



User Manual | K500 Series

[Touch / RF Tag / Fingerprint / Key]

■ Please read the manual thoroughly in order to secure your safety and to use the product properly.

■ Please use the RF Tag which is provided with door lock.

■ If you use the RF Tag which is not provided with door lock, it may occur security problem.

Smart & Safe



Smart & Premium Design



Fire-proof



Electric Shock & Static Proof



Passcode Hide

MEMO

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Features

- Open/Close function**
Door open by entering passcode
Door open by RF Tag / Door open by Fingerprint / Door open by emergency key
Door open by inside handle (Anti panic release function)
- Outside force-lock function**
Outside force-lock by passcode
- Auto close/Manual close setting function**
Setting auto close/manual close by switch
- Inside force-lock function**
Inside force-lock by program
- Others**
Etiquette mode, high temperature alert, intrusion alert, passcode hide, prank prevention, reset, master management, low battery alert, auto re-lock, door open alert

Safety Information

- This section contains user safety information. Please read carefully and use it properly.

warning If not followed, user can be dead or seriously injured.

Caution If not followed, user can be injured or property damage can be caused.

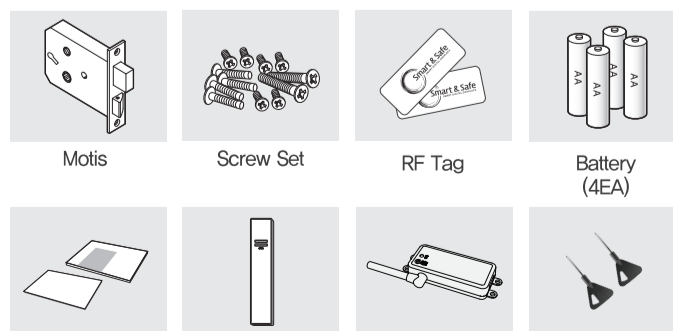
warning **Do not remove**
▷ You should not remove any installed parts from the door. If you need to do so for any reason, please contact service center and consult.
▷ It can cause product malfunction or operation malfunction.

warning **Do not spray water to the door lock or install it where it is exposed to water or damp.**
▷ door lock is not water proof, thus water exposure can cause malfunctioning.

Caution **Do not install where it is exposed to snow or rain.** Due to the extreme temperature difference of indoor and outdoor, it can cause dampening the door lock. Please use it after it dries.
▷ It can cause product malfunction or operation malfunction.

Caution **Make sure the door lock is properly installed and read manual for proper functioning.**
▷ It can cause product malfunction or operation malfunction.

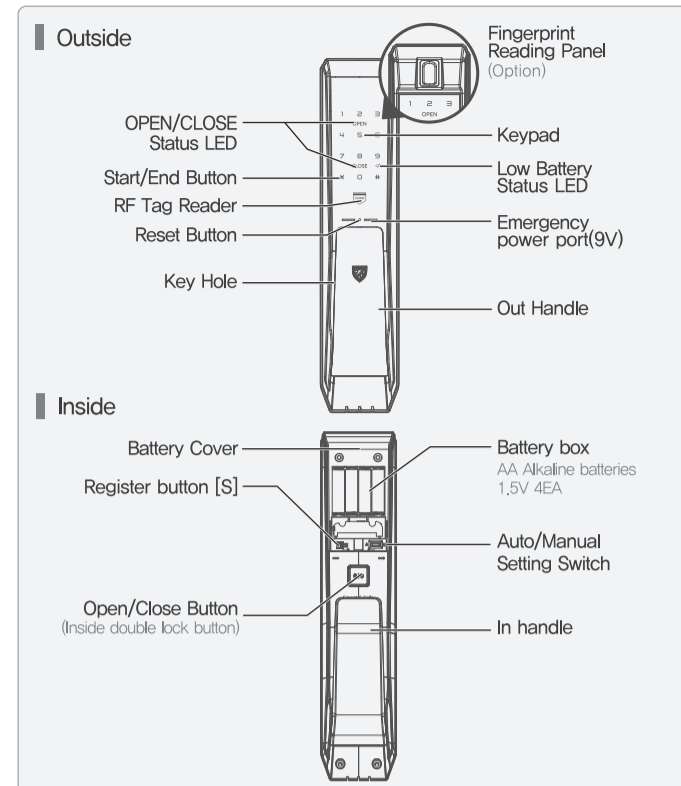
Parts



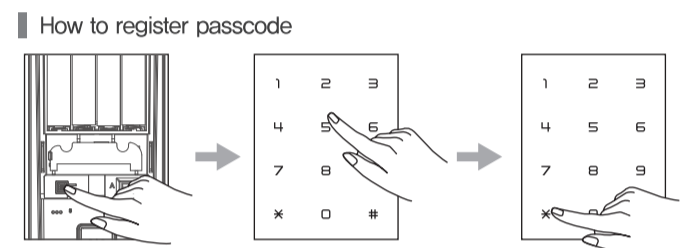
Installation manual, User manual(1) Remote Control (Optional Device) Wireless Communication Module (Optional Device) Emergency key (3Way Model Only)

※Types and quantity of RF Tag and emergency key can be changed according to a specification.

Components name



Basic Functions

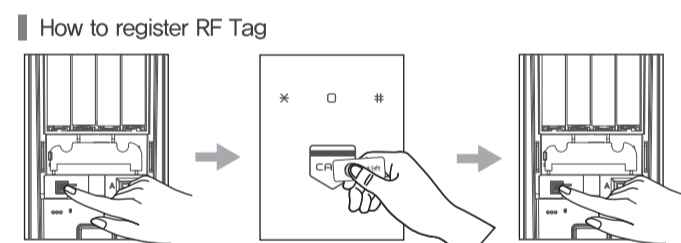


1. Open battery cover and press register Button [S].
2. Input the desired passcode.
Passcode can be set 4~13 digits.
3. Press * Button to complete the procedure.
You will hear buzzer melody from door lock.

- When register mode is canceled, previous passcode is kept.
- When more than 14 digits are entered, it will not be registered.
- When less than 4 digits are entered, it will not be registered.
- When a new set of passcode is registered, existing passcode is deleted.
- While entering passcode, registration is canceled when there is no action for 60 seconds.

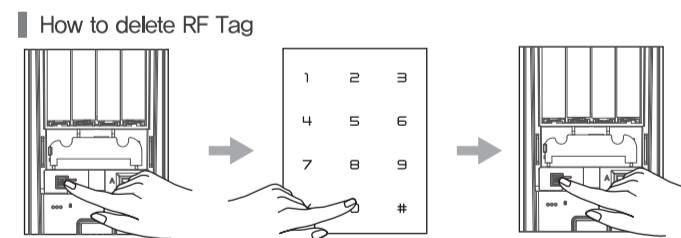
※ Please make sure whether the new passcode works or not before you close the door.

Basic Functions



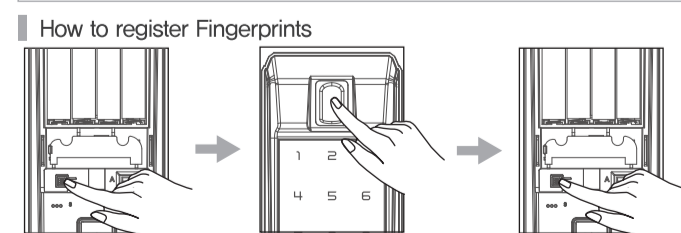
1. Open battery cover and press register Button [S].
2. Place RF Tag on RF Tag reader.
Backlight comes on CARD LED with Beep Sound.
You may register up to 50 RF Tags.
Repeat the process consecutively if you have more RF Tags to register.
3. Press register Button [S] to complete the procedure.

- When registration mode is canceled, existing RF Tag is kept.
- When 50 consecutive tags are registered, registration is completed automatically.
- When error occurs during the process, start over by pressing register Button.
- Registration is canceled when there is no action for 60 seconds.
- You can not register the same RF Tag twice.
- When a new RF Tag registered, existing RF Tag is deleted.



1. Open battery cover and press set Button [S].
2. Press 0 Button on the keypad.
3. Press set Button [S] to complete.

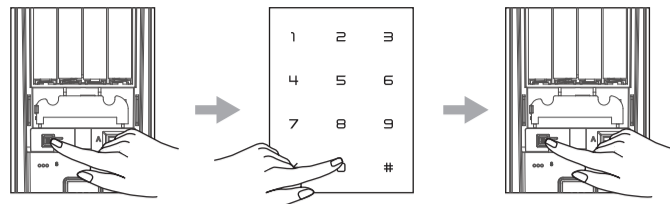
- If lost RF Tag, register new RF Tag after deleting all existing RF Tag information in system.
- When canceled, existing RF Tag is kept.
- Delete mode is canceled when there is no action for 60 seconds.



1. Open battery cover and press register button [S].
2. Place the fingerprint on Fingerprint Reading Panel.
(Must do it 4 times)
3. Press register button [S] to complete the procedure.

- You can register and use up to 100 fingerprints.
- Repeat the procedure 2 in order to register fingerprints consecutively.
- Registration mode is cancelled when there is no action for 20 seconds.
- How to register fingerprint on designated address
[S] button → 63 button → [S] button → designated address from 1 to 100 → # button → place fingerprints 4 times → [S] button

How to delete Fingerprints



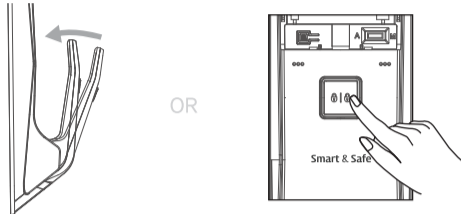
[all registered fingerprints]

1. Open battery cover and press register button [S].
2. Press 71 button.
3. Press register button [S] to complete the deletion.

[fingerprint on designated address]

1. Open battery cover and press register button [S].
2. Press 73 button and press register button [S].
3. Press the designated address '1~100' and then #button.
4. Press register button [S] to complete the deletion.

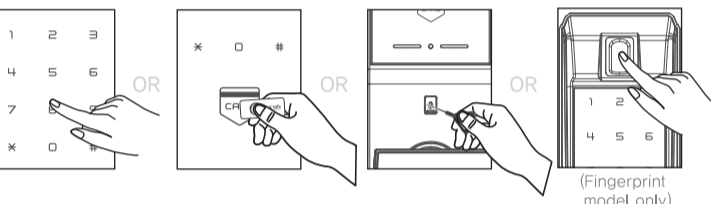
How to open door from inside



1. Push the in-handle to open while locked.
2. Turning the manual open/close lever to open position while locked.

- Auto lock is activated when the door is not opened within 7 seconds.
- When outside force-lock is set, opening the door will set off intrusion buzzer alarm.
- When Prank Prevention function is set, Prank Prevention function is deactivated.

How to open door from outside



- Press registered passcode and * Button after touching the keypad and getting backlight on.
If you want to use the passcode hide function, press imaginary number (Max, 16digits) then press the passcode.
Ex) Imaginary number (Max, 16digits)+Passcode+*
- Place RF Tag on RF Tag reader.
- Open the door using by emergency key. (3Way Model Only)
※ You must carry or keep at least one emergency key outside.
- Place the registered fingerprint on Reading Panel. (4Way Model Only)

- Auto lock is activated when the door is not opened within 7 seconds.
- When unregistered passcode is entered, you will hear error sound or see LED blinking.
- When incorrect passcode is entered 5 consecutive times, Prank Prevention function is activated.
- If passcode is not entered within 7 seconds after pressing more than 1 Button or *Button, then the mode is terminated.

Outside force-lock function by passcode

If door is opened from inside, alarm will be occurred. It could be set once and automatically deactivated when door opens.

1. When door is locked, touch keypad and then backlight will get on.
2. Press #Button during 3 seconds after pressing the passcode.

Etiquette mode function

It allows turning on or turning off the buzzer sound when using digital door lock. It is one time function which automatically is deactivated after the regular procedure.

[Setting with passcode]

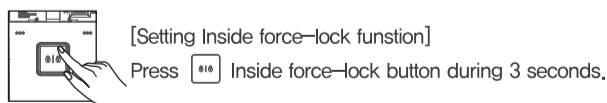
1. When door is locked, touch keypad and then backlight will get on.
2. Press #Button + passcode + *Button.

[Setting with RF Tag]

1. When door is locked, touch keypad and then backlight will get on.
2. Place RF Tag on RF Tag reader after pressing # button.

Inside force-lock function

This function prohibits someone from opening the door using passcode or RF Tag or fingerprint from outside. This function is useful during night time when extra caution for safety is required.



[Setting Inside force-lock function]

Press **000** Inside force-lock button during 3 seconds.

Passcode hide function

Passcode hide function is to prevent someone from noticing the actual passcode. This function gets rid of anxiety that there would be fingerprint on the pad.

[What is passcode hide function?]

In case of a risk of passcode exposure, this function can be useful. If you want to use this function, enter imaginary numbers(up to 16digits) before entering the actual passcode.
Ex) Imaginary number should be up to 20 digits including passcode.

Reset function



In case there is malfunction in door lock, pressing RESET button will set the program to factory settings.
※ The registered passcode and RF Tag are kept after setting the program to factory settings.

High temperature alert function

It checks for open mode every 3 seconds and tries to open if not in open mode. It activates open mode to open even when inside or outside force lock function is activated. It only activates open mode through pressing any button inside. Alarm is deactivated when passcode is entered or RF Tag is placed.

[What is high temperature alert function?]

When high temperature is detected, deadbolt switches automatically to open from close and alarm goes off.

High temperature function activates at 60°C±10°C or higher and alarm goes off at least 80dB.

Intrusion alert function

Alarm goes off when someone try to open the door abnormally. Alarm is deactivated when passcode is entered or RF Tag is placed.

[What is intrusion alert function?]

When parts are separated improperly or someone try to invade by breaking the door, intrusion alert alarm goes off more than 80dB.

1. 2 minutes alarm: [S] Button → 7 Button → [S] Button
2. Unending alarm: [S] Button → 8 Button → [S] Button

Prank Prevention function

[What is Prank Prevention function?]

When incorrect passcode or RF Tag is used for 5 consecutive times, the system freezes for 60 seconds.

※ In case of opening the door from inside, this function is deactivated.

Deadbolt jamming alert function

Try Open/Close 3 times. Warning sound goes off if the problem is not resolved after the trial.

[What is the deadbolt jamming alert function?]

In case of entrance door malfunctioning due to deadbolt being stuck at the strike or the door not being completely closed, buzzer sound goes off and keypad LED flickers.

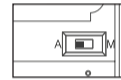
You will hear buzzer sound 'beep beep beep beep'. It is deactivated when the door is properly closed.

Auto/Manual lock setting

Door locks automatically certain time after the door opens or closes. Manual lock setting keeps the door open at all times.

[Auto lock setting]

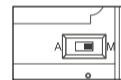
– Open battery cover and set Auto/Manual switch to 'Auto [A]' .



※ It determines to auto lock while switching over to close mode after open mode.

[Manual lock setting]

– Open battery cover and set Auto/Manual switch to 'Manual [M]' .



※ It determines to manual lock while switching over to close mode after open mode.
※ To lock from outside, press more than 1 button on the keypad or press "*" Button.

Volume control function

You can adjust the volume 8 steps from mute to high.

[Setting volume control]

1. Open battery cover and press [S] button.
2. From keypad, press #button.
3. Volume goes up whenever press # button.

- ※ Press 3 button to set Max volume.
- Press 2 button to set Low volume.
- Press 1 button to set mute.
- ※ Volume of Alarm is max regardless of volume control.

4. Press [S] Button.

Low battery alert function

It is activated only after it detects low battery more than 3 times. It remains activated even after power resets. It is deactivated only after replacing batteries. Low battery voltage : 4.2V±0.3



In case of low battery, low battery buzzer sound goes off and LED starts to flicker. You can hear buzzer melody.

Door open alert function

- Door open alarm goes off when door opens under auto lock mode.
- Alarm occurs 2 times every 18 second.

Check the number of registered fingerprints

The number of registered fingerprints blinks on keypad.

[S] button → 95 button → [S] button

How to change batteries

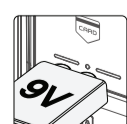
When you hear a buzzer melody, replace all of the batteries.

[Replacing batteries]

1. Use 1.5V AA authentic alkaline batteries.
2. Insert each battery according to the plus and minus sign inside the battery holder. Please be cautious since improper insertion of the battery may cause leakage or breakage.
3. After battery life is over, replace all the batteries at the same time and do not mix new batteries with old ones.

- Door lock has a special design which prevents improper insertion of the battery by not allowing any actions if the battery was installed incorrectly.
- Passcode and RF Tag information are kept when batteries are being replaced.
- Make sure the door lock works properly by entering passcode after replacing batteries.

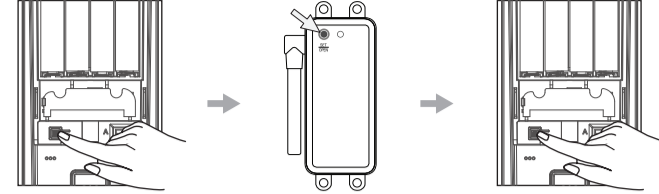
Opening door with emergency battery



When batteries are discharged, place 9V battery to emergency power port in order to use the passcode.

1. This is to provide temporary power when the door lock is not functioning due to a complete discharge of batteries.
2. Use it while the battery is still in contact with the port.
3. When using emergency power, polarity of the battery does not matter.

Wireless communication module registration (Optional Product)



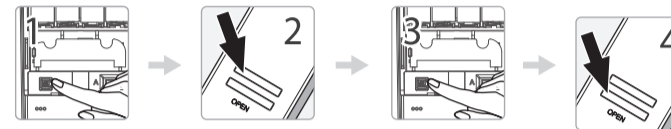
[Registering wireless communication module]

1. Open battery cover and press [S] button.
 2. Press register/open button on the wireless communication module.
 3. Press [S] button.
 4. Press open button on the wireless module to see if door lock operates properly.
- ※ Please register within 60 seconds.
※ Can register 5pcs of wireless module continuously.

[Deleting wireless communication module]

1. Open battery cover and press [S] button.
2. Press the number 5 button.
3. Press [S] button.

Remote controller Registration (Optional Product)



[To register the remote controller]

1. Lift up the battery cover from the main body, then press the register button [S].
2. Press and hold the register button on the remote controller for 4 seconds.
3. Press the register button [S] on the main body.
4. Press the open button on the remote controller to see if the door lock operates properly.



[To delete remote controller]

1. Lift up the battery cover from the main body, then press the register button [S].
2. Press 5 on the keypad.
3. Press the register button [S]

Problem	Check	Solution
When entering passcode, buzzer melody goes off.	It's time to replace batteries.	Replace all of the batteries with alkaline batteries.
After entering passcode, door doesn't open.	It's time to replace batteries.	Use 9V battery to open the door and then replace all of the batteries.
When operating Open/Close, motor stops after a while then 'bleep bleep bleep' buzzer sound comes on.	There is a deadbolt jam caused by improper hinging of the door and frame.	Use door closer to adjust the door and the frame.
It freezes while entering passcode.	In case incorrect passcode is entered 5 times, it goes to safe mode for 60 seconds.	Try again after 1 minute.
9V battery does not work when used as emergency power.	9V battery connection is bad.	Reconnect 9V battery and try again.
Door does not lock automatically after closing the door.	Sensor may be deflected or magnet is displaced.	Please call A/S center and request service. Meanwhile switch to manual mode to use the lock properly.
When Open/Close the door, it feels like there is something stuck or it is shaky.	Bolt for motor or striker may be loose.	Check the bolts for motor and striker and tighten it if loose. Use super glue if necessary.

Model name	2WAY : Passcode, RF Tag
	3WAY : Passcode, RF Tag, Key
	4WAY : Passcode, RF Tag, Fingerprint, Key
Rated voltage	DC 6 V (4EA 1.5V AA Type Alkaline Batteries)
Type	Electronic & Mechanical (Passcode, RF Tag), Fingerprint
Weight	4,3kg (Include packing)
Usage Temperature	-20°C~60°C
Sensor activating Temperature	60°C ±10°C
Product size/Material (width x height x depth)	Outbody 84(W) x 385(H) x 82(D) / Al diecasting
	Inbody 84(W) x 382(H) x 82(D) / R.F ABS / Al diecasting
Battery life	1 year if used 10 times per day
	Battery life depends on battery quality, usage frequency or usage environment
Emergency power	9V Alkaline battery(6LF22) 1EA (Optional Product)
Product type	2Way Non Fire-proof/Temp. sensor/Non Key/Digital door lock (NF-T-NK-M)
	3Way Non Fire-proof/Temp. sensor/Key/Digital door lock (NF-T-K-M)
Equipment name	Wireless equipment for RF ID / USN 447,275Mhz
Frequency	13,56 MHz
Signal Type	A1D+F1D
Modulation Type	ASK+FSK
Certification number	MSIP - CMM - IcQ - K500

※ This product cannot carry on perfect security function. You may want to install separate security system.

※ Contents in user manual can be changed without notifying users in order to improve product quality or service.