**GPI**®

Commercial Grade
Q9 COMPUTER ELECTRONICS
Owner's Manual

To the owner . .

Congratulations on receiving your GPI Commercial Grade Computer Electronics. We are pleased to provide you with a product designed to give you maximum reliability and efficiency.

Our business is the design, manufacture, and marketing of liquid handling, agricultural, and recreational products. We succeed because we provide customers with innovative, reliable, safe, timely, and competitively-priced products. We pride ourselves in conducting our business with integrity and professionalism.

We are proud to provide you with a quality product and the support you need to obtain years of safe, dependable service.

Victor Lukic

Victor Lukic, President
Great Plains Industries, Inc.

GENERAL INFORMATION

This manual will assist you in operating and maintaining the Computer Electronics of the GPI Commercial Grade Meters. (See Figure 1) Calibration details are given in this manual. Information on turbine housings and accessory modules are contained in other manuals. Please reference those as necessary.
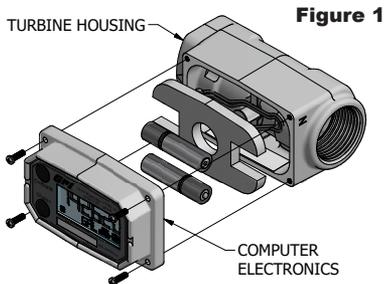

Figure 1

TURBINE HOUSING

COMPUTER ELECTRONICS

Before Getting Started

Take the time to fully acquaint yourself with all information about the components of your GPI Electronic Digital Meter. If you need assistance, contact the distributor from whom you purchased your computer.

⚠ This symbol is used throughout the manual to call your attention to safety messages.

⚠ **WARNING** **Warnings** alert you to the potential for personal injury.

⚠ **CAUTION** **Cautions** call your attention to practices or procedures which may damage your equipment.

Notes give information that can improve efficiency of operations.

It is your responsibility to make sure that all operators have access to adequate instructions about safe operating and maintenance procedures.

Read Me!

For your safety, review the major warnings and cautions below before operating your equipment.

⚠ WARNING
The apparatus enclosure may contain aluminum and is considered to constitute a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction.

⚠ WARNING
Part of the enclosure is constructed from plastic. To prevent the risk of electrostatic sparking the plastic surface should only be cleaned with a damp cloth.

1. This equipment is approved to handle only fluids that are compatible with all wetted materials.

2. When measuring flammable liquids, observe precautions against fire or explosion.

3. When handling hazardous liquids, always follow the liquid manufacturer's safety precautions.

4. When working in hazardous environments, always exercise appropriate safety precautions.

5. For best results, always verify accuracy before use.

METER INSTALLATION

Avoid electronically "noisy" environments. Install at least 6 inches (15.2 cm) away from motors, relays, or transformers.

All GPI A1 Series meters are Factory Mutual Approved and carry a Class 1, Division 1 Approval for hazardous environments. In addition, GPI meters have NEMA Type 4 enclosures. They are tested and calibrated at the factory using state-of-the-art calibration procedures and testing equipment.

To ensure accurate measurement, remove all air from the system before use.

1. Ensure some back pressure on the turbine.

2. Open the discharge valve or nozzle and allow fluid to completely fill the system. Make sure the stream is full and steady.

3. Close the discharge valve or nozzle.

4. Start normal operations.

It is strongly recommended that accuracy be verified prior to use. To do this, remove all air from the system, measure an exact known volume into an accurate container, and verify the volume against the readout or recording equipment. If necessary, use a correction factor to figure final volume. For best results, accuracy should be verified periodically as part of a routine maintenance schedule.

TROUBLESHOOTING

Symptom	Probable Cause	Corrective Action
A. METER IS NOT ACCURATE	1. Field Calibration not performed properly	Field calibrate again or select Factory Calibration.
	2. Factory Calibration not suitable for liquid being measured	Perform a Field Calibration according to Calibration Section.
	3. Meter operated below minimum flowrate	Increase flowrate.
	4. Meter partially clogged with dried liquid	Remove meter. Clean carefully. Make sure rotor spins freely.
	5. Turbine bearings partially clogged with dried liquid	Remove meter. Clean carefully. Make sure rotor spins freely.
	6. Sealant material wrapped around rotor	Remove meter. Make sure rotor spins freely.
	7. Installed too close to fittings	Install correctly.
	8. Installed too close to motors or electrically "noisy" environment	Install correctly.
B. READOUT FADED OR BLANK	1. Batteries weak, dead or not connected	Remove computer, check and replace batteries if necessary.
	2. Computer defective	Contact the factory.
C. NORMAL FLOWRATE BUT METER DOES NOT COUNT	1. Field Calibration not performed correctly	Field Calibrate again or select Factory Calibration.
	2. Rotor stuck or damaged	Remove meter. Make sure rotor spins freely.
	3. Sealant material wrapped around rotor	Remove meter. Make sure rotor spins freely.
	4. Computer defective	Contact the factory.
D. REDUCED FLOWRATE AND METER DOES NOT COUNT	1. Meter clogged with dried liquids	Remove meter. Clean carefully. Make sure rotor spins freely.
	2. Below minimum flowrate	Increase flow.
E. CANNOT GET METER INTO FIELD CALIBRATION	1. Wrong button sequence	Proceed with calibration according to the Calibration Section.
	2. Computer circuit board defective	Replace computer. Contact the factory.
	3. Button defective	Replace computer. Contact the factory.

Q9 COMPUTER ELECTRONICS

SPECIFICATIONS

MECHANICAL	
Housing Material	**Transparent Amorphous Nylon**
Operating Temperature	**+0°F to +129°F (-18°C to +54°C)** If wider operating temperature ranges are desired, reference information on GPI® Remote Kits.
Storage Temperature	**-40°F to +158°F (-40°C to +70°C)**

ELECTRICAL	
Input Pulse Rate	**Frequency Range: 0.25 Hz – 3kHz**
K-Factor	**Minimum: 0.001 pulses/unit** **Maximum: 999,999 pulses/unit**
Field Calibration Correction	**Minimum: -99.999%** **Maximum: +99.999%**
Readout Totals	**Minimum Display: 0.001** **Maximum Display: 999,999 (x100)**
Field Calibration	**Yes**
Power	**Internal Power Supply: (2) Alkaline AAA batteries @ 1.5-volts each** **Battery Life: 2+ years**

STANDARD FEATURES INCLUDE

- **(2) Totalizing Registers**
- **(1) Factory Calibration Curve**
- **(1) Field Calibration Curve**

COMPUTER ELECTRONICS TERMINAL CONNECTIONS
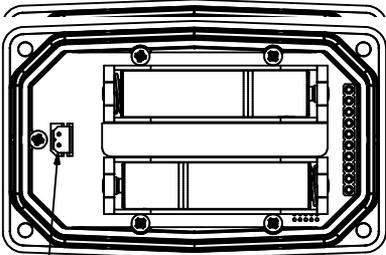
FEMALE TERMINAL HOUSING
(PICKUP COIL CONNECTION)

Figure 2

SPECIFICATIONS (CONTINUED)

DIMENSIOINS

| Length "A"	Height "B"	Height (Mounted) "C"	Width (Widest Point) "D"
3.40 in. (8.6 cm)	0.85 in. (2.1 cm)	0.72 in. (1.8 cm)	2.14 in. (5.4 cm)
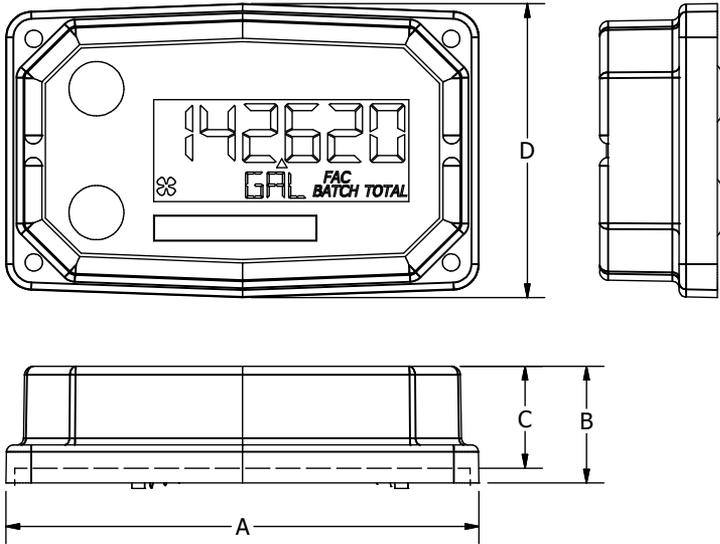
Figure 3

COMPUTER DISPLAY FEATURES

**Familiarize yourself with the computer features before installation and use.**
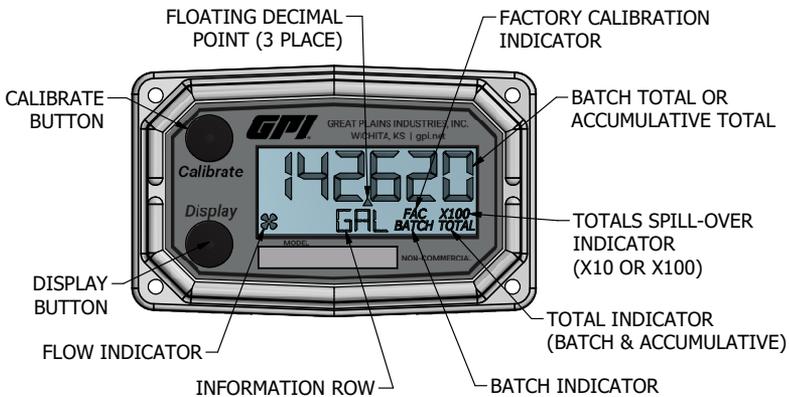
Figure 4

SPECIFICATIONS (CONTINUED)

AGENCY APPROVALS

ELECTRONIC DIGITAL METER
GREAT PLAINS INDUSTRIES, INC.
5252 E. 36TH ST. NORTH
WICHITA, KANSAS 67220 U.S.A

c **FM** APPROVED

FM16CA0148X INTRINSIC SAFETY FOR HAZARDOUS LOCATIONS. SECURITE INTRINSEQUE. CLASS I, II DIV. 1 GROUPS ABCDEFG, T4 at Ta= -40° to +54°C

IP65 Rated $C\epsilon_{2809}$

SERIAL NUMBER AND DATE CODE ON PRODUCT

FM13ATEX0016X   IECEx FMG 13.0005X
⟨Ex⟩ II 1 G Ex ia IIC T4 Ga Ta= -40° to +54°C

INTRINSICALLY SAFE FOR CLASS I, II, III, DIV. 1, GROUPS ABCDEFG, T4 Ta= -40° to +54°C NONINCENDIVE FOR CLASS I, II, III, DIV. 2, GROUPS ABCDFG, T4 Ta= -40° to +54°C

FM APPROVED

⚠ **WARNING:**
See Owner's Manual for Warnings and Cautions Before Installation.

GREAT PLAINS INDUSTRIES, INC., 5252 E. 36TH ST. NORTH,   WICHITA, KANSAS 67220 U.S.A

⚠ **CAUTION**

Use Only These Batteries:
Energizer® E92 / EN92 Alkaline
Duracell® MN2400 Alkaline
Size: AAA   Voltage: 1.5V

Warning: Wipe only with damp cloth.

WARNING: TO PREVENT IGNITION OF HAZARDOUS ATMOSPHERE, BATTERIES MUST ONLY BE CHANGED IN NONHAZARDOUS LOCATION. AVERTISSEMENT: AFIN DE PRÉVENIR L' INFLAMMATION D' ATMOSPHÉRES DANGEREUSES, NE CHANGER LES BATTERIES QUE DANS DES EMPLACEMENTS DÉSIGNÉS NON DANGEREUX.

REMOTE KIT ASSEMBLY (113275-10)

ELECTRONIC DIGITAL METER GREAT PLAINS INDUSTRIES, INC. WICHITA, KANSAS USA

FM13ATEX0016X   IECEx FMG 13.0005X
⟨Ex⟩ II 1 G Ex ia IIC T4 Ga Ta= -40° to +54°C

$C\epsilon_{2809}$
SERIAL NUMBER INSIDE PRODUCT

c **FM** APPROVED

FM16CA0148X INTRINSIC SAFETY FOR HAZARDOUS LOCATIONS. SECURITE INTRINSEQUE. CLASS I, II, DIV. 1 GROUPS ABCDEFG, T4 AT Ta=54°C.

INTRINSICALLY SAFE FOR CLASS I, II, III, DIV. 1, GROUPS ABCDEFG, T4 Ta=54°C NONINCENDIVE FOR CLASS I, II, III, DIV. 2,GROUPS ABCDFG, T4 Ta=54°C When Installed in Accordance with Manual 920695-2

FM APPROVED

NOTE: When a component with Approval Agency ratings is mated to another component with the same Approval Agency ratings, the combination may gain environmental approvals.

When one of the components has lessor or no Approval Agency ratings, the resultant combination assumes the ratings of the lessor rated component.

If one component has no ratings, the resultant combination has no ratings.

Specific Conditions of Use

1. All computer assemblies are to be used with GPI battery 902004-02 except Q1, Q9, and R9 versions which use Energizer E92 / EN92, or Duracell MN2400 Alkaline batteries.

2. GPI remote kit assembly 113275-1 may be used with the meter when installed in accordance with GPI Manual No.920507-01. GPI Remote Kit Assembly 113275-10 may be used with the meter when installed in accordance with GPI Manual No. 920507-02.

3. The apparatus enclosure may contain aluminum which is considered to constitute a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction.

4. Part of the enclosure is constructed from plastic. To prevent the risk of electrostatic sparking the plastic surface should only be cleaned with a damp cloth.

INSTALLATION

PRODUCT DESCRIPTION

This computer electronics is designed specifically for use on GPI Turbine Housings. It is also designed to work with several accessory output modules.

The CMOS, microprocessor-based electronics have extremely low power requirements and data retention capabilities in both RAM and ROM. Information is clearly displayed on a large 6-digit LCD readout with three-point floating decimal for totals from .001 to 999,999 (x1), 9,999,990 (x10), or 99,999,900 (x100). All operations are easily accessed with the two buttons on the front panel.

In a GPI turbine meter, liquid flows through the turbine housing causing an internal rotor to spin. As the rotor spins, an electrical signal is generated in the pickup coil. This pulse data from the turbine is translated into calibrated flow units shown on the computer's display readout.

INSTALLATION

Before installation, ensure your computer model meets your specific needs. Refer to the Specifications Section to confirm required features. The model number of your computer is displayed on the outside wall of the computer housing and also inside the computer housing on the floor of the battery holder.

If you ordered your computer electronics with a turbine body, the electronics are installed at the factory.

If you ordered your computer separately as a replacement, simply mount the computer on your turbine body with the four screws at the corners of the faceplate. Make sure the seal is fully seated before tightening the screws.

If you ordered the computer with a turbine body and an accessory module, please review and thoroughly understand all installation instructions before proceeding.

All GPI turbine meters are designed to measure flow in only one direction. The direction is indicated by the arrow on the turbine outlet port. If the computer display is upside down in your installation, remove the four screws, turn the display 180 degrees and reinstall the screws. (See Figure 5)

METER BODY

PICKUP COIL
CONNECTOR
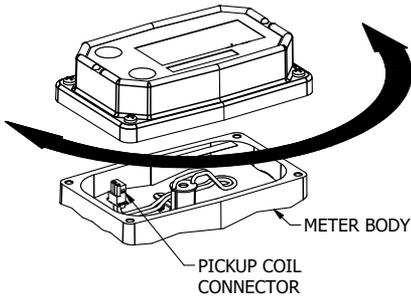
NOTE: When rotating the computer display, it is not necessary to disconnect the pickup coil connector, however, care should be taken to avoid inadvertent strain on the connector wires.

Figure 5

OPERATION

COMPUTER DISPLAY

All operations are revealed on the LCD using the large 6-characters in the top row and smaller characters and symbols in the second row. These characters and symbols indicate information regarding totals, flow, calibration, units of measure and operational messages.

Push button operation varies dependent upon the various modes of operation, i.e. Normal Operation mode and Field Calibration mode. Their operation will be described in their respective sections.

ACTIVATE THE COMPUTER

When batteries are installed, the computer is on continuously and always ready to perform.

The computer is powered by field replaceable commercially available batteries. Reference the computer maintenance section for battery replacement details.

Figure 6

When batteries are initially installed or replaced, the initialization routine will start the LCD display blank, then display "HELLO" on the top row and "Q9Disp" on the information row for one second. (See Figure 6)

Figure 7

The LCD will then display "HELLO" on the top row and "FW Vxx" on the information row for one second. The Vxx will be the version of the software installed on the display. Example: "FW V03" indicates firmware version 3 installed on the display. (See Figure 7)

General

The computer maintains two totals; Batch total and accumulative total. The batch total can be reset to measure flow during a single use. The accumulative total provides continuous measurement and can only be reset by removing the batteries, holding down the **Display** button, and replacing the batteries.

The button usage map on the next page is useful for understanding where the various menus are located within the software programming and the route to get to a specific menu. The map is followed by user instructions explaining each menu.

OPERATION

NORMAL OPERATION MODE

Button Usage Map – Normal Operation Mode

BUTTON

Display — Toggles Between — Batch Total / Accumulative Total

Display — When Batch Total is Displayed — Hold for 3 Seconds to Reset Batch Total

Hold Calibrate and **Press Display** — Toggles Between — Gallons / Litres

Calibrate — Hold for 3 Seconds to Enter Field Calibration Mode
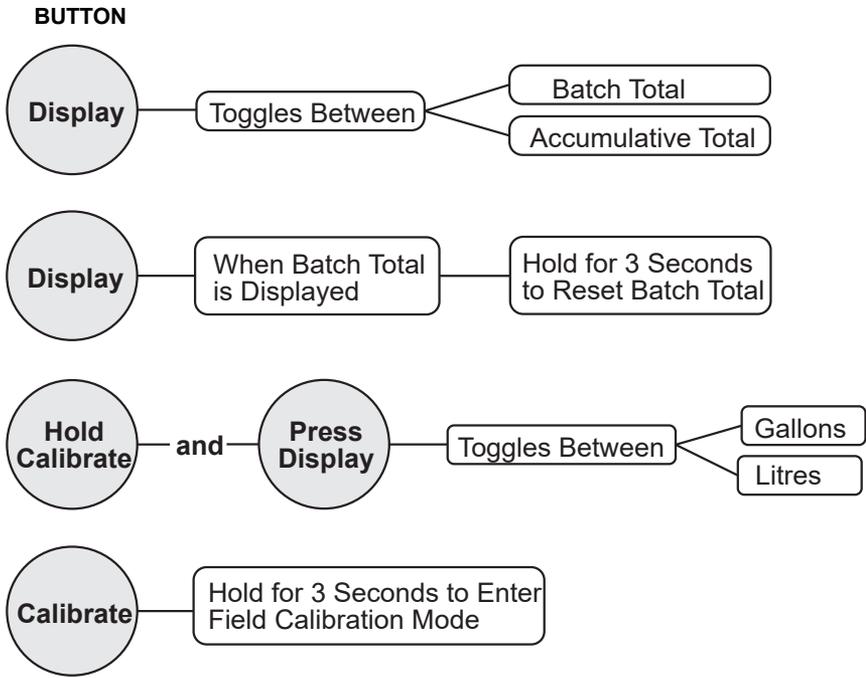
Button Operation (Normal Operation Mode)

Display **Button**: **Toggle between batch total and accumulative total.**

When a total is displayed, momentarily pressing **Display** button toggles the top row of large display digits between batch total and accumulative total. The information row will change to the proper units and the corresponding icons will also be shown, i.e. TOTAL or BATCH TOTAL. (See Figure 8)


(Batch Total-Litres)   (Accumulative Total-Gallons)
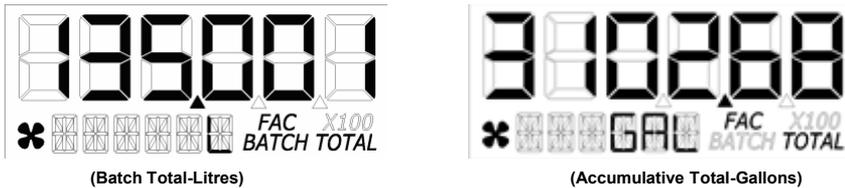
Figure 8

OPERATION (continued)

NORMAL OPERATION MODE (continued)

Display Button: Batch total reset.

When a batch total (see Figure 9-1) is displayed, press and continue to hold **Display** button for 3 seconds; the software will display a three second count down, then reset the batch total to zero. (See Figures 9-2 thru 9-4)
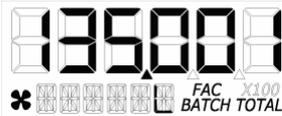
Figure 9-1

NOTE: If **Display** button is released prior to count down completion, the software returns to batch total screen. (See Figure 9-1)

Figure 9-2

Figure 9-3

NOTE: After count down completes, display will show 0.000 until user releases **Display** button. (See Figure 9-3)

Figure 9-4

NOTE: After **Display** button is released, the display will return to Batch Total screen and will increment the total if flow is detected. (See Figure 9-4)

NOTE: When the accumulative total is displayed in Normal Operation Mode, it cannot be reset using the **Display** button. Accumulative total can only be reset by removing

Figure 9-5

the batteries, holding down the **Display** button, and replacing the batteries. If the user attempts to reset it using the **Display** button, the software will display a "Reset Denied" message on the LCD until the button is released. (See Figure 9-5).

OPERATION (continued)

Calibration Method Selection Menu

This menu is used to define which calibration method will be used in normal operation, either factory calibration or field calibration. The calibration method last entered (by the user or the factory) will be used to calculate volume.

Factory Calibration: All units are configured with a "factory" calibration. This factory calibration (FAC icon displayed below 6-digit display) is permanently programmed into the computer and is not user adjustable.

NOTE: The factory calibration stored in the unit will never be lost

Figure 10-1

Factory calibration is the typical use method (see Figure 10-1). Prior to shipping from the factory, the display will be configured and calibrated to the meter body on which it is installed (or going to be installed).

When the user selects this option the FAC icon will be "ON" to indicate that the display is using its factory calibration table. This method does not support field calibration.
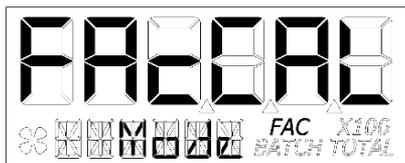
Field Calibration: Field calibration is done using the dispense/display method.

Figure 10-2

Dispense/Display is a field calibration method by which the user will dispense a known volume of fluid and the software will keep track of the pulse count during the dispense operation. The user will then enter the known volume into the display and the software will calculate a K-factor for the volume dispensed. (See Figure 10-2)

General

The calibration method may be set by the user (either factory calibration or field calibration). The field calibration can be modified at any time using the process described in this section. Totals derived from the field calibration are being invoked when the (FAC) icon is no longer visible below the 6-digit display.

Factory calibration settings are programmed into each computer during manufacturing, using Stoddard test solvent at 70° F (21° C) for meters up to 1 inch. Meters 1-1/2 inch and larger are factory calibrated using water at 70° F (21° C).

Settings are correct for light liquids such as water, gasoline or diesel. Readings using the factory calibration (FAC) may not be accurate in some situations, for example, "heavy" liquids such as motor oil, under extreme temperature conditions, non-standard plumbing configurations or with fluids other than mentioned above.

For improved accuracy under such conditions, the computer allows for field calibration, that is, user entry of custom calibration parameters.

FIELD CALIBRATION MODE (continued)

Verify Accuracy before Beginning Field Calibration

For the most accurate results, dispense at a flowrate which best simulates your actual operating conditions. Avoid "dribbling" more fluid or repeatedly starting and stopping the flow. This can result in less accurate calibrations. Make sure you meet the meter's minimum flowrate requirements.

- Low Flow meter: 0.3 GPM (1.1 LPM or 0.25 IGPM)
- 1 inch meter: 3.0 GPM (11 LPM or 2.5 IGPM)
- 2 inch meter: 30 GPM (113 LPM or 25 IGPM)

The use of a uniformly dependable, accurate calibration container is recommended for the most accurate results. A five gallon calibration container is available in the parts section of this manual. For best results, the meter should be installed and purged of air before field calibration.

Due to high flowrates on meters 2 inch and larger, it is strongly recommended that field calibration be completed with a combination of volume and weight determined with fine resolution scales.

Field Calibration Entry

At the beginning of the calibration entry menu, the software will allow the user to start the calibration process or to exit back to normal operation. (See Figures 11-1 & 11-2)

Advance focus: Press and release the CALIBRATE button.

Advance to the next menu: Press and release the DISPLAY button.

The bottom row of characters will be in focus to indicate that the user can select between either "Start" or "Exit" by advancing focus.
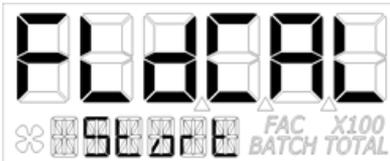
If "Start" is in focus when advancing to the next menu, the software will automatically advance to the dispense/display field calibration menu

Figure 11-1

If "Exit" is in focus when advancing to the next menu, the software will display a "save" screen (see Figure 13-3) to enter "yes or no" to save your entries.

Figure 11-2

FIELD CALIBRATION MODE (continued)

Dispense Display Method

Dispense/Display is a field calibration method by which the user will dispense a known volume of fluid and the software will keep track of the pulse count during the dispense operation. The user will then enter the known volume into the display and the software will calculate a K-factor for the volume dispensed. (See Figure 12-1)

Figure 12-1

The software will allow the user to dispense a known volume in order to create a custom K-factor. This will not over write the existing factory calibration table.

Figure 12-2

The first screen in this calibration method will show "run 1" indicating that computer is waiting for flow to start. (See Figure 12-2)

NOTE: Pressing any single button while on this screen will not have any effect. Pressing both buttons and holding will allow the user to exit calibration mode.
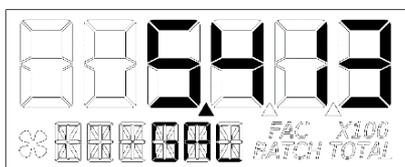

Figure 12-3

Begin dispensing into a container of known accurate volume. As soon as pulses are detected by the software, the screen will switch to display the volume being dispensed on the top row and the volume unit on the bottom row. (See Figure 12-3)

When the user is finished with the run, modify the volume on screen to be the actual volume dispensed. To do this press and hold the Display button until the left most digit begins to flash indicating it is in focus, then release the Display button.

Pressing the Calibrate button will increment the digit in focus. Pressing the Display button will advance focus to the next digit.

Holding Display and pressing Calibrate will lock in the entered volume.

The software will then calculate the K-factor for the volume entered based on the pulse count for the run and the volume entered. The average frequency and the K-factor will be entered into the custom user K-factor table for run 1.

OPERATION (continued)

Exit Dispense Display Method

This menu is used to indicate to the user they are exiting the field calibration mode menu. The user can exit any of the calibration methods at any time. To exit, press and hold the Display and Calibrate buttons simultaneously for 3 seconds; the software will display a three second count down (see Figure 13-1), then reset to show the exit display. (See Figure 13-2)
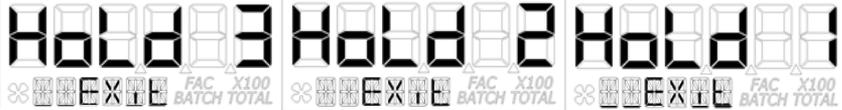
Figure 13-1

NOTE: After 3 seconds, "FldCAL" will then be displayed on the top row and "Exit" on the bottom row (see Figure 13-2) until the user releases both buttons. The software will store the sorted table of frequencies and K-factors, then exit back to normal mode.

Figure 13-2

COMPUTER MAINTENANCE

Batteries

The computer electronics are powered by alkaline batteries. Removing the batteries before storing the meter will extend battery life since the computer is always on (either standby or active) when the batteries are installed.

If the meter's readout should become dim, blank or the low battery message appears (see below), the batteries should be replaced.

Note: If the battery life is sufficiently low, "LOWBAT" will be displayed in the message area on the bottom row of characters. This low battery message will be displayed automatically.

COMPUTER MAINTENANCE (continued)

Battery Replacement Information

The computer is shipped with (2) alkaline AAA size batteries (1.5-volts each) installed. The installed batteries are Agency Approval rated for use with this electronic device.

Battery replacements are readily available as an off-the-shelf item. To maintain the Agency Approvals of this device, and maintain the GPI warranty, the batteries listed below are approved for use.

Alkaline (AAA size, 1.5-volts each) Energizer, Alkaline, E92 or En92 Duracell, Alkaline, Mn2400

Do not mix brands or technologies. Do not mix old and new batteries. Do not use rechargeable batteries.

Open battery cells should be disposed of in accordance with local regulations.

When batteries are disconnected or fail, the computer memory will retain the batch total, accumulative total, factory calibration curve, and field calibration curve indefinitely.

It is strongly recommended that battery checks and terminal cleaning be a part of a routine maintenance schedule. Battery terminals should be cleaned annually. Batteries can be replaced without removing the meter from the piping system.

Replace Batteries

1. Remove the (4) corner screws attaching the computer electronics to the meter and lift the computer electronics from the meter.
2. Remove the batteries.
3. Check the battery terminals and remove any corrosion.
4. Install the new batteries and make sure the positive posts are positioned correctly. When the batteries are installed correctly, the computer powers on automatically and the display will show information.
5. Make sure the seal is fully seated before placing the computer electronics back on the turbine. Tighten the (4) screws previously removed.
6. Do not clean exterior of computer assembly with Isopropyl Alcohol.

PARTS

The factory, when provided with model number and serial number, can replace your entire Computer Electronics Assembly.

Order replacement kits, parts, and accessories with the part numbers given here.

Part No.	Description
901002-52	Seal
116000-1	Large (5 gal.) Calibration Container. Use for water based fluids. Do not use with fuel products.

SERVICE

For warranty consideration, parts, or other service information, please contact your local distributor. If you need further assistance, call the GPI Customer Service Department in Wichita, Kansas, during normal business hours.

1-888-996-3837

To obtain prompt, efficient service, always be prepared with the following information:

1. The model number of your computer electronics.

2. The serial number or manufacturing date code of your computer electronics.

3. Specific information about part numbers and descriptions.

For warranty work always be prepared with your original sales slip or other evidence of purchase date.

Returning Parts

Please contact the factory before returning any parts. It may be possible to diagnose the trouble and identify needed parts in a telephone call. GPI can also inform you of any special handling requirements you will need to follow covering the transportation and handling of equipment which has been used to transfer hazardous or flammable liquids.

⚠ CAUTION

Do not return computer electronics or meters without specific authority from the GPI Customer Service Department. Due to strict regulations governing transportation, handling, and disposal of hazardous or flammable liquids, GPI will not accept computer electronics or meters for rework unless they are completely free of liquid residue.

⚠ CAUTION

Meters not flushed before shipment can be refused and returned to the sender.

Declaration of Conformity

We declare, that the product:

      Product Name: Electronic Digital Meter
      Model Numbers: 03*****
                                    A1***********
                                    A2***********
                                    G2*****9***

Model numbers include all combinations of an alpha-numeric series as illustrated above.

Conforms with the requirements of the Directives below by compliance with the Standards subsequently listed:

1. Council Directive 2004/108/EC (until April 19, 2016) and Directive 2014/30/EU (from April 20, 2016) relating to Electro-Magnetic Compatibility.

   EN 61000-6-2:2005
   EN 61000-6-3:2007/A1:2011

2. Council Directive 94/9/EC (until April 19th, 2016) and Directive 2014/34/EU (from April 20th, 2016) relating to equipment or protective systems intended for use in potentially explosive atmospheres.

   EN 60079-0:2018
   EN 60079-11:2012
   EN 60529+A1:2000

3. Council Directive 2011/65/EU and 2002-95-EC as amended (RoHS Directive) relating to the restriction of certain hazardous substances in electrical and electronic equipment.

Supplementary Information:

- This product meets an (Ingress Protection) IP65 rating.

- This product has insufficient internal volume size or pressure ratings to meet a pressure   directive.

- This product is not recommended for custody transfer or application where levying by consumption takes place.

I the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s).

Signature: *Victor Lukic*

Full Name: Victor Lukic
Position: President
                            Great Plains Industries, Inc.
Place: Wichita, KS USA
                            March 2016

Notified Body: FM Approvals Europe Ltd.
                      One Georges Quay Plaza
                      Dublin, Ireland D02 E440

Identification No: 2809

EC-Type Examination Certificate No: FM13ATEX0016X

Q9 Computer Electronics:

CE RoHS 2002/95/EC FM APPROVED IECEx Ex ATEX

FM APPROVED Factory Mutual Approved
Intrinsically Safe for Class I, II, III, Division 1, All Groups

Intrinsically Safe approval only applies when used with GPI® FM Approved meter

Q9 Computer Electronics when installed on a GPI FM Approved meter

CE RoHS 2002/95/EC FM APPROVED IECEx Ex ATEX

IP65 FM APPROVED Factory Mutual Approved
Intrinsically Safe for Class I, II, III, Division 1, All Groups

Limited Warranty Policy

Great Plains Industries, Inc. 5252 E. 36th Street North, Wichita, KS USA 67220-3205, hereby provides a limited warranty against defects in material and workmanship on all products manufactured by Great Plains Industries, Inc. This product includes a 2 year warranty. Manufacturer's sole obligation under the foregoing warranties will be limited to either, at Manufacturer's option, replacing or repairing defective Goods (subject to limitations hereinafter provided) or refunding the purchase price for such Goods theretofore paid by the Buyer, and Buyer's exclusive remedy for breach of any such warranties will be enforcement of such obligations of Manufacturer. The warranty shall extend to the purchaser of this product and to any person to whom such product is transferred during the warranty period.

The warranty period shall begin on the date of manufacture or on the date of purchase with an original sales receipt. This warranty shall not apply if:

A. the product has been altered or modified outside the warrantor's duly appointed representative;
B. the product has been subjected to neglect, misuse, abuse or damage or has been installed or operated other than in accordance with the manufacturer's operating instructions.

To make a claim against this warranty, contact the GPI Customer Service Department at 316-686-7361 or 888-996-3837. Or by mail at:

Great Plains Industries, Inc.
5252 E. 36th St. North
Wichita, KS, USA 67220-3205

If you are outside North or South America contact:

Great Plains Industries – Australia

1/16 Atkinson Road,
Taren Point NSW 2229, Sydney, Australia

The company shall, notify the customer to either send the product, transportation prepaid, to the company at its office in Wichita, Kansas, or to a duly authorized service center. The company shall perform all obligations imposed on it by the terms of this warranty within 60 days of receipt of the defective product.

GREAT PLAINS INDUSTRIES, INC., EXCLUDES LIABILITY UNDER THIS WARRANTY FOR DIRECT, INDIRECT, INCIDENTAL AND CONSEQUENTIAL DAMAGES INCURRED IN THE USE OR LOSS OF USE OF THE PRODUCT WARRANTED HEREUNDER.

The company herewith expressly disclaims any warranty of merchantability or fitness for any particular purpose other than for which it was designed.

This warranty gives you specific rights and you may also have other rights which vary from U.S. state to U.S. state.

Note: In compliance with MAGNUSON MOSS CONSUMER WARRANTY ACT – Part 702 (governs the resale availability of the warranty terms).

FM APPROVED   CE   c FM APPROVED   IECEx   RoHS 2002/95/EC

Ex ATEX   NEMA 4   (IP65)

Wichita · Sydney   GREAT PLAINS INDUSTRIES / GPI®

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