

NXQWLL B0DPF936PG

NXQWLL 30 Amp 120 VAC Automatic RV Transfer Switch User Manual

Model: B0DPF936PG

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your NXQWLL 30 Amp 120 VAC Automatic RV Transfer Switch. This device is designed to automatically switch between shore power (mains) and generator power, ensuring a continuous and reliable power supply for your RV or speedboat. Please read this manual thoroughly before installation and use to ensure safe and efficient operation.

2. IMPORTANT SAFETY INFORMATION

WARNING: Risk of electric shock. Installation and servicing should only be performed by qualified personnel. Disconnect all power sources before working on the transfer switch.

- Always ensure that the main power supply and generator are disconnected before attempting any installation, wiring, or maintenance.
- Verify all wiring connections are secure and correct according to the wiring diagram to prevent electrical hazards.
- Do not operate the transfer switch if it appears damaged or has been exposed to water beyond its IP65 rating.
- Ensure proper grounding for all electrical connections.
- This device is designed for 120 VAC, 30 Amp applications. Do not exceed these ratings.

3. PRODUCT FEATURES

The NXQWLL Automatic RV Transfer Switch offers advanced features for reliable power management:

- **Automatic Switching:** Automatically detects mains power status and switches to generator power upon

mains failure, prioritizing mains when available.

- **20-Second Delay Protection:** A built-in precision control circuit delays switching to generator power by 20 seconds, ensuring voltage stability before transmission and preventing equipment damage.
- **Wide Application:** Suitable for RVs, speedboats, and other outdoor activities requiring emergency power supply (120 VAC, 30 Amps).
- **Reliable and Durable Construction:** Features advanced coating technology for IP65 waterproof and dustproof standards, corrosion resistance, and durability in various temperature conditions.
- **Easy Installation:** Designed with a clear internal wiring diagram and robust copper wire layout for straightforward setup. Includes a sturdy metal buckle and removable protective cover.



Figure 3.1: Internal components and basic wiring layout of the transfer switch. This view illustrates the relays and terminal

20s Delayed Start Mechanism

Ensure voltage is stable before transmission



Figure 3.3: Detail of the 20-second delayed start mechanism, which ensures voltage stability before power transmission.

4. TECHNICAL SPECIFICATIONS

Specification	Value
Operation Mode	Automatic
Current Rating	30 Amps
Operating Voltage	120 Volts (AC)

Specification	Value
Contact Type	Normally Closed
Connector Type	Screw Terminals
Brand	NXQWLL
Terminal	Screw
Circuit Type	2-way
Contact Material	Copper
Number of Positions	1
Ingress Protection (IP) Rating	IP65 (Waterproof & Dustproof)

PRODUCT SIZE



Figure 4.1: Product dimensions for installation planning. The unit measures approximately 10.5 inches in length, 6.25 inches in width, and 3.95 inches in depth.

5. SETUP AND INSTALLATION

Professional installation by a certified electrician is highly recommended to ensure safety and compliance with local electrical codes.

5.1 Pre-Installation Checklist

- Ensure all power sources (shore power and generator) are disconnected and locked out.
- Gather necessary tools: wire strippers, screwdrivers, multimeter, mounting hardware.

- Confirm the transfer switch ratings (120 VAC, 30 Amps) match your system requirements.
- Select a suitable mounting location that is dry, protected, and allows for proper ventilation and access for wiring.

5.2 Wiring Instructions

Refer to the internal wiring diagram for precise connections. The transfer switch has dedicated terminals for Shore Line, Generator Line, and Load connections.

Emergency Power Supply

- Suitable for a variety of outdoor activities
- 120VAC 30amps



RV travel



Speedboat sailing

Figure 5.1: Detailed wiring diagram. This diagram illustrates the connections for the Live Line, Neutral Line, and Ground Bar to the Shore Line, Load, and Generator inputs/outputs.

1. **Mounting:** Securely mount the transfer switch to a stable surface using appropriate hardware.

2. **Shore Power Connection:** Connect the Live (Hot) and Neutral wires from your shore power inlet to the designated 'SHORE LINE' and 'SHORE NEUTRAL' terminals. Connect the ground wire to the ground bar.
3. **Generator Connection:** Connect the Live (Hot) and Neutral wires from your generator output to the designated 'GEN LINE' and 'GEN NEUTRAL' terminals. Connect the ground wire to the ground bar.
4. **Load Connection:** Connect the Live (Hot) and Neutral wires leading to your RV or speedboat's electrical panel (the load) to the designated 'LOAD LINE' and 'LOAD NEUTRAL' terminals. Connect the ground wire to the ground bar.
5. **Verify Connections:** Double-check all wiring for correct polarity, secure connections, and proper grounding. Ensure no bare wires are exposed.
6. **Close Enclosure:** Replace the protective cover and securely close the enclosure to maintain its IP65 rating.

6. OPERATING INSTRUCTIONS

The NXQWLL Automatic RV Transfer Switch operates automatically once properly installed and powered.

1. **Power On Shore Power:** When shore power is connected and stable, the transfer switch will automatically detect it and route power to your RV/speedboat's electrical system. The 'SHORE' indicator light (if present) will illuminate.
2. **Power On Generator:** If shore power is disconnected or fails, and the generator is running and providing stable power, the transfer switch will initiate a 20-second delay. After the delay, it will automatically switch to generator power. The 'GEN' indicator light (if present) will illuminate.
3. **Return to Shore Power:** If shore power becomes available and stable while operating on generator power, the transfer switch will automatically switch back to shore power, prioritizing the mains supply.

The 20-second delay mechanism is crucial for protecting your appliances from voltage fluctuations during power transitions. Do not bypass this feature.

7. MAINTENANCE AND CARE

Regular maintenance ensures the longevity and reliable operation of your transfer switch.

- **Periodic Inspection:** Annually inspect the transfer switch for any signs of physical damage, corrosion, or loose connections.
- **Cleaning:** Keep the exterior of the enclosure clean and free from dirt and debris. Use a soft, dry cloth. Do not use harsh chemicals or abrasive cleaners.
- **Terminal Check:** With all power disconnected, periodically check the tightness of all terminal screws to ensure good electrical contact.
- **Seal Integrity:** Ensure the enclosure seals are intact to maintain the IP65 waterproof and dustproof rating.

8. TROUBLESHOOTING

If you encounter issues with your transfer switch, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No power to load from either source.	No input power from shore or generator; tripped breaker; loose wiring.	Check shore power connection and breaker. Verify generator is running and producing power. Inspect all wiring connections for tightness.
Switch does not transfer to generator power.	Generator not producing stable power; shore power still present; faulty wiring.	Ensure generator is fully warmed up and producing correct voltage. Confirm shore power is truly disconnected. Check generator input wiring.
Switch does not transfer back to shore power.	Shore power not stable or detected; faulty wiring.	Verify shore power is stable and available. Check shore power input wiring.
20-second delay not functioning.	Internal circuit issue.	Contact customer support. Do not attempt internal repairs.

If the problem persists after attempting these solutions, contact customer support or a qualified electrician.

9. WARRANTY AND CUSTOMER SUPPORT

Your NXQWLL Automatic RV Transfer Switch is designed for durability and reliability. For specific warranty details, please refer to the product packaging or your purchase documentation. In case of any issues or for technical assistance, please contact NXQWLL customer support through the retailer where the product was purchased.