ENMET **Corporation**
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GS-24-DF

Manual

80003-142
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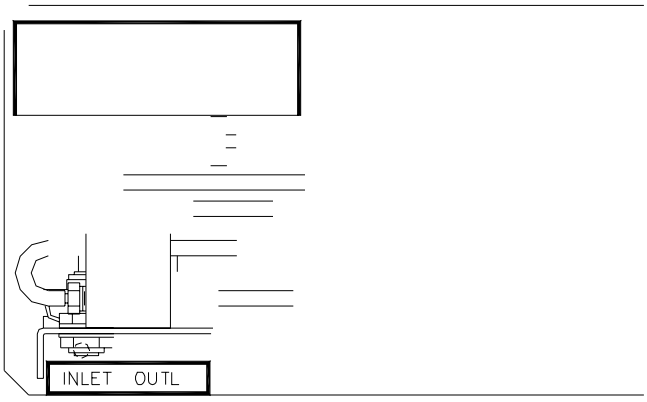
2.0 Features

See Figure 1 and 2

Feature	Description
Power Terminal	This terminal provides connections for: the DC power (24 VDC) supplied from external power source, Sensor/Transmitters and 4-20mA
Display	LCD, Allows the user to verify and monitor the flow rate of the air sample. Standard flow rate, approximately 05 ℓpm(liter per minute).
Indicator LED	Green/Red: When green indicates flow rate is sufficient. When red indicates flow rate is inadequate. Yellow: When on solid indicates **GS-24-DF** is in menu to change settings When flashing indicates **GS-24-DF** is in menu to calibrate*(factory use only)*
Sampling Pump	This electromagnetic diaphragm pump draws the air sample from the test area to the sensor chamber.
Pushbutton Switch	SW1: Menu Switch, this switch is for viewing/changing display settings. SW2: Select Switch, this switch is for temporary deactivating audio alarm and changing display settings.
Potentiometer	Flow Adjustment Potentiometer (POT)
Inlet Port	This port draws the air sample from the test area. For external piping, use ¼″ O.D. tubing. See section 4 for type of tubing to be used.
Outlet Port	This port expels the air sample after it passes the sensor. For external piping, use ¼″ O.D. tubing
Gas Sensing Chamber	This chamber directs the air sample to the gas sensor. Varies, depending on the type of sensor/transmitter.



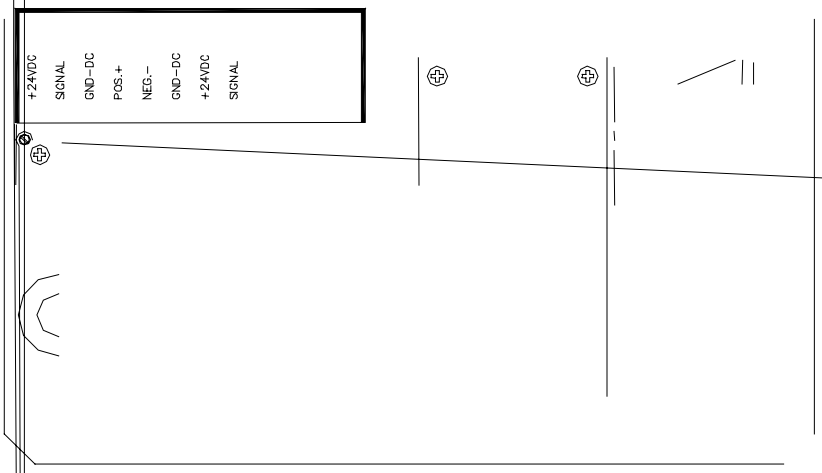


Figure 2: Interior View

3.0 Installation

The **GS-24-DF** needs to be level and as close to the area to be monitored as possible, to reduce transport time to the sensor/transmitter.

- Sensor/Transmitters can be located within the **GS-24-DF** or remotely.
- Inlet tubing must be compatible with the target gas.

Non reactive gases Standard vinyl or tygon tubing, ***ENMET*** part number 73073-001
Reactive gases Teflon lined vinyl or tygon tubing, ***ENMET*** part number 73073-029

- Caution should be used to insure that fluids do not enter the inlet tubing.
- Some types of gases require that the sample gas be removed from the area.
  This is accomplished with the outlet port.
- Power is supplied from an external source.
  Connect 24 VDC to terminal block positions 1 and 3.
- Note 12Vdc output is available on the pump module.
- After installing all the tubing and the sensor/transmitter, verify that there are no leaks in the system.
  Verification should be done by plugging the inlet tube.
  If the system is correct the flow meter reads zero and the flow alarm activates.
  If this does not happen, check all fittings and seals.

4.0 Display Settings

To display the current settings of the **GS-24-DF** use the push button switches. See figures 1 and 2 for location of switches.
Access the MENU and SELECT switches through holes in front. See figures 1 and 2.

To cycle through the display settings press:
MENU switch once = Low Flow alarm setting.
MENU switch twice = High Flow alarm setting.
MENU switch three times = Audio alarm on or off.
MENU switch four times = Raw sensor signal in millivolts.

To disable audio alarm press:
SELECT switch once = Audio Alarm (horn) disabled for approximately 1 minute.

4.1 Changing Display Settings

To change the current setting of the **GS-24-DF** use the push button switches.

Press and hold MENU switch for *three seconds*, display will indicate Units
Press MENU

5.0 Maintenance

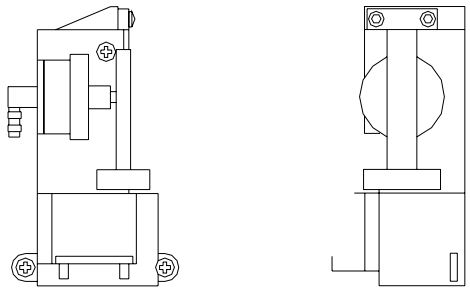
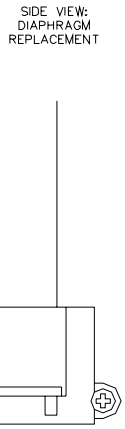


Figure 3: Pump Features

5.1 Pump diaphragm Replacement

If the diaphragm becomes damaged or torn, it can be replaced.
Replacement diaphragm ***ENMET*** part number 04018-117.

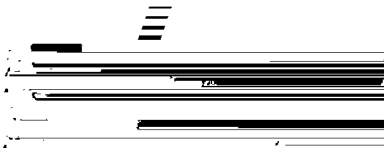


6.0 WARRANTY

ENMET warrants new instruments to be free from defects in workmanship and material under normal use for a period of one year from date of shipment from ***ENMET***. The warranty covers both parts and labor excluding instrument calibration and expendable parts such as calibration gas, filters, batteries, etc... Equipment believed to be defective should be returned to ***ENMET*** within the warranty period (transportation prepaid) for inspection. If the evaluation by ***ENMET*** confirms that the product is defective, it will be repaired or replaced at no charge, within the stated limitations, and returned prepaid to any location in the United States by the most economical means, e.g. Surface UPS/RPS. If an expedient means of transportation is requested during the warranty period, the customer is responsible for the difference between the most economical means and the expedient mode. ***ENMET*** shall not be liable for any loss or damage caused by the improper use of the product. The purchaser indemnifies and saves harmless the company with respect to any loss or damages that may arise through the use by the purchaser or others of this equipment.

This warranty is expressly given in lieu of all other wa

Notes:



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Returning an Instrument for Repair

ENMET instruments may be returned to the factory or any one of our Field Service Centers for regular repair service or calibration. The ***ENMET*** Repair Department and Field Service Centers also perform warranty service work.

When returning an instrument to the factory or service center for service, paperwork must be included which contains the following information:

- ü A purchase order number or reference number.
- ü A contact name with return address, telephone and fax numbers
- ü Specific instructions regarding desired service or description of the problems being encountered.
- ü Date of original purchase and copy of packing slip or invoice for warranty consideration.
- ü If a price estimate is required, please note it accordingly *and be sure to include a* ***fax number***.

Providing the above information assists in the expedient repair and return of your unit.