



Installation &
Operation



CPSR

***System
Regulator***

INTRODUCTION

Thank you for purchasing the Rockford Fosgate CPSR System Regulator. The CPSR uses the latest charging technologies to maintain and distribute charge to multi battery systems.

The CPSR takes an innovative approach to ensure proper voltage levels in multiple battery systems. The CPSR is an intelligent computer controlled regulator/isolator that senses the needs of the vehicle's starting battery and auxiliary batteries. Unlike conventional battery isolators, the CPSR requires no cutting into the factory electrical system. It allows all the batteries in your vehicle to become a collective voltage source.

The CPSR ensures the proper voltage level in the vehicle's starting battery by concentrating solely on that battery until it reaches a charge voltage above 12.5 volts. Once this voltage level has been established, the CPSR couples all the batteries so they can be charged together.

The CPSR does not charge the primary (vehicle) battery. Charging of the primary battery is done solely by the vehicle's alternator. However, the CPSR does monitor the primary battery voltage to determine when to charge the secondary battery(ies).

When your engine is running, the CPSR allows the alternator to feed the auxiliary batteries a regulated charge of up to 200 amps.

When the ignition is turned off, the CPSR becomes a "one-way gate," isolating the current in the vehicle's starting battery from passing through to the auxiliary batteries. This "one-way gate" ensures that the vehicle's starting battery will always have enough charge to start the automobile, regardless of the charge level in the auxiliary batteries.

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, in the U.S. call 480-967-3565 or FAX 480-967-8132.

For all other countries, call +001-480-967-3565 or FAX +001-480-967-8132.

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 1-800-669-9899. 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 record it in the space provided below as your permanent record. This will serve as verification of your factory warranty and may become useful in recovering your SSR2002 if it is ever stolen.

Serial Number: _____

Model Number: _____

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NOTE: Review each section for more detailed information.

WARNING


This symbol with “**WARNING**” is intended to alert the user to the presence of important instructions. Failure to heed the instructions will result in severe injury or death.

CAUTION

This symbol with “**CAUTION**” is intended to alert the user to the presence of important instructions. Failure to heed the instructions can result in injury or unit damage.

 **CAUTION:** To prevent injury and damage to the unit, please read and follow the instructions in this manual. We want you to have enjoyment from this system, not a headache.

 **CAUTION** If you feel unsure about installing this system yourself, have it installed by a qualified Rockford Fosgate technician.

 **CAUTION** Before installation, disconnect the battery negative (-) terminal to prevent damage to the unit, fire and/or possible injury.

DESIGN FEATURES

- Isolates multiple batteries when ignition is off.
- Can mount in front or rear of vehicle.
- Senses charge voltage of auxiliary batteries.
- Brings charge voltage up on the vehicle's battery, then begins charging the auxiliary batteries.
- Enables the stereo system to draw off all the batteries when the engine is running.
- Can be installed without cutting into the factory wiring harness.
- Features an LED indicator to confirm POWER and CHARGE status.
- Accepts up to 1/0 gauge wires for high power systems.
- Can handle charge currents up to 200 amps.

INSTALLATION

INSTALLATION CONSIDERATIONS

The following is a list of tools needed for installation:


Volt/Ohm Meter	Battery post wrench
Wire strippers	Hand held drill w/assorted bits
Wire crimpers	1/8" diameter heatshrink tubing
Wire cutters	Electrical tape
Wire brush and sandpaper	Rubber or snap grommets
Soldering iron and solder	Nylon tie straps
Felt-tip pen or center punch	Assorted connectors
#2 Phillips screwdriver	Adequate Length—Red Power Wire
5/32" Allen wrench	Adequate Length—Black Grounding Wire


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www.rockfordfosgate.com

INSTALLATION

This section focuses on some of the vehicle considerations for installing your new CPSR. Pre-planning your system layout and best wiring routes will save installation time. When deciding on the layout of your new system, be sure that each component will be easily accessible for making adjustments.

 **CAUTION:** If you feel unsure about installing this system yourself, have it installed by a qualified technician.

 **CAUTION:** Before installation, disconnect the battery negative (-) and positive (+) terminals to prevent damage to the unit, fire and/or possible injury.

Before beginning any installation, follow these simple rules:

1. Be sure to carefully read and understand the instructions before attempting to install the Unit.
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 CPSR in place.
4. Route all of the high current wires close together and away from any RCA cables.
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 the appropriate fuse holder 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


Select a dry location that will provide adequate ventilation around the CPSR. The heatsink has fins to transfer generated heat to the surrounding air. We recommend that you mount the CPSR on the floor of the trunk or in a location where it will be protected from water damage. Keep in mind that heat travels up and away from the heatsink fins.


- Mount the CPSR in a dry location.
- **Do not** mount the CPSR on a plastic surface or other low combustion point material.
- **Do not** place a plastic, glass or metal cover over the CPSR unless you have a cooling fan at one end. Direct cool air along the length of the fins, rather than across them.
- **Do not** use more than 5 auxiliary batteries per CPSR.

WIRING THE SYSTEM

 **CAUTION:** If you do not feel comfortable with wiring your new unit, please see your local Authorized Rockford Fosgate Dealer for installation.


 **CAUTION:** Before installation, disconnect the battery negative (-) and positive (+) terminals to prevent damage to the unit, fire and/or possible injury.

 **CAUTION:** Avoid running power wires near the low level input cables, antenna, power leads, sensitive equipment or harnesses. The power wires carry substantial current and could induce noise into the audio system.

 **CAUTION:** Improper wiring connections can seriously damage the CPSR and/or your vehicle. Be sure to carefully follow the connection instructions in this manual.

NOTE: The vehicle battery will need to be connected for the following step.


1. **Locate ignition wire (switched +12v)** - Use a multimeter at the fuse box to locate the vehicle ignition wire. Be sure the wire reads +12 volts with the engine running and 0 volts when the ignition is off (and in the accessory position). Mark this wire with a piece of electrical tape.
2. **Disconnect vehicle battery** - With the ignition off, disconnect the negative (-) and positive (+) leads from the vehicle battery.
3. **Install fuse holder near vehicle battery** - Mount a 200 amp ANL fuse holder/circuit breaker within 18" (45.7cm) of the vehicle battery.

 **CAUTION:** Failure to install a fuse holder or circuit breaker at this location could result in severe damage to the CPSR or your vehicle.

4. **Route power wire to CPSR** - Route a short 1/0 gauge power wire from the vehicle battery to the vehicle battery fuse holder/circuit breaker. Route a long 1/0 gauge power wire from the opposite end of the fuse holder/circuit breaker to the proposed location of the CPSR. Use rubber grommets when routing the power wire through sheet metal. Make sure to use the proper terminals and that the connections are water tight.

NOTE: Do not install the fuse or activate the circuit breaker at this time.

5. **Install auxiliary batteries** - Select the location for the auxiliary batteries and install them with the battery manufacturer's recommended hardware. Observe all precautions.
6. **Install fuse holder near auxiliary batteries** - Mount a 200 amp ANL fuse holder/circuit breaker within 18" (45.7cm) of the auxiliary batteries.

 **CAUTION:** Failure to install a fuse holder or circuit breaker at this location could result in severe damage to the CPSR or your vehicle.

7. **Route power wire to auxiliary batteries** - Route a 1/0 gauge power wire from the proposed location of the CPSR to the auxiliary battery fuse holder/circuit breaker. Route a short 1/0 gauge power wire from the opposite end of the fuse holder/circuit breaker to the first auxiliary battery. Make sure to use the proper terminals and that the connections are water tight.

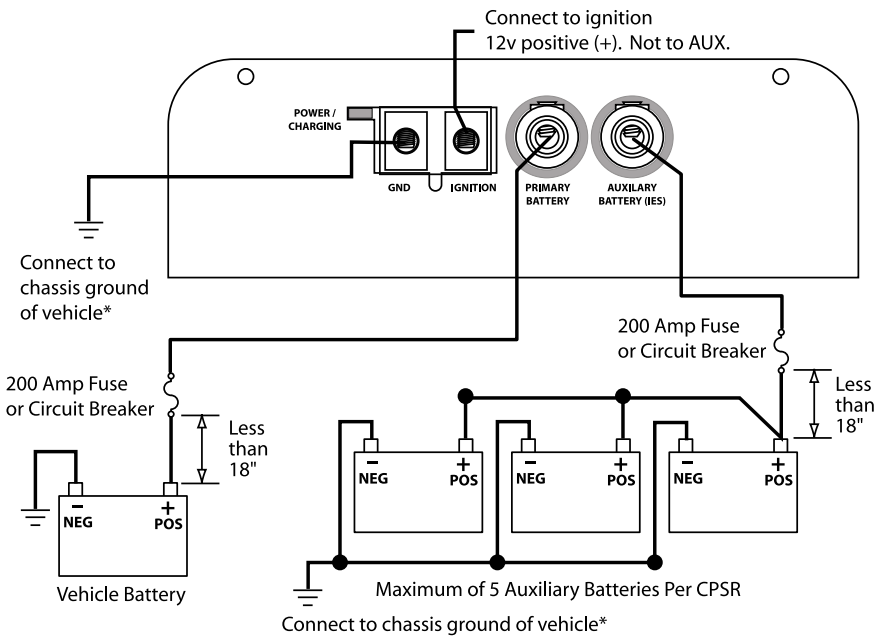
NOTE: Do not install the fuse or activate the circuit breaker at this time.

8. **Install the CPSR** - Turn the CPSR over and loosen the two hex screws. Strip back a section of insulation on 1/0 power wire from the vehicle battery fuse holder. Insert the wire into the terminal marked INPUT and tighten the hex screw. Strip back a section of insulation on 1/0 power wire from the auxiliary battery fuse holder. Insert the wire into the terminal marked BATTERY OUT and tighten the hex screw. Mount the CPSR securely in the desired location with four self-tapping screws.
9. **Connect ground wire to auxiliary batteries** - Drill a pilot hole into a piece of sheet metal located near the auxiliary batteries. Expose the bare metal by scraping off the body paint. Be sure to clean the area with sandpaper until the metal has a bright, shiny finish. Cut short piece of black 1/0 gauge wire and crimp a 1/0 gauge ring terminal to the end. Secure the ring terminal to the sheet metal using a star washer, bolt and lock nut. Secure the other end of the wire to the first auxiliary battery.

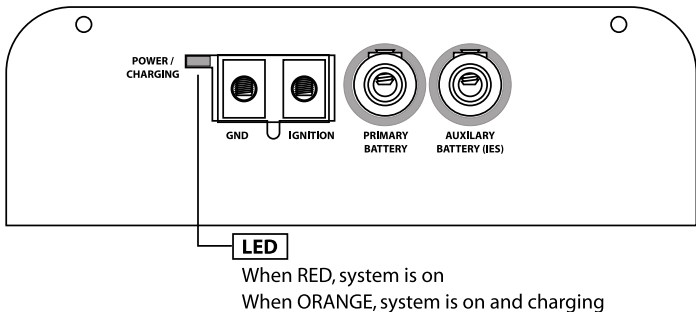
INSTALLATION

10. **Install CPSR Ignition wire** - Route and connect a 0.5 amp fused red 18 gauge wire from the ignition wire previously marked with black tape in step 1 to the CPSR terminal marked IGNITION.
11. **Install CPSR ground wire** - Drill a small pilot hole into a piece of sheet metal located near the CPSR. Expose the bare metal as explained in step 9. Cut short piece of black 18 gauge wire and crimp a ring terminal to one end. Secure the ring terminal to the sheet metal using a self-tapping screw and a star washer. Secure the other end of the wire to the CPSR terminal marked GROUND.
12. **Install Fuses** - Install 200 amp ANL fuses (or activate the circuit breakers) into the vehicle battery and auxiliary battery fuse holders.
13. **Verify CPSR operation** - Start the engine and check the Power/Charging LED on the CPSR. If the LED is RED, the system is on and all auxiliary batteries are charged. If the LED is ORANGE, the system is on and currently charging auxiliary batteries.

NOTE: If the vehicle battery is low, the CPSR will not CHARGE the auxiliary batteries until the vehicle battery has reached a voltage of at least +12.5 volts.



*Keep Grounds as short as possible



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

Length of Warranty

1 year Parts and Labor (Proof of purchase 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#: _____

Ship to: **Speakers**
Rockford Acoustic Design
Speaker Returns
2356 Turner Ave. NW
Grand Rapids, MI 49544
RA#: _____



Installation assistance available at:

RFTECH

www.rockfordfosgate.com/rftech

Rockford Fosgate

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