

MVP-DAX RO Operation



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Oreco's Most Versatile Panel (MVP) line of control panels includes an easy-to-use programmable logic unit that incorporates many timing and logic functions. The units have built in screens which show the time and date, digital input status, digital output status, analog input status (3 screens), analog output status, memory flag status and an ESC + Cursor key status. (The analog input status, analog output status, memory flag status and ESC + Cursor key status screens are not used in this application.) Additionally, the following system data screens have been included in your panel:

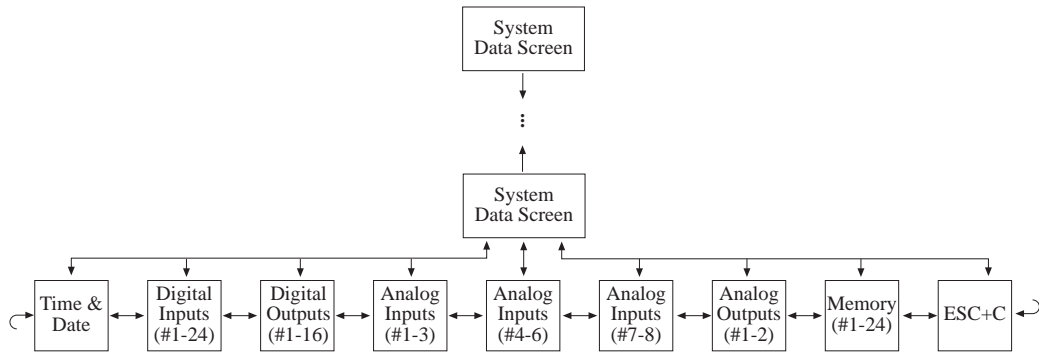
System Data Screens:

1. Pump 1 CT & ETM
2. Pump 2 CT & ETM
3. Lag 1 CT & Lag 2 CT
4. High Lvl CT & Low Level CT
5. Power Faults & Operating Hr

Description:

- Pump 1 cycle counter at top of screen and pump run time in minutes beneath
 Pump 2 cycle counter at top of screen and pump run time in minutes beneath
 Lag pump #1 cycle counter at top of screen and lag pump #2 beneath
 High level alarm counter at top of screen and low level counter beneath
 Power fault counter at top of screen and operating hours beneath

To move between screens, use the four arrow keys. The screens are accessed as shown below:



Input and Output Screens: The unit will activate various inputs and outputs as it operates (please refer to the Liquid Crystal Display screens shown below). Knowing what conditions cause the inputs and outputs to activate can be a helpful installation and troubleshooting tool. The following inputs and outputs have been used with your control panel:

Input Functions:

1. Redundant Off & Low Level Alarm Float
2. Pumps Off Float
3. Lead Pump On Float
4. Lag Pump On Float
5. High Level Alarm Float
6. Push To Silence

Activation Conditions:

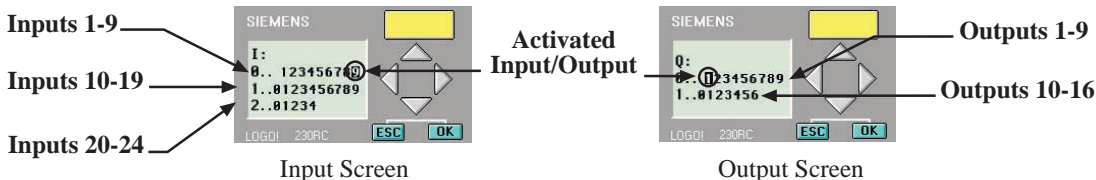
- Float in up position
- Float in up position
- Float in up position
- Float in up position
- Float in up position
- Pushbutton is pressed

Output Functions:

1. Pump #1
2. Pump #2
3. Level Alarm Light
4. Audible Alarm

Activation Conditions:

- Pump #1 is activated
- Pump #2 is activated
- Level Alarm Light is activated
- Audible Alarm is activated



Your control panel can perform the float functions listed below. Depending on the number of floats for your application, some functions may be omitted or combined.

High Level Alarm: This float activates the alarm light (steady) and audible alarm when lifted for longer than the high level alarm delay (factory set for 5 seconds). The audible alarm may be silenced by pressing the illuminated PUSH TO SILENCE button on the front of the control panel. The alarm light (steady) will remain on until the float is lowered, and the audible alarm will reactivate in 12 hours if condition is not corrected.

Lag Pump On: This float will activate the lag pump when lifted (both pumps will be on). Both pumps will continue to run together until the Pumps Off float lowers.

Lead Pump On: This float will activate the lead pump when lifted. The pump will run for the duration of the dose time as a minimum or until the Pumps Off float (if used) is lowered.

Pumps Off: This float will deactivate the pumps when lowered if the dose time has elapsed.

Redundant Off & Low Level Alarm: This float turns off the pumps when lowered for more than two seconds. This float is a secondary off float which will operate if the Pumps Off float fails. Pumping will be disabled in both the automatic and manual modes. This float also activates the alarm light (flashing) and audible alarm. The audible alarm may be silenced by pressing the illuminated PUSH TO SILENCE button on the front of the control panel. The alarm light will remain flashing until the float is lifted, and the audible alarm will reactivate in 12 hours if the alarm condition is not corrected.

This panel supports four different modes of operation relating to the pump alternation which are based on selected parameter settings. See the setting page for this panel for information on how to adjust these parameters.

Alternating (default): Parameters “Pmp1Lead” and “Pmp2Lead” set to “Off”
The lead and lag pumps will alternate and for each cycle. This mode provides equal wear on each pump and is recommended for most applications.

Pump 1 Lead: Parameter “Pmp1Lead” set to “On” and parameter “Pmp2Lead” set to “Off”
The lead pump is locked to pump #1 and the lag pump is locked to pump #2. No alternation will occur. Pump #1 will be the primary pump for the system. Pump #2 will only be used during high flow conditions.

Pump 2 Lead: Parameter “Pmp1Lead” set to “Off” and parameter “Pmp2Lead” set to “On”
The lead pump is locked to pump #2 and the lag pump is locked to pump #1. No alternation will occur. Pump #2 will be the primary pump for the system. Pump #1 will only be used during high flow conditions.

Both Pumps: Parameters “Pmp1Lead” and “Pmp2Lead” set to “On”
Both pumps will run together for every cycle.