

Smart Lock



Description

1. Electro- mechanical device
2. Card Sensor Radio Frequency
3. Electrical, opens very quickly.
4. Uses rechargeable Li battery
5. Network compatible
6. Can be placed into an unlocked position
7. Remote control RF
8. Weather resistant
9. Metal Housing



Basic Parameter

Volume:	121mm×102mm×33mm
Pack Volume:	215mm×210mm×90mm
Weight:	1.5 kg
Color:	silver
Work temperature:	-40°C to +70°C
Work humidity:	10% to 90% RH
Read Card Type:	ID smart card
Read Card Distance:	>= 3CM
Read Card Speed :	< 0.3s
Record:	2000
User Card:	2000
Communication:	RS485
Affix:	charger, Li battery

Electric Parameter

Input Voltage:	DC12V
Input Current:	1000mA
Dynamic Current:	800mA
Static Current:	< 50mA
Power:	10W



Remote Controller



Electronic Smart Door Lock

- To be opened by inductive card, original design in industry.
- Integrative design, controlled by micro-motor, consume less power, long service life.
- Compatible with general electric lock, expedite to install and test.

Electric Parameters: Input Voltage: DC12V
Input Current: 1000mA
Static Current: < 50mA



Instruction of Smart Electronic Lock

I. The assembling of lock body

1. According to the door opening direction (open on the left side/open on the right side), choose a circle center on the door which is 60mm away from the door edge.
2. Dig a lock hole which the diameter is 29mm on the center of the circle, and then make two sockets for the support panel of the lock head and lock tongue(inlay them to the door edge and make them at the same level.)
3. Put the lock head into the loop and insert it to the door.
4. Assemble the support panel and screw it. If the door panel is too thin, you can add a wooden block or assemble it with a cut screw.
5. Before you fix the lock with the screws, you should try the key at first. If you can open the door with the key freely, you can screw and fix the lock
6. Check whether the door-shutter can deal with the weight of the door. If you find too much noise or you can't lock the door, you can use NO.12 spanner or pliers to screw the hexagon nut and adjust the load spring until you get the balance of the elasticity when you open or shut the door.
7. Assemble the shell to the doorframe and balance it with the width and height of the lock to make the bevel tongue and square tongue adjustable in the shell hole. Then, open the support panel socket in this position(inlay them to the door edge and make them at the same level)and screw it tight.
8. Get the signal line of the inductive Card Reader & Writer and insert it to the hole of the lock where the line goes out.
9. When the door is open to the outward direction, you should change the direction of the bevel tongue. The bevel tongue should be used after being installed in the opposite direction.
 - a. Twist off the cover screw and take out the cover.
 - b. Pull out the bolt.
 - c. Take out the stopper loop.
 - d. Take out the elastic loop.
 - e. Take out the bevel tongue and rotate it for 180°
 - f. Then assemble the parts mentioned above in the opposite direction.

II. The assembling of the Control Circuitry

1. The outside wiring of the electronic lock can be connected to the junction board of the lock body.

Concrete operation is as follows:

Red line	— — — —	connect to the anode of the DC12V
Black line	— — — —	connect to the cathode of the DC12V

Yellow line	— — — —	connect to the A of the 485 communication line
Green line	— — — —	connect to the B of the 485 communication line
Brown line	— — — —	connect to the anode of the extern lock-opening signals
Write line	— — — —	connect to the cathode of the extern lock-opening

signals

2. The two white-head lines are the motor lines which connect to the motor
3. The two black-head lines are the batter-line which connect to the lithium batteries.
4. The 5-core soft line plug connects to the card-reading loop of the lock head.

Connect the power line, then make the card approach the card reader. When hearing a sound “DI-”, it means all the lines are connected correctly.

III. Operating Instruction

1. The Initialization of the lock

Connect the Setting card needles inside the lock, and then you hear short sound ‘Di’ ,6 seconds later ‘Di’ again, The same time disconnect needles .The lock is initializing. All data (management card, user card, records of opening lock, period of limited time, period of timing of unlocking lock)in the lock will be deleted. The lock addresses become black.. At the end , exit with ‘Di—‘ long sound.

2. Issue management Card (one lock has only one.)

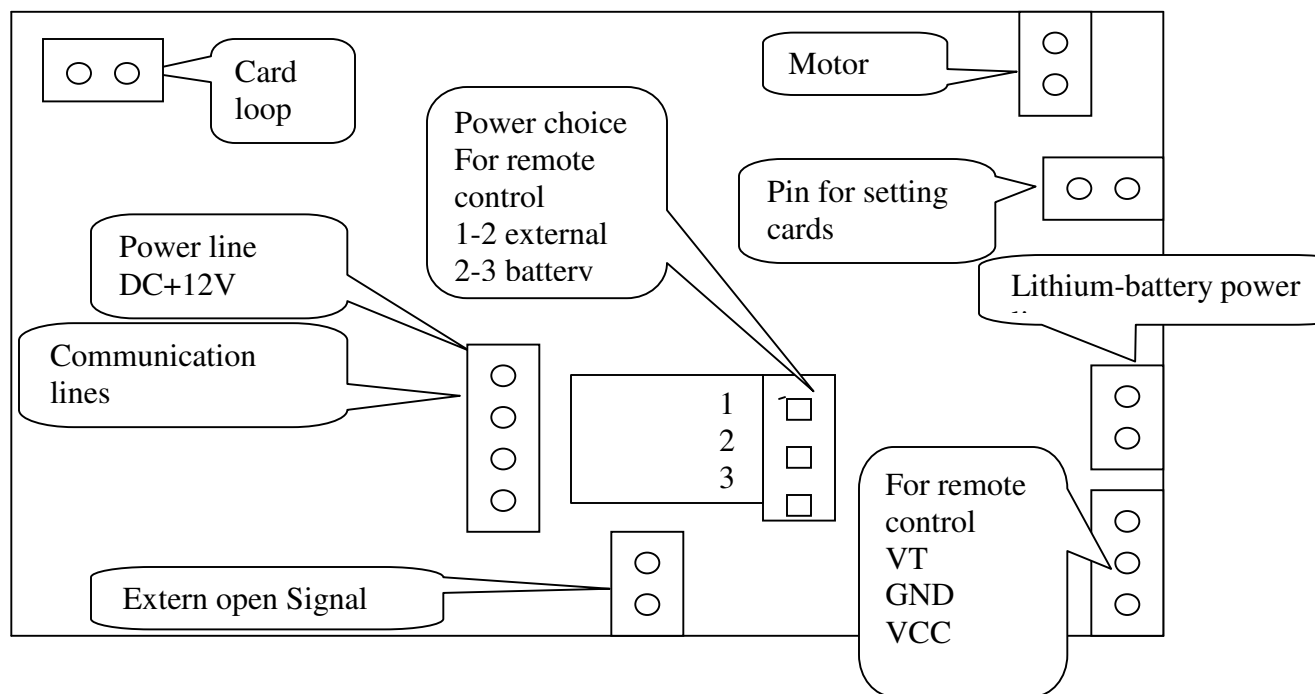
Connect the set card needles inside the lock, and then you hear “Di” short sounds and disconnect needles. It enters the setup card state. Put one new card close to the card reader. It is succeed in setup one new management card when it makes there short sounds of “Di” .Exit setup card state after “di,di,di” three short sounds.

Attention: This operation will be carried out in 6 seconds. It will exit the setup state after 6 seconds.

3. Issue User Card (One lock has 2046 user cards.)

- a. Put the management card close the card reader in the lock. Open the lock with one short sound of “Di” . And then there is one short sound ‘Di’ again. Put the management card to the card reader with one long sound ‘Di—’ . It enters the issuing card state at this time.
- b. Put one invalid card close the card reader, and then you hear “Di” one short sound, this card has been setup to the locks.
- c. Put the user card close to the card reader, then you hear “Di,Di” two short sounds. These user card have been canceled their unlocking functions. It means they can’ t open the lock.They are invalid cards. If you need to resume them, put they close the card reader again.
- d. The operation of issuing cards and deleting cards in 6 seconds. Add one user card can delay 6 Seconds, or it will exit setup card state. If you need issue cards, please following the step b.
- e. After issuing the user cards. Put the management card to the card reader again. And then you hear “Di” one long sound. It means that it exit the issuing card state.

Attention: During this operation , if you hear “di—,di— “ two long sounds, it means that this operation failed.



4. **Unlock the lock**

Put the user card close to the card reader, you will hear one sound of “di”. The lock is opened.

5. **If you lose the management card carelessly, please issue one new management card again as step 2. At the same time the previous management card has deleted.**

6. Delete all the user cards: Put the management card close to the card reader. The lock will be unlocked after ‘Di’ a short sound, then a short sound ‘Di’ again. Put manage card adhere to card reader again, you can hear ‘Di—’ a long sound. Put manage card adhere to card reader again without any other operations, and you can hear ‘Di—’ a long sound again. It means that it enter the state of deleting all user cards. After then, it means the operation successes after three short sound “Di,Di,Di” .

Notice:

1. The instruction corresponds to not-online operation, please look over the software instruction for online operation.
2. The lock don't react by using user card during the time of time-lapse opening. It can be locked and exit this period of time by using management card. It will come back to the time of time-lapse opening by using the management card.

VII. Technical Parameter of the Product

Communication Interface	RS485
Digit Transmission Rate	9600bit/s
Transmission Distance	500m
Time of Reading & Writing	<2s
Distance of Reading & Writing	10~30mm
lithium batteries	3.6V-4.2V
Extern Supply Power	DC 12V
Static current	<30uA
Working current	<300mA
Frequency	125KHz
Operating Temperature	-10C to +70C
Operational Moisture Content	10% to 90%

▲ VII. Pay Attention:

1. Strictly prohibit using the electric welding to connect the lock body.
1. Please use the supply power (DC12V), Prohibit using supply power(AC12V)
2. Please screw down the screws on the bearing board when you install the lock.
3. The materials of the door can affect the loop of the card reader. When it is difficult to read cards, please add the loop for 5MM~1CM.
4. Don't use the cards together close to the card reader.

Note: If the lock is destroyed by above 1 to3 items. No Warranty !!!

Electronic Smart Lock Simply Line Connection

