

# MPQ-6XO 4 Band Parametric Equalizer

Owner's Manual and Installation Guide

## Congratulation!

You now own the **Soundstream MPQ-6XO** parametric equalizer, the product of an uncompromising design and engineering philosophy. Your **Soundstream MPQ-6XO** parametric equalizer will outperform any other parametric equalizer in the world.

To maximize the performance of your system, we recommend that you thoroughly acquaint yourself with its capabilities and features. Please retain this manual and your sales receipt for future reference.

Soundstream parametric equalizer is the result of American innovation and the highest quality control standard. When properly installed, they will provide you with many years of listening pleasure. Should your parametric equalizer ever need service or replacement due to the theft, please record the following information which will help protect your investment.

Model and Serial #	
Dealer's Name	
Date of Purchase	
Installation Shop	
Installation Date	

#### CAUTION!

Prolonged listening at extremely high levels may result in hearing loss. Even though your car audio system with your new Soundstream MPQ-6XO parametric equalizer sounds better than anything you've ever heard, exercise caution to prevent hearing damage.

#### **DESIGN FEATURES**

- 1. Active gain pre amplifiers with adjustable input sensitivity.
- 2. Volume Control with up to 10 Volts RMS of output.
- 3. Individual left and right sensitivity control for RADIO & AUX.
- 4. Four band parametric equalizer with 18dB booster / Cut.
- 5. Specific bandwidth for each band plus high frequency shelving.
- 6. Low noise BI-FET op-amp design yields minimum distortion.
- 7. Subwoofer outputs and level controls.
- 8. Subwoofer Frequency adjustable (30Hz~250Hz).
- Subwoofer phase adjustable (0 ~ 180°).
- Input Distortion Indicate.
- Universal Half-DIN chassis for easy installation.
- 12. Chrome Plated RCA input connectors.
- 13. 20dB headroom eliminates signal overload.
- 14. RADIO/AUX input selector.

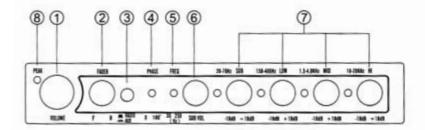
## EQUALIZER BACKGROUND

There are basically three types of equalizers: graphic, parametric, and a hybrid of these two, often referred to as paragraphic. Additionally, there are passive equalizers, which have no gain; active gain pre-amps, which have a again stage usually with a volume control, and booster equalizers which we won't consider here since they are inferior passive equalizers with inexpensive IC amplifier built-in.

As in state-of-the-art automotive audio systems the optimum system requires a dedicated pre-amp with enormous gain to drive various power amplifiers. Since automotive audio amplifiers do not have adjustable sensitivity, they require a high output pre amplifier to drive them to maximum levels.

This unit is the first production pre amplifier to incorporate a specific bandwidth parametric equalizer with shelving control. With 18dB boost or cut on its four bands, it can compensate for the four acoustic anomalies unique to the automotive environment. This unit easily becomes the "Mission control Center" of any high end automotive sound system.

## FRONT PANEL CONTROLS



1.VOLUME CONTROL: This control adjusts the output level.

2.FADER CONTROL: This control adjusts the volume between the front and rear speakers in a 4 speaker system.

3.INPUT SELECTOR SWITCH: This switch selects the RADIO or AUX input.

4.PHASE CONTROL: This switch allows you to invent the left and right phase from 0 to 180°.

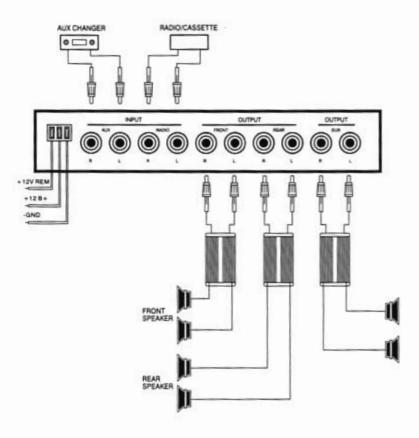
5.SUBWOOFER FREQUENCY: This control adjusts subwoofer frequency from 30Hz to 250Hz.

6.SUBWOOFER OUTPUT VOLUME: This control adjusts output level of subwoofer RCA jack.

7.PARMETRIC EQUALIZER CONTROLS: Control the frequency response of the boost or cut ,with the 4 tone controls each Sub .Low .Mid .High.

8.DISTORTION INDICATE: This indicator lights up when signal source is indicated.

### **ELECTRICAL INSTALLATION**



**NOTES:** Set your source volume at one -half to three quarter up and leave it.

Always use your volume as a master(main) volume control. It has better electronics, higher S/N ratio and is more linear than any source unit volume available. If engine noise is audible, try raising the volume on the source unit, and/or check the ground connection on the unit.

### CROSSOVER CONTROL

It is recommended that the LOW/MID/HI frequencies be set a center position and that the SUB frequency be set at around 60Hz. One of the best features of this unit is that it allows the listener to adjust each band exactly to his own satisfaction, so please note that the correct settings depend very much on the overall system itself and the individual musical taste of the listener. Please check the settings for each band carefully before completing the installation.

# SET-UP ADJUSTMENT

**BEFORE TURN ON:** Turn the unit volume to minimum. Adjust the input gains to minimum. Turn the source unit volume to minimum. Set EQ controls to flat(12 o'clock).

SYSTEM TURN ON: After completing all wiring and signal connections you can now turn the system on.

ADJUST: Raise volume of the unit to maximum. Adjust left and right input gains of the unit until half way between minimum and maximum. Gradually increase source volume until clip. Begin gradually incrasing input gains until distortion is audible, then reduce slightly, System should be extremely load at this point. Turn the volume control down to minimum and back up to comfortable level. Volume changes should sound linear and balanced.

#### **SPECIFICATIONS**

4-BAND PARAMETRIC

SUBWOOFER

: SUB 20 - 70 Hz, LOW 150 - 400 Hz

MID 1.5-4.0 KHz, HI 10-20 KHz

BOOST/CUT : 18 dB

BANDWIDTH : SPECIFIC TO EACH BAND-HI SHELVING

S/N RATIO : 110 dB REF 1V INPUT

 FREQUENCY RESPONSE : 15Hz~30KHz, ± 1dB

RMS OUTPUT : 10V RMS / 14V Peak

• T.H.D. : 0.0021%

INPUT

: ADJUSTABLE 50mV~5V RMS

SENSITIVITY

HEADROOM : 20 dB

• INPUT : 20K Ohms

IMPEDANCE

: 92dB / 100Hz-1KHz

SEPARATION

STEREO

: 11~16V Negative Ground

 OPERATING VOLTAGE

: 1K Ohms

 OUTPUT IMPEDANCE

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SIZE (WxHxD)

: 7.01" x 1.18"x 4.21" (Inches)

#### SOUNDSTREAM TECHNOLOGIES

www.soundstream.com