WSM22D PRODUCTION COUNTER MANUAL

Operating Manual

Version: **2.4**

Date: 18/12/2024

ELECTRO-MED

TABLE OF CONTENTS

1   OVERVIEW

1.1   FEATURES

- Input: Potential Free Contacts (COM NO)
- Customizable debounce time (0 to 100 ms) and minimum time between counts (0 to 10 minutes).
- 1000 V AC isolation between input and internal circuitry.

1.2   CONNECTIONS

Input Signal: Potential Free Contacts (COM NO)
Power: 220VAC

2   OPERATING PROCEDURE

1. Input Signal Connection
    *   Connect the potential-free contacts from the sensor or switch to the designated input terminals.
    *   Verify the connections are secure to avoid errors.

2. Power On

3. Operation
    *   The device automatically begins counting based on the input signals.
    *   The display will show the following information:
        o **Current Hour Total**: Counts accumulated within the current hour.
        o **Previous Hour Total**: Counts accumulated during the hour.
        o **Current Day Total**: Counts accumulated within the current day.
        o **Previous Day Total**: Counts accumulated during the current day.
        o **Season Total**: Counts accumulated since the last seasonal reset.
        o **Current Time**: Displays real-time clock information.

4. Reset Counts
    *   To reset all totalizer counts, press the reset button, or short the reset terminals with a wire.
    *   Ensure the reset action is authorized and documented if necessary.

3   DEVICE SETTINGS

3.1   TIME SETTING

1. Press button **ESC (D)**
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
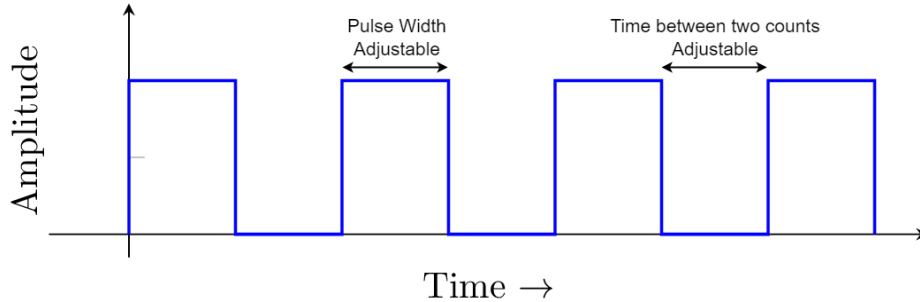4. Time has now been set to HH:MM:00

(A) ENTER

(B) DCR

(C) INCR

(D) ESC

3.2   RESET TOTALIZER VALUE

1. To reset all totalizer counts, press the reset button, or short the reset terminals with a wire.
2. The value of counter will become 0.
3. Ensure the reset action is authorized and documented if necessary.

3.3 DELAY & PULSE WIDTH SETTING

Square wave

1. Press **ENTER (A)** and **INCR (C)** buttons together
2. First, we set Time between two counts
3. Display will show `dELAY` (time between 2 pulses) (0 to 1000 sec)
4. Set the delay time (in sec) as follows
   a. Press **DECR (B)** for decrement
   b. Press **INCR (C)** for increment
   c. Press **ENTER (A)** to Save and move to next setting
5. Second, we set Pulse Width
6. Display will show `PULSE` (pulse width in msec) (10 msec – 1000 msec)
7. Set the pulse value as follows:
   a. Press **DECR (B)** for decrement
   b. Press **INCR (C)** for increment
   c. Press **ENTER (A)** to Save and move to next setting
8. Display will show `dAY CH`
   a. Press **ENTER (A)** to Save and Exit

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	Counts not updating	Loose or damaged input signal connection	Inspect and reconnect the input cables securely.
3	Display shows incorrect totals	Configuration settings are incorrect	Verify and reconfigure the reset intervals.
4	Time not accurate	Clock not synchronized	Manually adjust the clock via the menu options.
5	Device unresponsive	Software or hardware issue	Restart the device or contact customer 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.

5.6   ADDITIONAL NOTES
- This device is designed to operate autonomously once set up.
- Maintain a log of all resets and maintenance activities for better operational tracking.
- Report any unusual behaviour or errors to support for immediate resolution.

6   WARRANTY AND SUPPORT

- For support, mail us at support@electromed.co.in or visit us at https://electromed.co.in