# Smart Lock User Manual

Reserves the right to interpret this manual

# Content

# I、Product introduction

## 1.1. Product performance parameters

| | |
|---|---|
| Door lock type | Rfid card door lock |
| Mechanical material | Stainless steel |
| Unlocking mode | Mifare S50 card, mechanical key |
| International standard | ISO14443-A |
| Operating voltage | 4 5# batteries (4.2-6.5V) |
| Open-door power consumption | ≤200mA |
| Duration | ≤0.2 seconds |
| Battery opening life | ≥10000 times |
| Static power consumption | ≤40uA |
| Low voltage alarm | 4.5V(Soil 0.2V) |
| Operating temperature | - 20 ℃ ~ 55 ℃ |
| Storage temperature | - 30 ℃ ~ 70 ℃ |

## 1.2 Product Size
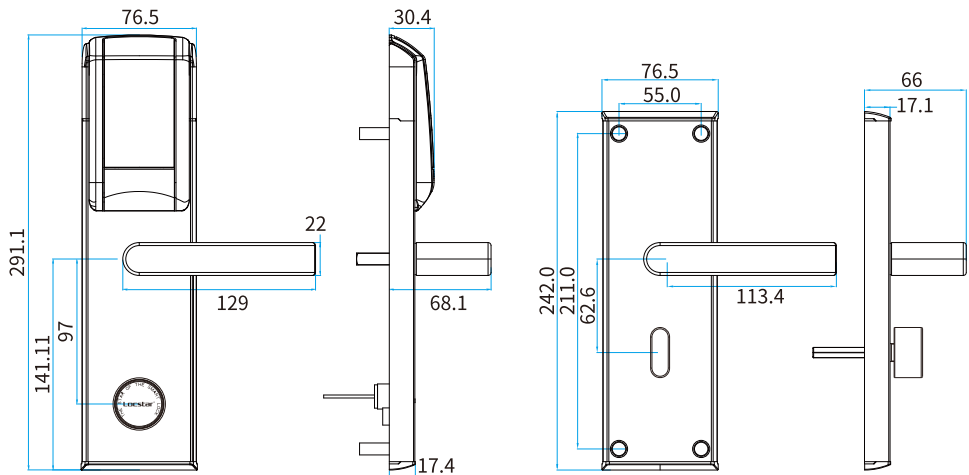
## 1.3 Packing list(accessories in kind prevail, pictures are for reference only)

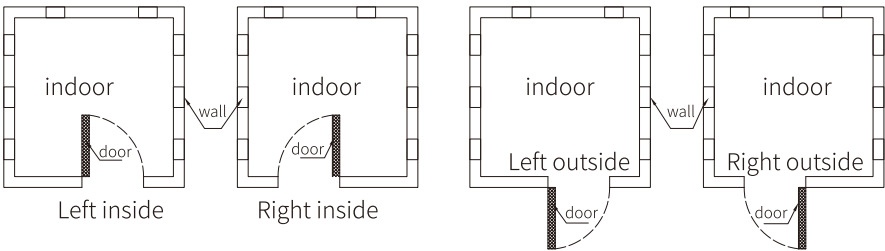| No. | Name | Unit | Quantity |
|-----|------|------|----------|
| 1 | Front panel | pc | 1 |
| 2 | Back panel | pc | 1 |
| 3 | Opening size diagram | pc | 1 |
| 4 | Side panel | pc | 1 |
| 5 | door buckle box | pc | 1 |
| 6 | door buckle | pc | 1 |
| 7 | Mortise | pc | 1 |
| 8 | Mechanical key | pc | 1 |
| 9 | Key hole cover | pc | 1 |
| 10 | Battery box | pc | 1 |

# II、Installation Guide

## 2.1、installation conditions

1.1、Door thickness
- Door lock border ≥110 mm (thickness of inconsistent doors)
- 38mm≤door thickness ≤60mm( custom accessories are required when size exceeded)

- Opening direction



| indoor | indoor | indoor | indoor |
|--------|--------|--------|--------|
| wall / door | wall / door | wall / door | wall / door |
| Left inside | Right inside | Left outside | Right outside |
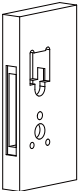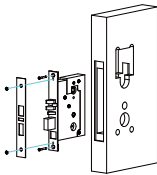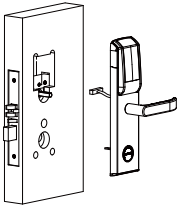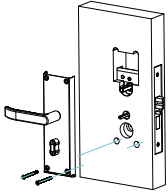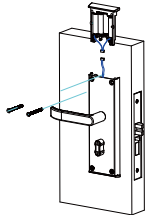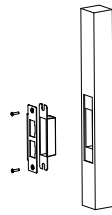
## 2.2、Installation tool (for reference only)



| 1.manual electric drill | 2.pencil | 3.tape ruler | 4.hammer | 5.bit |
|-------------------------|----------|--------------|----------|-------|
| 6.hacksaw | 7.angle ruler | 8.screwdriver | 9.Cutter | 10.chisel |

## 2.3 Opening size diagram (for reference only)



The edge of door

Center line of handle

$55\pm0.1$
69
$83.9\pm0.2$
72
R7
R5
R19
$30.9$
$62.6\pm0.2$
Ø18
$36\pm0.2$
Ø35
Ø10
$55\pm0.2$
28.5
57.3
183.5
203deepth6mm
165deepth120mm
Ø2.5
28.5
6

Installation instructions:
1, Fold thc drilling tcmplatc against the cdgc of door
2, Align the ccntcr linc of handlc with horizontal ccntcr lincof front door.
3, Draw drilling line on thc front door and draw thc top& bottom cdgc linc of sidc tcmplatc on the sidc door.
4, Drill holc through thc door according to the tcmplatc marking.
5, Align thc sidc templatc 's centcr linc with the actual ccntcr lincof door thickncss, and drill holes according to the tcmplatc.

## 2.4 Installation Notes

| ① | ② | ③ | ④ |
|---|---|---|---|
| In order to ensure successful installation, do not exert excessive force when tightening the screws, which may cause damage to the lock | Select correct screw tool | Wearing eye protection devices when opening doors to avoid eye injury | In order to prevent unnecessary damage to the door, when opening the door, please make the opening from both sides, remember to penetrate the opening on one side |

## 2.5 Installaton Steps

| | |
|---|---|
| **2.5.1 Open mortise hole**<br><br>• Draw a horizontal center line on the inside/outside side of the door 1 meter from the ground. | **2.5.2 Install the lock mortise**<br><br>• Insert the lock mortise into the already opened door hole, with a srew ST4*25 fixed on the door.<br><br>• Fix the side trim strip to the lock cylinder using two KM4*6 screws |
| **2.5.3 Front panel installation**<br><br>• Insert the 8 * 8 square drawer into the lock cylinder hole<br><br>• Connect the front panel wiring to the lock cylinder, and then place the wiring inside the door<br><br>• Stick the front panel tightly to the door, and note that the 8*8 square axis needs to be inserted into the handle square hole | **2.5.4 Rear panel installation**<br><br>• Insert the 8*8 square shaft and 5*5 square shaft into the lock cylinder hole<br><br>• Stick the rear panel tightly to the door, and note that the 8*8 square axis needs to be inserted into the handle square hole<br><br>• Fix the front and rear panels with 2* M5 screws according to the thickness of the door |
| **2.5.5 Battery box Installation**<br><br>• Place 4AAA batteries in the battery box, and then connect the 2P cable of the battery box to the 2P cable of the lock cylinder<br><br>• Install the battery box into the installation position of the rear battery box, and fix it with two M5 screws according to the thickness of the door | **2.5.6 Commissioning after installation**<br><br>• Rotate the handle to check the flexibility of the front and rear handles<br><br>• Open the lock cover, insert the mechanical key, and turn the key clockwise to check if the door is opened normally<br><br>• Test the door lock function after setting the door lock according to the door lock operation guide |
| **2.5.7 Door buckle box installation**<br><br>• Close the door to the door frame, use a pencil to draw the position of the lock tongue on the door frame, and then draw the shape of the opening on the door frame:<br><br>• After opening the holes, place the buckle box and door buckle plate into the holes in the order shown on the left, and fix the door buckle plate with 2 bottles of screws;<br><br>• Check if the locking tongue can fully retract after closing the door. | |

# III、Software Instructions

## 3.1. System requirements

- Windows7 64-bit or more
- More than 2G memory
- One available USB port

## 3.2. System Installation

### 3.2.1 Encoder installation

Encoder installation: Connect the USB cable to the USB port of the computer and the USB port of the encoder.

**Note:** In order to ensure normal use, the USB port on the computer must be connected to the USB socket on the motherboard (located at the back of the chassis). Some computers, such as the USB socket connected to the front of the chassis, may not work properly.

**Note:** The encoder driver must be installed before issue cards. The following picture shows the encoder driver installation file.

| 名称 ^ | 修改日期 | 类型 | 大小 |
|---|---|---|---|
| x64 | 2018/6/23 20:04 | 文件夹 | |
| x86 | 2018/6/23 20:04 | 文件夹 | |
| an197 | 2015/5/29 10:30 | WPS PDF 文档 | 80 KB |
| CP210xVCPInstaller_x64 | 2014/4/12 5:56 | 应用程序 | 1,026 KB |
| CP210xVCPInstaller_x86 | 2014/4/12 5:56 | 应用程序 | 901 KB |
| dpinst.xml | 2014/4/12 5:56 | XML 文件 | 12 KB |
| ReleaseNotes | 2014/4/12 5:56 | 文本文档 | 11 KB |
| SLAB_License_Agreement_VCP_Wind... | 2014/4/12 5:56 | 文本文档 | 9 KB |
| slabvcp | 2014/4/12 5:56 | 安全目录 | 12 KB |
| slabvcp | 2014/4/12 5:56 | 安装信息 | 5 KB |

### 3.2.2 Software Installation

(1)Select the software installation package, double-click to start the installation and select the next step

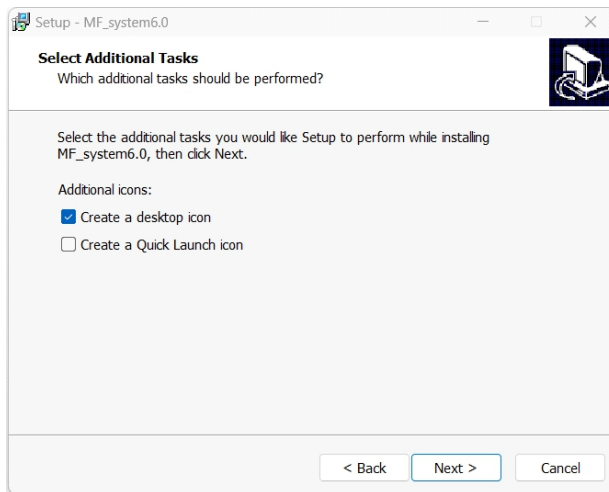| MF_system6.0 | 2023/7/29 13:54 | 应用程序 | 3,578 KB |
|---|---|---|---|

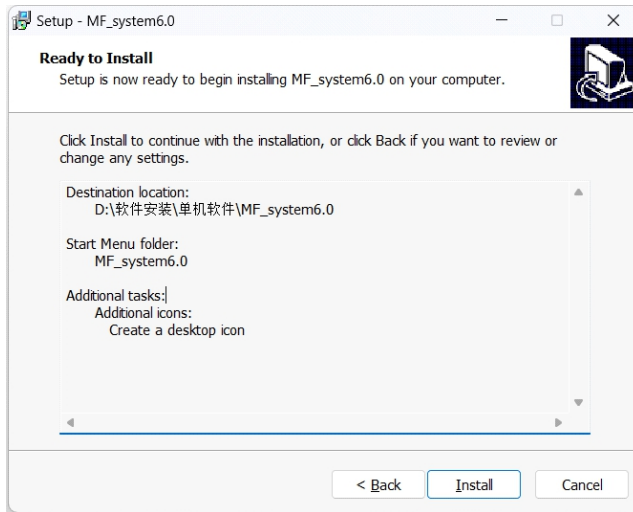(2)Select the software installation address and click Next
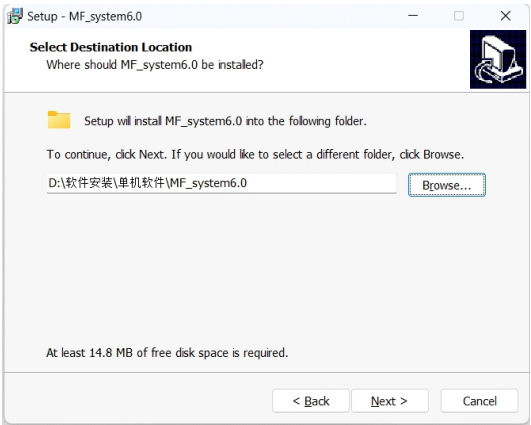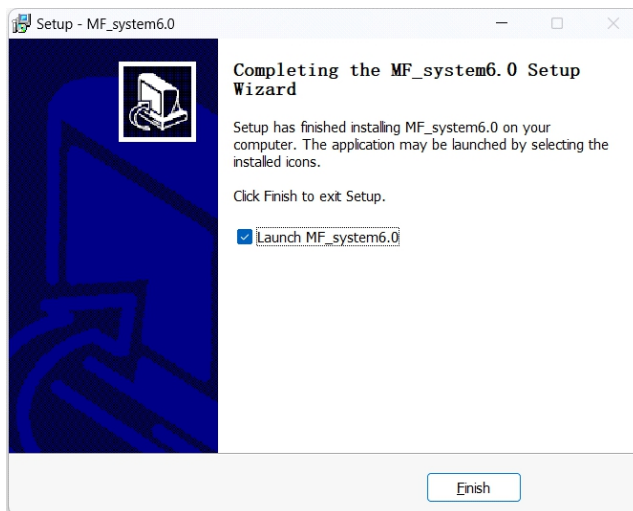
(3)Select shortcut address, default to next step
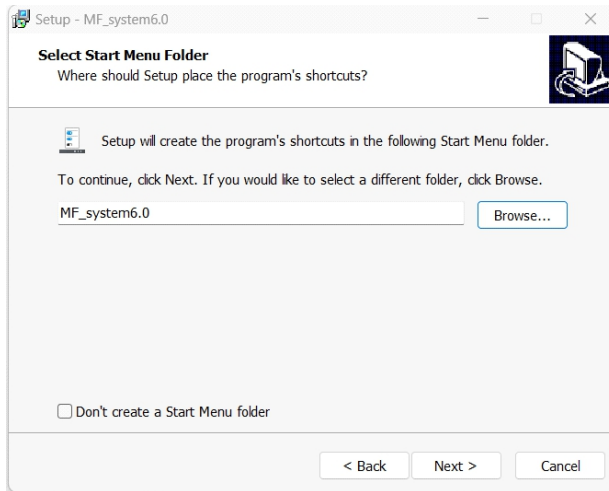


(4)Select Create Desktop shortcut icon and click Next

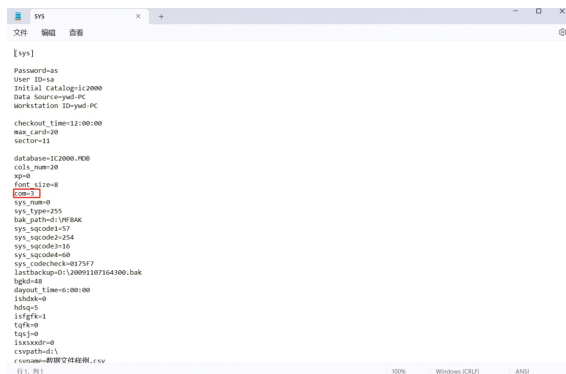(5)Confirm all installation configurations and click Install



(6)Select whether to open the software and click Finish

(7) Configure the connection file SYS

● Open the installation location of the software, locate the SYS file and open it for editing

● Sets the COM interface



Attention:

SYS file COM interface Settings please check the COM interface displayed after the local computer is connected to the card issuer, refer to the following figure



## 3.2.3 System initialization:

When the system is run for the first time,the default user name is **SUPER**, the password is 0. This is a super administrator. **(** ** For security reasons, change the user's password immediately ** **)**

Enter the user name and password on the login screen. The system will check the serial port and encoder. If the encoder is detected, it automatically enters the door lock software. If the encoder is not detected, the software will prompt you whether to continue. Select "Yes" to enter the software for demonstration (the encoder function is invalid).
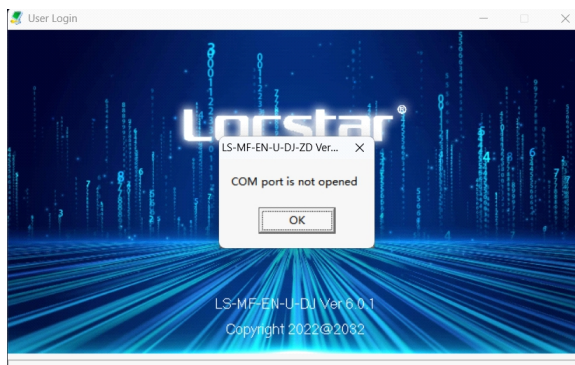
## 3.3. System operators

Three levels of operators are configured: **super administrator, administrator, and Front desk operator**. Operators at all levels have the following permissions:

**Super administrator**: can use all system functions.

**Manager**: can use all the operating functions of the system except the restore authorized information operator management function;

**Front desk**: Only the function of issuing guest card and changing personal password.

## 3.4. Key cards types and functions

| Card Type | Function | Operater |
|---|---|---|
| Authorization card | Used to set, clear, and update the door lock password | System administrator |
| Master Card | Used to open all locks | General Manager, customer service manager |
| Building Card | Used to unlock all the locks on the corresponding building | Customer service manager |
| Floor Card | Used to open all door locks on the corresponding floor | Floor attendant |
| Clean Card | Used to open all door locks in a specified area | cleaner |
| Emergency Card | Used to open all locks and keep them normally open | General MANAGER |
| Guest Card | Used to open the door lock of the specified room | Patron |
| Terminate Card | Used to terminate the use of the guest card | Floor service staff |
| Lock out Card | For closing door lock | Customer Service Manager |
| Room No. Setting Card | Set door lock parameters (building number, floor number, room number) | Hotel maintenance |
| Foreman Card | Used to open all door locks on the corresponding floor | Duty manager |
| Passage Card | Set and deactivate the normally on function | System administrator |
| Clock Card | Used to check the lock clock | Hotel maintenance |
| Alarm Card | Set and clear the alarm function of door lock false close and open door | Hotel maintenance |
| No Disturb Card | Set and clear the anti-lock do not disturb function | Hotel maintenance |
| Check-out card | For early termination of guest card use | Duty manager |

# IV、Software operation instructions

## 4.1 Software Login

Double-click the desktop shortcut icon 'MF_system6.0', and enter the account and password to log in. The default administrator account is 'Super' and password is '0'.
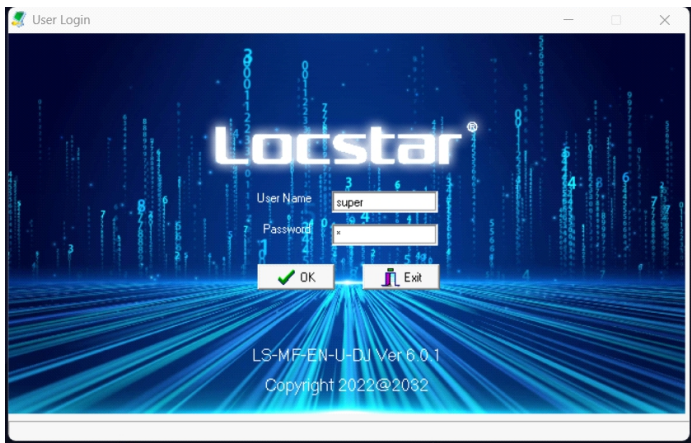


## 4.2 Operation Administrator

● **Function**: Add, delete, and query maintenance operators and their operation rights

● **Operating instructions**

Click the "Operator Management" module (or Ctrl+E) in the menu "Super Administrator" to enter the following screen.
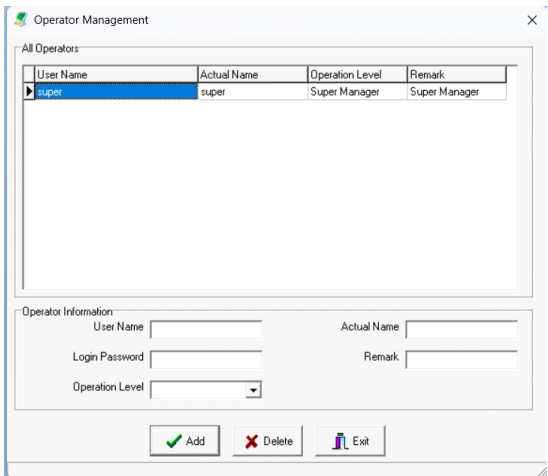
(1) Add an operator: First enter the user name, real name, login password, remarks, select an operation right, and then click the Add button to complete the operator additon



(2) Delete an operator: Select the operator you want to delete from the table on the screen, and then click the Delete button
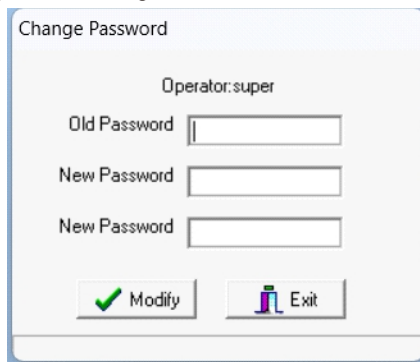
## 4.3 Change Password

● **Function**: Modify personal login password

● **Operating instructions**

Click "Change Password" (or F11) in the menu "Tools" to enter the following screen:

Then enter the old password and the new password, the new password needs to be entered twice, click OK to complete the password change.



## 4.4 Room Setup
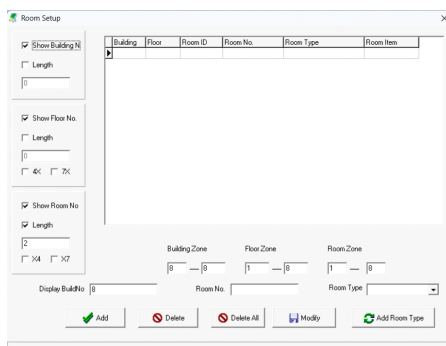
● **Functions**: Add, delete, modify room number

● **Operating instructions**

Click "Guest Room Setup" in the menu "System Setup"



● **Add room**

Enter the building number, floor, and room number range that needs to be added (building number cannot exceed 10, floor number cannot exceed 30, and room number cannot exceed 100). Select a room type from the room type drop-down box, and then click the add button to complete the room number addition within the filled range

For rooms that do not require room numbers such as 04, 14, 07, and 17, please tick in front of X4 and X7

For rooms that do not require floors 4, 40, 7, 70, etc., please tick in front of 4X and 7X

For example, if you need to fix the number of digits in the display of building number, floor, and room number, first check the fixed length in front of the building number, floor, and room number that needs to be fixed on the left, and then modify the corresponding fixed length.

- **Modify room type**

  Select the room you want to modify, and then select the corresponding type from the drop-down options of the room type to complete the modification



- **Modify room number**

  Select the room you want to modify in the table, and then enter the modified room number. Click the modify button to complete the operation (if the user does not click the modify button, the modification is invalid).

● **Delete room number**

Select the room number in the list box above and click the Delete button
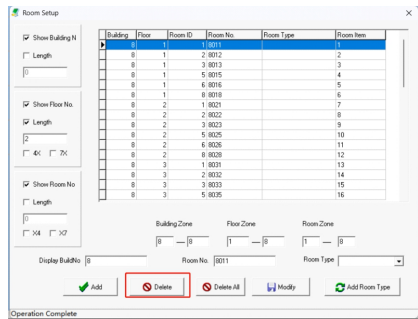


● **Delete all**

Click the Delete All button
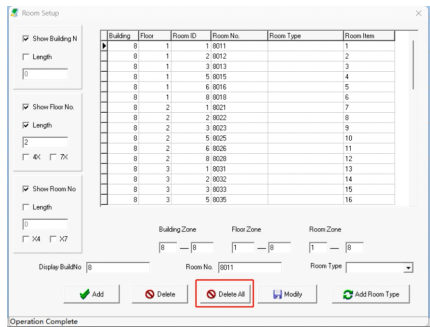


## 4.5 Room Type Setup

● **Function**

Add or delete room types

● **Operating instructions**

Click the Add Room Type button to the following figure:
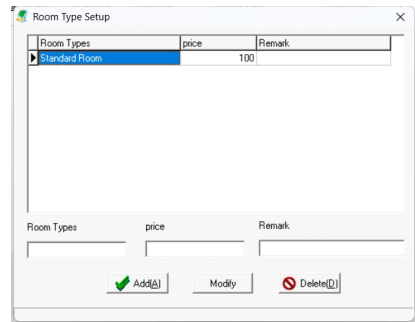


Enter the room type to be added, click the add button, select the option to be deleted, and click the delete button to complete the deletion operation

## 4.6 Maid Zoon Setup

● **Function**: Set the cleaning area range

● **Operating instructions**

Add Area: Click on 'Maid Zoon Setup' (or Ctrl+B) in the' System Setup' to enter the following screen. Add Area: Enter the area number and description, and then click on the add button.

Delete Area: Select the area number to be deleted from the area list above, and then click the delete button to delete it



## 4.7 System Parameter Setup

● **Function**: Set system parameters

● **Operating instructions**

Click "System Parameters" in the menu "System Setup" or system parameters in the toolbar (or Ctrl+D) to enter the following screen:

**Default check-out time**: The default check-out time for the guest card

**Maximum amount of guest cards**: The maximum number of cards that can be issued in each room. If the setting is exceeded during the issuance of guest cards, a prompt will be given that no more guest cards can be issued.

**Shift check out data to tomorrow after** : The system will compare the current time with the time. If the guest checks in before that time, the system will change the check out time to the same day time.

**Room Amount per Row**: The number of rooms per row displayed on the interface (default to 20 rooms per row) can be adjusted by users according to their needs.

**Interface width**: This setting can change the display size of the room number table on the main interface.

**Deadbolt setting**: Whether the system door opening card (only valid for guest cards) can unlock the deadbolt lock, users can set it to be able to unlock the deadbolt lock or not according to their own needs.

**Guest Card Settings**: This option controls whether the guest card must be a new card when issued.

**Advance lodging**: This option controls whether the check-in time on the guest card is advanced, and the number of hours in advance is the set data.

# 4.8 Permission Settings

● **Function**: You can modify the operation rights of the system operator

● **Operating instructions**

Click "Permission Settings" (or Ctrl+G) in the menu "Adminstation Manager" to enter the following screen: Select the operator category to be modified on the left, and then check or cancel the operation permission of the corresponding name on the left, and then click the triangle button to modify, and then click the tick button to save the operation to complete the modification operation
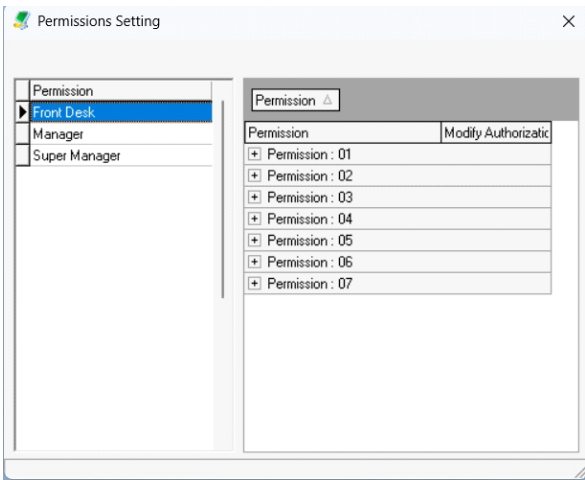
## 4.9 Issuance of various cards

● **Function**: Store authorization information for this system

● **Operating instructions**

Card issuance: Click on the 'Issue Card' function in the' Card Management 'menu, or click on the' Issue Card' function in the toolbar (or Ctrl+F4) to enter the following screen. Then select the issue card page, and then select the card type to be issued. You can enter the name, ID number and remarks of the cardholder as required. Then click the OK button to issue the card. Please determine if the release was successful based on the status below the screen



● **Remarks:**

If you want to update the authorization card, you must first use the old system's clear authorization card to clear the authorization of the door lock, and then cancel all the original issued cards before issuing a new authorization card (if some rooms still have records, you can clear them by checking out without card).

If the original authorization information in the door lock has not been cleared, and the authorization of the door lock system needs to be updated at this time, the mechanical key can be turned to make the door open and forcibly cleared with the current new setting authorization card

## 4.10 Guest check-in

● **Issue guest cards**

Function: When a guest registers for accommodation, a guest card corresponding to the room is issued, and the corresponding room door lock can be opened within the valid time

● **Operating instructions**

Select a room on the room status table, as shown in the following figure. After modifying the number of check-in days. Click the OK button or press the Enter key to issue the guest card. After successful release, you can use the up and down keys or left and right keys on the keyboard to change the room number.

● Click "Issue Guest Card" in the menu "Check In" or "Issue Guest Card" in the toolbar (or F2), enter the picture below, select the room number and enter the corresponding information, and click the OK button to issue the card



● **Remarks**:

Room number must be entered. Option to report loss for issuance. When a guest card in a certain room is lost, in order to prevent others from using this card to open the door lock of the room, it should be reported as lost and issued. After unlocking the guest card issued for loss reporting, the original lost guest card will not be able to unlock the door of the guest room.

## 4.11 Changing Rooms

● **Functions**

Change rooms for guests

● **Operating instructions**

Click on "Change Room" (or F4) in the menu "Check In" with the mouse, enter the room number, and click the change room button to proceed with the change.



## 4.12 Revise Check Out Time

● **Functions**

Modify the guest's check-out time.

● **Operating instructions**

Click on "Revise Check Out Time" (or F5) in the menu "Check in" , select the check out time, and click the "Revise Check Out Time" button to modify the check out time.

## 4.13 Erase Guest Card

● **Function**: After the guest checks out, cancel the guest's guest card.

● **Operating instructions**

Click on "Erase Guest Card" in the menu "Check in", press the Erase button or the Delete key on the main interface to cancel the guest card.
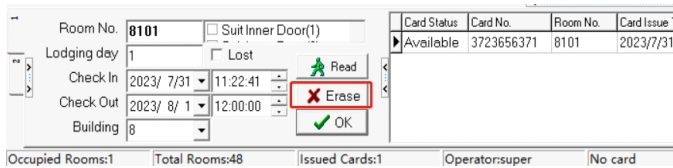


● **Remarks:**
This functional module can only erase guest cards

## 4.14 Room status

● **Function**: Display seven types of room status, including Clean Room, Occupied Room, Reserved Room, Private Room, Prpairing Room, Forbidden Room, Non-clearned Room.

● **Operating instructions**

Select a room and right-click to pop up the room status menu, and select an item with the left mouse button to change the room status.
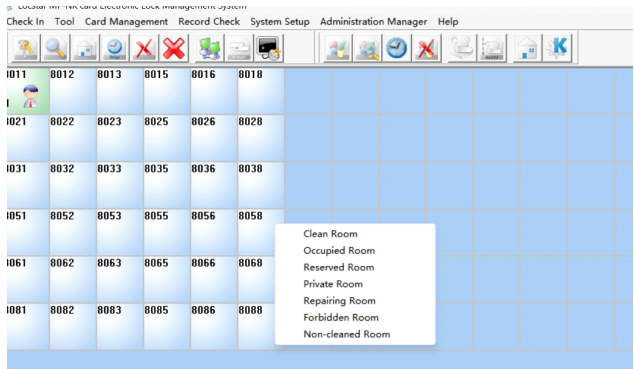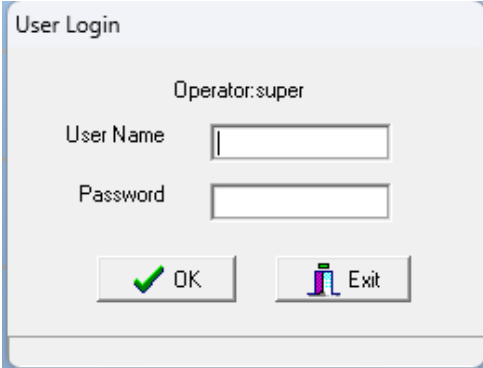
## 4.15 Shift handover

● **Functions**

Conduct staff shift

● **Operating instructions**

Click on the 'Operator Shift' function in the 'Tools' (or F10) menu, enter the code and password of the new staff member, and click the OK button.
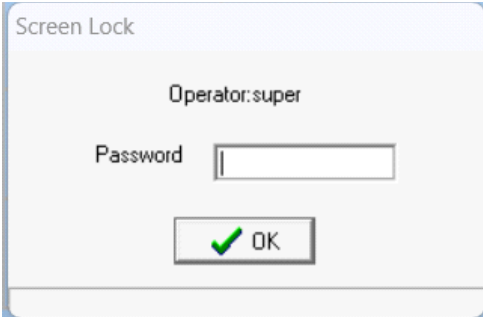


## 4.16 Screen Lock

● **Functions**

Lock the screen, you must enter a password to use the software again

● **Operating instructions**

Click on the 'Screen Lock ' (or F12) function module in the 'Tools' menu to enter the following screen. Only by entering the password of the operator on duty can enter, otherwise you will need to shut down the system and re-enter it.

## 4.17 Reading and Erase Various Cards

● **Functions**

Used to read or cancel all cards issued by this system

● **Operating instructions**

Click on the "Read Cards/Erase Cards" function module in the "Card Setup" menu, or click on the "Read Cards/Erase Cards" function module in the toolbar (or Ctrl+F5 (Read Cards) or Ctrl+F8 (Erase Cards). After entering the operation interface, place the card above the sensing area of the card issuer, and the system will display the card information. After confirming the information inside the card, if you want to erase the card, click the Erase button. After successful cancellation, a new card will be displayed in the bottom left corner of the screen.



## 4.18 Data Management

● **Functions**

Clear records of invalid cards used in the system

● **Operating instructions**

Click on 'Data Management' (or CTRL+F9) in the 'Card Setup' menu, select a time period, and click on the data delete button to manage the data.

## 4.19 Re-Authorization

● **Functions**

Read the authorization card and restore the system authorization to the authorization on this card

● **Operating instructions**

Place the authorization card you want to restore authorization on the reader and click on 'Restore Authorization Information' in the dropdown menu 'Administration Manager' (or Ctrl+F) with the mouse
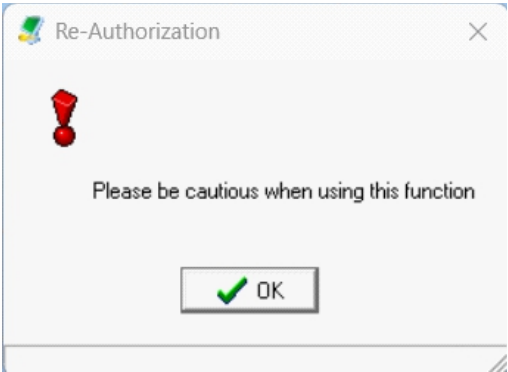


## 4.20 Help

● **About us**

To display the software version, use the mouse to click "About Us" or "Ctrl+z" in the "Help" dropdown menu.



●

**Exit the system**
You can click on "About Us" or "Ctrl+Q" in the dropdown menu to exit this system

# V、Door lock maintenance and troubleshooting

## 5.1 Common problems and solutions

| 1. Software problem analysis | | |
|---|---|---|
| Problem | Problem Discription | Solutions |
| Issue Cards Problems | tip: No card | No card or the card isn't on the right place. |
| | tip: correction error | Card isn't issued successfully. Need to issue again. |
| | tip: Port communication error | The encoder isn't connected properly or the port of PC is occupied. |
| | tip: data of card error | Card isn't issued successfully. Need to issue again. |
| | tip: not detect the blank card | The card has been issued and need to be erased and issued again. |
| | tip: Authorization error | Card isn't fit your software and need to change it with factory. |
| Guest card can't unlock thelock (Master card and floor card canunlock it) | LED blinks and beeps twice. | 1.The guest card is expired,Issue this card again. 2.The time of lock is wrong.Correct the time of lock. |
| | Red LED blinks and beeps for four times. | 1.The guest card doesn't match this room No,Issue this card again. 2.The lock doesn't match this room No, Reset the room No. of lock. |
| | No action | 1.The card is damaged, Change a new card. 2.The card isn't issued, Issue this card again |
| Floor card,clean card and guest card can't unlock the lock (Master card can unlock) | Red LED blinks and beeps twice. | 1.Floor card is expired, Issue this card again. 2.The time of lock is wrong, Correct the time of lock. |
| | Red LED blinks and beeps for four times. | 1.The floor No., building No. ,room No. and clean district of lock doesn't match the floor No., building No. ,room No. and clean district of card, Issue card again. 2.The lock doesn't match this room No., Reset the room No. of lock. |
| | Blue LED blinks and beeps for three times. | 1.The deadbolt works.Open the deadbolt. 2.The tiny switch of the mortise damaged,.check the tiny switch and replace it if damaged. |
| | No action | 1.The card is damaged, Change a new card. |
| Master card, floor card and guest card can't unlock the lock. | No action | 1.The battery is used out, Change the battery. 2.The authorization error. Reset the lock with Authorization card again. 3.PCB is broken, Change the PCB. |
| | Blue LED is blink and motor has no action. | 1.PCB is broken, Change the PCB. 2.Change the battery. 3.Motor is broken. Check the motor and the wire(If the motor is broken, need to change the motor.) |

| 2. Lock Mechanical problems | | |
| --- | --- | --- |
| Problem | Problem Discription | Solutions |
| Latch problem | The latch can't be out | Check the side panel of mortise if it is on the right place and reinstall it . |
| Deadbolt problem | The deadbolt can't be locked. | Check the strike if it is on the right place and reinstall it. |
| can not unlock | Swipe the card and blue LED blink, but can't unlock and motor has no action. | 1.If the battery is used out, change the battery. 2.The motor is broken and change it. |
| | The door can't be unlocked and the latch can't be stretched. | Check the latch if it isn't out or inflexible and adjust the side panel. |

| 3. Encoder problems | | |
| --- | --- | --- |
| Problem | Problem Discription | Solutions |
| Encoder Problem | LED isn't blinked. | Change the encoder |
| | Can't read and write the card, tip no card | Change the encoder |
| | Tip: can't detect the encoder | 1.Check the connect line if it loose. 2.Change the encoder |

## 5.2 Door lock maintenance

● **Clock calibration**

The accuracy of the door lock clock will directly affect the use of the key card. Therefore, it is necessary to regularly check (collect with a data card). If it is not correct, it should be calibrated in a timely manner, using the same method as setting the clock. When repairing the door lock, if the power outage exceeds 5 minutes, the door lock clock should be reset after the repair is completed.

● **Replace the battery**

When the battery is depleted to the alarm voltage, insert any card and the buzzer will beep continuously once, with a red light on. If a valid door opening card is inserted, the buzzer will beep twice continuously, with the red light on first and then the green light on. The door can be opened about 50 times. At this time, the battery should be replaced in a timely manner. The operation is very simple. Remove the side trim panel from the side, pull out the battery box, install a new battery, reinstall the battery box, and then reinstall the side trim panel.

● **Backup mechanical key unlocking**

If the card key cannot unlock (door lock failure or battery depletion), a backup mechanical key can be used to unlock. First, use a special tool to remove the lock cover, and then use the mechanical key to unlock the door lock.

Attention: After opening the door lock, it should be repaired in a timely manner.

● **Maintenance and refurbishment**

Regularly wipe the surface of the lock with a clean soft cloth or paper, and do not use water, alcohol, or other chemical cleaning agents to clean the surface. If there are scratches on the surface of the lock body and handle, the decorative panel and handle can be replaced.

● **Add lubricating oil**

If the lock cylinder is not flexible or cannot maintain the correct position, lubricating oil can be added to the lock cylinder. The method is as follows: remove the side trim panel, spray oil into the lock cylinder with an oil gun (note: oil should not be sprayed onto the motor), and at the same time, turn the handle and knob by hand until the door lock is flexible (note: do not spray too much oil, as long as the lock cylinder is flexible).

## 5.3 Precautions

- The door lock handle sheath should be removed after the door lock is officially put into use.
- The door lock battery must be alkaline.
- Do not use acidic substances to clean rooms or door locks.
- Maintain good ventilation in the room, especially in rooms that have been unoccupied for a long time. Regular ventilation is essential.

# ──○ Warranty Card ○──

1. The manual and warranty card are included in the factory default packaging for each product. After installation, please fill in the warranty card and keep it properly as the warranty certificate.

2. Full grantee: 1 year

3. The following are not covered by the warranty:

A. Damage caused by accidental factors or human behavior and external forces including violent tampering, un-suitable voltage inputted.

B. Force majeure causedby natural disasters, such as earthquake, fire, flood etc

4. We charge corresponding fees for those beyond the warranty scope.

5. If the product fails, please contact the local distributor for repair, and write down the specific address, name, telephone number and fault phenomenon.

| | | |
|---|---|---|
| **Product info** | Product Name | |
| | Product Model No | |
| | Purchase PrIce | |
| | Purchase Da | |
| **User Info** | User Name | |
| | User Phone No | |
| | Delivery Address | |
| | Post code | |
| **DistributorInfo** | Distributor | |
| | Address | |
| | Phone No | |
| | lnvoice No | |
| | Distributor Chop | |

### Maintenance Record
(Filled in by the maintenance staff)

| Maintenance Date | Fault Phenomenon | Maintenance Record | Authorized Maintenance Chop |
|---|---|---|---|
| | | | |
| | | | |
| | | | |