

RQG 7786FRB-12V/40A

RQG 12V 4-Relay 12-Fuse Automotive Fuse Relay Box Instruction Manual

Brand: RQG | Model: 7786FRB-12V/40A

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your RQG 12V Fuse Relay Box. This unit is a 12-way ATC/ATO automotive fuse block designed to accommodate up to 4 relays and 12 fuses simultaneously. It is pre-wired for simplified installation and features a protective plastic cover and a flame-retardant nylon base for enhanced safety and durability. The front-mounting, waterproof design makes it suitable for various applications including cars, trucks, motorcycles, and marine boats.



Figure 1: RQG 12V Fuse Relay Box Overview

2. PRODUCT FEATURES

- **Integrated Design:** Combines a 12-way ATC/ATO automotive fuse block with capacity for 4 relays and 12 fuses.
- **High Current Relays:** Equipped with 4 pieces of 4-pin 40A relays for wider and safer applications.
- **Comprehensive Fuse Set:** Includes 12 ATC/ATO blade fuses (3 x 10A, 3 x 20A, 3 x 25A, and 3 x 30A).
- **Pre-Wired for Convenience:** Simplifies installation with pre-wired connections.
- **Durable Construction:** Features a plastic cover for protection and a flame-retardant nylon base for enhanced safety and longevity.
- **Waterproof Design:** Designed to be waterproof, suitable for various vehicle types.
- **Front Mounting:** Convenient front mounting design for ease of installation.

3. PACKAGE CONTENTS

The package includes the following items:

- 1 x 12V Fuse Relay Box
- 4 x 4-pin 40A Relays

- 12 x ATC/ATO Fuses (3x10A, 3x20A, 3x25A, 3x30A)

40A Bosch Type Relay + ATC/ATO Fuse



Figure 2: Included Relays and Fuses

4. SPECIFICATIONS

Attribute	Value
Brand	RQG
Model Number	7786FRB-12V/40A
Voltage	12V (DC)
Relay Type	4-pin 40A Bosch Type Relay (4 pcs)
Fuse Type	ATC & ATO Blade Fuses (12 pcs)
Current Rating	40 Amps (Relays)

Attribute	Value
Connector Type	Plug-In
Contact Material	Copper
Mounting Type	Panel Mount (Front Mounting Design)
Item Weight	1.3 pounds
Package Dimensions	6.5 x 3.3 x 2.8 inches

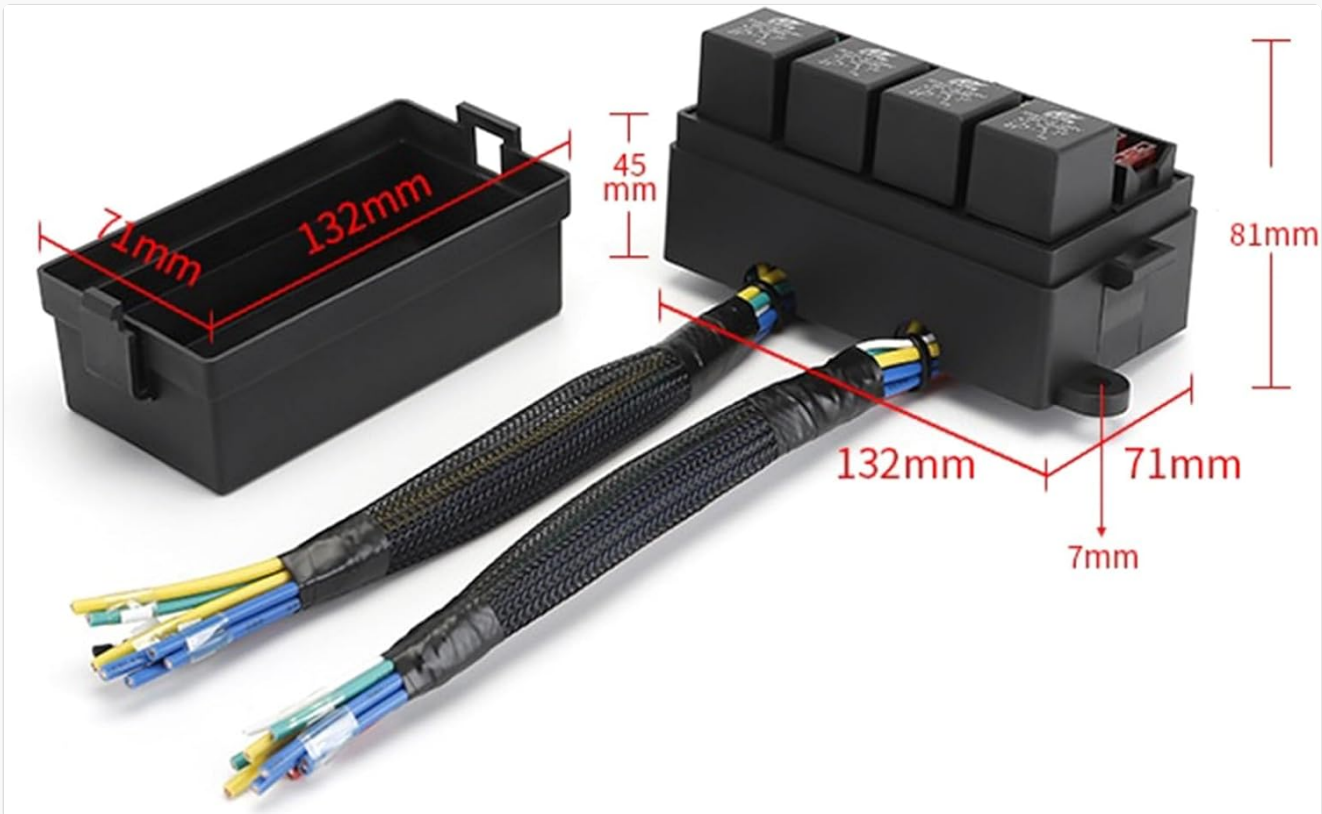


Figure 3: Product Dimensions

5. INSTALLATION GUIDE

The RQG 12V Fuse Relay Box is designed for straightforward installation due to its pre-wired configuration. Always ensure the vehicle's battery is disconnected before beginning any electrical work to prevent short circuits or injury.

5.1 Safety Precautions

- Disconnect the vehicle's battery before installation.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Ensure all connections are secure and properly insulated.
- Do not exceed the maximum current ratings for fuses and relays.
- While the unit is waterproof, avoid complete immersion in water.

5.2 Wiring Overview

The fuse relay box comes pre-wired, simplifying the connection process. Refer to the wiring diagram for specific

connections. Each relay and fuse slot is clearly marked.

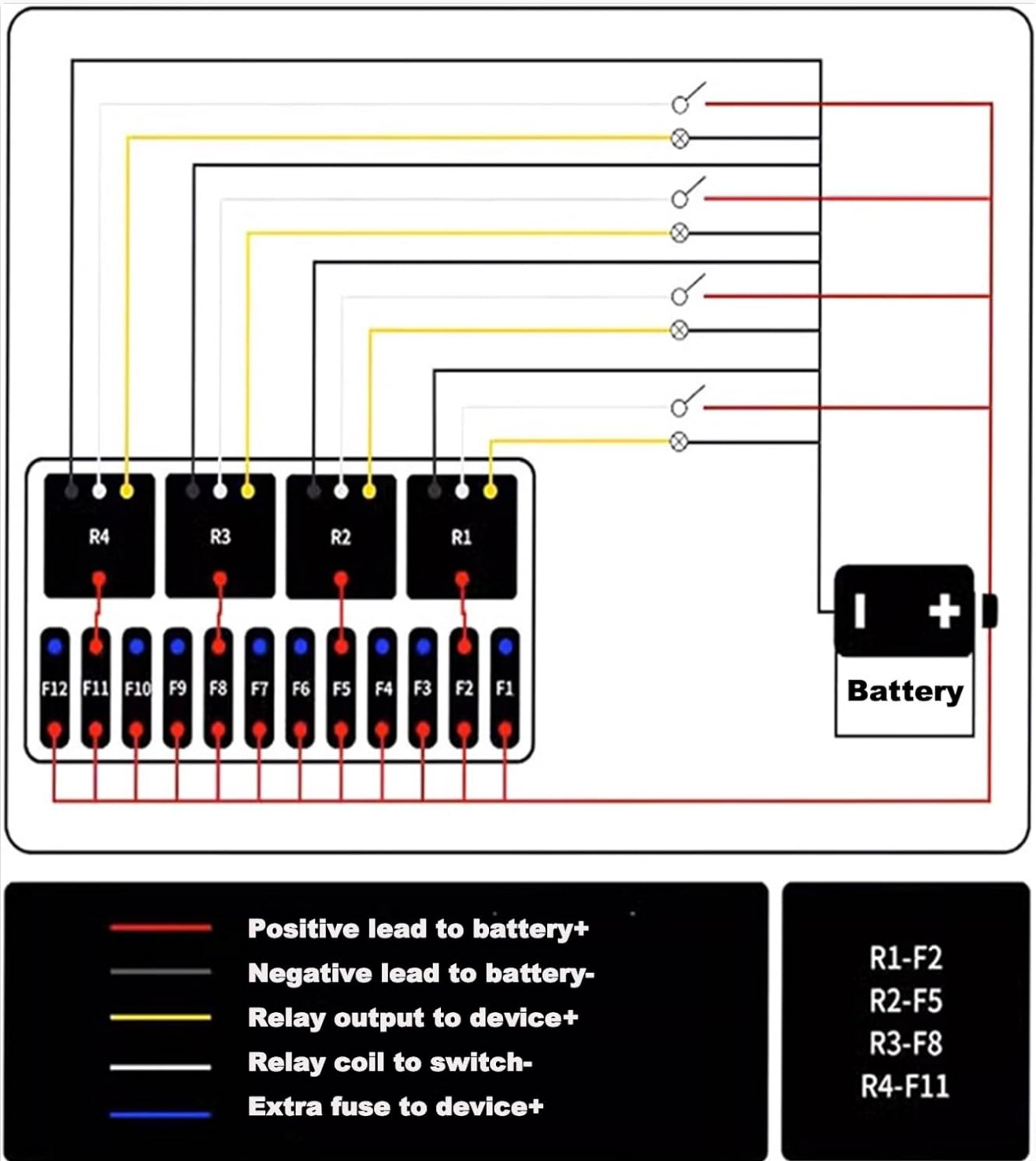


Figure 4: Wiring Diagram

The diagram illustrates connections for positive and negative battery leads, relay outputs to devices, relay coil to switches, and extra fuse connections. Ensure correct polarity and secure connections for optimal performance and safety.

5.3 Mounting

The unit features a front mounting design. Select a secure, easily accessible location in your vehicle, such as the engine bay, away from excessive heat or moving parts. Use appropriate fasteners to secure the box firmly.

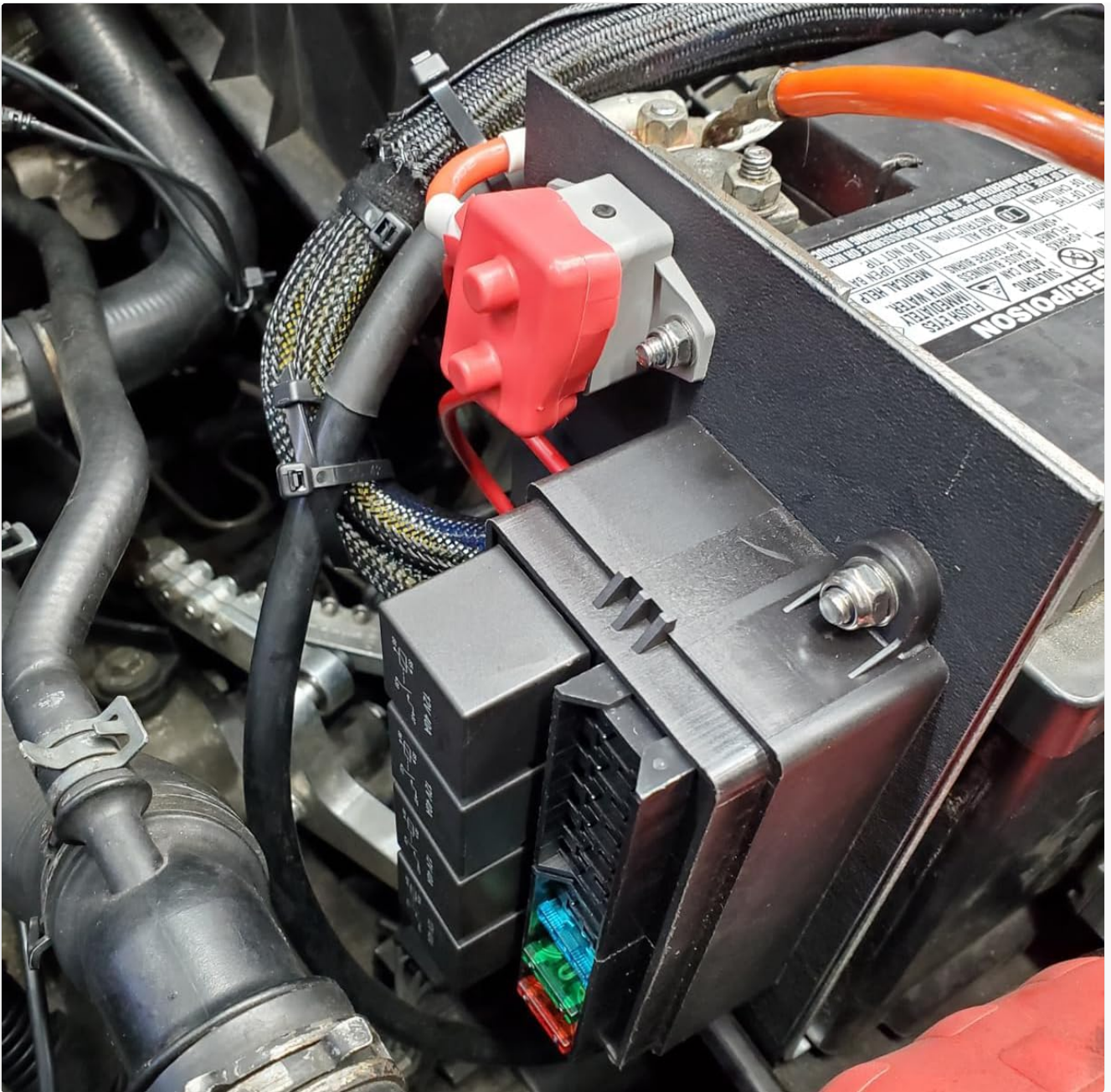


Figure 5: Example Installation in Engine Bay

The waterproof design provides protection against splashes and moisture, making it suitable for engine bay environments. However, direct submersion should be avoided.

Waterproof Solid Relay Fuse Box



Figure 6: Waterproof Design

6. OPERATING INSTRUCTIONS

Once properly installed and wired, the fuse relay box operates automatically based on the connected circuits and switches. Relays are activated by a control signal (e.g., from a switch) to switch higher current loads, while fuses protect the circuits from overcurrents.

- Ensure all devices connected to the fuse relay box are within the specified current limits of the installed fuses and relays.
- Verify that the control switches for each relay are functioning correctly.
- Regularly check for any loose connections or signs of wear.

7. MAINTENANCE

7.1 Fuse Replacement

If a connected device stops working, check the corresponding fuse in the fuse relay box. A blown fuse will have a broken metal strip inside. To replace a fuse:

1. Disconnect power to the fuse box.
2. Carefully pull out the blown fuse using a fuse puller or small pliers.

3. Insert a new fuse of the **exact same amperage rating** into the slot. Using a fuse with a higher rating can lead to circuit damage or fire.
4. Restore power and test the device.

7.2 General Inspection

- Periodically inspect the fuse relay box for any signs of physical damage, corrosion, or loose wiring.
- Ensure the protective cover is securely in place to prevent dust and moisture ingress.
- Clean the exterior of the box with a damp cloth if necessary. Do not use harsh chemicals.

8. TROUBLESHOOTING

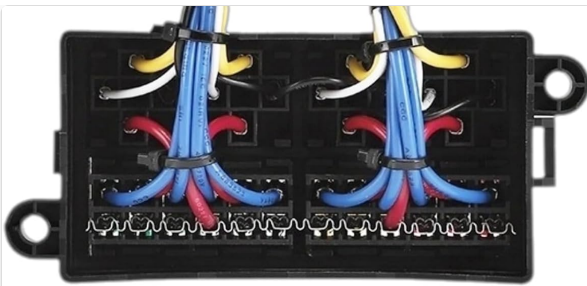
Problem	Possible Cause	Solution
Device not receiving power	Blown fuse	Identify and replace the blown fuse with one of the correct amperage. Investigate the cause of the fuse blowing (e.g., short circuit, overload).
Relay not activating	Faulty relay, incorrect wiring, no control signal	Check relay connections, test the relay with a multimeter, verify the control signal (e.g., from a switch) is present. Replace relay if faulty.
Intermittent power supply	Loose connections, corroded terminals	Inspect all wiring connections for tightness. Clean any corroded terminals.
Overheating of wires/box	Overloaded circuit, incorrect wire gauge	Ensure total current draw does not exceed the box's capacity. Verify appropriate wire gauges are used for the current load. Consult a professional if unsure.

9. WARRANTY AND SUPPORT

RQG products are manufactured to high-quality standards. For warranty information, technical support, or service inquiries, please refer to the contact details provided with your purchase or visit the official RQG website. Keep your proof of purchase for warranty claims.

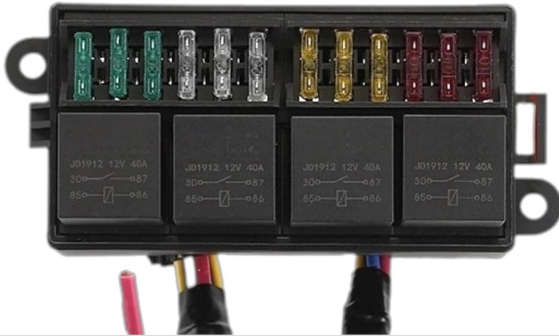
10. PRODUCT MEDIA

10.1 Additional Product Images



Pre-Wired Fuse Relay Box

Front Mounting Design



Pre-wired connections for easy setup.



Complete unit with cover and wiring.

10.2 Official Product Videos

Video: Overview of the 12 Volt Fuse Relay Box, highlighting its pre-wired design and components.

Video: Demonstrates the features of the Weasch 12V 40A 12 Way Pre-Wired Fuse Relay Box, including its waterproof capabilities and wiring diagram.

Video: Detailed look at the DaierTek 4 Way Relay & 12 Way Fuse Box, showcasing its internal structure and pre-wired setup.