

User Manual

REXECU

Fingerprint Identification Doorlock

Thank you for purchasing Rexecu

Please attain the warranty from
the installer and listen carefully
to the instructions.



Patent application No. 10-2003-0037466
10-2003-0085333
10-2004-0026256

Guide to system operations

A musical tune indicates the successful completion of each operation.

- How to register or delete a user's fingerprint
(Register twice fingerprint certainly)

- . Registering a selected fingerprint:

Push the REG button about 1 second gently until hearing a short tune of 'Peek'. Push the # button. While the red LED indicator lights on, place your finger on the sensor (for 0.5-t. 0 seconds), on hearing a short tune of 'Peek' promptly lift and place simply again the finger on the sensor within the sensor housing until hearing musical tune of 'Peer1ring'. Retry when not hearing musical tune.

- . Deleting a selected fingerprint:

Push the DEL button about 1 second until hearing 'Peek' tune

-- Push the # button .. Place the finger on the sensor once and hear musical tune.

- How to register or delete a password

- . Registering a password :

Push the DEL button. Push the *button. Enter the desired number(4 -12 digits) to register- Push the # button.

- . Deleting a password:

Push the DEL button - Push the *button - Press the password number you want to delete - Push the # button

- . Registering new password surely:

Enter the desired number (4_12 digits) to register, Previous password of '123' must be replaced by new password automatically.

. After registering the new password, you must check that the former password of '123' was successfully deleted.

- How to register or delete a remote control

- . Registering a remote control: Push the REG button _ Push the open button _ Use a remote control you want to register.

- . Deleting a remote control: Push the DEL button _ Push the open button

- Use the remote control you want to delete.

- . Complete deletion and resetting

- . Push the reset button _ Push the DEL button about 3 seconds, hear 'Peek' tune and 'Peer1ring' tune at Interval of 2 seconds - Deletion and resetting completed

- . Once you've completed resetting the system, all the information stored previously must be deleted, and the password should be set to '123' automatically.

- . Warning alarm cancellation

- . Fingerprint - Push the # button - Place the registered finger on the sensor (Musical tune)

- . Password _ *button _ Enter registered password _ # button (Musical tune)

- . Selecting the Manual Mode (When the door is open for a long period of time.)

- . Setting (Manual Mode) :

Push the open button about 2 seconds. You will hear a musical tune when the setting is complete.

- . Canceling (Automatic Mode) :

Push the reset button. When the canceling is complete, you will hear a musical tune.

- . Selecting security mode function (When you plan to leave the house for a long period of time.)

- . Selecting the security mode;

Push the START button about 2 seconds. You will hear a musical tune when the setting is complete.

- . Canceling the security mode;

Use the registered password, fingerprint, or remote control. (Musical tune)

- . No signal comes on sensor when you push START button.

- . Push the reset button _ Wait about 1 second _ Push the START button.

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Features

○ Back-up password system

You may register up to 10 passwords, each ranging from 4 to 12 digits.

○ The use of multiple wireless RF remote controls

Up to 10 remote controls can be used for larger areas.

○ To eliminate or add users

You can eliminate or add users. It is even possible to turn back the system to it's initial state and register a new password when you want to change all the users or in the event of moving.

○ Losing the remote control not to effect security

When one or more of the remote controls are lost, resetting the remaining remote controls will deactivate the lost ones.

○ Automatic locking function

The sensor will automatically lock the door within 3 seconds upon the closing of the door.

○ Alarm system for forced door entry

The alarm will go off when a door is forced open by an unauthorized person.

○ Security lock function

The security lock prevents break-ins through doors with small openings.

○ Battery change notification alarm system

When it becomes time to change the battery, the alarm will go off six times and a blue light on the lower part of the keypad will blink three times. This warning system will go off until the battery dies, therefore it is recommended to change the battery within a week.

○ Security lock mode(Complete security function)

When all the users are inside, you can deactivate the unit by turning the knob to the lock position. After this procedure, the door cannot be opened in any way from the outside.

○ Manual mode selecting function

(Whenthe door is openfor a long periodof time,)

You may select the manual mode when the door is frequently used due to various activities.

○ Emergency power supply for energy failure

When you have failed to replace the battery on time, you can open the door with your fingerprint or password while connecting a rectangular type 9V battery to the emergency 9V Battery power terminal located on the upper part of the keypad.



Specifications

Part and Accessories		Specification	Notes
Finger print capture type		CMOS Optical	
Dimensions	Outside	4D(D) x 80 (W) x 290 (H) [1.6" (D) x 3.1" (w) x 11.4" (H)]	Zinc Die casting
	Inside	35 (D) X 80 (W) X 290 (H) [1.4' (D) x 3.1' (W) x 11.4' (H)]	ASS plastic
Door handle		Al Die casting	
Remote control		RF wireless (Frequency:447.775MHz)	
Number of users		99 users	
Power supply	Msize alkaline 1.5V x Spes		Body
	AM size alkaline 1.5V x 4pcs		Remote control
	CR2032 3Vx 1pc		Portable Remote control
Battery life		18 months if the system is used an average of 15 times daily	
Door thickness		Regular 35mm-55mm (1.4" - 2.2")	
Operating temperature		-20'C - 50'C (-4°F - 122°F)	
Automatic locking sensor		1 Magnetic sensor each	

* Measured in accordance with EASYINTEO-I standard. Remote controls are not registered)

The battery life may be shorter, according to operating condition, local territory feature, etc.

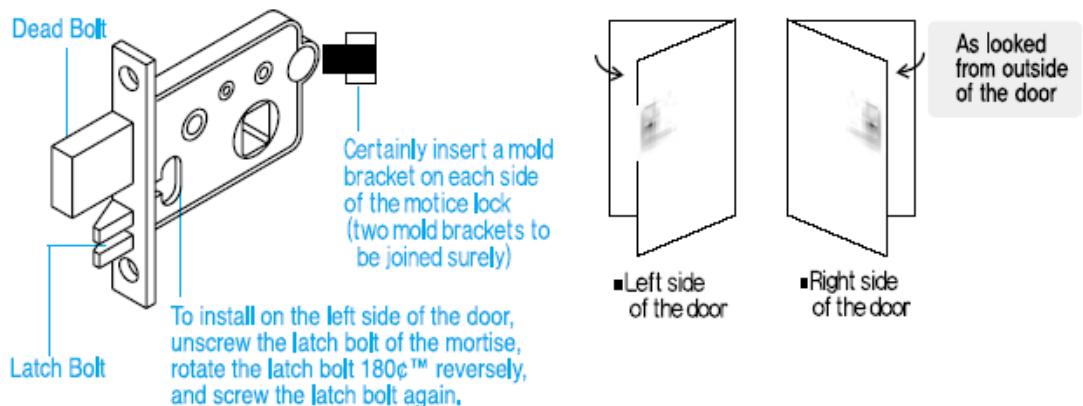
3. Name for part and accessories





4. How to install a doorlock

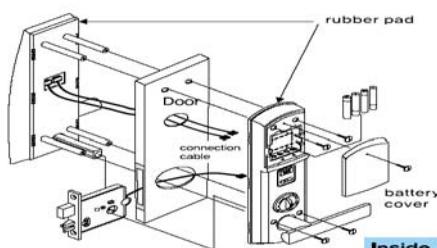
1. Put the installation guide paper for hole, location on the door tightly as the installation guide. Then mark hole position each on the door.
2. Choose the right or the left side of the door as a proper installation location. (When the product is released from the manufacturer, it is made to install on the right side of the door.
3. To install on the right side of the door. place and tighten the mortise lock provided on the door.
4. To install on the left side of the door. unscrew the latch bolt ,of the mortise. rotate the latch bolt 180°™ reversely. and screw the latch bolt again as shown in the figure below)



5. Through both sides of the door, please drill $\Phi 10$ (mm) of 2 holes, a $\Phi 30$ (mm) and a $\Phi .55$ (mm) holes in the center of the punch hole guide. as shown in the reverse side. As already installed with about $\Phi 55$ (mm) of previous cylinder key hole. it is unnecessary to punch it.

6. Please assemble the doorlock with the bolt and parts as shown in the figure on the right. Before assembling front parts and back parts, please connect 3 cables on the right position.

outside



- o To confirm that the mortise lock is located properly, press the open button as shown in the figure below.

- . If it is the left side of the door,

Push the reset button at" Push the REG button

Push the * button " Press the number '1'

Push the # button or" Push the open button

- . If it is the right side of the door,

Push the reset button. "Push the REG button.

Push the * button. Press the number '3'.

Push the # button. Push the open button.



- o Install a manual lever pointing to the open/close sign as shown in the figure below.



- o Checklist after Installation

- Register password before fingerprint and remote control registration.

The fingerprint remote controls can be registered after registering password .

- Check whether the door operates properly with the fingerprint recognition.
 - Check whether the door operates properly with the password.
 - Registering a password or a fingerprint must be done personally.

After the registration, the user should re-check if the password '123" has been completely deleted. If the door opens with the '123' password register a new password or delete the '123' password immediately .

- Notify users about the security lock function the battery changing time and the emergency power supply manual.

To register a user

O Fingerprint registration

- . Automatic registration

Push the REG (register) button or Push the # button or Place the finger you want to register on the sensor twice

- . Registration completed

- . Manual registration

Push the REG (register) button or Enter the desired address number ranging from '01 to 99'

or Place the finger you want to register on the sensor twice

- Registration completed



O Password registration

When register initial password right after manufactured password

'123' is automatically deleted.

Push the REG(register) button or Push the * button or

Enter the password you want to register, ranging from 4 to 12 digits or

Push the # button - Registration completed

~ Up to 10 passwords can be stored and registered.



O Remote control registration

Push the REG(register) button or

Push the open button or Use a remote control to be registered

(Up to 10 remote controls IDs can be used.)

- Registration completed



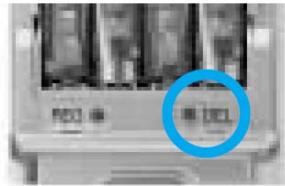
6. How to delete a user

o. Resetting to initial state

Push the reset button on the outdoor body.

Push the DEL(delete) button

This procedure erases all registered fingerprints, passwords and remote control IDs, and returns the unit to its initial state. After this procedure, the password will be set to '123' automatically.



o. Deleting a fingerprint

. Automatic deletion

Push the DEL(delete) button. Push the # button. Place the finger you want to delete on the sensor once - Delete completed

. Manual deletion

Push the DEL(delete) button. Enter the fingerprint ID you want to delete - Deletion completed (ID number can range from '01 to 99').



o. Deleting a password

In case it has left one password registered! it can't be canceled.

It can be deleted after another password is registered.

Push the DEL(delete) button. Push the * button. Enter the password you want to delete. Push the # button - Deletion Completed.



o. Deleting a remote control ID

Push the DEL(delete) button

Push the open button,

Use a remote control to be deleted

Deletion completed

7. Opening/Closing the door with a fingerprint



o. Opening the door

As shown in the figure, slide the sensor cover off and push the start button. When the red LED lights, place the registered finger on the sensor with the proper pressure (as advised in 16) and hold the finger in place avoiding movement until you hear the musical tune.

o. Closing the door

The unit has an automatic locking sensor that will lock the door automatically within 3 seconds upon the closing of the door.

8. Opening/Closing the door with a registered password



o. Opening the door

As shown in the figure, raise the keypad cover by pressing the mark. After the blue LED turns on, enter the registered password and press the # button. However, when the blue LED is gone, press the * button, enter the password and press the # button.

o. Closing the door

Because the mortise lock has an automatic locking sensor, the door will lock within 3 seconds automatically upon the closing of the door.

9. Opening/Closing the door with a registered remote control

○ After the visitor is identified with a videophone or an interphone.

- . push a remote control button as shown in the figure and the door will be opened automatically.
- . The door will automatically lock within 3 seconds upon the closing of the door.
- . once press start button(when go out) or open button(when enter a room) before work with sensor part, the door is closed.



10. Selecting the manual/automatic mode

(When the door is open for a long period of time.)



○ Setting

Push the open button about 2 seconds.

You will hear a musical tune when the setting is complete.

- . When the door needs to be open for a long period of time to avoid frequent entrance and exit such as parties, using the manual mode is very convenient and efficient because it does not waste the battery life.
- . If you keep the door open for a long period in the automatic mode, you will have to replace the battery sooner. Therefore, select the manual mode when you need to keep the door open for a long period of time.

○ Canceling

Push the reset button.

When the canceling is complete, you will hear a musical tune.

- . If you cancel the manual mode, the system will switch to the automatic mode.

11. Security lock mode



o. Setting

Press the START button about 2 seconds.

When the setting is complete, you will hear a musical tune.

o. Canceling

Use the fingerprint, the password or a remote control to open the door and the security lock mode will be automatically cancelled.

12. Use of lock/unlock function

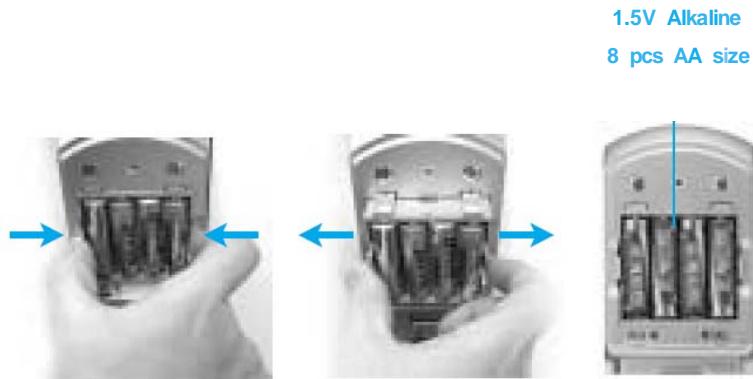
- o. When all the users are inside, pushing the lock button to the blue side will deactivate the unit.
- o Once the unit is deactivated, the door cannot be opened from the outside in any way.



13. Changing the battery

o Changing the battery on the 'indoor body'

- . As shown in the figure1 Iremove the battery case and replace all 8 pcs of 1.5V alkaline AA size.



* To remove batteries, hold the case between your fingers and push inward as shown in the figure.

* To insert batteries, hold the battery case between your fingers and insert the case into the indoor body. Then push the case outward with pressure as shown in the figure.

o. How to replace a remote control battery

- . Open a remote control battery case cover ,as shown in the figure, and replace all 4 pcs of 1.5V alkaline AAA size.

1.5V Alkaline
4 pcs AAA size



14. Intrusion warning alarm system

The unit has an alarm system for forced door entry. If an unauthorized person tried to open the door, the alarm will go off. Using the fingerprint or the password will shut off the alarm.

- . Password: Push the * button. Enter the password. Push the # button
- . Fingerprint: Push the # button. Place the fingerprints

15. Trouble Shooting

○ The JJower does not turn on after pushing the start button.

- . Push the reset button.
- . Check the battery.
- . If the battery dies, open the door with the 9V battery connected to the emergency power terminal.
- . After using the 9V battery as an emergency power source, open the door and replace old batteries with new ones.

○ The fingerprint can not be identified for registration or deletion.

- . If your finger is too dry, breath on your finger and try again.
- . Check if the finger is sweaty or extremely wet.

Clean your finger and try again.

- . Do not place your finger on the sensor with too much pressure or force.
- . Be sure not to move your finger when you place it on the sensor.
- . If the sensor is dirty, wipe it with a soft piece of cloth and try again.
- . Check whether the fingerprint is registered or not.
- . Check if you've placed your finger on the center of the sensor.

○ The door doesn't open after the fingerprint is recognized.

- . Try again and check for the sound of the motor.

○ The registration can not be completed even when the red light is on.

- . This means that the maximum fingerprint storing capacity (99) is filled. Please delete the unnecessary fingerprints.

16. Problems with fingerprints

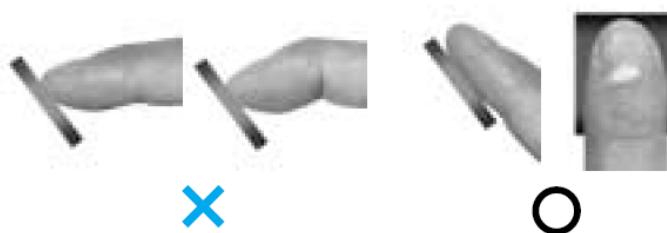
- o Extremely dry fingers
 - . Place the finger on the sensor with more pressure.
- o Sweaty fingers or 'extremely fine fingerprints'
 - . Place the finger on the sensor gently.

17. Compensation guidelines on defect ,and damage

1 year warranty (Within 1 year of installation)			
Defect ,and Damage	Compensation guidelines		
Problems under normal use	Problems that repeat twice	Repair service with no charge	Repair service with charge
	Problems that repeat three times	Replacement	Repair service with charge
	Lack of spare parts		Replacement (Depreciation)
Misuse of the product by a user			
Arbitrary installation of the product by a user	Repair service with charge		
Caused by natural disasters and unavoidable power			

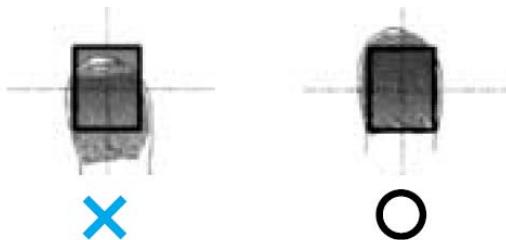
18. How to input fingerprint

- o When you enroll and authenticate user fingerprint, do the followings to avoid authentication error:
 - . Press your finger evenly to maximize the input area. If we say the weakest push as 0%, and the strongest push as 100%, apply 50-70% of force.



- . Make sure that the core of the fingerprint: is at the center of the fingerprint input window. In general, the core of the fingerprint is on the same line as the lunula of the fingernail. So locate the lunula

of the fingernail at the center of the fingerprint input window.



19. How to improve decreased recognition rate due to direct sunlight.

o Why direct sunlight should be blocked during fingerprint authentication.

. Like a camera, the fingerprint recognition device captures an image. If there is a large amount of light, the image gets darker and becomes hard to recognize. Unlike a camera, the device does not have a shutter or an iris. So you should block direct sunlight yourself.

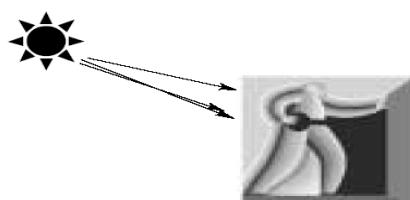
o Where to install

. As all our products are optical products that can be affected by direct sunlight, avoid the following places when you install.

1. Next to the window likely to get direct sunlight
2. Outdoors where there is no awning.

o How to improve recognition rate in case direct sunlight cannot be avoided

1. Stand with the sun behind your back.
(As shown in the figure, use your body to block direct sunlight.)



2. Cover the sensor with your free hand as if you wrap your hand around it.
3. Use a tool like a parasol to block sunlight during authentication.

FCC Notices

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Caution : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause interference with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off

and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.