



Manuals.plus /

› SURAIELEC /

› SURAIELEC Outdoor Electrical Outlet Box (Model PPG02A) Instruction Manual

SURAIELEC PPG02A

SURAIELEC Outdoor Electrical Outlet Box (Model PPG02A) Instruction Manual

Dual 20 AMP WRTR GFCI Receptacles, Rainproof 3R Enclosure

1. INTRODUCTION

This manual provides essential information for the safe installation, operation, and maintenance of your SURAIELEC Outdoor Electrical Outlet Box, Model PPG02A. This unit features dual 20 AMP Weather-Resistant (WR) and Tamper-Resistant (TR) Ground Fault Circuit Interrupter (GFCI) receptacles within a NEMA 3R rated, all-metal enclosure. It is designed for outdoor use, providing reliable and safe power for various applications such as garden lighting, outdoor decorations, and other electrical needs.

Please read this manual thoroughly before installation and retain it for future reference.

2. SAFETY INFORMATION

WARNING: Risk of Electric Shock or Fire. Installation must be performed by a qualified electrician in accordance with all national and local electrical codes.

- Always disconnect power at the circuit breaker or fuse box before installing or servicing this unit.
- Ensure proper grounding of the enclosure and receptacles.
- Do not install this product in locations where it may be submerged in water.
- Verify that the supply voltage and current rating match the product specifications (120Vac, 20 AMP).
- The GFCI receptacles provide protection against ground faults. Test them monthly as described in the operation section.
- Keep the enclosure door closed and secured when not in use to maintain its weather-resistant rating.

3. PRODUCT COMPONENTS

The SURAIELEC Outdoor Electrical Outlet Box (Model PPG02A) includes the following components:

- 1 x All-Metal NEMA 3R Enclosure (Galvanized Steel)
- 2 x 20 AMP WRTR GFCI Receptacles
- 1 x Gasket for weather sealing
- 1 x Metal Cover
- Mounting hardware (screws)



One Equals Five

Power Up Economically, Safely and Sustainably

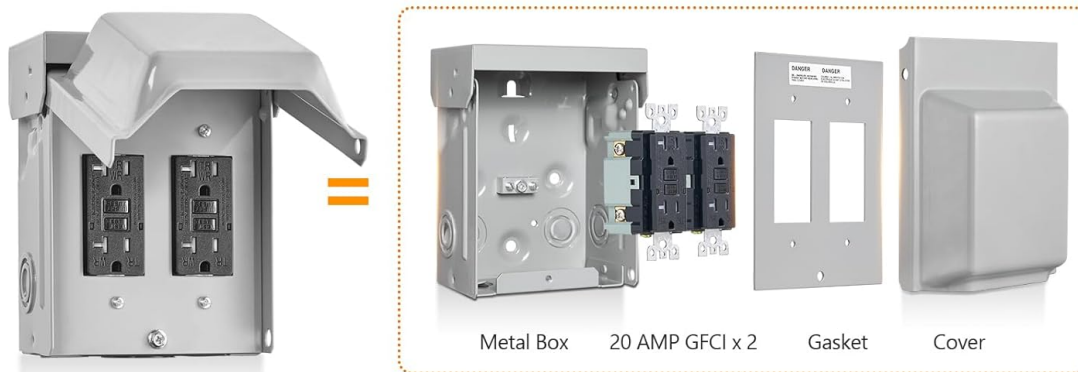


Image: Exploded view showing the metal box, two 20 AMP GFCI receptacles, gasket, and cover.

4. SPECIFICATIONS

Feature	Specification
Model Number	PPG02A
Voltage Rating	120Vac
Current Rating	20 AMP
Receptacle Type	Dual WRTR GFCI
Enclosure Rating	NEMA 3R (Rainproof, Dust-tight)
Material	Alloy Steel (Galvanized Steel, Powder Coated)
Color	Grey
Certifications	ETL Listed
Approximate Dimensions (H x W x D)	7.1 in x 5.5 in x 3.3 in (excluding cover depth)



Image: Front view dimensions of the outdoor electrical outlet box.



Image: Back view dimensions showing mounting points and knockouts.

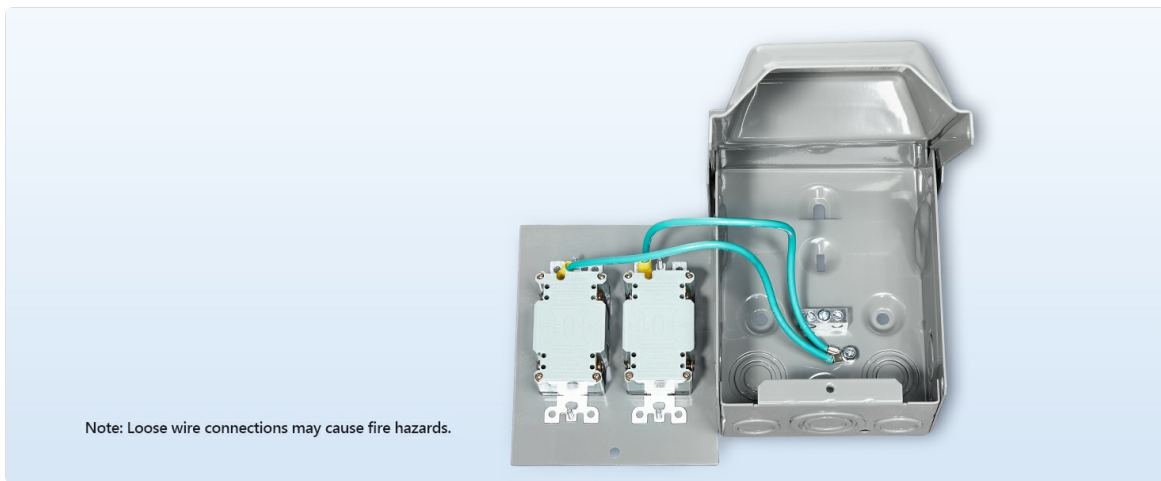


Image: Side view dimensions of the outdoor electrical outlet box.



Image: Bottom view dimensions showing knockouts.

5. INSTALLATION

Follow these steps for proper installation. Ensure power is OFF before beginning.

5.1 Mounting the Enclosure

1. Choose a suitable outdoor location for mounting, ensuring it is on a stable surface and accessible for maintenance.
2. Use appropriate mounting hardware (not always included) to securely fasten the enclosure to the desired surface. The enclosure has pre-drilled mounting holes on the back.

5.2 Preparing for Wiring

1. Identify the desired knockout locations for your electrical conduit or cable entry. The enclosure features easy-to-remove knockouts on the side, bottom, and back, ranging from 1/2" to 1-1/4" in size.
2. Carefully remove the chosen knockouts using a hammer and punch.
3. Install appropriate conduit connectors or cable clamps into the knockout holes to secure wiring and maintain the NEMA 3R rating.

Install with Ease

Easy removable knockouts on the bottom and back

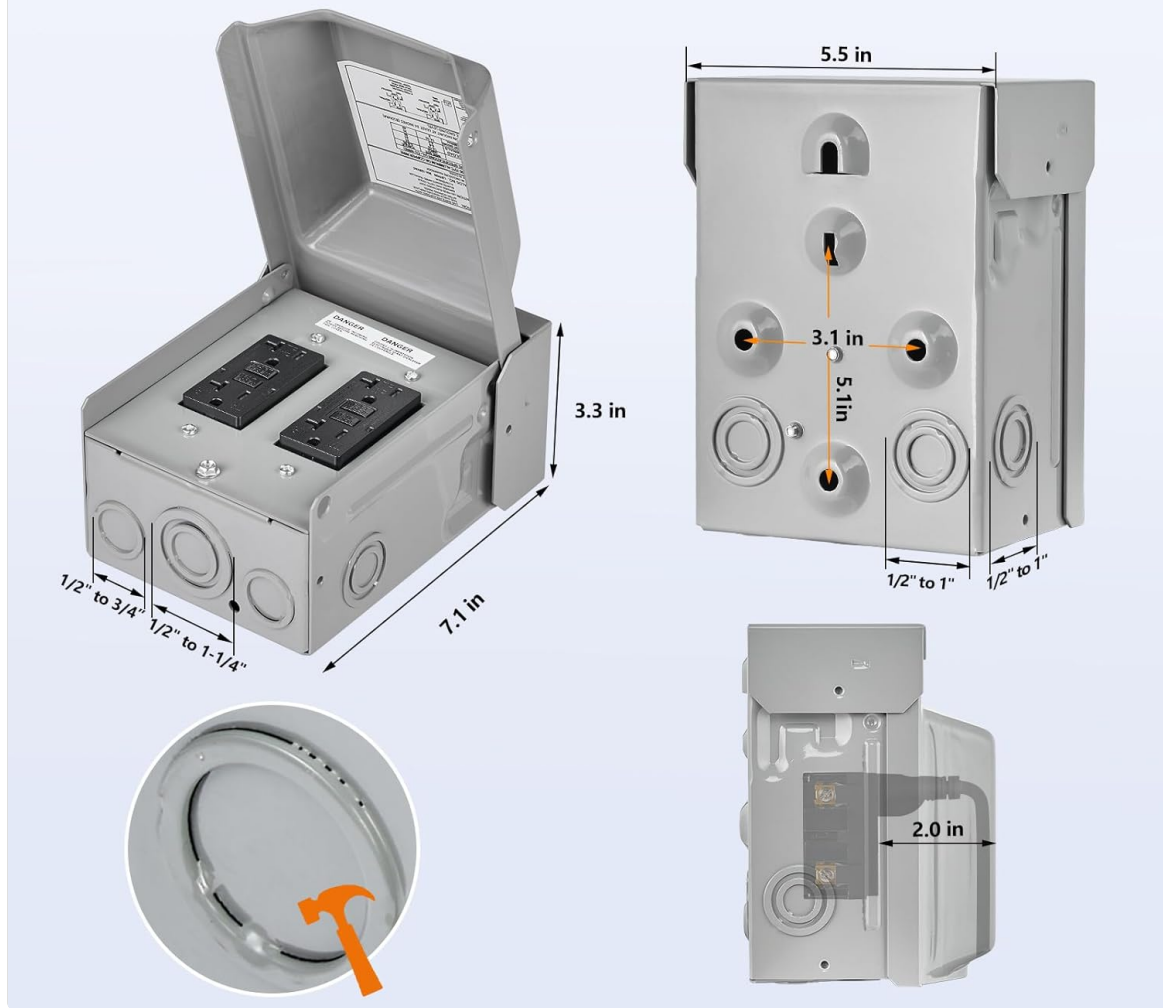


Image: Diagram illustrating knockout locations and sizes for wiring entry.

5.3 Wiring the GFCI Receptacles

IMPORTANT: Ensure power is OFF at the main breaker before wiring.

1. Connect the incoming power supply wires to the GFCI receptacles. The GFCI receptacles are clearly marked for 'LINE' (incoming power) and 'LOAD' (power to downstream devices, if applicable).
2. Connect the hot (black) wire to the brass 'LINE' terminal.
3. Connect the neutral (white) wire to the silver 'LINE' terminal.
4. Connect the ground (green or bare copper) wire to the green ground screw on the GFCI receptacle and also to the ground lug inside the metal enclosure.
5. If connecting additional receptacles or devices downstream, connect their wires to the 'LOAD' terminals. Otherwise, cap the 'LOAD' terminals if not used.
6. Ensure all wire connections are tight and secure. Loose connections can cause fire hazards.



Image: Internal wiring showing connections for GFCI receptacles and grounding within the enclosure.

5.4 Securing the Cover

1. Once wiring is complete and verified, carefully position the gasket and the metal cover over the receptacles.
2. Secure the cover with the provided screws, ensuring a tight seal to maintain the weather-resistant rating.
3. The enclosure features a lockable design for added security. A padlock (not included) can be used to secure the cover.

6. OPERATION

The GFCI receptacles are designed to protect against electrical shock due to ground faults. Each receptacle has 'TEST' and 'RESET' buttons.

6.1 GFCI Test and Reset

1. **To Test:** With power ON, plug a lamp or other device into the GFCI receptacle. Press the 'TEST' button. The device should turn off, and the GFCI indicator light (if present) may change color or turn off.
2. **To Reset:** Press the 'RESET' button firmly. The device should turn back on, and the GFCI indicator light should return to its normal operating state (e.g., green).

If the GFCI does not reset or trips immediately after resetting, discontinue use and consult a qualified electrician. This indicates a persistent ground fault or a faulty GFCI.



Image: Detail of a 20 AMP GFCI receptacle, highlighting its Weather-Resistant (WR) and Tamper-Resistant (TR) features, along with the test and reset buttons.

7. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your outdoor electrical outlet box.

- **Monthly GFCI Test:** Perform the GFCI test procedure (Section 6.1) monthly to ensure proper function.
- **Periodic Inspection:** Visually inspect the enclosure and cover for any signs of damage, corrosion, or wear. Check for loose screws or compromised seals.
- **Cleaning:** Clean the exterior of the enclosure with a damp cloth. Do not use abrasive cleaners or solvents. Ensure the unit is dry before restoring power.
- **Wiring Check:** Annually, or if any issues arise, disconnect power and inspect internal wiring for loose connections or signs of overheating.

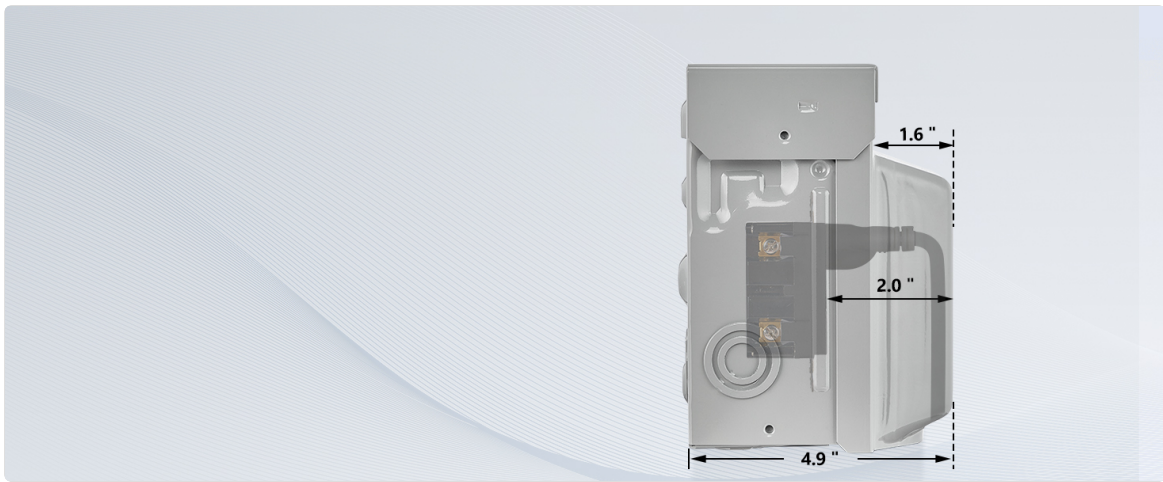


Image: Cross-section illustrating the solid steel plate, zinc plating layer, and anti-rust paint coating for enhanced durability and rust prevention.

8. TROUBLESHOOTING

If you encounter issues with your SURAIELEC Outdoor Electrical Outlet Box, refer to the following common problems and solutions:

- **GFCI Trips Frequently:**

Cause: A ground fault is detected, or the GFCI is faulty.

Solution: Unplug all devices from the GFCI. Press 'RESET'. If it holds, plug devices back in one by one to identify the faulty device. If it still trips with no devices, or trips immediately, consult an electrician.

- **No Power to Outlets:**

Cause: GFCI tripped, circuit breaker tripped, or loose wiring.

Solution: Press the 'RESET' button on the GFCI. Check your main electrical panel for a tripped circuit breaker. If neither resolves the issue, disconnect power and check for loose wire connections inside the box.

- **Water Inside Enclosure:**

Cause: Improper installation, damaged gasket, or open cover.

Solution: Immediately disconnect power. Inspect the gasket for damage and ensure the cover is properly sealed. Verify conduit connections are watertight. Replace damaged components as necessary.

9. WARRANTY AND SUPPORT

SURAIELEC products are designed for quality and reliability. For specific warranty details, please refer to the product packaging or contact SURAIELEC customer support directly. If you have any questions, require technical assistance, or need to report a product issue, please visit the official SURAIELEC website or contact their customer service department.

Contact information can typically be found on the product packaging or on the brand's official online presence.

