

Landwell Intelligent Key Management System User Guide

For i-keybox

V1.3

03/12/2022

Beijing Landwell Electron Technology Co., Ltd

Version History

Version	Date	Who	Description	Approved by
1.0	7/16/2021	Bruce	Initial version	
1.1	7/22/2021	Bruce	Add information of the WEB management	
1.2	2/16/2022	Bruce	Add mobile app	
1.3	3/12/2022	Bruce	Add wall mounting and power	

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1. Introduction

This User Guide has been prepared to assist you (the end user) with the operating basics of the Landwell i-keybox. It covers the relevant knowledge about how to use the intelligent key cabinet device and software, which is a supplement to the in-depth product training that you get from our experienced project manager after the system installation and commissioning.

1.1 Summary of i-keybox

Keys give access to vehicles, lockers, facilities, equipment, and more, making them one of your most valuable assets. How many keys do you have in your management? And who owns which key?

Landwell i-keybox is an electronic key management system. It allows businesses to better protect their commercial assets like vehicles, machinery, and equipment. The system is made by LANDWELL and is a locked physical cabinet that has individual locks for each key inside. Once an authorized user gains to the locker, they can get access to the specific keys they have permission to use. The system automatically records when a key is signed out and by whom. This increases the level of accountability with your staff, which improves the responsibility and care they have for the organization's vehicles and equipment.

1.2 Glossary overview

- [1] System The term 'system' refers to the i-keybox unit.
- [2] Key Tag The heart of the i-keybox system. It contains a small RFID chip that allows the system to identify the keys(s) attached.
- [3] Security Seal The one-time security seal is used to attach the key(s) to the key tag. Once the seal has been crimped, the only way to detach the keys from the key tag is to cut the security seal using a pair of heavy-duty cutters.
- [4] Users Users are added to the system by an administrator and can either be a standard user or another administrator. This is done from the user wizard in the admin section of the i-keybox.
- [5] Permissions The permissions section of the i-keybox allows you to easily identify who has access to what keys and allows you to edit each user's permission.
 - [6] Permission Group A set of users with the same operation authority and the same key authority
 - [7] Multi-Verification The person using the key will not be allowed to remove the preset key(set) unless

one of the preset person(s) login to the i-keybox to provide proof

- [8] Event The purpose of using the key
- [9] Reservation Key reservation is a short-term exclusive use of the available keys within the permissions. The initiation takes effect immediately. During the validity period, no one except the administrator can access the key.
- [10] Application Key application is a request for temporary access to the key, and it will take effect after the administrator approves it.

2.i-keybox Overview

The Landwell i-keybox system uses touch screen technology for an easy, user-friendly interface. i-keybox does not require the use of a stylus or any other navigation device, to use the system simply click on the desired buttons with your finger.

2.1 Panel

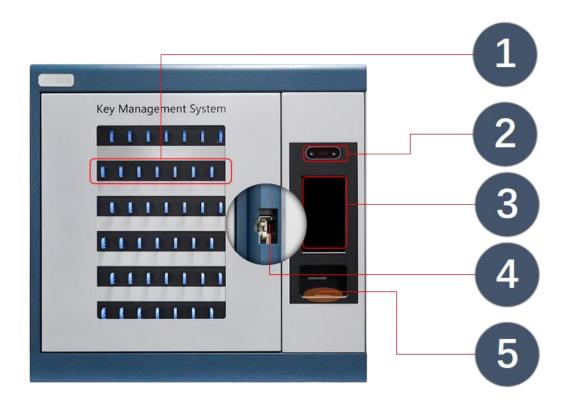


Figure 2-1 i-keybox Panel

① Key Slot Strip – Several key receptor slots. Provide functions such as locking, monitoring, identification, and indication of keys.

- ②Facial Reader Collecting the user's facial features.
- ③Touch Screen Built-in Android OS, and provide user-friendly interaction.
- (4) Electric Lock Door Access Control.
- ⑤External RFID Reader Reading the information of key tags and user cards.

Fingerprint Reader – Collecting user fingerprints.

2.2 The Touch Screen

2.2.1 Screen Saver



Figure 2-2 screen saver

If the i-keybox system is not active for 30 seconds (or other settings), then the system will go into the 'Standby page'. To use the system again simply press anywhere on the touch screen.

2.2.2 Touch Command



Click - Selecting an onscreen button then immediately releasing will activate it.



Click & Hold - Selecting and holding certain directional buttons will cycle through menus and various options



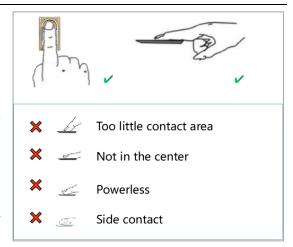
Scroll: Swiping up and down on a list or menu will allow you to scroll through the various

2.3 Fingerprint Sensor

The high-security industrial-grade capacitive fingerprint in this system requires an adaptation period for its use, so don't have any concerns when it fails to succeed. Therefore, be sure to operate in a standardized manner, and you will get a higher success rate after getting used to it.

How to collect fingerprints correctly?

- a. Fingerprints with clear lines should be selected for the collection, and fingers should be kept clean;
- b. The finger should be in full contact with the collector without shaking the finger.
- c. The user should press slightly harder to make the fingerprint come into close contact with the collector and hold it for 1-2 seconds.



2.4 Network

There are two networking methods for the Landwell i-keybox: Ethernet and Wi-Fi. You can configure them while logging into the i-keybox system via an administrator account.

2.5 Wall mounting

Notice: This chapter Applies to i-keybox-S and i-keybox-M. And please do not lock the mechanical key into the inside of the box.

2.5.1 How to wall

- 1) Design the locations of installation, power input, and network access in advance. Make sure that the wall is load-bearing.
- 2) Draw and punch holes in the wall according to the cutout positions of the stickers and wall-mount components.
 - 3) Wall mount the components.
 - 4) Connect the power cable (and Ethernet cables).
 - 5) Wall mount the i-keybox system.
 - 6) Screw in the two screws located inside the key panel
 - 7) Power On to test the system.

2.5.2 How to dismantle

Removal and installation are inverse processes.

2.6 Power the System

The i-keybox system should be connected to an electricity supply. It's suggested that connect the system to a UPS backup power. An optional battery backup will maintain the system in the event of power interruptions (a fully charged battery can work up to 12 hours).

2.6.1 Power Parameters of i-keybox

Power Supply	Input: 100-240V AC, Output: 12V DC
Power	12V 2amp max

2.6.2 Using UPS backup power

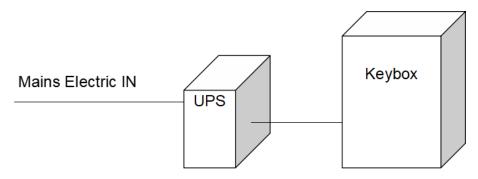


Figure 2-6-2 UPS for keybox

2.6.3 Using battery

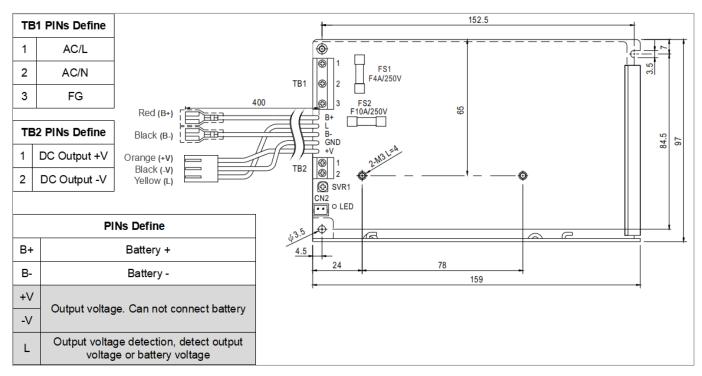


Figure 2-6-3 Power Supply

3. Using the System

To use i-keybox a user with the correct credentials must log in to the system.

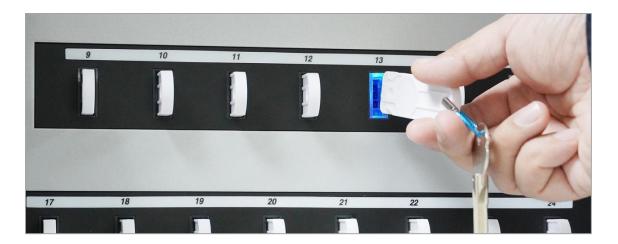
3.1 Logging into the system

There are three methods to log in to the i-keybox system:

- ➤ ID + Password;
- ➤ ID + Fingerprint;
- Swiping your staff Card;



3.2 Removing & returning keys



Removing a key is a handed operation.

- 1. Log in to the system.
- 2. The screen will show which keys you can gain
- 3. Select one from your available keys
- 4. the door will pop open automatically.

- 5. The system will unlock the key tag, with LED indication.
- 6. Remove the key and close the door.

Return a Key

- 1. Swipe the key tag at the external RFID reader.
- 2. The door will open.
- 3. The correct receptor slot led indicating will open its magnet.
- 4. Insert the key tag.
- 5. Close the door.

3.3 Key in Wrong Slots

When you accidentally insert the key into the wrong slot, the system will sound an alarm and give a reminder with an LED at the slot. When an error occurs, the cabinet door cannot be closed at this time.

3.4 Keys Status Icons



Present Key

No Permission

Key Taken

Key Unregistered

Incorrect key slot

3.5 Key Lookup

When swiping the touch screen left or right without logging in to the system, you can view the status and usage details of all keys, know whether the keys are available, who is currently using them, and so on.

3.6 Change Password

When a user is logged in, he/she can change the password himself in the [Me] menu.

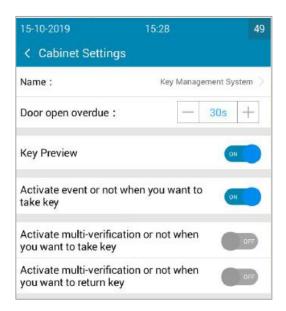
4. Admin Menu

All the settings, except the registration of keys, user card, fingerprint, can be realized through the website or i-keybox. For convenience, I will only introduce the setting method on the i-keybox.

4.1 Cabinet

In the [Cabinet settings] menu, the following can be set:

- Cabinet Name
- Maximum time of door opening
- Whether Key Preview on/off
- Whether Event on/off
- Whether multi-verification on/off



4.2 Keys

In the [Key Settings] menu, the following can be achieved. Among them, the key registration is usually the primary setting for system operation.

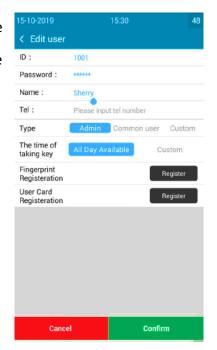
- Edit & Register
- Register one key tag (the selected)
- Register all key tags (while no key is selected)
- Rename a key
- Edit keys maximum time for use



4.3 Users

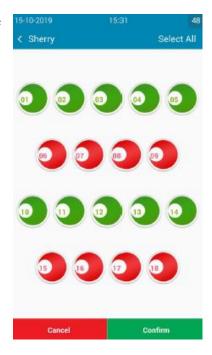
From the admin menu, select the user's button. To add, edit or delete a user, log in to the system and navigate to the admin menu.

- ID Users' identity, should be 4-11 digits.
- Password users' authentication, should be 3-11 digits. The
 password can only be modified by yourself or reset by the
 administrator.
- Name Full name suggested
- Tel
- Email
- Type types of keys/menu permission
 - ♦ Admin, all permissions except to create an admin account
 - ♦ Common User, Key permissions granted by the admin
 - Custom, set of key/menu permissions granted by the admin
- The time of taking keys When the user can remove keys.
- Fingerprint and User card registrations



4.4 Permissions

Set key permissions for the user selected, following the images on the right. Green means he/she can access the key, and red is opposite.



4.5 Multi-Verification

Multi-verification gives multiple protection of key safety. This means if one user wishes to use a key, he or she is required to obtain another user's permission or finalization of the request, the key will then be released. Important keys that lead to vital assets usually are suggested to use the multi-verification function. For example:

a) One person to authorized

Key	User Group	Verification Group
8	User-A	Veri-B

Removing key [8] by any member of the group [User-A] should be verified by any member of the verification group [Veri-B].

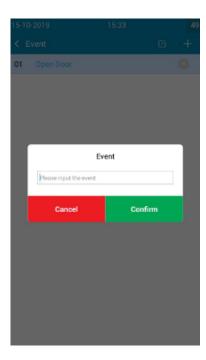
b) Two persons to authorized

Key	User Group	Verification Group
8	User-A	Veri-B
8	User-A	Veri-C

Removing key [8] by any member of the group [User-A] shall be verified by a member of the verification group [Veri-B] followed by a member of [Veri-C].

4.6 Events

The event, the purpose of using the key. When the event option is turned on, it's necessary for users who removing keys to enter/select events



4.7 Reports

From the admin menu, select the reports button. Reports allow you to view all the transactions and events that have occurred in the system.

Through the report, you can easily understand all records:

Who's got a key?

Who's had a key?

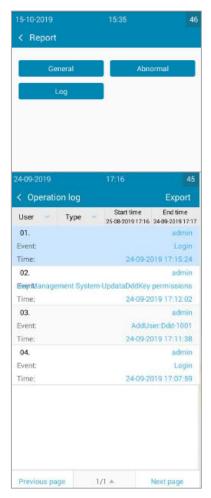
What keys has someone had?

System events log?

Exporting reports:

Once you have run a report you can export the data to a USB memory stick.

- 1. Run a report as instructed in the previous sections.
- 2. On the results page there is a button in the top right hand called Export.
- 3. Click the Export button and a new screen will appear prompting you to enter a USB memory stick.
 - 4. Insert a USB memory stick into the slot on the system.



4.8 System Settings

Settings of system operation parameters:

No.	ltem
1	Screen Brightness
2	System Sleep Time
3	Key preview on/off
4	Standby page displayed or not
5	Snap a picture when taking & returning keys?
6	Volume
8	Door open overdue
9	Switch of Fingerprint/face/user card
10	Emergency password
10	Update checking
11	Language
12	Cabinet name
13	Standalone or internet-based

4.9 Exit the App and Return OS

This option is only visible to the systems administrator.

Click [Settings] -> [Shut down], as shown on the right:



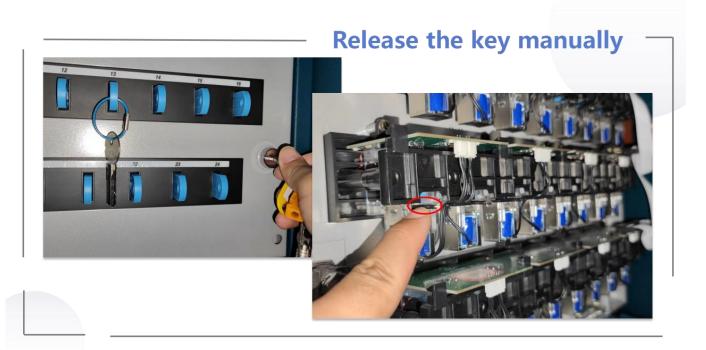
4.10 Replace the Saver Page

- 1) Make a standby picture with a 600*1024 pixel, and rename it "standby.jpg";
- 2) Copy it to the folder "keybox/standby/" of the Android key cabinet by a USB storage device;
- 3) Restart the app.
- 4) [Settings]->[standby page display or not].

5. Replacing a key-tag

When the key/key tag is damaged or lost, a new key tag needs to be registered. Log in to the system via admin, selects the key setting menu, selects the key position, and then click to register a single key. After the cabinet door opens automatically, insert the key according to the prompt and close it to complete the replacement.

6. How to remove keys in a power failure



In case of power failure, or other special circumstances, you can use the emergency key to open the cabinet door and manually take out the key.

- ① Use the emergency key to open the cabinet door and inner lining board.
- ② Lift the solenoid valve corresponding to the key position on the inside (as shown in the figure) to

remove the key.

7. WEB Management

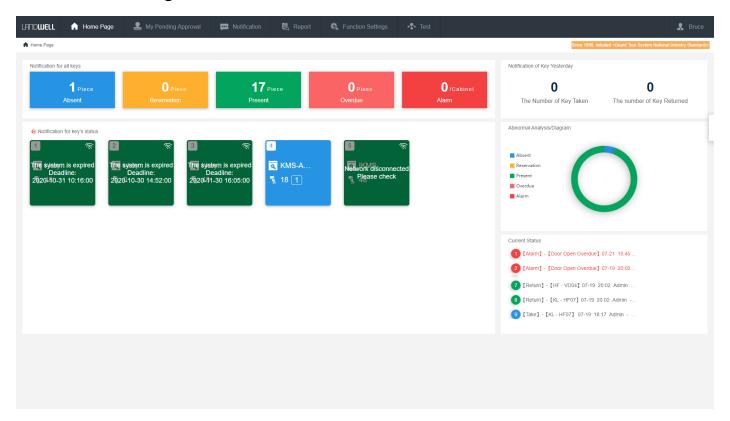
Landwell key management system is a web management software with a B/S structure, which realizes ikeybox multi-system network management so that you don't need to install additional tools and extensions on your computer. As long as you need a web browser, you can easily manage it, providing you with More convenience.

7.1 Function List

Notification Home Report Settings My Data Overview Push a notification Key Record Department Reservation •Key Status •Read notification Abnormal record Cabinet Approval •Take key Operation Log Key Mailbox •Return key •Permission Group Password Exit •Reserve Verification Group Applicate •Key permission Event

7.2 Main Pages

7.2.1 Home Page



Menus

- Home Page Return the home page
- My pending approval Key usage reservation and applications submitted by the staff
- Notification Notice from the administrator
- Report Keys removing & returning records, system abnormal records, user's operation log, and mail-box records
- Function settings settings of department, cabinet, key, user, permission, and so on.
- Current department Switch to sub-department

Current account

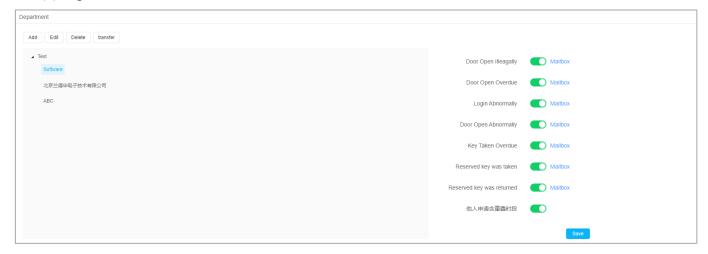
- My reservation
- My approval
- My mail-box
- Change password
- exit
- Keys Overview Statistics of the number of keys in different states, such as absent, reservation,
 present, overdue, alarm.

- Systems Lists cabinet lists of the current department.
- Realtime records Scroll to display the latest key records

7.2.2 Settings



(1) department



- Add add a sub-department of the selected
- Edit rename the selected department
- Delete delete the selected department
- Turn on and off alarm options for the selected department
- (2) Cabinets



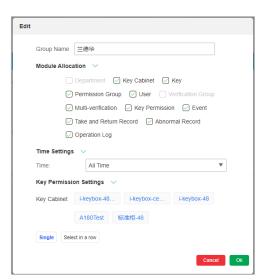
- Cabinet Setting As described in 4.1 about the key cabinet setting
- Transfer Transfer the key cabinet to another department
- (3) keys



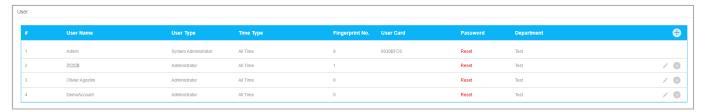
- Key Setting As described in 4.2 about the key setting
- (4) Permission Group



- Permission Group A set of users with the same menu
 authority and the same key authority
 - Group name
 - Module allocation What menu functions can group members use?
 - Time (type) When can group members use the keys?
 - Key permission Which keys can group members use?



(5) users



- Add/Edit/Delete a user
- Set his/her information
- Reset his/her password to 333
- Set user type admin/common user/custom type
- (6) Verification Group



- Add/edit/delete a verification group used for the function of multi-verification
- (7) multi-verification
- Add/delete one piece of a multi-verification relationship.

E.g,

a) One person to authorized

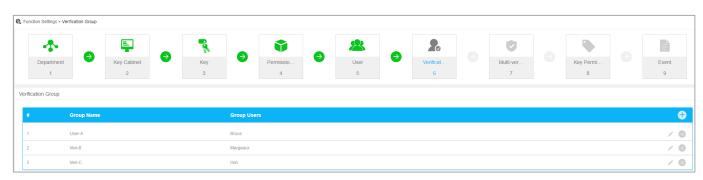




Figure 4-5(b)

The key [8] removed by any member of the group [User-A] should be verified by any member of the verification group [Veri-B].

b) Two persons to authorized





Keys [8] deleted by any member of the group [User-A] shall be verified by a member of the verification group [Veri-B] followed by a member of [Veri-C].

(8) key permission



Set key permission for users

(9) event

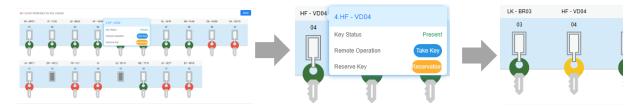


• Set the events for a single system

7.2.3 Key Reservation and Application

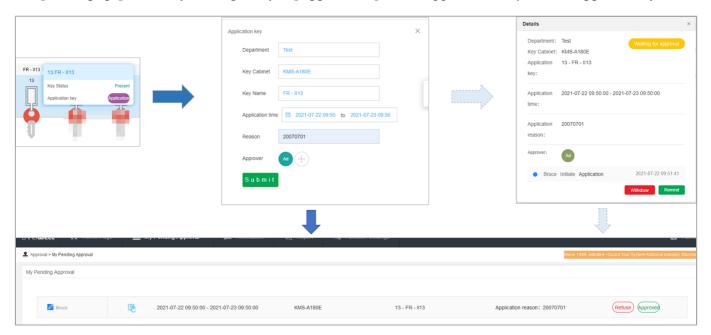
(1) Key reservation

[Home page] > Click the key [Reservation] > Edit reserve key form > Done.



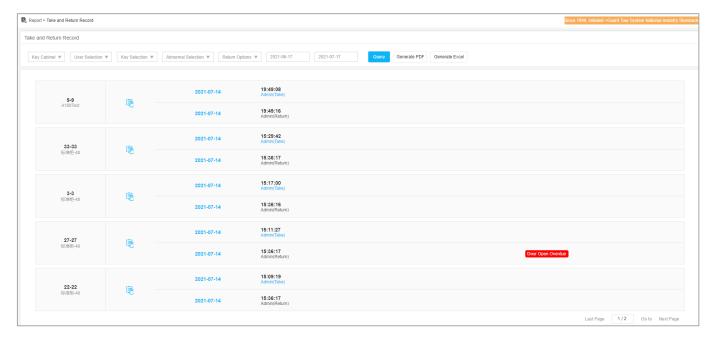
(2) Key application

[Home page] > Click your target key > [Application] > Edit application key form > approved by admin.

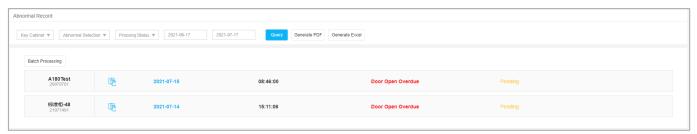


7.2.4 Reports

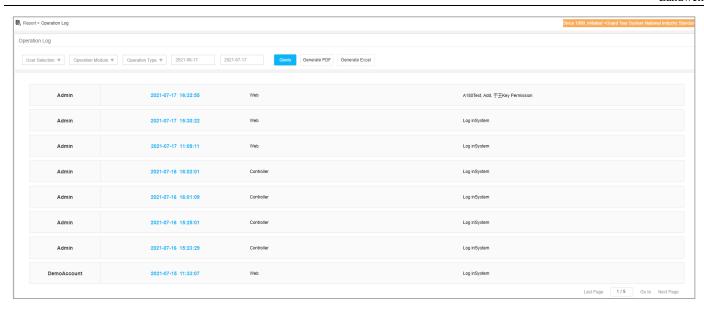
(1) Take and return records



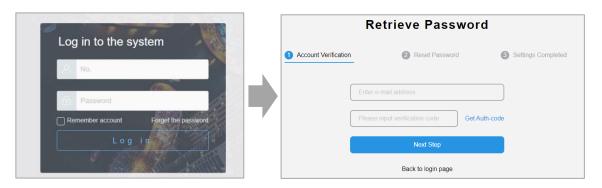
(2) Abnormal Record



(3) Operation log



7.3 Forgot the password



Steps:

[Forget the password] -> [Email & Author-code] -> [Reset your password].

8. Applications for Cell Phone

8.1 How to obtain and activate the app

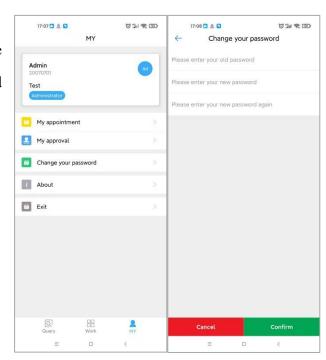
Scan the [Download QR Code] at the bottom of the screen of the i-keybox smart key cabinet through the mobile browser, and select the corresponding download link according to the mobile phone system type in the pop-up interface. Other ways to obtain it: visit the WEB management website, scan the QR code at the bottom right of the page through the mobile browser, enter the download link, or click the QR code with the mouse to download the APP installation package to the PC, and then forward it to the mobile phone

After the software is running, directly enter the key cabinet code ID or scan the QR code at the bottom of the key-cabinet screen, and then click [activate].



8.2 How to modify password

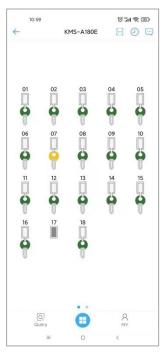
With the account and password provided by the administrator, log in to the system, and modify the password by yourself. Method: [My] > [Change your password].



8.3 Key overview

(Select a system) Swipe the screen left and right to view the basic information of the keys in the key cabinet of the selected current department and whether they are available.





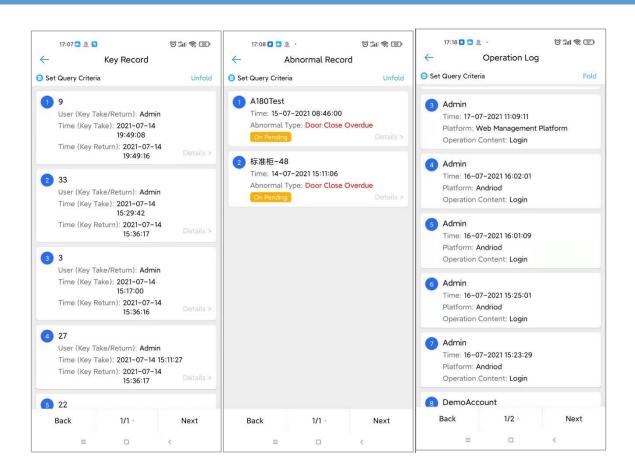


8.4 Reservation and approval

Key reservation is an appointment for the use of a specific key within the authority. After the reservation is successful, the key can only be taken out by the reservation person and the system administrator within the set time. Method: On the key overview page, click on the key location and select [Reservation] in the pop-up interface.



8.5 Records



9.FAQs

9.1 General

1. How many users can use i-keybox?

Up to 10,000 people per system.

- 2. What happens when someone leaves the door open?
- (1) After 30 seconds, the audible alarm is activated and all key receptor slots indicators turn red. The system requests that the door is closed and all keys stay locked in position until someone does it. (2) An alert email will be sent to the administrator.
 - 3. Who can change the password?

Every user can change their password after they have logged in. The administrator can reset any user's password to 333.

4. What if a user forgets their password code?

Reset the password after verifying the email on the web or mobile app, or else ask the administrator for help.

5. How much information can i-keybox save about keys activities?

No limit.

6. How can I power the i-keybox?

The device should be connected to an electricity supply.

7. What will happen with the system during a power failure?

The door and all keys will be inaccessible. Keys can be removed urgently with the help of mechanical keys, as described in chapter 6 of this article. You can also use an external UPS to ensure system operation.

8. What material is the i-keybox made from?

The outer case is made with cold-rolled steel plate. The key tag is ABS plastic with an embedded RFID chip.

9. What if I lose my spare keys?

You can order replacement spare keys from the sales manager or local distributors.

10. Can I access the system through a web browser?

Yes. The cloud-based management allows users to access and manage i-keybox systems through the PC web browser, cell phone, and tablet.

9.2 Operation

1. Can I book the key for a determined day or hour?

No. i-keybox can not offer this option, because the future of Keys is fraught with uncertainty. You can reserve a key that is in place, but it needs to be removed within a maximum of 1 hour.

2. What if it needs two persons for authorizing a key removal?

Add two pieces of multi-verification, so that they have the same key group and same user group, and different verification groups. As described in Chapter 4.5.

3. Can I check who has the particular key right now?

Yes, you can easily get an overview of keys from the i-keybox system, from the web, and the cell phone.

4. How many types of user roles are there in the system? Who can add new users?

There are four user types:

system administrator (all menu and key permissions, unique per department),

Administrator (all key permissions, most menu permissions, create common and custom user),

common user (key permissions granted or approved by an administrator),

and custom type (custom menu permissions and key permissions).

5. Can I give user key access only during working hours?

Yes, this is a function of the user schedule.

6. How do I know where to return the key?

Illuminated key slots will tell you where to return the key.

7. What if I return the key to the wrong position?

The system will sound an audible alarm, and the door will not be allowed to close.

8. When will an audible alarm activate?

The alarm will activate:

when forgetting to close the door

When opening the door using the spare key

When returning to the wrong location

9. Does the user know to which keys he/she has access?

Yes. The accessible keys are indicated with a green icon when he/she login to i-keybox systems.

9.3 Others

1. Can I use my staff card?

It depends on the RFID type. The system can recognize 125KHz EM cards, and 13.56MHz IC cards (optional).

2. Can I integrate my card reader?

No. The standard system can't offer this option. Please contact us and we will help you choose the best solution, which suits your needs.

3. Can I integrate with existing systems?

No. The standard system can't offer this option. Please contact us and we will help you choose the best solution, which suits your needs.

4. Can multiple authentication methods be combined to log in to the system?

No. The standard system can't offer this option. Please contact us and we will help you customize this option.

5. Can the key locker still be used without the Internet?

Yes. There are two editions: the standalone edition and the network edition. In case of internet disconnection, all menus of standalone edition and key-removing and returning menus of network edition remain accessible.

10. About Us

Company: Beijing Landwell Electron Technology Co., Ltd

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Email: ad@land-well.com

Tel: 86-10-84717640

Website: http://www.guard361.com

