## The manual of hanging type electromagnetic lock(Model BCL-2502)

#### I , Brief Introduction:

BCL-2502 is a new design electric lock with excellent performance, novel and noble in appearance. 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, colorful LED flash flight and detection signal output. It has a build-in demagnetizing electrocircuit to realize non-magnetic remanence at door opening. BCL-2502 is the best combination of high-tech and fashion; it is safer and more reliable.

#### II . Technical Parameter:

Working voltage:  $12VDC \pm 10\%/24VDC \pm 10\%$ Working current: 2VDC490mA/24VDC 245mA

Signal output of door status detection: can be equipped with external

voltage≤36VDC/AC with the current ≤300mA.

Ambient Temperature:-30  $^{\circ}\text{C} \sim$  55  $^{\circ}\text{C}$  Relative Humidity:10%  $\sim$  95%RH

Holding power: 300KG

Dimension of Lock Body: 245mm×53mm×29mm
Dimension of Suction Plate: 150mm×46mm×13mm

Security Type: Lock on power/unlock off power

Door Status Indicator: The light will turn blue when open the door, on the contrary, it

will turn red. Wiring Drawing:

Red → (VCC) Anode of power supply

Blue → (NO) Normally Open (Door status)

Black → (GND) Cathode of power supply

Yellow → (NC) Normally Closed (Door status)

Green → (K+) the anode of control signal

White → (COM) Neutral Point (Door status)

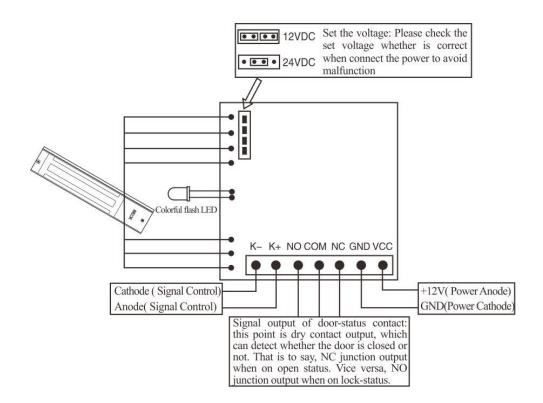
Gray → (K-) the cathode of control signal

Through adjusting the P2 jumper, the lock can work under the voltage of 12 VDC or 24 VDC.

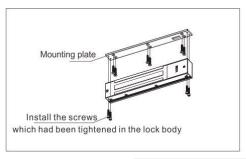
If the voltage is 12VDC, the position is:

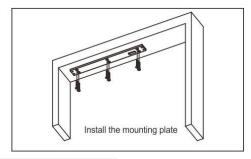
If the voltage is 24 VDC, the position is:

**Remark**: The factory default is under 12 VDC

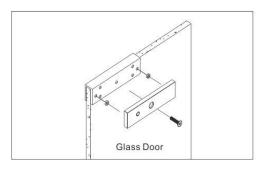


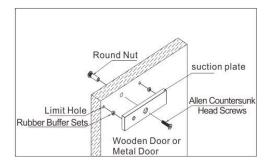
# **Ⅲ、Installation Diagram:**



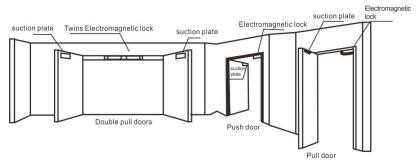








#### Hanging type Installation Diagram

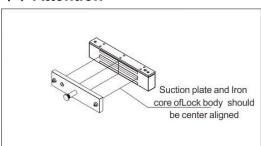


# IV . Application Scope:

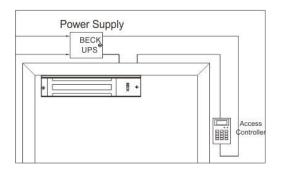
Suitable for installing wooden gate with 90° opening angle, stainless steel door and emergency exit, etc.

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).

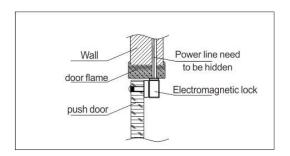
### **V** 、 **Attention**



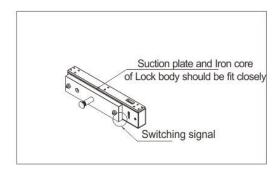
Whatever the installation way you choose, the lock body must be completely aimed at the suction plate. Otherwise, it will greatly reduce the holding force or maybe just a pull can also open the door.



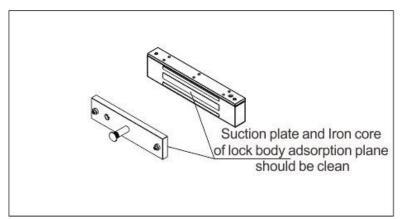
EM lock is fail safe. We suggest you equip the UPS in case of the situation when the power is off to be more safe and secure.



Whatever the installation way you choose the power line and signal line and other lines should be hidden. If the door is pull door which need to be pulled to open the door when you are outside, the lock must be equipped with L-shape bracket and you had better to install it inside the door.



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.

## **Ⅷ、Original List**

EM Lock: 1 Piece Suction Plate: 1 Piece flat cable: 1 piece Screw Accessories: 1 Bag

Instruction: 1 Piece

### **Ⅷ、Common Fault Treatment:**

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

	shifting. Or the absorption	been fixed with door-frame, so as to
	surface did not completely	keep the suction plate and the lock
	touch.	completely touch
	There is blot or other things on the absorption surface.	Please to clear the blot. If there is rust,
		you have to repair it or change a new
		one.
		Please according to the power supply
	The settings are wrong, or the	voltage to set the jumper, because the
	jumper becomes flexible.	lock has two jumpers—12VDC &
		24VDC.
	The power is not enough.  The power line of lock is too thin or too long.	Please check the voltage and current
		by using multimeter.
		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.
Can not	control port no voltage or	To check the unlock control circuit of
open the	Anode & Cathode connect	the access controller Make sure the
door	inside out	connecter is correct or not.