

USER'S MANUAL OF LSLD-001

(1).Important Safeguard

1. Read Instructions – All safety and operating instructions should be read before the unit is operated.
2. Retain Instruction – The safety and operating instructions should be retained for future reference.
3. Heed Warnings – All warnings on the equipment and in the operating instructions should be adhered to.
4. Follow Instruction – All operating and use instructions should be followed.

(2).Main Parameters

Work Voltage:DC9V-18V

Standard Voltage:12V.

Max Current:300mA.

Standby Current:10mA.

Distance Of Induction:10mm.

Delay Time Of Lock:0.5S.

Delay Time Of Unlock:0.5S.

Signal Parameter Of Door Release:

1.Signal Input Way:Motorized(Impulse Signal)

2.Voltage For Unlock Signal: $\geq 5V$.

3.Last Time Of High-level Signal: $\geq 10mS$

(3).Main Features

1.This product has auto-check function,when power on,it will check whether the door is locked or unlock by mistake.

(1).Circuit open,when door in close status,**power on**,door will be closed after 1 buzzer.

(2).Circuit open,when door in open status,**power on**,door will be closed after 1 buzzer.

2.Auto-lock function:when motorized by unlock signal,door will be open after 1 buzzer.

3.Unlock Delay Time:9S.When lock is open,the unlock time can delay about 9 seconds.After 9seconds,if door is not open,it will be locked again.If door is open within 9s,delay time is finished.The delay time can be set by 1s,3s,6s/9s.

4. Resistance disposal during lock/unlock process:

(1). Resistance during lock process: If lockpin forward with resistance, it can lock normally in case resistance disposed within 3-voice alarm. Otherwise, door will be locked incompletely, anyway, the lock will continue to work normally.

(2). Resistance during unlock process: If lockpin backward with resistance, it can unlock normally in case resistance disposed within 3 times backward. Without resistance disposal, door will be locked again. In this case, you can use a mechanic key to open it, and ask the technician to repair it.

5. Auto-unlock if close the lock by indoor switch when door in open status: If someone locks the door by indoor switch when door open, the lockpin can be backward automatically, to avoid the lockpin damaged by door frame when close the door.

6. LED Indicator showing lock status.

7. Anti-interference during lock/unlocking process.

(4). Work Theory

1. Lock Operation.

After lock installed on the door, when lockpin runs forward to mortise, magnetic switch checks the magnet's location, switches on the circuit, sending an unlock motorized signal to control unit on the PCB. The system will impulse the electric-motor rolling, lockpin runs forward to finish lock process. If lockpin goes forward with resistance, door will be closed incompletely. Optical switch will check out the error signal, drives the electric-motor rolling to-and-fro 3 times. With 3 times rolling without resistance, then locked completely, if without it, locked incompletely. Even this, lock works normally all the time. You can check whether the lock panel or mortise has contamination inside.

2. Unlock Operation.

When door locked, if unlock signal $\geq 5V$, system drives the electric-motor rolling anti-clockwise, then door unlocked. If unlock fails, the electric-motor will roll to-and-fro 3 times, to impulse the door unlocked completely. If not completely unlocked, after 2 seconds, the door will be auto-locked. Use mechanic key to open the door, check whether contamination exists or not.

3. Lock/Unlock Error.

When door open and unlock (magnetic switch now works), close the lock by indoor switch, control unit checks the unlock signal, driving the electric-motor rolling to release the lockpin, to avoid the lockpin damaged by the mortise when close the door.

(5).Installation

Installation Chart

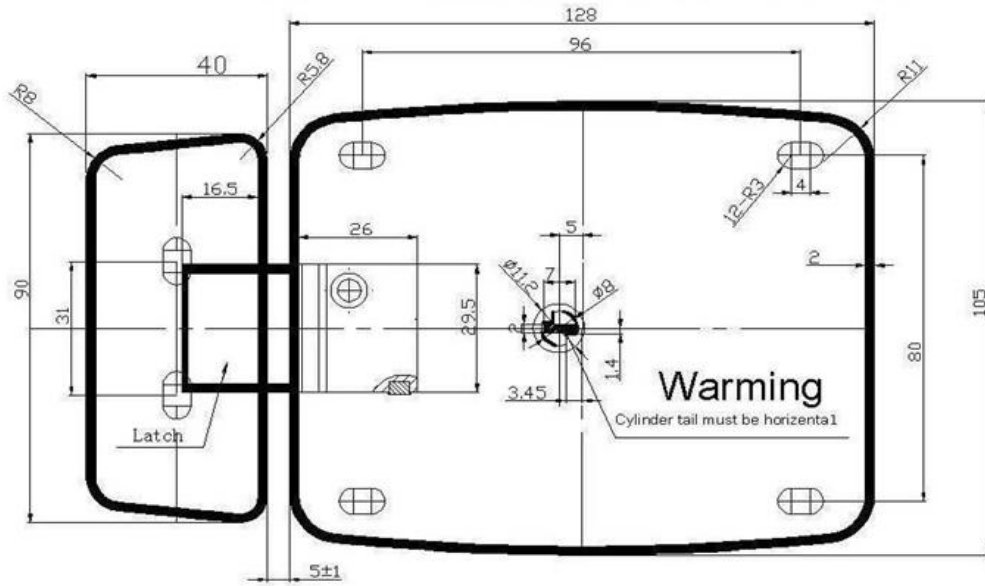


Figure1.

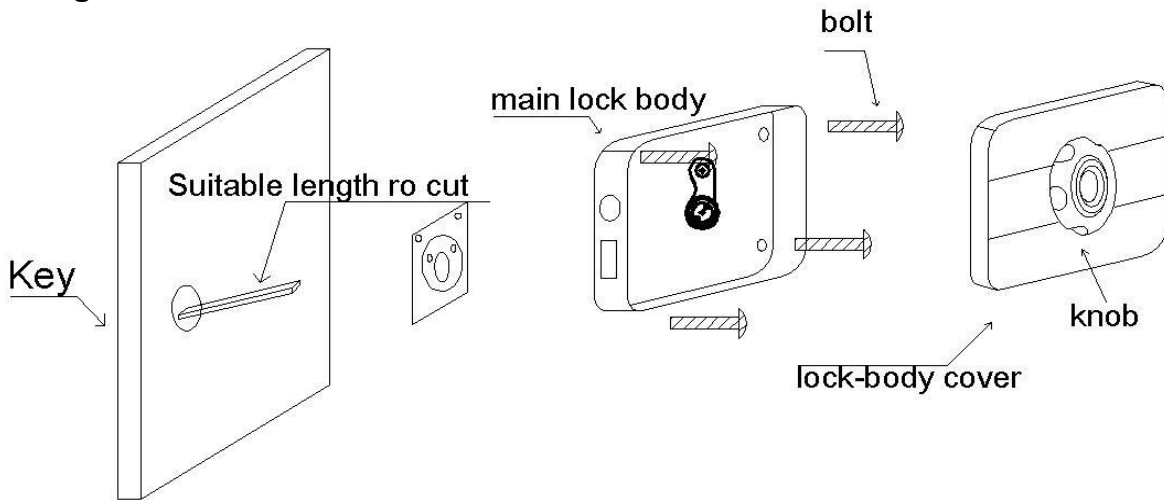


Figure2.

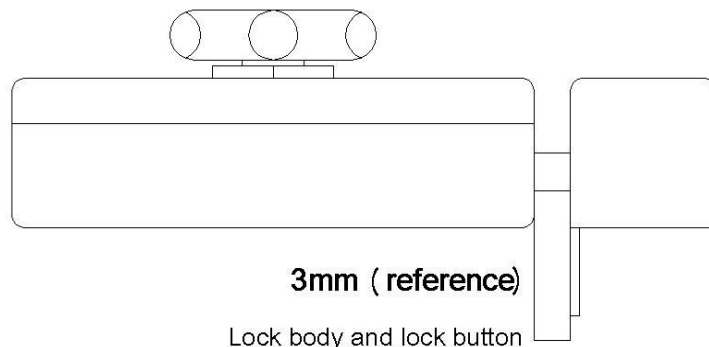


Figure3.

1.Slot Making.

A.Making $\Phi 30$ slot for keyhole with 60mm distance from the door leaf frame.

B.Making slot for lock panel and mortise by 1:1 proportion.

2.Install Keyhole.

A.Insert the key into the keyhole with key teeth upward,install the 2 coils on the keyhold from inside to outside.Then install the keyhole with coil on the door.Fix the shaft from the keyhole through the board.

B.If the shaft of the keyhole longer than the door leaf by 10-15mm,it should be cut to suitable size.

C.Make sure the door thickness comply with the shaft length,if not,repeat process A again and adjust the size properly.

D.Install the fix board and keyhole onto the door by wiring the screws.

3.Install The Lock Panel.(Lock should be in open status)

A.Open the cover of the panel.

B.Wring the power cable and unlock cable into the panel by 10cm.

C.Aiming at the keyhole location,especially the shaft,then install the panel in place.

D.Wiring the 4 screws on the panel,operate the key during wiring.

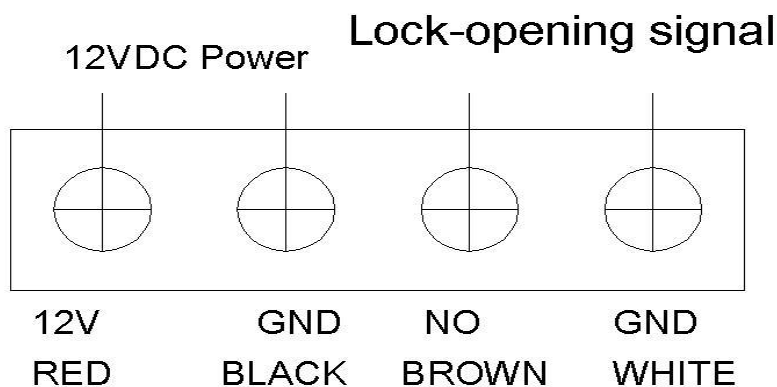
E.After installation,try to operate the key when lockpin in any place.If key operated at ease,then install succeed.

4.Install Lock Mortise.

A.Draw the sketch on the other door frame,make sure the mortise install size complying with the lockpin's location.(The distance between lock mortise and lock panel is: $\leq 10\text{mm}$.)

B.Uninstall the bracket on the mortise by loosening the screw,fix the bracket on the door frame as per the pre-drawn sketch,then install the mortise through the bracket.Wire the screw to finish final installation.

(6).Wiring



(7).Solution To Malfunction

- 1.Unlock fails when close the door:check power on or off,then check the magnetic switch and the magnet in place or not,the distance is:5mm.
- 2.Unlock signal available,but unlock fails:check the wiring correct or not,then check the unlock signal correct(unlock-driven signal same as our parameter).
- 3.With beep,but lockpin operation fails:inside electric motor damaged,or the lockset and the unlock switch are not in place.
- 4.Some contamination in the keyhole or in some other place.

(8).Notice And Maintenance

- 1.Keep proper distance between the lockpin and mortise,to reduce the friction between the 2 parts.
- 2.Keep proper distance between the magnetic switch on the lock panel and the magnet on the mortise.(5mm)
- 3.Do not install the lock under the circumstance:high-temperature,rainy,strong electromagnetism interference.
- 4.Set the correct parameter of motor-driven unlock signal.