



INSTALLATION & OPERATION MANUAL



Dear Customer,

Congratulations on your purchase of America's finest brand of car audio components. At Rockford Fosgate we are committed to musical reproduction at its best, and we are pleased you chose our product. Through years of engineering expertise, hand craftsmanship and critical testing procedures 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 Rockford Fosgate product installed by an Authorized Rockford Fosgate Dealer, as we provide specialized training through Rockford Technical Training Institute (RTTI). Please read your warranty and retain your receipt and original carton for possible future use.

To add the finishing touch to your new Rockford Fosgate image order your Rockford accessories, which include everything from T-shirts and jackets to hats and sunglasses.

To get a free brochure on Rockford Fosgate products and Rockford accessories, please call 1-800-669-9899 or FAX 1-602-966-3983 in the U.S. For Canada, call Korbon Trading at 905-567-1920. For international orders FAX 001-1-602-967-8132 or call 001-1-602-967-3565.

PRACTICE SAFE SOUND™

CONTINUOUS EXPOSURE TO SOUND PRESSURE LEVELS OVER 100dB MAY CAUSE PERMANENT HEARING LOSS. HIGH POWERED AUTO SOUND SYSTEMS MAY PRODUCE SOUND PRESSURE LEVELS WELL OVER 130dB. USE COMMON SENSE AND PRACTICE SAFE SOUND.

If, after reading your manual, you still have questions regarding this product, we recommend that you see your Rockford Fosgate dealer. If you need further assistance, you can call us direct at 1-800-795-2385. Be sure to have your serial number, model number and date of purchase available when you call.

The serial number can be found on the outside of the box. Please be sure to record it in the space provided below as your permanent record. This will serve as verification of your factory warranty and could become useful in recovering your product if ever stolen.

Serial Number: _____

Model Number: _____

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GETTING STARTED

Welcome to Rockford Fosgate! This manual is designed to provide information for the owner, salesperson and installer. For those of you who want quick information on how to install this product, please refer to the Basic Connections section of the manual. Other information can be located by using the Table of Contents. We, at Rockford Fosgate, have worked very hard to make sure all the information in this manual is current. But, as we are constantly finding new ways to improve our product, this information is subject to change without notice.

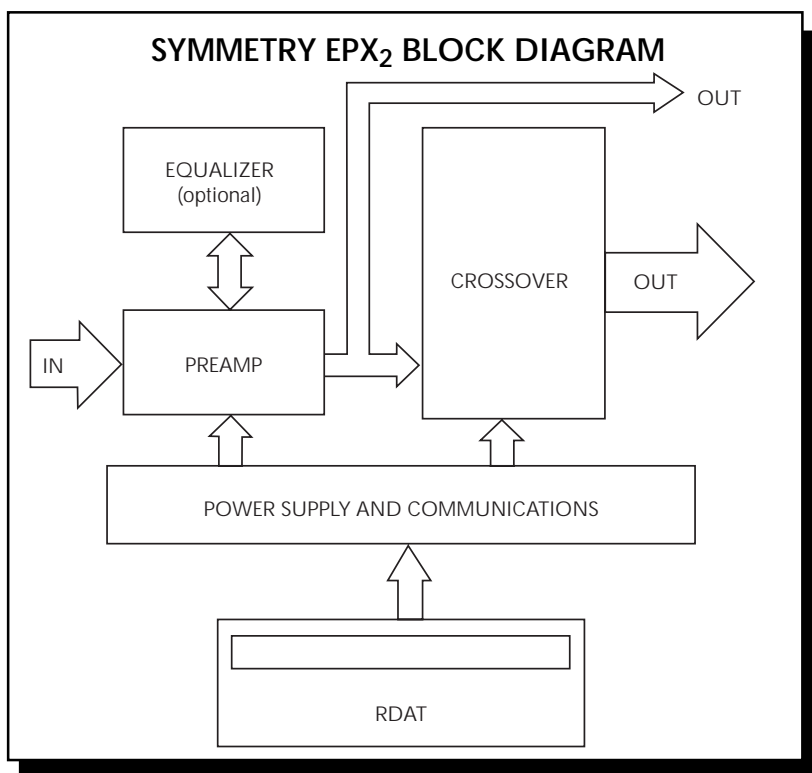
EPX₂ ACCESSORY PACK

- (1) Power Connector
- (1) 18' Modular Cable
- (1) Velcro Fastener
- (4) Mounting Screws
- (1) Allen Wrench 3/32"

INTRODUCTION

The Symmetry EPX₂ is a technological derivative of Rockford Fosgate's Symmetry system. It offers you a product that is both rich in features and affordable.

The EPX₂ has many features including a 4-way Preamplifier, fadable 3-way Crossover, and connections for an optional 14-band or 28-band Equalizer. To fully appreciate the benefits offered by the EPX₂, it is necessary to examine each of its key components in detail.



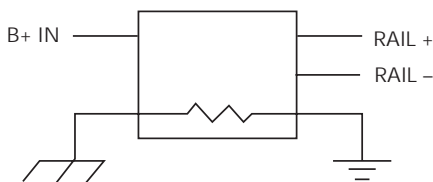
TECHNICAL DESIGN FEATURES

◆ Power Supply

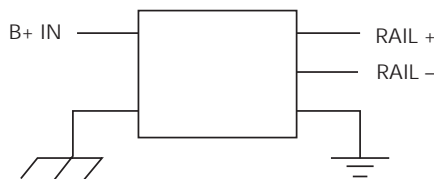
The power supply provides the fundamental voltages required for circuit operation. In simplest terms, a power supply converts the standard automotive 12 volts DC into the bipolar voltages required for audio applications.

What makes the EPX₂ Power Supply unique is that it utilizes a Self-Oscillating High Voltage Switching topology. This type of design provides a full 1,000,000 ohms of “Power Ground / Signal Ground” isolation. Input ground isolation is the single most effective way to prevent alternator whine from entering an autosound installation.

CONVENTIONAL SWITCHING SUPPLY



ISOLATED SWITCHING SUPPLY



In a self-oscillating power supply, power ground and audio ground are completely isolated.

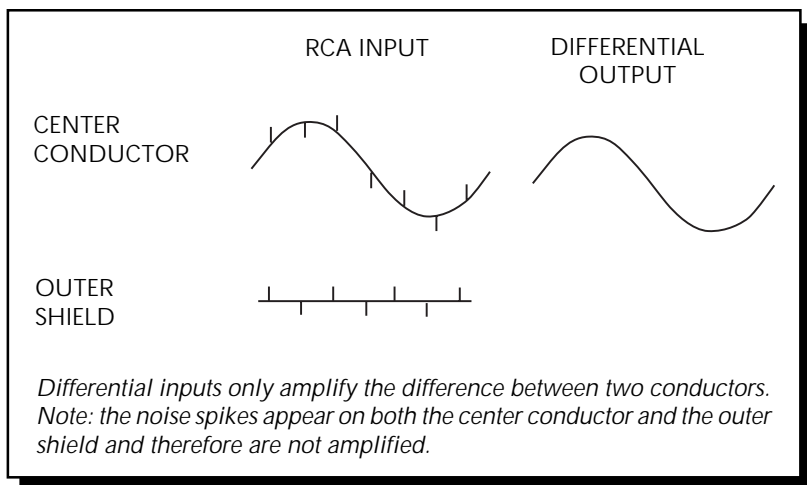
Reduced Radio Frequency Interference (RFI) radiation is another benefit provided by self-oscillating power supplies. RFI “desensitizes” the tuner section of your radio resulting in poor radio reception. Self-oscillating power supplies generate significantly less RFI than other switching power supply designs.

In addition to performance, reliability was another objective during the design process. The EPX₂ also incorporates Electrostatic Discharge Protection and Reverse-Polarity Protection.

◆ Preamplifier

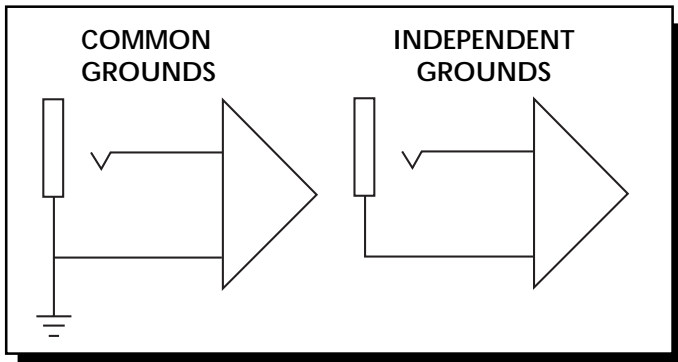
The preamplifier section is the heart of all EPX₂ signal processing activity. It provides source selection from one of two separate input sources, volume control covering an 80dB range, independent bass and treble controls with $\pm 12\text{dB}$ of boost or cut, and balance and fade capabilities.

The EPX₂ preamplifier has “differential inputs” to help prevent noise problems from creeping into the audio system. A circuit that incorporates differential inputs will only amplify the **difference** between two conductors or wires. In car audio, most components are connected together with RCA patch cables. Under ideal circumstances, the difference between the hot center conductor and the outer shields is the musical signal. Cars are anything but ideal, however. Electrical noise is generated by the alternator, fan motors, windshield wipers, brake lights, etc. These noises can be inductively coupled into the RCA patch cables. When this occurs, the noise spikes appear on both the center conductor and its outer shield. Since differential input circuitry amplifies only the difference between the two conductors, the noise spikes are **NOT** amplified, and they are consequently eliminated from the system.



To further reduce the possibility of noise, each set of RCA inputs has its own independent audio ground. This is critically important when dealing with systems that contain multiple source units. In every system there should be one, and only one, point where audio ground

and power ground are common. This point should be established by the source unit. When multiple source units are used, each will establish its own common ground point, with the result being the dreaded "ground loop." (Ground loops are the primary cause of engine noise in a system.) By utilizing independent input grounds, the EPX₂ preamplifier avoids ground loops.



The preamp also has individual solid-state input sensitivity controls on the input circuitry. This, in conjunction with our unique on-line level setting procedure, allows the installer to perfectly integrate the EPX₂ with the rest of the sound system. This on-line level setting process is an industry first. The EPX₂ system actually steps the installer through the level setting procedure via the RDAT (Remote Data Access Terminal). This process is more than just a series of instructions. The EPX₂ actually adjusts itself during this maneuver to ensure the best possible signal-to-noise ratio, while still maintaining adequate signal headroom. Finally, the EPX₂ is capable of producing 10 Volts RMS of output signal. This results in reduced system noise (hiss) and maximum dynamic range.

◆ Equalizer (optional)

Equalizers (EQs) are signal processors that are used to correct or compensate for the acoustical deficiencies inherent in most auto sound installations. EQs are also commonly used to "tailor" the sound of a system to the listener's own personal listening preference. The EPX₂ has the ability to integrate a 14-band or 28-band equalizer through the use of a plug-in module.

Equalizer operation is exceptionally user-friendly. All adjustments are made from the multi-function RDAT in real-time. This means that the user can actually hear changes as they are being made. Also, all equalizer settings are displayed both graphically and numerically on the system's large, easy to read RDAT display. This allows the user to instantly **see** exactly how much boost or cut is being applied to any particular band.

In the past, potentiometers have been used as the control elements for equalizers. Being the electro-mechanical devices they are, it was only a matter of time before they became dirty or just wore out. The EPX's equalizer utilizes state-of-the-art solid state devices as the control elements. They don't wear out, they don't get dirty, and they'll be just as accurate tomorrow as they are today.

The optional EQ modules feature 14 or 28 bands of adjustments to satisfy even the most discriminating of listeners. The 14-band equalizer module adjusts 1/2 octave centers in the region below 1kHz, and octave centers at 1kHz and above. The 28-band equalizer module, commonly used in competition, allows for adjustment at 1/3 octave centers. Left and Right channels may be calibrated independently or simultaneously. Additionally, each band may be adjusted over a $\pm 12\text{dB}$ range in exact 1dB increments.

◆ Electronic Crossover

The EPX₂'s active electronic crossover is, arguably, the unit's most outstanding feature. Its primary purpose is to do to sound what a prism does to light. That is, it splits the composite musical signal into discrete frequency "bands." Most loudspeakers are not capable of efficiently reproducing the entire musical spectrum. By splitting the music into discrete bands, individual components of the musical signal can be routed to loudspeakers that are specifically designed to reproduce that part of the musical spectrum.

The EPX₂ features a ***fadable***, 3-way active crossover network. Fourteen discrete outputs are provided.

Front	Left and Right All Pass (passes all frequencies)
Front	Left and Right High-Pass (passes high frequencies)
Front	Left and Right Bandpass (passes midrange frequencies)
Back	Left and Right All Pass (passes all frequencies)
Back	Left and Right High-Pass (passes high frequencies)
Back	Left and Right Bandpass (passes midrange frequencies)
Constant Bass	Left and Right Low-Pass (passes low frequencies)

The crossover points for high-pass, bandpass, and low-pass may be adjusted independently. (All pass outputs do not have crossover points.) The most flexible feature is that crossover point adjustments may be made in real time. With the EPX₂, crossover points can be dynamically adjusted while listening. In addition, the user is not limited to the handful of crossover points offered by most crossover manufacturers. Each filter in the EPX₂ can be set to 1 of 256 possible frequencies, for a total of 72,057,594,000,000,000 (72 quadrillion) unique crossover combinations.

All crossover points are represented both graphically and numerically on the LCD display of the RDAT. High-Pass, Bandpass, and Low-Pass transfer functions are realistically simulated on a calibrated logarithmic frequency scale. The exact crossover frequency is displayed numerically.

The EPX₂ features a ***fadable*** crossover with constant bass low-pass outputs. It has outputs for both the Front and Rear of the system. Front and Rear crossover settings for these outputs can be adjusted independently. A fadable crossover allows the user to fade the system from front to back for just the right amount of front stage / rear fill. The constant bass low-pass outputs provide low-pass information regardless of the position of the fader.

◆ Remote Data Access Terminal (RDAT)

The RDAT makes the EPX₂ a unique and powerful signal processor. The RDAT is, in reality, a very powerful computer. It coordinates the operation of the power supply, preamp, equalizer, and crossover sections of the EPX₂, so that they all work together in perfect harmony.

The RDAT also provides the all-important link with the user. To ensure ease of operation, a menu driven software architecture was selected for the user interface. In this type of system, options are presented to the user on the RDAT's large 40 character by 2 line display. To select a particular option, the user simply presses the function key that corresponds to the desired menu selection.

The RDAT contains a 16 bit microcontroller that runs at 20mHz. It has a program capacity of 32k bytes and an 8k byte bank of nonvolatile storage (saves settings when disconnected from the battery). Since all software is written in assembly language, program coding is tight and performance is optimal.

◆ Communications Interface

The communications interface provides the communications link between the RDAT and the EPX₂ unit. It accomplishes this task by using RS-232 serial interface circuitry on all lines carrying data. Furthermore, to maintain ground isolation, all data lines are optically isolated from the EPX₂'s audio circuitry.

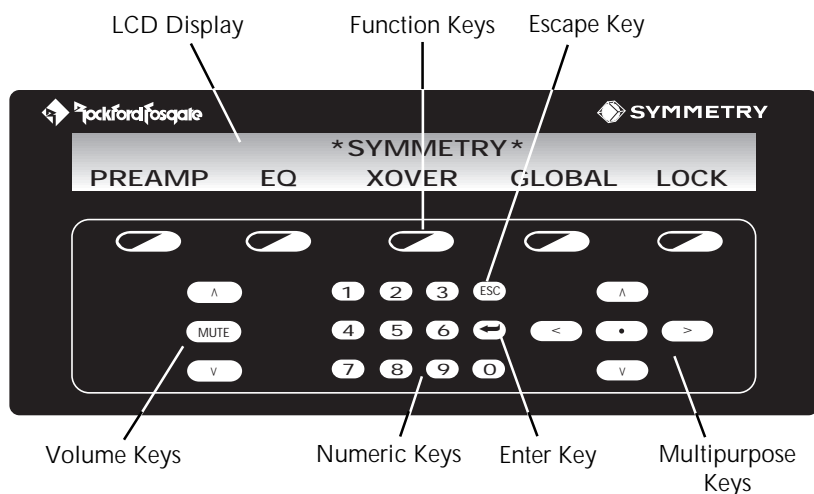
◆ Global and VDISC Features

The first goal of Symmetry EPX₂ was to offer a great equalizer, crossover and preamplifier all contained in one unit controlled by the RDAT. With that goal achieved, the second goal was to make the unit software driven allowing each of those components to interact with one another.

After achieving the second goal the Rockford Fosgate design team gave the EPX₂ Global and VDISC features. These features work together and are very simple to operate. The global feature allows you to save all equalizer-crossover-preamp settings to one preset. There are four global presets. The VDISC feature, which stands for Volume Dependent Interactive System Control, allows you to toggle between different global presets based on the user specified volume thresholds.

EPX₂ DESIGN FEATURES

Remote Data Access Terminal



LCD Display: Menu selections and other vital system information are displayed in this area.

Function Keys: The function keys are used to select options displayed on the LCD display.

Escape Key: The ESC key is used to cancel a function or return to the previous menu.

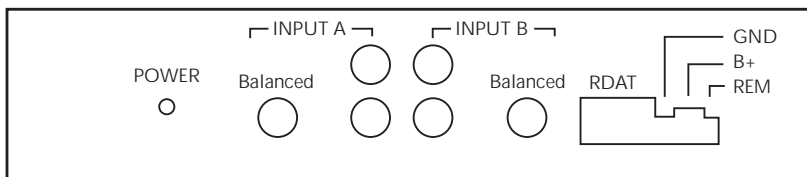
Volume Keys: These keys are used to control the system volume level and mute.

Numeric Keys: These keys are used for entering numeric data.

Multipurpose Keys: These keys are used for various operations. See Basic Operation for additional information.

Enter Key: This key is reserved for future applications.

EPX₂ Input Section



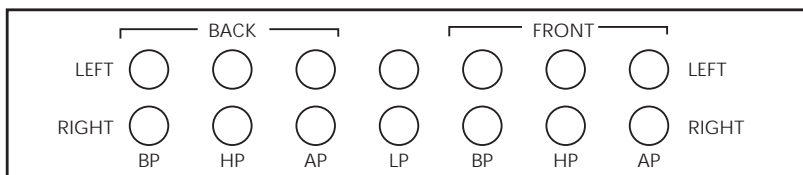
Power LED: The LED gives a visual indication of the status of the EPX₂, lighting when the unit is turned on.

RCA Input Jacks: The industry standard RCA jack provides an easy connection for signal level input. They are gold-plated to resist the signal degradation caused by corrosion.

Balanced Line Connector: This input will allow the optional Balanced Line Transmitter to be used in conjunction with the EPX₂ to provide better noise rejection. The Balanced Line Transmitter converts standard RCA signals to balanced line inputs.

RDAT Interface: The RJ11 connector is used to provide an easy 1 cable hook-up for the Remote Data Access Terminals.

EPX₂ Output Section



BP Output: The crossover signals from these outputs are Bandpass frequencies. The crossover frequency is adjustable through the RDAT.

HP Output: The crossover signals from these outputs are High-Pass frequencies. The crossover frequency is adjustable through the RDAT.

AP Output: The signals from these outputs bypass the internal crossover and are All-Pass (Full Range) frequencies.

LP Output: The crossover signals from these outputs are constant Low-Pass frequencies. The crossover frequency is adjustable through the RDAT.

INSTALLATION CONSIDERATIONS

Tools Needed

The following is a list of tools you will need for installing the EPX₂.

Allen wrench 3/32" (included)	Voltmeter
Wire strippers	Battery post wrench
Electric hand drill w/assorted bits	Wire cutters
1kHz tone recorded at "all bits high" (opt.)	

This section focuses on some of the vehicle considerations for installing your new EPX₂. Checking your battery and present sound system, as well as pre-planning your system layout and best wiring routes will save installation time. When deciding how to lay out your new system, be sure that each component will be easily accessible for making adjustments.

Before beginning any installation, be sure to follow these simple rules:

1. Be sure to carefully read and understand the instructions before attempting to install the EPX₂.
2. **For safety**, disconnect the negative lead from the battery prior to beginning the installation.
3. For easier assembly, we suggest you run all wires prior to mounting your EPX₂ in place.
4. Route all of the RCA cables close together and away from any high current wires.
5. Use high quality connectors for a reliable installation and to minimize signal or power loss.
6. **Think before you drill!** Be careful not to cut or drill into gas tanks, fuel lines, brake or hydraulic lines, vacuum lines or electrical wiring when working on any vehicle.
7. Never run wires underneath the vehicle. Running the wires inside the vehicle provides the best protection.
8. Avoid running wires over or through sharp edges. Use rubber or plastic grommets to protect any wires routed through metal, especially the firewall.
9. **ALWAYS** protect the battery and electrical system from damage with proper fusing. Install a fuseholder and fuse on the +12V power wire within 18" (45.7 cm) of the battery terminal.
10. When grounding to the chassis of the vehicle, scrape all paint from the metal to ensure a good, clean ground connection. Grounding connections should be as short as possible and always be connected to metal that is welded to the main body, or chassis, of the vehicle.

MOUNTING LOCATIONS

The mounting location of your EPX₂ main housing and RDAT will have a great effect on the performance of your system. To provide proper ventilation the EPX₂ should be mounted vertically whenever possible.

Trunk Mounting

Mounting the EPX₂ main housing in the trunk is sufficient. Leave adequate room for the connection of cables and be careful not to mount the unit near any vehicle computers or sources of high voltage. Mounting the RDAT in the trunk does not allow for convenient access and is not recommended.

Passenger Compartment Mounting

Mounting the EPX₂ main housing in the passenger compartment is an adequate location. Leave sufficient room for the connection of cables and be careful not to mount the unit near any vehicle computers or sources of high voltage. Mount the RDAT in a location that provides the user with easy access. Do not expose the RDAT to water, extreme heat, or direct sunlight.

Engine Compartment Mounting

The Rockford Fosgate EPX₂ main housing and RDAT should never be mounted in the engine compartment. Not only will this void your warranty but could create an embarrassing situation caused by the ridicule from your friends.

WIRING THE SYSTEM

1. Connect the EPX₂ power cable

The B+ lead should be connected to a source of non-switched 12 volts DC. Prepare the length of cable from the constant +12V by stripping 3/8" of insulation from the end of the wire. Insert the bared wire into the B+ terminal of the power connector and fasten the screw. The total current consumption through this lead is approximately 2 amps.

NOTE: The B+ cable *MUST* be fused 18" or less from the vehicle's battery. Install a fuse holder, along with a 3 amp fuse, under the hood and prepare the cable ends as stated above. Connections should be water tight.

The REM input lead should be connected to the remote turn-on or power antenna output from the source unit. Prepare the length of cable from the source of switched voltage by stripping 3/8" of insulation from the end of the wire. Insert the bared wire into the REM terminal of the power connector and fasten the screw. Total current consumption through this lead is negligible.

The GND lead should be connected to the chassis ground of the vehicle. Prepare a length of cable (approximately 12" long) to be used for the ground lead by stripping 3/8" of insulation from each end. Insert one end of bared wire into the GND terminal of the power connector and fasten the screw. Prepare the chassis ground by scraping any paint from the metal surface and thoroughly clean the area of all dirt and grease. Strip the other end of the wire and attach a ring connector. Fasten the cable to the chassis using a screw.

After all three wires are securely fastened, insert the power connector into the EPX₂ power socket.

2. *Connect the RDAT to the EPX₂ with the modular cable*

Important! The modular cable is NOT a standard phone cable. It is a 6 conductor non-flipped cable as opposed to the 4 conductor flipped cable used for telephone applications. ***Using a standard phone cable with the EPX₂ will damage the unit and void your warranty.***

3. *Connect the source inputs*

Connect the front RCA outputs from the source unit to the desired source input on the EPX₂. Since fade functions take place in the EPX₂, only front outputs from the source unit are required.

If using the optional Balanced Line Transmitter, remove the cover from the main housing with the supplied Allen wrench. Locate and configure the signal input jumpers (J1, J2, J4, J5) to accept a balanced line input. Replace the cover on the main housing and connect the RCAs from the source unit to the BLT input. Attach the mini-DIN cable to the BLT and to the desired source input on the EPX₂. For more detailed instructions refer to Page 41 of this manual.

4. *Connect the outputs*

Connect the appropriate outputs from the EPX₂ to the appropriate inputs on the amplifiers.

5. *Verify operation*

Power the system up by turning on the source unit. After a few seconds, the RDAT should display the Main Menu. Keep the volume low until the correct crossover points are set.

6. *Adjust EPX₂ crossover settings*

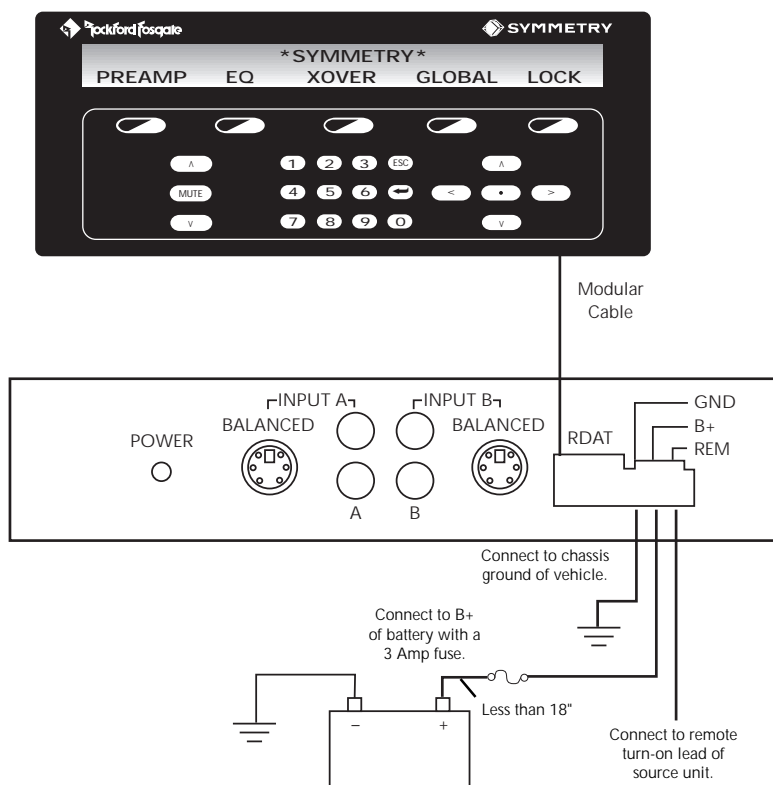
Adjust the EPX₂ crossover points to the desired crossover frequencies. To access the crossover functions, select **XOVER** from the Main Menu. Then select the crossover section you wish to set up.

7. *Adjust system levels*

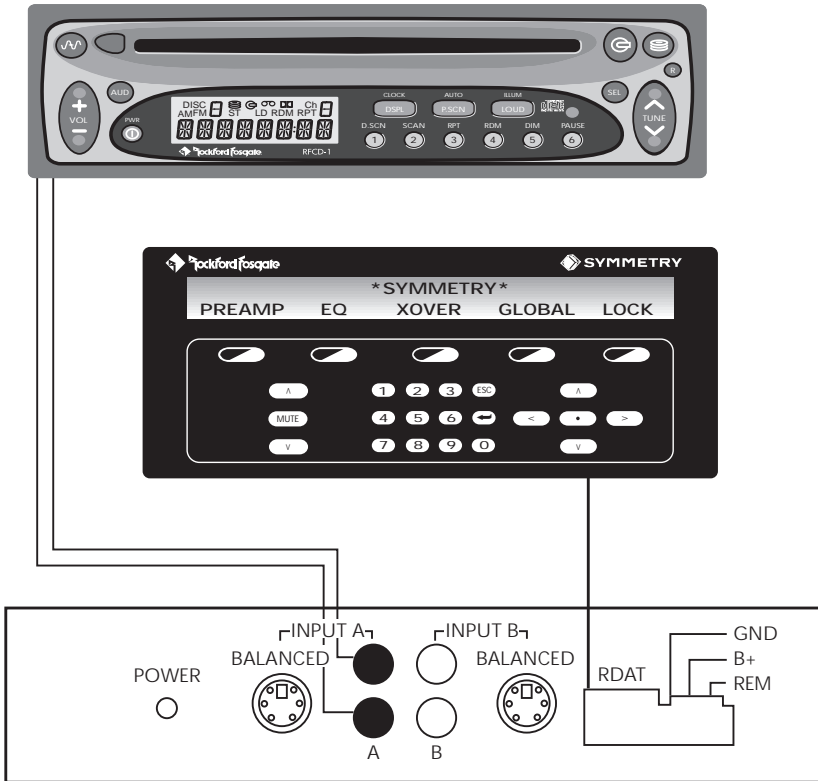
Go through the EPX₂ level setting procedure. Select **Setup** from the Main Menu and then select **Levels**. Follow the instructions given on the screen.

EPX₂ BASIC CONNECTIONS

Power Connections

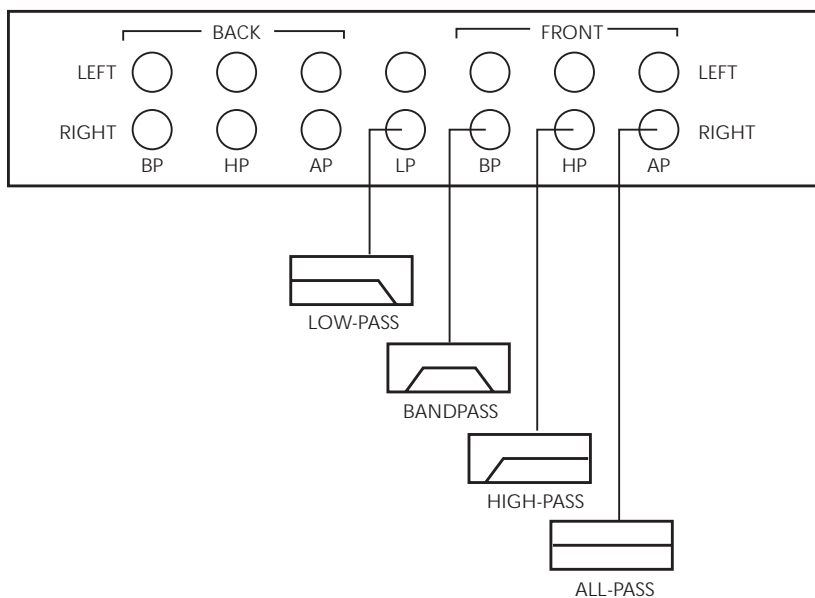


RCA & RDAT Connections



- **RCA**s from source 1 are connected to "INPUT A."
- **RCA**s from source 2 are connected to "INPUT B."
- **RDAT** with cable is connected to "RDAT" input.
- **Gain** is adjustable in SETUP / LEVELS menu.

RCA Output Connections

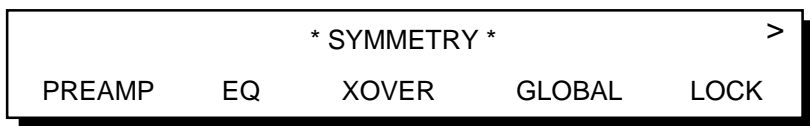


- **Low-Pass** output is connected to subwoofer amplifier.
- **Bandpass** outputs are connected to midrange amplifier.
- **High-Pass** outputs are connected to tweeter amplifier.
- **All-Pass** outputs are connected to special applications amplifier.
- **LP, BP, & HP** crossover points are adjustable in XOVER.

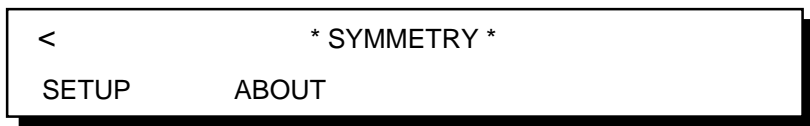
BASIC OPERATION

The RDAT provides the link with the user. To ensure ease of operation, a menu driven software architecture was selected for the user interface. In this type of system, options are presented to the user on the RDAT's large 40 character by 2 line display. To select a particular option, the user presses the function key that corresponds to the desired menu selection.

Main Menu



The display shown above is a representation of the EPX₂ main menu. The ">" symbol located in the upper right corner of the LCD display indicates that there are additional menu commands available. To access these commands, press the **right ">" multipurpose key**. The display will change as follows.



To return to the previous selections, press the **left "<" multipurpose key** or the **ESC** key.

PREAMP OPERATION

Volume Control

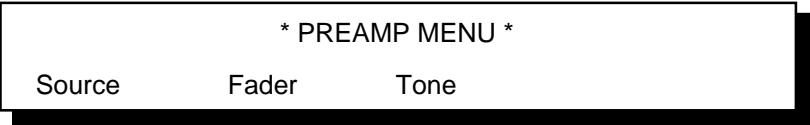
Use the dedicated volume control keys to adjust the output level of the EPX₂. Pressing the **Up** arrow key increases the volume in 2dB increments. Pressing the **Down** arrow key has the opposite effect. Press the **Mute** key to mute the output by 20dB. Press again to **Unmute** the output by the same amount.



The volume keys may be used at any time, however, the volume bar graph will only be displayed at the MAIN MENU level.

Preamp Functions

To access the EPX₂ preamplifier functions, select **Preamp** from the main menu by pressing the function key directly below **Preamp**. The following display will appear.



Source Selection

To change the EPX₂ source input, select **Source** from the preamp menu. The following display will appear.

The bracket < > around A indicates that input source A is currently selected. To switch to source B, select B from the Preamp / Source menu. To return to the previous menu, press **ESC**.



PREAMP OPERATION

Source Name

To name the source, first select which Source is to be named (A or B), then select **Name**. The following will be displayed.

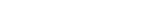
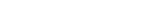
Use arrow keys to change source name.

[A] B

Use the **left/right multipurpose keys** to select cursor position and the **up/down multipurpose keys** to select characters. Upon completion, press the corresponding function key.

Fader Control

To adjust the EPX₂ fader control, select **Fader** from the preamp menu. The following display will appear.

L  R F  B

Balance Fader

To adjust the Left/Right Balance, use the **left/right multipurpose keys**. To adjust the Front/Back Fader, use the **up/down multipurpose keys**. To reset Balance and Fader to their default positions, press the **center multipurpose key**. To return to the previous menu, press **ESC**.

Tone Control

To adjust the EPX₂ tone controls, select **Tone** from the preamp menu. The following display will appear.

$$- \underbrace{\text{|||||}}_{< 45 \text{ Hz}} + \quad - \underbrace{\text{|||||}}_{15 \text{ kHz}} +$$

The bracket < > around 45Hz indicates that the 45Hz tone control is currently selected. Use the **left/right multipurpose keys** to switch between the two tone controls.

Use the **up/down multipurpose keys** to boost or cut the currently selected tone control. Press the **center multipurpose key** to set both tone controls to their neutral (flat) positions. To return to the previous menu, press **ESC**.

EQUALIZER OPERATION (optional accessory)

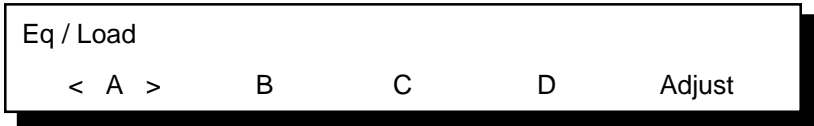
NOTE: One of the optional equalizers (SYM-E14 or SYM-E28) must be installed prior to equalizer operation. Refer to pages 38 and 39 for hardware installation and page 36 for software installation.

To access the EPX₂ equalizer functions, select **EQ** from the main menu. The following display will appear.



Load EQ Preset

To load a previously saved equalizer preset, simply select which **BANK** of presets to be recalled by pressing its corresponding function key. After selecting which Bank of presets to load, the following options will be displayed.



To select the Preset to be loaded, press the corresponding function key. For example, to load preset "A" under "BANK A", press the function key directly below "BANK A" and then press the function key directly below "A."

The bracket < > around a Bank or Preset indicates that selection is currently selected. To load another preset, press the desired preset's corresponding function key. To return to the previous menu, press **ESC**.

EQUALIZER OPERATION (optional accessory)

EQ Adjust

To manually adjust the EPX₂ equalizer, select **EQ** from the main menu and then select **Adjust** from the Eq/Load menu. The following display will appear.

Select channel to Adjust ...

Left

Right

Both

Select **Left** to adjust the equalizer's left channel or **Right** to adjust the equalizer's right channel. (Left and Right equalizer settings can be set independently.) Selecting **Both** will allow the left and right equalizer channels to be adjusted simultaneously. The following screen will be displayed.

250 Hz

L=R

0 dB

|||||↓|||||

Save

NOTE: The display shown above represents the SYM-E14 equalizer graph.

Use the **left/right multipurpose keys** to select the desired band. The currently selected band is indicated with an underscore character "_". The frequency of the currently selected band is displayed numerically in the top left of the LCD display.

Use the **up/down multipurpose keys** to boost or cut the selected band. The exact amount of boost or cut for the currently selected band is displayed numerically in the lower left of the LCD display.

To set the currently selected band to "Flat", momentarily press the **center multipurpose key**. To set all equalizer bands to "Flat," press and hold the **center multipurpose key**. To return to the previous menu, press the **ESC** key.

EQUALIZER OPERATION (optional accessory)

Save Curve / Change Name

To save the previously set EQ curve, select **Save**. The following options will be displayed.

Eq / Adjust / Save

BANK A

BANK B

BANK C

BANK D

Press the corresponding function key under the desired Bank. After selecting which Bank will store the curve, the name of the selected Bank can now be changed.

The underscore “_” shows cursor position. Use the **left/right multipurpose keys** to position the cursor and the **up/down multipurpose keys** to select characters. After changing the name, press the corresponding function key and the following will display.

Eq / Adjust / Save

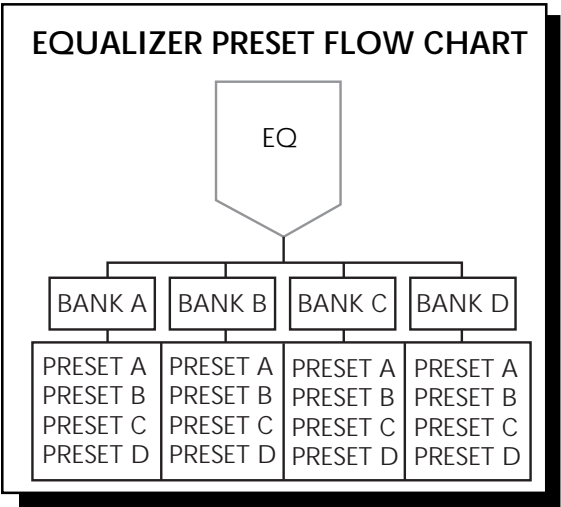
A

B

C

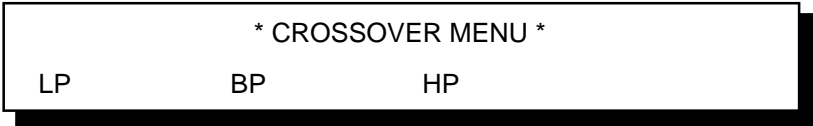
D

Now select the Preset that the curve is to be saved at. After selecting which Preset will store the curve, the name of the selected Preset can be changed. Similar to naming the Bank, use the **left /right multipurpose keys** to select cursor position and the **up/down multipurpose key** to select characters.



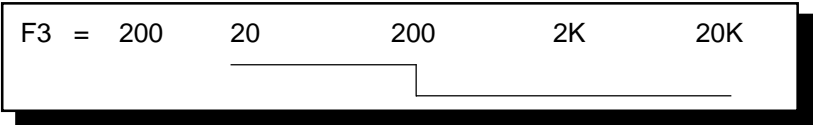
CROSSOVER OPERATION

To adjust the EPX₂ active electronic crossover, select **XOVER** from the main menu. The following options will be displayed.



Low-Pass Adjustment

To access the crossover's low-pass section, select **LP** from the crossover menu. The following screen will be displayed.



In the display above, F3 indicates the currently selected low-pass crossover frequency in Hz. The crossover frequency is also represented graphically on a 20Hz-20kHz log scale.

To adjust the low-pass crossover point, use the **left/right multipurpose keys**. Press **ESC** to return to the previous menu. Changes will be saved automatically.

CROSSOVER OPERATION

Bandpass Adjustment

To access the crossover's bandpass section, select **BP** from the crossover menu. The following options will be displayed.

Xover / BP

Back

Front

Select **Back** to adjust the crossover's back bandpass section or **Front** to adjust the front bandpass section. (Front and Back crossover settings are totally independent.) The following screen will be displayed.

F3 = 200 20 200 2K 20K
Lo Side _____

The bandpass section has two separate crossover frequency settings. The first determines the low-side cutoff frequency and the second determines the high-side cutoff frequency. The EPX₂ allows the user to adjust each of these crossover frequencies independently.

To adjust the low-side frequency, press the **Far Left** function key. The current low-side crossover frequency will be displayed numerically as F3 in the top left corner of the LCD display. Use the **left/right multipurpose keys** to adjust the low-side crossover frequency.

To adjust the high-side frequency, press the **Far Right** function key. The current high-side crossover frequency will be displayed numerically as F3 in the top left corner of the LCD display. Use the **left/right multipurpose keys** to adjust the high-side crossover frequency.

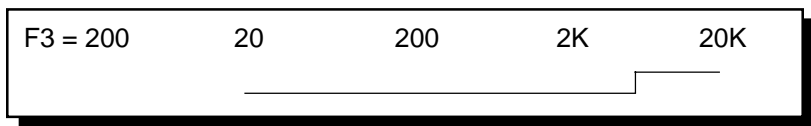
CROSSOVER OPERATION

High-Pass Adjustment

To access the crossover's high-pass section, select **HP** from the crossover menu. The following screen will be displayed.



Select **Back** to adjust the crossover's back high-pass section or **Front** to adjust the front high-pass section. (Front and Back crossover settings are totally independent.) The following screen will be displayed.



In the display above, F3 indicates the currently selected high-pass crossover frequency in Hz. The crossover frequency is also represented graphically on a 20Hz-20kHz log scale.

To adjust the high-pass crossover point, use the **left/right multipurpose keys**. Press **ESC** to return to the previous menu. Changes will be saved automatically.

GLOBAL OPERATION

The EPX₂ Global Preset functions allow the user to...

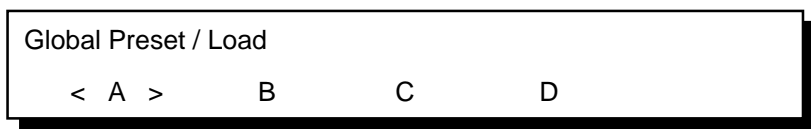
- Save all Source-EQ-Preamp-Crossover settings to one global preset.
- Recall all system settings from one of four presets
- Automatically toggle between presets A & B with volume control (VDISC)
- Automatically toggle between presets B & C with volume control (VDISC)
- Automatically toggle between presets C & D with volume control (VDISC)

To access the global preset functions, select **Global** from the main menu. The following options will be displayed.



Global Load

To load a previously saved global preset, select **Load** from the global preset menu. The following options will be displayed. Next, press the function key that corresponds to the preset you would like to load. For example, if you would like to load global preset "A", you would press the function key directly below "A".



The bracket < > around A indicates that global preset A is currently selected. To load another preset, press the corresponding function key. To return to the previous menu, press **ESC**.

GLOBAL OPERATION

Global Save / Change Name

To save all system settings to a global preset:

1. Select desired **Source** input to be used from the **Preamp/Source** menu.
2. Select desired **EQ** curve from the **EQ** Bank of Presets (RTA curve, SPL curve).
3. Select desired **Tone/Fader** settings from the **Preamp** menu.
4. Select desired **Crossover** settings from the **XOVER** menu.

Once all system settings are adjusted, select **Save** from the global preset menu. The following options will be displayed.

Global Preset / Save

< A > B C D

Select the preset of the desired settings to be saved and press the corresponding function key. The following will be displayed.

Use arrow keys to change global name

[A] B C D

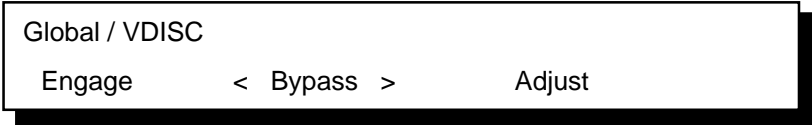
The name of the global preset can now be changed. Use the **left/right multipurpose keys** to select cursor position and the **up/down multipurpose keys** to select characters. To return to the previous menu press **ESC**.

GLOBAL OPERATION

Global VDISC

The EPX₂ has the ability to automatically switch between global presets A & B, presets B & C, and presets C & D based on the current EPX₂ volume settings. This feature is known as **Volume Dependent Interactive System Control**, or **VDISC** for short. The VDISC utilizes 3 thresholds for its switching process.

To enable the VDISC feature, select **VDISC** from the global preset menu. The following screen will be displayed.



The bracket < > around Bypass indicates VDISC is currently inactive. To enable VDISC, select **Engage** by pressing the corresponding function key. To return to the previous menu, press **ESC**.

To adjust the VDISC thresholds, select **Adjust** from the Global / VDISC menu. The following will be displayed.



NOTE: The locations of the thresholds on the volume bar graph are user selectable.

In the display above, the solid bars in the volume scale represent the 3 VDISC thresholds. The bracket < > around A-B indicates that the first threshold is currently selected for adjustment. The numerical position of the threshold point is displayed to the right of the volume scale.

To adjust the threshold point on the volume scale, use the **left/right multipurpose keys**. To select another threshold for adjustment, press its corresponding function key. Press **ESC** to return to the previous menu. Changes will be saved automatically.

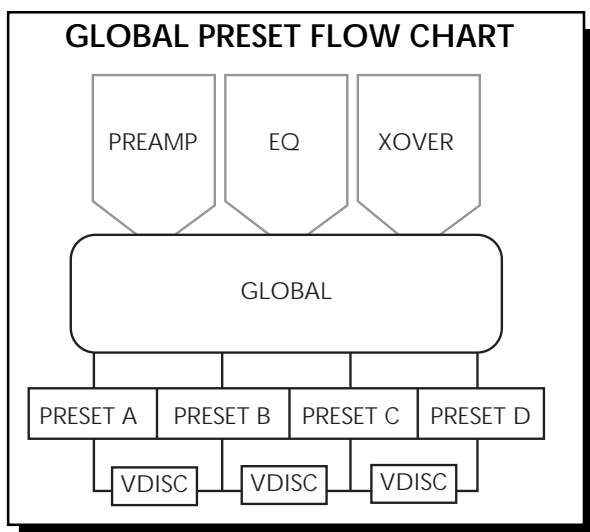


GLOBAL OPERATION

With VDISC engaged, global **Preset A** will be active whenever the EPX₂ volume control is set below the first threshold. Global **Preset B** will be active whenever the EPX₂ volume is adjusted to a level that exceeds the first threshold point. Global **Preset C** will be active whenever the EPX₂ volume control is adjusted to a level that exceeds the second threshold point. Global **Preset D** will be active when the EPX₂ volume control is adjusted to a level that exceeds the third threshold point.

With VDISC, a user could set up a system with very different characteristics depending upon the volume setting. A good example would be the operation of a vehicle with a convertible top. The owner could set up the VDISC according to 4 different conditions:

- Preset A:** City driving with top up
(Crossover points adjusted for sound quality.)
- Preset B:** Highway driving with top up
(EQ adjusted to compensate for road noise.)
- Preset C:** City driving with top down
(Tone control adjusted to compensate for wind noise.)
- Preset D:** Highway driving with top down
(Crossover adjusted for speaker protection due to higher SPL & EQ adjusted to compensate for road and wind noise.)

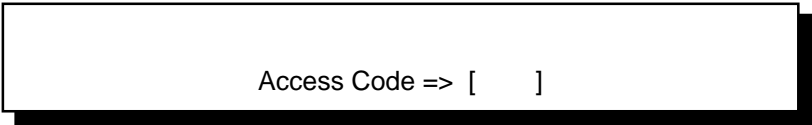


LOCK OPERATION

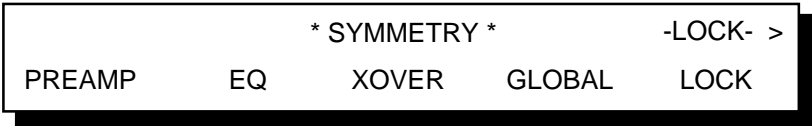
The EPX₂ lock feature allows the user to lock access to vital system areas. This prevents unauthorized tampering and potential system damage.

Lock

To lock the system, select **Lock** from the main menu. The following screen will be displayed.



Enter your 4 digit Personal Identification Number (PIN). The default PIN number shipped with the EPX₂ unit is 1234. To change PIN numbers see SETUP. After entering the fourth digit, the following display will appear.



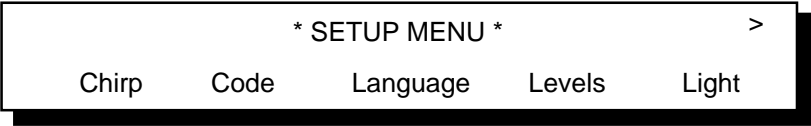
The word -LOCK- in the upper right corner of the LCD display indicates that the system is currently locked. Access to vital system settings is now restricted. Furthermore, the Volume will not be allowed to exceed the level it was at when the system was locked.

Unlock

To unlock the system, select LOCK from the main menu. Enter your 4 digit PIN number as before. After entering the fourth digit, the system will be unlocked.

SETUP OPERATION

To access the Setup Menu, select **Setup** from the Main Menu. The following options will be displayed.

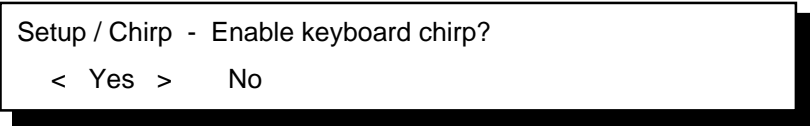


To access the next menu of commands, press the **right ">" multipurpose key**. The display will change as follows.



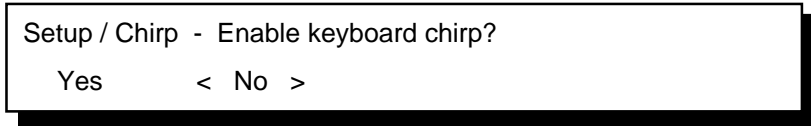
Chirp

The Chirp option allows the user to enable or disable the sounds generated by the RDAT. To access this function, select **Chirp** from the Setup Menu. The following options will be displayed.



The bracket < > around Yes indicates that the chirp feature is currently active. To disable this feature, select **No**. The display will then revert back to the Setup Menu.

To re-enable the chirp feature, or to change the pitch of the chirp, select **Chirp** from the Setup Menu. The following options will be displayed.



SETUP OPERATION

Select **Yes**. The screen will then display the following.

Setup / Chirp / Pitch Control

Press UP/DN arrow keys to adjust pitch.

Press the **up/down multipurpose keys** to adjust the pitch of the chirp. Pressing the **center multipurpose key** will reset the chirp pitch to its factory default position. Press **ESC** to return to the Setup Menu.

Code

The code option allows the user to define his/her Personal Identification Number (PIN). To access this feature, select **Code** from the Setup Menu. The following screen will be displayed.

Setup / Change Access Code

Enter Old Access Code => []

Enter your 4 digit Personal Identification Number (PIN). The default PIN number shipped with the EPX₂ unit is 1234. The display will change to show the following.

Setup / Change Access Code

Enter New Access Code => []

Enter your personalized 4 digit PIN number. (You choose the code.) After entering the fourth digit, you will be asked to re-enter your new PIN number for verification purposes. After successfully entering the same number twice, the display will change to show the following.

Setup / Change Access Code

NEW ACCESS CODE ACCEPTED

This indicates that your new PIN number was accepted. ***Do not forget your code.***

SETUP OPERATION

Language

This option is used to select the default language that will be displayed on the RDAT LCD. To access this function, select **Language** from the Setup Menu. The following options will be displayed.

Setup / Language - Select default

< English > French German Italian Spanish

The bracket < > around English indicates that the English language is currently selected. To select another language to be displayed, press the corresponding function key. To return to the previous menu, press **ESC**.

Levels

This feature is used during the initial installation of your EPX₂ for proper input gain settings, maximizing noise floor, and prevent signal clipping. To access this function, select **Levels** from the Setup menu. The following screen will be displayed.

Setup / Levels - Please select method.

Assist Manual Track

The EPX₂ has the ability to step the user through the level setting procedures during the initial installation of the unit. To access this function, select **Assist** from the LEVELS menu and follow the directions on the screen.

To adjust the level setting manually, select **Manual**. The following screen will be displayed.

Select Source To Setup

< A > B

The bracket < > around A indicates that input source A is currently selected. To adjust source B, select **B** from the Levels / Manual menu. After selecting the source, the following screen will appear.

> L 128
 > R 128

The bracket > next to L & R indicates that the left and right channels are currently selected for simultaneous adjustment. To increase the left and right channel gain, use the **right multipurpose key**. To decrease the left and right channel gain, use the **left multipurpose key**.

The left and right Gain control may be adjusted individually by using the **up/down multipurpose keys**. To adjust the Left channel gain, press the **up “^” multipurpose key**.

> L 141
 R 128

The bracket > next to L indicates that the left channel is currently selected for adjustment. To increase the left channel gain, use the **right multipurpose key**. To decrease the left channel gain, use the **left multipurpose key**. To adjust the Right channel gain, press the **down “v” multipurpose key**.

 L 128
 > R 135

The bracket > next to R indicates that the right channel is currently selected for adjustment. To increase the right channel gain, use the **right multipurpose key**. To decrease the right channel gain use the **left multipurpose key**.

After the Gain has been properly adjusted for both the left and right channels, press **ESC** to return to the previous menu.

SETUP OPERATION

To access the EQ Tracking feature select **Track** from the Setup/Levels menu. The following screen will be displayed.

Setup / Levels / EQ Tracking

Engage < Bypass >

The bracket < > around Bypass indicates the EQ Tracking feature is currently inactive. To enable EQ Tracking, select **Engage** by pressing the corresponding function key.

The EQ tracking feature monitors the optional E14/E28 DCard equalizer to prevent signal clipping or distortion. When any frequency on the equalizer is boosted, the overall input gain of the EPX2 automatically re-adjusts itself just under clipping level.

NOTE: The levels must be adjusted prior to engaging the EQ Tracking using **Assist** or **Manual** from The levels menu. EQ Tracking is only beneficial when using an optional E14 or E28 DCard.

Light

This option is used to select the backlit status of the RDAT.

Setup / Light: Select backlight status.

< On > Off Auto

The bracket < > around "On" indicates that the illumination feature is currently active. To disable this feature, select "Off". Temporary illumination can be enabled by selecting "Auto". Within a 1 minute time frame, if no keys are touched, the illumination will turn off.

Memory

This option is used to reset all system presets to their default factory settings. To access this function, select **Memory** from the Setup Menu. The following options will be displayed.

Restore presets to factory defaults?

Yes < No >

Select **Yes** to reset all system presets. Select **No** or **ESC** to cancel and return to the Setup Menu.

DCard

This option is used to adapt the software when installing or un-installing optional DCard modules into the EPX₂ main housing. To adapt DCard software, select **D-Card** from the Setup menu. The following will be displayed.

Setup / D-Card: Select options.

E14 [*] E28 []

The asterisk * inside the E14 brackets [] indicates that the E14 software is currently installed and adapted. If installing an E28 equalization module, select **E28** by pressing the corresponding function key.

When un-installing optional modules in the EPX₂ main housing, the DCard software may be disabled by pressing the corresponding function key again. The asterisk will then be removed from the brackets. To return to the previous menu, press **ESC**.

ABOUT OPERATION

The About function displays the software version currently installed in the RDAT. Since the EPX₂ is software controlled, the program can easily be updated as new features are developed. To access this function, select **About** from the Main Menu. The following will be displayed.

SYMMETRY
was created by WAYNE HARRIS

A few moments later the screen will automatically change to the following.

SYMMETRY
EPX BIOS: • _____

ROCKFORD FOSGATE ACCESSORIES

The following accessories were designed to enhance the performance of the EPX₂ and are available from your Authorized Rockford Fosgate Dealer.

- **14-Band Graphic Equalizer (SYM-E14)**

The SYM-E14 is a 14-band graphic equalizer. This analog processor adjusts frequencies centered at 30Hz, 45Hz, 60Hz, 90Hz, 125Hz, 180Hz, 250Hz, 375Hz, 500Hz, 1kHz, 2kHz, 4kHz, 8kHz, and 16kHz with ± 12 dB of boost or cut. Equalization curves can be adjusted independently between left and right channels and can be saved to one of 16 namable presets.

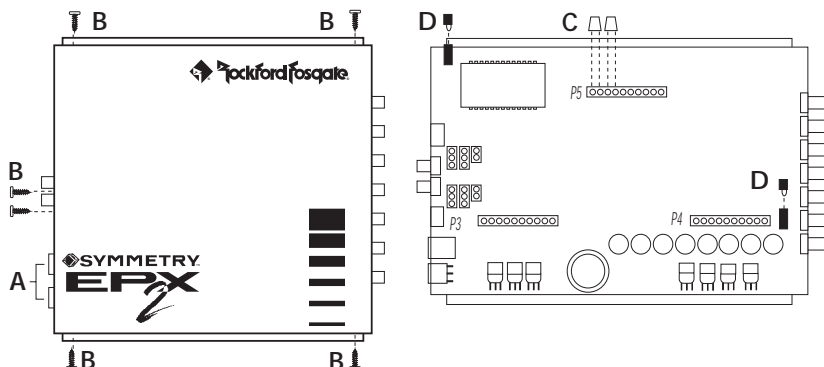
- **28-Band Graphic Equalizer (SYM-E28)**

The SYM-E28 is a 28-band (1/3 octave) graphic equalizer. This analog processor adjusts frequencies centered at 32Hz, 40Hz, 50Hz, 63Hz, 80Hz, 100Hz, 125Hz, 160Hz, 200Hz, 250Hz, 320Hz, 400Hz, 500Hz, 630Hz, 800Hz, 1kHz, 1.25kHz, 1.6kHz, 2kHz, 2.5kHz, 3.25kHz, 4kHz, 5kHz, 6.3kHz, 8kHz, 10kHz, 12.5kHz, and 16kHz with ± 12 dB of boost or cut. Equalization curves can be adjusted independently between left and right channels and can be saved to one of 16 namable presets. Additional features include dual LED level meters. The E28 is available for the EPX₂ signal processing system.

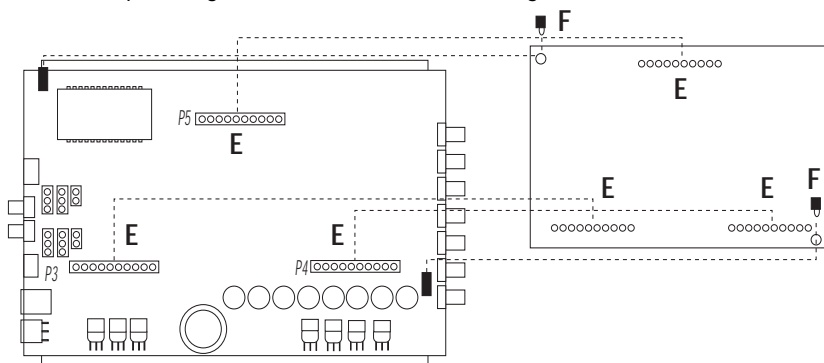
- **Balanced Line Transmitter (FG-BLT)**

The Balanced Line Transmitter converts signal RCA cables from the source unit to balanced signals. The BLT improves sound quality in the system by eliminating noises generated by vehicle electrical systems. The BLT is available for Rockford Fosgate products that offer a balanced input.

Installing the Optional SYM-E14



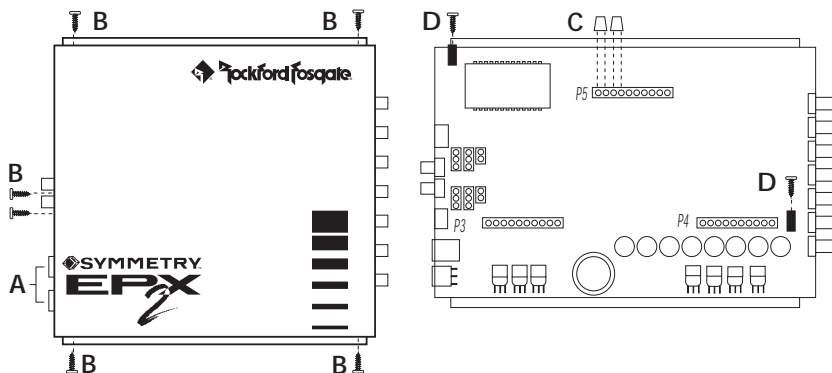
- A. **Disconnect RDAT & Power** from the main unit.
- B. **Remove Cover** from main unit by unscrewing the six hex head screws with the 3/32" Allen wrench supplied with the EPX₂.
- C. **Remove 2 Jumpers** on connector P5 corresponding to LOL, LRL, LOR & LRR.
- D. **Remove the Top Half of the 2 Standoffs** carefully by hand from the main unit. It is not necessary to remove the top screws when separating the standoff into its two segments.



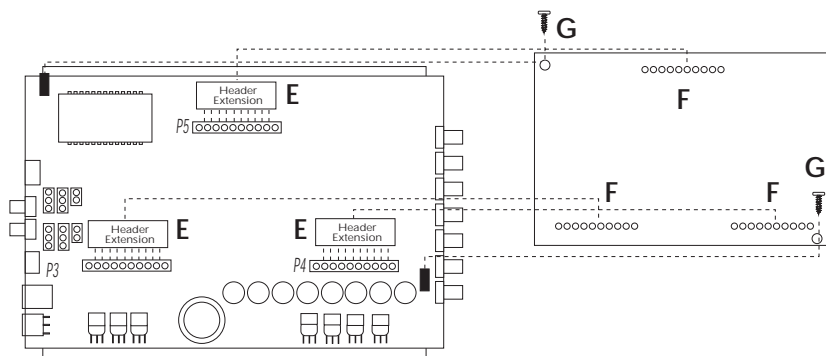
- E. **Install E14** carefully into header connections P3, P4 and P5.
- F. **Replace 2 Top Standoffs**, with screws intact, carefully by hand. (*Do Not Overtighten.*)
- G. **Replace Cover** on the main unit with the six hex head screws.
- H. **Reconnect RDAT & Power** to main unit.
- I. **Adapt E14 Software** by selecting **DCard** from the **Setup** menu and select **E14** or refer to page 36 of your EPX₂ Manual.
- J. **Congratulations!** You have successfully installed your optional Equalizer Module.

ATTENTION: To maintain your EPX₂ warranty, we recommend your Authorized Rockford Fosgate Dealer install your new accessory.

Installing the Optional SYM-E28



- A. **Disconnect RDAT & Power** from the EPX₂.
- B. **Remove Cover** from main unit by unscrewing the six hex head screws with the 3/32" Allen wrench supplied with the EPX₂.
- C. **Remove 2 Jumpers** on connector P5 corresponding to LOL, LRL, LOR & LRR.
- D. **Remove 2 Nylon Screws** carefully from standoffs with a slotted screwdriver.

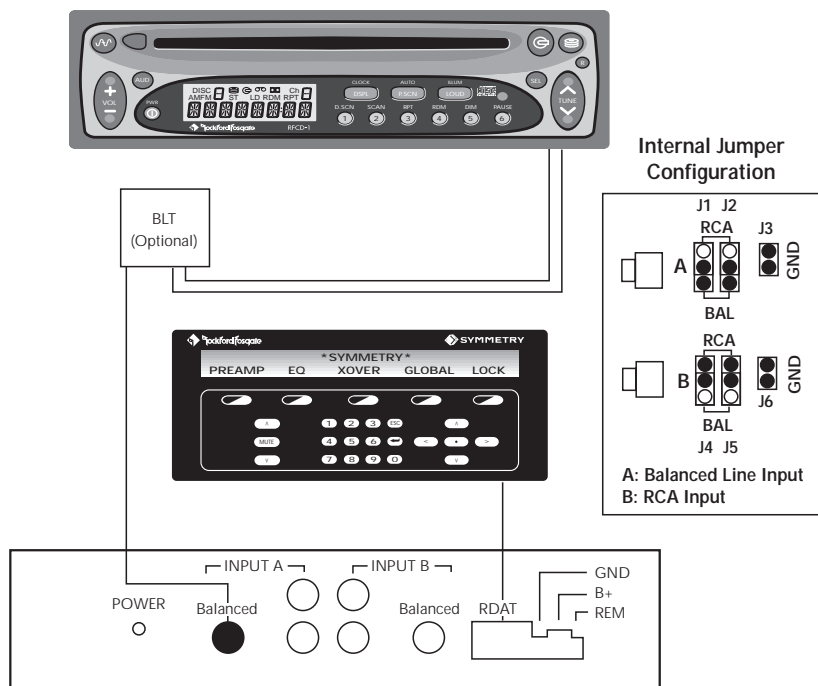


- E. **Install 3 Header Extensions** supplied with EQ carefully into P3, P4 and P5.
- F. **Install E28** carefully into header extensions P3, P4 and P5.
- G. **Replace 2 Nylon Screws** carefully through EQ and secure into standoffs with a slotted screwdriver. (**Do Not Overtighten.**)
- H. **Replace Cover** on the main unit with the six hex head screws.

- I. **Reconnect RDAT & Power** to main unit.
- J. **Adapt E28 Software** by selecting **DCard** from the **Setup** menu and select **E28** or refer to page 36 of your EPX₂ Manual.
- K. **Congratulations!** You have successfully installed your optional Equalizer Module.

ATTENTION: To maintain your EPX₂ warranty, we recommend your Authorized Rockford Fosgate Dealer install your new accessory.

Installing the Optional Balanced Line Transmitter

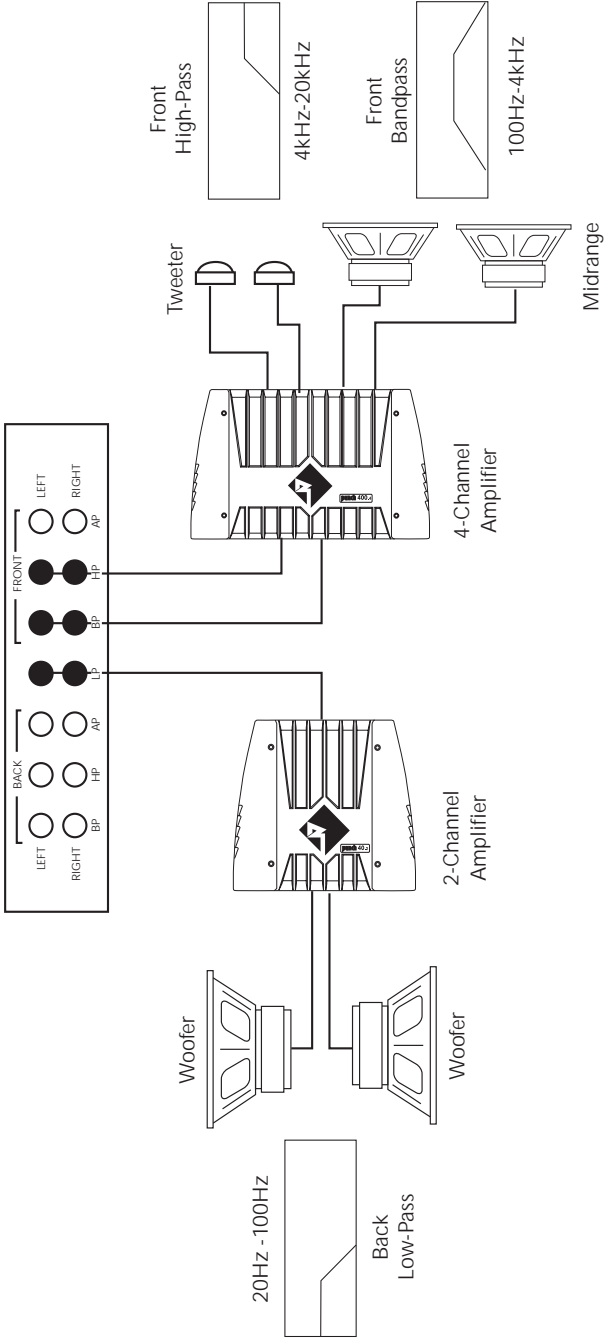


- **Remove Cover** from main unit by unscrewing the six hex head screws with the 3/32" Allen wrench supplied with the EPX₂.
- **Reconfigure Jumpers** J1 & J2 (Input A) or J4 & J5 (Input B) to accept balanced line inputs (refer to drawing).
- **RCAs from Source** connected to Balanced Line Transmitter with minimal cable.
- **Balanced Line Cable** from BLT connected to "Balanced" input.

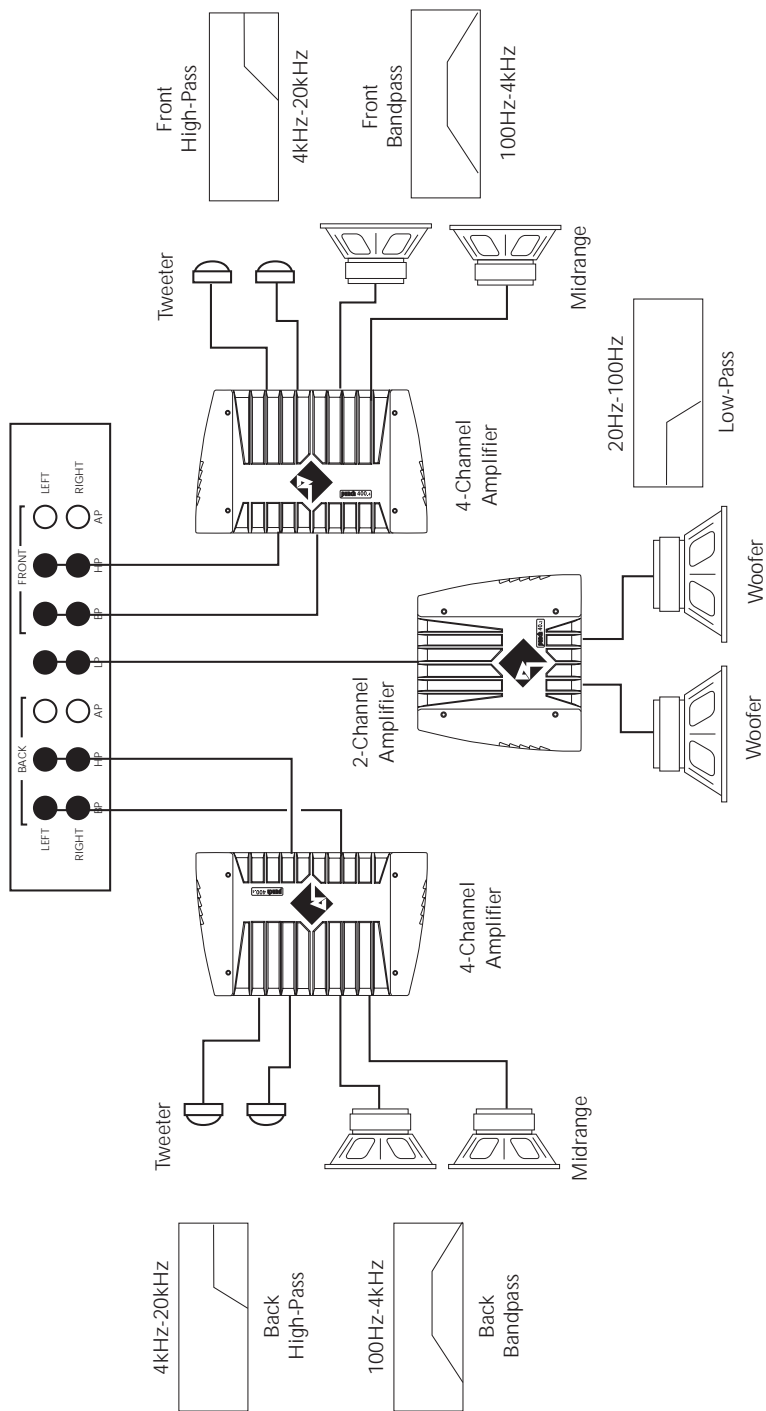
ATTENTION: To maintain your EPX₂ warranty, we recommend your Authorized Rockford Fosgate Dealer install your new accessory.

SYSTEM DIAGRAMS

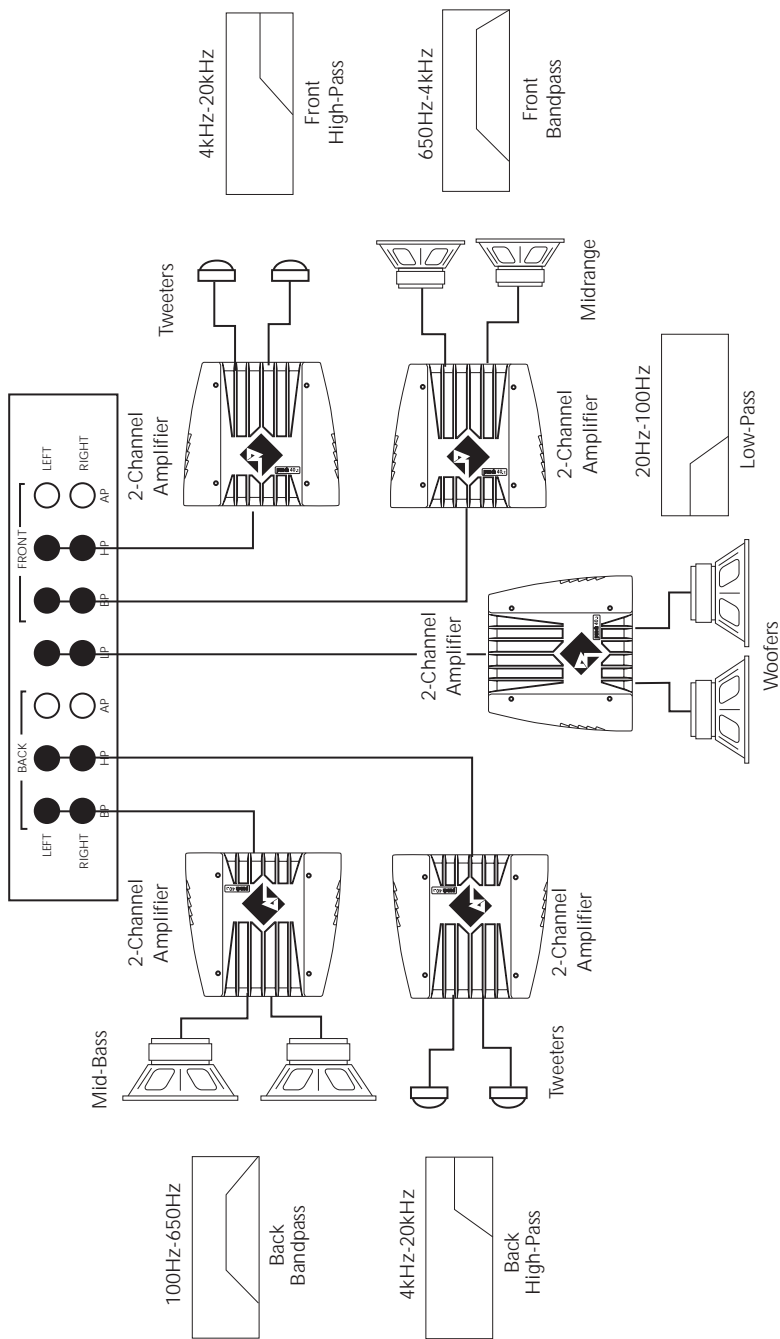
3-Way System



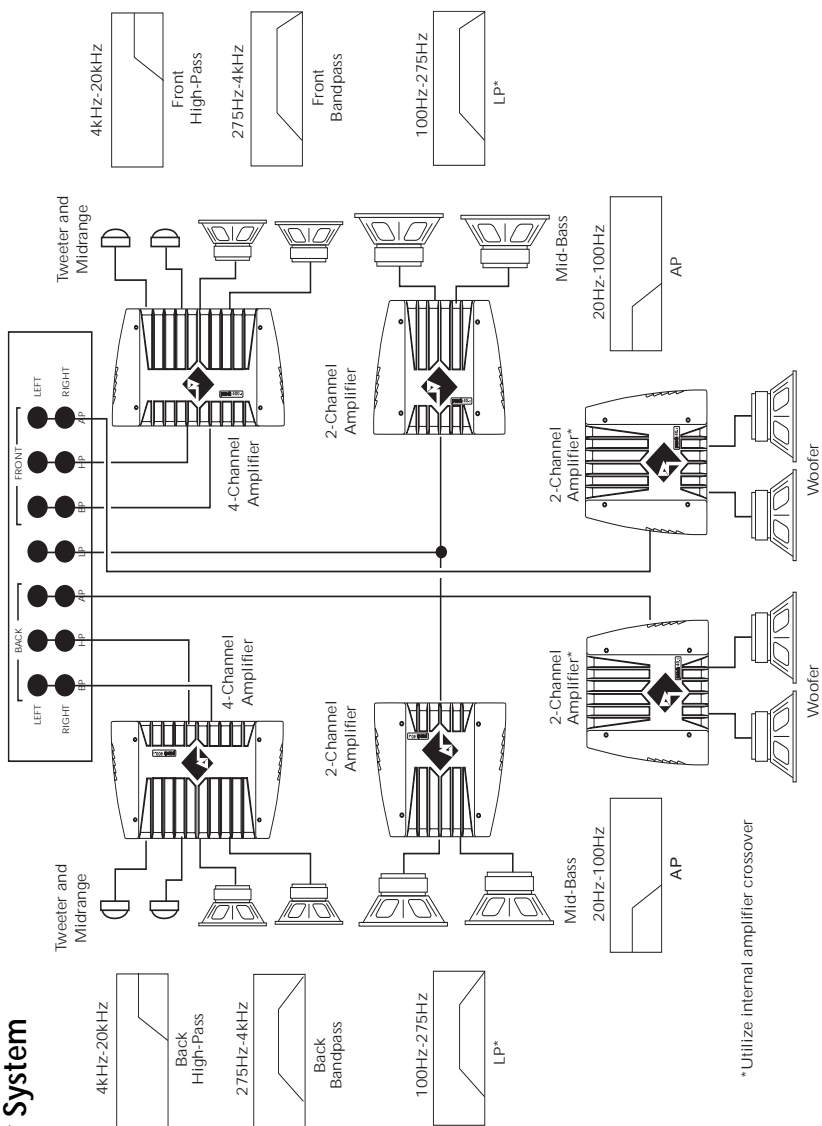
Fadable 3-Way System



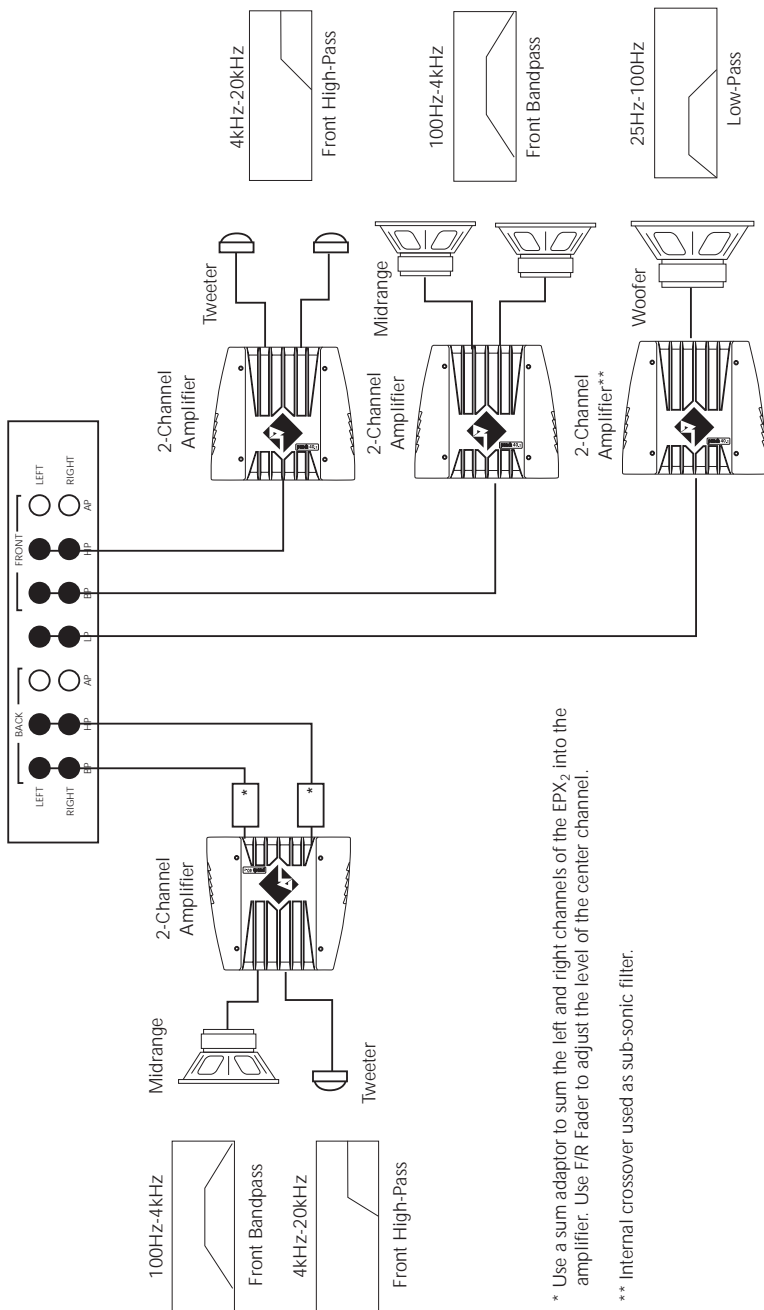
4-Way System



Fadable 4-Way System



3-Way with Center Channel



* Use a sum adaptor to sum the left and right channels of the EPX₂ into the amplifier. Use F/R Fader to adjust the level of the center channel.

** Internal crossover used as sub-sonic filter.

TROUBLESHOOTING

Symptom	Diagnosis	Remedy
Unit does not turn on (Power LED is off)	Voltage applied to the REM terminal is not between 10.5 and 15.5 volts or there is no voltage present.	Check the alternator, battery, fuse, and wiring and repair as necessary. If the voltage is above 15.5 volts, have the electrical system inspected by an authorized car service center.
	Voltage to the B+ terminal is not between 10.5 and 15.5 volts or there is no voltage present.	Check the alternator, battery, fuse, and wiring and repair as necessary. If the voltage is above 15.5 volts, have the electrical system inspected by an authorized car service center.
	EPX ₂ is not properly grounded.	Check wiring and repair as necessary.
EPX ₂ has no sound (Power LED is on)	Source is not properly selected.	Check Preamp Source and select the corresponding source input.
	Signal from source is not connected or functioning properly.	Check connections, substitute with known working source and cables and repair or replace as necessary.
	When using the BLT, Balanced Line Input from BLT is not connected or not functioning properly.	Check connections, substitute with known working BLT and cables and repair or replace as necessary.
Keyboard doesn't respond properly	RDAT is not processing information correctly.	Make sure no keys are depressed on the RDAT.
	RDAT cable is not fully connected.	Check cable connection and correct if necessary.
	Microprocessor is scrambled.	Disconnect power to the EPX ₂ , then reconnect.

TROUBLESHOOTING

Symptom	Diagnosis	Remedy																								
New software doesn't function correctly	Microprocessor is scrambled.	Reset memory using Memory from the Setup menu.																								
Feature not available	Software not configured correctly.	Select DCard option from the setup menu																								
High noise floor or “System Hiss”	Input gain for EPX ₂ is set too low.	Readjust input gain of the EPX ₂ using Levels from the Setup menu.																								
Low output from EPX ₂ .	RCA/Balanced input jumpers are not selected for corresponding input.	Check signal input jumpers (J1, J2 & J4, J5) and correct as necessary.																								
High noise floor or low output when using Manual from the Levels menu	Source unit output level is not properly matched with the EPX ₂ .	<table><tr><th>Source Output</th><th>Manual Setting</th></tr><tr><td>1.0 V</td><td>200</td></tr><tr><td>1.5 V</td><td>180</td></tr><tr><td>2.0 V</td><td>164</td></tr><tr><td>2.25 V</td><td>157</td></tr><tr><td>2.5 V</td><td>150</td></tr><tr><td>2.75 V</td><td>145</td></tr><tr><td>3.0 V</td><td>139</td></tr><tr><td>3.25 V</td><td>134</td></tr><tr><td>3.5 V</td><td>129</td></tr><tr><td>3.75 V</td><td>125</td></tr><tr><td>4.0 V</td><td>120</td></tr></table>	Source Output	Manual Setting	1.0 V	200	1.5 V	180	2.0 V	164	2.25 V	157	2.5 V	150	2.75 V	145	3.0 V	139	3.25 V	134	3.5 V	129	3.75 V	125	4.0 V	120
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TROUBLESHOOTING

Symptom	Diagnosis	Remedy
Noise in system (Alternator whine)	EPX ₂ is not properly grounded.	Check wiring and repair as necessary.
	The simultaneous connection of 2 source units is causing a ground loop.	Remove cover from the EPX ₂ main housing and locate grounding jumpers J3 & J6. Remove one of the jumpers while listening to the system. If the noise is gone, push the jumper back onto one of the pins for storage. NOTE: One jumper should always be connected when using two source units. Both jumpers should be connected when using one source unit.
	<p>Noise is entering through the system via a possible ground loop.</p> <p>Jumper Placement Diagrams</p> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="margin-right: 10px;"> DGND A. Chass AGND </div> <div style="border: 1px solid black; padding: 2px; text-align: center;"> • • • </div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="margin-right: 10px;"> DGND B. Chass AGND </div> <div style="border: 1px solid black; padding: 2px; text-align: center;"> • • • </div> </div> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> DGND C. Chass AGND </div> <div style="border: 1px solid black; padding: 2px; text-align: center;"> • • • </div> </div>	<p>Remove the cover from the EPX₂ main housing and locate the jumper labeled DGND and AGND next to the transformer (round donut with wires). This jumper applies ground to the chassis of the EPX₂. There are three possible connections.</p> <p>A. No jumper - No ground applied to the chassis</p> <p>B. DGND - Power supply ground applied to chassis</p> <p>C. AGND - RCA shield applied to chassis</p> <p>Experiment with these jumper configuration options until a reduction in noise is observed.</p>

SPECIFICATIONS

Power Supply

Input Voltage	10-16 Volts DC
Input Current	<2.5 amps
Ground Isolation	1 Meg Ohm
Switching Frequency	30kHz
Rail Voltages	± 5 VDC, ± 15 VDC
Fuse	Internal - AGC 3 amp

Preamplifier

Frequency Response	20Hz-20kHz ± 0.5 dB
Signal-to-Noise Ratio	94dB @ 1kHz ref. 1 Volt
THD + Noise	<0.05% @ 1kHz ref. 1 Volt
Input Voltage	Adjustable 500 mV - 4 V RMS
Output Voltage (AP)	10 Volts RMS maximum
Sources	2 (RCA or Balanced)
Volume Control Range	80dB in 2dB increments
Mute	20dB fixed
Balance Control Range	40dB in 2dB increments
Fader Control Range	40dB in 2dB increments
Bass Control	± 12 dB at 45Hz
Treble Control	± 12 dB at 15kHz

E14 Equalizer (Optional)

Number of Bands	14
Half Octave Centers	30, 45, 60, 90, 125, 180, 250, 375, 500Hz
Octave Center	1k, 2k, 4k, 8k, 16kHz
Adjustment Range	± 12 dB in 1dB increments
Presets	20 total (16 normal, 4 VDISC)

E28 Equalizer (Optional)

Number of Bands	28
1/3 Octave Centers	32, 40, 50, 63, 80, 100, 125, 160, 200, 250, 320, 400, 500, 630, 800Hz, 1.0k, 1.25k, 1.6k, 2.0k, 2.5k, 3.25k, 4.0k, 5.0k, 6.3k, 8.0k, 10.0k, 12.5k, 16.0k
Adjustment Range	± 12 dB in 1dB increments
Presets	20 total (16 normal, 4 VDISC)

SPECIFICATIONS

Crossover

Type	Fadable 3-way
Number of Outputs	10
Pass Band Information	
Front L/R High-Pass	182Hz to >20,000Hz
Front L/R Bandpass	
Low Side	58Hz to 7,500Hz
High Side	182Hz to >20,000Hz
L/R Low-Pass	58Hz to 7,500Hz
Rear L/R High-Pass	182Hz to >20,000Hz
Rear L/R Bandpass	
Low Side	58Hz to 7,500Hz
High Side	182Hz to >20,000Hz
Crossover Points per Filter	256
Unique Crossover Settings	72,057,594,000,000,000
Output Voltage (HP, BP, LP)	10 Volts RMS maximum
Filter Topology	Equal Component Sallen Key
Filter Type	Butterworth
Rolloff Rate	12dB/octave

Remote Data Access Terminal

Microcontroller	16 bit High Performance
Clock Speed	19.66mHz
Program Memory	32k bytes
Non Volatile Retention	>10 years
Non Volatile Endurance	>10,000 write operations
Display	40 character x 2 line LCD

Dimensions

EPX Housing	6.88"W x 2.25"H x 8.14"D
RDAT	7.00"W x 2.88"H x .88"D

WARRANTY INFORMATION

Rockford Corporation offers a limited warranty on Rockford Fosgate products on the following terms:

- **Length of Warranty**

3 years on electronics

90 days on electronic B-stock (receipt required)

2 years on source units

30 days on speaker B-stock (receipt required)

- **What is Covered**

This warranty applies only to Rockford Fosgate products sold to consumers by Authorized Rockford Fosgate Dealers in the United States of America or its possessions. Product purchased by consumers from an Authorized Rockford Fosgate Dealer in another country are covered only by that country's Distributor and not by Rockford Corporation.

- **Who is Covered**

This warranty covers only the original purchaser of Rockford product purchased from an Authorized Rockford Fosgate Dealer in the United States. In order to receive service, the purchaser must provide Rockford with a copy of the receipt stating the customer name, 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 Rockford's discretion.

- **What is Not Covered**

1. Damage caused by accident, abuse, improper operations, water, theft
2. Any cost or expense related to the removal or reinstallation of product
3. Service performed by anyone other than Rockford or an Authorized Rockford Fosgate Service Center
4. Any product which has had the serial number defaced, altered, or removed
5. Subsequent damage to other components
6. Any product purchased outside the U.S.
7. Any product not purchased from an Authorized Rockford Fosgate 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 Rockford Fosgate any other liability in connection with the sale of the product.

- **How to Obtain Service**

Please call 1-800-669-9899 for Rockford Customer Service. You must obtain an RA# (Return Authorization number) to return any product to Rockford Fosgate. You are responsible for shipment of product to Rockford.

Ship to:

Electronics

Rockford Corporation

Warranty Repair Department

2055 E. 5th Street

Tempe, AZ 85281

RA#: _____

Rockford Corporation
546 South Rockford Drive
Tempe, Arizona 85281 U.S.A.
In U.S.A., (602) 967-3565
In Europe, Fax (49) 4207-801250
In Japan, Fax (81) 559-79-1265