

# MANUAL

# GE-MS10

MGCB Module with  
Two 0-10Volts Outputs and Relays



**Installation / User's Guide**

This guide will inform the electrician on proper wiring and installation procedures and, will also inform the user on how to use the GE-MS10 module.

The manufacturer recommends that the following installation instructions be followed to as closely as possible, and that all work be performed by a certified electrician. Failure to do so may void the warranty.

## **Description**

The GE-MS10 module is designed to control two 0-10V outputs and relays from an MGCB communication signal provided by a master control.

The GE-MS10 comes in a PVC non-corrosive enclosure that is protected from dust and humidity. The GE-MS10 is covered by a complete two-year warranty.

## **Unpacking**

Unpack the GE-MS10 module and inspect contents for damage. Should the contents appear to be damaged, contact your local distributor to return the equipment.

The package should contain the following standard items:

1 GE-MS10

1 Installation / User's guide

## **Mounting hardware required**

This is the list of the mounting hardware needed, which is not included with the product:

Screws (to mount the module on the wall)

Screwdriver

Soldering iron kit or approved sealed connectors

## **General installation guidelines**

- It is recommended to install the unit in a hallway to limit the GE-MS10 exposure to noxious gases.
- In order to avoid condensation problems inside the GE-MS10, it is recommended to install the module on an inside wall. If it is not possible, use spacers to have an air gap between the wall and the controller.
- The GE-MS10 should be installed in easy-access location but away from damaging elements (heat, cold, water, direct sunlight...).
- Do not install the GE-MS10 near high-voltage equipment, power supply or transformer.

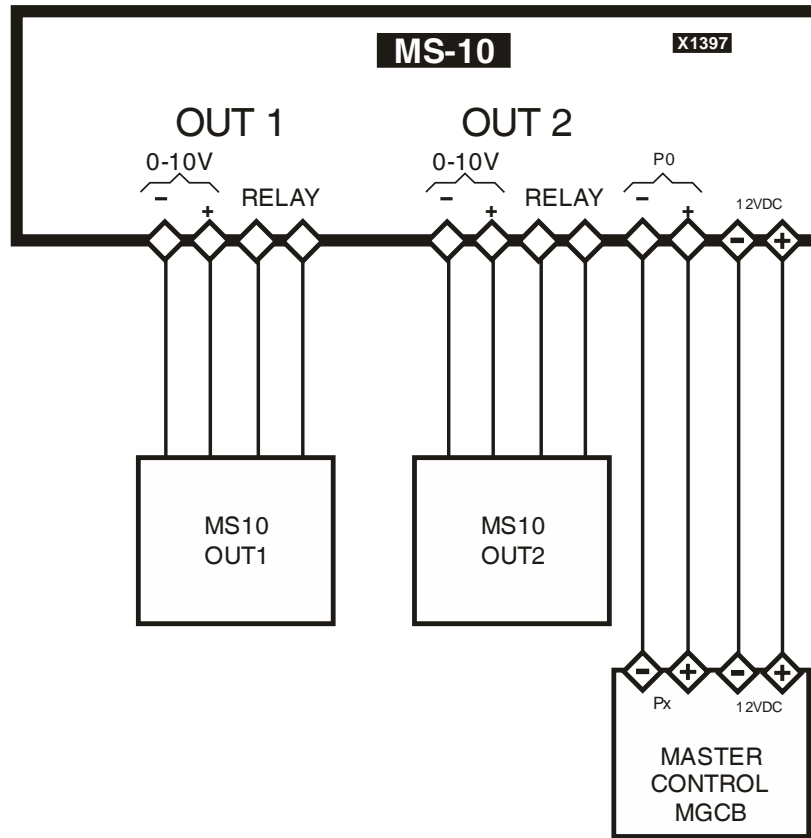
## **Wiring Procedure**

1. Open the GE-MS10 module enclosure.
2. Verify the technical specifications to know which wire to use.
3. Connect the equipment to the green terminal block identified as 0-10V and RELAY (if needed) as shown in figure 1.
4. Connect the MGCB communication wires coming from the master control to the green terminal block identified as P0 as shown in figure 1.
5. Connect the power source to the green terminal block identified as 12VDC as shown in figure 1.

**IMPORTANT:** Low-voltage and high-voltage wire must be passed through different conduits at least 1 foot (30 cm) apart. If low-voltage and high-voltage conduits must be crossed, the crossing must be at a 90-degree angle.

6. Power up the master control (or another power source) in order to power up the GE-MS10 module. Verify that the controller operates correctly.
7. Close the GE-MS10 enclosure. Don't forget to put a security screw or a padlock.

Figure 1: Wiring Diagram



## Using the GE-MS10

With the GE-MS10 you can control two 0-10Volts outputs and relays from a master control MGCB port. The relay will be activated as soon as the demand is 1% and more. Refer to figure 3 for the location of the module potentiometer.

Figure 2: Electronic Board and component location

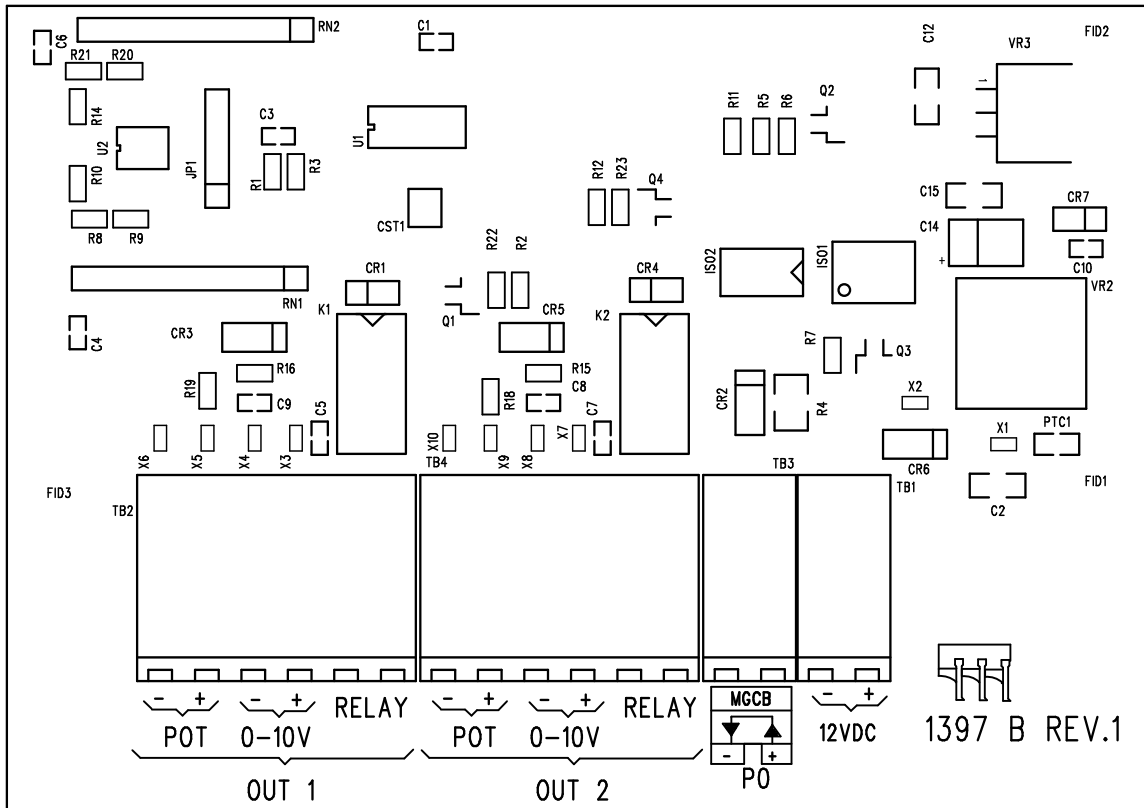


Figure 3: GE-MS10 Faceplate



### 1. Control Potentiometer

These potentiometers are used to select the automatic or manual mode. In manual mode, the output level is adjustable from OFF, minimum to maximum. In automatic mode, the output level is dictated by the MGCB compatible master control.

## Specifications

DESCRIPTION	VALUE
Storage temperature	-4°F to 131°F (-20°C to 55°C)
Operating temperature	32°F to 113°F (0°C to 45°C)
Humidity	90% maximum Non-condensing
Weight	1,4 lb (0,6 kg)
Size	5 15/16" x 5 15/16" x 3 9/16" (15 cm x 15 cm x 10 cm)
Protection index	IP 66
Warranty	2 years
<b>POWER SUPPLY</b>	
Operational voltage range	12VDC
Maximum consumption	100mA
<b>0-10V OUTPUTS</b>	
Output signal	0-10Volts
Precision	2.5%
Maximum load	10mA
<b>RELAYS</b>	
Relay type	Normally open
Maximum load	1A

## **Limited Warranty**

The manufactured equipment and supplied components have gone through rigorous inspection to assure optimal quality of product and reliability. Individual controls are factory tested under load, however the possibility of equipment failure and/or malfunction may still exist.

For service, contact your local retailer or supplier. The warranty period shall be for two years from manufacturing date. Proof of purchase is required for warranty validation.

In all cases, the warranty shall apply only to defects in workmanship and specifically exclude any damage caused by over-voltage, short circuit, misuse, acts of vandalism, lightning, fortuitous events, acts of God, flood, fire, hail or any other natural disaster. Any unauthorized work, modification or repair on this product automatically voids the warranty and disclaims the manufacturer from all responsibility.

The manufacturer assumes only those obligations set forth herein, excluding all other warranties or obligations. This warranty stipulates that in all cases the manufacturer shall be liable only for the supply of replacement parts or goods and shall not be liable for any personal injury, damages, loss of profits, interrupted operations, fines for infringement of the law or damages to the production of the PURCHASER and the PURCHASER shall take up the defence and hold the manufacturer faultless regarding any legal or extra legal proceedings, notice, or claim by the customer or by a third party, and regarding any legal and extra legal expenses and fees brought forward on by such damages.



