

# 13.8V DC 25A Switching Power Supply

OWNER'S MANUAL — Please read before using this equipment.

Your RadioShack 13.8V DC 25A Switching Power Supply is designed to use AC power to power equipment that requires 12V DC automotive power. The power supply converts standard 120V AC household power to 13.8V DC power and can supply up to 25 amps of continuous power. Your vehicle's 12V electrical system provides 13.8V when the engine is running.

If you are an electronic hobbyist or technician, you will appreciate the many uses for the power supply at your workbench or in your house. For example, you can use your CB mobile transceiver as a base station, check the operation of autosound systems before you install them in your vehicle, or even power marine equipment such as pumps.

Your power supply's features include:

**Regulated Output Voltage** — makes it safe to use with mobile CBs, scanners, ham radios, laptop computers, tape players, cellular phones, or anything you would power with a vehicle's DC electrical system.

**Electronic Overload Protection** — automatically shuts off when its output is overloaded.

**Overheat Protection Circuit** — automatically shuts off if it overheats.

**Versatile Output Connectors** — act as both binding posts and banana plug terminals.

Not recommended for outdoor use.

This power supply has been tested and found to comply with all applicable UL standards.

**WARNING:** To reduce the risk of fire or shock hazard, do not expose this product to rain or moisture.

	<b>CAUTION</b> RISK OF ELECTRIC SHOCK. DO NOT OPEN.	
<b>CAUTION:</b> TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.		



This symbol is intended to alert you to the presence of uninsulated dangerous voltage within the product's enclosure that might be of sufficient magnitude to constitute a risk of electric shock. Do not open the product's case.



This symbol is intended to inform you that important operating and maintenance instructions are included in the literature accompanying this product.

This power supply has been tested and found to comply with all applicable UL standards.

## FCC INFORMATION

This equipment complies with the limits for a Class B digital device as specified in Part 15 of *FCC Rules*. These limits provide reason-

able protection against radio and TV interference in a residential area.

However, your equipment might cause TV or radio interference even when it is operating properly. To eliminate interference, you can try one or more of the following corrective measures:

- reorient or relocate the receiving antenna
- increase the distance between the equipment and the radio or TV
- use outlets on different electrical circuits for the equipment and the radio or TV

Consult your local RadioShack store if the problem still exists.

You must use shielded interface cables with this equipment.

### The FCC Wants You to Know

This device complies with Part 15 of *FCC Rules*. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Your power supply might cause TV or radio interference even when it is operating properly. To determine whether your power supply is causing the interference, turn off your power supply. If the interference goes away, your power supply is causing it. Try to eliminate the interference by:

- moving your power supply away from the receiver
- connecting your power supply to an outlet that is on a different electrical circuit from the receiver
- contacting your local RadioShack store for help

If you cannot eliminate the interference, the FCC requires that you stop using your power supply.

## CONNECTIONS

Your local RadioShack store has a wide selection of banana plugs and hook clips that are convenient for making the connections to the binding posts.

**Caution:** Make all other connections before you connect the power supply to standard AC power.

1. Turn off the device requiring power.
2. Set the power supply's **POWER** switch to **O** (Off).
3. Insert banana plugs into the terminal's jack.

If you are not using banana plugs, turn the sleeves of the red and black binding output posts counterclockwise to expose the wire hole.

4. Insert the device's positive wire (usually red) into the red binding post's wire hole, then tighten the binding post's sleeve to secure the wire in place.

### Warnings:

- To avoid damage to both the power supply and the device, follow the correct polarity (+ to + and – to –) when connecting the power supply and the device.
- Do not let the ends of the positive and negative wires touch each other.

**Note:** The binding posts' wire holes can accommodate up to 16-gauge wire.

5. Insert the device's negative wire (usually black) into the black binding post's wire hole, then tighten the binding post's sleeve to secure the wire in place.

6. Connect the power supply's AC cord to a standard 120V AC outlet.

## OPERATION

To use the power supply after you connect the device to it, set **POWER** to **I** (On) to turn it on.

If the power supply's **POWER** switch does not light, check all connections and confirm the AC outlet has power.

If the outlet has power, set **POWER** to **O** (Off), reduce the load (by using a device that does not require more than 25 amps), then set **POWER** to **I** (On). Your power supply's overload protection circuit automatically shuts down the power supply when it is overloaded and resets by turning **POWER** to **O** (Off).

**Caution:** To reduce the risk of energy hazard, be careful not to short the output terminal during operation. Remove the output connections after use.

## SPECIFICATIONS

Input Voltage .....	110 to 120V AC
Input Frequency .....	60 Hz
Output Voltage .....	13.8V DC $\pm$ 0.5 Volts
Output Current .....	25 Amps DC Continuous (Maximum)
Line Regulation .....	Less Than $\pm$ 5%
Load Regulation .....	Less Than $\pm$ 5%
Overload Protection .....	Fuse 10A/250V
Output Ripple .....	150mV RMS
Design.....	Switching Type
Operating Temperature .....	32° to 104°F (0° to 40°C)
Storage Temperature .....	-13° to 158°F (-25° to 70°C)
Input Cable.....	18 AWG $\times$ 3C, SVT 6 Feet
Output Terminal.....	Binding Post 10 Amp/125 Volts
Power Switch .....	Illuminated, 15A/125 VAC
Dimensions (HWD) .....	2 <sup>5</sup> / <sub>32</sub> $\times$ 7 <sup>5</sup> / <sub>16</sub> $\times$ 7 <sup>13</sup> / <sub>16</sub> In (55 $\times$ 186 $\times$ 198 mm)
Weight .....	3.37 lbs (1.53 kgs)

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

### **Limited Ninety-Day Warranty**

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RadioShack Customer Relations, 200 Taylor Street, 6th Floor, Fort Worth, TX 76102

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