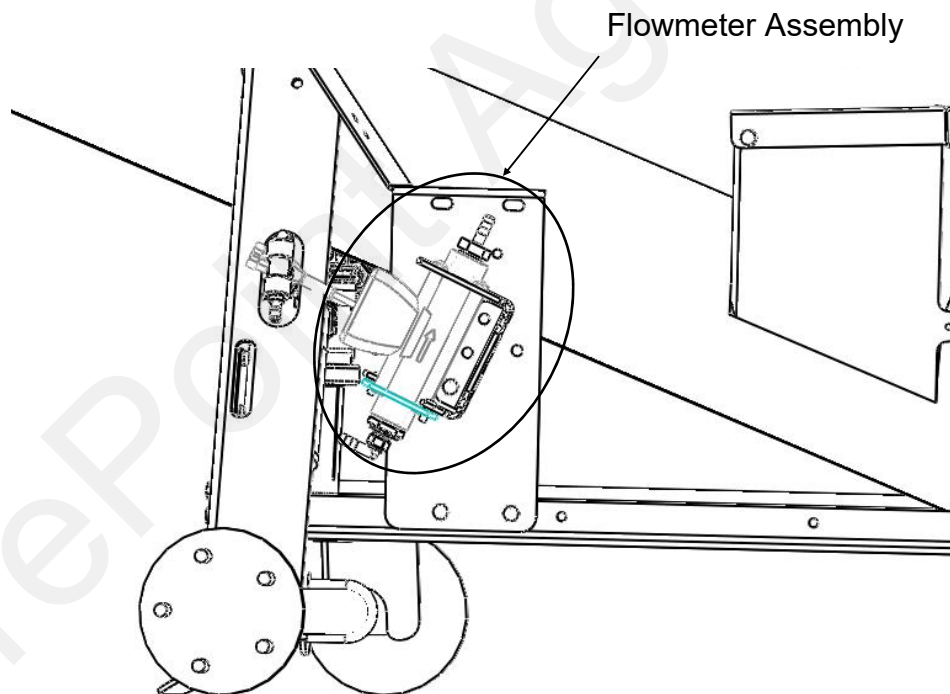# 396-001430

SuperTreater Display Setup Instructions

The SurePoint SuperTreater is equipped with an Electromagnetic Flowmeter. This flowmeter uses no moving parts. The flowmeter has a working range from 0.3—5.0 GPM. The calibration numbers provided in this manual will only work with the flow meter with that specified working range.*

SurePoint has conducted tests to verify this flowmeter is capable of metering product flow rates less than 0.3 GPM. The minimum recommended flow rate in this application is 25 oz/min.

Flowmeter Assembly

*The calibration numbers in this publication are for flowmeters purchased after 10/15/2012. These flowmeters have a blue label with white text. Earlier flowmeters (with a white label with black text) have different calibration numbers.

To prevent damage to the flowmeter, always disconnect the flowmeter before doing any welding on the SuperTreater unit.
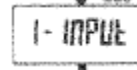
Re-Programming the Flow Display

The flow display is programmed at the factory. If the display needs reprogrammed for any reason, these instructions will provide the necessary settings for each item in the setup menus so you can make the necessary changes while also verifying no unintended changes are made.

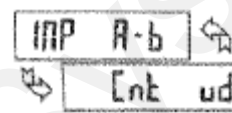**Instructions to Change Scale Factor in 1-INPut menu:**

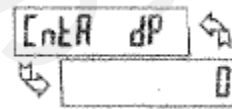Push and Hold SEL button until meter reads:
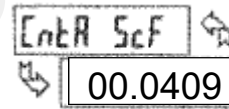
Push RST once, meter will read:

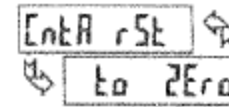Push SEL to enter Input menu. Cnt ud is the correct setting for INP A-b.

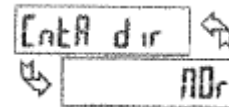Push SEL to move to next parameter. 0 is correct setting for CntA dP (decimal place).

Push SEL to advance to **Scale Factor**. You must change this parameter to **0.0409**. Push the RST key to begin changing. Push the RST key to change the digits (beginning at the left). Push the SEL key to advance to next digit. Display must read **0.0409**.
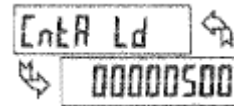
When display is correct, hold SEL key to exit change mode and advance to next parameter. To Zero is correct setting for CntA rSt.
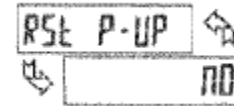
Push SEL to move to next parameter. NOr is correct setting for CntA dir.

Push SEL to move to next parameter. 500 is correct setting for CntA Ld.

Push SEL to move to next parameter. No is correct setting for RSt P-UP.

Push SEL to advance. This is the end of parameters in 1-INPut. Display will read Pro/No. Push RST twice to display 2-rATE setup menu. (Pushing SEL at this screen will exit setup mode).
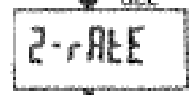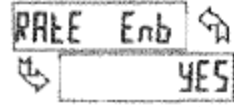
Re-Programming the Flow Display (cont.)

Instructions to Change Rate Input in 2-rATE menu:
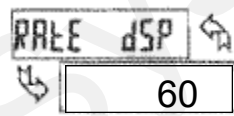
After pushing RST twice, meter should read:

`2-rAtE`

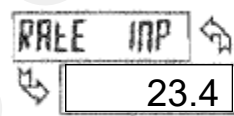Push SEL to enter Rate menu. YES is the correct setting for RATe Enb.

`RAtE  Enb`
`YES`

Push SEL to move to next parameter. 0 is correct setting for RATe dP (decimal place).
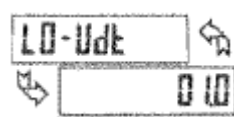
`RAtE  dP`
`0`

Push SEL to advance to RAte dSP. This must be set to **60**, which is NOT the display default setting. However, if only performing the flowmeter upgrade, setting should already be 60 from SurePoint factory.
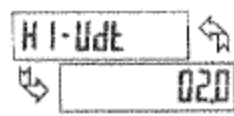
`RAtE  dSP`
`60`

Push SEL to advance to RAte INP. This must be changed to **23.4**. Push the RST key to begin changing. Push the RST key to change the digits (beginning at the left). Push the SEL key to advance to next digit. Display must read **23.4**.

`RAtE  INP`
`23.4`
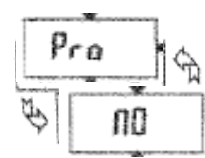
When display is correct, hold SEL key to exit change mode and advance to next parameter. 01.0 is correct setting for LO-Udt.

`LO-Udt`
`01.0`

Push SEL to move to next parameter. 02.0 is correct setting for HI-Udt.

`HI-Udt`
`02.0`

Push SEL to advance. This is the end of parameters in 2-rATE . Display will read Pro/No. Push SEL at this screen to exit setup mode.

`Pro`
`NO`

Verify Flow Display correctly calibrated

Instructions to check flow display calibration. You will need a stopwatch to catch a 60 second sample. Catching a 60 second sample allows us to verify the Scale Factor and Rate Input are both entered correctly (Scale Factor = 1 ÷ Rate Input)

1. Remove spray nozzles and caps from check valves. Remove check valves from box lids by twisting until slots align with check valve tabs. Re-attach spray nozzles and place nozzles into a measuring pitcher (50-100 oz sample required).
2. Fill 15 gallon tank with water or RV anti-freeze. Set dial to 3-4. Turn pump on and get system primed. Adjust dial to a flow rate between 50-60 oz/min.
3. Empty pitcher. Reset meter counter to zero.
4. Catch 60 second sample in pitcher. Watch Rate (R showing on display) to how much should be dispensed in 1 minute.
5. Does volume counter on display approximately match rate? (For a 1 minute sample, counted volume should = rate in oz/minute). If not, double check both Scale Factor and Rate Input. Scale Factor must equal 1 ÷ Rate Input.
6. Is amount caught in pitcher within 5% of counted volume on display? If not, re-run test. SurePoint recommends re-calibrating the meter based on the average of 3 one minute samples; OR you can run one long test for 3-5 minutes and measure total volume.

Calculations to Re-Calculate Calibration Factors

New Rate Input = Old Rate Input (23.4 initially) X (displayed value / measured value)

New Scale Factor = 1 / New Rate Input

The complete manufacturers information on the flow display settings for menu 1-INPut and 2-RAte follow. These should only be needed for reference. The preceding step by step instructions show all meter settings necessary for the flowmeter & SuperTreater Operation.