

## GLOGLOW DR-30-12

# GLOGLOW DR-30-12 30W DIN Rail Switching Power Supply User Manual

Model: DR-30-12 | Brand: GLOGLOW

## 1. INTRODUCTION

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This manual provides essential information for the safe and efficient operation of your GLOGLOW DR-30-12 30W DIN Rail Switching Power Supply. Please read this manual thoroughly before installation and use, and retain it for future reference. This power supply is designed to convert 100-240V AC input to a stable 12V DC output, suitable for various applications including lighting equipment, industrial control systems, and security monitoring.

## 2. SAFETY INFORMATION

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**CAUTION: Indoor use only. For use in a protected environment only. Risk of electric shock. Do not open.**

- Ensure the power supply is disconnected from the main power source before any installation, wiring, or maintenance.
- Only qualified personnel should perform installation and wiring.
- Do not operate the unit in environments with high humidity, extreme temperatures, or corrosive substances.
- Verify that the input voltage matches the specifications of the power supply (100-240V AC).
- Do not exceed the maximum output power of 30W.
- Ensure proper grounding to prevent electrical hazards.
- The unit features a hollow shell design for heat dissipation; ensure adequate airflow around the unit.



**Figure 2.1:** Top view of the power supply, highlighting the input (N, L) and output (+V, -V) terminals, the DC OK indicator, and the ADJ potentiometer. The label clearly states the model DR-30-12 and important safety cautions.

### 3. PRODUCT FEATURES

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The GLOGLOW DR-30-12 Switching Power Supply offers reliable performance with the following key features:

- **Input Voltage:** Wide range 100-240V AC, suitable for global use.
- **Output Power:** Stable 30W output.
- **Shell Design:** Thickened shell for enhanced safety and a hollow design for excellent heat dissipation, ensuring stable operation.
- **Protection Functions:** Built-in overload protection, over current protection, and over voltage protection to safeguard connected devices and the power supply itself.
- **Material:** Constructed from durable ABS material with excellent craftsmanship for long-term reliability.
- **Installation:** Designed for convenient DIN rail mounting.
- **Applications:** Ideal for lighting equipment, industrial control systems, and security monitoring applications.

### 4. SPECIFICATIONS

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Parameter	Value
Model	DR-30-12
Input Voltage	100-240V AC
Output Power	30W
Output Voltage	12V DC (Adjustable via ADJ potentiometer)
Material	ABS
Installation Method	DIN Rail Mount
Protection Features	Overvoltage, Overload, Short Circuit Protection
Operating Environment	Indoor, protected environment only

## 5. SETUP AND INSTALLATION

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The GLOGLOW DR-30-12 is designed for easy installation on a standard DIN rail. Follow these steps for proper setup:

- Mounting:** Securely attach the power supply to a standard DIN rail. Ensure it clicks into place firmly.
- Input Wiring (AC):**
  - Connect the Live (L) wire of your AC power source to the 'L' terminal on the power supply.
  - Connect the Neutral (N) wire of your AC power source to the 'N' terminal on the power supply.
  - Connect the Ground (PE) wire to the ground terminal (indicated by the ground symbol) on the power supply.

**WARNING: Ensure all connections are tight and secure to prevent loose contacts and potential hazards.**

- Output Wiring (DC):**
  - Connect the positive (+) terminal of your DC load to the '+V' terminal on the power supply.
  - Connect the negative (-) terminal of your DC load to the '-V' terminal on the power supply.
- Ventilation:** Ensure sufficient clearance around the power supply for proper heat dissipation. Do not obstruct the hollow shell design.



**Figure 5.1:** Angled view of the power supply, illustrating the terminal blocks for input and output connections, and the ventilation design for heat dissipation.

## 6. OPERATING INSTRUCTIONS

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Once properly installed and wired, the GLOGLOW DR-30-12 is ready for operation.

1. **Power On:** Apply AC power to the input terminals (L, N). The 'DC OK' indicator LED should illuminate, indicating proper operation.
2. **Output Voltage Adjustment:** If necessary, the output voltage can be finely adjusted using the 'ADJ' potentiometer located on the top of the unit. Use a small screwdriver to turn the potentiometer clockwise to increase voltage or counter-clockwise to decrease voltage within the specified range.
3. **Monitoring:** The 'DC OK' LED provides a visual indication of the output status. If the LED is off, check the input power and output load.



**Figure 6.1:** Front view of the power supply, clearly showing the "DC OK" LED indicator and the "ADJ" screw for output voltage adjustment.

## 7. MAINTENANCE

The GLOGLOW DR-30-12 Switching Power Supply requires minimal maintenance.

- **Cleaning:** Periodically clean the exterior of the unit with a soft, dry cloth. Do not use liquid cleaners or solvents. Ensure the unit is powered off and disconnected before cleaning.
- **Ventilation:** Regularly check that the ventilation openings are free from dust and obstructions to ensure optimal heat dissipation.
- **Connections:** Periodically inspect all wiring connections to ensure they remain tight and secure.
- **Do Not Open:** As stated in the safety warnings, do not attempt to open the casing of the power supply. There are no user-serviceable parts inside, and opening it poses a risk of electric shock.

## 8. TROUBLESHOOTING

If you encounter issues with your power supply, refer to the following troubleshooting guide:

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No output power / DC OK LED off	No AC input power Loose wiring connections Overload or short circuit on output	Check AC power source and circuit breaker. Verify all input and output wiring connections are secure. Disconnect load and check for short circuits. Reduce load if overloaded.
Output voltage unstable or incorrect	ADJ potentiometer incorrectly set Fluctuating input voltage Overload condition	Adjust the 'ADJ' potentiometer to the desired voltage. Ensure stable AC input voltage. Reduce the load to within the 30W limit.
Unit is excessively hot	Insufficient ventilation Overload condition	Ensure adequate airflow around the unit and clear any obstructions. Reduce the load to prevent overheating.

If the problem persists after attempting these solutions, contact customer support. Do not attempt to repair the unit yourself.

## 9. PACKAGE CONTENTS

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- 1 x GLOGLOW DR-30-12 Transformer Power Supply