

# The manual of hanging type electromagnetic lock(Model BCL-2503)

## I 、 Brief Introduction:

BCL-2503 is a new design electric lock with excellent performance, with noble and novel appearance. It adopt 6 Chinese word's LED display, Infrared Communication interface, can show English, Chinese, Korean, Japanese, Russian and all European countries linguistic function. The console port control the status of the door (hereby it can be used together with intercom system) .Besides, it has the function of time-delay and warning tone when open the door. It adopts the most advanced Haward Detection Circuit which enables the lock with the function of LED of door status indicator, and detection signal output. It has a build-in demagnetizing electrocircuit to realize non-magnetic remanence at door opening. Has automatic locking intelligent detection function at door closing. Without Power consumption after open the door. BCL-2503 is the best combination of high-tech and fashion; it is safer and more reliable.

## II 、 Technical Parameter:

Working voltage: 12VDC±10%

Working current: 12VDC 500mA

Display screen current: 12VDC≤700mA

Signal output of door status detection: Voltage≤36VDC/AC Current≤300mA

Ambient temperature: -30℃~55℃

Relative humidity: 10%~95%RH

Holding power: 400kg

Dimension of lock body: 256mm×62mm×37.5mm

Dimension of suction plate: 212mm×53mm×15mm

Dimension of Display: 230×45mm

LED pixel: 12

LED communication: infrared data line

Speed adjustment: 8 grades

Display Mode: 9 kinds of mode to choose (WSAD, Fixed, snowflake, scroll painting, Animation, and laser) .Besides, two check mode: "twinkle" and "marquee" can be added in the 9 modes.

Memory capacity: can storage 16 messages, 314 Chinese characters or same capacity picture messages at most.

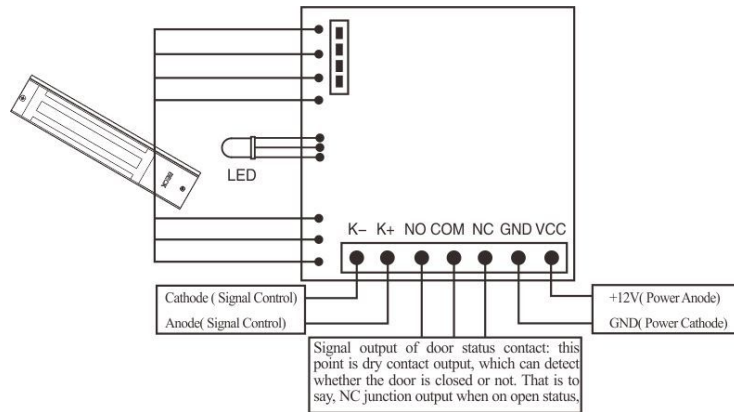
Security type: Lock on power / Unlock off power

Door status indicator: The LED light will turn green when open the door, on the contrary, it will turn red.

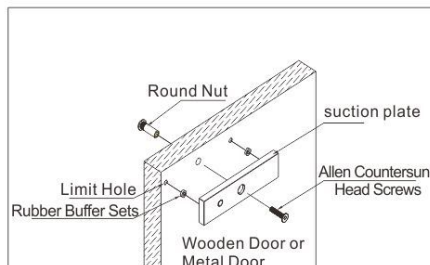
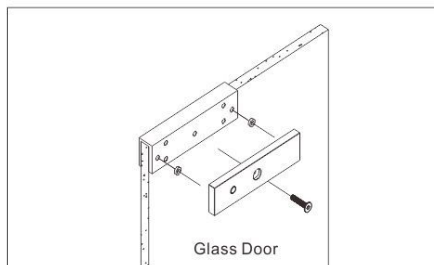
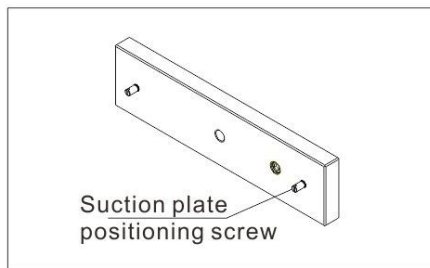
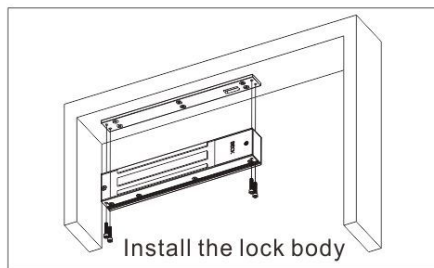
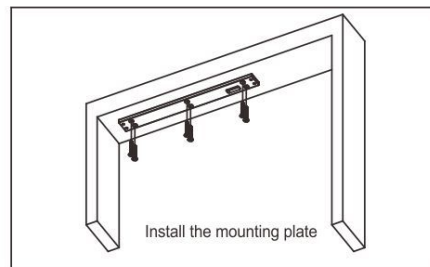
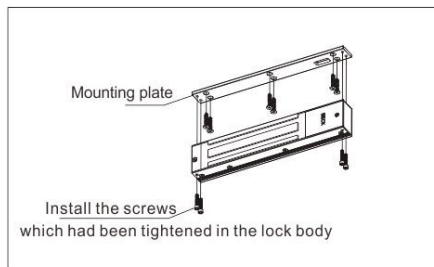
## Wiring Drawing

- Red ———→ (VCC ) Anode of power supply
- Black ———→ (GND) Cathode of power supply
- White ———→ (COM) Neutral point (door status)
- Blue ———→ (NO) Normally open (door status)
- Yellow ———→ (NC) Normally closed (door status)

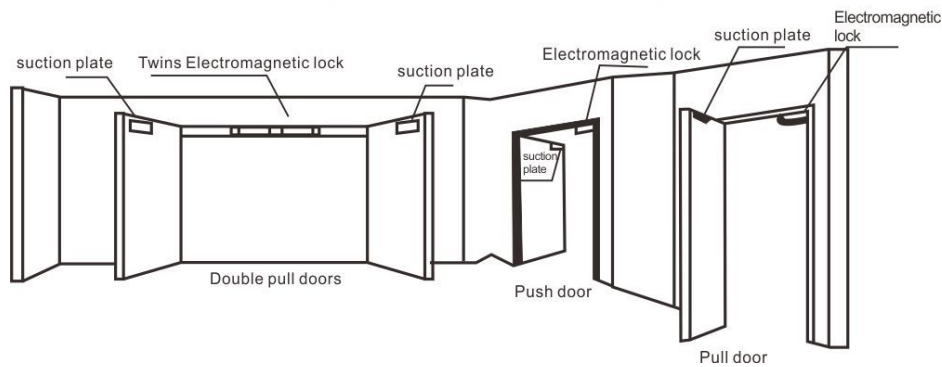
Green → (K+) The anode of control signal  
 Grey → (K-) The cathode of control signal



### III、Installation Diagram:



## Hanging type Installation Diagram

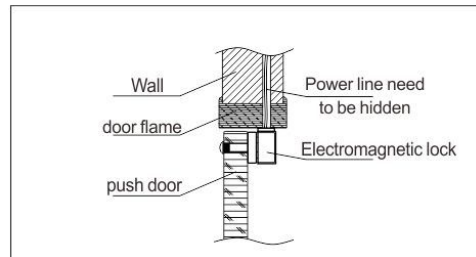
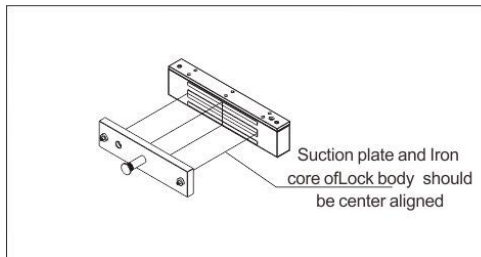


### IV、 Application Scope:

Suitable for installing wooden gate with 90° opening angle, stainless steel door and emergency exit, etc.

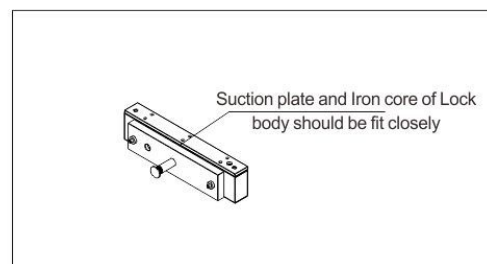
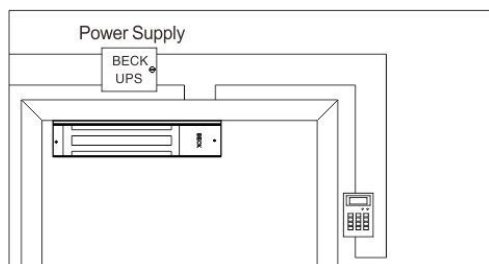
EM lock is power on locking. Therefore, if you need it on lock status although under the power-off situation, you need to equip the UPS (Uninterrupted Power Supply).

### V、 Attention



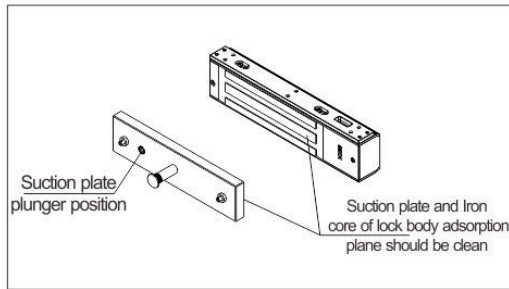
Whatever the installation way you choose, the lock body must be completely aimed at the suction plate. Otherwise, it will greatly reduce the holding force or maybe just a pull can also open the door.

Whatever the installation way you choose the power line and signal line and other lines should be hidden. Showed in the picture:



EM lock is fail safe. We suggest you equip the UPS in case of the situation when the power is off to be more safe and secure.

The lock body must be completely aimed at the suction plate. Otherwise, it will lead to reduce the holding force and no reaction from the inner Howard Element. Finally no any signals will be outputted.



Keep the absorption surface between suction plate and lock clean and tidy, no rust or blot and with good shape. Otherwise, it also will reduce the holding force and no signals will be outputted. The way to solve this problem is to slightly wipe this place with preservative oil.

## VII、 Original List

EM Lock: 1 Piece                      Suction Plate: 1 Piece                      flat cable:1 piece  
 Date line :1 piece                      Screw Accessories: 1 Bag                      Instruction: 1 Piece  
 Optical disk : 1 piece

## VIII、 Common Fault Treatment:

Situations	Reasons	Elimination Method
<b>Can not lock</b>	Line Fault or too low voltage	To check the line, test the voltage whether is normal or not
	The power line is too thin or too long so as it may results in the voltage drops too quickly.	To change the power line( select a thick one)
	The power supply maybe is out of work so as there is no any voltage.	To repair or change a new power supply
	You may make a mistake at the positive and negative poles	To check the polarity and then correct it.
	There is no power output	To check whether the lines from the power supply is correctly connected. the Red VCC connect 12V Anode of power supply, The black (GND)connect Cathode of power supply.
<b>Tension is not enough, indicator not switch, no signal output</b>	The absorption surface maybe has not touched completely.	To check the absorption surface whether is damaged which will result in incompletely closed. You need to repair it or change a new one.
	The suction plate may be fixed very very tight	To check the rubber washer whether has been put into the locating pin of suction plate. To adjust the set screw so as to let the suction
	The door is out-shape or shifting. Or the absorption surface did not completely touch.	To adjust the suction plate which had been fixed with door-frame, so as to keep the suction plate and the lock completely touch
	There is blot or other things on	Please to clear the blot. If there is rust,

	the absorption surface.	you have to repair it or change a new one.
	The settings are wrong, or the jumper becomes flexible.	Please according to the power supply voltage to set the jumper, because the lock has two jumpers—12VDC & 24VDC.
	The power is not enough.	Please check the voltage and current by using multimeter.
	The power line of lock is too thin or too long.	Pls use a better power line which is thicker and shorter and it had better no longer than 20m
	The lock maybe is of bad quality	To Repair it or change a new one.
<b>Can not open the door</b>	the electric lock control port no voltage or Anode & Cathode connect inside out	To check the unlock control circuit of the access controller Make sure the connecter is correct or not.