GV-ML1200 Electromagnetic Lock

The GV-ML1200 is a surface mount electromagnetic lock featured with a built-in voltage spike suppressor and a sensor.

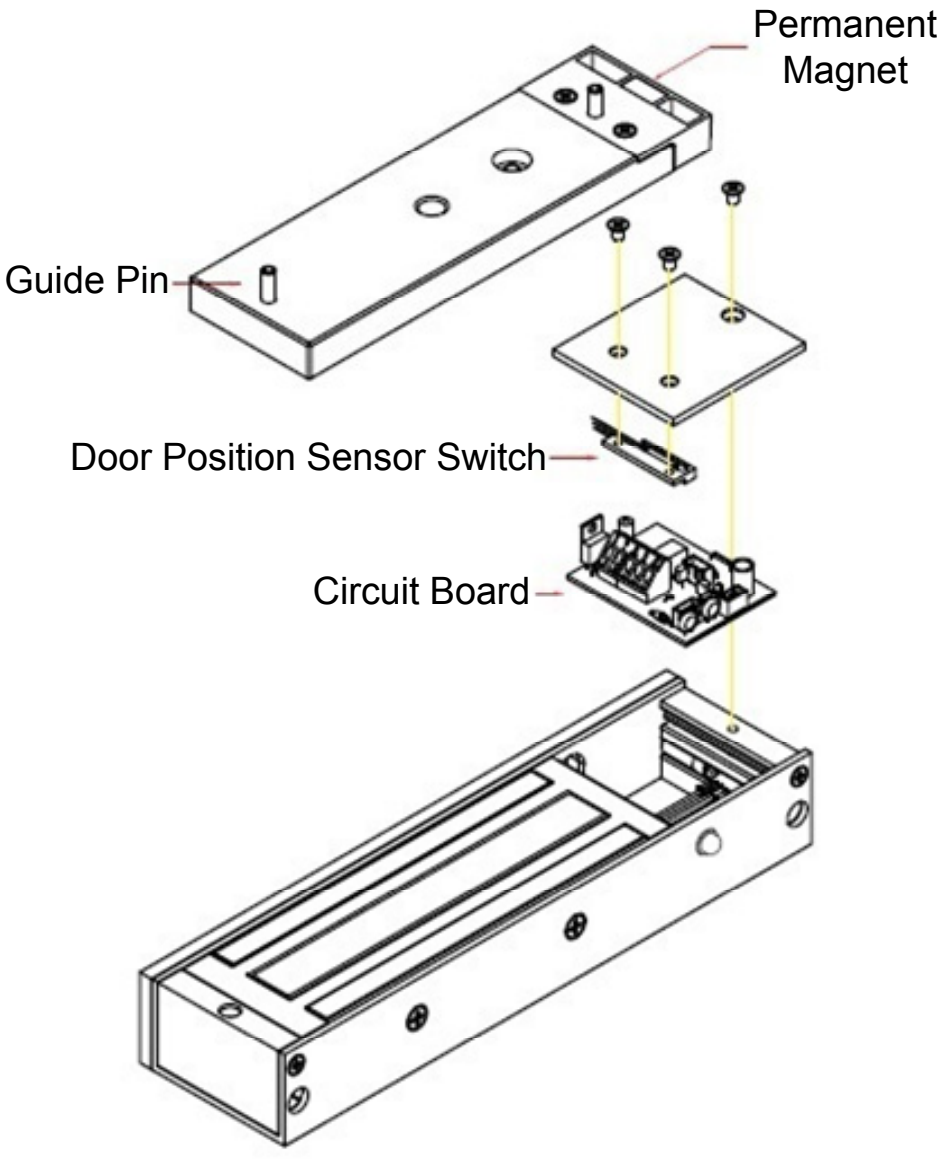
Packing List

1. GV-ML1200 electromagnetic lock x 1 	**2.** Magnet faceplate x 1 
3. Inner hexagon wrench x 1 	**4.** M8 (41mm) 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 9 
11. M4 (7mm) flat-head screw x 2 	**12.** M5 (8mm) flat-head screw x 2 
13. Washer x 3 	**14.** Aluminum tube x 1 
15. Tamper-proof tube x 3 	

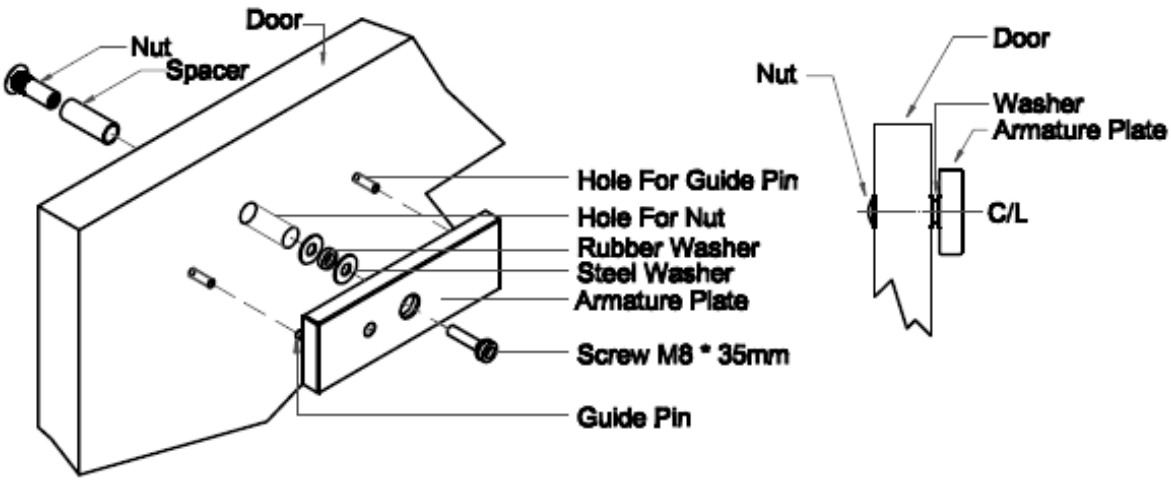
Installation

Before installing, add the thread lockers to all screws. Be sure to firmly tighten the screws.

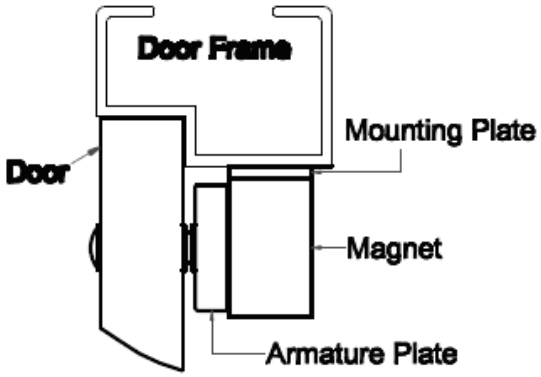
1. Install the electromagnetic lock to the doorframe.



2. Mounts the armature plate to the door.

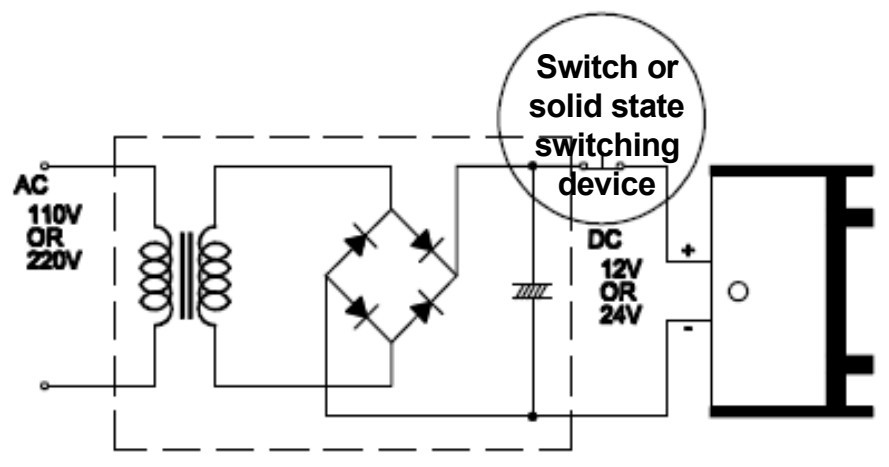


Typical Installation of the electromagnetic lock:

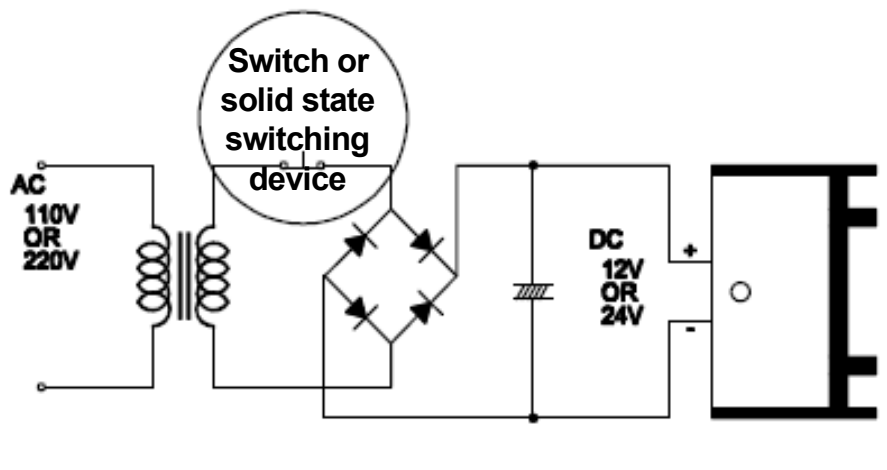


Note: To make the armature plate adjust its proper position to the magnet automatically, do not fix the armature plate too tightly and make the rubber washer more flexible.

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.



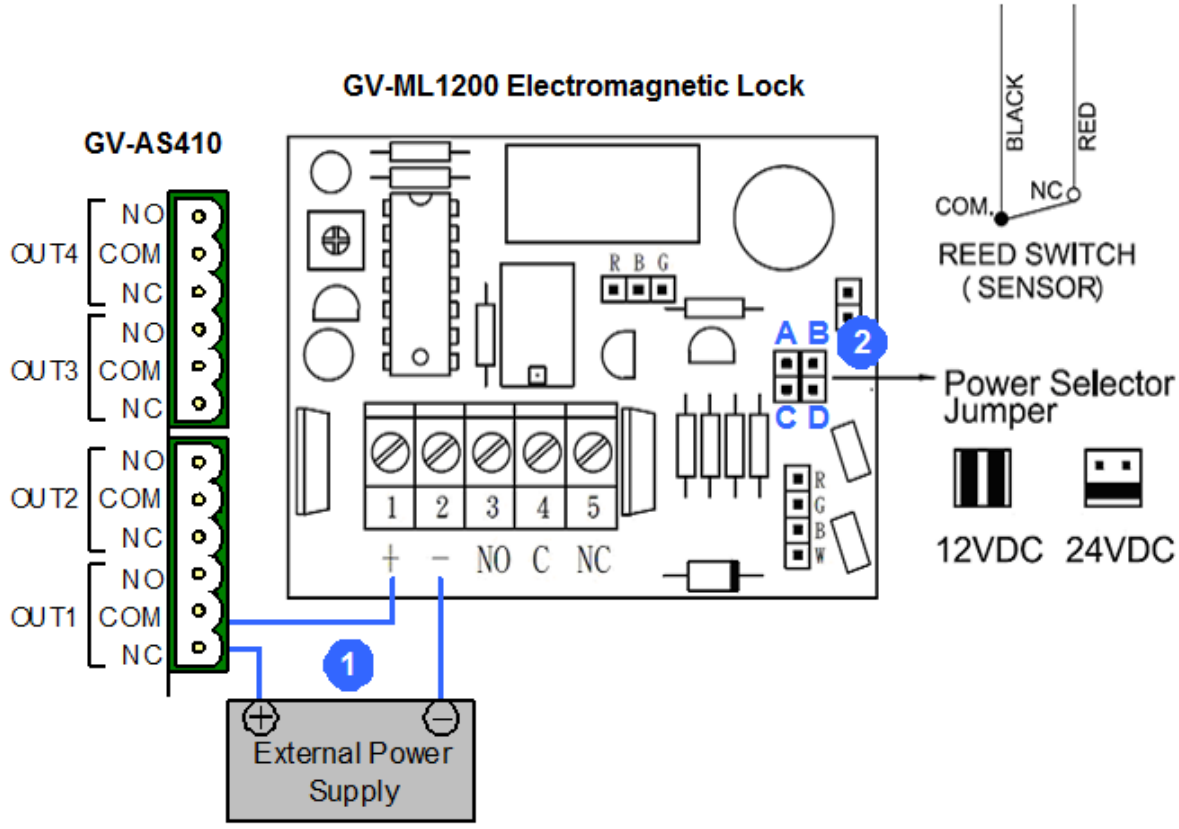
Correct



Incorrect

Connecting to Power

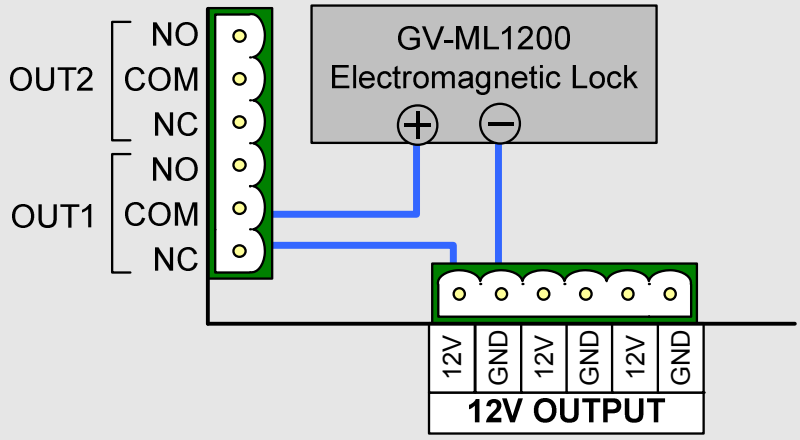
Unscrew the cover of electromagnetic lock, and connect the lock to the output interface of the GV-AS Controller and a power supply. Here we use GV-AS410 Controller as an example.



1. **Power Terminal Block:** Connects to a DC 12V / 24V power source. Connect the (+) point on the electromagnetic lock to **COM** on GV-AS410, 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-AS410.
2. **Power Switch Jumper:** Plug the power jumpers to **Pins A, C** and **Pins B, D** for a 12V DC power source. Plug the power jumper to **Pins C, D** for a 24V DC power source.

Note:

1. It is required to connect an external power supply if the total power consumption of the output devices and readers connected to the GV-AS Controller exceeds **3A** (for GV-AS210 / 2110), **3.5A** (for GV-AS410 / 4110) or **5A** (for GV-AS810 / 8110).
2. You may use the power outputs on the GV-AS Controller when the total power consumption of the output devices and readers connected to the GV-AS Controller is under **3A** (for GV-AS210 / 2110), **3.5A** (for GV-AS410 / 4110) or **5A** (for GV-AS810 / 8110). Here we use GV-AS410 Controller as an example.



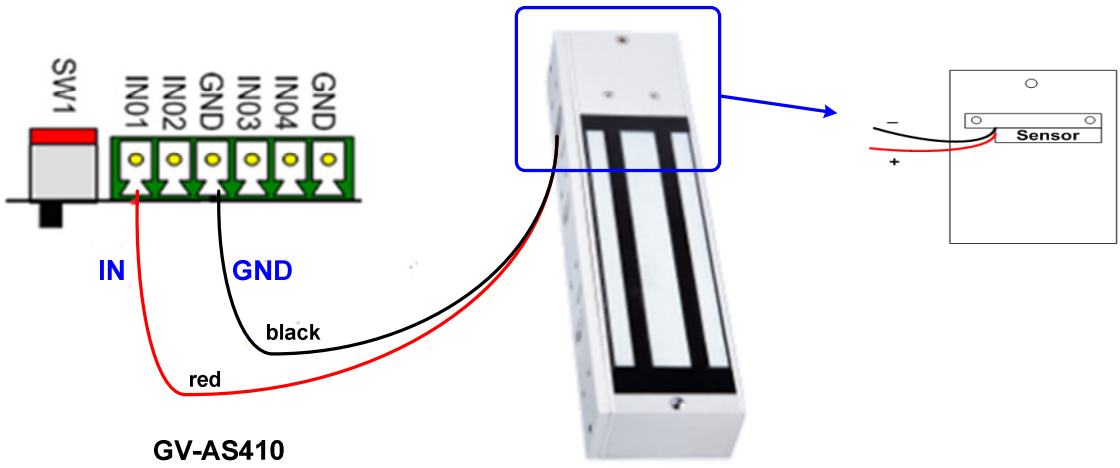
Connecting a Sensor to the GV-AS Controller

There are two types of sensors for the electromagnetic lock: Door Closure Detection Sensor and Magnet Clasp Detection Sensor. The sensors will detect whether the door is closed tightly or not, and trigger a “Held Open” message on GV-ASManager when the door remains unlocked. To connect the sensors to the GV-AS Controller, follow the steps below. Here we use GV-AS410 Controller as an example.

Note: Only one type of sensor could be applied at a time.

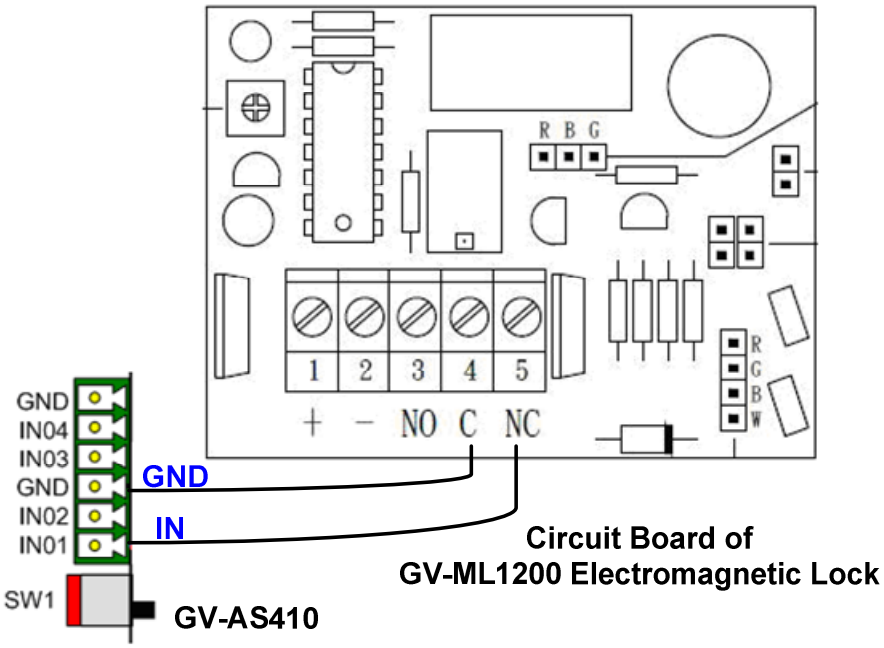
Option 1: Door Closure Detection Sensor

To connect the Door Closure Detection Sensor to the GV-AS410, connect the **Red** wire of the sensor to the **Input** of the GV-AS410, and connect the **Black** wire of the sensor to the **Ground** of the GV-AS410.



Option 2: Magnet Clasp Detection Sensor

To connect the Magnet Clasp Detection Sensor to the GV-AS410, connect one wire from NC of the electromagnetic lock's circuit board to the **Input** of the GV-AS410, and connect the other wire from COM of the electromagnetic lock's circuit board to the **Ground** of the GV-AS410.

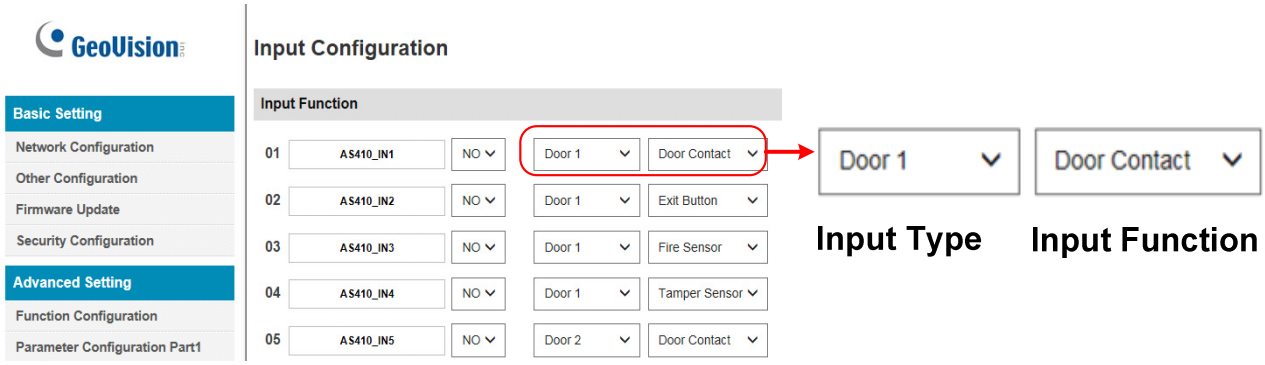


Note: The two wires mentioned in Option 2 are not included in the package; the users must prepare them additionally. It is recommended to use wire No. 26 AWG (American Wire Gauge) or above.

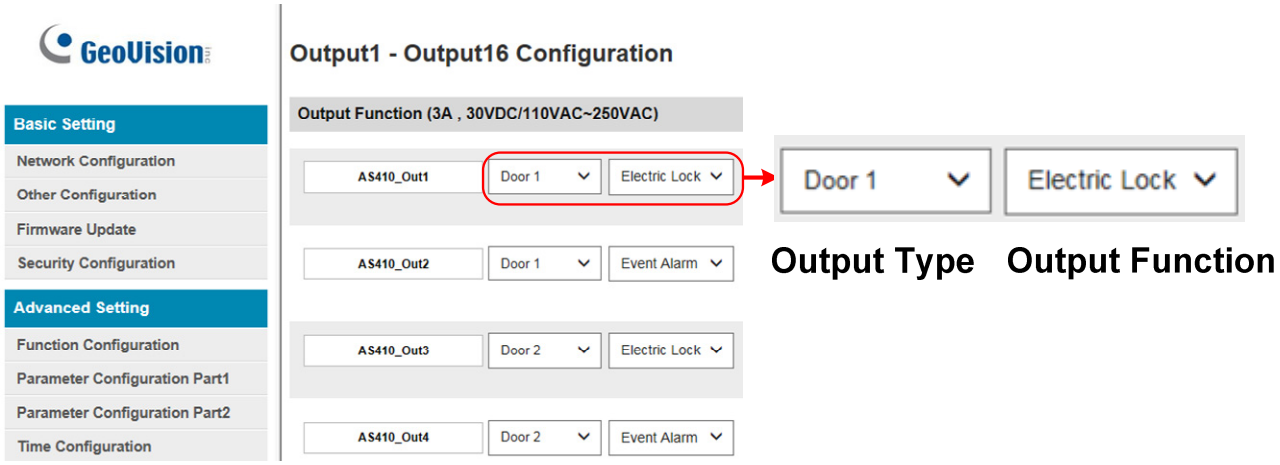
Setting the Web Interface of the GV-AS Controller

Here we use GV-AS410 Controller as an example.

1. To configure the input setting of connected sensor: on the Web interface of the GV-AS410, select **Advanced Setting**, select **Input Configuration**, and set the input function to **Door Contact**.



2. To configure the output setting of the electromagnetic lock: on the Web interface of the GV-AS410, select **Advanced Setting**, select **Output Configuration**, and set the output function to **Electric Lock.**



For details on configuring the input and output devices, see the *Input Configuration* and *Output Configuration* section in Chapter 8 of the *GV-AS Controller User's Manual*.

Specifications

Voltage	DC 12V / 24V
Current	500mA at 12V / 250mA at 24V
Holding Force	544.311 kg (1200 lb)
Operating Temperature	-20°C ~ 60°C (-4°F ~ 140°F)
Dimensions (L x W x H)	266 x 73 x 40 mm (10.47” x 2.87” x 1.57”)
Armature Plate Dimensions (L x W x H)	185 x 61 x 16 mm (7.28” x 2.40” x 0.62”)
Weight	5 kg (11.02 lb)
Certification	CE, UL, ISO 9001, RoHS

All specifications are subject to change without notice.