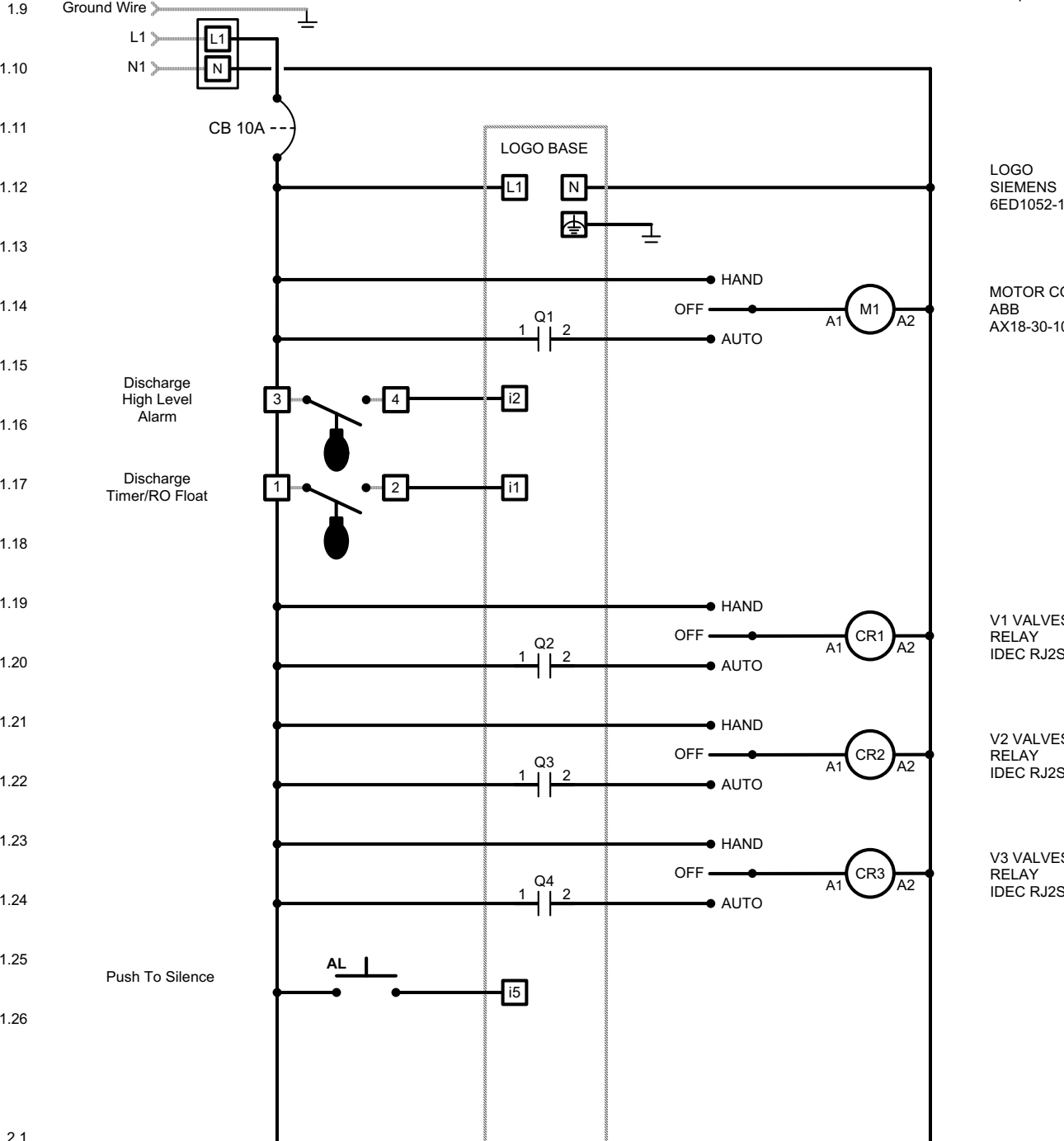
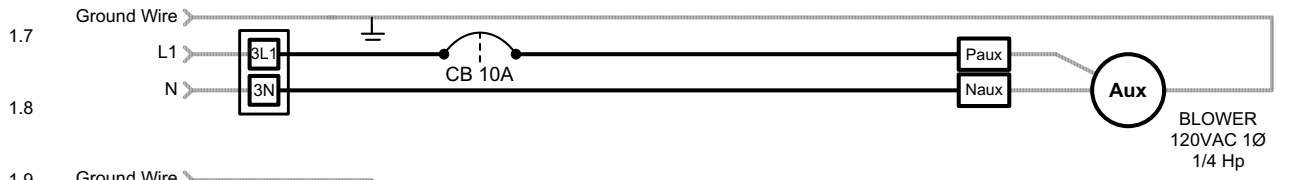
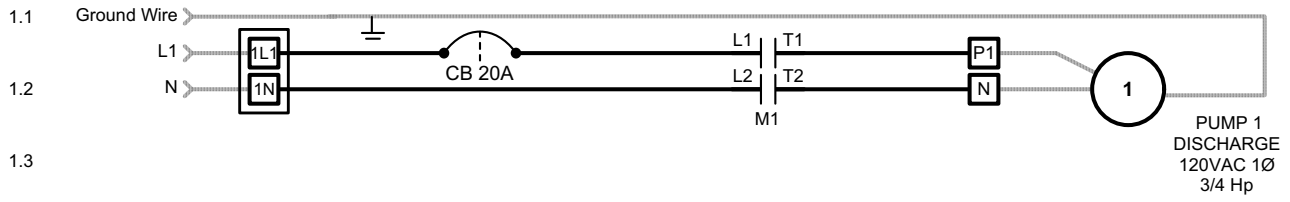
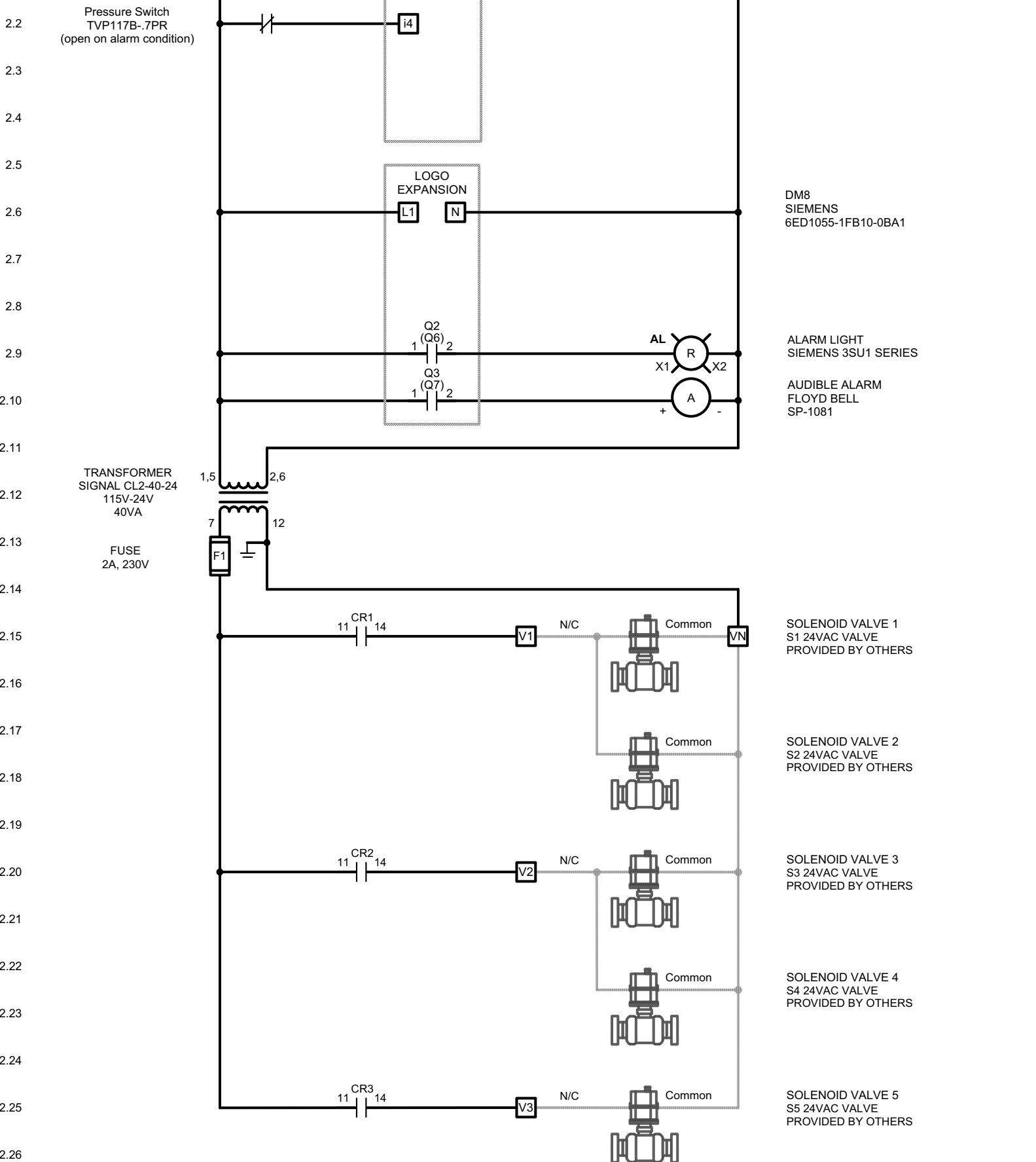


From Main Power Panel
120 VAC, 1 Phase, 60 Hz.
Branch disconnect
provided by others.

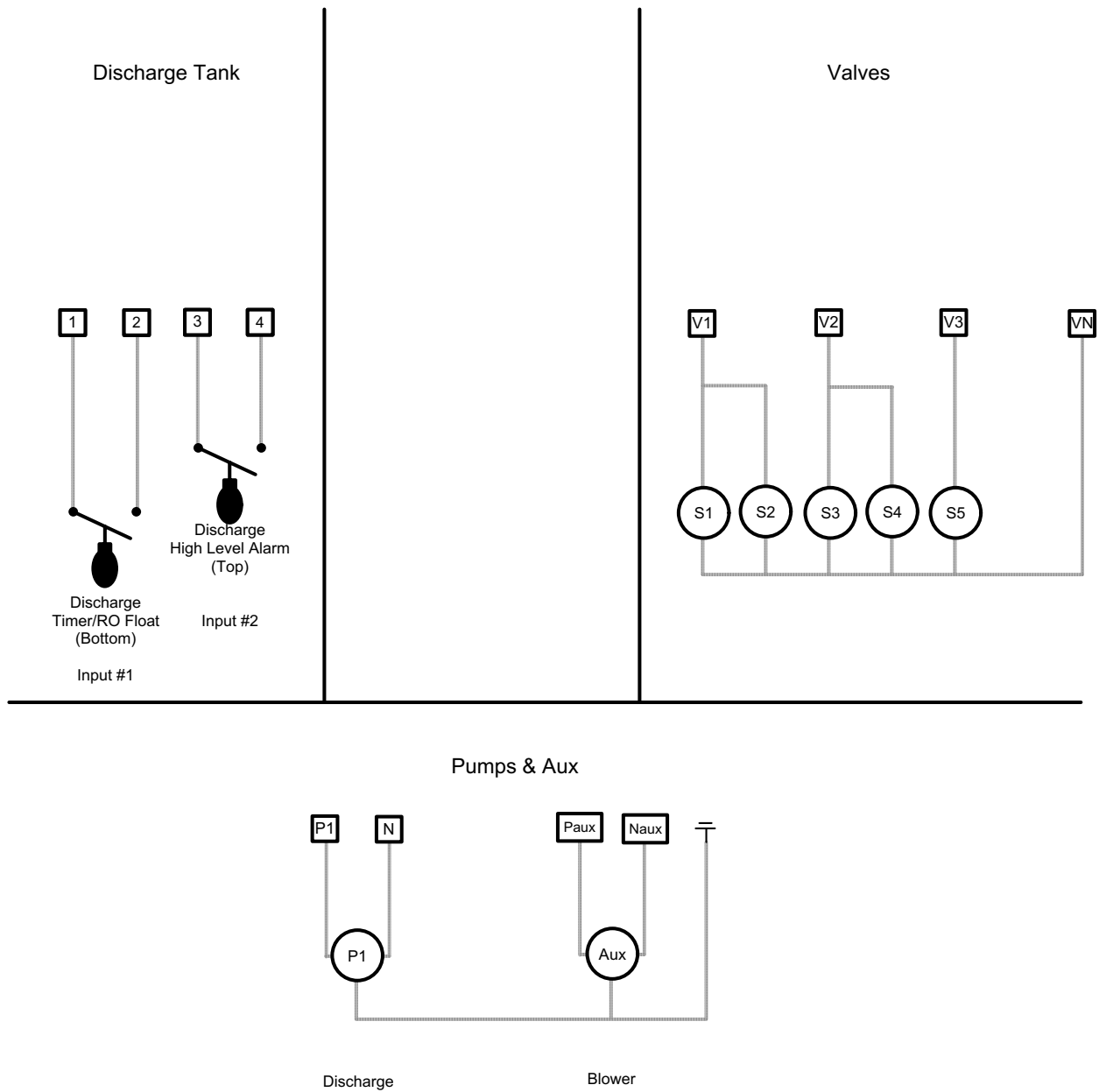
Control Panel Wiring Diagram Model LF1P-RF-BLWR

— = Factory Wire
- - - = Field Wire





Control Panel Connections



LF1P-RF-BLWR Operation

This PLC line of control panels includes an easy-to-use programmable logic unit that incorporates many timing and logic functions. This panel will accommodate timed dose or on-demand systems. The panel's default mode of operation is timed dose. This document describes each mode of operation.

Alarm and Data Screens:

Alarm and data screens have been included with the panel to assist with panel monitoring and troubleshooting. The following alarm and data screens have been included in your panel, look for the $\sqrt{\quad}$ to determine if the screen will be displayed for timed dosed or on-demand modes. Navigation between the screens is accomplished by using the up and down arrow keys. See "Screen Navigation" section for more details.

Screen	Description
Data Screens	
1	Discharge Pump cycles at top of screen and run time beneath
2	V1 cycles at top of screen and V1 run time beneath
3	V2 cycles at top of screen and V2 run time beneath
4	V1V3 cycles at top of screen and V1V3 run time beneath

Digital Input and Digital Output Screens:

The unit will activate various inputs and outputs as it operates (see Figure 2).

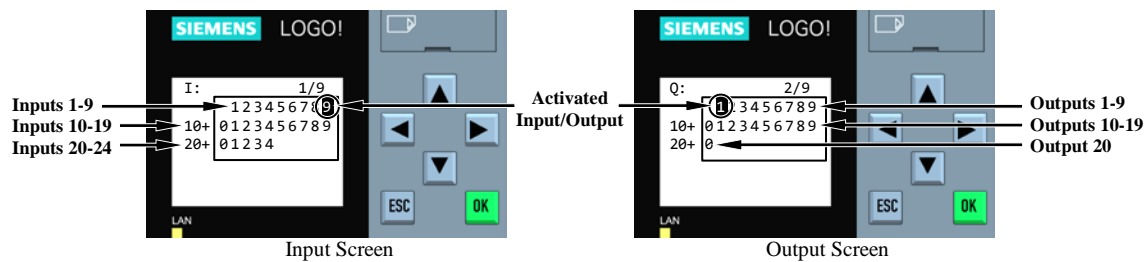


Figure 2. Input & Output Screens

Knowing what conditions cause the inputs and outputs to activate can be a helpful installation and troubleshooting tool. The input functions will vary based on the mode of operation of the panel. The following inputs and outputs have been used with your panel:

#	Functions:	Activation Conditions:
Inputs		
1	Discharge Timer Enable/RO	Float in up position
2	Discharge High Level Alarm	Float in up position
3	NA	NA
4	Pressure Switch	Pressure Switch is Closed
5	Push To Silence	Silence button is pressed
Outputs		
1	Discharge Pump	Discharge pump is called to run
2	Valve 1 & 2	Valve 1 & 2 is open
3	Valve 3 & 4	Valve 3 & 4 is open
4	Valve 5	Valve 5 is open
5	NA	NA
6	Level Alarm Light	Discharge High Level Alarm Float in the up position
7	Audible Alarm	Alarm condition exists

Screen Navigation:

The screens are arranged in the order shown in Figure 3 below. To move between screens, use the four arrow keys. The screens of interest are shown in bold. Additional built-in screens will be present, but do not contain useful information.

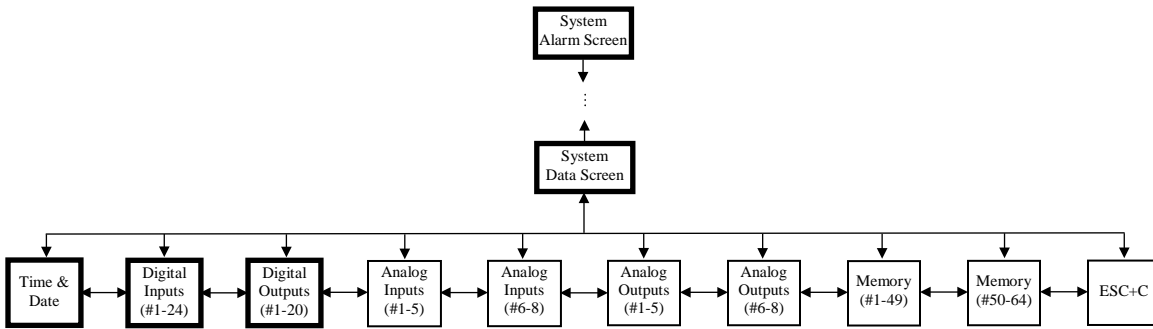


Figure 3. Screen Layout

Panel Operation:

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. In addition, this panel supports drip system.

Discharge Timer Enable: This float enables the coil dose cycles (Discharge pump, valves 1 & 2). The pump and valves will continue to cycle on the timer settings (V1 Off/ V1 On) until the float is lowered. These timers will continue to cycle until the coil dose cycles equal the V1 counts.

V2 Off/ V2 On Timers: This timer will control the filter flush cycles (Discharge pump, valve 3 & 4). These timers will be enabled when the number of coil dose cycles equals the V1 count setting. These timers will continue to cycle until the filter flush cycle number equals the V2 count setting. Note: The timer will start with its off cycle.

V1V3 Off/ V1V3 On Timers: This timer will control the coil flush cycles (Discharge pump, valve 1, 2, & 5). These timers will be enabled when the number of filter flush cycles equals 1 (field adjustable) V2 counts. When the number of coil flushes equal V1V3 counts setting, the coil dose cycles (V1 Off. V1 On) will be enabled again. Note: The timer will start with its off cycle.

Alarm light and Audible: The alarm light and audible will be activated if the Discharge alarm float is lifted or pressure switch contact opens. If the discharge alarm float is up the Discharge pump will be disabled if the Discharge pump HOA switch is in auto. The audible can be silence by pressing the push to silence button. The Alarm light will remain on until the pressure switch closes and the alarm float drops.

Pressure Switch: When this contact opens for longer than 2 seconds it will disable the Discharge pump in the auto mode.