

OBO HANDS T22

OBO HANDS RFID Door Access Control System Keypad T22 Instruction Manual

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your OBO HANDS RFID Door Access Control System Keypad T22. This comprehensive kit includes a stand-alone access control keypad, an electric drop bolt lock, a power supply, a door exit button, and 10 RFID key fobs. The system is designed for secure access management in various environments such as homes, hotels, offices, apartments, and factories.

The system supports multiple access methods including password, RFID card, or a combination of card and password, allowing for flexible security configurations. The electric drop bolt lock is a fail-safe (NC) type, meaning it locks when powered and unlocks upon power loss, ensuring safety during emergencies.

2. SYSTEM COMPONENTS

- **Stand-alone Access Control Keypad:** Supports up to 1000 users with card, password, or card+password access modes. Full programming is possible directly from the keypad without a computer.
- **Power Supply:** Stabilized DC12V/3A output. Features NC/NO outputs for various electric locks and automatic protection against short circuits.
- **Electronic Drop Bolt Lock:** NC mode (Fail-Safe) - locks with power, unlocks without power. Surface-mounted installation with adjustable time delay (0s, 3s, 6s). Constructed with durable, wear-resistant materials.
- **Door Exit Button:** Hard plastic material, 36V DC 3A-5A output. Supports both NC (Fail Safe) & NO (Fail Secure) modes.
- **RFID Keyfobs/Cards:** 10 blue 125KHz waterproof RFID key cards, each pre-programmed with a unique identity number. Detection range of 1-10cm.

CAN ADD 1000PCS USER CARDS

3 Kinds of identification method
125KHz Support Card, PIN, Card+PIN



Figure 2.1: RFID Access Control Keypad. This image shows the keypad unit, highlighting its numerical buttons and card reader area. A hand is shown interacting with the keypad using an RFID fob.



Product Specifications

AC Input Voltage: AC110V ~ 260V \ 50 - 60Hz

Momentary Current: 5A

Operating Temperature: - 20°C ~ + 60°C

Time: 0~30S

Dimension: 140X67X33mm(L/W/H)

Output Voltage: DC12V/3A

Persistent Current: 3.5A

Operating Humidity: $\leq 90\%$

Remote control function: Yes

Figure 2.2: Power Supply Control Unit. The power supply unit is displayed with its input/output specifications and wiring terminals clearly visible.



Product Specifications

Working voltage: 12/24V(Adjustable time delay 0s,3s,6s)

Red-power supply (+) White-COM

Black-Power ground(-) Yellow-NC

Working current: Start state 1.2A Persistent state 120mA

Coil type: Continuous working

Security type: Electric power lock,unlock

Lock core: The diameter of 12.5MM stainless steel, extending the length of 15MM

Locking mode: Magnetic induction

Dimension: 150X34X28(L / W / H)

Figure 2.3: Electronic Drop Bolt Lock. Two views of the electric drop bolt lock are shown, detailing its serial number, CE marking, and adjustable time delay settings.

Door Exit Button

Product specifications

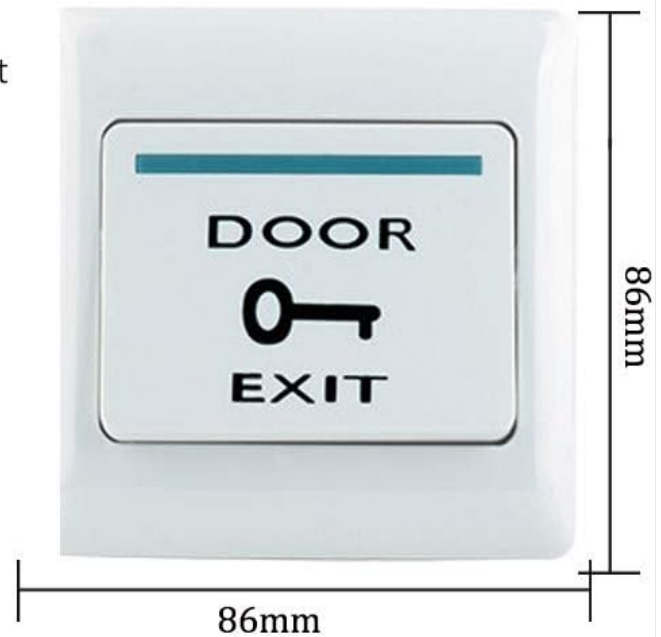
Material: Hard Plastic

Maximum Power Rating: 36V DC 3A—5A output

Support both NC Mode (Fail Safe Mode) &

NO Mode (Fail Secure Mode)

Dimension: 86X86MM (L / W)



Keyfob/Card

Product specifications

125KHz radio frequency induction card, waterproof

Operating frequency: 125kHz

Detection range: 3-10cm

Each card pre programmed a unique identity, is printed on the surface.

Quantity:10pcs.



Figure 2.4: Door Exit Button and RFID Keyfobs. This image presents the square door exit button with 'DOOR EXIT' text and a key icon, alongside a set of 10 blue RFID keyfobs and several white RFID cards.



Figure 2.5: Complete Access Control System Diagram. A visual representation of the entire system connected to a door, showing the keypad, power supply, electric lock, and exit button in an operational setup.

3. SETUP AND INSTALLATION

Proper wiring and installation are crucial for the correct functioning and security of the access control system. It is recommended to consult a qualified technician for installation if you are unfamiliar with electrical wiring.

3.1 Wiring Diagram

Refer to the following video for a detailed wiring and programming guide. Ensure all connections are secure and correctly matched to avoid damage or malfunction.

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Video 3.1: Wiring and Programming Guide. This video provides a step-by-step demonstration of how to correctly wire the access control system components and perform initial programming.

3.2 Electric Drop Bolt Lock Installation

The electric drop bolt lock is designed for surface-mounted installation. Ensure the mortised block with the "detector position" sticker is aligned and in proximity to the bolt block for proper engagement. Only the red and black wires of the bolt mechanism are typically used; white/yellow wires are not connected for standard operation.

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Video 3.2: Electric Drop Bolt Lock Overview. This video demonstrates the packaging, components, and fail-safe (NC type) operation of the electric drop bolt lock, including how to set the delay time.

4. OPERATING INSTRUCTIONS

4.1 Basic Access Methods

- **PIN Code:** Enter your programmed PIN code followed by '#'.
- **RFID Card:** Present your enrolled RFID card to the keypad reader.
- **Card + PIN:** Present your RFID card, then enter your PIN code followed by '#'.
- **Exit Button:** Press the 'DOOR EXIT' button from the inside to unlock the door.
- **Remote Control:** Use the provided remote control to lock or unlock the door.

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Video 4.1: System Operation Overview. This video demonstrates unlocking the door using a PIN, RFID card, remote control, and the exit button, as well as setting a new password and enrolling cards.

4.2 Tuya APP Integration and Management

The access control keypad can be integrated with the Tuya APP for remote management and advanced features.

1. **Add Device to Tuya APP:** Turn on the Tuya APP. Enter '* 123456 # 041 #' on the keypad. Add the device in the app and enter your Wi-Fi password.
2. **Remote Unlock:** Press the unlock icon in the Tuya APP to remotely unlock the door.
3. **Set Temporary Password:** Generate temporary passwords valid for a specific duration or single use via the app.
4. **Member Management:** Add administrators and ordinary members, assign private passwords, and enroll cards through the app's member management section.
5. **Door Keep Open Mode:** Configure specific time periods for the door to remain unlocked automatically.
6. **View Unlock Records:** Access a log of all unlock events, including method and user, directly from the app.

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Video 4.2: Tuya APP Operation Guide. This video demonstrates how to add the device to the Tuya APP, set temporary passwords, manage members, configure door open modes, and view unlock logs.

4.3 Programming Keypad (Direct)

The keypad can be programmed directly without the Tuya APP for various functions.

- **Set Management Card:** Power on and short the OPEN and GND wires. Release after three "di di di" sounds. The red/green light will prompt. Swipe the first card to add it as an administrator card (for adding users) and the second card to delete users.
- **Add User Card (Method 1):** Enter '# programming password # 1 swipe card #'.
- **Add User Card (Method 2):** Enter '# programming password # 1 user code # swipe card #'.
- **Delete User Card (Method 1):** Enter '# programming password # 3 swipe card #'.
- **Delete User Card (Method 2):** Enter '# programming password # 3 card number #'.

- **Delete User Card (Method 3):** Enter '# programming password # 3 user code #'.
- **Delete All Users:** Enter '# programming password # 4 programming password #'.
- **Modify Public Unlocking Password:** Enter '# programming password # 2 new password # new password #'.
- **Modify Programming Password:** Enter '# programming password # 9 new programming password # new programming password #'.
- **Turn on Combined Door Opening Method (Card + PIN):** Enter '* programming password # 0 21 #'.
- **Turn off Combined Door Opening Method:** Enter '* programming password # 0 20 #'.
- **Turn on Normally Open Mode:** Swipe a card to open the door, then press '0 #'.
- **Turn off Normally Open Mode:** Swipe a card or press a password to open the door, then exit normally open mode.
- **Restore Factory Settings:** Enter '* new programming password # 6 new programming password #'.
Alternatively, power on and short the OPEN and GND wires. Release after two "di di" sounds.

5. SPECIFICATIONS

Component	Specification
Access Control Keypad	User Capacity: 1000 users Material: Plastic Proximity Reader Frequency: 125KHz Compatible Cards: EM or EM compatible card Access Modes: Card, password, Card + password External Reader: Not supported Programming: Full programming from keypad, works alone
Power Supply	Material: Metal DC Output: Stabilivolt DC12V/3A Outputs: NC/NO (configurable) Remote Control Function: Yes Protection: Automatic short circuit protection
Electronic Drop Bolt Lock	Mode: NC (Normally Closed) - locks with power, unlocks without power Installation: Unfold install (surface mounted) Time Delay: 0s, 3s, 6s Surface: Scrub treatment, durable and wear-resistant Lock Body: Hexagon screw, fixed panel, anti-theft
Door Exit Button	Material: Hard Plastic Maximum Power Rating: 36V DC 3A-5A output Modes: Supports both NC (Fail Safe) & NO (Fail Secure) Dimension: 86X86MM
RFID Keyfobs/Cards	Quantity: 10pcs Blue RFID frequency key cards Waterproof: Yes Operating Frequency: 125kHz Detection Range: 1-10cm Unique ID: Each card pre-programmed with a unique identity number
General	Item Weight: 1.09 Kilograms (2.4 pounds) Voltage: 12 Volts Control Method: Touch Connectivity Technology: Wired

6. MAINTENANCE

- Regularly clean the keypad surface with a soft, dry cloth. Avoid abrasive cleaners or solvents.
- Inspect wiring connections periodically for any signs of wear or damage.
- Ensure the electric drop bolt lock mechanism is free from obstructions and operates smoothly.
- For remote controls, replace batteries as needed to ensure consistent performance.

7. TROUBLESHOOTING

- **Door not locking/unlocking:** Check all wiring connections, especially to the electric drop bolt lock and power supply. Ensure the lock's mortised block is correctly aligned with the bolt. Verify power supply is active.
- **Keypad not responding:** Check power supply to the keypad. Ensure no buttons are stuck.
- **RFID card not working:** Ensure the card is correctly enrolled in the system. Check the card's operating frequency (125KHz).
- **PIN code not working:** Verify the correct PIN code is being entered. Ensure the programming password has not been inadvertently changed.
- **System unresponsive after power outage:** The electric drop bolt lock is fail-safe (NC type) and will unlock upon power failure. Consider a UPS for continuous operation if this is a critical security concern.
- **Difficulty with programming:** Refer to the detailed programming videos and instructions in Section 4. If issues persist, consider performing a factory reset (see Section 4.3).

8. WARRANTY AND SUPPORT

OBO HANDS products undergo rigorous quality testing to ensure reliability, durability, and compliance with industry standards. For any questions or concerns regarding your product, please contact our support team.

Customer Support: Whatsapp: +86 177 2255 8183 (Mon-Sun 24/7)