GE-OPTIGAIN7 User Manual

1E_GE_OPTIGAIN7 User Manual
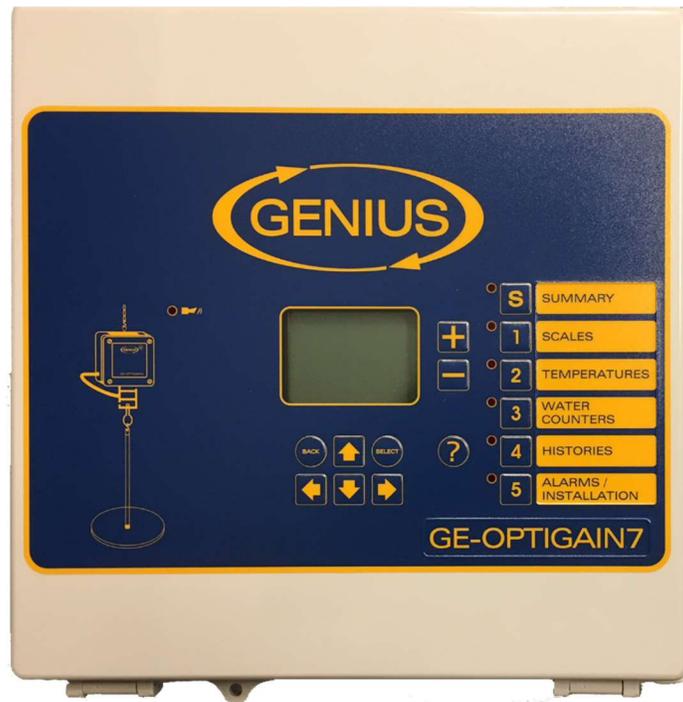
GE-OPTIGAIN7 User Manual

IMPORTANT NOTICE

The manufacturer reserves the right to make changes without notice in product design and specifications as warranted by evolution in user needs, progress in engineering or manufacturing technology.

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Introduction

The GE-OPTIGAIN7 controller can be used to control poultry-weighing equipment such as the GE-OPTIGAIN1.

Notable features of the GE-OPTIGAIN7 include:

- Rugged plastic housing to protect internal electronic components

- Specifically manufactured for farm environments

- Easy installation and maintenance

- User-friendly interface

- *FarmQuest*-compatible with livestock management service for worldwide operation and monitoring

- Surge protection

Document icons

Various icons may be found throughout this document. These are explained in the table below:

Table 1 Document icons

Icon	Notice Type	Description
👍	Helpful Note	Useful instruction to remember during setup, operation and/or maintenance.
⚠️	Caution Note	Important point to remember during setup, operation and/or maintenance.
⚠️	**Warning Note**	**Critical information to prevent damage to equipment or physical injury to personnel.**

Standard Hardware Description

The GE-OPTIGAIN7 includes the following standard equipment:

Table 2 Standard equipment

Component	Description	Visual	Qty.
GE-OPTIGAIN7 controller	User Interface and plastic housing for the GE-OPTIGAIN7 boards		1
Installation kit	Screws and brackets to install the controller on a wall		1

Installation

Refer to the *GE-OPTIGAIN7 connection diagram* document which was supplied with this manual for installation instructions and diagrams.

⚠️ All wiring must be made by a certified electrician and conform to local electrical regulations.
It is important to have a backup system in case of a system failure.

Using the GE-OPTIGAIN7

The GE-OPTIGAIN7 controller features a programmed configuration specific to your application and a user interface through which the functionalities of the controller can be accessed.

👍 Refer to the *1E_GE-OPTIGAIN7_Configuration Manual* for information on the functions and parameters of your specific configuration.
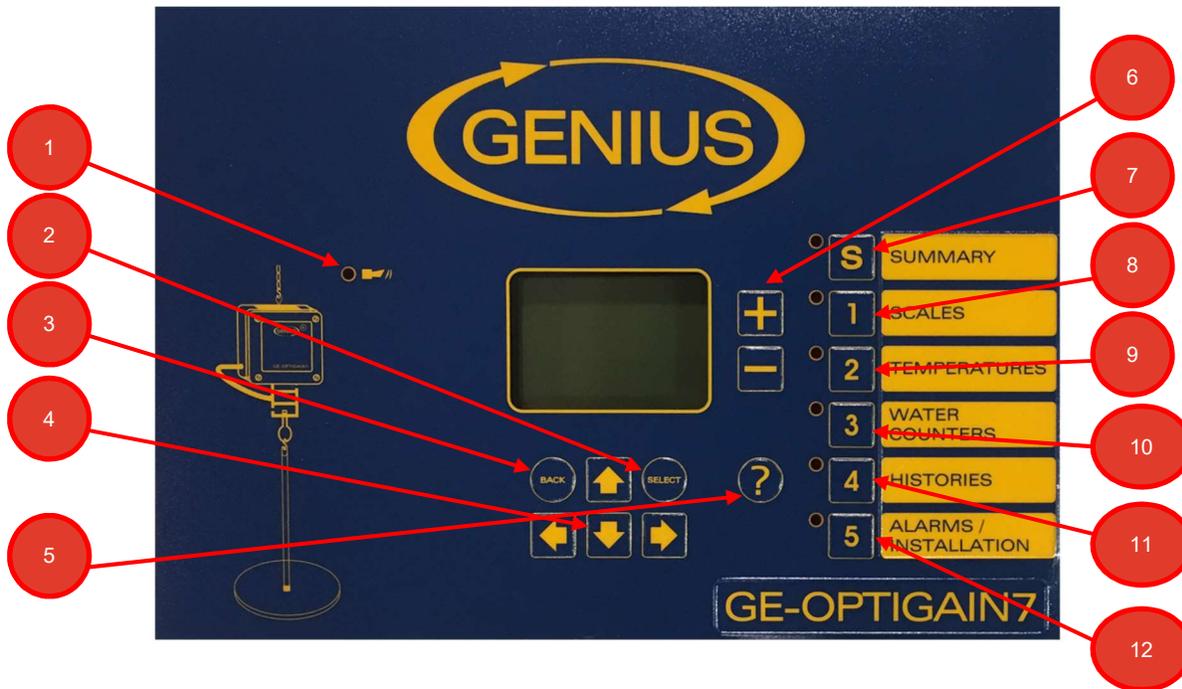
Table 3 Front panel component descriptions

Numbered Item	Name	Description
1	ALARM LED	This LED lights up if the controller detects an alarm condition.
2	SELECT button	The SELECT button allows you to open the parameter control menu or the sub menu/screen that is presently selected.
3	BACK button	The BACK button allows you to return to the previous sub menu/screen.
4	Arrow buttons	The four arrow buttons allow you to navigate through the various parameters and components of a specific screen.
5	HELP button	The HELP button allows you to receive contextual help for the parameter that is presently selected.

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Numbered Item	Name	Description
6	+/- buttons	The +/- arrow buttons allow you to adjust parameter value of the currently selected parameter.
7	SUMMARY button	The SUMMARY button allows you to access the *Summary* sub menu.
8	SCALES button	The SCALES button allows you to access the *Scales* sub menu.
9	TEMPERATURES button	The TEMPERATURES button allows you to access the *Temperatures* sub menu.
10	WATER COUNTERS button	The WATER COUNTERS button allows you to access the *Water Meter* sub menu.
11	HISTORIES button	The HISTORIES button allows you to access the *Histories* sub menu.
12	ALARMS/INSTALLATION button	The ALARMS/INSTALLATION button allows you to access the *Alarms & Installation* sub menu.

Maintenance

The GE-OPTIGAIN7 requires a slight amount of periodic maintenance. The following table lists the necessary maintenance procedures, as well as their frequency and required equipment.

Table 4 Maintenance procedures

Procedure	Periodicity	Required equipment
Cleaning of controller	As required	Gentle soap solution and clean cloth
Cable verification	Monthly	-

Cleaning of controller

The controller may become contaminated and dirty. It should be cleaned using a gentle soap solution and a clean cloth.

Cable verification

The cabling should be verified monthly for signs of wear and replaced as needed.

Troubleshooting

Screen is blank

This may indicate that the GE-OPTIGAIN7 controller is not powered or that the connector between the top and the main boards is disconnected.

Troubleshooting procedure:

1. Verify that the controller is powered.

2. Verify that both connectors are properly connected.

3. Contact your supplier if the cause is not determined.

Temperature, Water meter or Humidity probe reads LO or HI

This may indicate that the corresponding measurement value is below/above a critical value or that the probe is disconnected or defective.

Troubleshooting procedure:

1. Check all connections.

2. Verify independently the corresponding measurement value. If it is not the same as the value measured by the probe, replace the probe.

3. Contact your supplier if the cause is not determined.

No communication with GE-OPTIGAIN1 module

This may indicate that the MGCB connection between the GE-OPTIGAIN7 controller and the GE-OPTIGAIN1 module is disconnected or defective.

Troubleshooting procedure:

1. Check all MGCB connections between the controller and module (refer to 11x17 connection diagram).

2. Verify that the GE-OPTIGAIN1 is powered.

3. Contact your supplier if the cause is not determined.

GE-OPTIGAIN7 Specifications

Table 5 Specifications

Storage temperature	-4°F to 131°F (-20°C to 55°C)
Operating temperature	32°F to 122°F (0°C to 50°C)
Humidity	90% maximum Non-condensing
Weight	7 lb (3.3 kg)
Size	12¼" x 11" x 4¾" (32 mm x 288 mm x 115 mm)
NORMS	CSA (NRTL/C)
Protection index	IP 66
Warranty	2 years
POWER SUPPLY	
Operational voltage range (SW1 on 115 V)	92 to 125 V
Operational voltage range (SW1 on 230 V)	184 to 250 V
Operational frequency range	45 to 65 Hz
Power supply circuit consumption (CPU Board)	20 W maximum
Input Fuse	500 mA, 250 V
INPUTS (PRB1-PRB9)	
Measuring range	0 ohm, open circuit 0-5000 mV
Maximum frequency for the water meter (50% cycle)	4 Hz
Maximum wire length	500 feet (150 m)
Recommended wires	2 strands, shielded, AWG #22
ALARM RELAY	
Maximum current	1 A at 30 VDC
Activation delay	30 seconds (approximate)
COMMUNICATION PORTS (P1-P8)	
Maximum cable length	1000 feet (304 m)
Recommended cable	AWG #22, 2 twisted pair, stranded, tinned copper, foil shield with drain wire
8 VAC SOURCE (8 VAC)	
Voltage range	6,5 to 11 VAC
Maximum current allowed	100 mA
PC COM. BOARD (X1152)	
COMMUNICATION PORT (P0)	
Maximum cable length	1000 feet (304 m)
Recommended cable	AWG #22, 2 twisted pair, stranded, tinned copper, foil shield with drain wire

Warranty and support

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:

- Regular wear and tear
- 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.
- Return freight or delivery costs
- Installation or removal costs
- Loss or damage to property
- Damage resulting from unauthorized work, modification or repair on this product as well as damage resulting from improper maintenance or operation

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 defense 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.

Support

While under the period of warranty, the PURCHASER benefits from technical support services. Whenever an issue arises, the first step should always be to contact your dealer. If the issue remains unresolved afterwards, you or your dealer may contact technical support by using one of the following methods.

By e-mail
Contact support@monitrol.com

By phone
+1 450 641-4810