

# RECOIL

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# RECOIL

## R1D

Power Capacitor  
Owners Manual

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Dear Valued Customer,

We congratulate you on your purchase of this superior product and thank you for putting your trust in **Recoil**.

This installation manual has been carefully developed with consideration to variations in automobile, mechanical, and acoustical characteristics.

## Limited Warranty

Recoil warrants to the original retail purchaser of this product. Should this product prove to be defective in material workmanship within 1 year from the date of original purchase. It will be repaired or replaced (at Recoil's option) without any additional charges for parts or labor.

This warranty does not apply to any product or part thereof which has been changed through alteration, misuse, neglect, accidents, mishandling, unreasonable use, improper installation, accident in shipment, blown vent plug due to switched polarity or stripped terminals. This warranty does not cover cost incurred for removal or re-installation of the product, or damage to other accessories or car electrical systems. Further, this warranty is in-applicable to any product which has not been maintained in accordance with Recoil installation and operation instruction.

To obtain repair or replacement within the terms of this warranty, the defective product, with proof of purchase, first should be returned to the original place of purchase. If that is not possible, the defective product must be delivered, transportation prepaid, to Recoil at the address shown. A letter explaining the details of the problem must be enclosed. Capacitors must be returned to Recoil complete. Any missing parts will be replaced and billed at current pricing. Repairs or replacement will be made and the product will be returned as soon as possible.

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Before returning the item for repair or service, verify that the product itself is defective, as errors in wiring or in adherence to following installation directions may be the problem.

Product materials and specification are subject to change without notice.

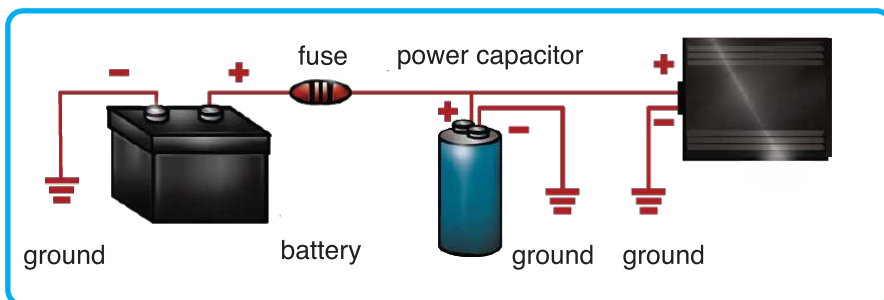
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No person or representative of Recoil is authorized to assure for Recoil any liability otherwise expressed herein in connection with the sale of this product. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damage so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

## Discharge and Removal

The capacitor needs to be discharged before uninstalling. Please use the same charging board used to charge the capacitor and pinch off the battery and place the charging board between the positive and negative pole of the capacitor. As soon as the loading light expires, the capacitor is completely discharged.

## Mounting Guidelines



Please use the correct ring lugs and make sure all connections are secured. Please do not install the main fuse further than 30 cm away from the battery.  
(see above)

## Safety Precautions

Please read all warnings in this manual. They inform you of the possible risk of personal injury and damage to property! These products are intended to be installed by a trained professional. The relevant safety regulations should be diligently followed. Recoil cannot take responsibility for hearing, physical, or property damage arising through using or misusing our products.

**ATTENTION:** If the capacitor emits a warning signal, please disconnect the device immediately and check polarity.

**If the device is connected for more than 15 seconds with reverse polarity, there is a danger of explosion!**

**Make sure cooling is sufficient.** If the capacitor is connected wrong, then electrolytic liquid may stream out and the interior of your car could be damaged. This liquid is also harmful if swallowed.

Large electrolytic capacitors cannot withstand heat, oil, or water. If the chassis of the capacitor is deformed during installation, it is possible several layers inside the capacitor could be damaged. If this occurs, do not attempt to install the capacitor. Please install the capacitor in a dry and secure location.

## Description

Amplifiers require a lot of power and quite often this cannot be provided by the stock electrical system in your vehicle. Stock batteries have a high internal resistance (ESR) and if the air conditioning is running, 70% of the power capacity is already being utilized.

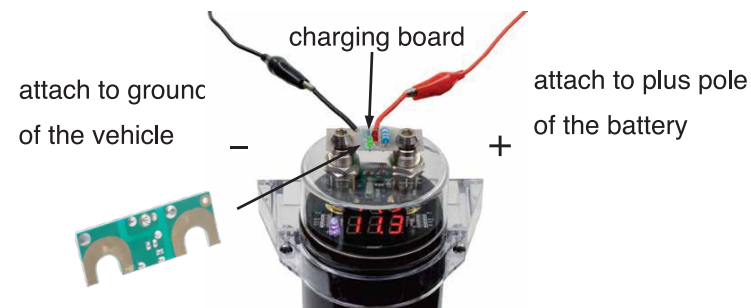
When playing powerful subwoofers at high volumes, there is often not enough energy to play music efficiently. A capacitor helps store electric power and its low resistance makes quick current output possible. As soon as your amplifier needs current it can be drawn from the capacitor instead of your battery. As the capacitor is drained, it is recharged in order to be drawn from again. This will allow you to achieve the best sound quality possible.

## Technical Data

Operating Voltage:	10-16V DC
Connection In - and Output:	M6
Dimensions:	ø75 mm x H 250 mm
Certificate:	E13-10R-02 9997

## Charging Instructions

Charging: When first charging please hold charging board between plus pole of the capacitor and the battery till displaying >12V.



Remember that the capacitor needs to be charged before installation. Otherwise sparks may occur when it is connected. Please use the provided charging board and place it in series between the positive pole of the battery and the positive pole of the capacitor.

**ATTENTION:** Risk of burning! Please hold the charging board with a tong and never with your fingers. Please pay attention to the connection scheme in order to avoid capacitor damage. The charging process is finished as soon as the capacitor and the vehicle battery has reached the same voltage or the charging board extinguishes. This process takes a few seconds to complete. The voltage of the battery and capacitor is measurable via a voltmeter. If both voltages are identical, the capacitor is completely charged.