

# **LASERMET MONITORED MAGLOCK INSTRUCTION MANUAL**



## **MONITORED MAGLOCK INSTALLATION**

Issue 2

# LASERMET Maglock Instruction Manual

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## **1 Safety Warnings**

This device is intended to be used as part of a safety system which may be used to protect personnel and equipment from possible injury, damage, or loss.

As such it must be installed and wired according to these instructions and tested by suitably qualified persons. No attempt may be made to tamper with the parts, open them, or use them outside of the parameters contained herein.

The units are only designed to be fixed to surfaces using their inbuilt fixing holes. They must not come into contact with each other or any other moving part when in use. The parts should never be subject to impact or mechanical strain.

Safety switches should never be defeated or bypassed. It is imperative that all steps are taken to ensure that any spare actuators are made unavailable, such that they cannot be used to defeat the switch or reduce the protection offered by the system in any way.

## 2 Concept

Suitable for internal doors, this maglock has an aluminium finish and it is monitored so that the status of the door locking mechanism can be confirmed.

When the maglock is energised and the door is closed, the onboard relay is closed and a green LED illuminates.

When the maglock is energised and the door is NOT closed, the onboard relay is open and a red LED illuminates.

Lasermet provides a full range of laser interlock equipment including control systems, interlock switches, illuminated warning signs, laser shutters, door locks, external power supplies etc. which can be connected to provide a complete laser interlock system. Full support, design and installation is available from Lasermet, please contact us for any queries. Contact details are given at the end of this manual.

## 3 Installation

Handle the equipment with care, damaging the mating surfaces of the magnet or armature plate may reduce locking efficiency.

The magnet mounts rigidly to the door frame, the armature plate mounts to the door with the hardware kit provided. This allows it to pivot about its centre to compensate for door wear and misalignment.

The template must be used when the door is in the closed position.

Before installing, add thread locker to all screws. Firmly tighten screws.

**NOTE:** Fix the armature plate lightly to ensure the rubber washer remains flexible. This enables the armature plate to automatically adjust to its correct position with the magnet.



**Typical Installation**

### 3.1 Mounting

**STEP 1**

- Fold template along dotted line.
- Place template against door and head frame.
- Drill holes as indicated on template.

**STEP 2**

- Mount the armature plate to the door using one (1) rubber washer sandwiched between two (2) steel washers.

**STEP 3**

- Install the mounting plate.
- Adjust the mounting plate so that it and the armature plate form a right angle.
- Using the mounting plate as a template, drill the wire hole.
- Drill and install the remaining mounting screws.

**STEP 4**

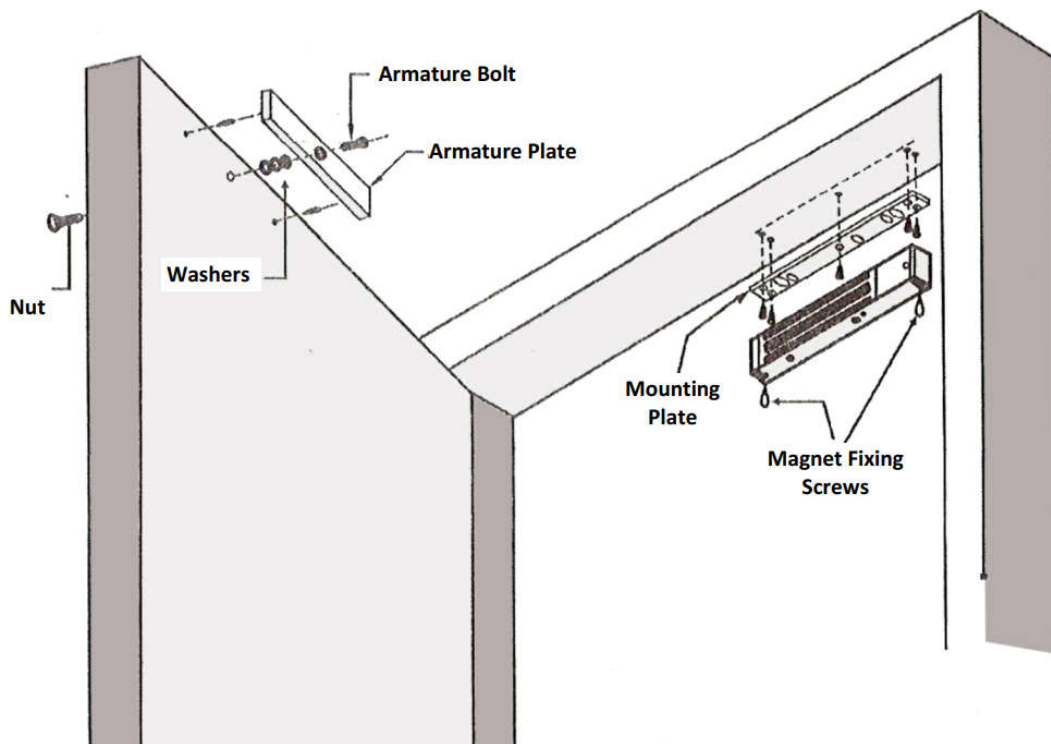
- Fix the magnet to mounting plate with two m4 (m6) screws supplied.

**STEP 5**

- Install electrical wiring per instructions.

**STEP 6**

- Test all functions of this model (see wiring)



**Mounting the Maglock**

## 4 Wiring

A typical wiring scheme for the Monitored Maglock is shown below. If you require further assistance, please call Lasernet technical help. Contact details are at the end of this manual.

### 12VDC Input

Required Power 0.5A minimum

Connect the positive (+) lead from a 12VDC power source to V+

Connect the ground (-) lead from a 12VDC power source to V-

Check jumper for 12VDC operation

### 24VDC Input

Required Power 0.25A minimum

Connect the positive (+) lead from a 24VDC power source to V+

Connect the ground (-) lead from a 24VDC power source to V-

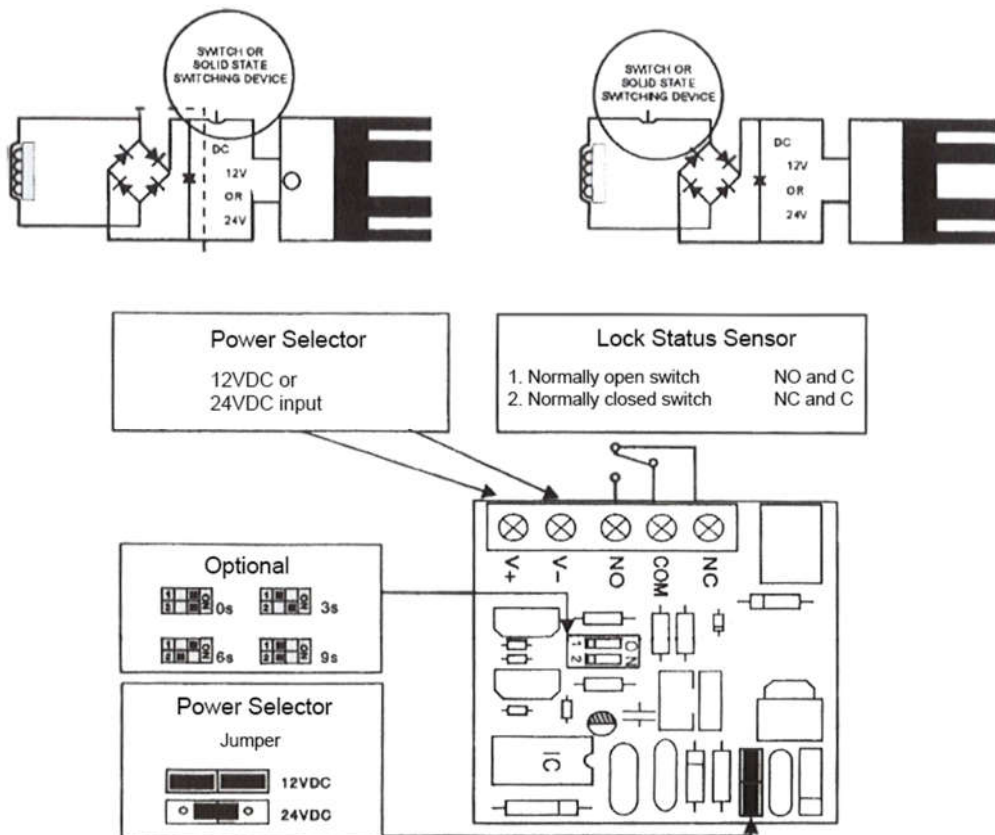
Check jumper for 24VDC operation

### Contacts

Relay dry contacts are rated at 1A at 24VDC for safe operation. Do not exceed this rating.

For a normally open switch, connect the wires from the system to COM and NO.

For a normally closed switch, connect the wires from the system to COM and NC.

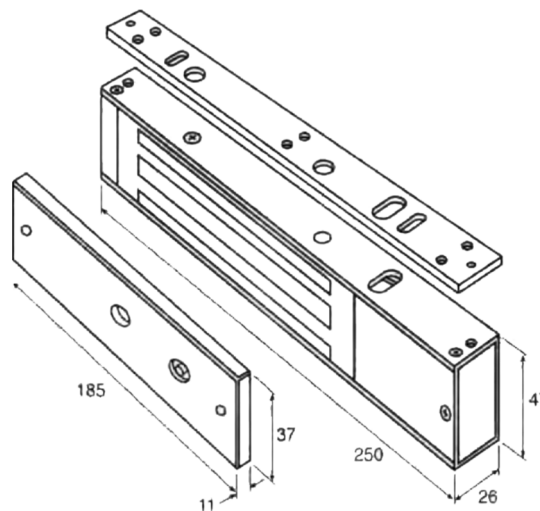


**NOTE:** If power switch is not wired between DC source voltage and magnet, it will take longer to de-energize the magnet simulating residual magnetism. See above.

## 5 Specifications

Holding Force	Up to 600lbs (272Kg) per lock	
Current Consumption	500mA	12VDC
	250mA	24VDC
Size	250mm long X 47mm wide X 26mm deep	

## Dimensions



Dimensions are approximate. Values given as 'typical' are average values measured across a number of samples and are not guaranteed. Lasernet reserve the right to alter any specification without prior notice.

## 6 Warranty

Lasermet provide a 12-month warranty for defects in materials and manufacture, from the date of installation or delivery. Installations completed by Lasermet are covered against defects in workmanship for 12 months.

Damage or defects caused by other factors are not covered. For example, industrial contamination, incorrect cleaning, storm damage. Consequential loss is not covered under warranty. Compensation for indirect or direct loss or damage is expressly excluded. Rectification of the defects or a replacement does not initiate a new warranty period.

For all deliveries, payments and other legal transactions, English law takes precedence for any litigation.

## 7 Contact Details

Lasernet provide a full range of laser interlock equipment including interlock switches, illuminated warning signs, laser shutters, entry keypads with built-in fail-safe override timer, door locks, external power supplies etc. which can be interconnected to provide a complete system. We also supply equipment and consultancy covering all aspects of laser safety. Full support, design, and installation is available from Lasernet, please contact us for any queries.

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