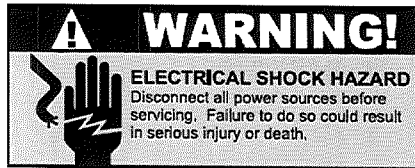


Program #01.0034.1
Demand Dose / Time Dose Simplex
User Manual

Manufactured By:

Alderon Industries
151 16th St S. Hawley, MN 56549
•Phone: 218-483-3034 •Fax: 218-483-3036
•Web: www.alderonind.com



Warranty void if panel is modified.

Notice:

This electrical panel must be installed and serviced by a licensed electrician in accordance with the NEC NFPA-70, state and local electrical codes. Cable connections must be liquid tight in NEMA 4X enclosures. Nema 4X enclosures ensure a degree of protection against corrosion, dust, rain, & splashing water from any angle.

Installation

Note: Conduit sealant must be used to prevent moisture and gasses from entering the panel. If splicing is required use liquid tight junction box and connectors. **Do not mount junction box inside sump or basin. Run control switches in separate conduit from pump and line power.**

1. Determine a good location for mounting the control panel.
2. Use the mounting devices supplied with the panel to mount the panel in an upright position, high enough so the panel will not be subject to submersion.
3. Determine the number, size, and location of the conduit locations on the enclosure. Note: control switches require separate conduit from power and pump cables.
4. Drill proper size holes for conduit connectors.
5. Attach cable/conduit connectors to enclosure.
6. Identify and label each wire before pulling through conduit/connectors.
7. Pull cables though conduit/connectors.
8. Tighten connectors/apply conduit sealant.
9. Make connections per panel schematic. Ensure incoming pump and control voltages match that of the panel and pump motors.

10. Power up the panel. After making final adjustments, ensure the panel is operating properly.

Sequence of Operation

This controller is designed to operate a simplex (one pump) control panel. In either a demand dose or a time dose mode. This depends on if PGM #1 or PGM #2 is selected on the home screen of the controller.

Hand Mode:

When a HOA switch is placed in "Hand" mode the corresponding pump will be called to run regardless of the float conditions.

PGM#1 Demand Dose Auto Mode:

When the HOA switches are placed into "auto" mode the float switches control when the pump(s) will be called to run and stop and when the alarm will trigger. (See diagram next page).

PGM#2 Time Dose Auto Mode:

When the HOA switches are place into "auto" mode the float switches control when the dose/rest timers will be active (see diagrams on next page for your particular set-up). When the HOA switch is placed from auto to off during a dose the dose timer will retain the value, the timer will resume when the switch is placed back into auto or hand mode. If the level drops below the redundant off level the timers reset.

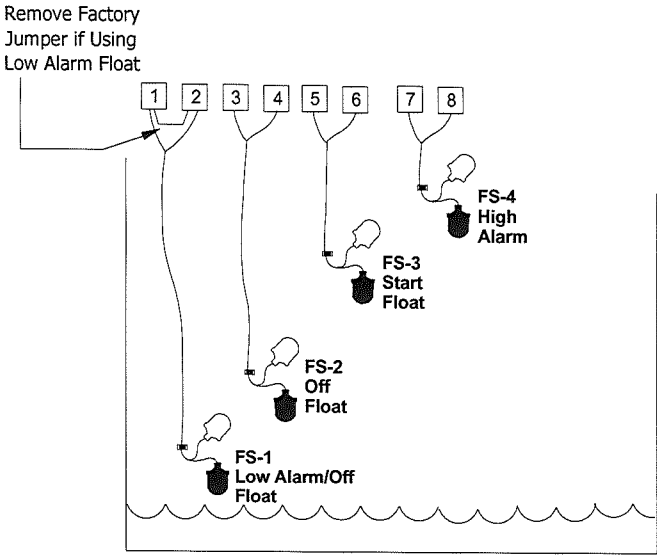
Alarm Conditions

High Level Alarm: (model dependent)

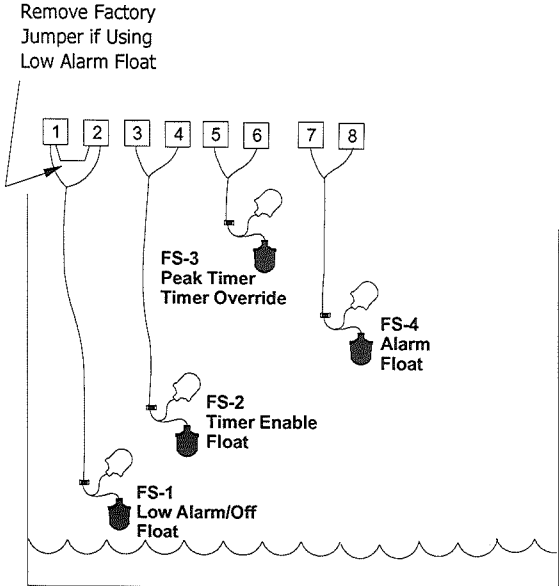
The alarm will trigger if the high alarm switch closes. The alarm will reset automatically when the switch opens. When the alarm is active a set of dry contacts will close until the alarm switch opens.

The alarm buzzer may be silenced by toggling the alarm switch to the "silence" position.

Float Control Operation



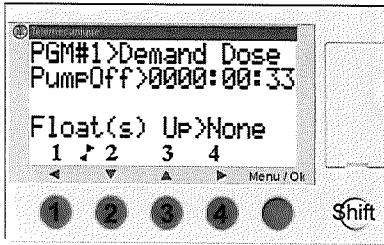
Demand Dose Application PGM#1



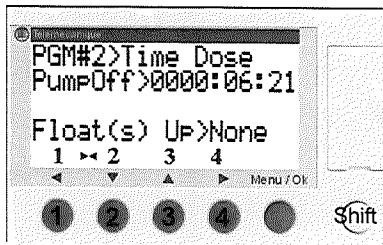
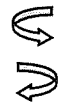
Time Dose Application PGM#2

Controller Display & Setting

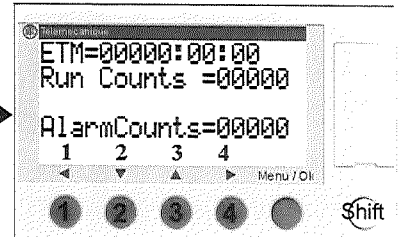
The controller has 5 main display screens. To scroll between screens press buttons 1 or 4. Follow the instructions below for adjusting timers.



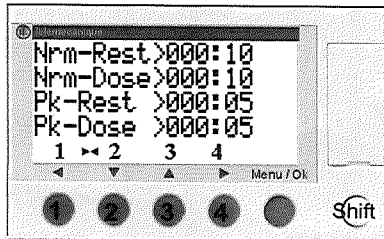
-Home Screen- If PGM#1 is selected. Shows the pump and float status. -Factory Default-



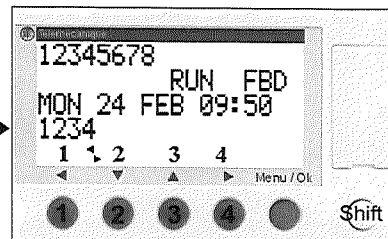
-Home Screen- If PGM#2 is selected. Navigate to timer screen pressing the #4 button, to change the timer settings. Shows the pump and float status.



-Pump History Screen- This screen show the run time, run count, and alarm counts.



-Timer Set Point Screen- This screen will let you change the normal or peak rest/dose time set points.



-Input/Output Screen- This screen shows the input/outputs and if the controller is in "run" or "stop" mode.

Quick Guide: Adjusting Dose & Rest Timers

The timer setting screen below may be scrolled to by pressing either buttons 1 or 4. Caution! Timer values can be adjusted from 00:00:00 to 99:59:59 hours:minutes:seconds, however setting values to low may cause short cycles which may damage equipment. Ensure all timer settings of at least 10 seconds. Peak dosing occurs during high usage periods when the peak float is up.

Screen Shot#5

N-Dose>00:01:00
N-Rest>01:00:00
P-Dose>00:01:00
P-Rest>00:30:00
1 2 3 4
Menu / Ok
1 2 3 4 Shift

Screen Shot#6

N-Dose>00:01:00
N-Rest>01:00:00
P-Dose>00:01:00
P-Rest>00:30:00
Parm
1 2 3 4
Menu / Ok
1 2 3 4 Shift

Screen Shot#7

N-Dose>00:01:00
N-Rest>01:00:00
P-Dose>00:01:00
P-Rest>00:30:00
Prog
1 2 3 4
Menu / Ok
1 2 3 4 Shift

Screen Shot#8

N-Dose> :01:00
N-Rest>01:00:00
P-Dose>00:01:00
P-Rest>00:30:00
← → + -
Menu / Ok
1 2 3 4 Shift

Step1: Scroll to the screen above by pushing button#4.

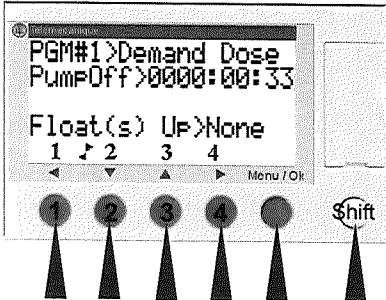
Step2: Press & hold down the shift key. The word **Parm** should appear.

Step3: While holding down the shift key, press button 4 once then release the shift key. The word **Prog** should flash.

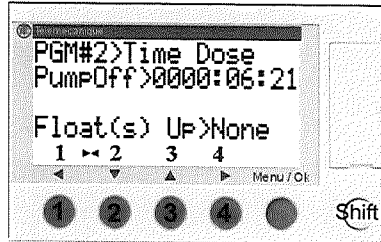
Step4: Use buttons 1 or 4 to scroll between settings and use buttons 2 & 3 to adjust the value of the setting. When finished adjusting dose/rest timers press the Menu/Ok button to save.

Selecting demand dose or time dose application: (Factory default is demand dose) The first step after powering up the panel is to select weather this is a DEMAND DOSE (PGM#1) or TIME DOSE (PGM#2) application. To change the application, Step (1) press and hold the shift button – the word “param” will display along the bottom of the screen. Step (2) Press and release button #4 once. Step (3) Release the shift button- the PGM digit at the top left of the screen should now be blinking, if not repeat steps 1-3. Step (4) Press button #2 or #3 to alternate between PGM#1 and PGM#2. Step (5) Finally, after choosing which program you want to use press the OK button to except. *Note: If you have selected PGM#2 you will need to set the dose and rest timers refer to instructions below.*

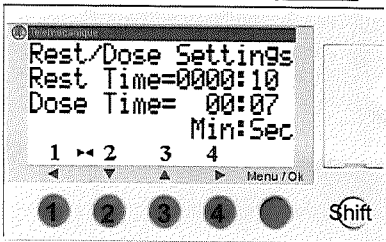
Home Screen – PRM#1 Selected



Home Screen – PRM#2 Selected



Dose/Rest Timer Setting Screen



The screen above allows you to change rest and dose (Min:Sec) This screen only be accessed when PGM#2 is selected. To adjust the timers refer to the “Timer Adjustment” instructions below.

Dose/Rest Cycle Timer Adjustment:

To adjust the dose rest timers, Step (1) scroll to the rest/dose timer setting screen button-4. Step (2) Press and hold the shift button - the word “param” will appear along the bottom of the screen. Step (3) Press and release button #4 once. Step (4) Release the shift button – the rest timer hour digit should be blinking, if not repeat steps 2-4. Step (5) Now, use buttons 1 & 4 to scroll between timer setting. Step (6) Use buttons 2 or 3 to adjust the timer setting. Step (7) Finally, when finished adjusting all 4 timer values (rest minutes 0-9999, rest seconds 0-59, dose minutes 0-99, & dose seconds 0-59, press the OK button to save the values. You may now navigate back to the HOME screen by pressing button 3.