# MLSH01-0 Electromagnetic Lock

The MLSH01-0 is a surface mount electromagnetic lock featured with a built-in voltage spike suppressor and a sensor. It can be applied for single-leaf or double-leaf doors.

**Note:** The product should only be powered by a UL listed power supply.

## Packing List

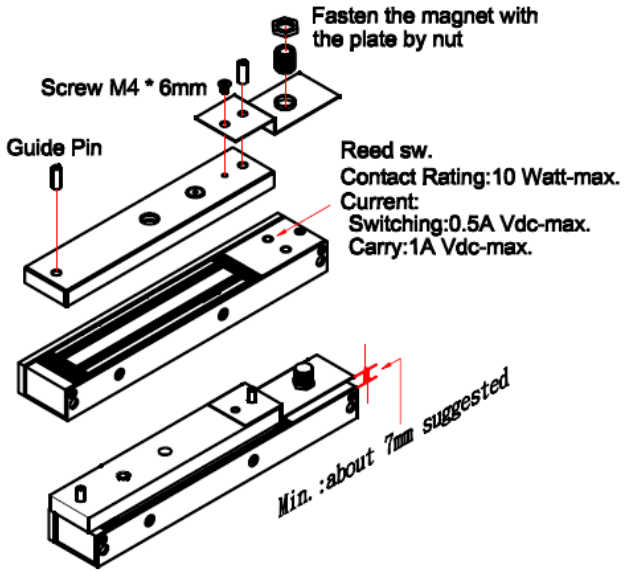
| | |
|---|---|
| **1.** MLSH01-0 electromagnetic lock x 1  | **2.** Magnet faceplate x 1  |
| **3.** Inner hexagon wrench x 1  | **4.** M8 (35mm) screw + black rubber spacer x 1  |
| **5.** Hat nut x 1  | **6.** Galvanized steel rivet x 2  |
| **7.** Black rubber spacer x 2  | **8.** Aluminum shim x 2  |
| **9.** #10 (5/8”) screw x 2  | **10.** #10 (1.25”) screw x 8  |
| **11.** Washer x 2  | **12.** Stainless steel bracket x 1  |
| **13.** CU1201 screw + permanent magnet x 1  | **14.** M4 (6mm) screw x 1  |
| **15.** Inner hexagon nut x 1  | **16.** Aluminum tube x 1  |



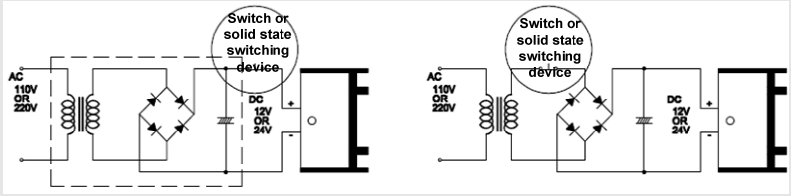
## Installation

Before installing, add the thread lockers to all screws. Firmly tighten the screws to avoid fastening loosen.

1. Install the electromagnetic lock to the doorframe.

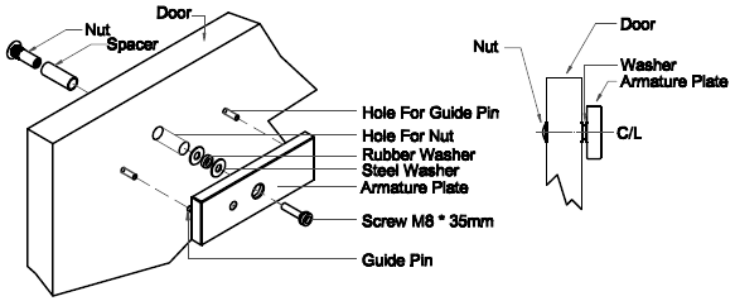



**Note:** If the power switch is not wired between the DC source voltage and the magnet, it will take longer to de-energize the magnet simulating residual magnetism.

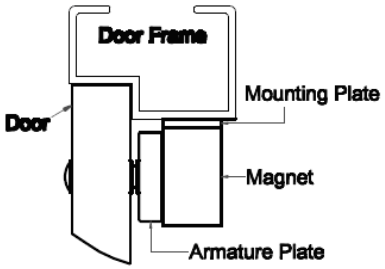



Correct Incorrect

2. Mounts the armature plate to the door.




Typical Installation of the electromagnetic lock:

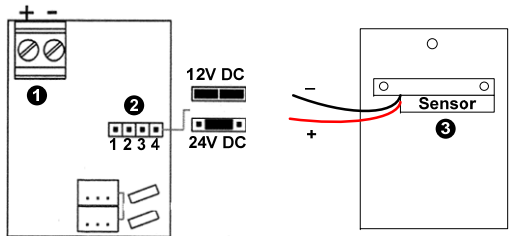



**Note:** To make the armature plate adjust its proper position to the magnet automatically, do not fix the armature plate too tightly and make the rubber washer more flexible.



## Contacts

Unscrew the cover of electromagnetic lock and you will see the diagram as below:

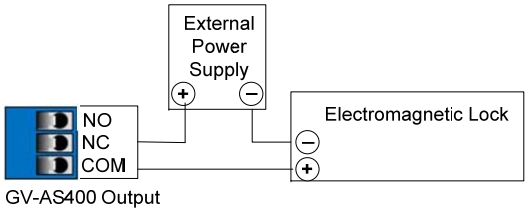



1. **Power Terminal Block:** Connects to the DC 12V / 24V power source.
2. **Power Switch Jumper:** Plug the power jumpers to **Pins 1, 2** and **Pins 3, 4** for a 12V DC power source. Plug the power jumper to **Pins 2, 3** for a 24V DC power source.
3. **Sensor:** Connects to the access control system by using the black and red wires. For details, see Connecting Sensor to the Access Control System later in this installation guide.

## Connecting to the GV-AS Controller

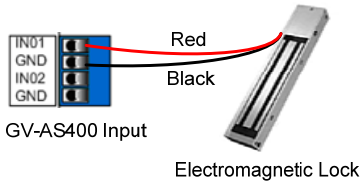
To connect the electromagnetic lock to the GV-AS Controller, follow the steps below. Here we use the GV-AS400 Controller for example.

1. To connect the power between the electromagnetic lock and the GV-AS400, refer to the diagram as below.

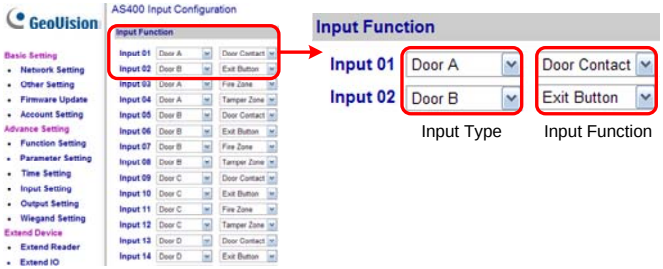



Connect the (+) point on the electromagnetic lock to **COM** on GV-AS400, connect the two (-) points of the electromagnetic lock and the external power supply together, and connect the (+) point on the external power supply to **NC** on GV-AS400.

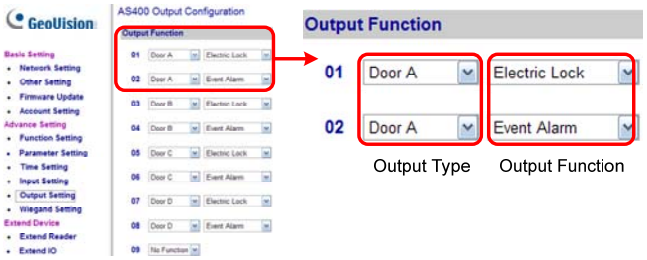
2. To connect the sensor to the GV-AS400, connect the **Red** wire of the sensor to the **Input** of the GV-AS400, and connect the **Black** wire of the sensor to the **Ground** of the GV-AS400.




3. On the Web interface of the GV-AS400, select **Input Setting**, and select an input type and input function for the connected sensor from the electromagnetic lock.




4. On the Web interface of the GV-AS400, select **Output Setting**, and select an output type and output function for the connected electromagnetic lock.




For details on configuring the input and out devices, see *3.4.3.D Input Function* and *3.4.3.E Output Function* on the GV-AS Controller User's Manual.



## Specifications

| | |
|---|---|
| **Voltage** | DC 12V / 24V |
| **Current** | 500mA at 12V / 250mA at 24V |
| **Holding Force** | 272.15 kg / 600 lb |
| **Dimension (L x W x H)** | 250 x 47.2 x 26.6 mm / 9.84 x 1.86 x 1.05 in |
| **Armature Plate Dimension (L x W x H)** | 185 x 38 x 12.5 mm / 7.28 x 1.50 x 0.49 in |
| **Certification** | CE and UL |