Sigma Engineered Solutions 16446

Sigma Engineered Solutions 16446 Weatherproof TRWR Duplex Receptacle Kit User Manual

1. Introduction and Overview

This manual provides detailed instructions for the installation, operation, and maintenance of the Sigma Engineered Solutions Model 16446 Weatherproof TRWR Duplex Receptacle Kit. This kit is designed to provide a secure and weather-resistant electrical outlet for outdoor applications.

Key Features:

- Weatherproof protection for both horizontal and vertical installations.
- Includes a 15 Amp Tamper Resistant, Weather Resistant (TRWR) duplex receptacle.
- Constructed from durable die-cast material with a powder-coated finish for corrosion resistance.
- cULus listed, suitable for wet locations when the cover is closed.
- Lockable cover for restricted access.

2. Product Components

The Sigma Engineered Solutions 16446 kit includes the following components:

- One-gang box with three 1/2-inch holes
- Universal cover
- 15 Amp TRWR duplex receptacle
- Closure plugs
- Hardware (screws)
- Gasket



Figure 2.1: All components included in the Sigma 16446 kit. From left to right: the electrical box, the duplex receptacle, the gasket, and the universal cover.

3. Safety Information

WARNING: Risk of electric shock. Improper installation or use can result in serious injury or death. Always turn off power at the circuit breaker or fuse box before installing or servicing this product. If you are unsure about any part of these instructions, consult a qualified electrician.

This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

- Ensure all wiring connections are secure and comply with local electrical codes.
- Do not exceed the specified electrical ratings of the receptacle (15 Amp).
- Keep the cover closed when the receptacle is not in use to maintain weatherproof integrity.
- This product is suitable for wet locations only when the cover is closed.

4. Installation Instructions (Setup)

Follow these steps for proper installation of your weatherproof duplex receptacle kit.

1. **Turn Off Power:** Locate the circuit breaker or fuse controlling the electrical circuit where you intend to install the receptacle. Turn off the power completely. Verify the power is off using a voltage tester.
2. **Prepare the Box:** The one-gang box has three 1/2-inch threaded holes for conduit entry. Select the appropriate knockout(s) for your wiring and remove them. Install any necessary conduit fittings.
3. **Mount the Box:** Securely mount the one-gang box to the desired surface using appropriate fasteners (not included). Ensure the box is level and firmly attached.
4. **Wire the Receptacle:** Connect the electrical wires to the 15 Amp TRWR duplex receptacle. Follow standard wiring practices:
    - Connect the **hot (black)** wire to the brass-colored screw terminal.
    - Connect the **neutral (white)** wire to the silver-colored screw terminal.
    - Connect the **ground (green or bare copper)** wire to the green screw terminal.

Ensure all connections are tight and no bare wire is exposed outside the terminals.

5. **Install Receptacle into Box:** Carefully fold the wires into the box and secure the duplex receptacle to the box using the provided screws.
6. **Apply Gasket:** Place the provided gasket over the receptacle, ensuring it aligns with the mounting holes and provides a seal against the box.
7. **Install Universal Cover:** Position the universal cover over the gasket and receptacle. The patented corner hinge allows for installation in either a vertical or horizontal orientation. Secure the cover to the box using the provided hardware. Ensure the cover closes completely and forms a tight seal.
8. **Install Closure Plugs:** Insert the closure plugs into any unused conduit holes to maintain the weatherproof rating.
9. **Restore Power:** Once installation is complete and all components are securely in place, restore power at the circuit breaker or fuse box.

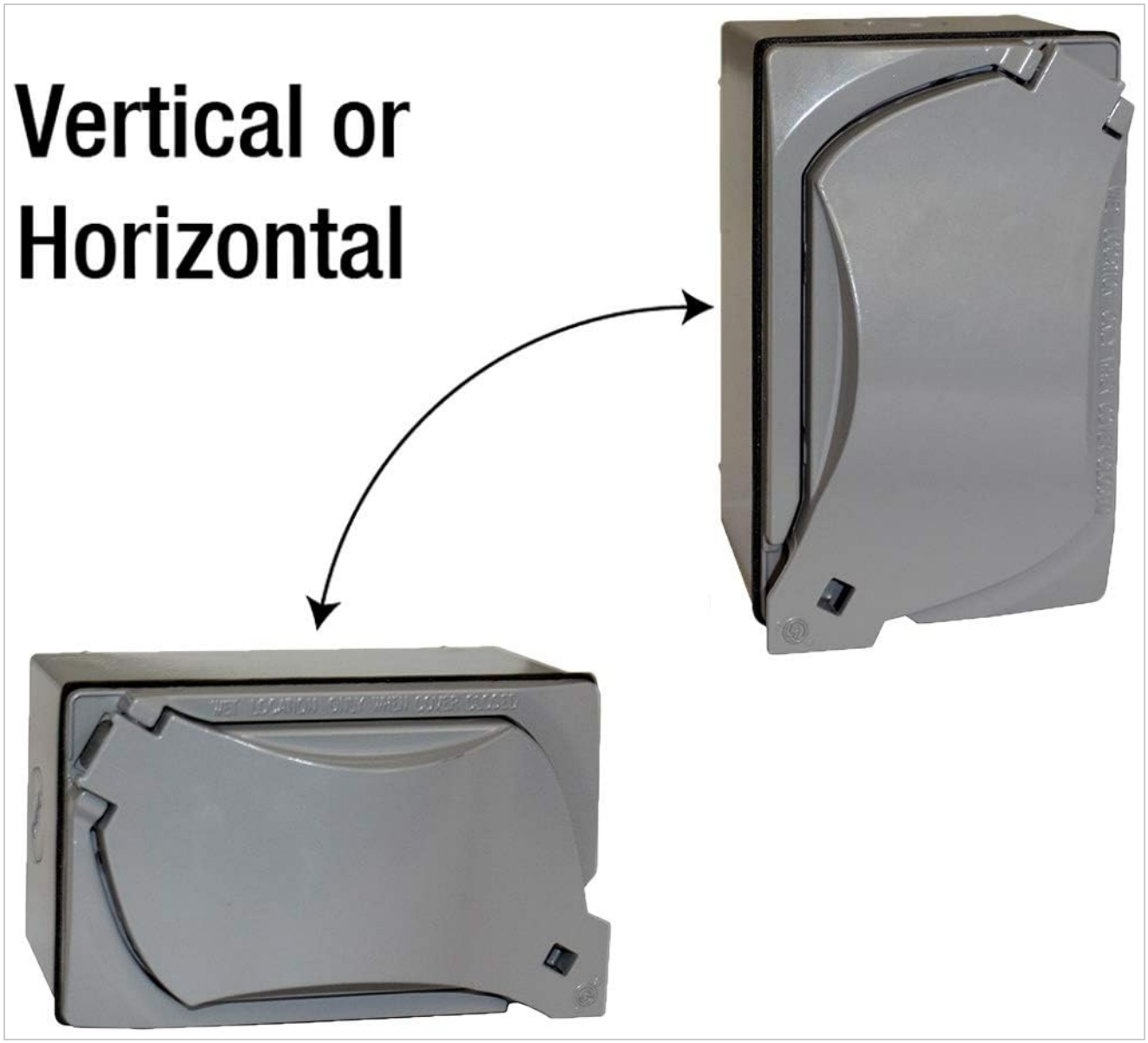


Figure 4.1: The universal cover can be installed for either vertical or horizontal orientation of the receptacle.



Figure 4.2: Example of the weatherproof duplex receptacle kit installed on a surface.

5. Operation

To use the receptacle, simply open the hinged cover and plug in your electrical device. When not in use, ensure the cover is fully closed to maintain its weatherproof rating. The cover can be locked with a small padlock (not included) for added security and to restrict unauthorized access.



Figure 5.1: Front view of the unit with the cover partially open, showing the duplex receptacle inside.

6. Maintenance

The Sigma 16446 Weatherproof TRWR Duplex Receptacle Kit requires minimal maintenance. Periodically inspect the unit for any signs of damage, wear, or loose connections. Ensure the cover gasket remains intact and free of debris to maintain its weatherproof seal. Clean the exterior with a damp cloth as needed. Do not use abrasive cleaners or solvents.

7. Troubleshooting

If the receptacle is not providing power:

- Check the circuit breaker or fuse for the circuit. Reset if tripped or replace if blown.
- Ensure the device plugged into the receptacle is functioning correctly.
- Verify all wiring connections are secure (with power off).
- If the issue persists, consult a qualified electrician.

8. Specifications

Specification	Detail
Model Number	16446
Brand	Sigma Engineered Solutions
Receptacle Type	TRWR Duplex
Amperage	15 Amp
Material	Die-cast Metal
Finish	Powder Coated
Color	Grey
Installation Method	Screw-In
Certification	cULus Listed
Item Weight	15.2 ounces

9. Warranty and Support

This product is covered by a manufacturer's warranty. For specific warranty details, please refer to the documentation included with your purchase or visit the Sigma Engineered Solutions official website. For technical support or further assistance, please contact Sigma Engineered Solutions customer service.

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Example: How do I reset this device or fix this error?

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