

Installation/maintenance guide

GE-OPTIGAIN1

Poultry Scale Module



Although the manufacturer has made every effort to ensure the accuracy of the information contained herein, this document is subject to change without notice due to ongoing product development.

The purpose of this guide is to detail the procedures of installation and operating of the GE-OPTIGAIN 1 scale module. This module can be used with several type of master control. This guide does not contain information concerning those master control. Please consult the guide of the master control currently used.

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

1. Unpacking

Unpack the GE-OPTIGAIN 1 and inspect contents for damage. Should the contents appear to be damaged, contact your local distributor to return the module.

The package should contain the following standard items:

- 1 GE-OPTIGAIN 1 scale module.
- 1 gaugeable tube fitting.
- 1 plastic disc, ½" (1.25cm) thick, 20" (50cm) in diameter.
- 1 6-foot steel pole.
- 1 6-foot chain.
- 2 «S» coupling hook
- 1 Installation / maintenance guide.

2. Mounting hardware required

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

- Shielded 4-wire low capacitance cable, AWG #22.
- Screwdrivers.
- Soldering iron kit or approved sealed connectors.

3. Description

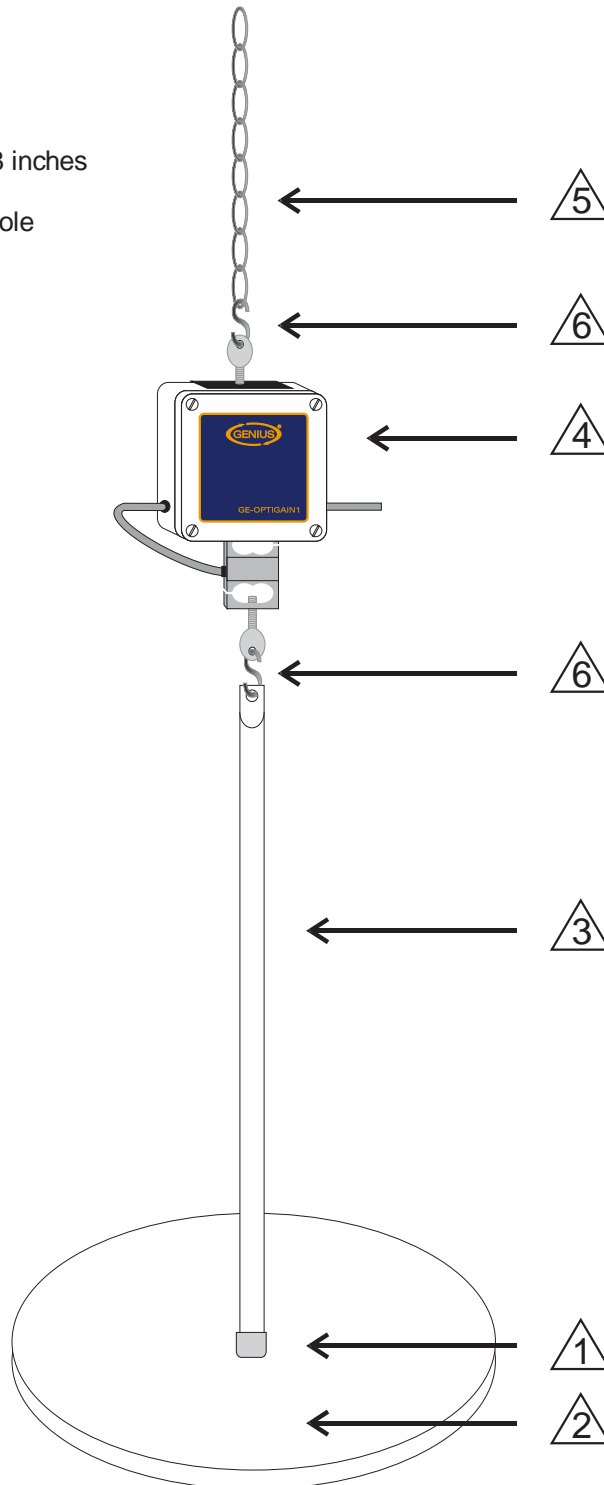
The GE-OPTIGAIN 1 is an electronic module allowing the continuous weighing of poultry. The scale is suspended on the ceiling by a chain. At the base, a vertical steel pole maintains a platform in the shape of a disc. The whole is suspended with an electronic weighing module fixed on a chain. Provided with a piezoelectric measuring cell, the module sends the weighing data via a communication port. The module records the weight of poultry when they climb up on the platform of the scale. The weight on the platform is read at regular interval, several times per second. The weight is memorized after approximately two seconds of stability. The stabilized weight is compared with the preceding stabilized weight reading. If the two consecutive readings have a difference corresponding to the target weight, the difference is then recorded. This approach of differential reading makes it possible to measure the weight of poultry even when there are several animals on the platform. Moreover, this method corrects the error caused by the remains on the platform.

4. Assembly

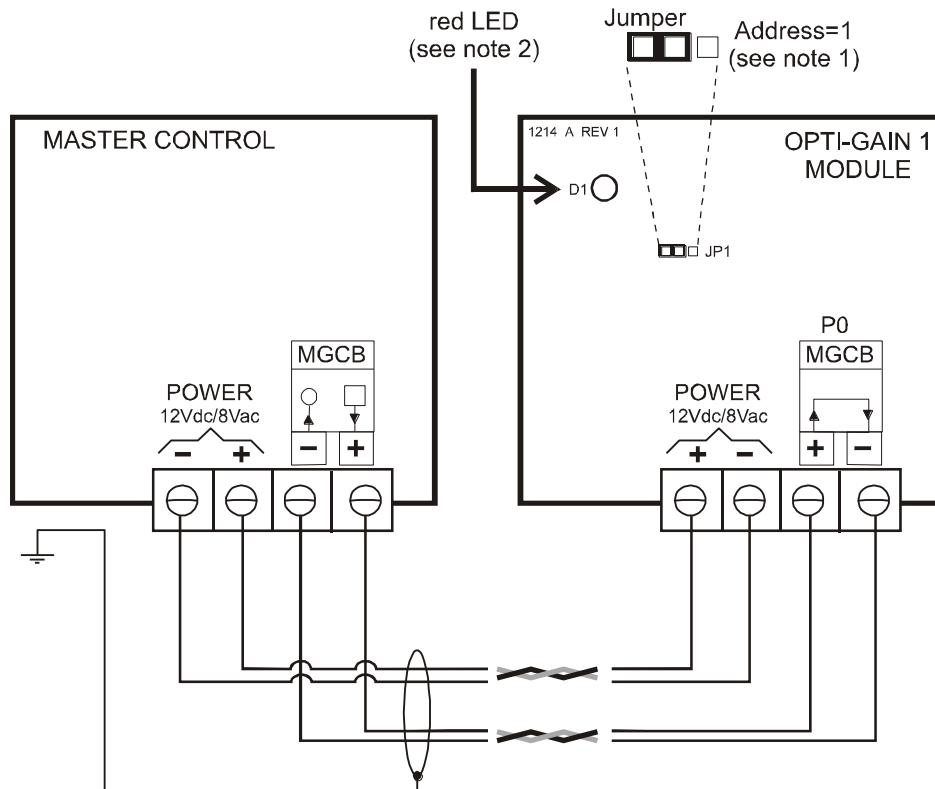
Assemble the parts as illustrated on the figure. Adjust the chain to obtain a platform height easily accessible to the animals.

Pieces :

- 1- Gaugeable tube fitting 5/8 inches
- 2- Plastic disc
- 3- 6-foot (1.86meter) steel pole
- 4- Poultry Scale Module
- 5- 6-foot (1.86meter) chain
- 6- «S» Coupling hook



5. Wiring diagram for the GE-OPTIGAIN 1 scale module with master control



Wiring:

- Use a shielded cable, 4 wires, 2 twisted pairs, AWG #22, 750' (250m) maximum length.
- Connect the shield to the master control circuit common end only. Never connect shield at both ends.

Note 1: The jumper JP1 determines one or the other of the two communication addresses for the GE-OPTIGAIN 1 scale module. Put the jumper on the left to choose address "1".

Note 2: Inside the GE-OPTIGAIN 1 scale module the red LED blink when the module is correctly connected. The blinking is irregular (by two small blinks) when there is a communication problem with the master control.

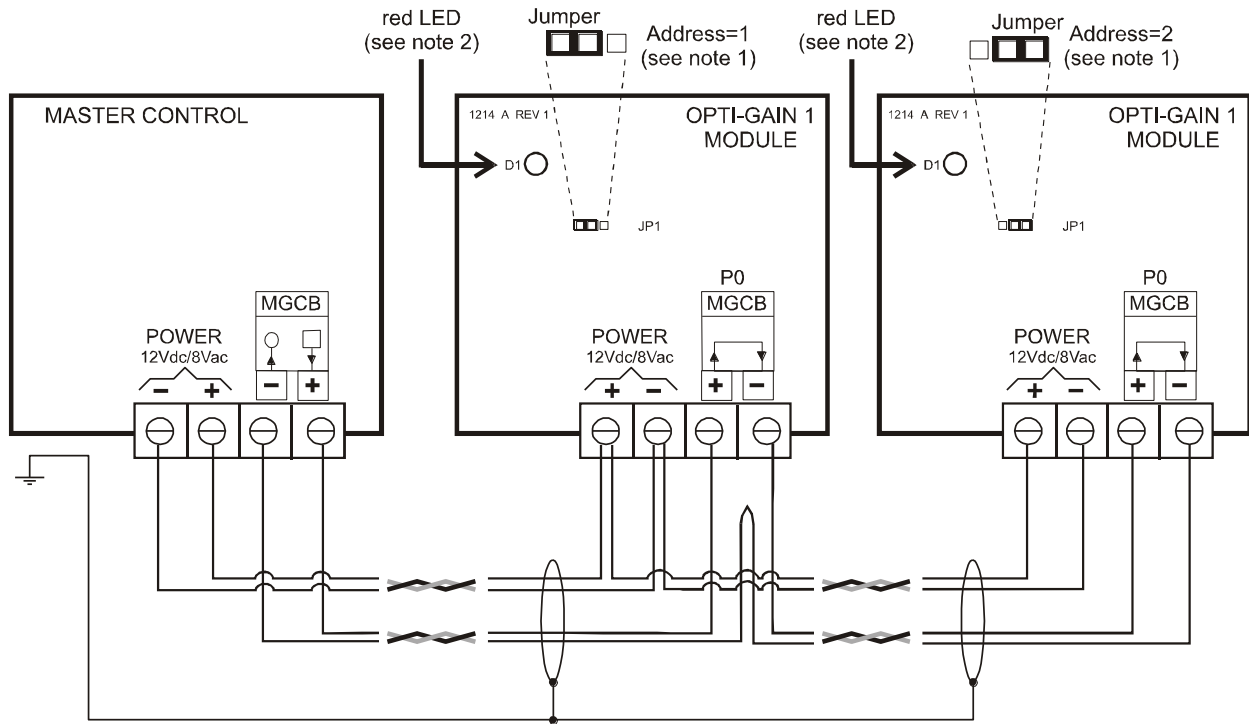
If the LED is OFF: It is because the GE-OPTIGAIN 1 scale module is not powered.

- Is there an error in the wiring?
- Is the master control powered?

If the LED blinks irregularly: It is because the GE-OPTIGAIN 1 scale module cannot communicate with the master control.

- Is the polarity of the wiring for the MGCB communication network correct?
- Is the jumper JP1 for the address selection on the left?

6. Wiring diagram for two GE-OPTIGAIN 1 scale modules with master control



Wiring:

- Use a shielded cable, 4 wires, 2 twisted pairs, AWG #22, 750' (250m) maximum length.
- Connect the shield to the master control circuit common end only. Never connect shield at both ends.

Note 1: The jumper JP1 determines one or the other of the two communication addresses for the GE-OPTIGAIN 1 scale module. The two modules must not have the same address. Put the jumper on the left for one module and on the right for the other module.

Note 2: Inside the GE-OPTIGAIN 1 scale module the red LED blink when the module is correctly connected. The blinking is irregular (by two small blinks) when there is a communication problem with the master control.

If the LED is OFF: It is because the GE-OPTIGAIN 1 scale module is not powered.

- Is there an error in the wiring?
- Is the master control powered?

If the LED blinks irregularly: It is because the GE-OPTIGAIN 1 scale module cannot communicate with the master control.

- Is the polarity of the wiring for the MGCB communication network correct?
- Is the jumper JP1 for the address selection on the left?

7. Operating

Use the chain to adjust the height of the platform according to the size of chickens. Choose a height that gives poultry access to the platform easily. Be sure that the master control uses a good reference weight. Consult the user's guide of the master control. If the reference weight programmed in the master control does not correspond to the weight of the animals, the GE-OPTIGAIN 1 scale module will not be able to read the weight.

The residual excrements on the platform influence the absolute measurement of the weight but not the differential measurements. This does not affect the daily statistical data such as average weight, standard deviation, homogeneity and covariance.

8. Cleaning and precaution

Clean the platform after each flock.

Never point the high pressure cleaner directly on the GE-OPTIGAIN 1 scale module. Never load the platform with a weight heavier than 25kg (55 lbs). If one of these situations occurs, the strain gauge could be damaged.

9. Calibration

Calibrate the scale module at the beginning of a new flock. Follow the procedure in the user's manual of the master control. The distributor of your GE-OPTIGAIN 1 scale module system sells weights used for calibration.

10. Specifications

DESCRIPTION	
Communication port	Communication network MGCB
Maximum number of scales per MGCB port on the master control	2
Maximum differential reading	8,000 g 8.000 lbs
Maximum differential reading error, 100 g weight	± 1 g
Maximum differential reading error, 1000 g weight	± 3 g
Storage Temperature	-4°F to 131°F (-20°C to 55°C)
Operating Temperature	32°F to 104°F (0°C to 40°C)
System weight	4 kg

11. 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.

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