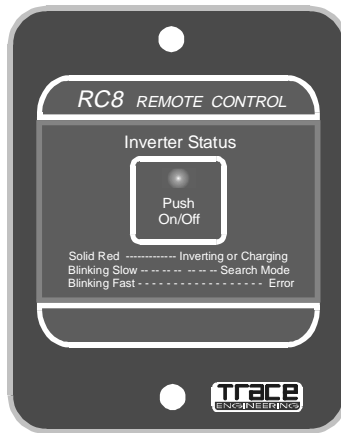




RC8 Remote Control



Installation and Operation Guide

RC8 Remote Control

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IMPORTANT SAFETY INSTRUCTIONS

This manual contains important safety instructions that should be followed during the installation and maintenance of this product.

To reduce the risk of electrical shock, and to ensure the safe installation and operation of this product, the following safety symbols have been placed throughout this manual to indicate dangerous conditions and important safety instructions.



WARNING - A dangerous voltage or condition exists in this area. Use extreme caution when performing these tasks.



CAUTION - This procedure is critical to the safe installation or operation of the unit. Follow these instructions closely.



NOTE - This statement is important. Follow instructions closely.

- All electrical work must be done in accordance with local, national, and/or international electrical codes.
- Before installing or using this device, read all instructions and cautionary markings located in (or on) the manual, the controller, the batteries, and the PV array.
- Do not expose this unit to rain, snow or liquids of any type. This product is designed only for indoor mounting.
- To reduce the chance of short-circuits when installing or working with the inverter, the batteries, or the PV array, use insulated tools.
- Remove all jewelry such as rings, bracelets, necklaces, etc., while installing this system. This will greatly reduce the chance of accidental exposure to live circuits.
- The inverter contains more than one live circuit (batteries and PV array). Power may be present at more than one source.
- This product contains no user-serviceable parts. Do not attempt to repair this unit.

SAVE THESE INSTRUCTIONS

1.0 INTRODUCTION

The RC8 Remote Control duplicates the ON/OFF power switch on the inverter and displays general system operating parameters. The remote can operate the inverter from distances of up to 100 feet and connects directly to the inverter's "RC8 Remote or COM" port using a special, tinned, 6-conductor length of cable.

The following system operating parameters are displayed with a single LED:

- Inverter Status (ON/OFF)
- Inverter / Charger Indicator
- Search Mode Indicator
- Error Indicator

Features

- Easy-to-Read LED
- Front Panel Control
- Plug-in Installation
- Compatible with DR Series, Legend Series I, M1512/1524 Series, Truck Series I, TS Series, UX Series, and PS Series Trace inverters
- ROF - Remote Override Function
(Legend Series I, Truck Series I, and UX Series inverters only)

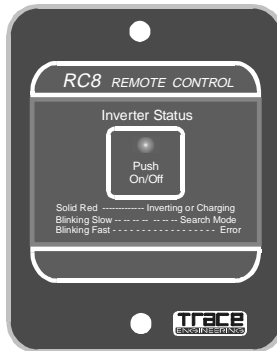


Figure A
RC8 Front Panel

2.0 INSTALLATION

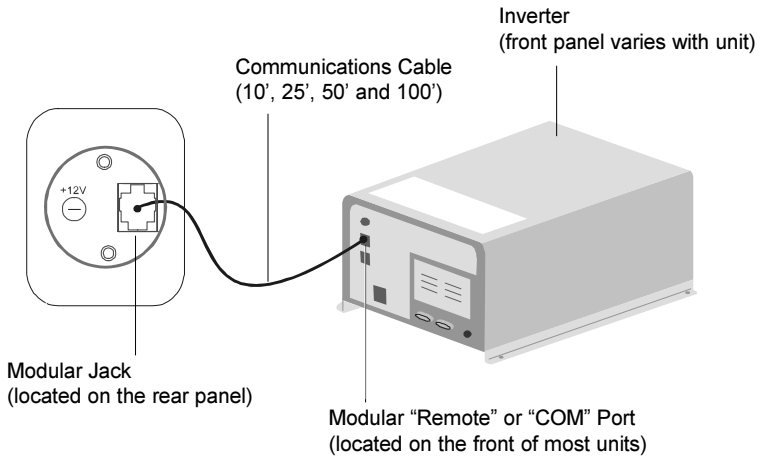


Figure B
RC8 Installation

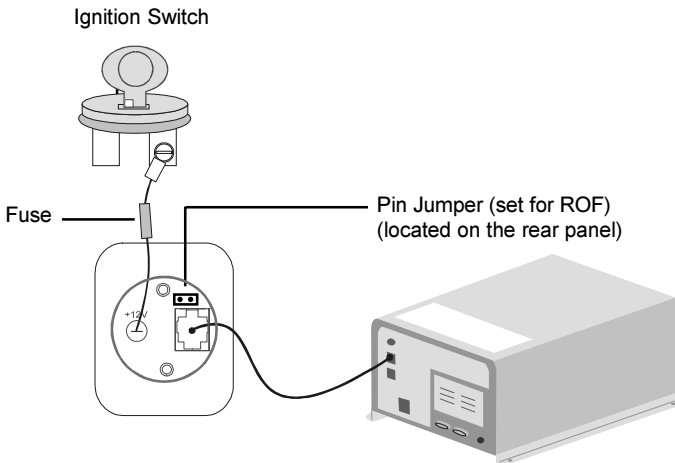


Figure C
ROF Option
(Legend Series I, Truck Series I and UX Series only)

2.0 INSTALLATION

Before installing or using the remote, read all instructions and cautionary markings located in this manual.

Mount the remote control in a clean, dry environment.



NOTE: Verify there are no electrical wires, etc., in the area of the cut.

1. Drill a 1-7/8" diameter hole in a wall. There must be at least 1-1/2" of clearance behind the hole. Remove any wall insulation (if applicable) that may contact the back of the remote.
2. Route the communications cable from the inverter up into the opening in the wall. It is recommended that only the 6-conductor tinned cable (10, 25, 50 or 100 foot length) provided with the remote be used. For optimum performance, the distance should not exceed 100 feet.



NOTE: Do not plug the cable into the inverter at this time.

3. Connect the communications cable to the modular jack at the rear of the remote control.
4. Position the remote into the opening in the wall and secure it with the 2 screws provided.
5. Switch the inverter OFF. Plug the communications cable into the "RC8 REMOTE or COM" port on the inverter.

ROF Option - Remote Override Function (Figure C) (LEGEND SERIES I, TRUCK SERIES I, AND UX SERIES INVERTERS ONLY)

In certain installations it is desirable to turn a connected 120 VAC load ON and OFF with the vehicle's ignition switch. For example: Many larger vehicles use a rear-mounted 12 VDC video camera with 120 VAC cab-mounted monitor to aid in backing up. The ROF option switches the inverter (monitor) ON at the same time the camera is switched ON.



CAUTION: Do not use this feature with inverters other than those listed. Serious damage will result.

1. Carefully remove the RC8's circular rear cover to expose the circuit board.
2. Locate the pin jumper just below the RJ6 connector. Lift the jumper and reposition it over both pins (see figure C). Replace the RC8's rear cover.
3. Run a 12 volt DC wire from the vehicle's ignition switch (or fuse block), to the back of the RC8's "AUX INPUT +12VDC." This wire must be protected with a properly sized 12 volt fuse.
4. Switch the vehicle's ignition ON to start the inverter. Switch it OFF to stop the inverter.



NOTE: When the ignition switch is OFF, the RC8 and inverter function normally.

3.0 OPERATION

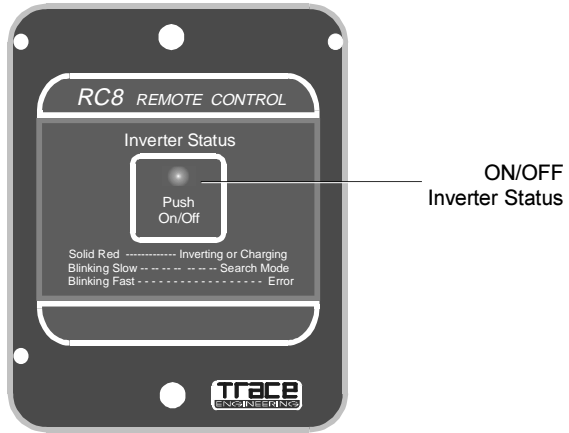


Figure D
RC-9 Operation



Figure E
Legend Series I, Truck Series I, and UX Series Inverters

3.0 OPERATION

Startup and Test

1. Switch the inverter ON using the inverter's front panel ON/OFF switch.
2. Verify the POWER LED is ON (both inverter and remote).
3. Press the RC8's ON/OFF switch to turn the inverter OFF. Press it again to restore power.

Operation

Legend Series I, Truck Series I, and UX Series Inverters (Figure E)

When the RC8 is used with Legend Series I, Truck Series I, and UX Series inverters, its red LED mimics the LED status display on the inverter.

Solid

With AC line power present, the unit is charging the batteries while directing AC to the load. With no AC line power present, the inverter is running on the batteries and supplying AC to the load.

Blinking Slow (3 to 5 flashes @ 1 second intervals)

The inverter is in search mode (no load connected).

Blinking Fast

The inverter has detected an error condition caused by overheating, over-current, low battery voltage, or high battery voltage. The LED (and inverter) will turn OFF whenever an overcurrent condition exceeds eight seconds.

Erratic Blinking (0 to 3 and 2 to 5 flashes @ 2 second intervals)

An error occurred while the inverter was in search mode, usually caused by a low or high battery voltage condition.

OFF

The inverter is OFF.



WARNING: On inverters equipped with a battery charger, the unit will always charge the batteries and pass AC power through to its output whenever AC power is available. The RC8 remote control, if connected, does not control charging or AC pass-through. ALWAYS check the inverters output to verify there is no voltage present before opening or servicing the inverter.

3.0 OPERATION

DR Series and M1512/1524 Series Inverters (Figure F)

When the RC8 is used with DR Series and M1512/1524 Series inverters, its red LED will display the following:

Solid

With AC line power present, the unit is charging the batteries while directing AC to the load. With no AC line power present, the inverter is running on the batteries and supplying AC to the load.

Blinking Slow (1 to 3 flashes @ 1 second intervals)

The inverter is in search mode (no load connected).

Blinking Fast (3 to 5 flashes @ 1 second intervals)

The inverter is charging the batteries.

Flickering (3 to 5 flashes @ 1 second intervals)

The inverter has detected an overcurrent error. The LED (and inverter) will turn OFF whenever an overcurrent condition exceeds eight seconds.

Erratic Blinking (0 to 3 and 2 to 5 flashes @ 2 second intervals)

The inverter has detected an error condition caused by overheating, low battery voltage, or high battery voltage.

OFF

The inverter is OFF.



WARNING: On inverters equipped with a battery charger, the unit will always charge the batteries and pass AC power through to its output whenever AC power is available. The RC8 remote control, if connected, does not control charging or AC pass-through. ALWAYS check the inverters output to verify there is no voltage present before opening or servicing the inverter.

TS Series Inverters (Figure G)

When the RC8 is used with TS Series inverters, its red LED mimics the POWER LED status display on the inverter.

Solid

With AC line power present, the unit is charging the batteries while directing AC to the load. With no AC line power present, the inverter is running on the batteries and supplying AC to the load.

Blinking Slow (1 to 3 flashes @ 1 second intervals)

The inverter is in search mode (no load connected).

Flickering*

The inverter has detected an overcurrent error. The LED (and inverter) will turn OFF whenever an overcurrent condition exceeds eight seconds.

OFF*

The inverter is OFF or an error condition caused by overheating, low battery voltage, or high battery voltage has occurred.



*NOTE: If the LED does not come back on after pressing the RC8's ON/OFF switch, the error condition may not have cleared. Check the inverter's error indicator and consult the operator's manual for recommendations.

4.0 SPECIFICATIONS

Operating Voltage	12 VDC
Connector	RJ-11 Modular (6-conductor phone type)
Indicator	Red LED (Inverter, Search, Charge, and Error)
Switch	ON / OFF (momentary)
Operating Temp	0 to 50 °C
Dimensions (WxHxD)	2.25" x 2.80" x 1.25" (5.7 cm x 7.1 cm x 3.2 cm)
Weight	0.125 lbs. (0.05 kg)
Enclosure	Indoor Rated
Finish	Lexan

5.0 SERVICE INFORMATION

Trace Engineering takes great pride in its products and makes every effort to ensure your unit fully meets your independent powering needs.

If your product needs repair, contact our Service department at: (360) 435-8826 to obtain an RMA# and shipping information; or fax this page with the following information to: (360) 474-0616.

Please provide:

Model Number: _____
Serial Number: (if applicable) _____
Purchase Date: _____
Problem: _____

Include a telephone number where you can be reached during business hours and a complete return shipping address (P.O. Box numbers are not acceptable).

Name: _____
Address: _____
City: _____
State / Province: _____
Zip / Postal Code: _____
Phone: () _____
Country: _____



visit our website at: www.traceengineering.com
or e-mail us at: traceengineering.com

6.0 WARRANTY

Limited Warranty

Trace Engineering warrants its power products against defects in materials and workmanship for a period of two (2) years from the date of purchase and extends this warranty to all purchasers or owners of the product during the warranty period. Trace does not warrant its products from any and all defects:

- (1) arising out of material or workmanship not provided by Trace Engineering;
- (2) resulting from abnormal use of the product or use in violation of the instructions;
- (3) in products repaired or serviced by other than Trace Engineering repair facilities;
- (4) in components, parts, or products expressly warranted by another manufacturer.

Trace Engineering agrees to supply all parts and labor, or repair or replace defects covered by this warranty with parts or products of original or improved design, at its option, if the defective product is returned to any Trace Engineering authorized warranty repair facility or to the Trace Engineering factory in the original packaging, with all transportation costs and full insurance paid by the purchaser or owner.

All remedies and the measure of damages are limited to the above. Trace Engineering shall in no event be liable for consequential, incidental, contingent, or special damages, even if Trace Engineering has been advised of the possibility of such damages. Any and all other warranties, expressed or implied, arising by law, course of dealing, course of performance, usage of trade or otherwise, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose, are limited in duration for a period of two (2) years from the original date of purchase.

Some countries or states do not allow limitations on the term of an implied warranty, or the exclusion or limitation of incidental or consequential damage, which means the limitations and exclusions of this warranty may not apply to you. Even though this warranty gives you specific legal rights, you may also have other rights which vary from state to state.





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visit our website at: www.traceengineering.com