HL-PO43 Monitor

Technical Manual

Version 1.0

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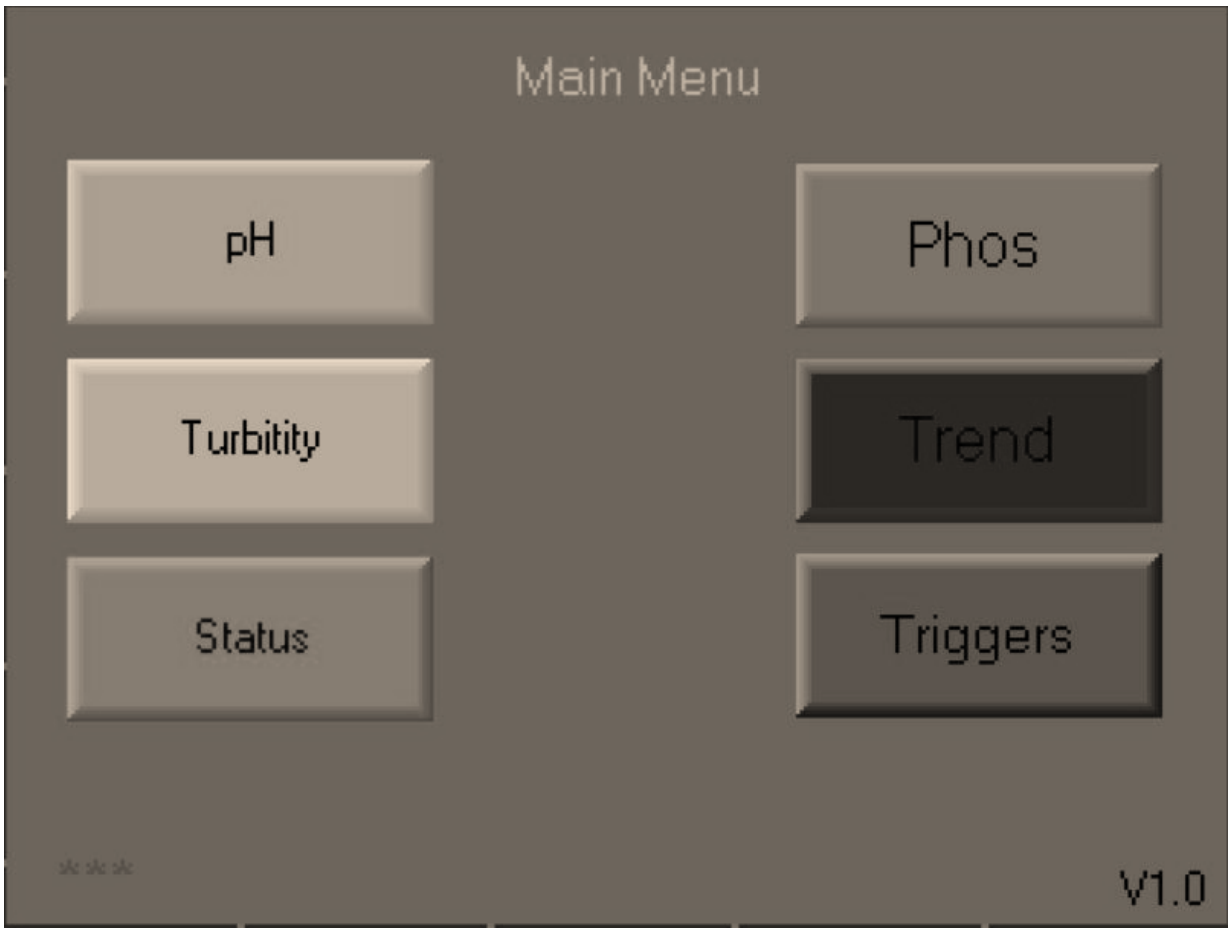
1 Introduction

The HL-PO43 was designed for Monitoring Phosphate. It uses Turbidity and pH to show the correlation to Phosphate.

2 Main Menu

Press ESC at any time to return to this screen.

Figure 1: Main Menu Screen



pH: Alarm and Input of pH adjustments

Turbidity: Input and calibration

Trend: Takes you to the input live trending screen

Status: Takes you to the status screen

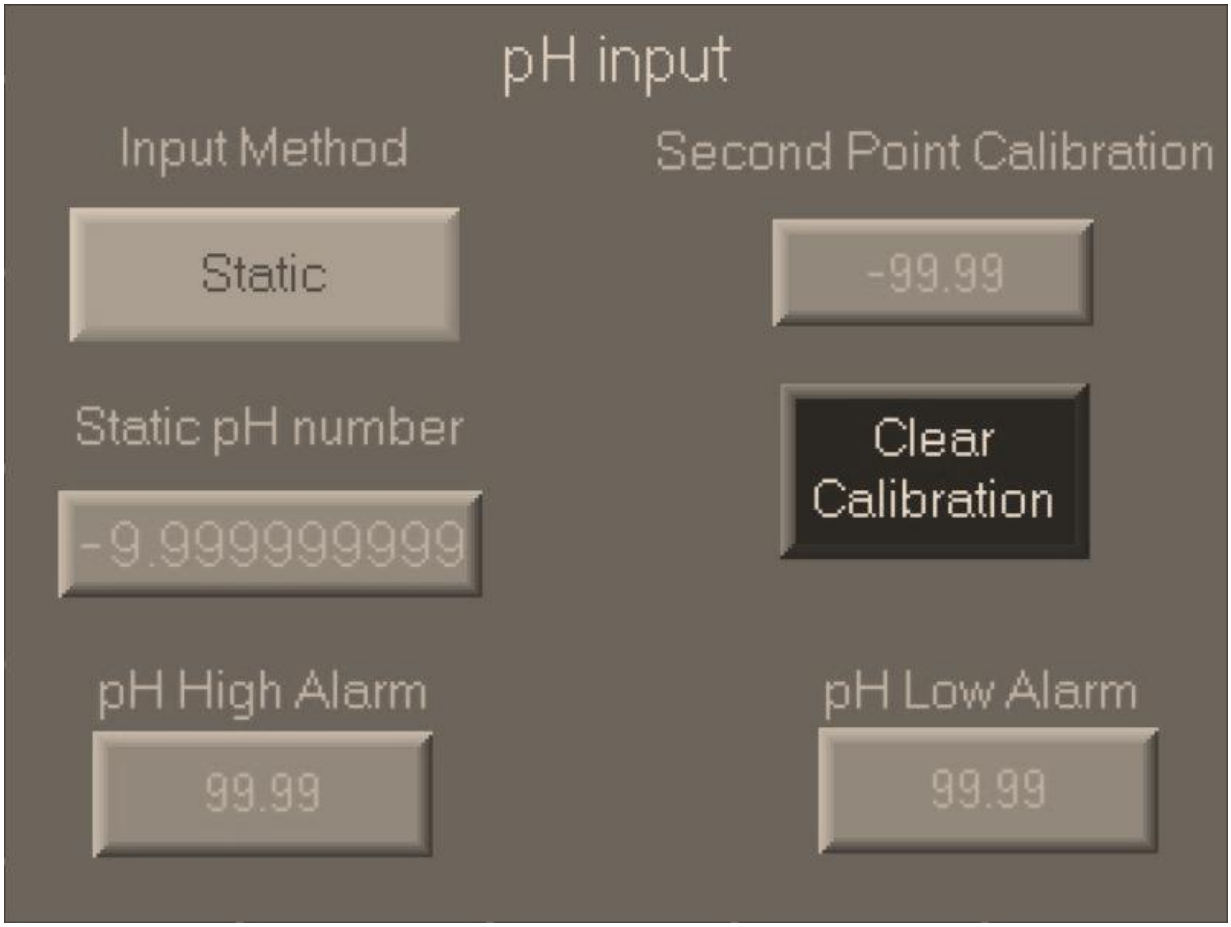
Phos: Averaging and Alarms

Trend: This will take you to the live trending screen

Triggers: Select which alarms fire the alarm active relay

3 pH

Figure 2: pH



Input Method: Static gives you a constant pH reading. Live Lets you attach a pH sensor to monitor

Static pH number: Static pH value

Second Point Calibration: Enter calibration pH value

Clear Calibration: Please clear any calibrations before entering a new one.

pH High Alarm: Will trigger if pH reaches this value

pH Low Alarm: Will trigger if pH reaches this value

4 Turbidity

Figure 3: Turbidity

Analog In: Minimum is what 4mA equals. Maximum is what 20mA equals

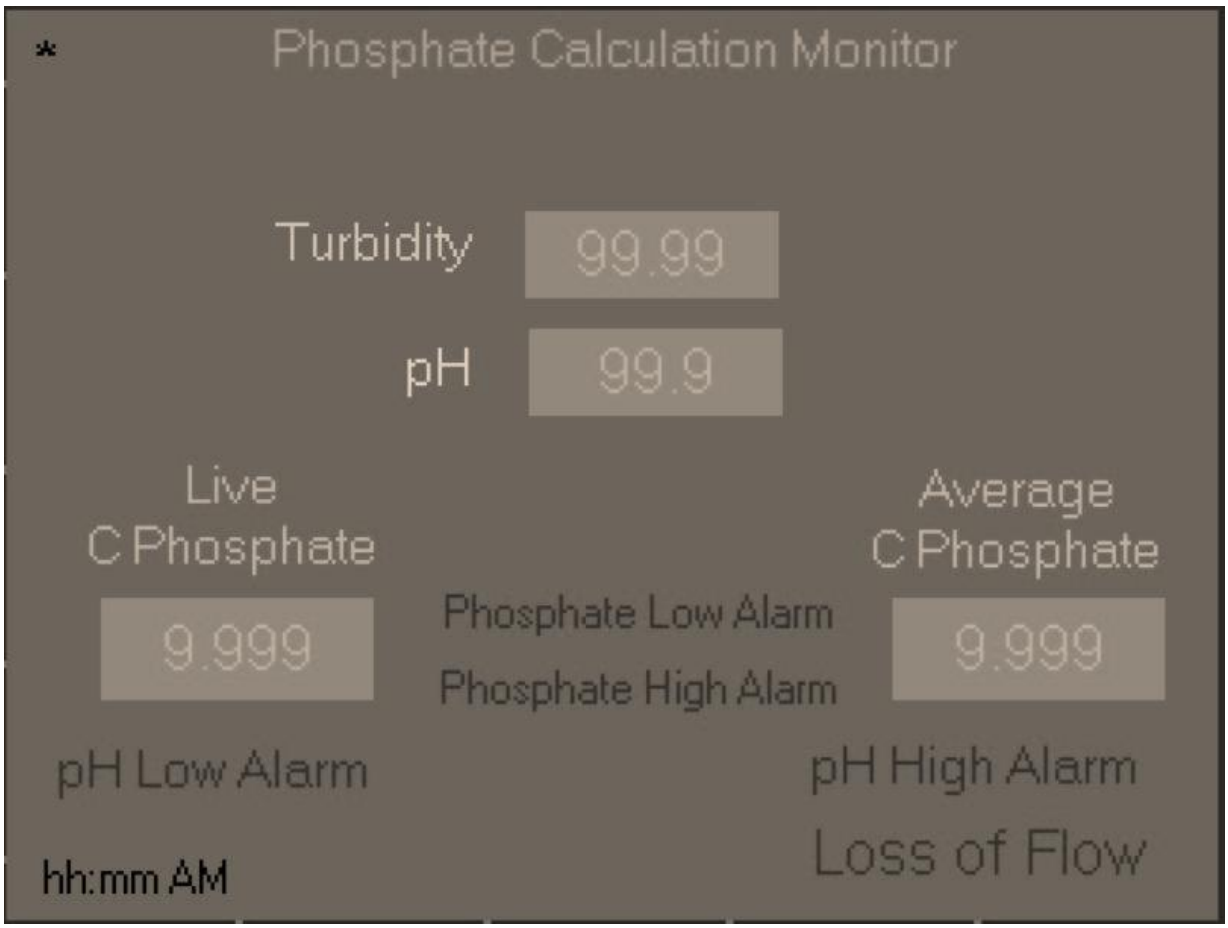
High Alarm: Alarm point for Turbidity. Will cause Analog output to go below 4mA

Second Point Calibration: Enter calibration number here

Clear Calibration: Will erase all calibrations

5 Status

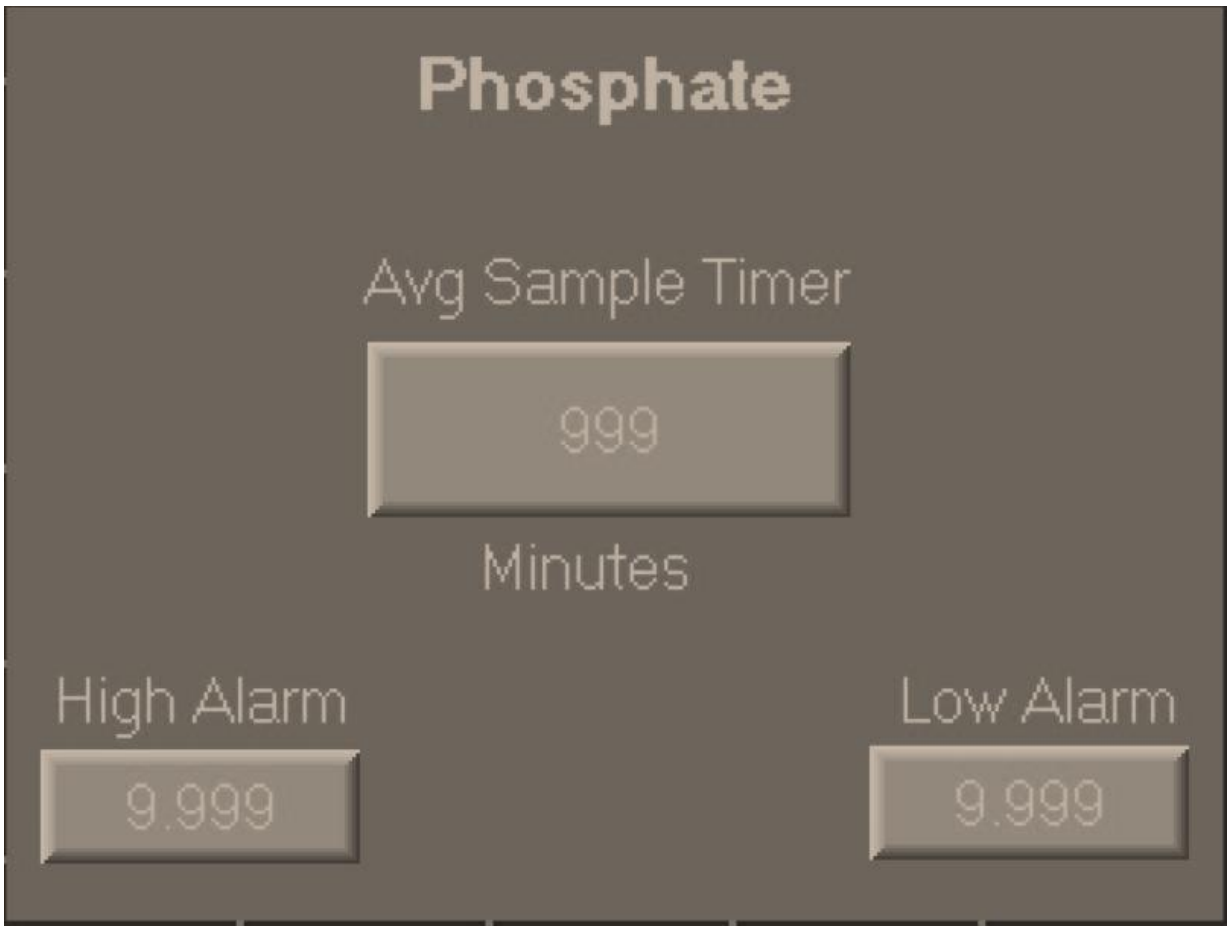
Figure 4: Status



Status of inputs, readings and alarms can be viewed here.

6 Phos

Figure 5: Phosphate



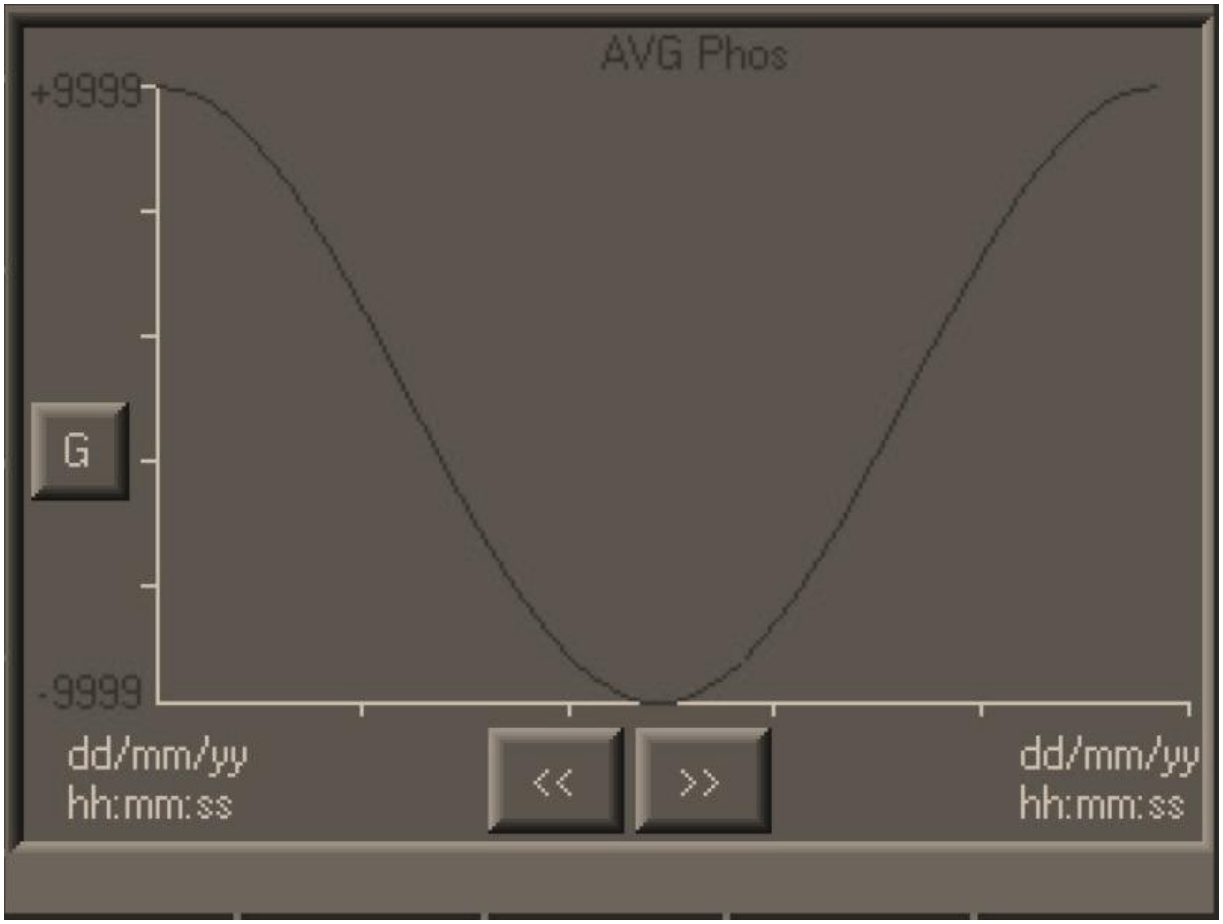
Avg Sample Timer: How long the monitor will sample live phosphate reading then calculate the average

High Alarm: Will trigger output if phosphate reading reaches it.

Low Alarm: Will trigger output if phosphate reading reaches it

7 Trend

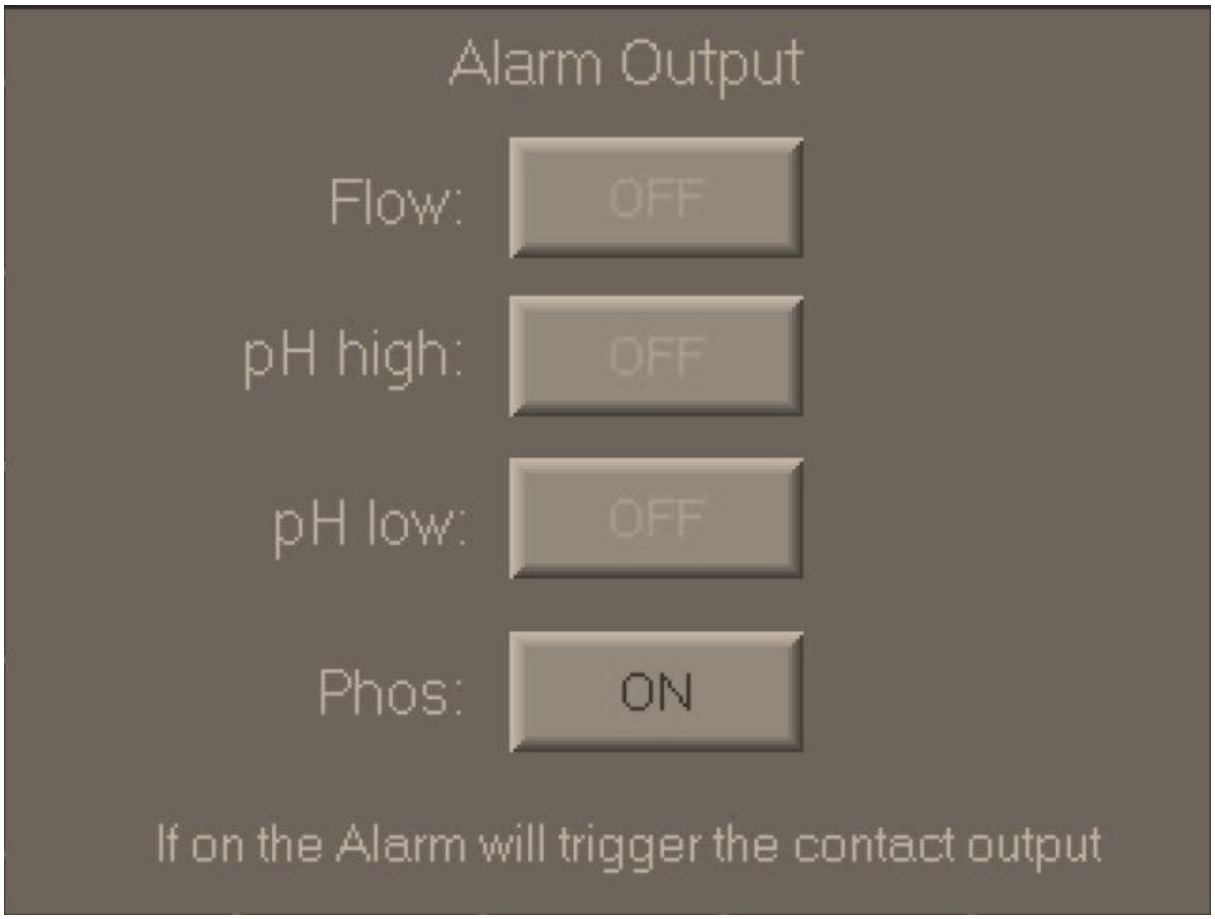
Figure 6: Trend



Live Trending screen:

8 Triggers

Figure 7: Triggers

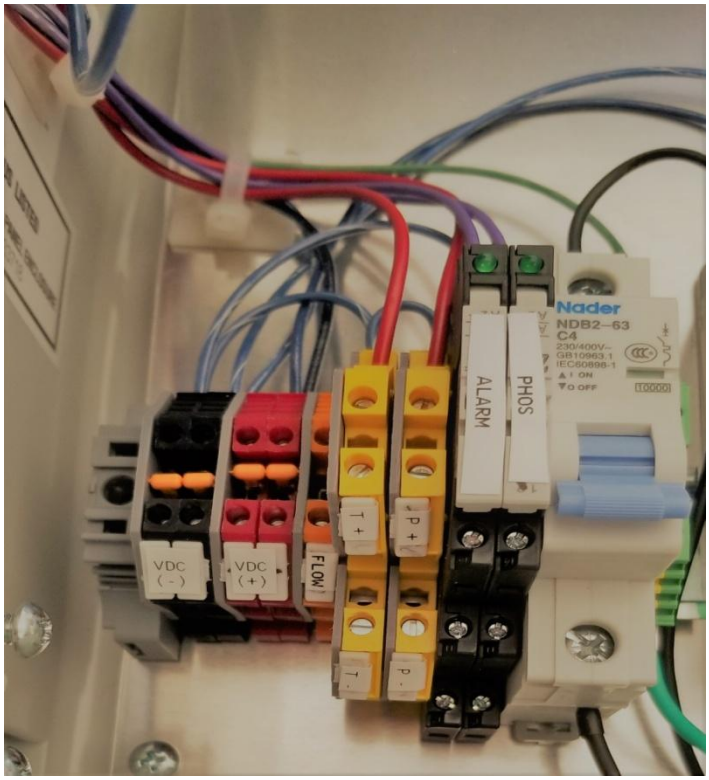


Alarm Output

List the possible alarms. If set to on the active alarm relay will engage when the alarm is active

9 Wiring

Figure 8 : Wiring



Terminals:

Green / Yellow : Ground

Red: 24VDC + Output

Black: 24VDC – Output

Flow: Flow switch input. Requires a 24 VDC + Signal

T+ : Turbidity input +

-T-: Turbidity input -

P+: Analog 4-20mA Average Phosphate output Positive

-P-: Analog 4-20mA Average Phosphate output Negative

Alarm Relay: Alarms that are active and turned on in the Trigger screen will fire this

Phos Realy: Will fire on high and low phosphate alarm