

Greluma 2-Gang Rocker Switch Panel with Voltmeter and Dual USB Charger

Greluma 2-Gang Rocker Switch Panel with Voltmeter and Dual USB Charger (4.2A)

Instruction Manual

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your Greluma 2-Gang Rocker Switch Panel. This product integrates two rocker switches, a digital voltmeter, and a dual 4.2A USB fast charger into a single aluminum panel. Designed for durability and versatility, it is suitable for a wide range of 12V/24V DC applications, including marine vessels, automobiles, trucks, RVs, and other vehicles. Please read this manual thoroughly before installation and use to ensure proper function and safety.

2. PRODUCT FEATURES

- **Multifunction Design:** Combines two rocker switches, a dual USB charger, and a digital voltmeter for comprehensive circuit control, device charging, and voltage monitoring.
- **High-Speed USB Charging:** Features a dual 4.2A USB charger, delivering 2.1A per port for rapid charging of all USB-powered devices.
- **Integrated LED Voltmeter:** A clear digital display shows the current working voltage, helping to prevent issues caused by low voltage. The display activates only when the panel is powered.
- **Pre-wired for Easy Installation:** Comes with a pre-wired harness for simplified setup.
- **Durable Construction:** Made with a superior aluminum panel and copper contact material for enhanced longevity.
- **IP65 Waterproof Rating:** Designed to withstand challenging environments, making it ideal for marine and outdoor applications.
- **Wide Compatibility:** Suitable for 12V/24V DC systems in various vehicles including boats, cars, trucks, RVs, UTVs, ATVs, and more.

3. SETUP AND INSTALLATION

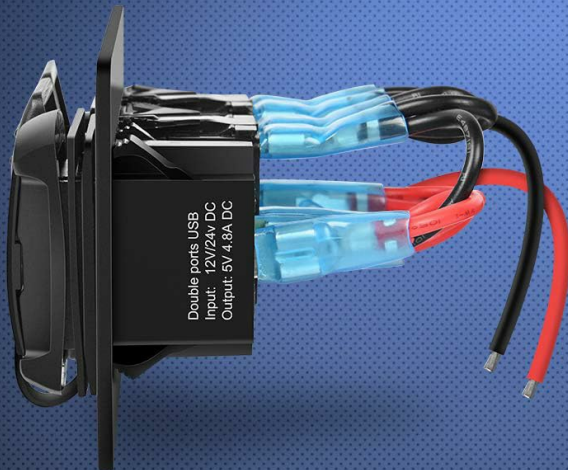
Follow these steps for proper installation of the switch panel.

1. **Choose Mounting Location:** Select a flat surface on your dashboard, console, or panel that can accommodate the dimensions of the switch panel. Ensure there is sufficient space behind the panel for wiring.
2. **Prepare Mounting Hole:** Based on the product dimensions, cut an appropriate opening in the chosen mounting surface. Refer to the product size image for precise measurements.
3. **Wiring Connections:** The panel comes pre-wired. Identify the two main connection lines on the back:
 - Connect the **red wire** to the positive (+) terminal of your 12V/24V DC power source.
 - Connect the **black wire** to the negative (-) terminal (ground) of your 12V/24V DC power source.

Ensure all connections are secure and properly insulated.

4. **Connect Devices:** Connect the devices you wish to control to the output terminals of the rocker switches. Each switch is a Single Pole Single Throw (SPST) type.
5. **Secure the Panel:** Insert the switch panel into the prepared opening and secure it using the provided screws or mounting hardware.
6. **Test Functionality:** Once installed, apply power to the panel and test each switch, the USB charger, and verify the voltmeter display.

EASY INSTALLATION



5 Pin on-off Rocker Switch is SPST designed (Single pole single throw) switch, it comes with a pre-wired wiring harness, simple to install, can be easily turned on/off.

Universal for all cars, RVs, Cans, Motorcycles, buses, boats, trailers, jeeps, UTV etc. Pre-wired wiring harness for you to easily install in both 12V and 24V vehicles.



Image: Installation Overview. This image illustrates the pre-wired harness and the general setup for the switch panel, highlighting the simplicity of connecting the red (positive) and black (negative) wires.



Image: Product Dimensions and Components. This image provides detailed measurements of the switch panel (98mm x 68mm / 3.9in x 2.7in) and its components, including the depth of the wiring (40mm / 1.5in) and the width of the terminal block (74mm / 2.9in), along with mounting screws.

4. OPERATING INSTRUCTIONS

The Greluma switch panel is designed for straightforward operation.

- **Rocker Switches:** Each of the two rocker switches controls an independent circuit. Press the top part of the switch to turn the connected device ON, and the bottom part to turn it OFF. The blue LED backlight on the switch indicates its ON/OFF status.
- **Dual USB Charger:** The two USB ports provide a combined output of 4.2A (2.1A per port) for charging compatible devices. Simply plug your USB charging cable into one of the ports. The USB charger is active when the panel is powered.
- **Digital Voltmeter:** The integrated voltmeter displays the current voltage of your 12V/24V DC system. This display is active when the panel receives power, allowing you to monitor your battery's health and prevent issues from low voltage.

2.1 A DUAL USB FAST CHARGER WITH VOLTMETER

Charge all your devices with the best speed.



Image: Dual USB Fast Charger and Voltmeter. This image highlights the dual 4.2A USB charging ports and the integrated digital voltmeter display, showing a voltage reading of 15.1V. It also illustrates charging speed comparisons between conventional, QC 2.0, and the panel's 4.2A output.

ROCKER SWITCH DIY STICKER

100 universal transparent DIY stickers
Easy to indentify

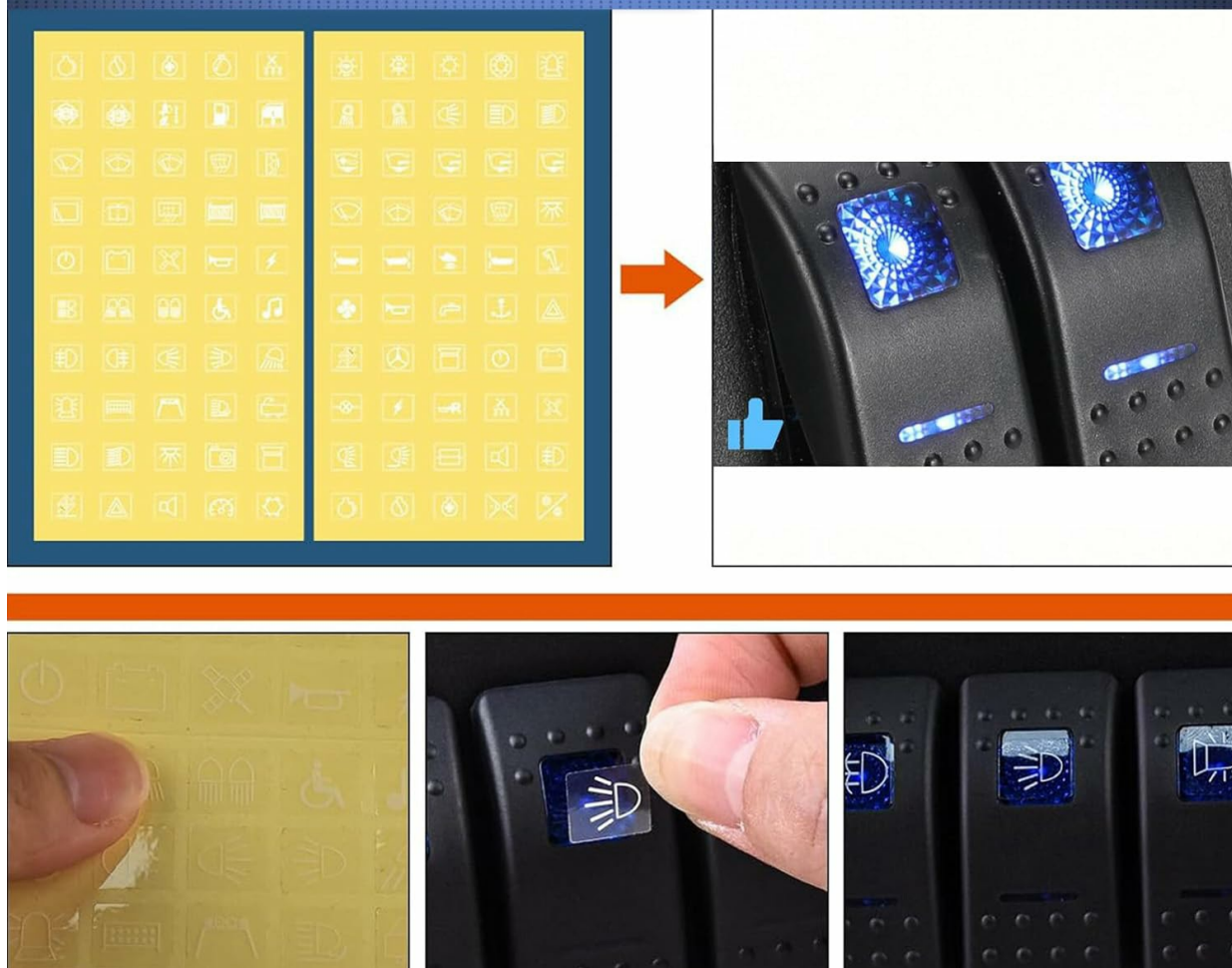


Image: Rocker Switch Labeling with DIY Stickers. This image shows a sheet of 100 universal transparent DIY stickers that can be applied to the rocker switches for easy identification of their functions, such as lights, horn, or other accessories.

5. MAINTENANCE

To ensure the longevity and optimal performance of your Greluma switch panel, follow these maintenance guidelines:

- **Regular Cleaning:** Periodically wipe the panel surface with a soft, damp cloth to remove dust and grime. Avoid using abrasive cleaners or solvents that could damage the finish or electronic components.
- **Inspect Wiring:** Annually, or as needed, inspect all wiring connections for tightness and signs of corrosion or damage. Re-tighten any loose connections and replace damaged wires immediately.
- **Check Waterproof Seals:** For marine or outdoor applications, periodically check the integrity of the IP65 waterproof seals around the panel to ensure continued protection against water ingress.
- **Avoid Overloading:** Do not connect devices that exceed the maximum current rating of the switches or the USB charger. Refer to the specifications section for limits.

6. TROUBLESHOOTING

If you encounter issues with your Greluma switch panel, refer to the following common problems and solutions:

- **No Power to Panel/Voltmeter Off:**
 - Check the main power connection to the red wire. Ensure it is securely connected to a live 12V/24V DC source.
 - Verify the ground connection (black wire) is secure.
 - Check for any blown fuses in the vehicle's electrical system or in the circuit supplying power to the panel.
- **Switches Not Activating Devices:**
 - Ensure the panel itself is receiving power (voltmeter is on).
 - Check the wiring from the switch output to the device. Ensure connections are secure and the device is properly grounded.
 - Verify the device itself is functional.
- **USB Charger Not Working:**
 - Confirm the panel is powered.
 - Try a different USB cable and device to rule out issues with the charging cable or the device being charged.
 - Ensure the outer cover of the USB port is open during charging.
- **Inaccurate Voltmeter Reading:**
 - Ensure the power source is stable. Fluctuations in the vehicle's electrical system can affect readings.
 - Verify the voltmeter's connections are secure and free from corrosion.

7. SPECIFICATIONS

Feature	Specification
Brand	Greluma
Operating Mode	Manual
Switch Type	Rocker (SPST)
Number of Switches	2
USB Charger Output	Dual 4.2A (2.1A per port)
Voltmeter Display	Digital LED
Input Voltage	12V/24V DC
Max Amperage	10A per switch / 20A total
International Protection Rating	IP65
Panel Material	Aluminum
Contact Material	Copper

Terminal Type	Wire end (Pre-wired)
Item Dimensions (LxWxH)	11 x 11 x 7.5 cm (4.33 x 4.33 x 2.95 inches)

PRODUCT SPECIFICATION		
PRODUCT	OTHERS	OURS
LED LIGHT	X	✓
JUMP WIRES	X	✓
USB CHARGER	X	✓
VOLTERMETER	X	✓
VOLTAGE	ONLY 12V DC	12V/24V DC
AMPERE	10-15 AMP	10/20 AMP
MATERIAL	Cheap Plastic	Superior Aluminum Panel

Image: Product Specifications Comparison. This image provides a comparative table highlighting key specifications of the Greluma panel, including LED lights, jump wires, USB charger, voltmeter, 12V/24V DC voltage, 10/20 AMP current, and superior aluminum panel material.

8. APPLICABLE VEHICLES AND ENVIRONMENTS

The Greluma 2-Gang Rocker Switch Panel is designed for broad compatibility with 12V and 24V DC systems, making it suitable for a variety of applications:

- **Marine:** Boats, yachts, ships, and other watercraft due to its IP65 waterproof rating.
- **Automotive:** Cars, trucks, SUVs, 4x4s, Jeeps, Wranglers, Silverados, Tundras, Tacomas, F350s, 4Runners.
- **Recreational Vehicles:** RVs, campers, motorhomes, caravans, UTVs, ATVs, RZRrs, golf carts, snowmobiles.

- **Commercial:** Buses, vans, trailers, and other commercial vehicles.



Image: Example Application: Marine Use. This image shows the Greluma switch panel installed on a boat's console, demonstrating its suitability for marine environments.

WIDE APPLICATIONS

Universally for all 12V-24V yacht, ship, motorcycle, bus, car, truck, RV, UTV/ATV, etc.



Image: Wide Range of Vehicle Applications. This image depicts the Greluma switch panel superimposed on a scene with an off-road vehicle, illustrating its versatility across various vehicle types including yachts, ships, motorcycles, cars, trucks, RVs, UTVs, and ATVs.

9. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the product packaging or contact your retailer. Keep your purchase receipt as proof of purchase.