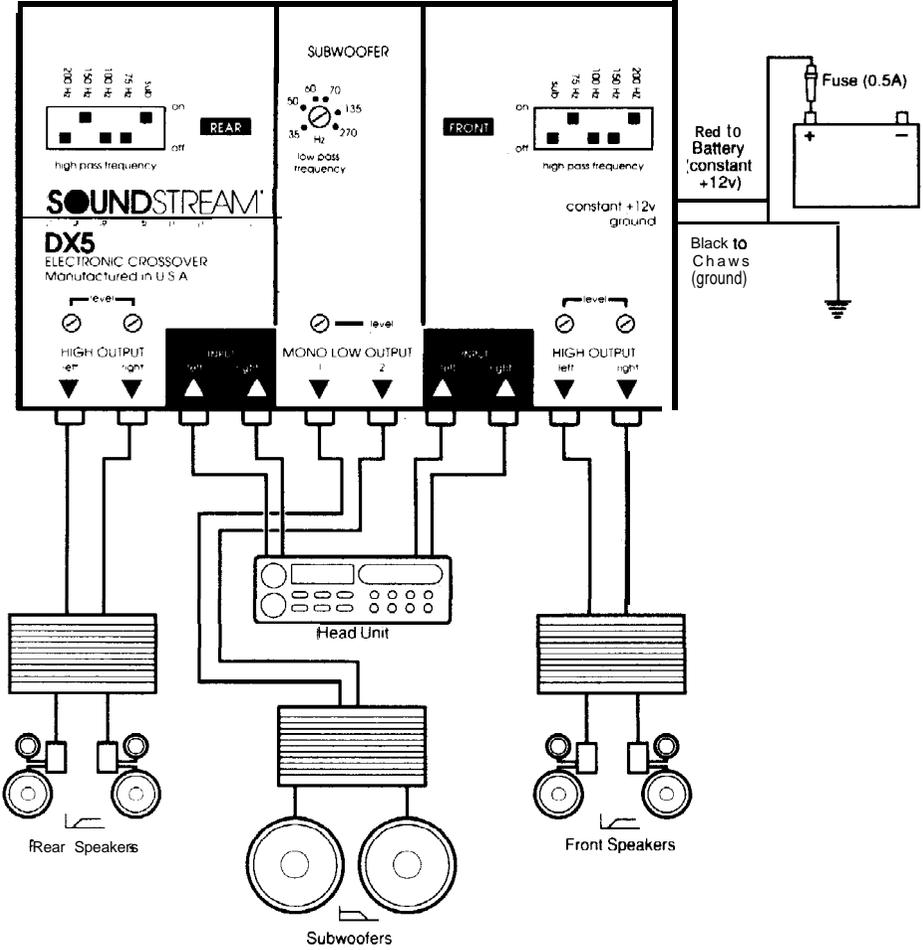

DX5

Five Channel 2-Way
Electronic Crossover
OWNER'S MANUAL

CONNECTIONS DIAGRAM



DX5 Staggered Electronic Crossover Network

OWNER'S MANUAL

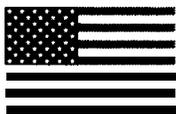
Thank you for purchasing the Soundstream DX5. You now own one of the finest electronic crossovers made, a precision component capable of audiophile quality performance.

To get the most out of your crossover, we suggest that you acquaint yourself with its capabilities and design. Please retain this manual for future reference.

Model Number: _____

Serial Number: _____

Dealer's Name: _____



This Soundstream Product is the result of American craftsmanship and the highest quality control standards; your DX5 should deliver many years of pleasure.

Should it ever require service or replacement, recording the information below for your own records will help protect your investment.

Date of Purchase: _____

Date of Install: _____

DESIGN FEATURES

This unit has been equipped with separate front and rear inputs to preserve use of the head unit fading control. The subwoofer outputs' unique tracking control allows the user to select constant bass or fadable bass depending on the specific installation.

The low frequency section of the DX5 is controlled by a precision filter. This technology allows very accurate tuning with a minimum of electronic parts in the chain. This filter affords a steep 24dB per octave slope which tightly limits the subwoofer to its intended bandwidth. The high pass, staggerable front and rear outputs employ a totally transparent 6dB per octave slope.

Only premium parts are used throughout the DX5 such as, double-sided masked glass epoxy circuit boards, film capacitors, sealed immersible potentiometers, and gold-plated input/output connectors. A switching power supply provides extended headroom and isolation from noise.

INSTALLATION

Proper installation and adjustment will reward you with reliable operation and optimum performance. Automotive sound system installations can be tricky, especially for first timers. For this reason you may want to consider using a professional installer who has the tools and more importantly, the experience to do the job right. If you decide to install your equipment yourself, we hope this manual will serve as a helpful guide. At the end of this manual you will find several typical uses of the DX5. Please review these variations prior to attempting installation.

Location and Mounting

The DX5 is compact and generates virtually no heat. It can be located almost anywhere within the passenger compartment or trunk. Do not attempt to install the DX5 in the engine compartment or in any outside location exposed to dirt and moisture. The DX5 should be mounted firmly to your car's chassis or an amplifier board, with the four screws provided. Use the DX5 for a template to make pencil marks where you intend to drill. It is a good idea to bench test your system prior to mounting any components. If you have a twelve volt power source, you can connect and test the components outside the car. Or, you can connect them inside the car prior to mounting. Either way, connect the components exactly as you intend to in the final installation; make all power connections last; test the system; then disconnect all power until final installation is complete.

Wiring

Pre-determine how your car's wiring is laid out, and run your wires in the same locations when possible. Keep all wiring inside the vehicle. Good audio practice suggests keeping all signal wires away from all power lines. Wires can be run under carpet, however, make sure not to interfere with normal operation of the vehicle. All wires should be hidden; an exposed wire can inadvertently be pulled, causing disconnection or shorting.

Power Wires

The power wires for the DX5 are permanently attached to the network. The red wire should be directly connected to a constant +12 volt source. It should be "hot" even when the ignition key is turned off. This can include connecting to the battery itself or tapping into the lead bringing power to your amplifiers. Be sure this +12 volt line is fused, using a 0.5A fuse. At idle, the DX5 draws minimal current, and keeping power applied constantly avoids any possible turn-on and turn-off thumps. The black wire is a ground wire. This ground wire should be connected directly to the chassis of the vehicle. A nearby bolt can serve as a ground terminal, but make sure that the wire contacts bare metal, not coated metal or paint.

Signal Wires

All audio connections to the DX5 attach by means of standard RCA type jacks. Since the DX5 achieves a level of performance at which cable and connector quality is important, we recommend the use of Soundstream DL•1 or Streamline Audio Cable or an equivalent premium cable.

Input Connections

Connect the audio outputs of the **head** unit to the four input **jacks** on the DX5. Be sure not to mix up front/rear and left/right, as this will prevent proper use of the fading control.

Output Connections

Connect the separate front and rear outputs to **the appropriate** amplifiers as well as the **subwoofer** outputs. The **subwoofer** outputs are both mono, so you have a choice **as** to how many of these you wish to use. If you are running a single bridged amplifier, run a single output from the DX5 subwoofer output to the appropriate input of the amplifier.

Level Controls

The DX5 provides individual level control for each of the front and each of the rear channels, as well as separate control for the subwoofer. These controls can be adjusted with a small flat-head screwdriver.

High Pass Crossover Point

The high pass crossover point is separately selectable for the front and rear channels. The front crossover point is set by the switch bank labeled Front and the rear crossover point is selected by the switch bank labeled Rear. Moving the **switch** up selects the crossover point marked for that switch. For each switch bank, select only one switch at a time.

Low Pass Crossover Point

The low pass crossover point is set by the low pass control. This control is infinitely **variable** from 35Hz to 270Hz.

Subwoofer Tracking Control

If your tuner/deck has a fader control and two sets of preamp outputs, the subwoofer can be made to fade with either the front or rear speakers, or, it can be selected to run constant regardless of fader position.

Front Fade

For the subwoofer to fade with the front loudspeakers: Move the switch marked Sub in the front switch bank up to the "on" position.

Rear Fade

For the **subwoofer(s)** to fade with the rear loudspeakers move the switch marked Sub on the rear switch bank up to the "on" position.

Constant Bass

If you want the subwoofer to run constant set both Low To Mono Out switches on.

Settings and Adjustments

Begin with all the output level controls set at their minimum setting (full counter-clockwise); Turn the system on, and set **the head** unit volume control at its mid-point. Play a musical selection with which **you** are very familiar, and turn up the front level controls until the music **has** reached a comfortable listening level. Next, do the same for the rear controls and set them slightly lower than the front. This will help to create a more realistic soundstage. Finally, set the **subwoofer** level control to your desired setting. Here you will have to experiment a bit since everyone

likes their bass level set differently. Once **you** have made **all of your level** settings, you will want to experiment with your chosen crossover points.

Setting Crossover Points

The optimum crossover settings depend on two factors: the characteristics of **your** loudspeakers and the acoustics of your car. Before making any **selections**, you **should** check the owner's manual for your **loudspeakers** and see if they make any particular recommendations. If not, **I&W** these steps; begin with your high-frequency crossover points **set** at 200Hz and your low crossover point set at 70Hz. Listen to your system: how are the vocals, do you feel you are hearing all the information? If the vocals seem to be removed **from** the rest of the information, **try** lowering the crossover point. It is going to take some experimenting to get everything just right, but remember, your personal taste is what is important.

SERVICE

Your DX5 is **protected by a limited warranty**. Please read the enclosed warranty information carefully. Should any problem **occur**, **contact your local** Soundstream dealer.

SPECIFICATIONS

Total Harmonic Distortion: c 0.05%, 20Hz–20kHz

Crossover Slopes:

Low Pass: 24dB per octave

High Pass: 6dB per octave

Crossover Frequencies:

Low Pass: Variable 35Hz–270 Hz

High Pass: Switchable 75, 100, 150, 200 Hz

S/N Ratio: >100dB

Gain: +3dB

Input Impedance: 10 kOhms

Maximum input **Level**: 5v RMS

Maximum Output Level: 5v RMS

Maximum Current **Draw**: 5 mA

Dimensions: 1" x 7" x 3-13/16"