

X-Bass PRO
Bass Restoration Processor
Owners manual

XFIREAUDIO

Bass! How low can you go?

Welcome to XFIRE AUDIO welcome to Life Amplified!

Congratulations on purchasing one of the finest autosound Signal processors in existence.

The X-Bass Pro is designed to deliver Bass, adding Bass is like breathing life into your autosound system. No matter your choice of music X-Bass Pro will make you experience your music in an exciting new way.

X-Bass Pro is not only letting you control the level of Bass added to your system, it also restores "lost Bass". Bass is filtered out of your system to protect your speakers of being damaged by low frequency energy. Not only is bass filtered out on some tracks in the recording studio but, many factory audio systems are known for filtering out Bass as well. X-Bass Pro has got you covered here it has the technology to restore the filtered out low Bass.

And to make it fully compatible to any source unit it excepts High and Low level input signals.

Features

XFIRE AUDIO E-Series processors are the result of XFIRE AUDIO's commitment to design and build prestine high end car audio building blocks, for the most scrutinizing car audio enthousiast.

- Bass restoration circuit.
- Balanced inputs, except both Low and High level input signals.
- Active two channel speaker level to line level converter.
- Auto sensing when high level inputs are used, auto turn on/off for seamless integration with OEM systems.
- DC Offset / Audio signal, turn on selection switch.
- Remote output for switching on/off amplifiers.
- 4-channel outputs.
- Output level selection switch.
- "Super Wide Range" frequency response.
- "Direct Device Mount" PCB's and tight tolerance components for improved signal to noise ratios and superior musical reproduction.
- Input and output connectors direct PCB mounted ensuring maximum signal transfer.

XFIRE AUDIO E-Series processors for seamless integrated precision driven audio . Hear what you've been missing!

This operating manual provides necessary information for the installation and use of your XFIRE AUDIO E-Series processor. Please read it carefully to insure a lifetime of high fidelty autosound enjoyment.

Specifications

Frequency response	10Hz - 70kHz	
Bass frequency adjust	25Hz - 70Hz	
Q adjust	0.4 - 15	
S/N ratio	>95dB (A-weighted)	
Channel separation	>90dB	
THD+N	<0.06%	
Operating voltage	9 - 16V DC	
Stand by current draw	<1mA	
Power consumption	150mA	
Remote out	700mA Max	
Input impedance	20k Ohm	
Output impedance	150 Ohm	
Output level	2.5V/5V/10V RMS	
Dimensions HxWxL	27x90x102mm	



Installation

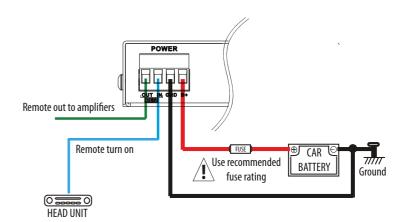
Actual installation of an E-series processor is not a difficult task. However, it takes a few tools, considerable care and precise attention to the instructions in this manual. If you doubt that you are up to the task, or your car proves to require special installation skills, we recommend having the work done by an authorized XFIRE AUDIO installation professional.

Safety instructions

- Always disconnect the negative ("-") battery terminal before making any connections in the vehicle.
- Each E-series processor is designed for use with a 12Volt DC negative ground system.
- Fuse the positive ("+") power lead, with the right value fuse, the fuse rating for an E-series processor is 1A.
- Make sure your source unit is switched off when making input connections to the processor.
- Inspect your processor mounting location carefully to avoid damaging gas tanks, gas lines, brake or hydraulic lines and electrical wiring.
- Install the processor in a location where it will have enough ventilation, protection from engine heat, heaters, direct sunlight, rain and dirt.
- Do not install in the engine compartment.

To get the best performance from your X-Bass Pro we it needs to be installed in between the source unit and amplifier(s), when external active crossover, equalizer or digital sound processor is used, the X-Bass Pro needs to be installed before it. For the bass restoration to work properly the X-Bass Pro needs to receive an "unprocessed" signal.

Connections



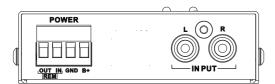
REMOTE OUTPUT (REM OUT) This is the connection to turn on and off amplifiers and processors connected to the X-Bass Pro. The output voltage is 12V DC with max 700mA current.

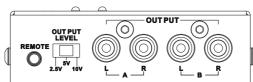
REMOTE INPUT (REM IN) This is the connection to turn the processor on and off when the processor is used with low (Line) level inputs. When a +12V DC voltage is applied to this terminal the processor will switch on, when this voltage is removed the processor will switch off. Usually this is done by the source unit's remote output.

GROUND (GND) Ground connection should be made to the vehicle's chassis with a clean, bare metal, strong connection keep the length of the ground wires as short as possible. Always use the same wire thickness as used for the positive 12V DC connection.

POSITIVE (B+) Positive power connection should be made directly to the vehicle's battery positive ("+") terminal. Use the proper wire thickness and make sure you install an inline fuseholder with the correct fuse rating.





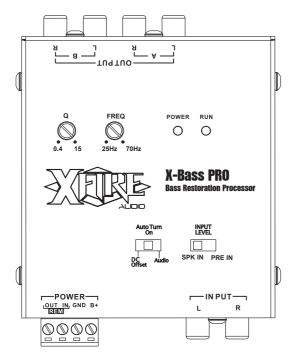


INPUT These connections accept low and high level signals. Connect to source unit pre out connections with high quality RCA connections. Use the included high level to RCA adapter to connect high level (speaker) output signals from your source unit to the inputs of the X-Bass pro.

REMOTE Connect the included remote controler to this connection.

OUPUT LEVEL This switch sets the output level of the X-Bass Pro.

OUTPUT These connections are the pre outs to connect to you amplifiers/processor.



Auto Turn On this switch is used to select if the X-Bass Pro switches on with DC Offset signal or with Audio signal when high level (**SPK IN**) input signals are used.

INPUT LEVEL This switch is used to select if the X-Bass Pro is used with high level (**SPK IN**) or with low level (**PRE IN**) input signals.

Q This dial sets the Q-factor of the Parametric Bass circuit.

FREQ This dial sets the center frequency of the Parametric Bass circuit.



Settings

To setup your X-Bass Pro correctly you need to know whats going on inside the processor.

As already mentioned the X-Bass Pro restores low bass frequencies that were filtered out. This processing is always active inside the X-Bass Pro.

Because the interior of the car, placement of the speakers in the car also have a huge effect on the bass response X-Bass Pro has a Parametric Bass circuit on board.

The **FREQ** dial lets you set a center frequency. The **Q** dial sets the filter shape or Q-factor for the circuit, in other words how many frequencies around the chosen center frequency are included.

The remote bass control allows you to adjust the level of added extra bass to your system.

The **OUTPUT LEVEL SWITCH** correct setting depends on your amplifier input sensitivity and the subwoofer(s) used:

OUTPUT LEVEL	Amplifier input sensitivity	Subwoofer(s)
2.5V	Upto 3V input voltage	6" to 8"
5V	Upto 5V input voltage	8" to 10"
10V	Upto 10V input voltage	12" and up

In case of difficulty

Almost all problems can be eliminated by re-checking connections and settings in your system. Follow the steps below as a guide. If you cannot solve the problem, consult your XFIRE AUDIO installation professional.

NO SOUND - POWER LED IS OFF

- 1. Check the inline fuse(s) in the positive power cable, replace these if needed.
- 2. Check the negative power cable connections.
- 3. Check if the system operating voltage is between 9V 16V DC, our processors and amplifiers have a high and low voltage protection.
- 4. Verify source unit operation.
- 5. Check connection of REMOTE TURN ON wires. If steps 1-4 are OK your processor and amplifier should switch ON and the power LED should light up.

NO SOUND - POWER LED IS ON

- 1. Check the RCA cables are properly connected on the source unit and processor.
- 2. Check the RCA cables for damages and replace the cables if needed.
- 3. Check the speaker cables for damages and if they are connected properly, replace cables if needed.
- 4. Check if the speakers are damaged and replace if needed.

NO SOUND - PROTECTION LED IS ON

- 1. The speakers connected have an impedance under the specified load or the speakers/speaker cables have a short circuit.
- 2. The amplifier runs really hot, mount the amplifier as recommended in the INSTALLATION section of its manual, check the impedance of the speakers and measure if the operating voltage is within 9V 16V DC.
- 3. Check for DC offset on the RCA inputs, if so check the source unit and RCA cables for damages.

POOR BASS RESPONSE

- 1. Check if all speakers are connected with the right polarity, speakers connected out of phase will cancel each other resulting in a poor bass response.
- 2. Check if the connected speakers/subwoofer(s) are OK, replace if needed.

ENGINE NOISE

- 1. Use only high quality shielded RCA cables.
- 2. Ensure that all signal transfer wires (RCA, speaker cables etc.) are kept separately and away from power and ground wires.
- 3. Ensure you have only ONE ground connection (star ground) for all your audio components.
- 4. Ensure that the point of ground is 100% metal which has been sanded free of rust, paint etc.
- 5. "Optional" Replace the OEM ground cable from the battery with the proper gauge wire (see Power Wiring Selection Chart in the amplifier manual).



Notes: Notes:



XFIRE AUDIO limited warranty.

U.S.A. warranty: 90 days. (1 year if installed by an authorized dealer.)

What is covered: This warranty applies only to XFIRE AUDIO products sold to consumers by authorized dealers in the U.S.A. Products purchased by consumers from an authorized dealer in another country are covered only by that country's distributor.

Who is covered: The original purchaser of XFIRE AUDIO product bought from an authorized dealer in the U.S.A.

To receive warranty, the original purchaser must provide a copy of the receipt with customer name, dealer, XFIRE model purchased with the date of purchase. Please retain all receipts for warranty purposes should they be needed. Warranty is not transferable.

Products found to be defective during the warranty period will be replaced (with a product deemed equivalent) at the discretion of XFIRE AUDIO.

What is NOT covered

- Abuse (including burnt voice coils) improper installation, operating product other than which it was designed, water damage, theft, product damage from vehicle accidents, or shipping damages.
- Any costs incurred for removal or reinstallation.
- Any product with altered, defaced or removed serial numbers.
- $\bullet \ {\bf Damage \ to \ other \ components.}$
- Products purchased from unauthorized dealers, retailers or internet sites.

Buyers beware of the internet. ANY XFIRE AUDIO product bought online that is NOT from and authorized dealer will void any and all warranty.

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, thus limitations may not apply.

No person shall assume for XFIRE AUDIO any other liability in connection with the sale of products.

Obtaining warranty: Contact your local authorized dealer.
Should you need additional assistance please email XFIRE AUDIO: salesusa@xfireaudio.com