



# FLOW TOTALIZER FW30T MANUAL

Operating Manual

Version: **2.4**

Date: 18/12/2024

ELECTRO-MED

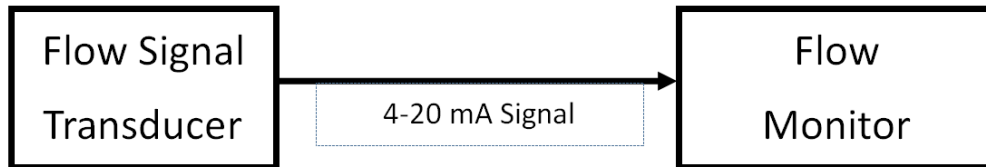
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## 1 OVERVIEW



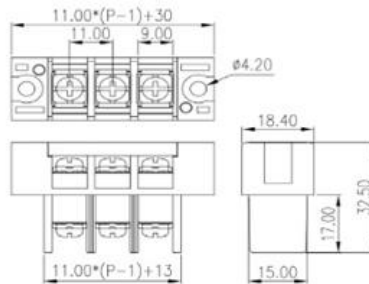
### 1.1 BLOCK DIAGRAM



### 1.2 CONNECTIONS



- +  
4-20mA  
INPUT



Input Signal: 4-20 Ma  
Power: 220VAC

## 2 OPERATING PROCEDURE

1. Power On
  - Ensure the power supply is connected to the device.
  - Turn on the power switch located at the back of the totalizer.
2. Input Signal Connection
  - Verify the 4-20 mA signal cable is securely connected to the designated input terminal.
  - Check the polarity of the connections to avoid errors.
3. Configuration
  - Set the appropriate Span value for 20mA.
4. Operation
  - Start the flow measurement by initiating the totalizer function from the menu.
  - Monitor real-time Flow Rate and totalized values on the display.
5. Reset
  - To reset the totalizer, press and hold ENTER button for 5 seconds.
  - Ensure the reset action is authorized and documented if necessary.

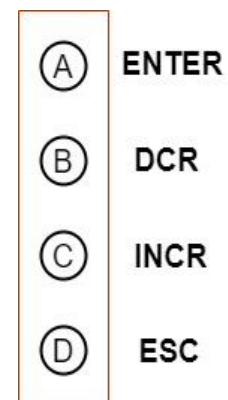
### 2.1 DISPLAY ERROR MESSAGES

#	Error Code	Message
1	-1	Input signal is under 4mA
2	-2	Input signal is over 20mA
3	-3	No signal or open circuit
4	-4	Device Internal Error. Contact Support

## 3 DEVICE SETTINGS

### 3.1 SPAN AND TOTAL SETTING

1. Press button **ENTER (A)**
2. 1<sup>st</sup> digit of Span will start blinking
3. Set the SPAN Range value as follows:
  - a. Press **DECR (B)** for decrement
  - b. Press **INCR (C)** for increment
  - c. Press **ESC (D)** for next digit
  - d. Press **ENTER (A)** to Save
4. Set the initial Totalizer value as follows:
  - a. Press **DECR (B)** for decrement
  - b. Press **INCR (C)** for increment
  - c. Press **ESC (D)** for next digit
  - d. Press **ENTER (A)** to Save and Exit



### 3.2 TIME SETTING

1. Press button **DECR (B)**
2. HH start blinking
3. Set the Time as follows:
  - a. Press **DECR (B)** for decrement
  - b. Press **INCR (C)** for increment
  - c. Press **ESC (D)** to move to MM
  - d. Press **ENTER (A)** to Save and Exit
4. Time has now been set to HH:MM:00

### 3.3 RESET TOTALIZER VALUE

1. To reset the totalizer, disconnect the signal wire.
2. Press and Hold **ESC (D)** button for 5 seconds.
3. The value of counter will become 0.

### 3.4 CALIBRATION

1. Press Button **INCR (C)** and **ESC (D)** together
2. Display will show **CL 4**
3. Give 4mA signal using standard signal source.
4. Press **INCR (C)** to calibrate current signal as 4mA
5. Display will now show **CL20**
6. Give 20mA signal using standard signal source.
7. Press **INCR (C)** to calibrate current signal as 20mA
8. Cross-check the calibration by checking the values at 4mA, 12mA, 19.99mA

## 4 TROUBLESHOOTING GUIDE

#	Issue	Possible Cause	Solution
1	No display or power	Power supply is not connected or faulty	Check and connect the power supply correctly.
2	Inaccurate readings	Incorrect scaling factor or input calibration	Verify and reconfigure the scaling factor.
3	No input signal detected	Loose or damaged 4-20 mA signal connection	Inspect and reconnect the input cables securely.
4	Intermittent display updates	Noise in the signal line	Use a shielded cable or check grounding.
5	Totalizer not resetting	Software glitch or reset button malfunction	Perform a software reset or contact support.

## 5 GENERAL GUIDELINES

### 5.1 PRECAUTIONS

1. Always ensure proper grounding of the device to prevent electrical hazards.
2. Avoid exposing the device to excessive vibrations or shocks.
3. Ensure cables are routed securely to prevent accidental disconnections.
4. Never open the device casing while it is powered on.

### 5.2 SAFETY INSTRUCTIONS

1. Operate the device within specified voltage and current ratings.
2. Keep the device away from flammable materials or environments.
3. Use insulated tools during installation and maintenance.

### 5.3 POWER REQUIREMENTS

- Voltage: 220V AC, 50Hz
- Power Consumption: 10W max

### 5.4 ENVIRONMENTAL CONDITIONS

- Operating Temperature: 0°C to 50°C
- Storage Temperature: -10°C to 60°C
- Humidity: 10% to 90% non-condensing
- Installation Location: Dry and dust-free area (Preferred)

### 5.5 MAINTENANCE

1. Perform regular visual inspections for signs of damage or wear.
2. Periodically check and recalibrate the device as per the manufacturer's guidelines.
3. Clean the device with a soft, dry cloth. Do not use solvents or abrasive materials.

## 6 WARRANTY AND SUPPORT

- For support, mail us at [support@electromed.co.in](mailto:support@electromed.co.in) or visit us at <https://electromed.co.in>