DataLoop™

Loop-Powered Meters

LI24 Series Quick Start

IECEx

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LIN6606QS_FL_A *02/19*
QS302110A

WELCOME TO THE LI24 QUICK START

The LI24 Quick Start is meant to show some of the more common setup solutions to getting the LI24 up and running quickly. If you run into an issue that is not addressed here or wish to install or set up with a non-standard configuration, please address the LI24 Manual or refer to the Flowline website at flowline.com.

WE DO YOUR LEVEL BEST

Thank you for purchasing Loop-Powered Meter (LI24). The LI24 Series is a multipurpose, easy to use digital process meter ideal for level, flow rate, temperature, or pressure transmitter applications. It accepts current signal (e.g. 4-20 mA) and has four (4) front panel buttons that can be programmed for specific operation.

ORDERING INFORMATION

Model	Reorder Number	Options Installed
PD6608-LNN-FL	LI24-1001	Loop Powered, Hazardous Area, Bar graph, No Options
PD6608-L3N-FL	LI24-1011	Loop Powered, Hazardous Area, Bar graph, 4-20mA Analog Output
PD6608-L2N-FL	LI24-1201	Loop Powered, Hazardous Area, Bar graph, Two Solid State Relays
PD6608-L5N-FL	LI24-1211	Loop Powered, Hazardous Area, Bar graph, Two Solid State Relays and 4-20mA Analog Output

Manufactured by Precision Digital Corporation, 233 South St, Hopkinton MA 01748

Model	Accessories
LM91-1001	Single NEMA Box, non-windowed, 1/8 DIN, PC
LM91-2001	Dual NEMA Box, non-windowed, 1/8 DIN, PC
LM92-1002	Single NEMA Box, Windowed, 1/8 DIN, PC
LM92-2002	Dual NEMA Box, Windowed, 1/8 DIN, PC
LM92-3002	Triple NEMA Box, Windowed, 1/8 DIN, PC

GENERAL COMPLIANCE INFORMATION
ELECTROMAGNETIC COMPATIBILITY

EMC Emissions	• CFR 47 FCC Part 15 Subpart B Class A emissions requirements (USA) • AS/NZS CISPR 11:2004 Class A ISM emissions requirements (Australia) • EN 55011:2009/A1:2010 Group 1 Class A ISM emissions requirements (EU) • ICES-001 Issue 4 ISM emissions requirements (Canada)
EMC Emissions and Immunity	EN 61326-1:2013 EMC requirements for Electrical equipment for measurement, control, and laboratory use – Industrial Use

LI24 COMPLIANCE INFORMATION
SAFETY

UL & C-UL Listed	USA & Canada UL 61010-1, 3rd Edition; CAN/CSA-C22.2 No. 61010-1-12, 3rd Edition
UL File Number	E160849
Front Panel	UL Type 4X, NEMA 4X, IP65; panel gasket provided
Low Voltage Directive	IEC 61010-1:2010 (Third Edition) Safety requirements for electrical equipment for measurement, control, and laboratory use
Additional Standards	UL 50E

HAZARDOUS AREA APPROVALS

ATEX **Certificate Number:** CML 17ATEX2015X

CE 0518 Ex ia IIC T4 Ga

Ex II 1G -40°C ≤ Ta ≤ 70°C

IECEx **Certificate Number:** IECEx CML 17.0008X

Ex ia IIC T4 Ga

Tamb = -40°C to +70°C

UL & C-UL **UL File Number:** E494837

c UL us LISTED Class I, Division 1, Groups A, B, C and D T4

Class I, Division 2, Groups A, B, C and D T4

Ex ia IIC T4 (Canada); Class I Zone 0, Zone 1,

AEx ia IIC T4 (U.S.);

Class I Zone 2, Group IIC T4 (U.S.)

PROCESS CONTROL EQUIPMENT FOR USE IN HAZARDOUS LOCATIONS

ATEX/IECEx Assessment Standards

ATEX	IECEx
EN 60079-0:2012+A11:2013 EN 60079-11:2012	IEC 60079-0:2011 Ed. 6 IEC 60079-11:2011 Ed. 6

UL Assessment Standards

United States Standards	Canadian National Standards
UL 913, Eighth Edition UL 60079-0, Sixth Edition UL 60079-11, Sixth Edition Standard No. UL 121201, 9th Edition	CSA C22.2 No. 60079-0:15 CSA C22.2 No. 60079-11:14 CAN/CSA C22.2 No. 213-17

ATEX/IECEx SPECIAL CONDITIONS FOR SAFE USE

The following conditions relate to safe installation and/or use of the equipment.

- The permitted ambient temperature range for the LI24 is -40°C to 70°C.
- The equipment must be installed in an enclosure which provides a minimum degree of protection of IP20 for the equipment connections.
- Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. This is particularly important if the equipment is installed in a zone 0 location. In addition, the equipment shall only be cleaned with a damp cloth.
- The equipment loop/power port must be connected to an intrinsically safe barrier with $U_o \geq 11V$.
- Entity parameters must meet the following requirements:

  U_i: 30 V; I_i: 175 mA; C_i: 0 µF; L_i: 0 µH; P_i: 1.0 W
- For ATEX Certification, barrier and transmitter must be ATEX Certified with Entity Parameters and must be connected per manufacturer's instructions.

FOR EUROPEAN COMMUNITY:

The LI24 must be installed in accordance with the Essential Health & Safety Requirements of Directive 2014/34/EU, the product certificates CML 17ATEX2015X and IECEx CML 17.0008X, and the product manual.

UL/C-UL SPECIAL CONDITIONS FOR SAFE USE

- Associated apparatus may be in a Division 2 or Zone location if so approved.
- Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. This is particularly important if the equipment is installed in a zone 0 location. In addition, the equipment shall only be cleaned with a damp cloth.
- The equipment shall be installed in a tool secured enclosure which provides a minimum degree of protection of IP20 for the equipment connections.
- Entity parameters must meet the following requirements:
  U_i: 30 V; I_i: 175 mA; C_i: 0 µF; L_i: 0 µH; P_i: 1.0 W

I.S. Equipment Entity Parameters	Required Relationship Between Entity Parameters	I.S. Barrier Entity Parameters
V_{max} (or U_i)	≥	V_{oc} or V_t (or U_o)
I_{max} (or I_i)	≥	I_sc or I_t (or I_o)
P_{max}, P_i	≥	P_o
$C_i + C_{cable}$	≤	C_a (or C_o)
$L_i + L_{cable}$	≤	L_a (or L_o)

- **For Division 2 and Zone 2 Applications:** Division 2 and Zone 2 installations do NOT require the use of an intrinsically-safe barrier or intrinsically-safe entity parameters. Class I, Division 2, Groups A, B, C, and D T4 and Class I, Zone 2, Group IIC T4, -40C <= Ta <= +70C. Ratings: V = 30 V dc, I = 30 mA; Relay Ratings: 250V ac/dc 1A

FOR NORTH AMERICAN COMMUNITY:

Installation and service of this device and/or associated apparatus (barrier) should be performed only by trained service personnel and must be installed in accordance with the manufacturer's control drawing, Article 504 of the National Electric Code (ANSI/NFPA 70) for installation in the United States, or Section 18 of the Canadian Electrical Code for installations in Canada.

WARNING! ***AVERTISSEMENT!***	**EXPLOSION HAZARD** – Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous **RISQUE D'EXPLOSION** – NE PAS BRANCHER NI DÉBRANCHER SOUS TENSION.

YEAR OF CONSTRUCTION

This information is contained within the serial number with the first four digits representing the year and month in the YYMM format.

SAFETY INFORMATION

CAUTION: *Read complete instructions prior to installation and operation of the meter.*

WARNING: ***Risk of electric shock or personal injury.***

Warning!

- ***Hazardous voltages exist within enclosure. Installation and service should be performed only by trained service personnel.***
- ***Service requiring replacement of internal components must be performed at the factory.***
- Control room equipment must not use or generate more than 250 VRMS or VDC.
- ***Hazardous location installation instructions for associated apparatus (barrier) must be followed when installing this equipment.***
- ***For safe installation of an ATEX approved transmitter in series with LI24 loop-powered meters, the hazardous location installation instructions for the transmitter, LI24 loop-powered meter, and associated apparatus (barrier) must be compatible.***
- ***LI24 Series Loop-Powered meters do not add capacitance or inductance to the loop under normal or fault conditions.***
- Substitution of components may impair hazardous location safety.
- ***Equipment contains non-metallic materials and therefore special care and consideration should be made to the performance of these materials with respect to chemicals which may be present in a hazardous environment.***

INSTALLATION

There is no need to remove the meter from its case to complete the installation, wiring, and setup of the meter for most applications.

Note: *LI24 installation must be performed in accordance with Control Drawing DW2516 contained within the LIMLI24-2-FL in order to meet agency approval ratings.*

UNPACKING

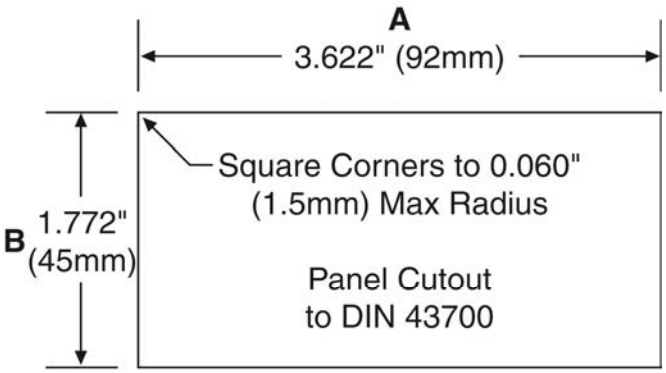
Remove the meter from box. Inspect the packaging and contents for damage. Report damages, if any, to the carrier. If any part is missing or the meter malfunctions, please contact your supplier or the factory for assistance.

INSTALLING THE LOOP-POWERED METER

When unpacking the Loop-Powered Meter, thoroughly inspect the unit for any damage that may have occurred during shipping. Be sure to report any damage, as well as any missing parts or malfunctions to your supplier or Flowline.

MOUNTING THE PANEL

When mounting the panel, first prepare a standard 1/8 DIN panel cutout – 3.622" x 1.772" (92 mm x 45 mm), as shown in the following diagram.



Tolerances:
A: +0.032" (+0.8mm)
- 0.000 (-0.0mm)
B: +0.024" (+0.6mm)
- 0.000 (-0.0mm)

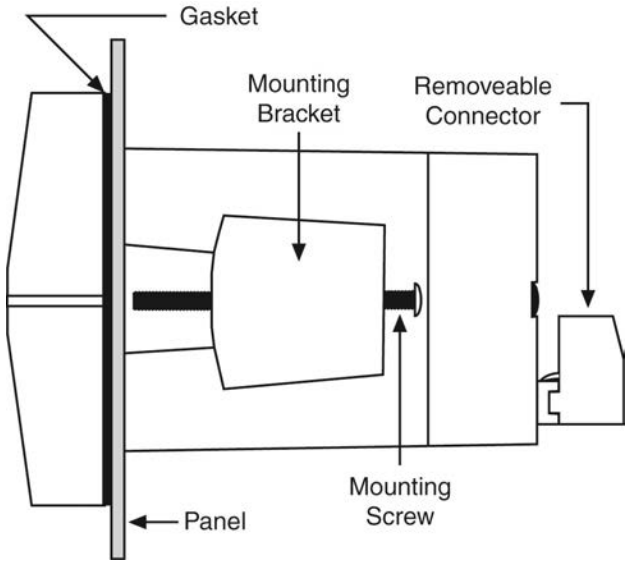
Allow at least 4.0" (102 mm) clearance behind the panel for wiring.

Be sure to maintain a minimum panel thickness of 0.04" - 0.25" (1.0 mm - 6.4 mm) to maintain type 4X rating. This would equal 0.06" (1.5 mm) for a steel panel and 0.16" (4.1 mm) for a plastic panel.

Remove the Loop-Powered Meter's two mounting brackets. Back-off the two screws so that there is ¼" (6.4 mm) or less through the bracket. Slide the bracket toward the front of the case and remove it.

Insert the Loop-Powered Meter into the panel cutout.

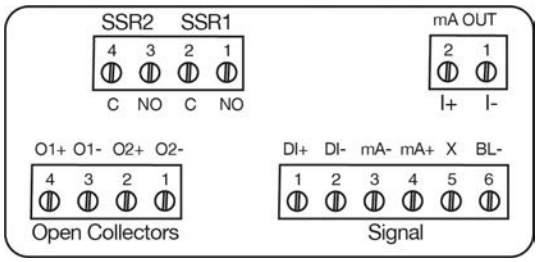
Install the mounting brackets and tighten the screws against the panel. To achieve a proper seal, tighten the mounting bracket screws evenly until Loop-Powered Meter fits snug against the panel along its short side. DO NOT OVER TIGHTEN or the rear of the panel may be damaged.



Note: *LI24 installation must be performed in accordance with Control Drawing DW2516 contained within the LIMLI24-2-FL in order to meet agency approval ratings.*

CONNECTIONS

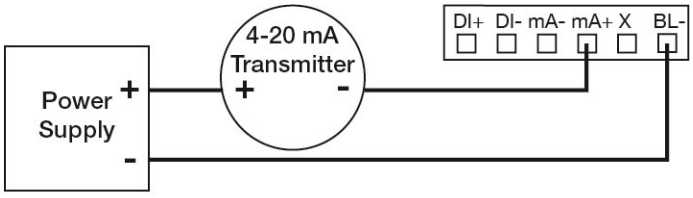
Signal connections are made via a removal, six-terminal connector. The terminal is marked ***Signal***.



Observe all safety regulations. Electrical wiring should be performed in accordance with all agency requirements and applicable national, state, and local codes to prevent damage to the meter and ensure personnel safety.

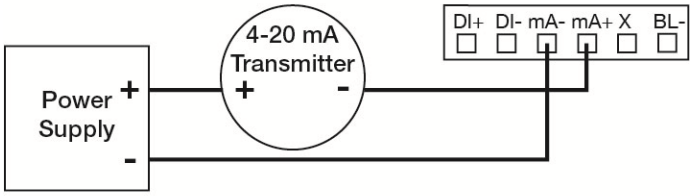
Signal Connections

Signal connections are made via the six-terminal connector on the LI24 back panel. The loop-powered backlight is an optional configuration and requires a total maximum voltage drop of 4.5 V. The backlight is recommended for dim lighting conditions and is enabled when wired as shown in the following diagram.



LI23 Signal Connections with Backlight

The backlight may be bypassed if installed in bright lighting conditions to reduce the maximum voltage drop to 1.5 V as shown in the following diagram.



LI23 Signal Connections without Backlight

THE LOOP-POWERED METER INTERFACE

The Loop-Powered Meter is factory calibrated to read in milliamps prior to shipment.

Overview

- There are no jumpers to set for the meter input selection.
- All setup and programming is performed through the front panel interface.
- After power and input signal connections have been completed and verified, apply power to the meter.

Note: *LI24 installation must be performed in accordance with Control Drawing DW2516 contained within the LIMLI24-2-FL in order to meet agency approval ratings.*

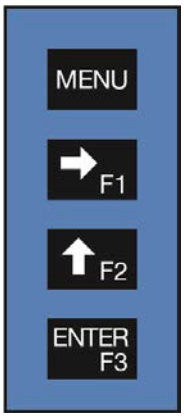
FRONT PANEL OPERATION

Display

The display shows the units for the level or volume of the tank. It also displays the unit of measurement for the application. A graphical representation of the percent full is displayed along the side of the screen.

Buttons

Down the right side of the LI24 series front panel are four buttons. It is through these buttons that you will set up and configure the Loop-Powered Meter. These buttons are explained as follows:



Menu. Use this button to enter or exit the Programming Mode at any time.

Right Arrow/F1. Use this button to move to scroll forward through the menus, select digits during numeric programming, select characters during text programming or decrement the value of a digit or character selected with the Up-Arrow.

Up Arrow/F2. Use this button to scroll backwards through the menus or to increment the value of a digit or character.

ENTER/F3. Use this button to access a menu or to accept a setting or programmed digit/character value.

PROGRAMMING THE LOOP-POWERED METER

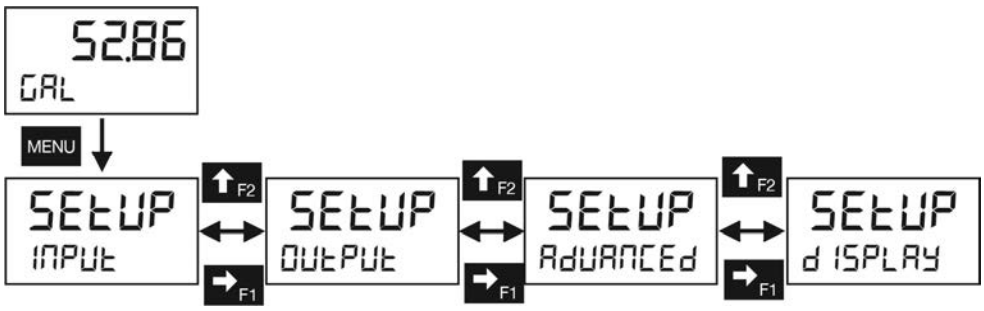
To enter the LI24 series Programming menu, press the **MENU** button. With the **UP** arrow or **RIGHT** arrow, you can scroll through four menu options: Input, Output, Advanced and Display

Input This selects the units of operation as well as scaling the display to the application required span.

Output This configures the outputs of the LI24 series. Depending on which version selected, not all of these options are available. Outputs are open collectors, relays, 4-20mA repeater and control functions. Please refer to the LI24 series Manual for further information.

Advanced This allows for all advanced features of the LI24 series to be configured. Please refer to the LI24 series Manual for further information.

Display This configures all features associated with the display. Features include units, decimal point, comma, bar graph, top display and bottom display. Please refer to the LI24 series Manual for further information.



QUICK SETUP AND PROGRAMMING

This section will take you through the key steps in setting up and programming the Loop-Powered Meter:

A. Confirm the Operational Scale for the Application

B. Select the Decimal Point location

C. Select the Units of Operation

D. SCALE the 4-20mA Input

E. Adjust the Bar Graph

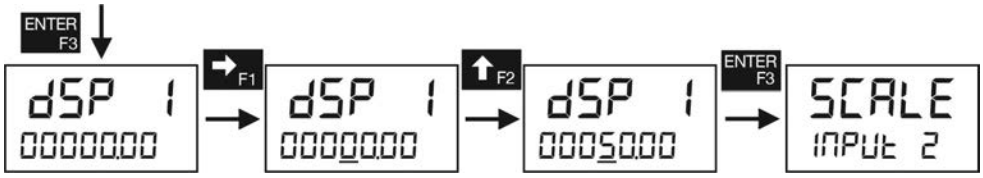
SETTING NUMERIC VALUES

The numeric values are set using the **RIGHT Arrow** and **UP Arrow** buttons. Press **RIGHT Arrow** to select next digit and **UP Arrow** to increment digit value. The selected digit will flash.

Press and hold **UP Arrow** to auto-increment the display value. If you have made a mistake or would like to enter a new value, select the left-most digit and press and hold the **RIGHT Arrow** button until all digits reset to zero.

Press the **ENTER** button at any time to accept a setting or **MENU** button to exit without saving changes.

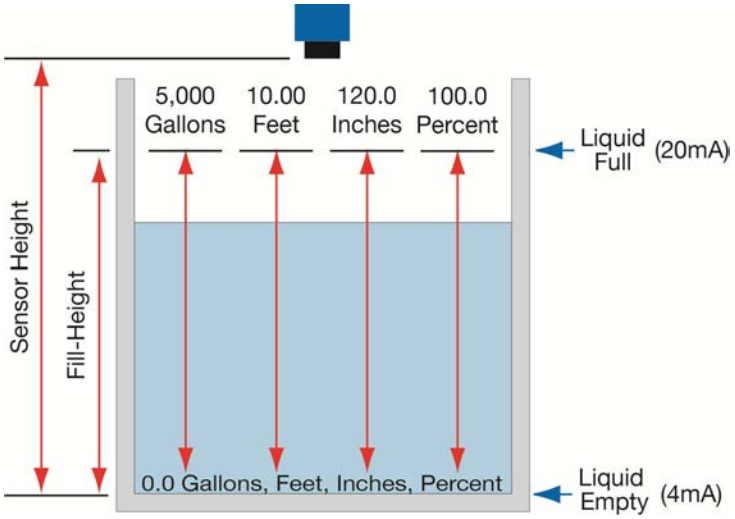
Note: the underscore in the graphic below is provided to show which digit would be flashing.



A. Confirm the Operation Scale for the Application

Typically, the LI24 series must match the operational span of the transmitter mounted on top of or inside the tank. The operational span is the 4-20mA span of the transmitter. Ideally, the transmitter will locate 4mA at the bottom of the tank and the 20mA will be at some known level near the top of the tank (see below). When using Flowline level transmitters, the Sensor Height setting will place 4mA at the bottom or Zero level. The 20mA will be the Fill-Height setting.

Confirm what number you want the LI24 series to display when the tank is empty (4mA) and when the tank is full (20mA).



B. Select the Decimal Points Location

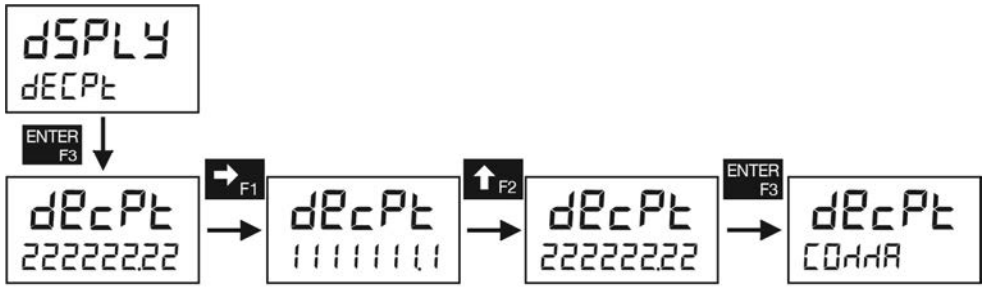
The decimal point may be set to as many as five decimal places. Use the Decimal Point feature to position the decimal point for all values displayed. Placement of the Decimal Point can influence the displayed output of your process. For example, setting a scale of 0 to 100% can be show in three different methods:

Method #1	0% to 100%	Reads to the ones place and is not very accurate
Method #2	0.0% to 100.0%	Reads to the 1/10's place and provides good accuracy
Method #3	0.00% to 100.00%	Reads to the 1/100's place. The accuracy is very good but may not be practical

When selecting a decimal point, take into account the practical scale for reading the level of liquid.

To set the Decimal Point:

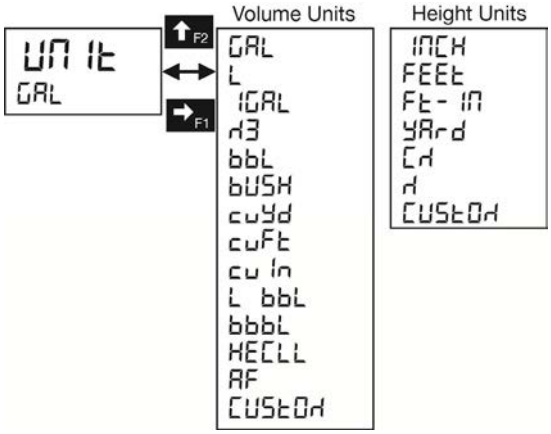
1) Press the **MENU** button to bring up the SETUP/Input screen.
2) Press **Up Arrow** button to bring up SETUP /Display screen.
3) Press **ENTER** button to bring up DSPLAY/Units screen.
4) Press **Right Arrow** to bring up DSPLAY/decpt screen.
5) Press **ENTER** to bring up DECPT/XXXXXX.XX screen.
6) Use the **Right Arrow** or **Up Arrow** to change the location of the decimal point. The location of the decimal point can be seen on the bottom display. Note: typical applications will set the decimal point to the 0, 1 or 2 location.
7) Press **ENTER** button to save your selection.
8) Press **MENU** button twice to return to Main Screen.



C. Select the Units of Operation

The LI24 series can show various engineering units in groups such as Volume, Height, Temperature, Pressure, Weight, Rate or Custom. This quick start will focus on Volume and Height. The other units will be covered in the product manual.

Volume can be display in Gallons, Liters, Imperial Gallons, Cubic Meters, etc. Height can be displayed in inches, feet, cm, meter, etc. Please determine the units of operation that you want to appear on the display.



To set the Units of Operation:

1) Press **MENU** button to bring up the SETUP/Input screen.
2) Press **ENTER** button to bring up SCALE/Units screen.
3) Press **ENTER** to bring up SCALE/Height screen.
4) Use the **Right Arrow** or **Up Arrow** to change the groups between HEIGHT and VOLUME.
5) Press **ENTER** button to select your group.
6) Use the **Right Arrow** or **Up Arrow** to change the engineering units to your required units of operation.
7) Press **ENTER** button to save your selection.
8) Press **MENU** button twice to return to Main Screen.

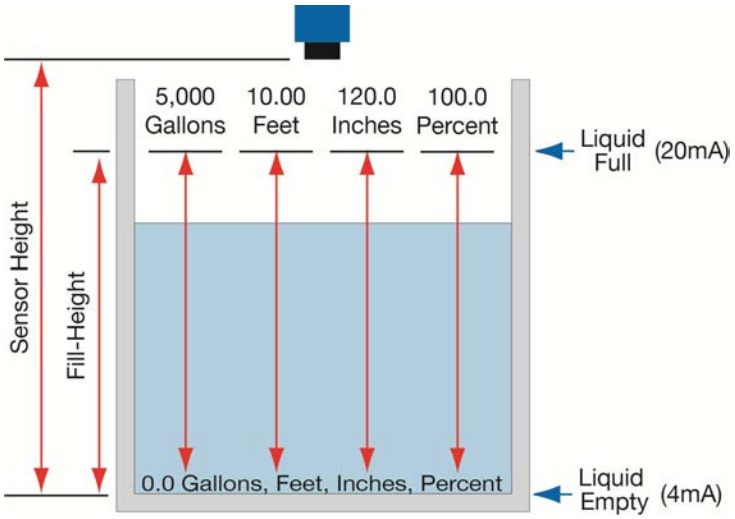
D. SCALE THE 4-20MA INPUT

The 4-20 mA input can be scaled to the appropriate values for a given application. The 4-mA input (input 1) should have a corresponding display value (display 1) which represents the low end of the process value range being measured by the transmitter. Likewise, the 20-mA input (input 2) should have a display value (display 2) which represents the high end of the process value range.

	Input	Display	Input Example	Display Example
1	Typically 04.000 mA	Value of tank at Empty	04.000	0000.0
2	Typically 20.000 mA	Value of tank at Full	20.000	0100.0

For example: If the meter is used to display the level of a 100 ft tall tank, the transmitter should send a 4 mA signal when the tank is empty and a 20-mA signal when the tank is full. The meter should be programmed to interpret these inputs on a display range of 0-100, so that at 4-mA the meter will display 0 and at 20-mA the meter will display 100.

A signal source is not needed to scale the meter; simply program the inputs and corresponding display value



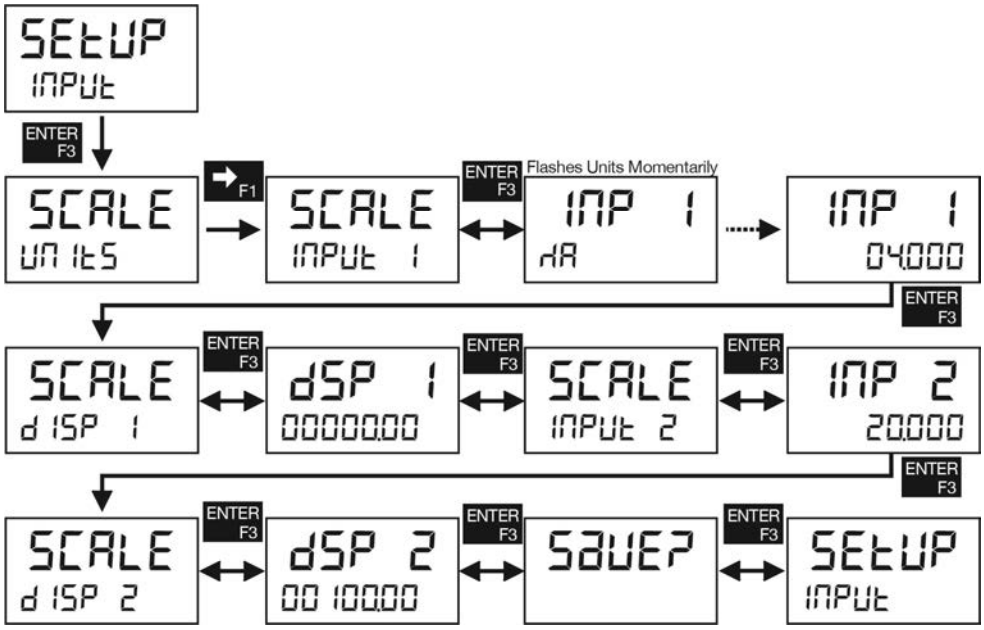
In the examples above, the 4 mA/Empty reading could represent 0 Gallons, 0 Feet, 0 Inches or 0.0%. The 20 mA/Full reading could represent 5,000 Gallons, 10.00 Feet, 120.0 Inches or 100.0%. Setting 4mA for an empty tank and 20 mA for a full tank simplifies configuration.

To set the SCALE function:

1) Press **MENU** button to bring up the SETUP/Input screen.
2) Press **ENTER** button to bring up SCALE/Units screen.
3) Press **Right Arrow** button to bring up SCALE/Input_1 screen.
4) Press **ENTER** button to bring up INP 1/04.000 screen.
   a. This is the default of 04.000mA and does not need to be changed.
   b. If the value needs to changed, use the **UP Arrow** to incrementally increase the selected digit and the **Right Arrow** to move to the next digit.
5) Press **ENTER** to save the Input 1 setting and to bring up SCALE/Disp_1 screen.
6) Press **ENTER** to bring up DSP_1/00000000 screen.
   a. The default is 0000000 and typically does not need to be changed.
   b. If the value needs to changed, use the **UP Arrow** to incrementally increase the selected digit and the **Right Arrow** to move to the next digit.
7) Press **ENTER** to save the Display 1 setting and to bring up SCALE/Input_2 screen.
8) Press **ENTER** to bring up INP_2/20000 screen.

a. This is the default of 20.000mA and does not need to be changed.
b. If the value needs to changed, use the **UP Arrow** to incrementally increase the selected digit and the **Right Arro**w to move to the next digit.

9) Press **ENTER** to save the Input 2 setting and to bring up SCALE/DISP_2 screen.
10) Press **ENTER** to bring up DSP_2/00100.00 screen.
    a. The default is 00100.00 and typically be the value you want to display when the tank is full.
    b. To change the value, use the **UP Arrow** to incrementally increase the selected digit and the **Right Arro**w to move to the next digit.
    c. If you are reading the height of the liquid, this value will typically be the same value as the Fill-Height setting in the Flowline transmitter.
    d. If you
11) Press **ENTER** to save the Display 2 setting and to bring up SAVE? screen.
12) Press **ENTER** to save all the settings and to bring up SETUP/INPUT screen.
13) Press the **MENU** button to return to the main screen.



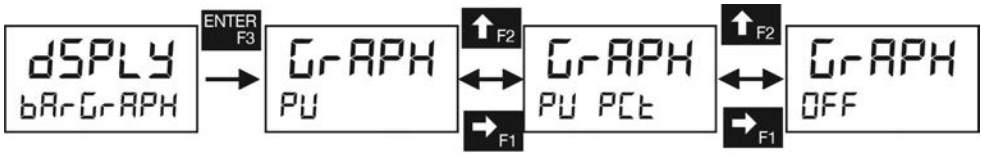
E. Adjust the Bar Graph

The LI24 series can show various engineering units in groups such as Volume, Height, Temperature, Pressure, Weight, Rate or Custom. This quick start will focus on Volume and Height. The other units will be covered in the product manual.

The LI24 Series comes equipped with a bar graph display for applications where a visual representation of the process variable's percentage of full scale is desirable. This feature can be enabled or disabled using the *Bargraph* menu (BARGRAPH). The value displayed on the bar graph can be the percentage of full scale (PV PCT) or the percentage of a user-programmable range (PV).

To set the Bar Graph:

1) Press the **MENU** button to bring up the SETUP/Input screen.
2) Press **Up Arrow** button to bring up SETUP /Display screen.
3) Press **UP Arrow** or **RIGHT Arrow** button three (3) times to bring up DSPLAY/Bargraph screen.
4) Press **ENTER** to bring up GRAPH/PV PCT screen.
5) Use the **Right Arrow** or **Up Arrow** to change the setting to either PV, PV PCT or OFF.
6) Press **ENTER** button to save your selection.
7) Press **MENU** button twice to return to Main Screen.



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SAFETY CONCERN

Where personal safety or significant property damage can occur due to a spill, the installation must have a redundant backup safety system installed.

WARRANTY

Flowline warrants to the original purchaser of its products that such products will be free from defects in material and workmanship under normal use and service in accordance with instructions furnished by Flowline for a period of two years from the date of manufacture of such products. Flowline's obligation under this warranty is solely and exclusively limited to the repair or replacement, at Flowline's option, of the products or components, which Flowline's examination determines to its satisfaction to be defective in material or workmanship within the warranty period. Flowline must be notified pursuant to the instructions below of any claim under this warranty within thirty (30) days of any claimed lack of conformity of the product. Any product repaired under this warranty will be warranted only for the remainder of the original warranty period. Any product provided as a replacement under this warranty will be warranted for the full two years from the date of manufacture.

RETURNS

Products cannot be returned to Flowline without Flowline's prior authorization. To return a product that is thought to be defective, go to flowline.com, and submit a customer return (MRA) request form and follow the instructions therein. All warranty and non-warranty product returns to Flowline must be shipped prepaid and insured. Flowline will not be responsible for any products lost or damaged in shipment.

LIMITATIONS

This warranty does not apply to products which: 1) are beyond the warranty period or are products for which the original purchaser does not follow the warranty procedures outlined above; 2) have been subjected to electrical, mechanical or chemical damage due to improper, accidental or negligent use; 3) have been modified or altered; 4) anyone other than service personnel authorized by Flowline have attempted to repair; 5) have been involved in accidents or natural disasters; or 6) are damaged during return shipment to Flowline. Flowline reserves the right to unilaterally waive this warranty and dispose of any product returned to Flowline where: 1) there is evidence of a potentially hazardous material present with the product; or 2) the product has remained unclaimed at Flowline for more than 30 days after Flowline has dutifully requested disposition. This warranty contains the sole express warranty made by Flowline in connection with its products. ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY DISCLAIMED. The remedies of repair or replacement as stated above are the exclusive remedies for the breach of this warranty. IN NO EVENT SHALL FLOWLINE BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND INCLUDING PERSONAL OR REAL PROPERTY OR FOR INJURY TO ANY PERSON. THIS WARRANTY CONSTITUTES THE FINAL, COMPLETE AND EXCLUSIVE STATEMENT OF WARRANTY TERMS AND NO PERSON IS AUTHORIZED TO MAKE ANY OTHER WARRANTIES OR REPRESENTATIONS ON BEHALF OF FLOWLINE. This warranty will be interpreted pursuant to the laws of the State of California. If any portion of this warranty is held to be invalid or unenforceable for any reason, such finding will not invalidate any other provision of this warranty.

For complete product documentation, video training, and technical support, go to flowline.com.
For phone support, call 562-598-3015 from 8am to 5pm PST, Mon - Fri.
(Please make sure you have the Part and Serial number available.)