

SafeSite SmartFill Operations and Maintenance Manual

SafeSite SmartFill Main Tank Power Fill System

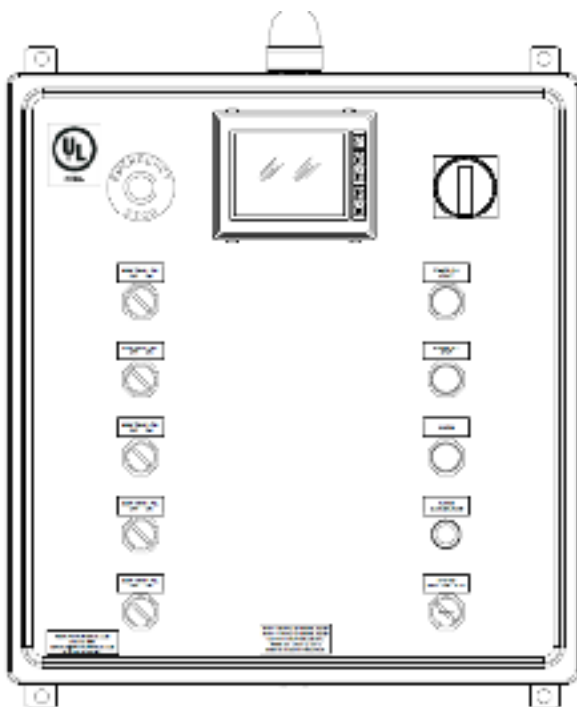


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Navigating the Screen



- | | |
|---------------------|---|
| MENU | Go to System Main Menu Screen |
| F1 (HOME) | Press to Return to the Home Screen |
| F2 (NEXT) | Go to the Next Screen |
| F3 (BACK) | Go Back to the Last Screen |
| F4 (ALARM) | Go to the Alarm Screen |
| F5 (MORE) | Go to the Programming and Calibration Screens |

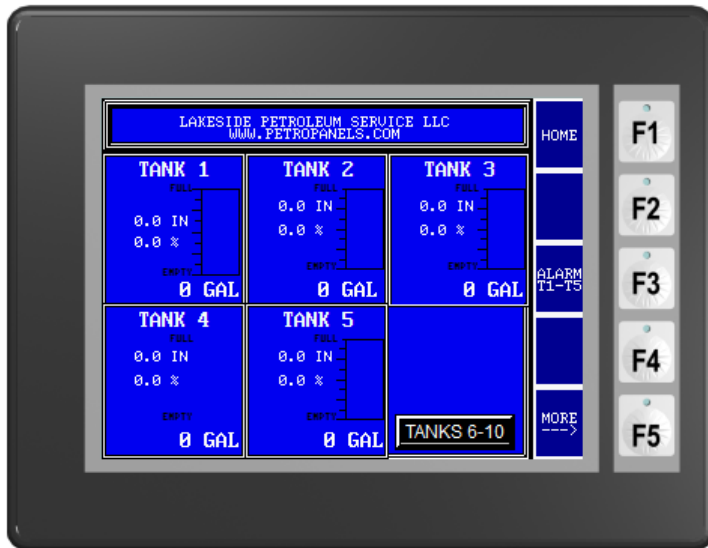
Home Screen



HOME A quick look at all of the tank levels and system statuses

MENU Press **MENU** to see more information

System Menu



Press **HOME** to go back to the Home Screen

Press any tank to go to more information on that tank

Press **NEXT** to go to Tank 1 information

Press **NEXT** to continue to all of the tanks in operation

Press **NEXT** to go to the Pump Status (after the last tank)

Press **ALARMS** to go to The Alarm Status Screen

Press **BACK** to go to the previous screen

Tank Information



Press **HOME** to go back to the home screen

Press the screen to go to tank zoom on that tank

Press **NEXT** to continue to all of the tanks in operation

Press **NEXT** to go to the pump status (after the last tank)

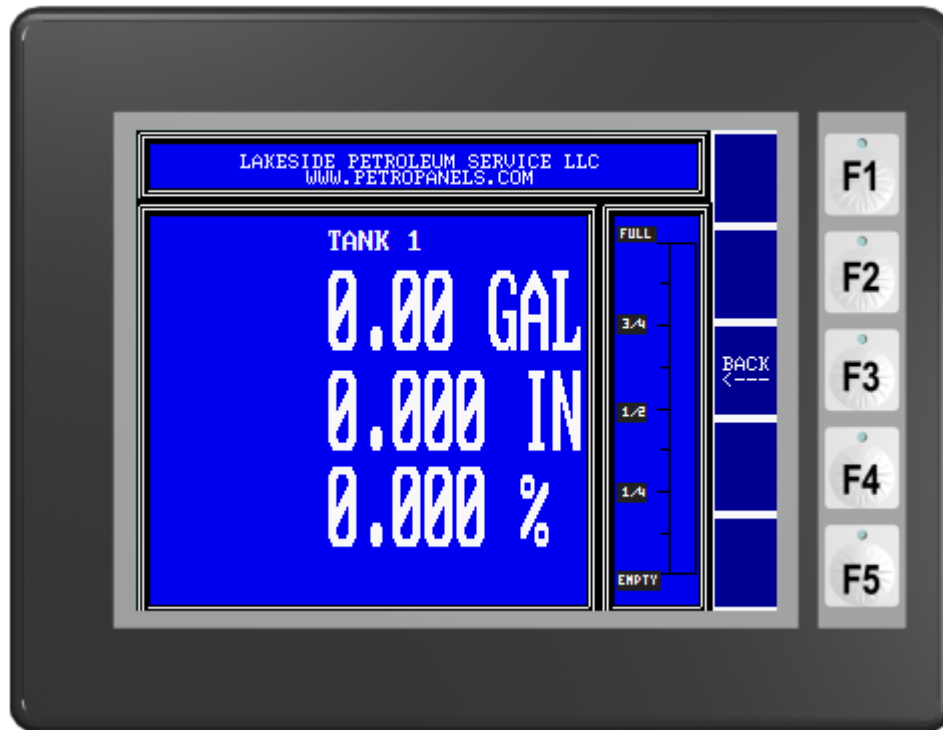
Press **BACK** to go to the previous screen

Press **ALARMS** to go to the alarm status screen

Press **MORE** twice to go to the system setup and calibration menu

The values to the left of the indicator lights are the set point for that level.

Tank Zoom



Press the screen to go back to the tank information

Press **BACK** to go back to the tank information

Pump Status



Press **HOME** to go back to the home screen

Press **NEXT** to go back to the home screen

Press **BACK** to go to the previous screen

Press **ALARMS** to go to the alarm status screen

Press **MORE** twice to go to the system setup and calibration menu

Alarms



Main tank

- High level alarm
- High level warning
- Low warning (if applicable)
- Low alarm (if applicable)
- Tank leak (if applicable)

Current status of the alarms

- when on Main tank in high level alarm
- when on Main tank in high level warning
- when on Main tank in low level warning
- when on Main tank in low level alarm
- when on Main tank double wall leak alarm

- when on The overload has been tripped or off
- when on The pump containment has liquid in it

Press **ALARM HISTORY** to see any historical alarm conditions.

Alarm History



Main tank

- High level alarm
- High level warning
- Low warning (if applicable)
- Low alarm (if applicable)
- Tank leak (if applicable)

The history of the alarms

- when on Main tank in high level alarm
- when on Main tank in high level warning
- when on Main tank in low level warning
- when on Main tank in low level alarm
- when on Main tank double wall leak alarm

Pump 1 overload

when on

The overload has been tripped or off

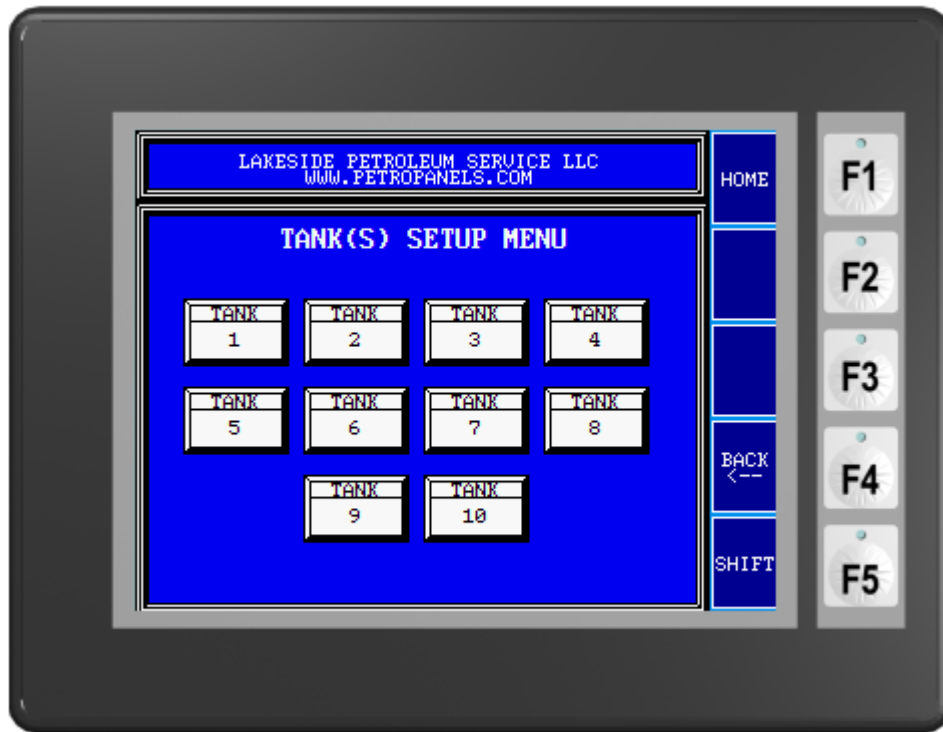
Pump leak alarm

when on

The pump containment has liquid in it

Press **RESET HISTORY** to see reset all alarm conditions that are not currently in alarm

System Setup

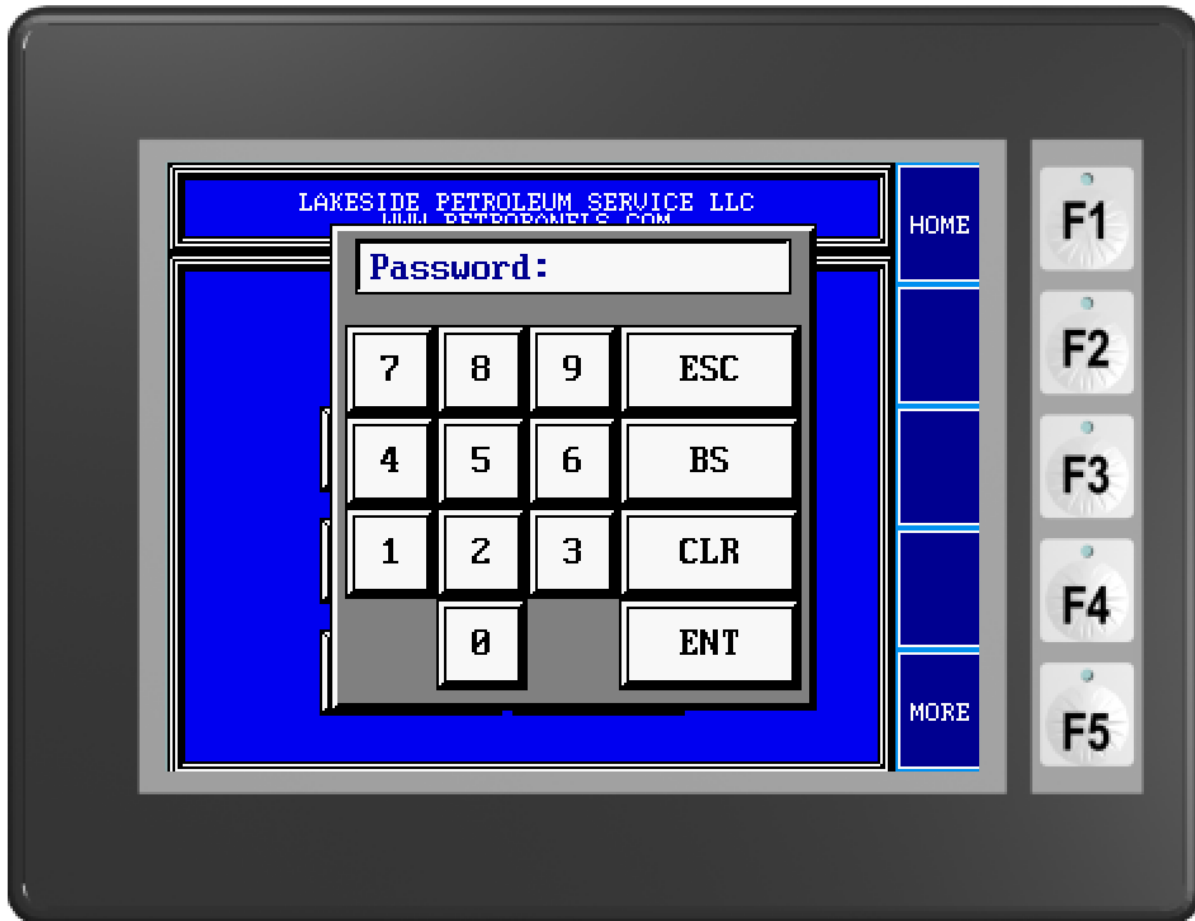


Press the **TANK** button to enter the system setup and calibration menu for that tank

Press **HOME** to go back to the home screen

Press **MORE** to go to upper level (factory tech only)

Set Up Password



Press **1, 2, 3** then **ENT** to enter the password

Press **HOME** to go back to the home screen

Press **MORE** to go to upper level (factory tech only)

Tank Setup/Calibration Menu



Press **HOME** to go back to the home screen

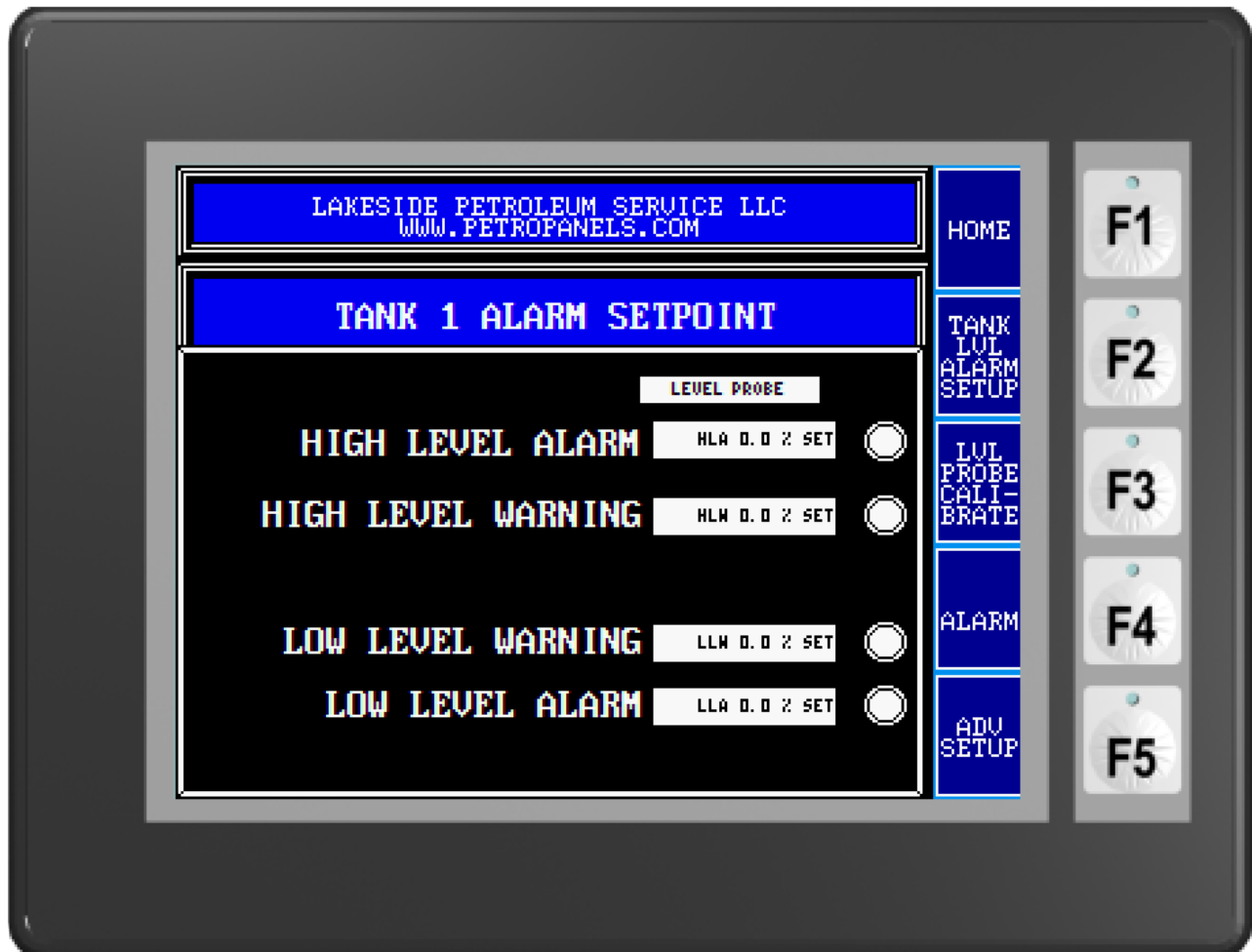
Press **TANK LVL ALARM SETUP** to change the alarm set points

Press **LVL PROBE CALIBRATE** to calibrate the level probe

Press **ALARM** to go to the alarm status screen

Press **ADV SETUP** to go to upper level (factory tech only)

Tank Alarm Set Points Menu



Press **HOME** to go back to the home screen

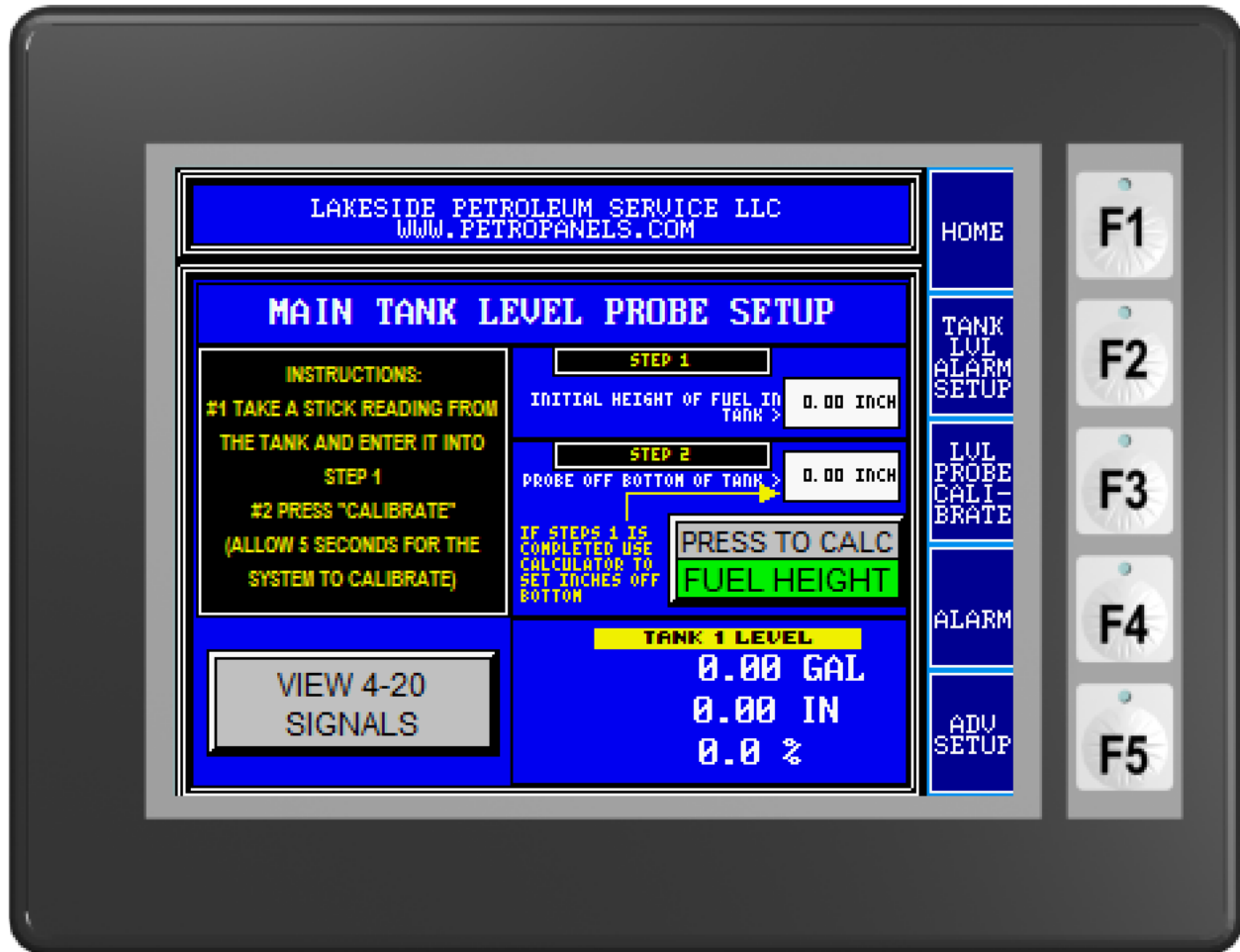
Press **TANK LVL ALARM SETUP** to change the alarm set points

Press **LVL PROBE CALIBRATE** to calibrate the level probe

Press **ALARMS** to go to the alarm status screen

Press **ADV SETUP** to go to upper level (factory tech only)

Tank Alarm Set Points Menu



- Press [HOME](#) to go back to the home screen
- Press [TANK LVL ALARM SETUP](#) to change the alarm set points
- Press [LVL PROBE CALIBRATE](#) to calibrate the level probe
- Press [ALARMS](#) to go to the alarm status screen
- Press [ADV SETUP](#) to go to upper level (factory tech only)
- Follow the instructions on the screen

Hooking up the Hose and Priming the System

Priming the pump –

1. Attach the delivery truck grounding cable to grounding lug on left of Smartfill enclosure.
2. Hook up the delivery hose to the truck and then to the connection on the Smartfiller system.
3. Open up the valve at the truck and look for leaks in the hose and connections. If a leak is found, close the valve at the truck.
4. Open all the 3" ball valves in the Smartfill enclosure.
5. Wait 30 seconds and then you are ready to start the pump.
6. Continue to the *Sequence of Operations* section on the next page to start the pump.

Sequence of Operations

When the System is Powered On

Running the system in auto mode –

1. Place the *system hand off auto* switch to *auto* position.
2. Place the tank to fill in the *on* position and the other tank switches to the *off* position.
3. If the tank ready light is enabled, then press the *start* button to start the pump.
4. When the tank is completed filling, press the *stop* button to stop the pump.
5. If the tank reaches the programmed high level warning level (typically 85%), the pump will automatically stop filling and the pump will shut off. The corresponding valves will close.
6. After the tank reaches high level warning, you can re-enable the tank ready light by shutting the tank selector switch to *off* and them back *on* for the corresponding tank. This will enable a 30 second run time to allow the delivery driver to drain the hose.
7. Press the *start* button to start a 30 second tank enable run and start the pump. Press *stop* at any time to end the pump run.
8. When the tank reaches high level alarm, the tank will not be able to be re-enabled and the corresponding valve will remain close.

Notes:

1. The tank ready light will only come on if the tank switch is placed in the *on* position and the tank is not in a high level warning or alarm.
2. The tank control valve opens and closes based on the tank ready light. The indicator for the valve will indicate the position when it is fully open or closed.
3. When filling more than one tank at a time, the pump will remain running as long as any tank is enabled until the stop button is pressed.
4. If the containment leak sensor senses liquid, the system will not run in auto. Clear the alarm before running.

Sequence of Operations

Running the system in manual mode –

Note: Placing the system key switch in manual mode overrides all automation shutdown safety features. This should only be used in case of a system failure. It is best performed with two operators with one operator located at the tank that is filling.

1. Place the *system hand off auto* switch to *hand* position.
2. Place the tank to fill in the *on* position and the other tank switches to the *off* position. The corresponding tank valve will open.
3. If the tank ready light is enabled, then press the *start* button to start the pump.
4. Press the *stop* button to stop the pump.