LIBO Smart Home K803A

LIBO Smart Home K803A Access Control Power Supply User Manual

Model: K803A

1. Product Overview

The LIBO Smart Home K803A is a standard 12V DC, 3A access control power supply designed to provide stable and reliable power output for various access control applications. This includes electric locks, access controllers, exit buttons, and RFID card readers.

Key Features:

- **Input Voltage:** AC 110V-260V, 50-60Hz.
- **Output Voltage:** Stabilized DC 12V, 3A.
- **Automatic Protection:** Features automatic protection against short circuits in the circumferential circuit, preventing voltage output in such events.
- **Output Control:** Adjustable NC (Normally Closed) / NO (Normally Open) outputs to control various types of electric locks.
- **Compact Design:** Enclosed in a durable iron shell.

2. Setup and Installation

Careful installation is crucial for the proper function and longevity of the K803A power supply. Ensure all connections are secure and correct before applying power.

2.1 Wiring Connections

Refer to the terminal block labels for correct wiring. The power supply features terminals for AC input, DC output, and control signals.

Image: Front view of the K803A power supply showing input/output labels and terminal block.

Image: K803A power supply with the green detachable terminal block for easier wiring.

- **AC Input (110~260V):** Connect the AC power source to the designated input wires. Ensure proper polarity if applicable, though the unit is designed for AC input.
- **DC Output (12V/3A):** Connect your access control system components (e.g., electric lock, controller) to the +12V and GND terminals.
- **Control Terminals:**
  - **CONTROL+, CONTROL-:** For external control signals.
  - **PUSH:** Connect to an exit button or similar device.
  - **COM (Common):** Common terminal for lock connections.
  - **NC (Normally Closed):** Connect to electric locks that require power to unlock (fail-secure).
  - **NO (Normally Open):** Connect to electric locks that require power to lock (fail-safe).
  - **Time:** Adjusts the delay for lock release.

2.2 Important Note for Electric Locks:

When connecting the power supply to an electric lock, the opening time (delay) must be set to 0 seconds. Failure to do so can result in the electric lock being damaged or burned out.

3. Operating Instructions

Once properly installed and wired, the K803A power supply operates automatically to provide stable DC 12V power to your access control system.

- **Power Indicator:** A 'POWER' LED indicator on the unit illuminates when the power supply is receiving AC input and functioning correctly.
- **Automatic Protection:** The unit is equipped with an automatic protection function. In the event of a short circuit in the connected circuit, the power supply will automatically cease voltage output to prevent damage to itself and connected devices. Normal operation resumes once the short circuit is resolved.
- **Time Delay Adjustment:** The 'Time' adjustment knob allows you to set the duration for which the lock remains open after an unlock signal. Ensure this is set to 0 seconds when initially connecting electric locks to prevent damage.

4. Maintenance

The LIBO Smart Home K803A power supply is designed for reliable operation with minimal maintenance.

- **Cleaning:** Keep the unit clean and free from dust. Use a dry, soft cloth for cleaning. Do not use liquid cleaners.
- **Environment:** Ensure the power supply is installed in a dry, well-ventilated area, away from direct sunlight, excessive heat, and moisture.
- **Inspections:** Periodically check all wiring connections to ensure they remain secure.

5. Troubleshooting

If you encounter issues with your K803A power supply, refer to the following troubleshooting steps:

- **No Power Indicator Light:**
  - Verify that the AC input power source is active and connected correctly to the power supply.
  - Check the AC input wires for any damage or loose connections.
- **Electric Lock Not Functioning / Damaged:**
  - **Critical:** Ensure the 'Time' delay setting on the power supply is set to 0 seconds when connected to an electric lock. Incorrect delay settings can cause damage to the lock.
  - Verify that the electric lock is correctly wired to either the NC or NO terminals based on its operational requirements (fail-secure or fail-safe).
  - Check the lock's power requirements to ensure they are compatible with the 12V/3A output of this power supply.
- **Output Voltage Issues:**
  - If the power supply is not providing output voltage, check for short circuits in the connected access control system. The automatic protection feature will disable output during a short circuit.
  - Ensure the total current draw of connected devices does not exceed 3A. Overloading can cause the unit to shut down or malfunction.
- **Unexpected Output Behavior (e.g., output always on):**
  - Double-check all control wiring (CONTROL+, CONTROL-, PUSH) for correct connections and

ensure no unintended signals are being sent.
    - Verify the NC/NO connections are appropriate for your lock type.

If problems persist after following these steps, contact your supplier or a qualified technician for assistance.

6. Specifications

Detailed technical specifications for the LIBO Smart Home K803A Access Control Power Supply.

Specification	Value
Model	K803A
Input Voltage	AC 110 ~ 260 V / 50 ~ 60Hz
Output Voltage	DC 12 V / 3 A
Material	Metal (Iron Shell)
Product Dimensions (L x W x H)	Approx. 120mm x 95mm x 38mm (4.72 x 3.74 x 1.5 inches)
Item Weight	Approx. 0.012 ounces (0.33 Grams)
Connector Type	Screw-in Terminal Block

Image: K803A power supply with key dimensions (105mm length, 68mm width, 34mm height).

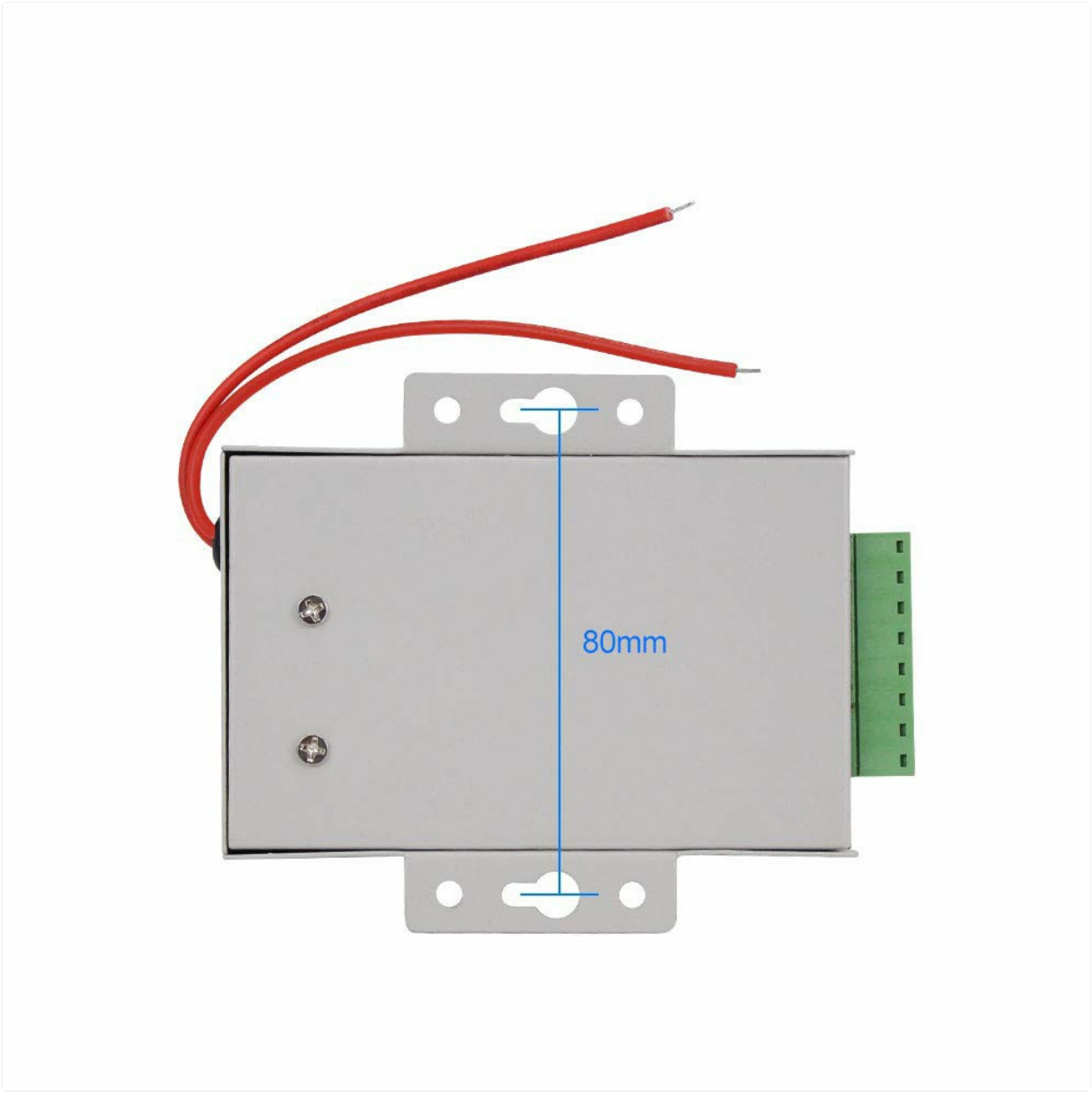

Image: Bottom view of the K803A power supply showing mounting holes and an 80mm dimension.

7. Warranty and Support

For warranty information and technical support, please refer to the documentation provided at the time of purchase or contact the seller directly. Specific warranty terms may vary by region and retailer.