

# N10001ST Series

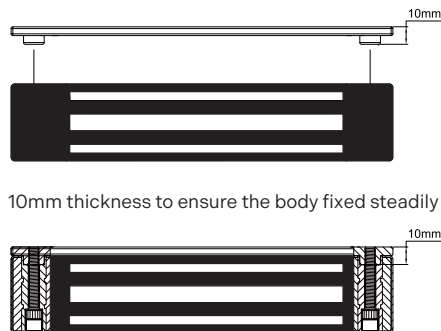
## Electromagnetic Lock Installation Instruction (Waterproof Series)

Website : [www.gianni.com.tw](http://www.gianni.com.tw)  
E-mail : [inquiry@gianni.com.tw](mailto:inquiry@gianni.com.tw)

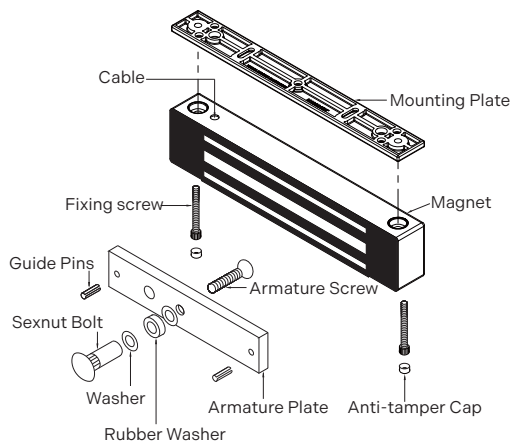
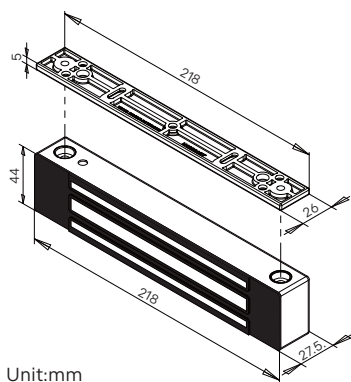
### A Technical Specification

Specification	
Operating Voltage	Single Voltage: 12 or 24VDC
	Dual Voltage: 12/24VDC
Current Draw	Single Voltage: 280mA/12VDC (low current draw)
	Dual Voltage: 500mA/12VDC
	Single/Dual Voltage: 250mA/24VDC
Operating Temperature	-31° to 150.8°F (-35 to + 66°C)
Access Control Rating	0.1A/20VDC(Resistive load)
Holding Force	600lbs (272kg)
Lock Surface Temperature	≤ Current temperature ±20°C
Lifetime Test	500,000 cycle
Humidity	0 to 85% Non-condensing
Finish	Magnet Surface: Galvanized Housing: Brushed stainless steel (US32D)

### B Extra Mounting Plate

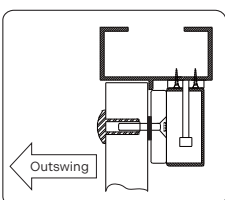


### C Dimension & Accessories

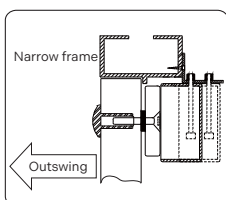


### D Optional Brackets

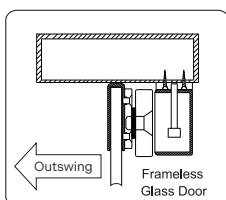
Brackets installatui are according to door swing direction and door frame type , e.g. narrow frame door, frameless glass door , inswing door , etc.



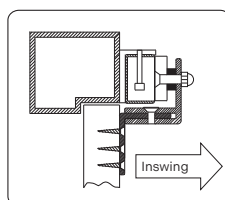
Regular Installation



With L-bracket for narrow frame doors

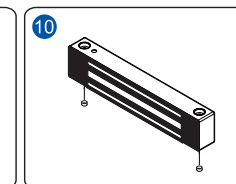
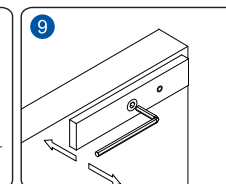
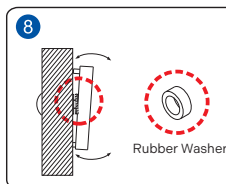
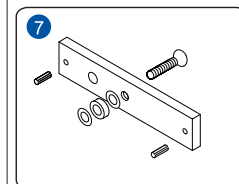
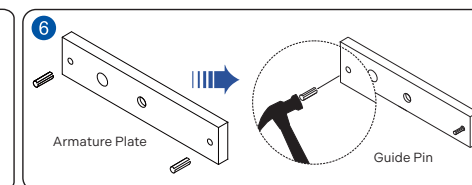
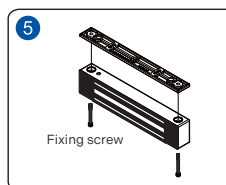
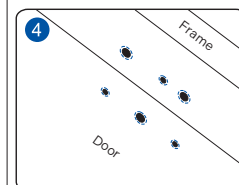
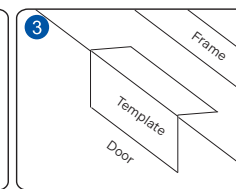
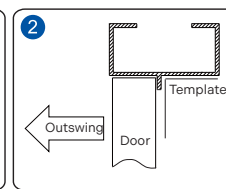
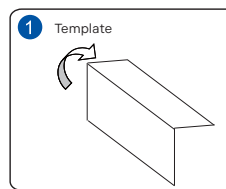
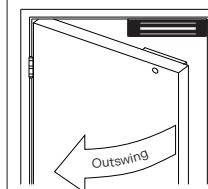


With U-bracket for frameless glass doors

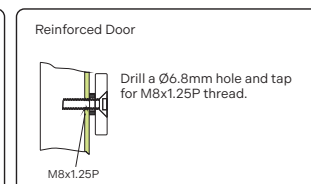
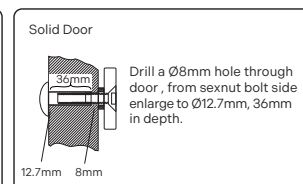
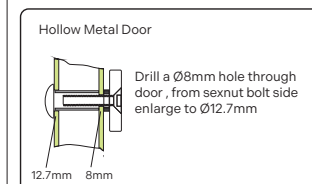


With LZ-bracket for inswing doors

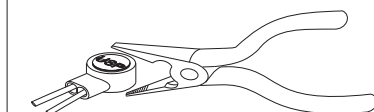
### E Regular Installation



### 11 Drilling Instruction:

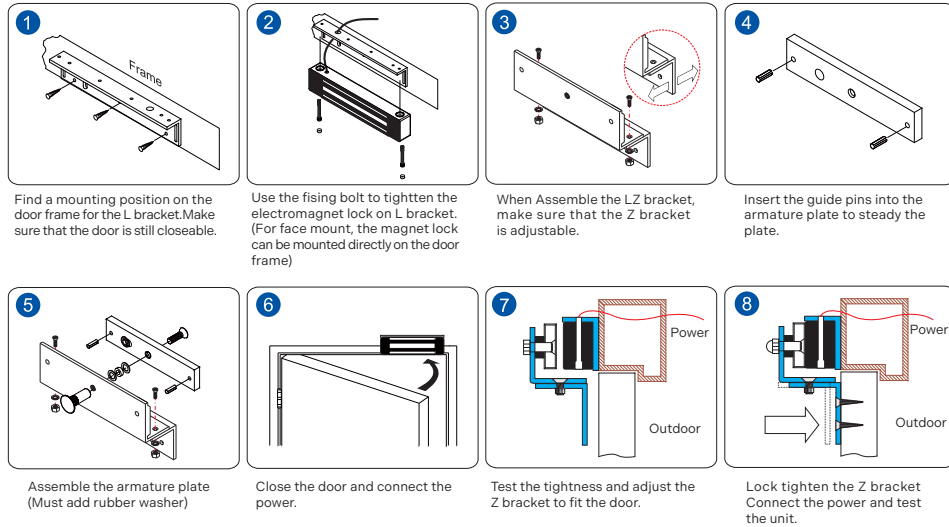


### F Butt Splice (IDC) Connector

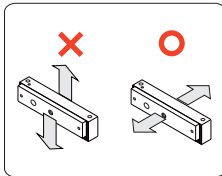


Using crimper or pliers and pressing the header of connector down to even position.

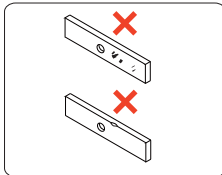
## G With LZ or Z bracket for inswing doors



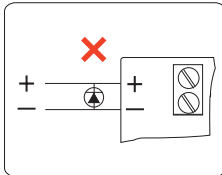
## H Important Notes



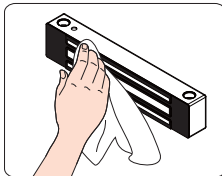
The electromagnet lock requires a face to face fitting as shown in Figure. Otherwise, the holding force will be greatly decreased (direction of hydraulic press pull must be collinear)



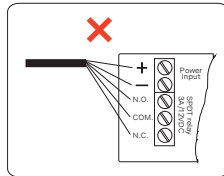
Make sure the contact area of the electromagnet lock and the armature plate are clean or the bond sensor output function will not work.



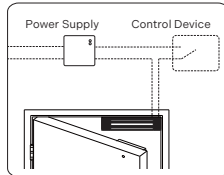
Remove any diode installed across the magnet lock for spike suppression. The magnet is fitted with a metal oxide varistor to prevent back EMF.



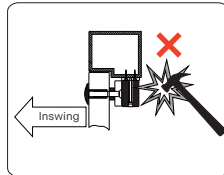
Wipe the surface of magnet lock with anti-rust oil regularly.



Do not apply power wires and signal wires in the same cable or conduit.



The electromagnet locks are fail-safe, therefore it may be required the UPS to remain locked during the power failure.



Be aware that it is better to install the electromagnet lock inside the house and hide the cable inside the door frame in order to against the unlawful entry. With LZ for inswing doors.

## I Connecting Diagram

Model	Wire Leads (Power input is polarity free)	Power Input	Bond sensor output	Digram	Bond sensor output
N10001ST-12 N10001ST-24 N10001ST-12-3M N10001ST-24-3M	2 Wire Leads	12VDC or 24VDC	—		
N10001STM-12 N10001STM-24 N10001STM-12-3M N10001STM-24-3M	5 Wire Leads		✓		Indicates the locked (N.O. contact) or unlocked (N.C. contact) status (Access Control Rating: 0.1A/20VDC (Resistive load))
N10001ST N10001ST-3M	4 Wire Leads		—		
N10001STR N10001STR-3M	6 Wire Leads	12VDC / 24VDC	✓		Indicates the locked (N.O. contact) or unlocked (N.C. contact) status (Access Control Rating: 0.1A/20VDC (Resistive load))
N10001STM N10001STM-3M	7 Wire Leads		✓		Indicates the locked (N.O. contact) or unlocked (N.C. contact) status (Access Control Rating: 0.1A/20VDC (Resistive load))

## J Trouble Shooting

Problem	Possible Cause	Solution
Door does not lock	No power	Make sure the wires are connected properly Check that the power supply is connected and working properly Make sure the lock switch is wired correctly
Low holding force	Poor contact between electromagnet and armature plate	Make sure if the armature plate is deformed? Make sure if the rubber washer was used between magnet lock and armature plate. Make sure the contact surfaces of the electromagnet and armature plate are clean and free from dust and foreign material.
	Low voltage or incorrect voltage setting	Ensure the electromagnet lock is set for the correct voltage. Check for proper voltage at the electromagnet locks input. if low determine if the correct wire gauge is being used to prevent excessive voltage drop.
Sensor output is not functioning	A secondary diode was installed across the electromagnet lock	Remove any diode installed across the magnet "spike" suppression. (The magnet is fitted with a metal oxide varistor to prevent back EMF)
	Misalignment between the reed switch and electromagnet lock	Make sure the armature plate and electromagnet lock are aligned correctly.