Ⓘ 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**	—	Parallel Connection:12VDC Control Device N.C contact or Access Relay Red, Black, Power Supply Series Connection:24VDC Control Device N.C contact or Access Relay White, Black, Power Supply	
N10001STM-12 **N10001STM-24** **N10001STM-12-3M** **N10001STM-24-3M**	5 Wire Leads		✓	Control Device N.C contact or Access Relay Blue, Blue, Power Supply White N.C. Black COM. Red N.O.	Indicates the locked (N.O. contact) or unlocked (N.C. contact)status (Relay rated:0.5A/20VDC)
N10001ST **N10001ST-3M**	4 Wire Leads		—	Voltage Selection:12VDC Red, White, Black, Green, Power Supply Control Device N.C contact or Access Relay Voltage Selection:24VDC Red, White, Black, Green, Power Supply Control Device N.C contact or Access Relay	
N10001STR **N10001STR-3M**	6 Wire Leads	**12VDC / 24VDC**	✓	Voltage Selection:12VDC Red, White, Black, Green, Power Supply Control Decive N.C. contact Access Relay Blue COM. Yllow N.O. Voltage Selection:24VDC Red, White, Black, Green, Power Supply Control Decive N.C. contact Access Relay Blue COM. Yllow N.O.	Indicates the locked (N.O. contact) or unlocked (N.C. contact)status (Relay rated:0.5A/20VDC)
N10001STM **N10001STM-3M**	7 Wire Leads		✓	Voltage Selection:12VDC Red, White, Black, Green, Power Supply Control Decive N.C. contact Access Relay Brown N.C. Blue COM. Yllow N.O. Voltage Selection:24VDC Red, White, Black, Green, Power Supply Control Decive N.C. contact Access Relay Brown Blue Yllow N.O.	Indicates the locked (N.O. contact) or unlocked (N.C. contact)status (Relay rated:0.5A/20VDC)

Ⓙ 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.

N10001ST Series

Website : www.gianni.com.tw
E-mail : info@gianni.com.tw

Electromagnetic Lock Installation Instruction (Waterproof Series)

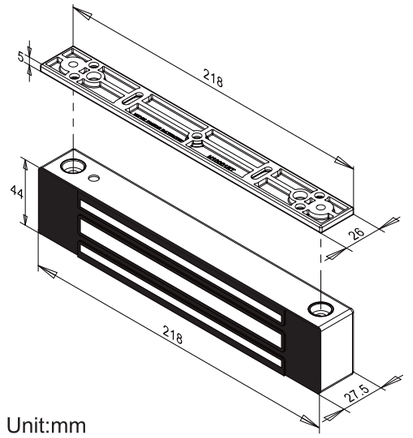
Ⓐ Technical Specification

Specification	
Operating Voltage	Single Voltage: 12 or 24VDC
	Dual Voltage: 12/24VDC
Current Draw	Dual Voltage: 0.5A/12VDC
	Single Voltage: 0.28A/12VDC (low current draw)
	Single/Dual Voltage: 0.25A/24VDC
Operating Temperature	-10~55°C(14~131°F)
Relay rating	0.5A/20VDC/10W
Holding Force	600lbs (272kg)
Lock Surface Temperature	≦ Current temperature ±20°C
Lifetime Test	Over 200,000 cycle
Net Weight	1.5kg
Waterproof Grade	IPX7

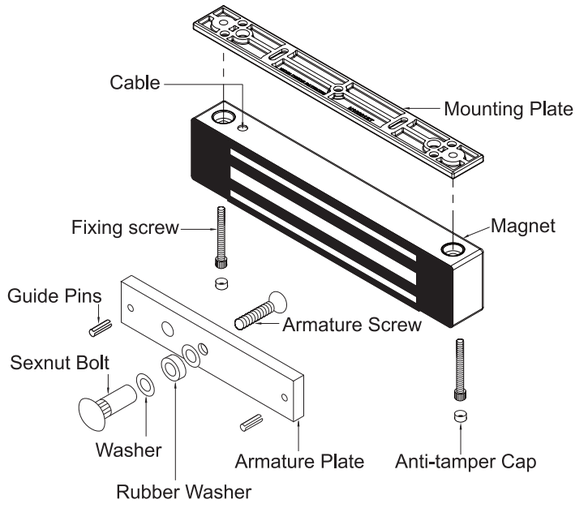
Ⓑ Extra Mounting Plate

10mm thickness to ensure the body fixed steadily

Ⓒ Dimension & Accessories

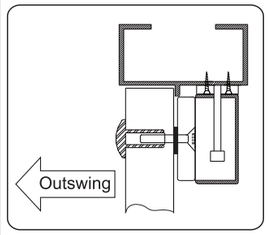


Unit:mm

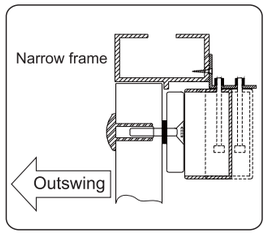


Ⓓ Optional Brackets

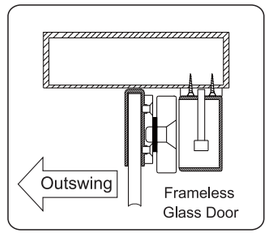
Brackets installatuin are according to door swing direction and door frame type , e.g. narrow frame door, frameless glass door , inswing door , etc.



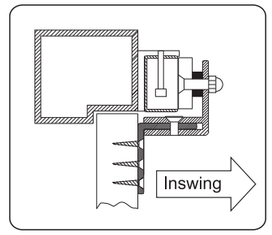
Regular Installation



With L-bracket for narrow frame doors

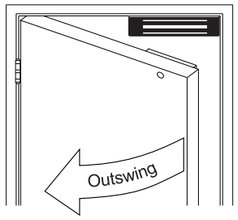


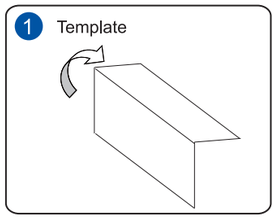
With U-bracket for frameless glass doors



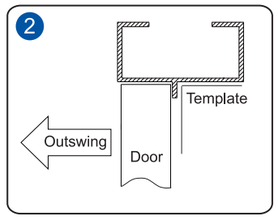
With LZ-bracket for inswing doors

E Regular Installation

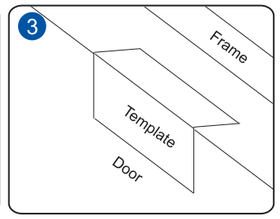




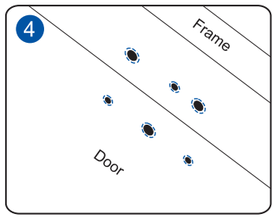
Fold the mounting template as a 90° angle



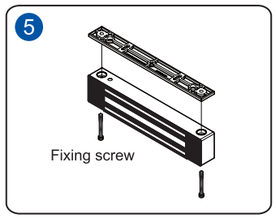
Close the door , find a mounting location on the door frame near the upper free-moving corner of the door , as close to the corner of the door frame as possible.



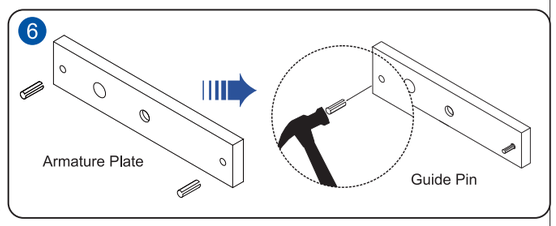
Place the template to the proper position of the door and frame. Mark the hole position of template to the door frame.



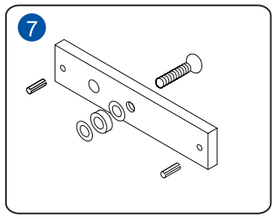
Drill the holes according to the mark.



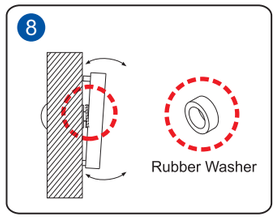
Use the screws to permanently mount the mounting plate,then mount the magnet with hardware provided.



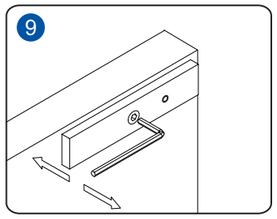
Please install the armature plate as the diagram. (Different dimension of the drilling holes are according to the door types). Mark sure the Guide pins are in the two guide pin holes.



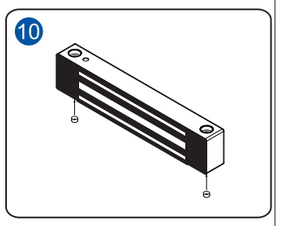
Add rubber washer when necessarily



The rubber washer makes the armature plate adjustable in order to reach the utmost combination with magnet lock.



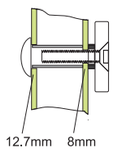
Close door and test holding force , adjust washer or armature plate to align



Inset caps into the mounting screw holes entirety.

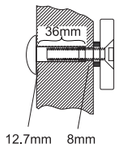
11 Drilling Instruction:

Hollow Metal Door



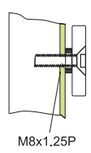
Drill a Ø8mm hole through door , from sexnut bolt side enlarge to Ø12.7mm

Solid Door



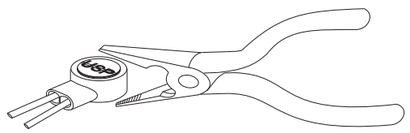
Drill a Ø8mm hole through door , from sexnut bolt side enlarge to Ø12.7mm, 36mm in depth.

Reinforced Door



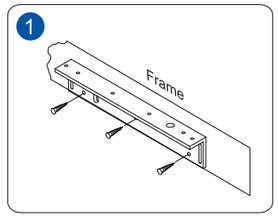
Drill a Ø6.8mm hole and tap for M8x1.25P thread.

F Butt Splice (IDC) Connector

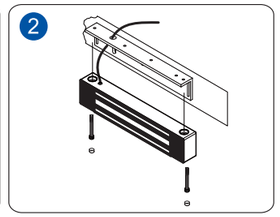


Using crimper or pliers and pressing the header of connector down to even position.

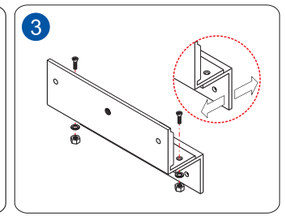
G With LZ or Z bracket for inswing doors



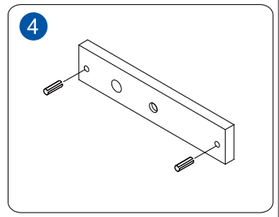
Find a mounting position on the door frame for the L bracket.Make sure that the door is still closeable.



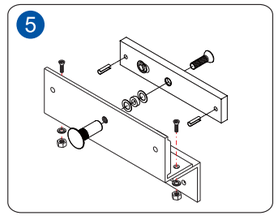
Use the fising bolt to tightten the electromagnet lock on L bracket. (For face mount, the magnet lock can be mounted directly on the door frame)



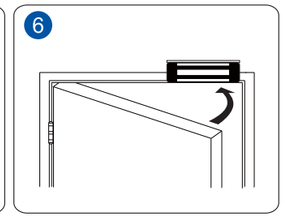
When Assemble the LZ bracket, make sure that the Z bracket is adjustable.



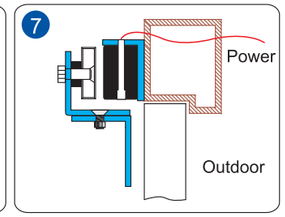
Insert the guide pins into the armature plate to steady the plate.



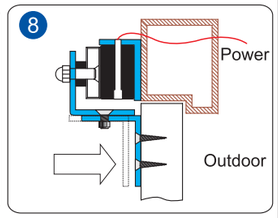
Assemble the armature plate (Must add rubber washer)



Close the door and connect the power.

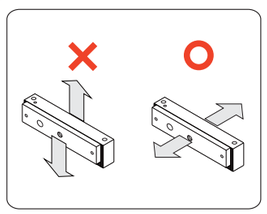


Test the tightness and adjust the Z bracket to fit the door.

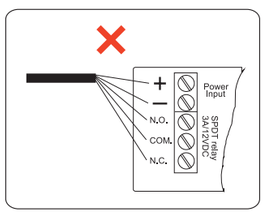


Lock tighten the Z bracket Connect the power and test the unit.

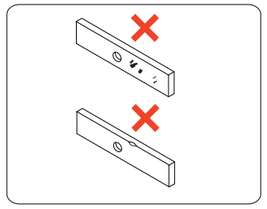
H Important Notes



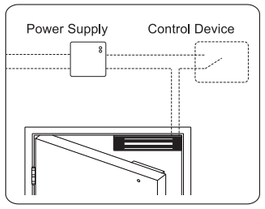
The electromagnet lock requires a face to face fitting as shown in Figure Otherwise,the holding force will be greatly decreased (direction of hydraulic press pull must be collinear)



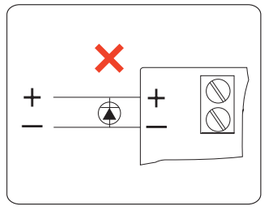
Do not apply power wires and signal wires in the same cable or conduit.



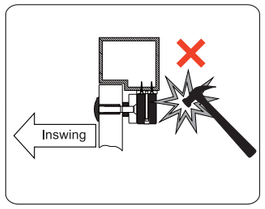
Make sure the contact area of the electromagnet lock and the armature plate are clean or the bond sensor output function will not work.



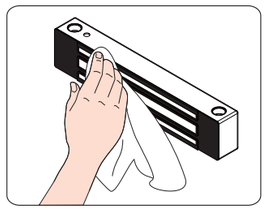
The electromagnet locks are fail-safe,therefore it may be required the UPS to remain locked during the power failure.



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



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.



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