



# PRIME™

**Mono Amplifiers**

**R250-1**

**R500-1**

**R1000-1d**

**Installation & Operation**

**Installation et fonctionnement**

**Instalación y funcionamiento**

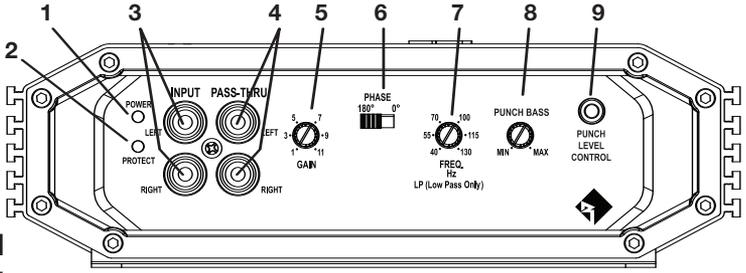
**Einbau und Betrieb**

**Installazione e funzionamento**

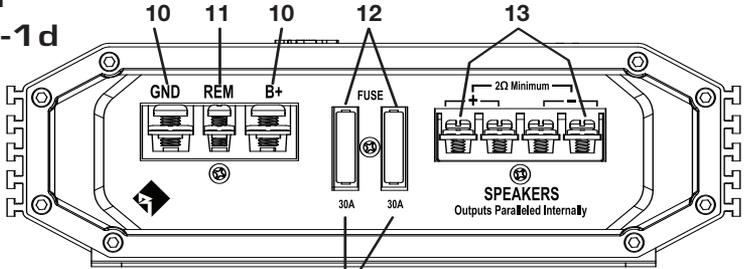
Serial Number: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

# DESIGN FEATURES



**R250-1**  
**R500-1**  
**R1000-1d**



R250-1 = (1) 30A Fuse  
 R500-1 = (2) 30A Fuses  
 R1000-1d = (3) 30A Fuses

1. **Power LED** – This LED illuminates when the unit is turned on.
2. **Protect LED** – This LED illuminates if a short circuit or to low of an impedance is detected at the speaker connections. The amplifier will automatically shut down if this occurs.
3. **RCA Input Jacks** – The industry standard RCA jacks provide an easy connection for signal level input. They are nickel-plated to resist the signal degradation caused by corrosion.
4. **RCA Pass-Thru Jacks** – This Pass-Thru provides a convenient source for daisy-chaining an additional amplifier without running an extra set of RCA cables from the front of the vehicle to the rear amplifier location.
5. **Gain Control** – The input gain control is preset to match the output of most source units.
6. **Phase Switch** – Allows you to select the output phase of the amplifier between 0° and 180°.
7. **Variable Crossover (Low Pass Only)** – Is a built-in 12dB/octave Butterworth filter with a crossover point variable from 40Hz to 130Hz.
8. **Punch Bass** – This is an adjustable Bass level control centered at 45Hz @ 12dB/octave.
9. **Remote Punch Level Control** – When connected, the “Gain Control” is linked and allows you to remotely control the output level of the amplifier from the dash or center console.
10. **Power Terminals** – The power and ground are nickel-plated clamp wire connectors and will accommodate 4 AWG #8 (up to 1/2”) spade or ring style connectors.
11. **REM Terminal** – The nickel-plated clamp wire connector and will accommodate 8 AWG #8 (up to 3/8”) spade or ring style connectors. This terminal is used to remotely turn-on and turn-off the amplifier when +12V DC is applied.
12. **Fuses** – These ATC fuses are easily accessible in case of failure. Always replace fuses with same type and rating. See Specifications for fuse ratings.
13. **Speaker Terminals** – The heavy duty, nickel-plated clamp wire connectors (+ and -) will accommodate 8 AWG #8 (up to 3/8”) spade or ring style connectors. **Two Positive (+) and Negative (-) terminals are provided for installation flexibility. Both terminals are wired in parallel internally. Only one Positive (+) and one Negative (-) terminal is required for a speaker connection.**

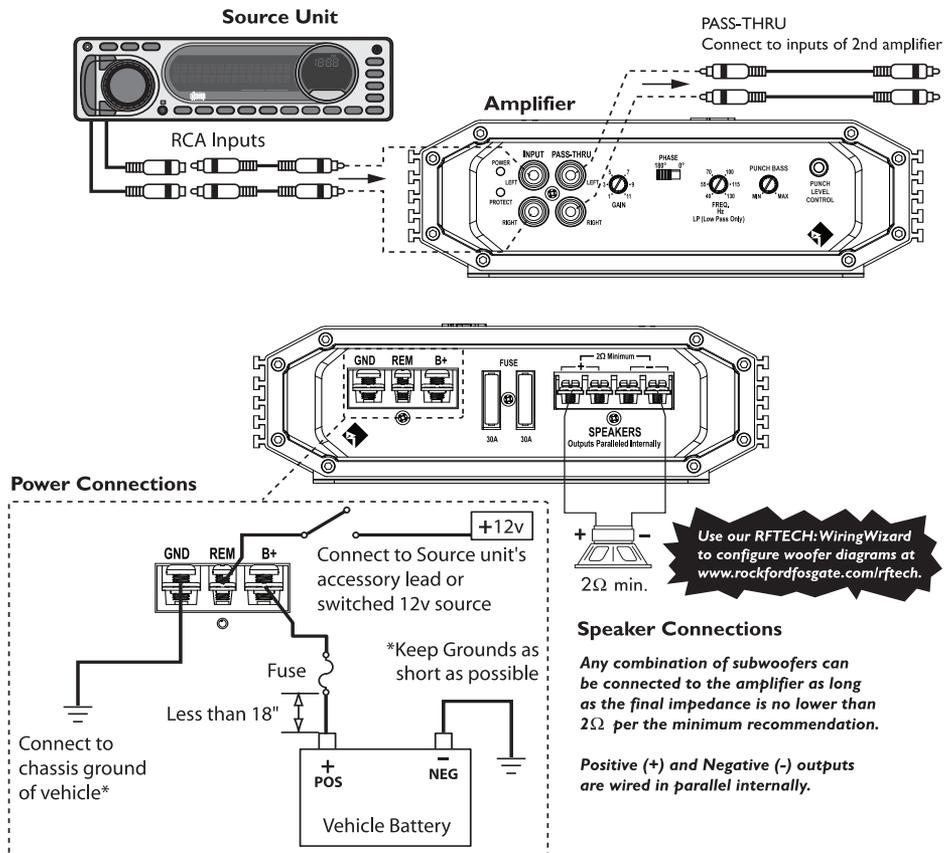
- Securely mount the amplifier to the vehicle or amp rack. Be careful not to mount the amplifier on cardboard or plastic panels. Doing so may enable the screws to pull out from the panel due to road vibration or sudden vehicle stops.
- Connect from source signal by plugging the RCA cables into the input jacks at the amplifier.

**CAUTION:** Always ensure power is off or disconnected at the amplifier before connecting RCA cables. Failure to do so may cause damage to the amplifier and/or connected components.

- Connect the speakers. Strip the speaker wires 3/8", crimp the bared wire into a fork or ring style connectors and attach to the speaker terminals. Tighten the screw to secure into place. Be sure to maintain proper speaker polarity. **DO NOT** chassis ground any of the speaker leads as unstable operation may result.
- Perform a final check of the completed system wiring to ensure that all connections are accurate. Check all power and ground connections for frayed wires and loose connections which could cause problems. Install inline fuse near battery connection.

**NOTE:** Follow the diagrams for proper signal polarity.

**CAUTION:** This amplifier is not recommended for impedance loads below 2-Ohm bridged.



# OPERATION

## ADJUSTING GAIN

1. Turn amplifier gains to minimum (counter-clockwise).
2. Turn the source unit volume up to 7/8 maximum (or when distortion is just inaudible).
3. Slowly increase amplifier gain control until adequate volume is achieved.

**NOTE:** Best signal to noise and dynamic range are realized with gain set to minimum. For a more in depth setting procedure, contact Rockford Technical Support.

**CAUTION:** Avoid setting amplifier gain high as noise and distortion will greatly increase.

## ADJUSTING CROSSOVER FREQUENCY

The crossover frequency can be adjusted between 40-130Hz. The crossover is set to LP (Low Pass) only. Turn the crossover adjustment to minimum. With the system playing, turn the crossover adjustment knob up slowly until the desired crossover point is achieved. A good place to start is 80Hz.

## PHASE SWITCH

Allows you to conveniently switch the output phase of the amplifier between 0° and 180°. This has the same effect as physically reversing the Positive (+) and Negative (-) speaker wires.

## PUNCH BASS

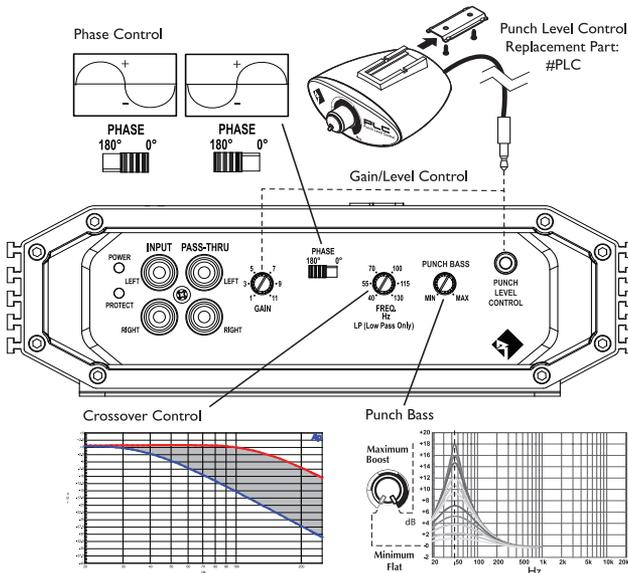
This is an adjustable Bass level control centered at 45Hz @ 12dB/octave.

## REMOTE PUNCH LEVEL CONTROL

When connected, the "Gain Control" is linked and allows you to remotely control the output level of the amplifier from the dash or center console.

Mounting and installation

1. Find a location, either under the dash or near the center console, that gives easy access to adjust.
2. Install the mounting clip using the screws supplied.
3. Route the cable from the remote and connect to the amplifier.
4. Slide the remote housing onto the mounting clip until it snaps into place.



# SPECIFICATIONS

MODEL- PRIME	R250-1	R500-1	R1000-1d
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**Continuous Power Rating (RMS) - Measured at 14.4 Battery Volts\***



4 Load Mono	150 Watts x 1	320 Watts x 1	500 Watts x 1
2 Load Mono	250 Watts x 1	500 Watts x 1	1000 Watts x 1
Dimensions:	Height 2.40" (6.10cm) Width 7.67" (19.49cm) Length 11.54" (29.30cm)	2.40" (6.10cm) 7.67" (19.49cm) 16.65" (42.30cm)	2.40" (6.10cm) 7.67" (19.49cm) 11.54" (29.30cm)
Amplifier Fuse Rating (Amp)	(1) 30A ATC	(2) 30A ATC	(3) 30A ATC
Battery Fuse Rating (Amp) External (Not Supplied)	40A	60A	90A
"A" Weighted Signal to Noise Ratio (CEA-2006) Referenced to 1 Watt into 4 ohms		80 dB	
"A" Weighted Signal to Noise Ratio Referenced to rated power into 4 ohms		100 dB	
Crossover Slope	12dB/octave Butterworth		
Crossover Frequency	Low Pass variable from 40Hz to 130Hz		
Frequency Response	20Hz to 130Hz ±1dB		
Signal Voltage Adjustment Range	Variable from 150mV to 8V (RCA Input)		
Remote Punch Level Control (replacement kit)	#PLC		
Protection	Short circuit protection shut downs the amplifier in case of very low impedance or shorted speaker wires.		
Punch Bass	Variable from 0dB to +12dB @ 45Hz		
Input Impedance	20K ohms		
Operating Voltage	9 to 16 Volts DC		
Balanced Inputs	No		
Damping Factor	>200		
THD+N (Total Harmonic Distortion + Noise)	< 1.0% @ 4 ohm		

\* These specifications are CEA-2006 Compliant

*Specifications subject to change without notice*



# Rockford Fosgate®

Installation assistance available at:

## RFTECH

[www.rockfordfosgate.com/rftech](http://www.rockfordfosgate.com/rftech)



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