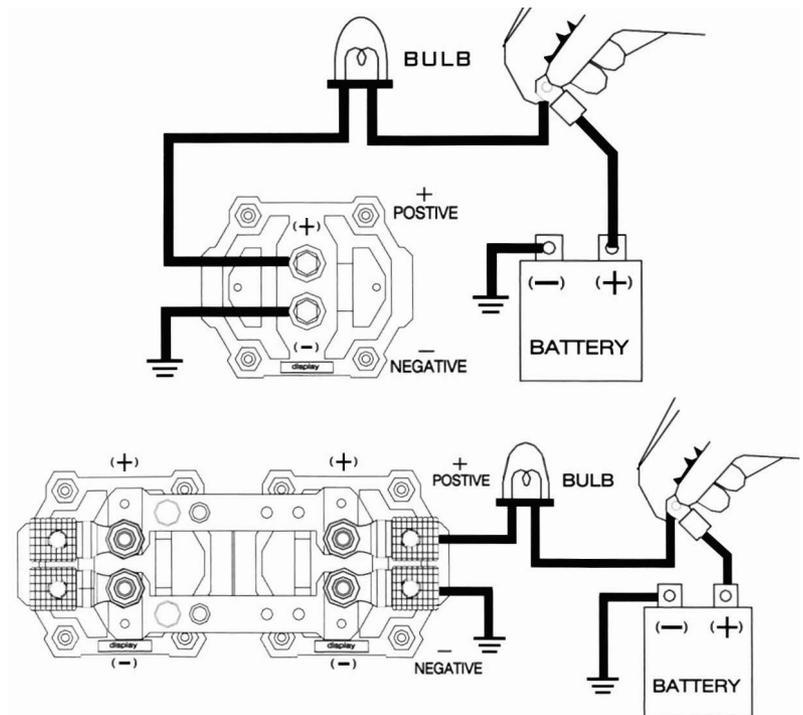
CHARGING THE CAPACITOR

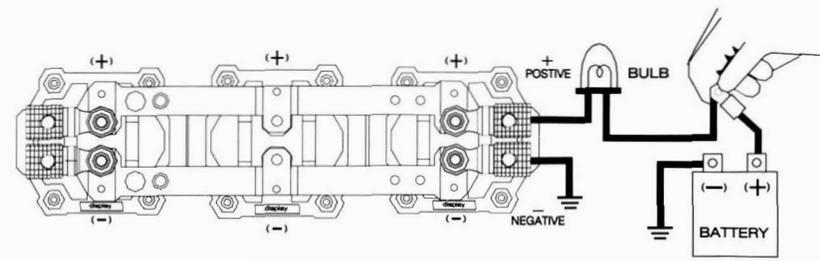
The capacitor must be charged before connecting the Power and Ground cables directly. Failure to charge the capacitor will result in a large spark generated from the rapid inflow of current.

To Charge the capacitor:

1. Make your positive terminal connections and tighten the bolt.
Caution: Do not over-tighten the bolts! Stripped terminals are not covered under the capacitors warranty.
2. Before connecting the ground cable, place the supplied charging bulb or resistor between the negative terminal on the capacitor and the ground cable. Do this for 60 seconds or until the light bulb goes out. Caution: The charging bulb may get hot!
3. Immediately after charging, connect the ground cable directly to the negative terminal on the cap.

CHARGING





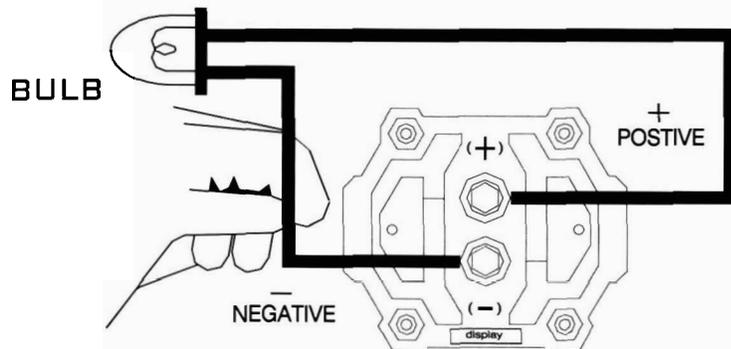
Once the capacitor is charged, the Orange LED will light and the VOLTAGE METER will turn on. The voltmeter will continuously display system voltage while system is in use. The voltmeter will turn off automatically when the sound system is not in use.

BEFORE MAKING ANY POWER CONNECTIONS, DISCONNECT BATTERY POWER FROM YOUR SOUND SYSTEM!

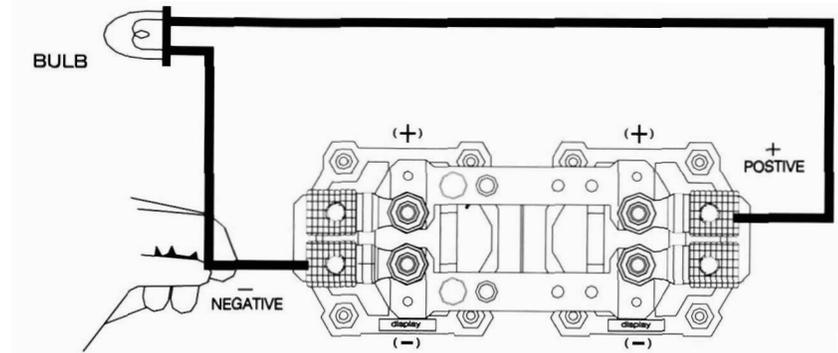
DISCHARGING THE CAPACITOR

To Discharge the capacitor: With battery power disconnected. Place light bulb or resistor across the capacitors positive and negative terminals until light goes out or for three minutes if using a resistor.

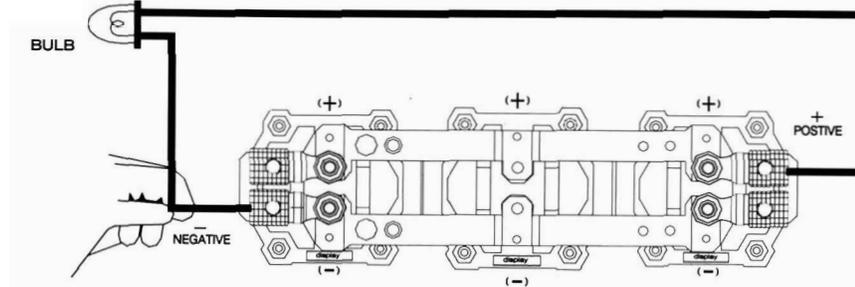
DISCHARGING



DISCHARGING

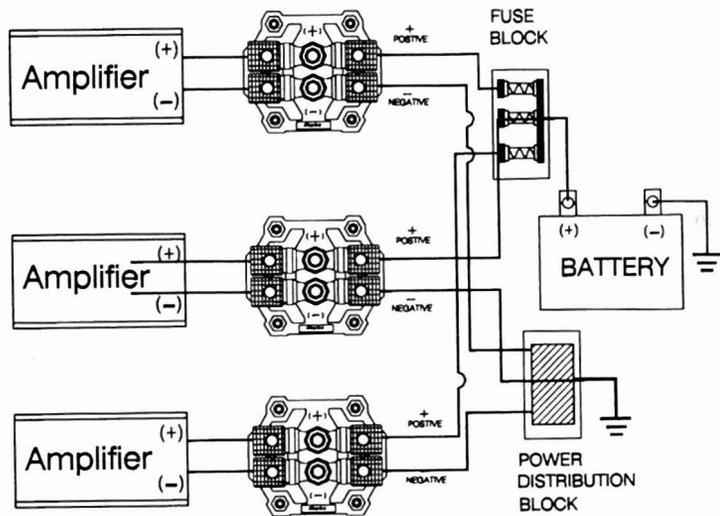


DISCHARGING



WIRING

1. Disconnect the positive cable connected to your car battery.
2. The capacitor will be installed between the amplifiers and the battery supplying power.
3. Do not connect the ground to the capacitor until the capacitor is charged.
4. Connect the power wire of the amplifier to an input on the positive distribution terminal block on the Capacitor.
5. Connect the power wire from the battery to the capacitor.
6. Again, do not connect the ground to the capacitor until the capacitor is charged using the light bulb.
7. Reconnect the positive power cable to the battery.
8. Charge the capacitor using the capacitors ground as shown in the figure above.
9. Connect the ground cable from one of the negative input terminals to a solid clean chassis ground.
10. Below is an illustration showing correct wiring for the capacitor.



Note: Use a separate ground for the Capacitor as shown in the figure.

** Do not connect the capacitor to the same ground that is used for the amplifiers. **

LIMITED WARRANTY

- ♦ **LENGTH OF WARRANTY**
ONE YEAR

- **WHAT IS COVERED**

Warranty applies only to The products sold to consumers by Authorized SOUNDSTREAM Dealers in the United States of America or its possessions. Products purchased by consumers from Authorized SOUNDSTREAM Dealer outside of the USA are covered only by that country's distributor.

- **WHO IS COVERED**

This warranty covers only the **original purchaser** of SOUNDSTREAM product purchased from an Authorized SOUNDSTREAM Dealer in the United States. For a list of Authorized Internet Retail Stores go to SOUNDSTREAM web. In order to receive service, the purchaser must provide SOUNDSTREAM with a copy of the receipt stating the customer name, SOUNDSTREAM Authorized dealer name, product purchased and date of purchase. Products found to be defective during the warranty period will be repaired or replaced (with a product deemed to be equivalent) at SOUNDSTREAM's discretion.

- **WHAT IS NOT COVERED**

1. Damage caused by accident, abuse, improper operations, water, or theft.
2. Any cost or expense related to the removal or reinstallation of product.
3. Repair Service performed by anyone other than SOUNDSTREAM's Repair Department.
4. Any product which has had the serial number defaced, altered, or removed.
5. Any product purchased outside the United States.
6. Any product not purchased from an Authorized SOUNDSTREAM Dealer.

- **LIMIT ON IMPLIED WARRANTIES**

Any implied warranties including warranties of fitness for use and merchantability are limited in duration to the period of the express warranty set forth above. Some states do not allow limitations on the length of an implied warranty, so this limitation may not apply. No person is authorized to assume for SOUNDSTREAM any other liability in connection with the sale of the product.

**** For warranty service outside the United States, contact your local distributor**