OBO HANDS K80

OBO HANDS K80 Power Supply User Manual

Model: K80 | Brand: OBO HANDS

1. Introduction

This manual provides essential information for the proper installation, operation, and maintenance of the OBO HANDS K80 AC 110-240V to DC12V 3A 36W Power Supply. This device is designed to provide stable and reliable 12V DC power for various access control system applications, including electric locks, access controllers, exit buttons, and RFID-ID readers.

2. Safety Information

- Ensure the power supply is disconnected from the main power source before any installation, wiring, or maintenance procedures.
- All wiring should be performed by qualified personnel in accordance with local electrical codes and regulations.
- Do not expose the unit to moisture or extreme temperatures.
- **Important:** When connecting to an electric controlled lock, the unlocking time delay must be set to 0 seconds. Failure to do so may result in damage or burning of the electric bolt lock.
- Verify correct voltage and current ratings of all connected devices to prevent overload.

3. Product Overview

The OBO HANDS K80 Power Supply is a compact and efficient unit designed for seamless integration into access control systems. It features a wide voltage input range and provides a stable DC 12V output.

3.1 Key Features

- **Input Voltage:** Standard AC 100V-240V, 50-60Hz, 36W.
- **Output Voltage:** Stabilized DC 12V / 3A.
- **Output Control:** NC (Normally Closed) / NO (Normally Open) outputs for compatibility with various electric locks.
- **Time Delay:** Adjustable unlocking time delay from 0 to 15 seconds.

- **Protection:** Automatic protection function against short circuits, preventing voltage output in such events.
- **Design:** Small and exquisite iron shell for easy installation.

3.2 Package Contents

- 1 x OBO HANDS K80 Access Control Power Supply
- 1 x User Manual (this document)

3.3 Product View

Figure 1: Front view of the OBO HANDS K80 Power Supply, showing input/output labels and power indicator.

4. Specifications

Feature	Description
Input Voltage	AC 100V-240V, 50-60Hz
Output Voltage	DC 12V / 3A
Output Power	36W
Output Types	NC / NO (Normally Closed / Normally Open)
Time Delay	Adjustable 0-15 seconds

Feature	Description
Protection	Automatic short circuit protection
Shell Material	Iron
Product Dimensions	120mm x 95mm x 38mm (4.72 x 3.74 x 1.5 inches)
Item Weight	0.2 Kilograms (7 ounces)
Model Number	K80

4.1 Dimensions

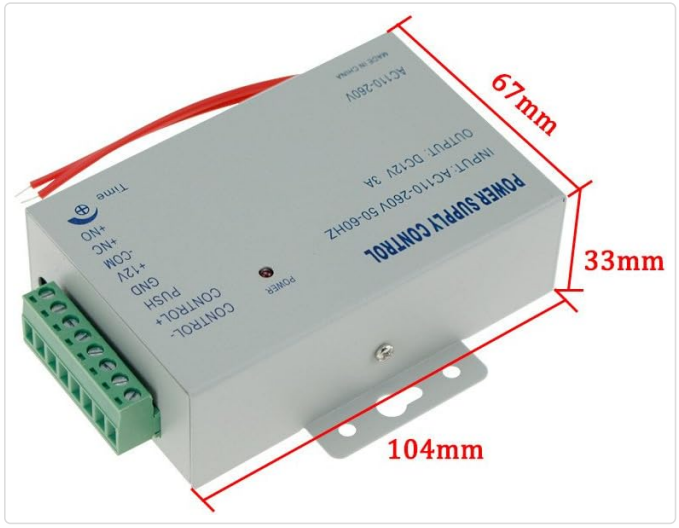


Figure 2: Product dimensions showing length (104mm), width (67mm), and height (33mm).

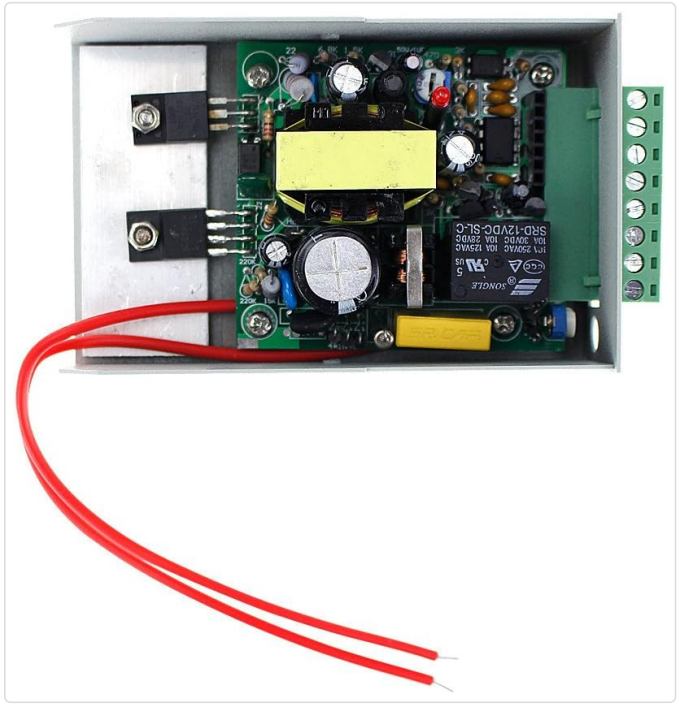


Figure 3: Mounting dimensions for the power supply, indicating screw hole spacing (80mm vertically, 30mm horizontally).

5. Setup and Installation

Careful wiring is crucial for the correct and safe operation of the power supply and connected access control

components.

5.1 Wiring Diagram

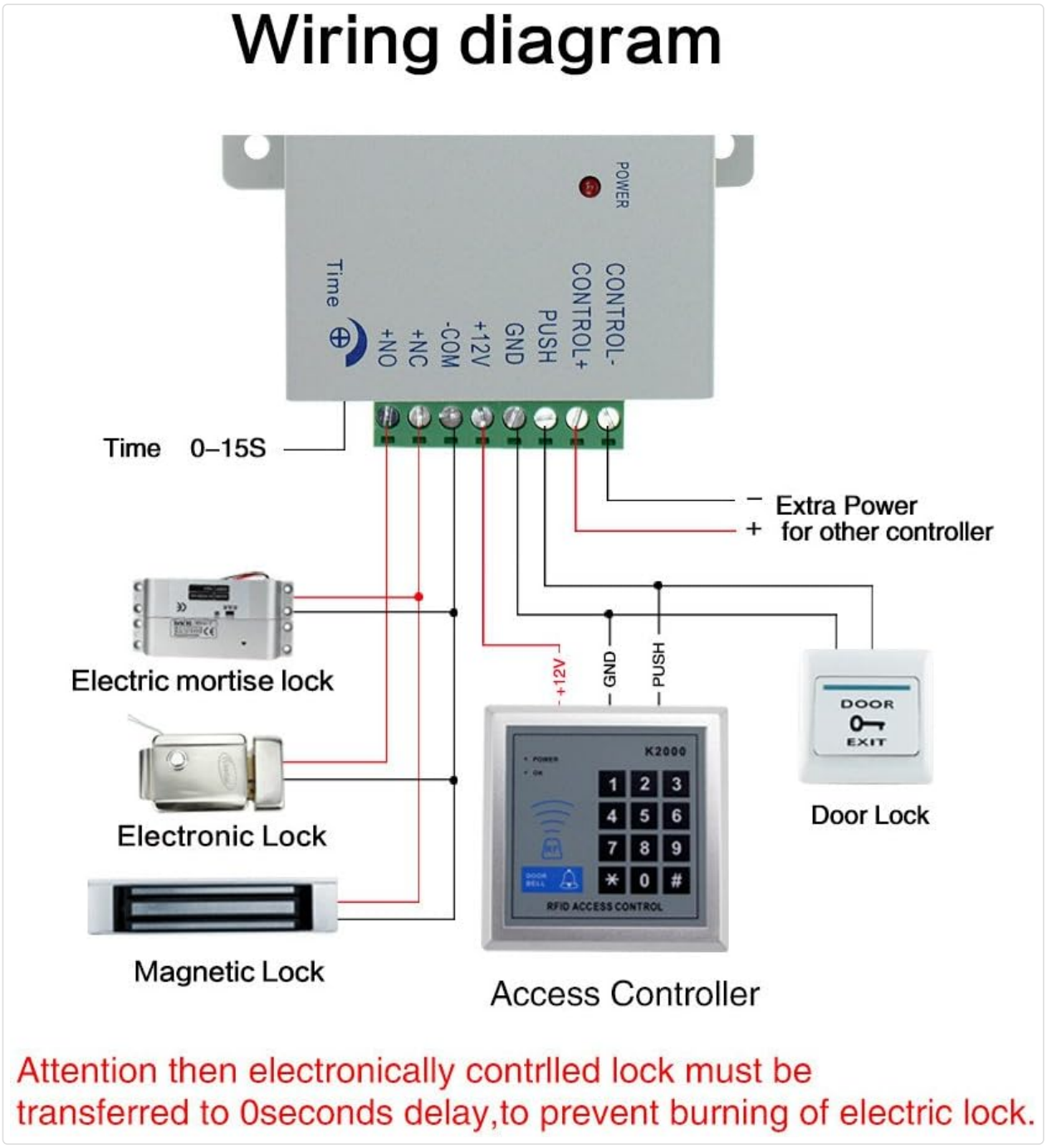


Figure 4: Detailed wiring diagram illustrating connections between the power supply, various electric locks (electric mortise lock, electronic lock, magnetic lock), an access controller (keypad/RFID reader), and an exit button. The diagram shows connections for +12V, GND, PUSH, -COM, +NC, and +NO terminals, along with an adjustable time delay (0-15S).

5.2 Connection Instructions

1. **AC Input:** Connect the AC 100V-240V power source to the designated AC input terminals on the power supply.
2. **DC Output (+12V, GND):** These terminals provide the main 12V DC power for your access control system components. Connect +12V to the positive input of your access controller or lock, and GND to the negative/ground.
3. **PUSH:** This terminal is typically used for connecting an exit button. When the button is pressed, it triggers the unlock mechanism.
4. **-COM, +NC, +NO:** These are the relay output terminals for controlling electric locks.

- **NC (Normally Closed):** The circuit is closed (power supplied) when the lock is in its default state, and opens to unlock. Used for fail-safe locks (e.g., magnetic locks).
- **NO (Normally Open):** The circuit is open (no power supplied) when the lock is in its default state, and closes to unlock. Used for fail-secure locks (e.g., electric bolt locks).
- **-COM (Common):** The common terminal for the relay output.

5. **Time Delay Adjustment:** Use the 'Time' potentiometer on the unit to adjust the unlocking delay from 0 to 15 seconds. **Remember to set this to 0 seconds for electric controlled locks to prevent damage.**
6. **Extra Power:** The diagram shows connections for 'Extra Power' for other controllers, indicating flexibility for complex setups.

6. Operating Instructions

Once properly installed and wired, the OBO HANDS K80 Power Supply operates automatically to provide stable power to your access control system.

- **Power On:** Connect the power supply to the AC mains. The 'POWER' indicator light on the unit will illuminate, indicating that the unit is receiving power and providing DC 12V output.
- **Lock Control:** The power supply will respond to signals from your access controller (e.g., keypad, RFID reader) or exit button to activate the connected electric lock via its NC/NO outputs.
- **Time Delay:** If configured, the adjustable time delay will control how long the lock remains in the unlocked state after activation.

7. Maintenance

The OBO HANDS K80 Power Supply is designed for reliable operation with minimal maintenance. However, periodic checks can help ensure its longevity and performance.

- **Cleaning:** Keep the unit clean and free from dust and debris. Use a dry, soft cloth for cleaning. Do not use liquid cleaners.
- **Connection Checks:** Periodically inspect all wiring connections to ensure they are secure and free from corrosion. Loose connections can lead to intermittent operation or system failure.
- **Environmental Conditions:** Ensure the unit is operating within its specified environmental conditions (temperature, humidity) to prevent premature wear.

8. Troubleshooting

If you encounter issues with your OBO HANDS K80 Power Supply, refer to the following troubleshooting guide:

Problem	Possible Cause	Solution
No power indicator light	No AC input power; faulty power cable; internal fault.	Check AC power source and cable. Ensure power outlet is functional. If problem persists, contact support.
Electric lock not unlocking/locking	Incorrect wiring (NC/NO); faulty lock; faulty access controller; incorrect time delay setting.	Verify wiring according to the diagram (Figure 4). Check lock functionality independently. Ensure time delay is set correctly, especially 0 seconds for electric controlled locks.

Problem	Possible Cause	Solution
Power supply gets excessively hot	Overload; poor ventilation; internal fault.	Ensure total current draw of connected devices does not exceed 3A. Provide adequate ventilation around the unit. Disconnect power and contact support if overheating continues.
Short circuit protection activates frequently	Short circuit in connected wiring or device.	Inspect all wiring for shorts. Test connected devices individually to identify the faulty component.

9. Warranty and Support

OBO HANDS products are designed for quality and reliability. For specific warranty information, please refer to the documentation provided at the time of purchase or contact your retailer.

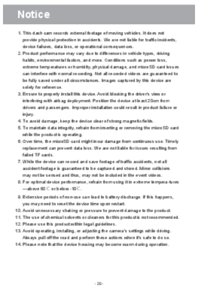
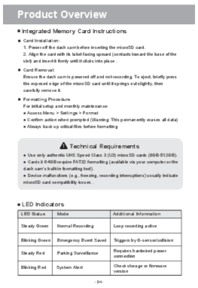
9.1 Technical Support

For technical assistance or inquiries, you may contact OBO HANDS support:

- **WhatsApp:** +86 177 2255 8183 (Available Monday-Sunday, 24/7)

Related Documents - K80

	PNI K80 Power Supply with Timing User Manual This document provides detailed information about the PNI K80 power supply with timing, including its features, technical specifications, wiring diagrams, and important warnings for installation and use.
	PNI K80 Power Supply with Timing - User Manual and Technical Specifications This document provides detailed information on the PNI K80 power supply with timing, including its main features, technical specifications, and wiring diagram. It covers installation, operation, and safety precautions for use with electromagnetic and mechanical locks.
	ORSKEY K80 User Manual and Compliance Information This document provides version information and details the various compliance certifications for the ORSKEY K80 product, including CE, UKCA, FCC, RoHS, and PSE markings.

 Notice	[ORSKEY K80 Dash Cam User Manual and Warranty Information] Comprehensive guide for the ORSKEY K80 dash cam, covering notices, FCC statements, warranty details, support, and company information.
 Troubleshooting	[ORSKEY K80 Dash Cam Troubleshooting Guide] Comprehensive troubleshooting guide for the ORSKEY K80 dash cam, addressing common issues such as card errors, device restarts, Wi-Fi connectivity problems, and incorrect time display.
 Product Overview	[ORSKEY K80 Dash Cam User Manual and Installation Guide] Comprehensive guide for the ORSKEY K80 dash cam, covering installation, memory card management, button functions, LED indicators, and display icons.