

### 2-Pump 18-Station Controller Reference Manual (PN:882.00250.00) for Complete Operation and Installation Instructions

(Available online at www.sterlco.com)



#### Unit Operation (Refer to controller manual for complete operating instructions).

Start Up (Refer to the following page for screenshots)

- 1. Push the **ON/OFF** disconnect switch to the **ON** position.
- At the "Station Status" screen, touch the MENU button. Once in the Main Menu, press the SYSTEM SETUP button.
- Touch STATIONS ACTIVE, or PUMPS ACTIVE. On the keypad you can configure the number of stations and pumps to be controlled by the system. Press ENT (Enter) when you are finished to set the new values or CLR (Clear) to erase the current values and reenter new ones.
- Press the MORE button to set the Alarm Silence feature. Press STROBE SUPRESS or HORN SILENCE to adjust the number of minutes that each will stay OFF when an alarm is activated. If you would like both to stay on as long as the alarm persists, put the values at 0 (zero).
- The factory delay for Pump Staging is three seconds. If this time has to be adjusted, go to the SYSTEM SETUP screen and touch the PUMP STAGING button. On the keypad, enter the number of seconds for the length of delay between the pumps.
- Before starting the system, you must define several settings for each station, such as which pump conveys material to it. The Stations will be displayed on the "Station Status" screen (you may have to press MORE to see the rest of the stations).
- 7. Press the Station that you would like to set up and hold it for several seconds. The "Station Operator" screen opens. On this screen you can adjust the amount of time that the station will convey, unload, and purge material. To change the time, touch any white box on the lower half of the screen to view the keypad. Press NEXT or PREV to switch between Stations.
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 On the "Station Operator" screen, touch the SETUP button. The values in the white boxes can be adjusted using the keypad. Press NEXT or PREV to switch between Stations.

Note: The first digit you enter into the keypad appears to the right of the decimal point and moves to the left as you enter more digits. You do not need to use the decimal point.

- Once the values have been entered, press MORE. The second "Station Setup" screen opens. On this screen, the user can enable or disable any of the items shown. Pressing RESET TO DEFAULTS, restores all of the station's values back to factory defaults.
- 10. Return to the Main Menu and touch the **PUMP STATUS** button to set up the pumps. On the screen, touch the icon of the pump that you wish to configure and hold it for several seconds.
- On the "Pump Setup" screen, you can reset the Hour Meter to clear the timer and you can transfer to a standby pump. Press MORE to see more options.
- 12. On the following "Pump Setup" screen you can disable or enable various settings, as well as set up the pump's idle time. Press and hold **IDLE TIME** to bring up the keypad. You can enter any number between 0 and 999 seconds. Press **MORE** again to see more options.
- The new screen shows various cleaning features that can be adjusted. Press on the setting that you would like to adjust and the keypad will appear.



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# Start Up Continued

14. Return to the Main Menu to set the alarm clock. Press on the **SET CLOCK** button to change the date and time. Press the individual numbers to replace them.

See Manual for setting up passwords. The controller comes from the factory with neither password set.

15. To start the system, go to the MAIN MENU and touch

the **STATION STATUS** or **PUMP STATUS** icon on the top left of the display. In either screen touch the station or pump that you would like to use. The icon will turn white and say **READY**, or in some cases the station might say **DEMAND**, which means it needs material.

16. When the pumps and stations have been selected, touch **START SYSTEM** to start it up.



# **CONTROLLER SCREENS**



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# **Troubleshooting - Quick Guide**

Problem	Possible cause	Solution
The control panel doesn't light up	The control panel is not turned on	Turn on the control panel
	The external disconnect (recommended) in the dedicated circuit is open (off)	Close the switch (on)
	Fuse/circuit breaker in the power drop is blown/tripped	Replace/reset
	Control power switch is broken	Replace
A pump package doesn't run,even though it is on-line and its indicator is lit.	The motor overload has tripped	Reset the overload and check the motor for the proper amp draw on the tag
	Main fuse in power drop or optional fused disconnect has blown	Replace the fuse
	Motor contact is faulty	Repair or replace as required
A vacuum receiver is being by-passed in the loading cycle	The vacuum receiver is off-line	Use the controller to put the vacuum receiver on-line
	The convey time for the vacuum receiver is set to zero	Use the controller to enter a longer convey time
	The field-installed station bypass switch is simulating a Bin Full condition	Normal operation. Set the switch so the vacuum receiver is back in the loading sequence
	The field-installed station bypass switch is bad or mis-wired	Repair, replace, or re-wire
	The vacuum receiver was assigned to the wrong pump during setup	Repeat the setup procedure
Vacuum receivers are overfilling	Conveying times are too long (Time Fill Mode only)	Time the vacuum receiver (s) during loading, and set the conveying times to a few seconds less
	Maximum conveying times are too long, and the PLC does not recognize the Vacuum Receiver Full Proximity Switch(es)	Check proximity sensors for proper operation and proper wiring to the PLC. Repair as needed. Reset the conveying times to a reasonable value, and adjust as needed.
The touch screen display doesn't come on when the control panel is powered up.	Fuse in display is blown	Replace
	Loose wiring to display	Repair
	Display is faulty	Replace



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### **Spare Parts List**

COMMON PARTS		QUANTITY REQUIRED
728.01024.00	SW,DISC,ABB,40A,600V,NFU,UL508 20HP MAX	1
A0569870	RELAY,SPDT,15A,24VDC	2
A0540997	FUSE,250V,GL,TD, 1.00A 1/4 X 1-1/4 BUSSMANN MDL-1	1
A0542203	FUSE,250V,GL,TD, 2.00A BUSSMANN MDL-2	2
A0542207	FUSE,250V,GL,TD, 3.00A 1/4 X 1-1/4 BUSSMANN MDL-3	1
A0542210	FUSE,250V,GL,TD, 5.00A 1/4 X 1-1/4	1
A0544790	FUSE,250V,GL,TD, 8.00A BUSSMANN MDL-8	1
A0542205	FUSE,250V,TD, 2.50A 1/4 X 1-1/4 BUSSMANN MDL-2-1/2	1
725.00885.00	FUSE,SLO-BLO,250V,1.5AMP BUSSMANN MDL-1-1/2	2

DRAWINGS	
A0569877	DWG,SCC2/18,ENCL LYT,6 OIT
A0569846	DWG,SCC2/18,ENCL LYT,4 OIT
A0569883	DWG,SCC2/18,ELEC SCHEM,SHTS 1 THRU 4