396-4507Y1

MAW

QuickDraw Lite Operator's Manual

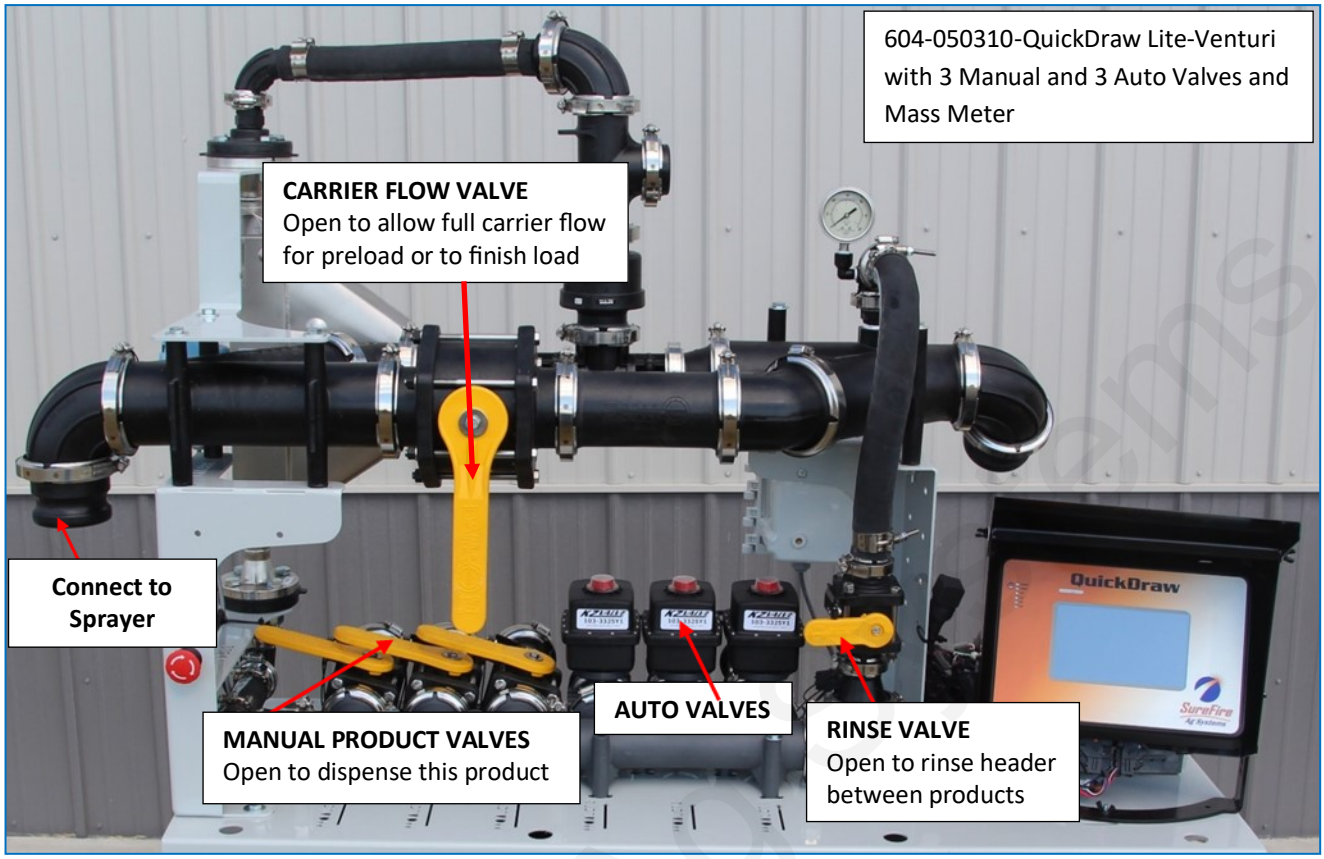
SureFire Ag Systems

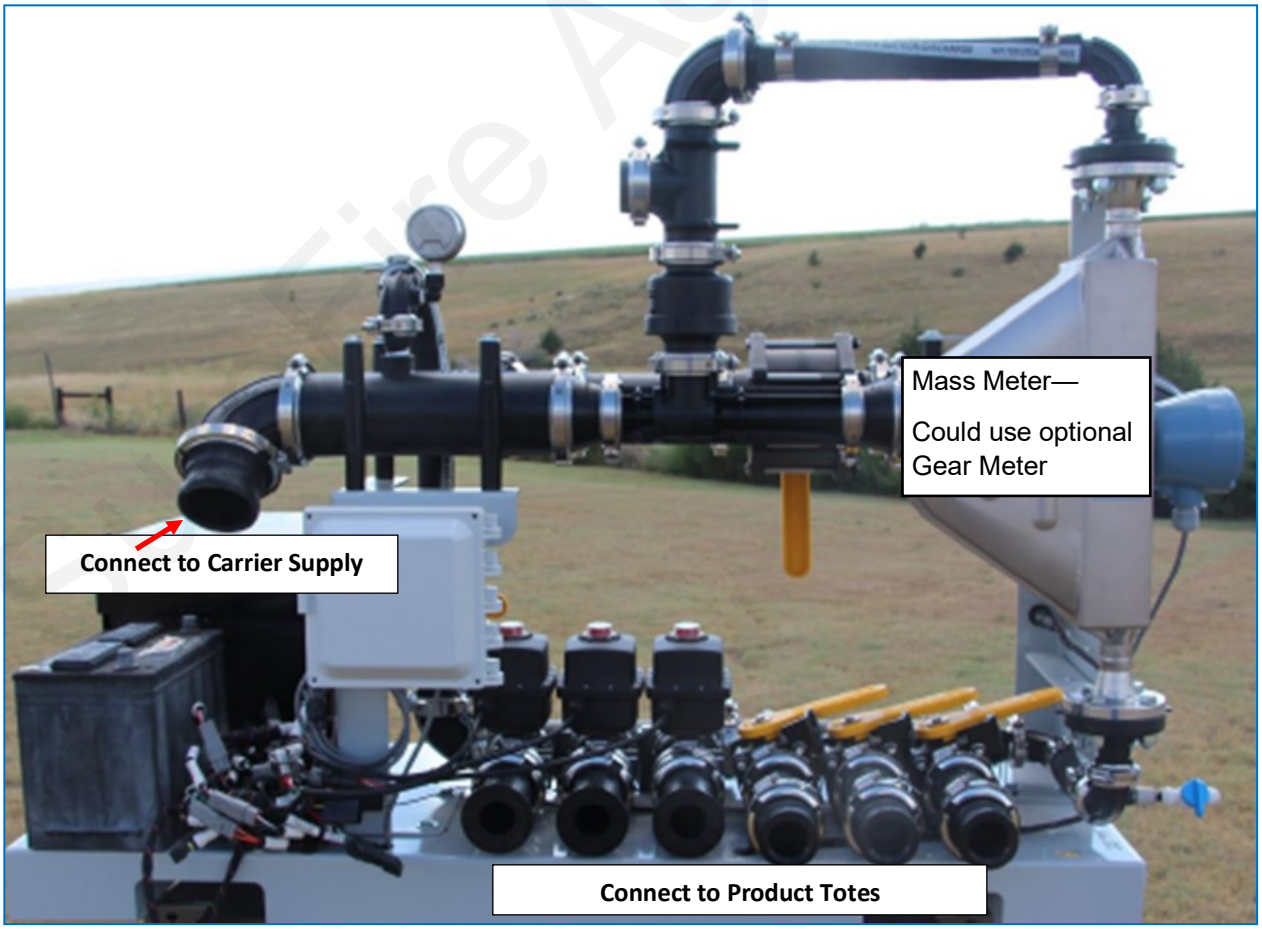
⚠ WARNING

It is the responsibility of the operator to read and understand this manual for the safe operation of the QuickDraw.

The operator must follow all safety precautions from the label of all products being used.

QuickDraw Lite

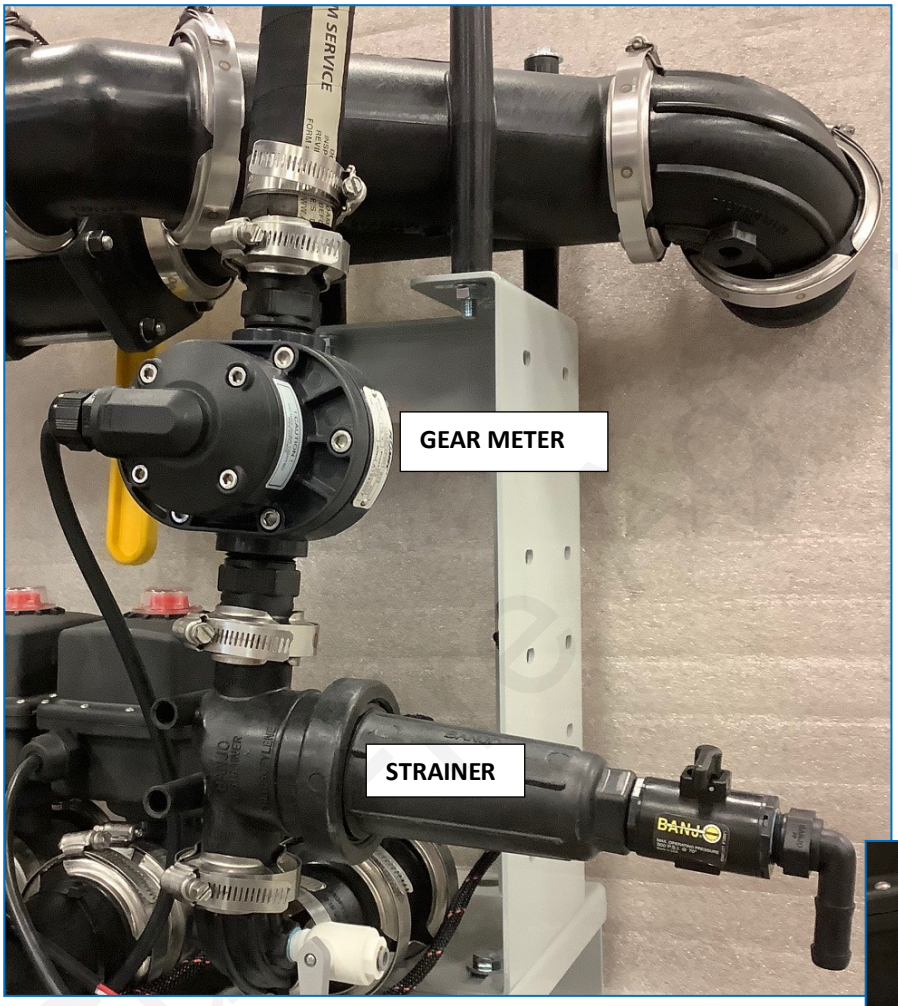




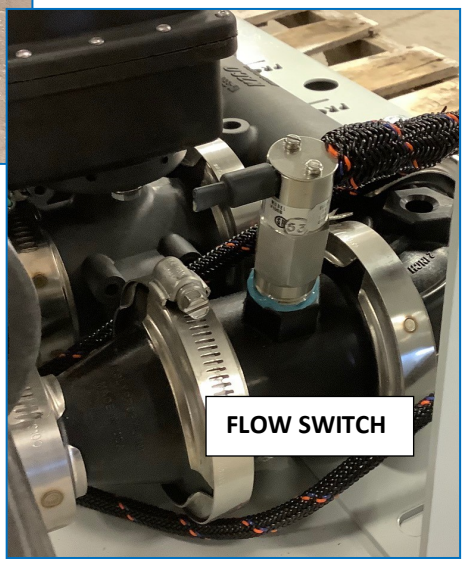
Optional Gear Meter

The QuickDraw Lite can be purchased with a Gear Meter instead of the Mass Meter. The Gear Meter provides very accurate measurement of the chemical products. The Gear Meter must be used with a strainer to be sure no particles get into the finely machined gear mechanism. This strainer must be drained and cleaned out if a product has been used that even a minute amount of that product may cause harm to the crop to be treated.

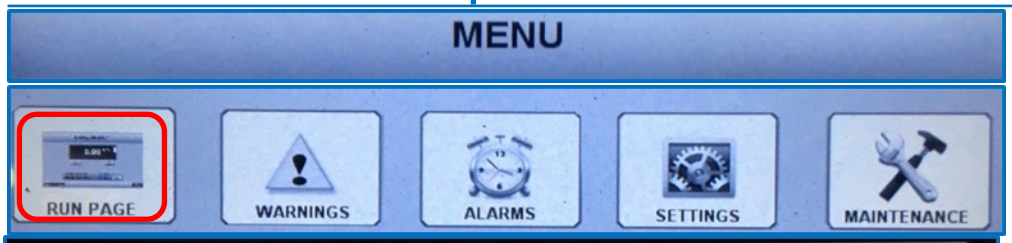
The Gear Meter system also comes with a paddle flow switch plumbed into the line before the strainer. This flow switch guarantees that product is flowing when the meter is spinning. The meter can turn from the venturi suction even if no product is flowing. With the flow switch, the controller will not read flow if the meter is spinning without any liquid flow.



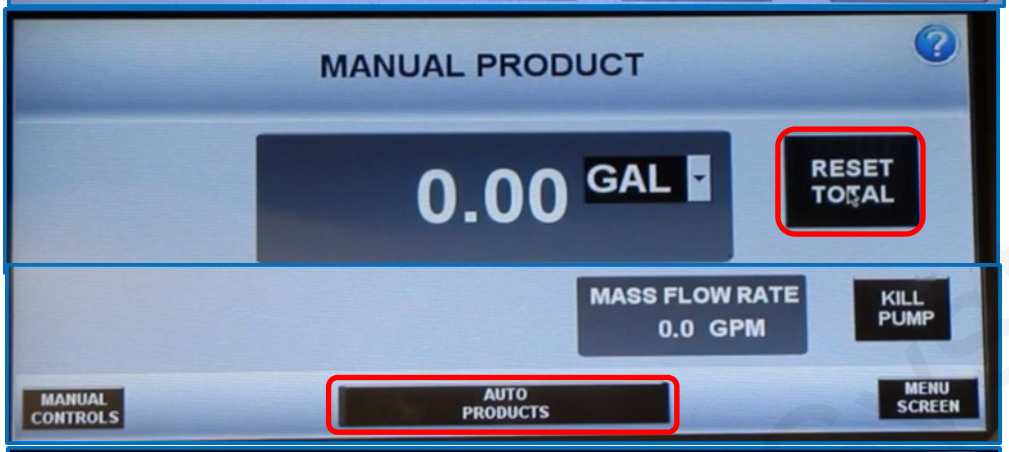
Typical Flowmeter Calibration for the gear meter is 406 pls/gal.
Adjust as needed for improved accuracy.



QuickDraw Lite Operation

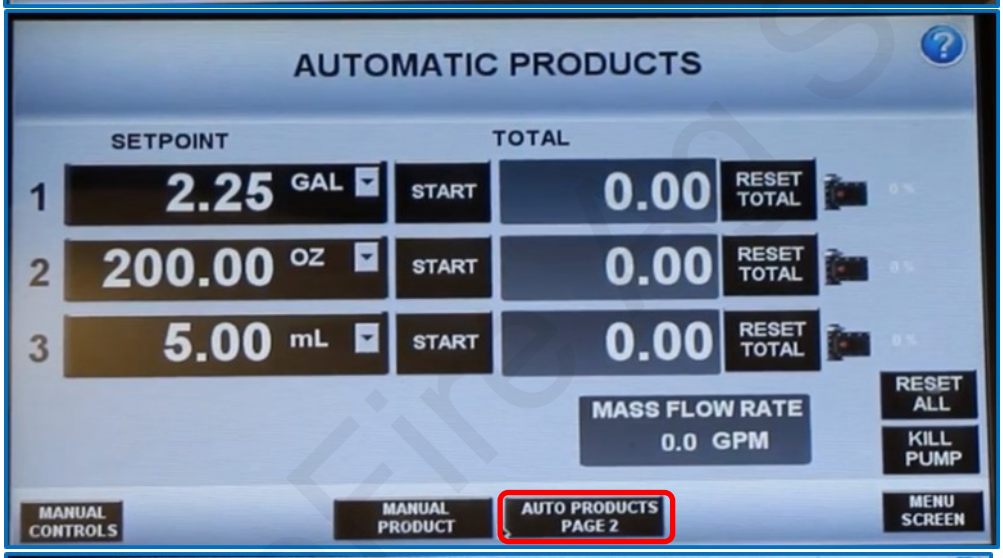


From the **MENU** screen you can access the other controller screens.



RUN PAGE brings up the **MANUAL PRODUCT** screen.

RESET TOTAL sets the Total at 0.00 GAL. Do this before loading each product.



AUTO PRODUCTS takes you to the Automatic Products screen shown to the left.

Enter the **SETPOINT** for the amount of each product in the batch.

Push **RESET TOTAL** for each product or **RESET ALL** to bring each Total back to 0.00.

Push **START** to automatically load a product. The controller will open and close the valve to get the correct amount.

After each product, open the rinse valve for 3-5 seconds to rinse the plumbing.

AUTO PRODUCTS PAGE 2 takes you to the screen for Valves 4, 5, and 6.

MANUAL CONTROLS brings up the Manual Operation and Debugging Screen.

Running a Batch with QuickDraw Lite

Calculate the amount of each product that will be needed in the batch.

Products can be loaded in any order.

Open the carrier flow valve for preloading and for finishing the batch with carrier.

Close the carrier flow valve when loading products.

Open the rinse valve for 3-5 seconds between products.

Enter the SETPOINTS for AUTO PRODUCTS before starting the batch. RESET TOTALS (to 0.00) for each product. (*Setpoints can be entered or changed and Totals can be reset while the batch is running, but not while that product is being loaded.)* An AUTO PRODUCT that is loading can be stopped by pressing STOP on that product.

To Load MANUAL PRODUCTS

Go to the **MANUAL PRODUCT** screen (RUN PAGE).

Press **RESET TOTAL** (to 0.00)**.**

Open the valve for the product. Close the valve when the desired amount has been loaded.

Open the **rinse valve** for 3-5 seconds to flush the header.

Repeat Steps 2-4 for all Manual Products.

To Load AUTO PRODUCTS

Go to the **AUTO PRODUCTS** screen (RUN PAGE > AUTO PRODUCTS).

Press **RESET ALL** or **RESET TOTAL** to set the Totals to 0.00.

Enter the **SETPOINT** for the desired amount of each product (if not already entered).

Press **START** for the product. The valve will close automatically when it reaches the setpoint.

Open the **rinse valve** for 3-5 seconds to flush the header.

Repeat steps 4 and 5 for each Auto Product.

After all products are loaded, open the Carrier Flow Valve until the batch is completed.

Kill the pump when the batch is complete.

Run Page Help Screen

Alarm Retry

This button appears if the system has paused due to an alarm failure. Pushing the button allows the system to restart and try again. Start pump before re-trying.

Warnings & Alarms Active

Push these buttons in order to see what alarms and warnings are active. They will only be visible if there are active alarms or warnings.

Rate and Totals

The manual product total is the large number in the middle of the screen and can be reset.

Mass flow is the amount of flow through the mass meter.

Carrier total, if enabled, show the total carrier pumped and can be reset.

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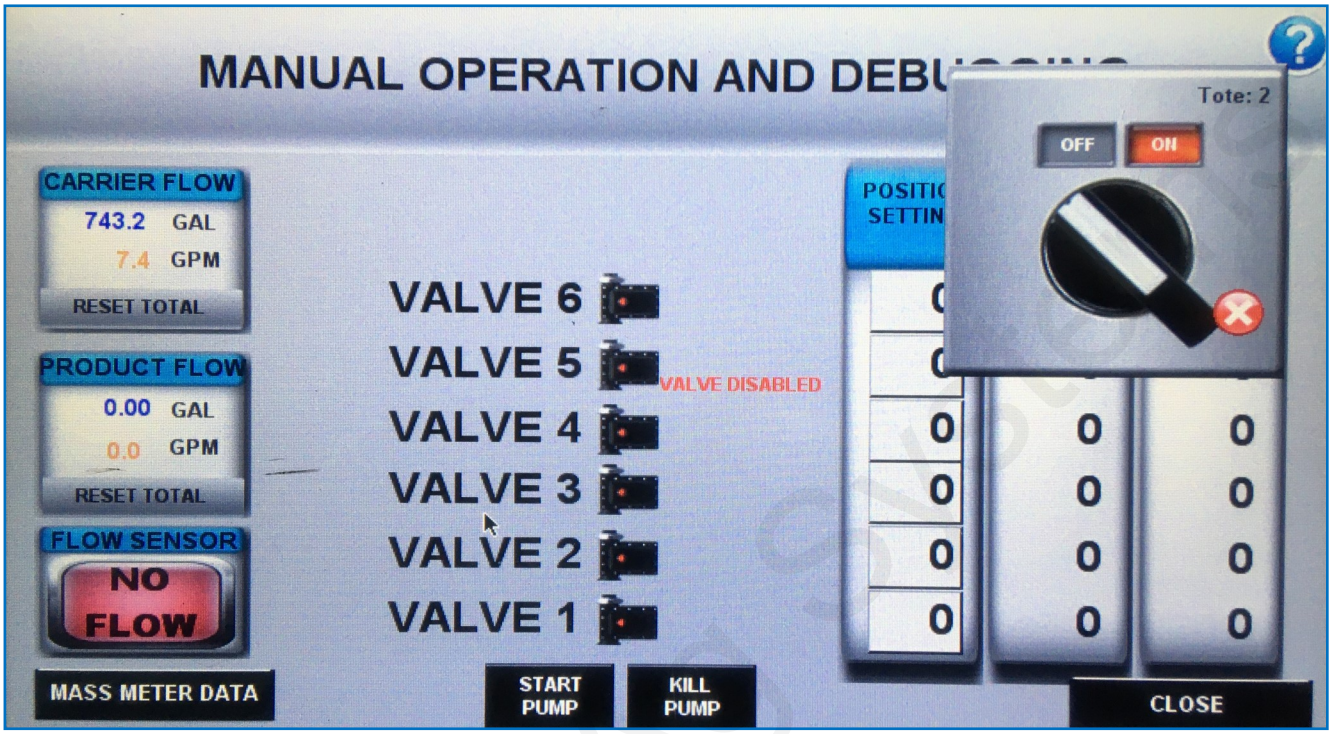
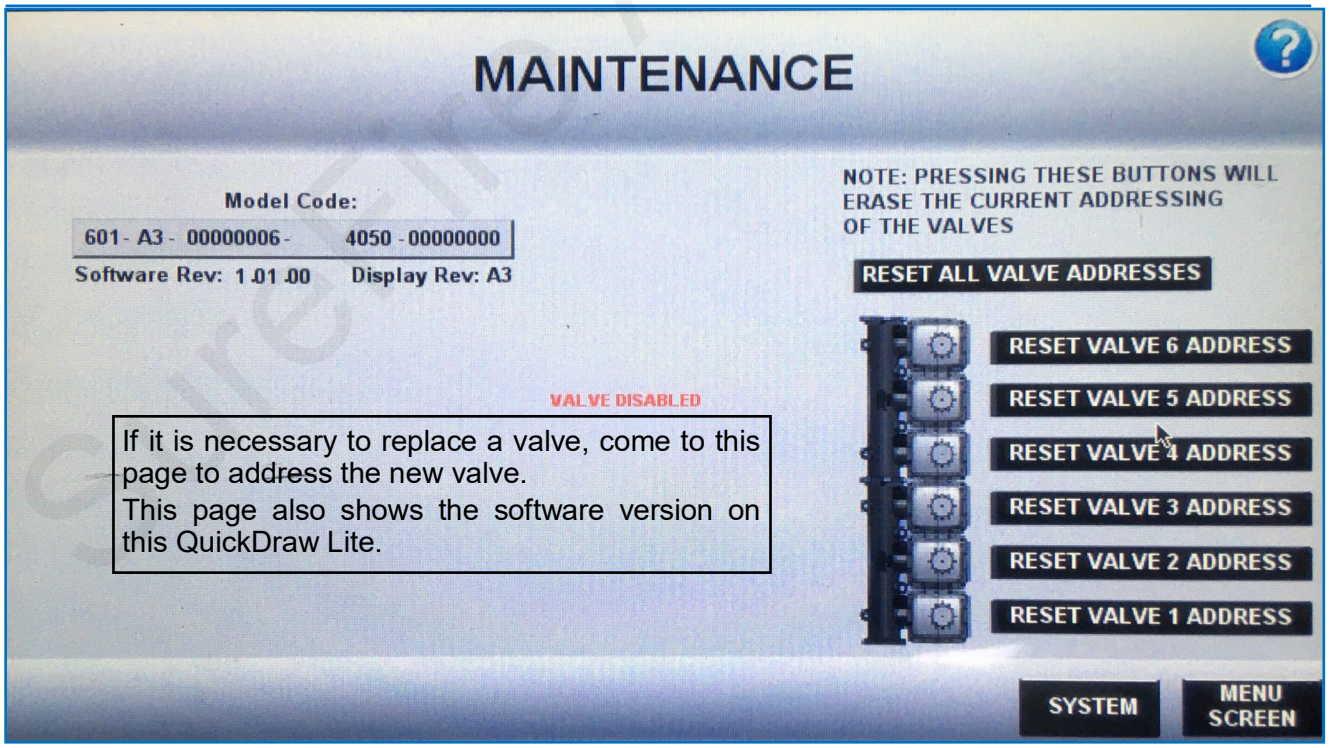
QuickDraw Lite Manual Operations

RUN | Manual Controls

To manually operate a valve, press on that valve on this screen. An ON/OFF switch will appear. Press ON to open the valve. Press the valve again to bring back the switch. Press OFF to stop the flow.

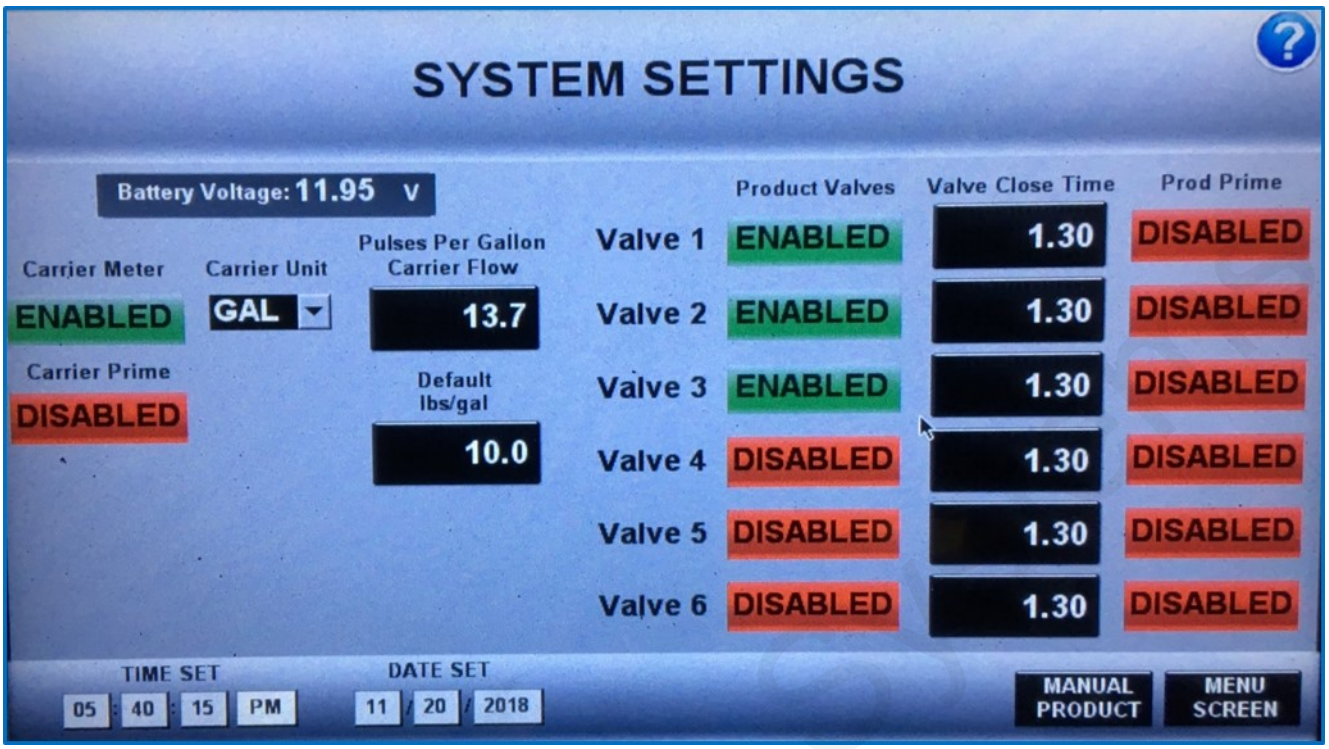


QuickDraw Lite Maintenance Screen



If it is necessary to replace a valve, come to this page to address the new valve.
This page also shows the software version on this QuickDraw Lite.

QuickDraw Lite System Settings



If a flowmeter is installed for the Carrier, set **Carrier Meter** to **ENABLED.** Adjust Pulses per Gallon as needed.

When Carrier supply has run empty or when starting with empty lines set **Carrier Prime** to **ENABLED** so the controller will give it time to prime before shutting down for a flow error.

Set electric automatic valves to **ENABLED.** Default **Valve Close Time is 1.5 seconds.** If the batch is overshooting the target, increase this number because the valve needs more time to get closed on time. If the batch is undershooting, lower this value. 1" valve default is 1.5 seconds.

When connecting a new tote, set **Prod Prime** to **ENABLED** on the first batch, so the controller won't time out before the hose gets filled with the new product.

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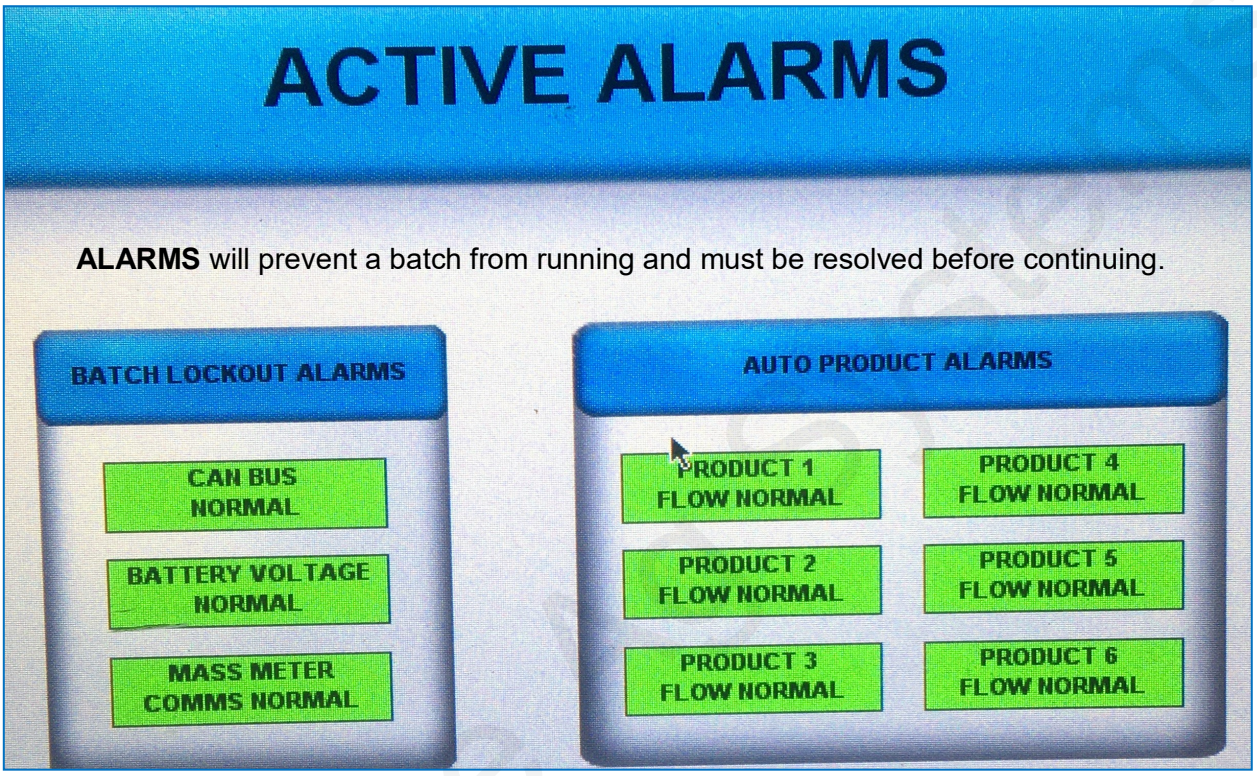
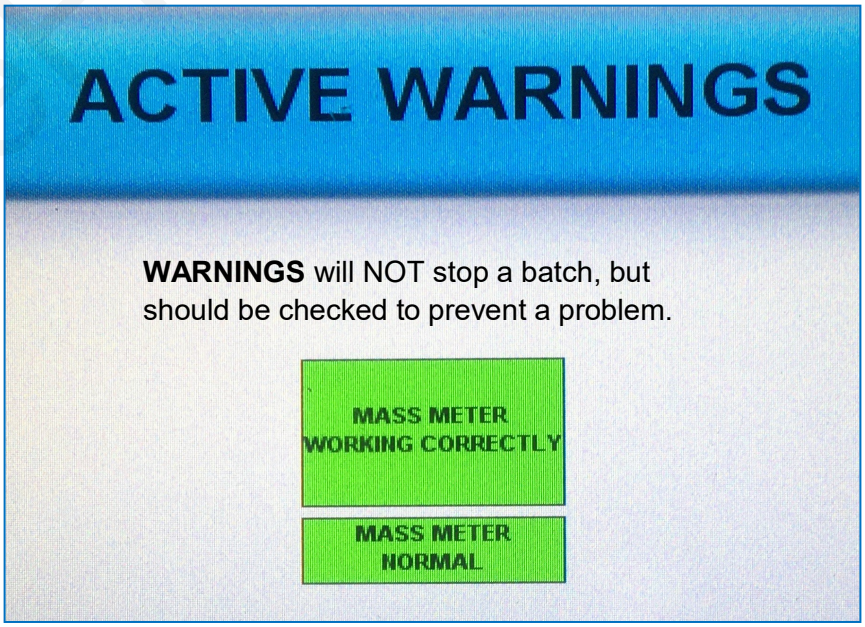
Alarms and Warnings





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