Installation and Operation Manual

Condensate Recovery Control System

ELITE

832.912.7500
COUGARUSA.COM

Safety Instructions

Read this manual carefully to learn how to safely install and operate your pump. Throughout this manual there are a number of SAFETY HAZARDS that must be read and adhered to in order to prevent possible personal injury and/or damage to the equipment.

Three keywords, “DANGER” ,“WARNING”, and “CAUTION”, are used to indicate the potential severity of the hazard, and are preceded by a SAFETY ALERT SYMBOL. Failure to follow the safety-related instructions may result in a safety hazard.

DANGER Indicates an imminently hazardous situation which, if not avoided, WILL result in serious injury or death.

WARNING Indicates a potentially hazardous situation which, if not avoided,

Could result in serious injury or death.

CAUTION Indicates a potentially hazardous situation which, if not avoided,

May result in minor or moderate injury.

THOROUGHLY REVIEW ALL INSTRUCTIONS AND WARNINGS PRIOR TO PERFORMING ANY WORK ON THIS PUMP.

Introduction:

Because panel installations are seldom identical, this manual cannot possibly provide detailed instructions and precautions for each specific application. Therefore, it is the responsibility and the duty of all personnel involved in the installation, operation and maintenance of the equipment to ensure that applications not addressed in this manual are performed only after establishing that neither operator safety nor panel integrity are compromised by the installation.

Pre-Installation Check:

Open all cartons and inspect for shipping damage. Report any damage to your supplier or shipping carrier immediately. Always verify that the panel nameplate Voltage, Phase, and HP ratings as well as Amps rating on panel match your pumps and power supply. Warranty does not cover damage caused by connecting panels to an incorrect power source (i.e., voltage and phase).

Installation:

Electrical connections are to be made by a qualified electrician in accordance with the National Electrical Code (NEC) or the Canadian Electrical Code, as well all national, state and local codes. Code questions should be directed to your local electrical inspector. Failure to follow electrical codes and OSHA safety standards may result in personal injury or equipment damage. Failure to follow manufacturer’s installation instructions may result in electrical shock, fire hazard, personal injury or death, damaged equipment, provide unsatisfactory performance, and may void the manufacturer’s warranty.

Motor must have a properly sized starter with a properly sized heater to provide overload and under voltage protection unless motor meets following two conditions: single phase and motor horsepower is 1HP or less. Motors that satisfy these two conditions have built-in thermal overload protection.

Operating personnel should be trained in the operation of the pump and any associated system.

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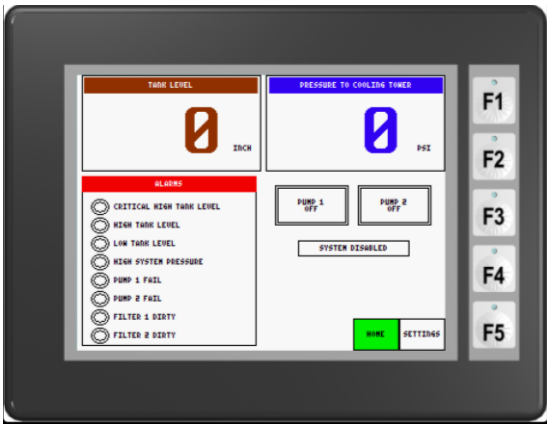
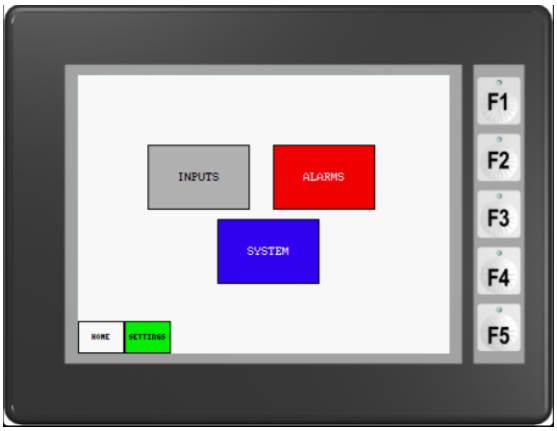
Main Screen



The controller Main Screen Provides the level in the tank level and System Alarms.

Setting Screen Options



To make any necessary setting adjustments, press the desired button.

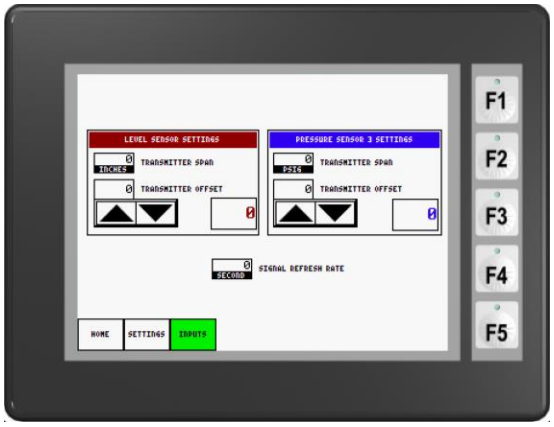
Inputs	Operating Range of level & Pressure Sensor. Signal refresh rate
Refresh Level	Allows Electronic Dampening of Input Signal.
Alarms	Tank Low On/Off & Hi System Pressure On/Off Alarm Setpoints.
System	Pump down Start/Stop. Lead Pump selector

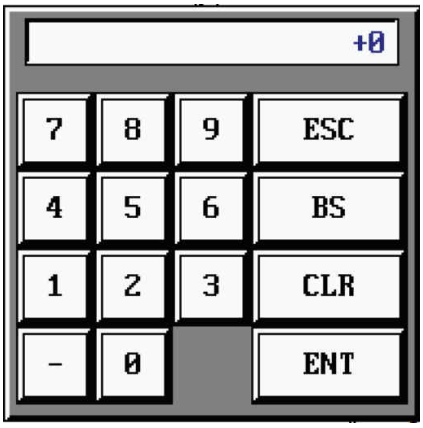
Press the **MAIN** button to return to Main Screen.

Tank Level Sensor Setting

Level Sensor Span

Press the Sensor Span button to access a data entry box that will allow the input on the Transmitter Level in the Inches at 100% Output – 20mA of the sensor.





Enter the desired set points and press **ENT** to save the setting. The new setting will be displayed on the button. To exit the data entry box, press **ESC** button

Level Sensor Offset

Press the UP/DOWN buttons as necessary to adjust the Tank Level Display to match the actual measured tank level. The setting is used to adjust for sensor installation heights that may be above the bottom of the tank.

Signal Refresh Rate

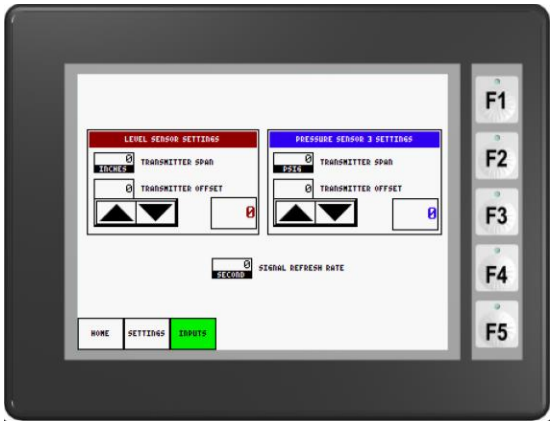
Press the Sensor Span button to access a data entry box that will allow an adjustment of the level sensor refresh rate in seconds to correct any potential signal bounce. If a required setting exceeds 5 seconds it is recommended to check the sensor or wiring for issues.

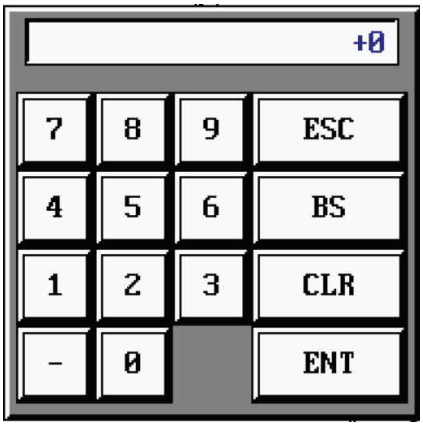
Enter the desired set points and press **ENT** to save the setting. The new setting will be displayed on the button.

Cooling Tower Pressure Sensor Setting

Pressure Sensor Span

Press the Sensor Span button to access a data entry box that will allow the input on the Pressure sensor in PSIG at 100% Output – 20mA of the sensor.





Enter the desired set points and press **ENT** to save the setting. The new setting will be displayed on the button. To exit the data entry box, press **ESC** button

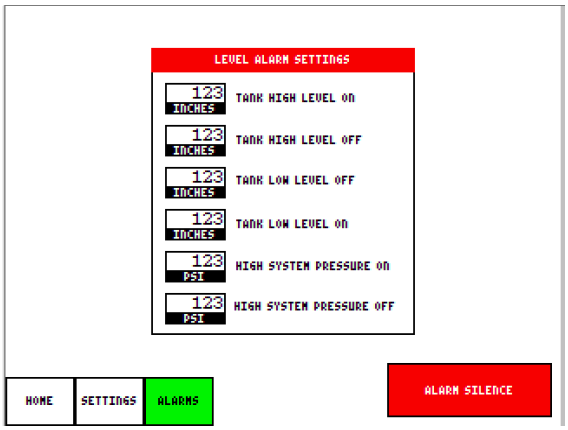
Pressure Sensor Offset

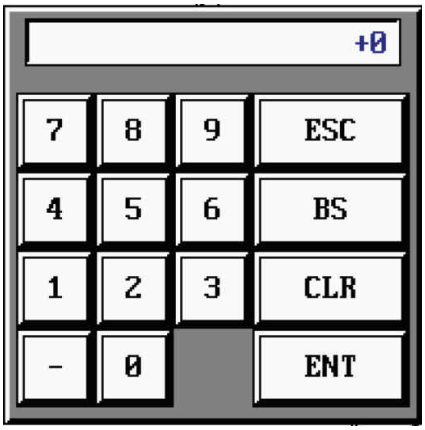
Press the UP/DOWN buttons as necessary to adjust the Tank Level Display to match the actual measured tank level. The setting is used to adjust for sensor installation heights that may be above the bottom of the tank.

Alarm Level Settings

Low Level Alarm

Press the Low Level Off button to adjust the set point for the tank level in inches that a Low Level Off Alarm will be indicted. Press the Low Level On button to adjust the set point for the tank level in inches that a Low Level On Alarm will be indicated. In the event the tank level sensor should fail and the Low Level ON alarm isn't called, then there is a **Critical Low Level Alarm** that is being operated by a back-up float. Should the **Critical Low Level Alarm** be activated, then both pumps will be de-energized.





Enter the desired set points and press **ENT** to save the setting. The new setting will be displayed on the button. To exit the data entry box press **ESC** button.

High Level Alarm

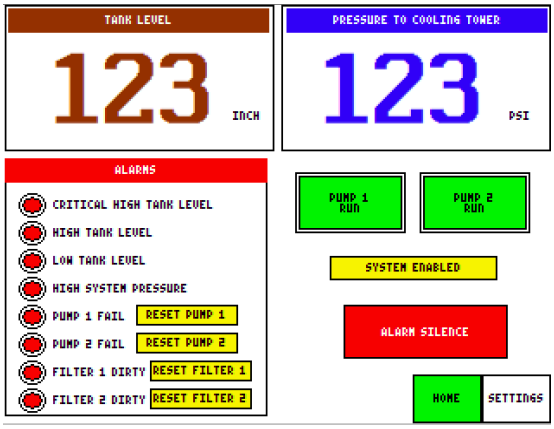
Press the High Level Off button to adjust the set point for the tank level in inches that a High Level Off Alarm will be indicted. Press the High Level On button to adjust the set point for the tank level in inches that a High Level On Alarm will be indicated. In the event the tank level sensor should fail and the level in the tank rise past the High level Alarm On set point, the **Critical High level Alarm** will come on through a back-up float.

(continued next page)

High System Pressure Alarm

Press the High System Pressure ON button to adjust the set point for the Cooling Tower in PSIG that a High System Pressure Alarm will be indicted. Press the High System Pressure OFF button to adjust the set point for the Cooling Tower in PSIG that the High System Pressure Alarm will be cleared.

Enter the desired set point and press **ENT** to save the setting. The new setting will be displayed on the button. To exit the data entry box, press **ESC** button.



Reset Fail Alarms

In the event a pump should fail, on the Home screen, the affected pump(s) will show as Pump Fail. The unaffected pump will act as the lead pump and no alternation will be done until the affected pump has been addressed. The failed pump can be reset by pressing the affected "RESET PUMP".

In the event a filter needs to be changed, on the Home screen, the affected filter(s) will show as Filter Dirty. Once the filter(s) have been addresssed, you can reset by pressing the affected "RESET FILTER".

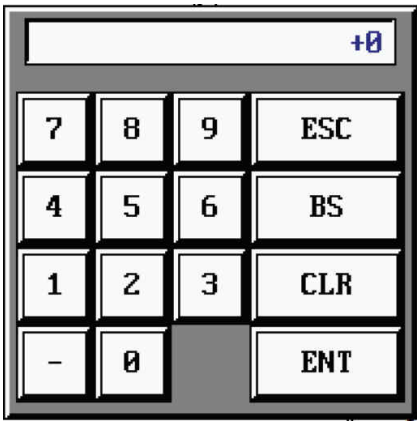
Pump System Setting

Pump Start

Press the Pump down Starts button to access a data entry box that will allow the input on the Transmitter Level in the Inches at 100% Output – 20mA of the sensor.

Pump Stop

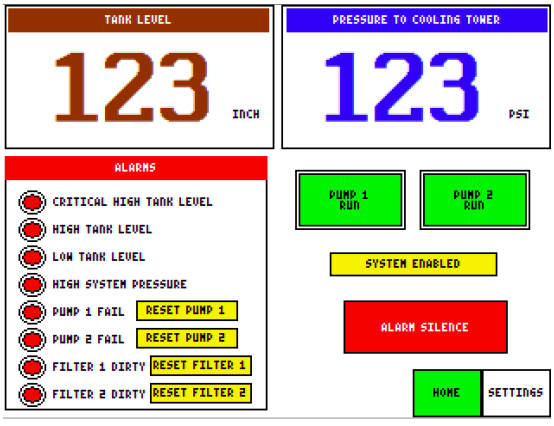
Press the Pump down Stops button to access a data entry box that will allow the input on the Transmitter Level in the Inches at 100% Output – 20mA of the sensor.



Enter the desired setpoint and press **ENT** to save the setting. The new setting will be displayed on the button. To exit the data entry box, press **ESC** button.

Lead Pump Selection

The lead pump selection is made by pressing the button on the System display. With the Lead Pump Selector in "AUTO", the pumps shall alternate after each fill cycle. Pressing "PUMP 1" button will make Pump 1 as the lead pump with no alternation. Pressing "PUMP 2" button will make Pump 2 the lead pump with no alternation. When the lead pump speed % is greater than the set point, the lag pump will start. The lag pump will stop when the output speed drops below the set point.



Enter the desired set point and press **ENT** to save the setting. The new setting will be displayed on the button. To exit the data entry box, press **ESC** button.

Field Penetration

*** URGENT ***
ANY FIELD PENETRATIONS IN LOCATIONS OTHER THEN FACTORY AUTHORIZED AREAS WILL ***VOID MANUFACTURERS WARRANTY*** OF ALL INTERNAL COMPONENTS.