SECTION Z

Revision Date: 1-6-25

TOUCH SCREEN INTERFACE DEVICE - TSID

The Touch Screen Interface Device (TSID) is a optional piece of equipment that is used to perform troubleshooting and customization of the SC1000 for specific applications.

It provides full access to all setup and status parameters.

It also has screens designed to demo the SCADA capabilities of the SC1000.

TSID FUNCTIONS

- View or Change Setup Parameters
- View Status or Change Setup of all I / O
- Test Communication Ports COM1 and ENET1
- Demo all SCADA features

TSID COMMUNICATION WITH SC1000

The following SC1000 parameter settings are required for COM1 and ENET1 to communicate with the TSID:

RS232 Port COM1 Setup						
E.11	1	Slave Address				Range: 1 - 247
E.12	3	Baud Rate	1 = 2400 bps	2 = 4800 bps	3 = 9600 bps	4 = 19200 bps
E.13	0	Parity Mode	0 = No Parity	1 = Odd Parity	2 = Even Parity	
E.14	2	Stop Bits	1 = 1 Stop Bit	2 = 2 Stop Bits		

Ethernet Port ENET1 Setup			
E.114 - E.111	192 . 168 . 80 . 12 (E.114 . E.113 . E.112 . E.111)	IP Address	Range: 0 - 255
E.144 - E.141	255 . 255 . 255 . 0 (E.144 . E.143 . E.142 . E.141)	Subnet Mask	Range: 0 - 255
E.154 - E.151	192 . 168 . 80 . 1 (E.154 . E.153 . E.152 . E.151)	Default Gateway	Range: 0 - 255
E.161	502	Port Number	Range: 1 - 65,535

Note:
The Controller's logic reads the setup values upon power up; any changes to the above settings require that the power to be cycled before the new values are used.

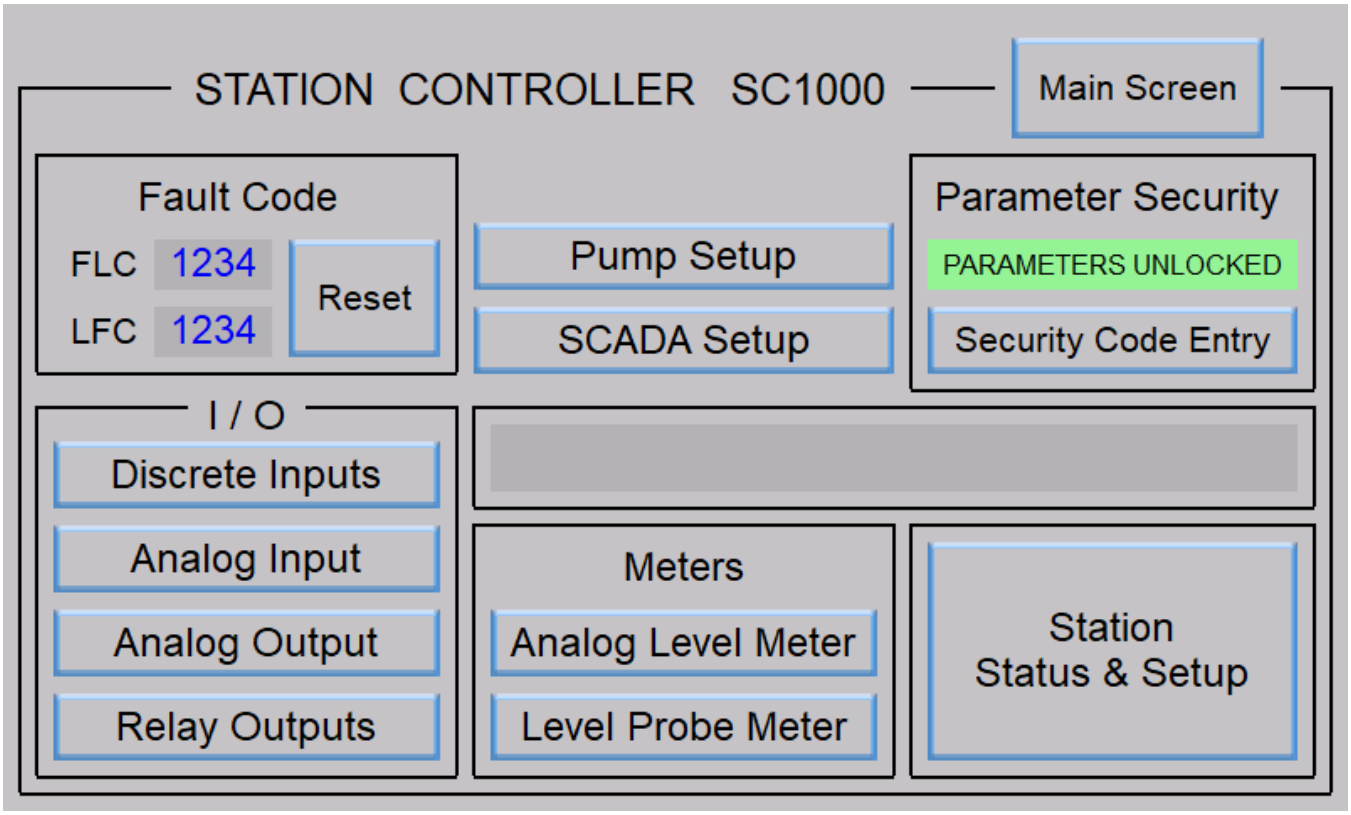
The Touch Screen Interface Device (TSID) consists of a 7 inch Touch Screen panel made by Automation Direct, housed in a durable carrying case with a power cord and interface cables for connection to the Serial Port COM1 and the Ethernet Port ENET1.

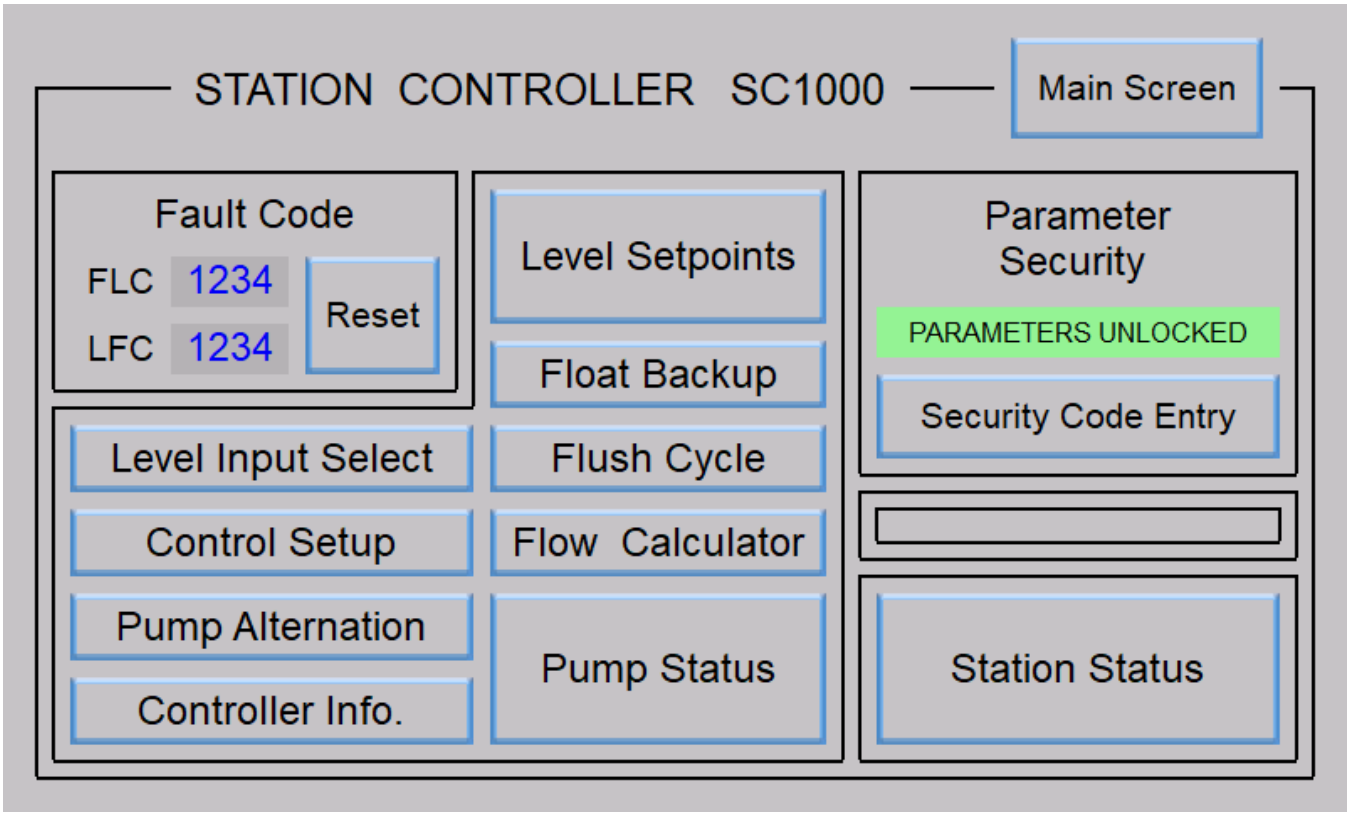
It is programmed as a Modbus Master that continually polls the Controller.

ORDERING INFORMATION

Part Number: **TSID**

SC1000 MENU - Touchscreen HMI SCREEN





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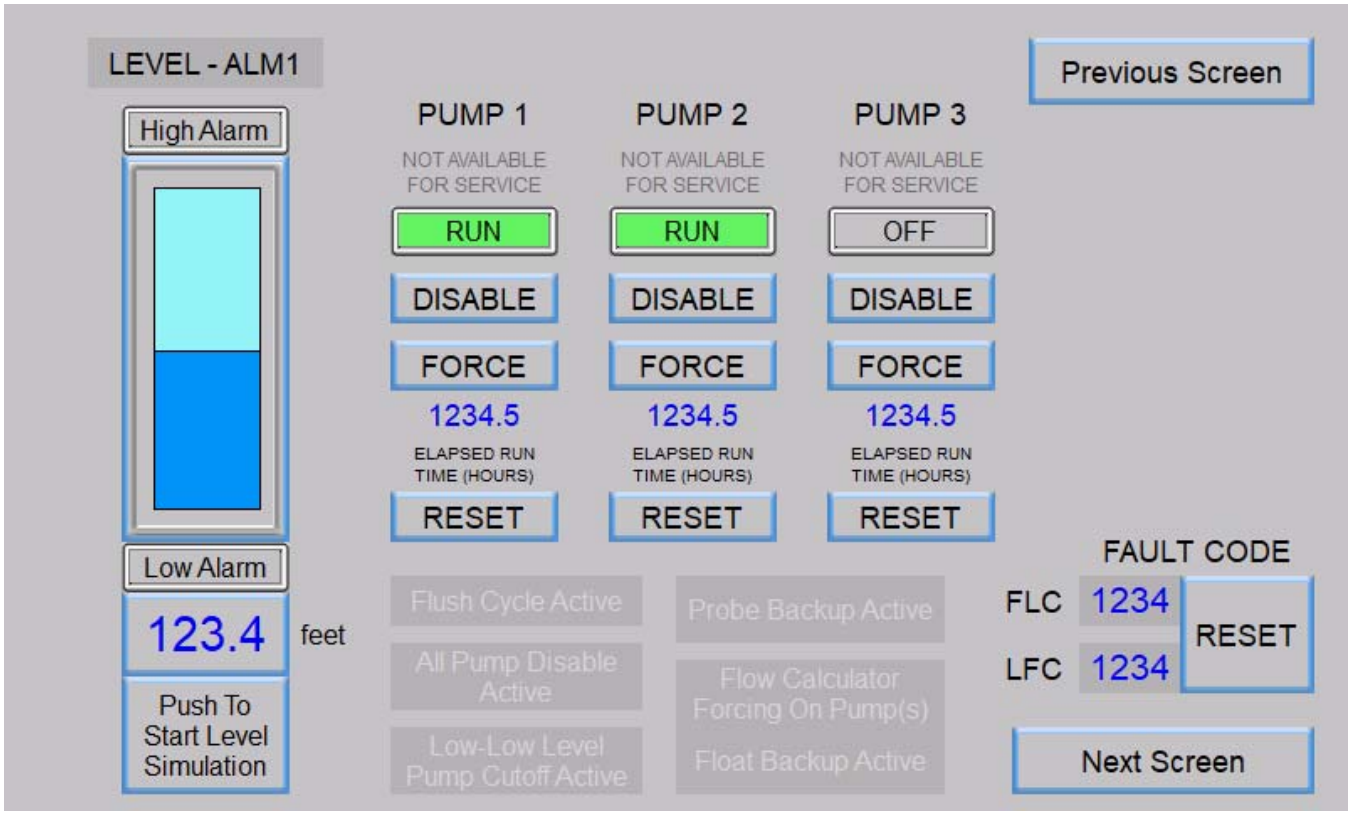

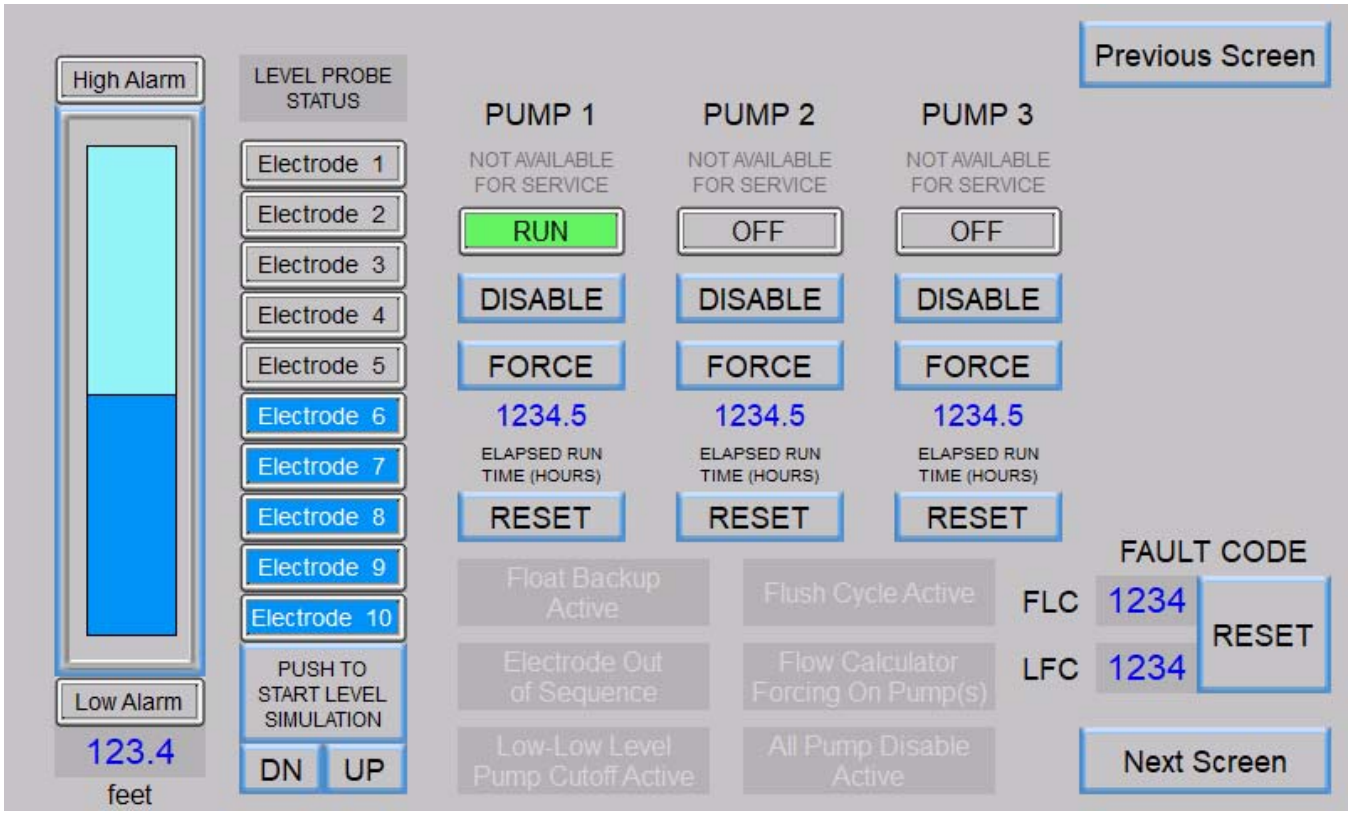

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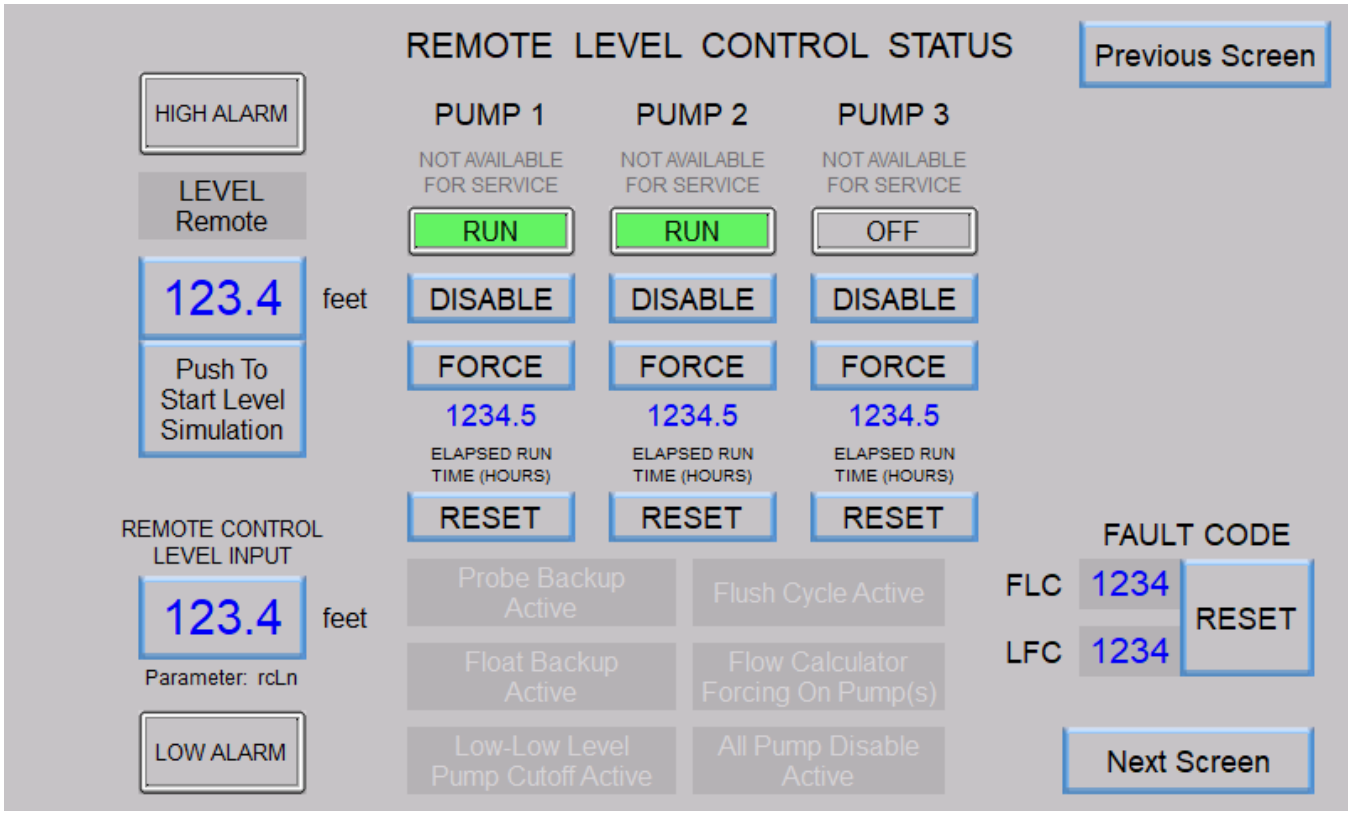

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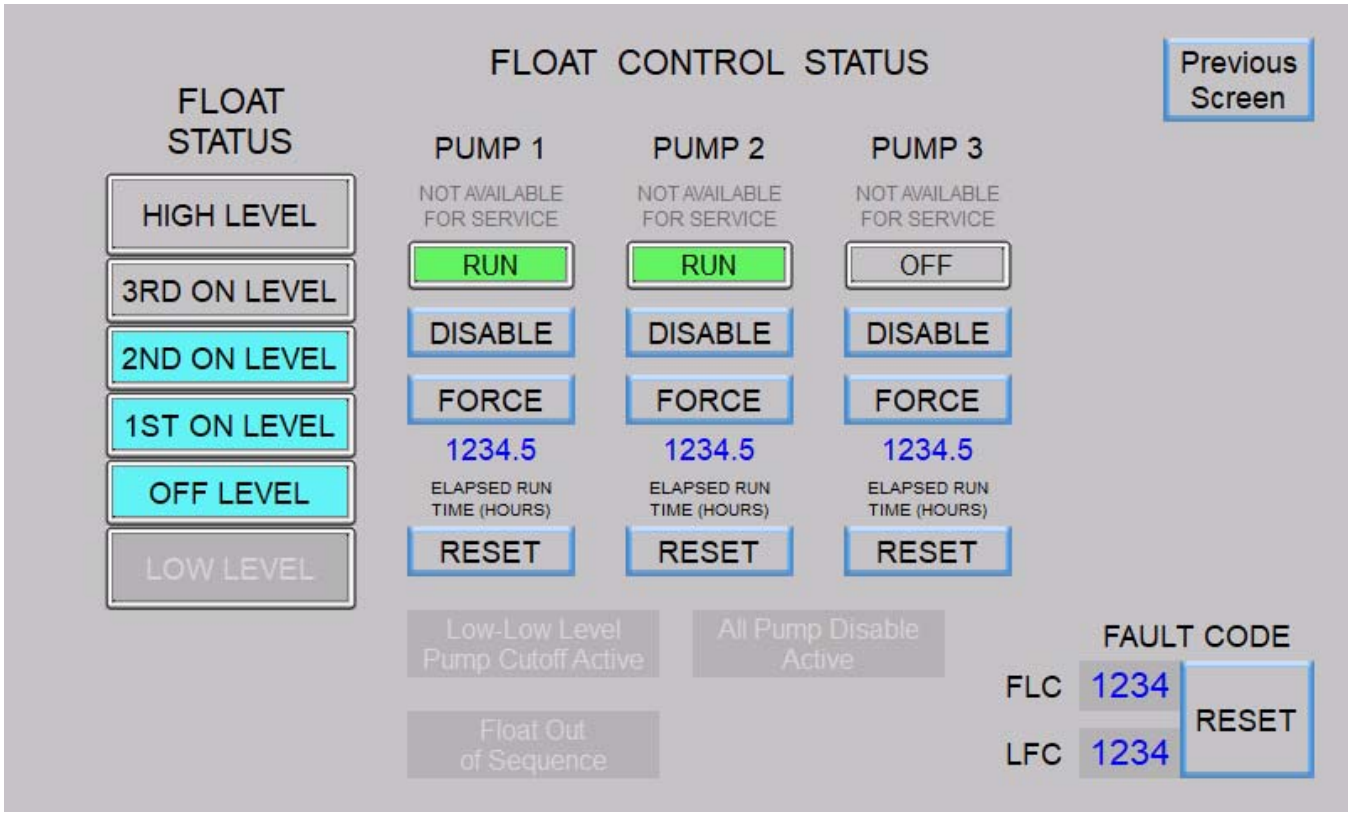

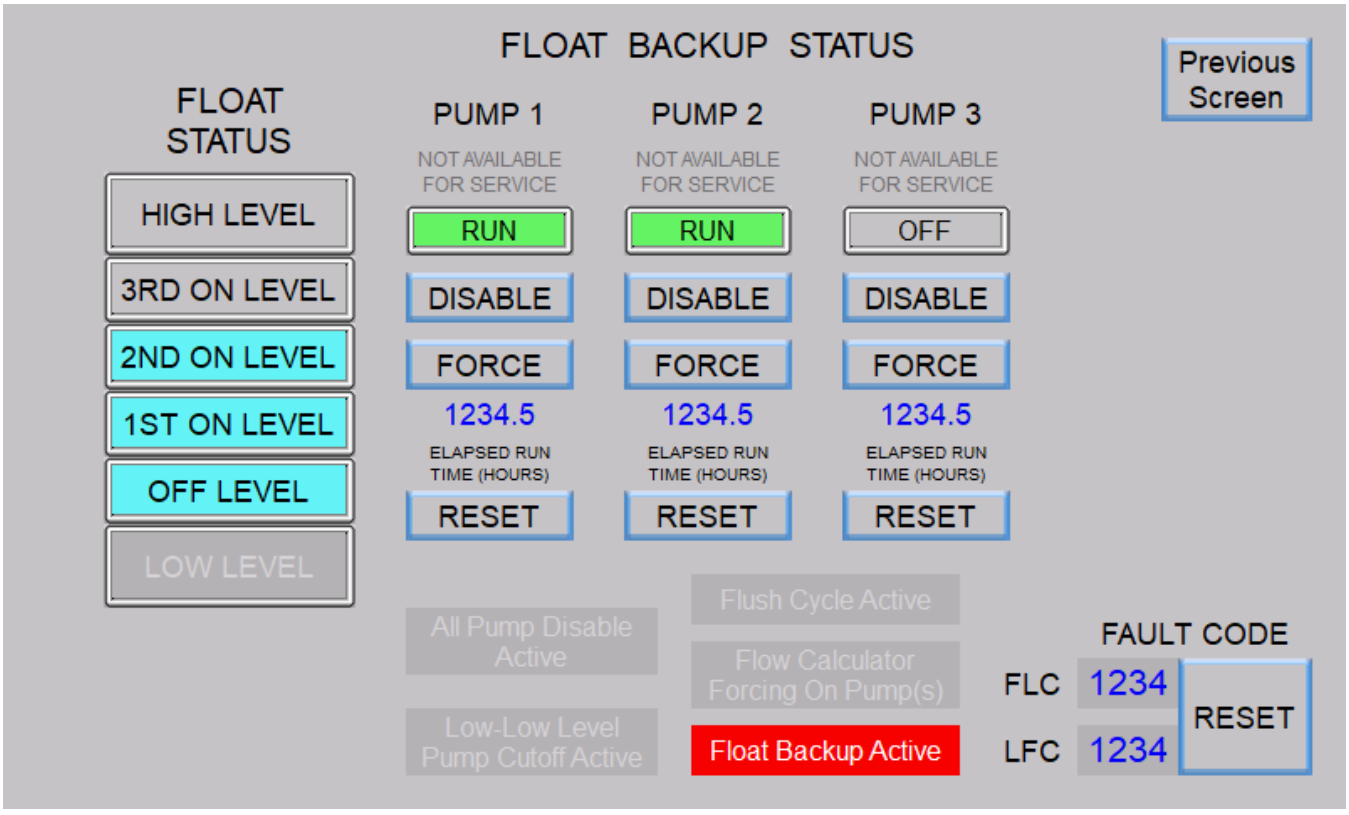

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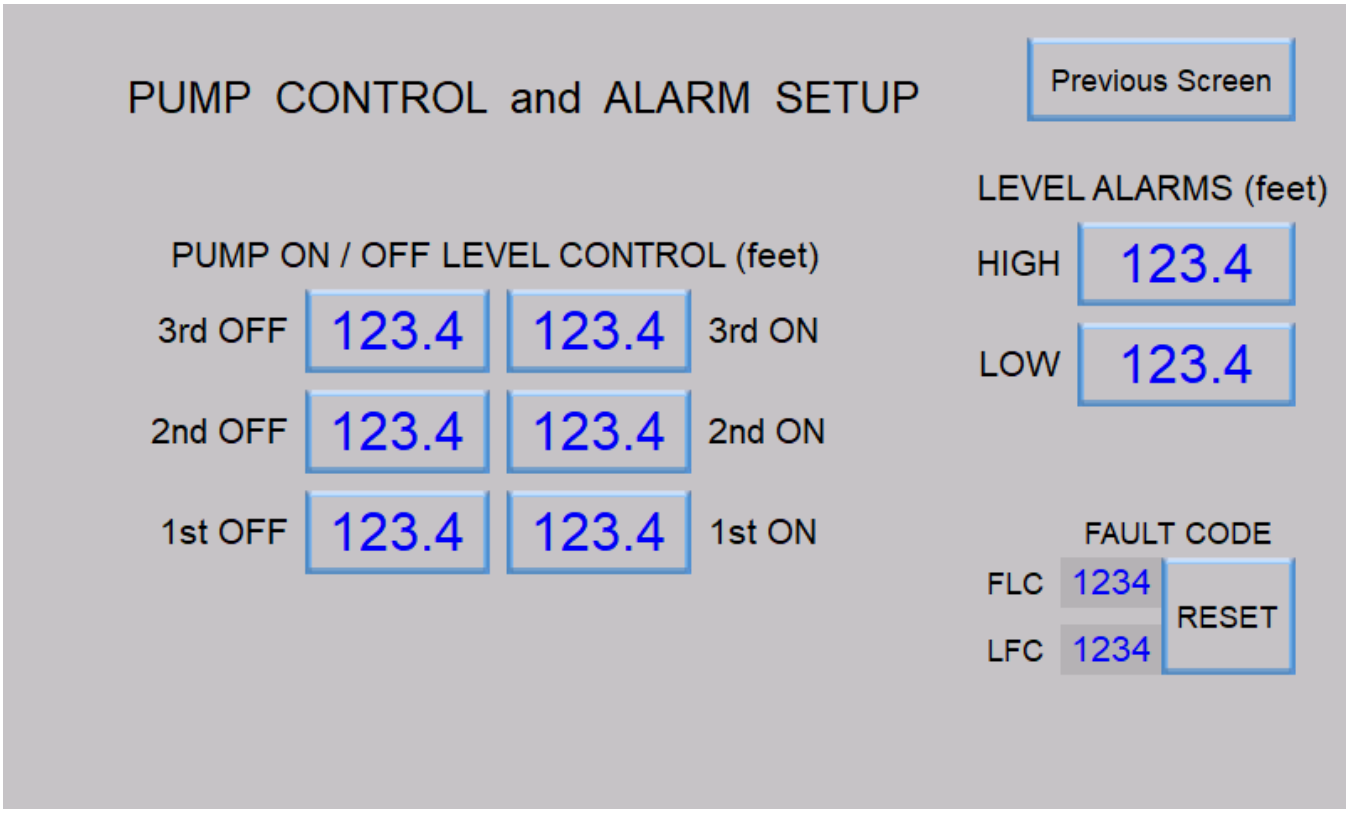
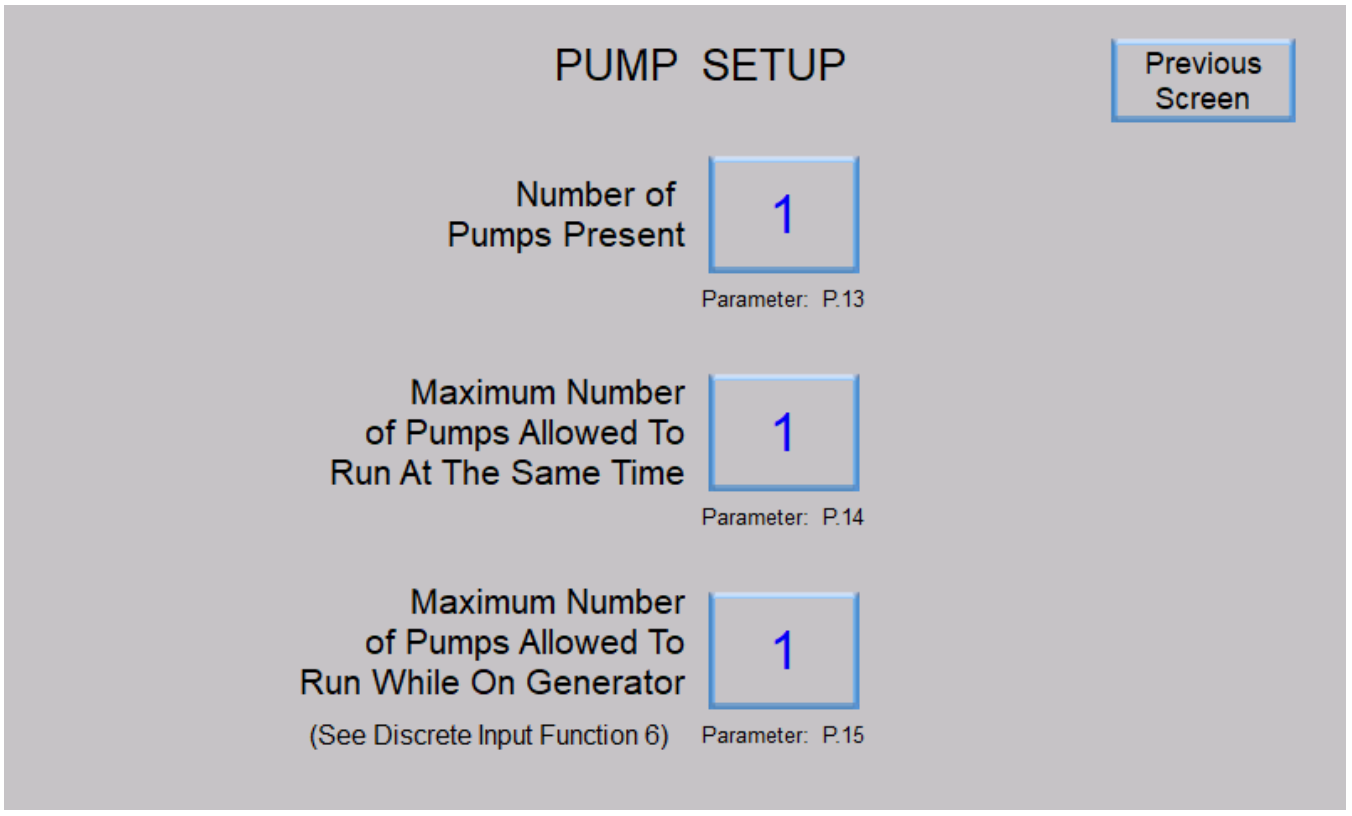
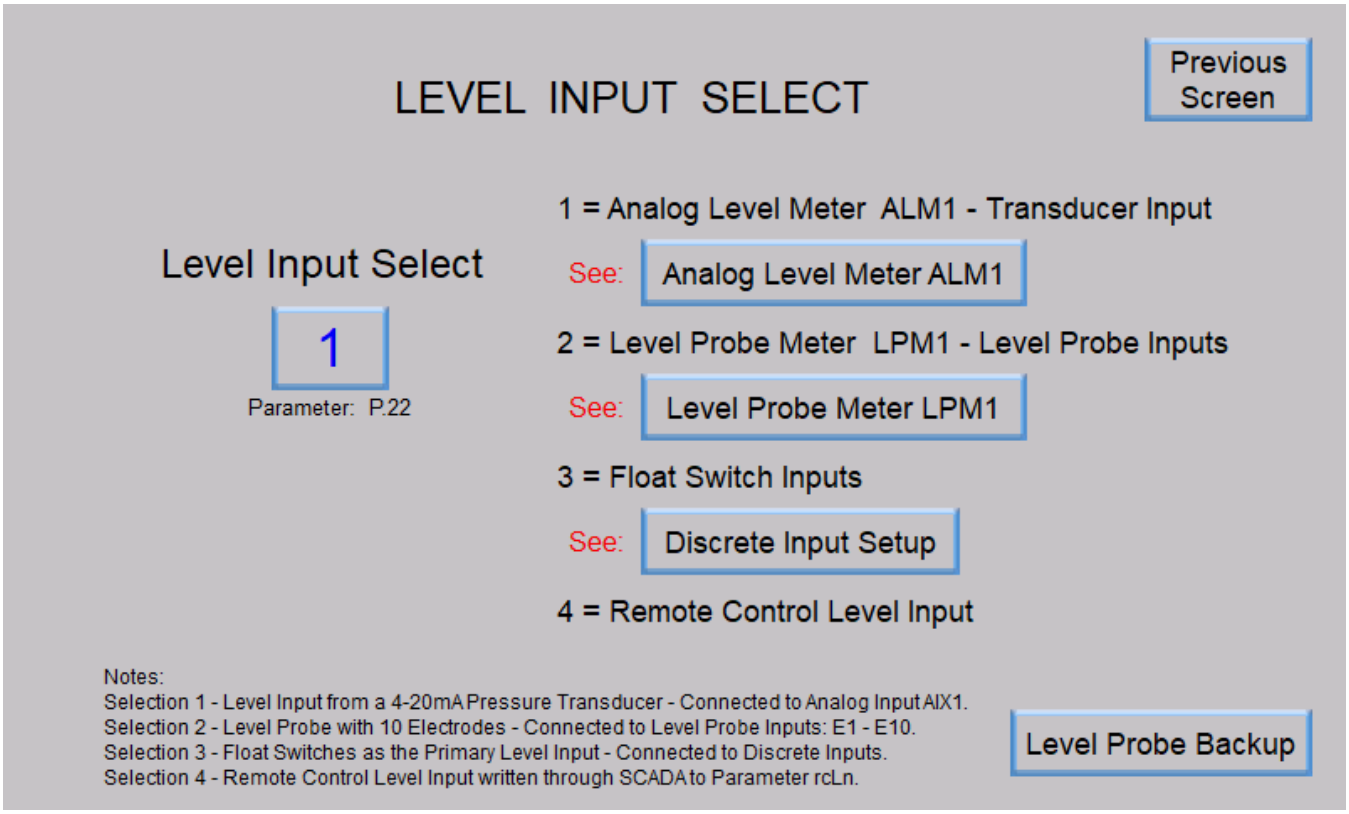
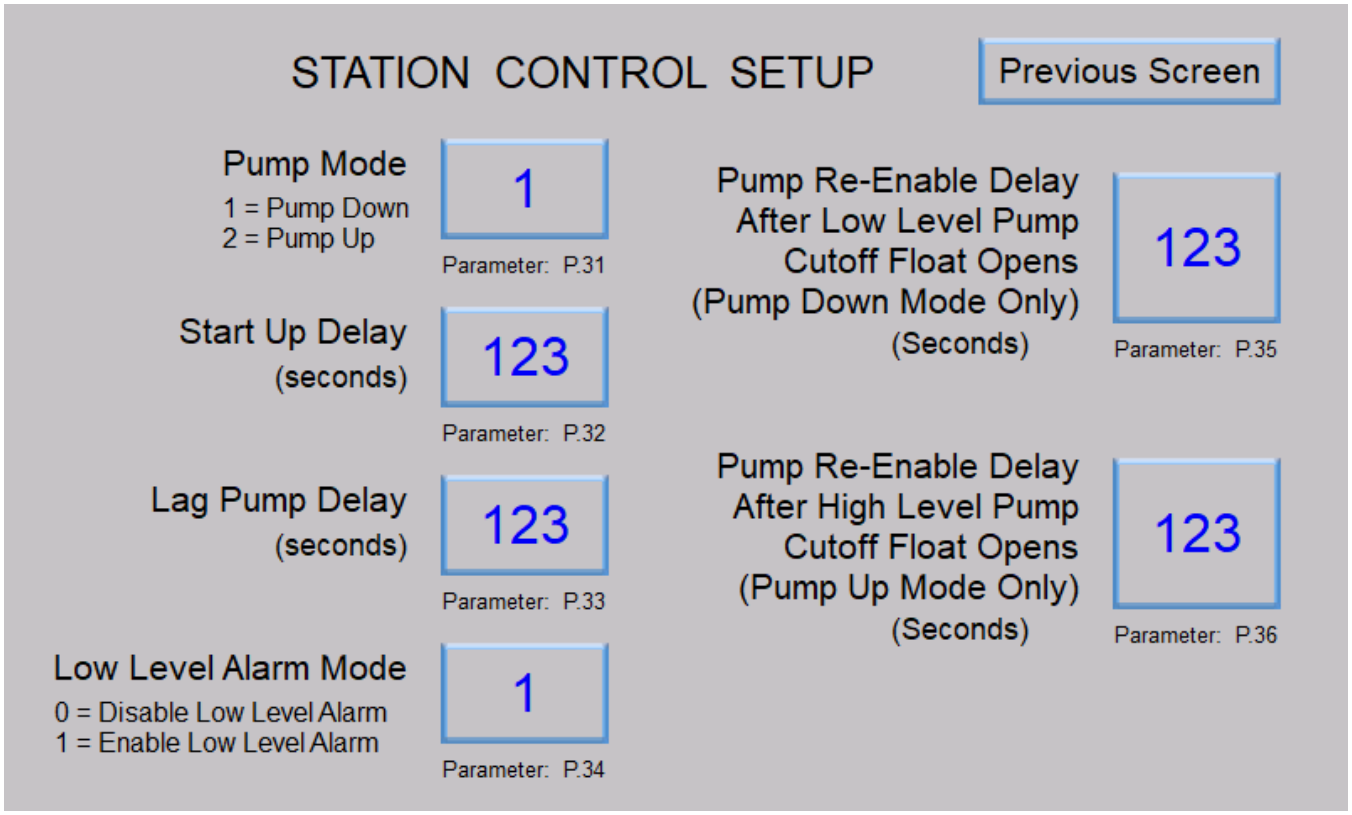
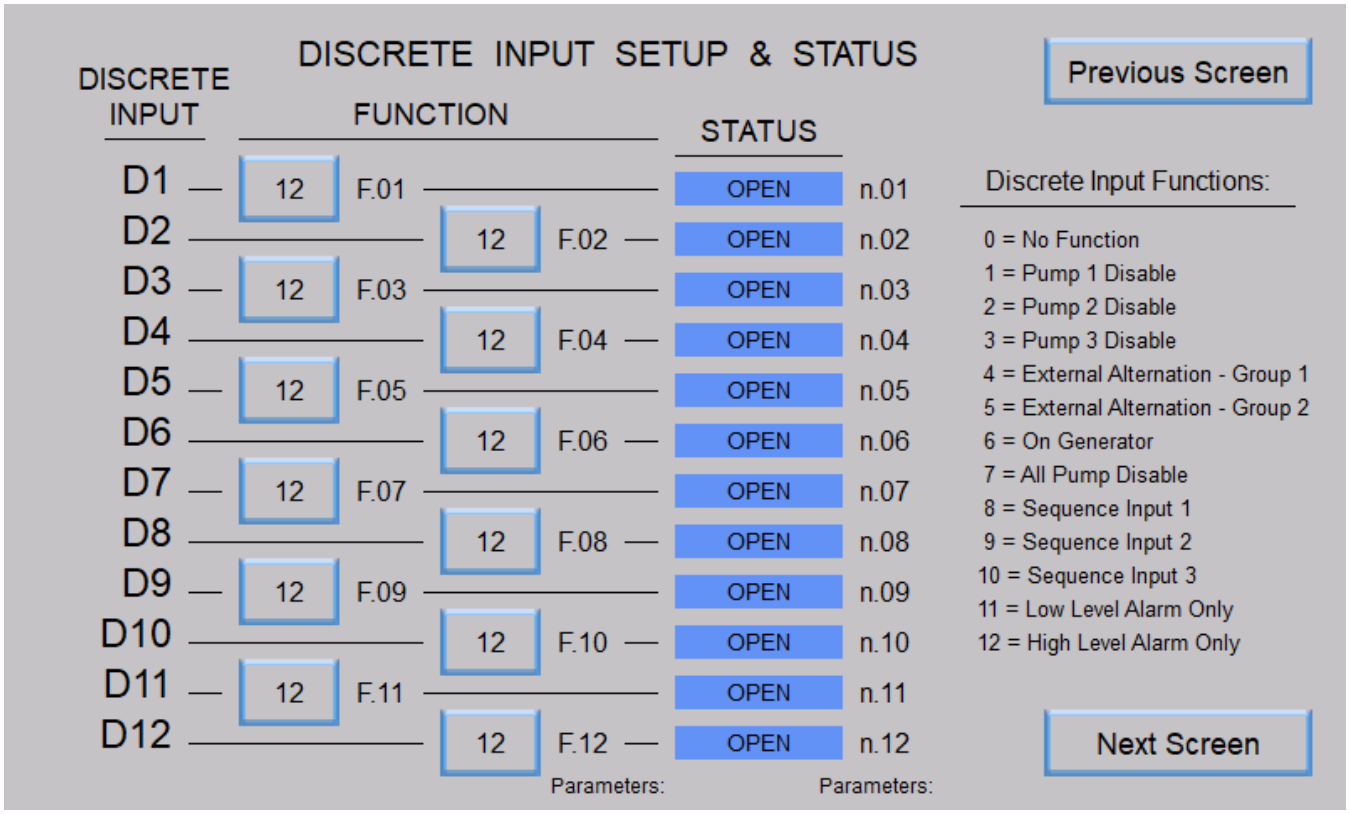


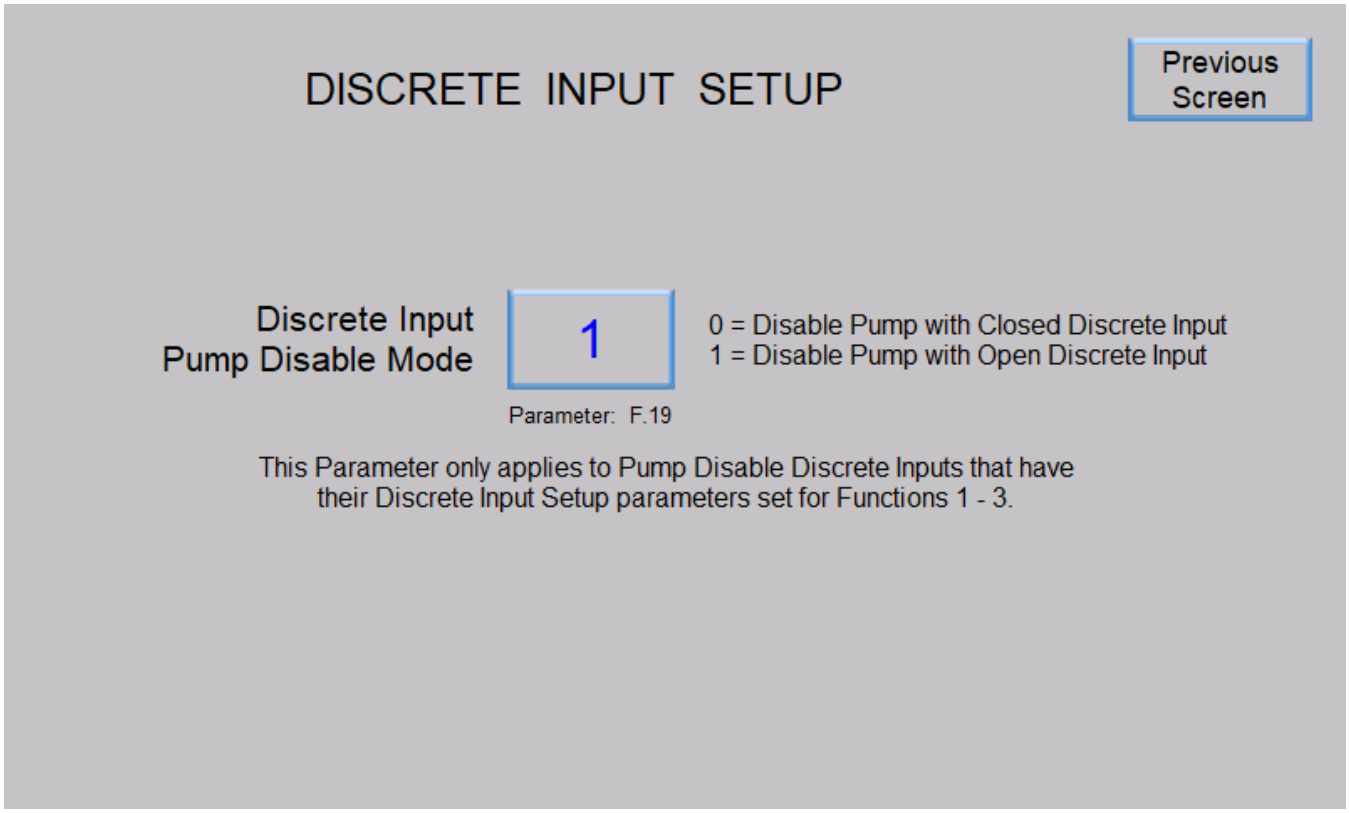



LEVEL INPUT SELECT
Previous Screen
Level Input Select
1
Parameter: P.22
1 = Analog Level Meter ALM1 - Transducer Input
See: Analog Level Meter ALM1
2 = Level Probe Meter LPM1 - Level Probe Inputs
See: Level Probe Meter LPM1
3 = Float Switch Inputs
See: Discrete Input Setup
4 = Remote Control Level Input
Notes:
Selection 1 - Level Input from a 4-20mA Pressure Transducer - Connected to Analog Input AIX1.
Selection 2 - Level Probe with 10 Electrodes - Connected to Level Probe Inputs: E1 - E10.
Selection 3 - Float Switches as the Primary Level Input - Connected to Discrete Inputs.
Selection 4 - Remote Control Level Input written through SCADA to Parameter rcLn.
Level Probe Backup


STATION CONTROL SETUP
Previous Screen
Pump Mode
1 = Pump Down
2 = Pump Up
1
Parameter: P.31
Start Up Delay
(seconds)
123
Parameter: P.32
Lag Pump Delay
(seconds)
123
Parameter: P.33
Low Level Alarm Mode
0 = Disable Low Level Alarm
1 = Enable Low Level Alarm
1
Parameter: P.34
Pump Re-Enable Delay After Low Level Pump Cutoff Float Opens (Pump Down Mode Only) (Seconds)
123
Parameter: P.35
Pump Re-Enable Delay After High Level Pump Cutoff Float Opens (Pump Up Mode Only) (Seconds)
123
Parameter: P.36

SC1000 MENU - Touchscreen HMI SCREEN





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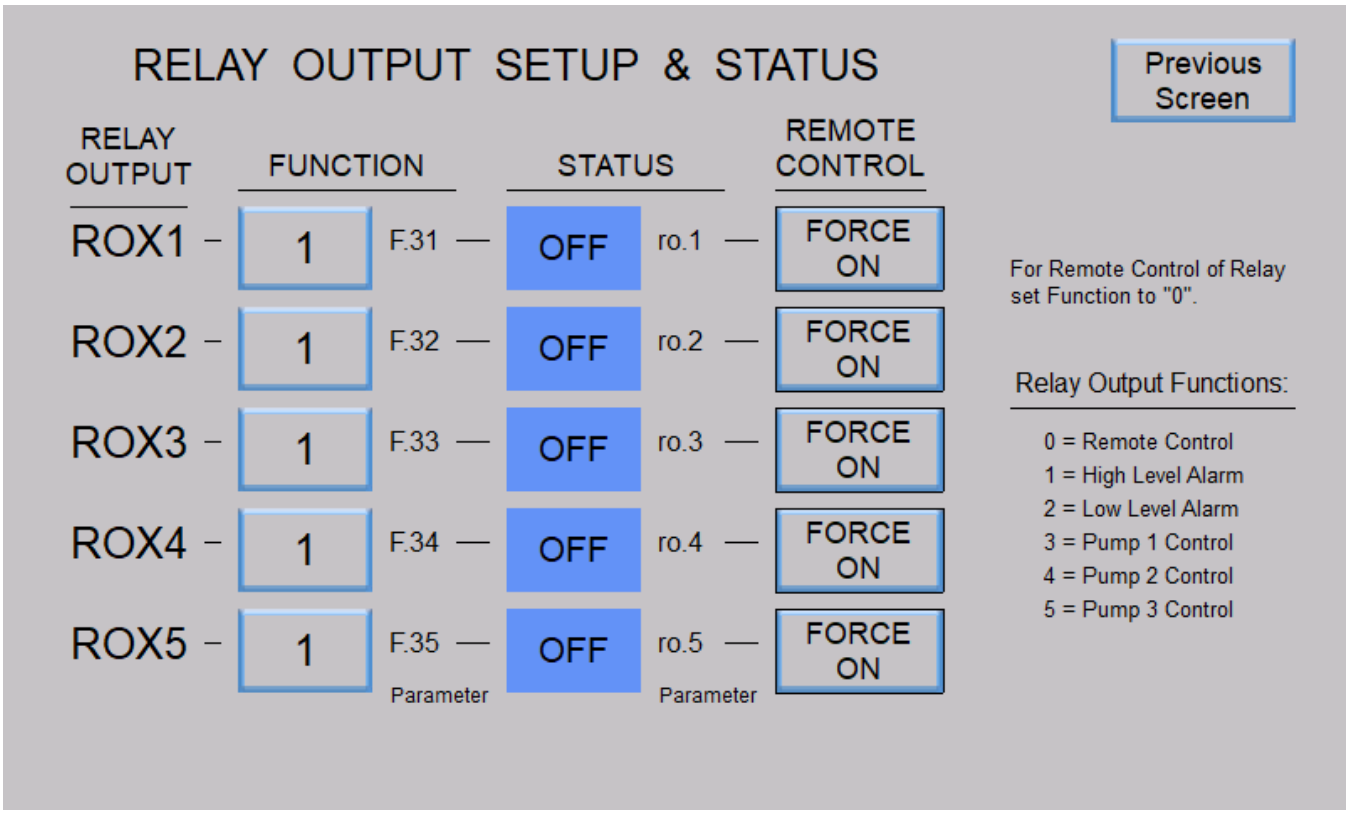
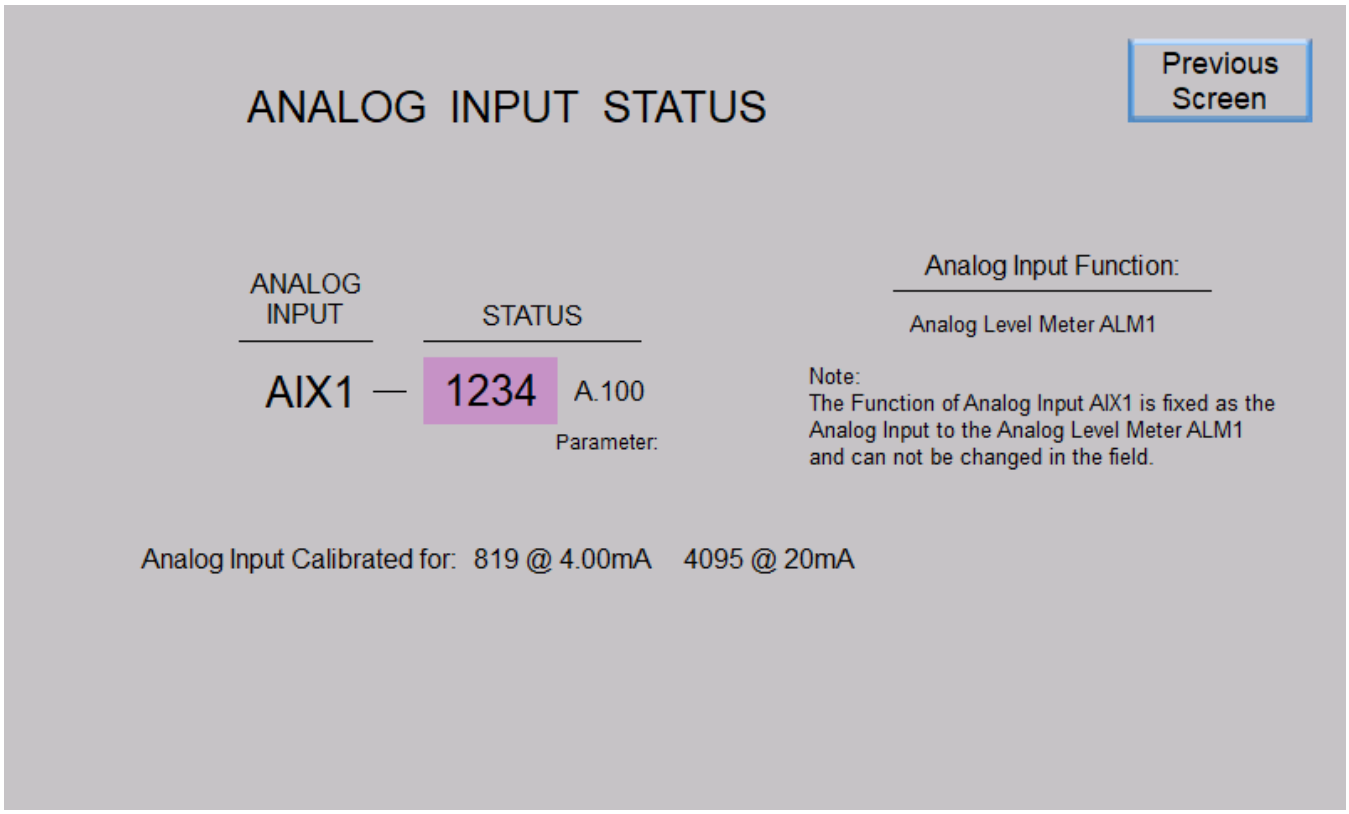
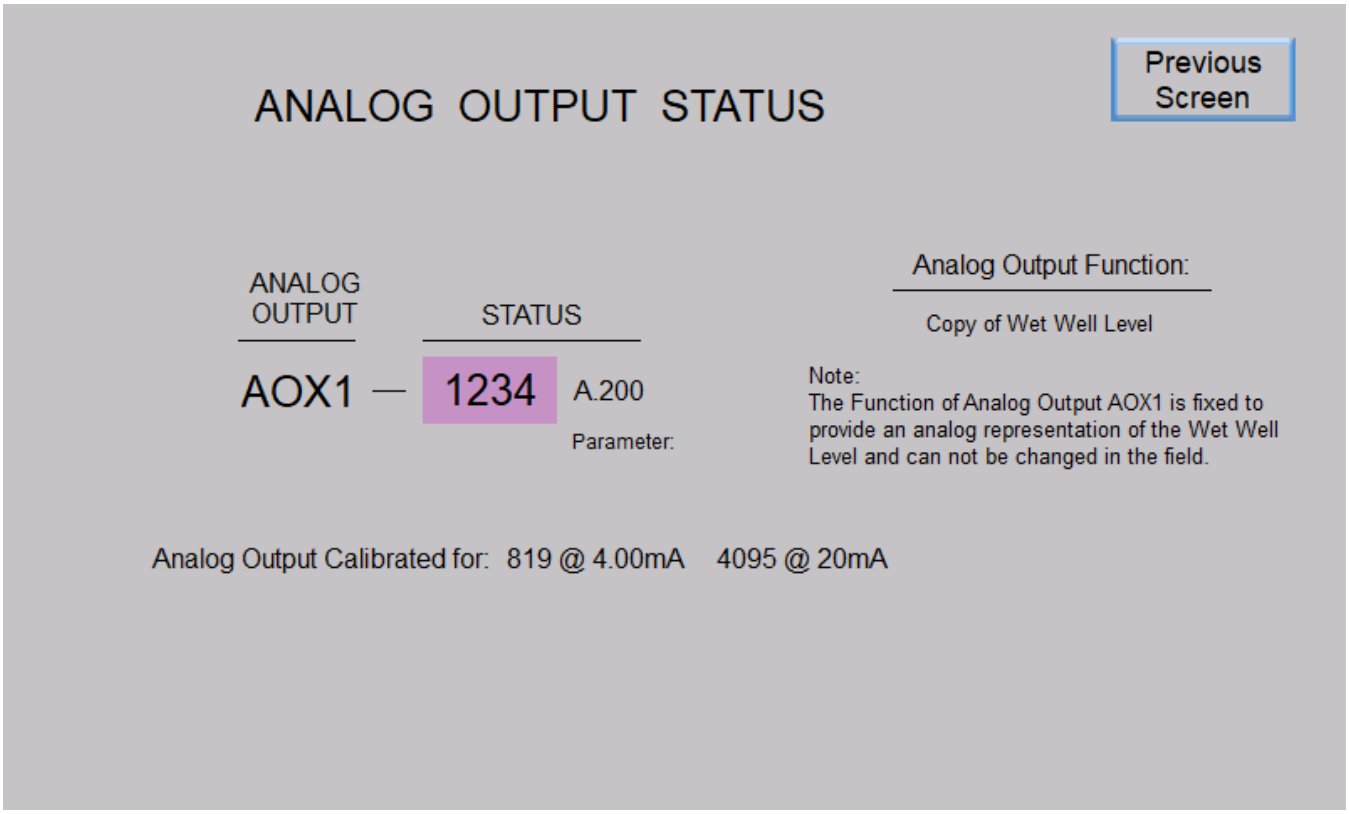
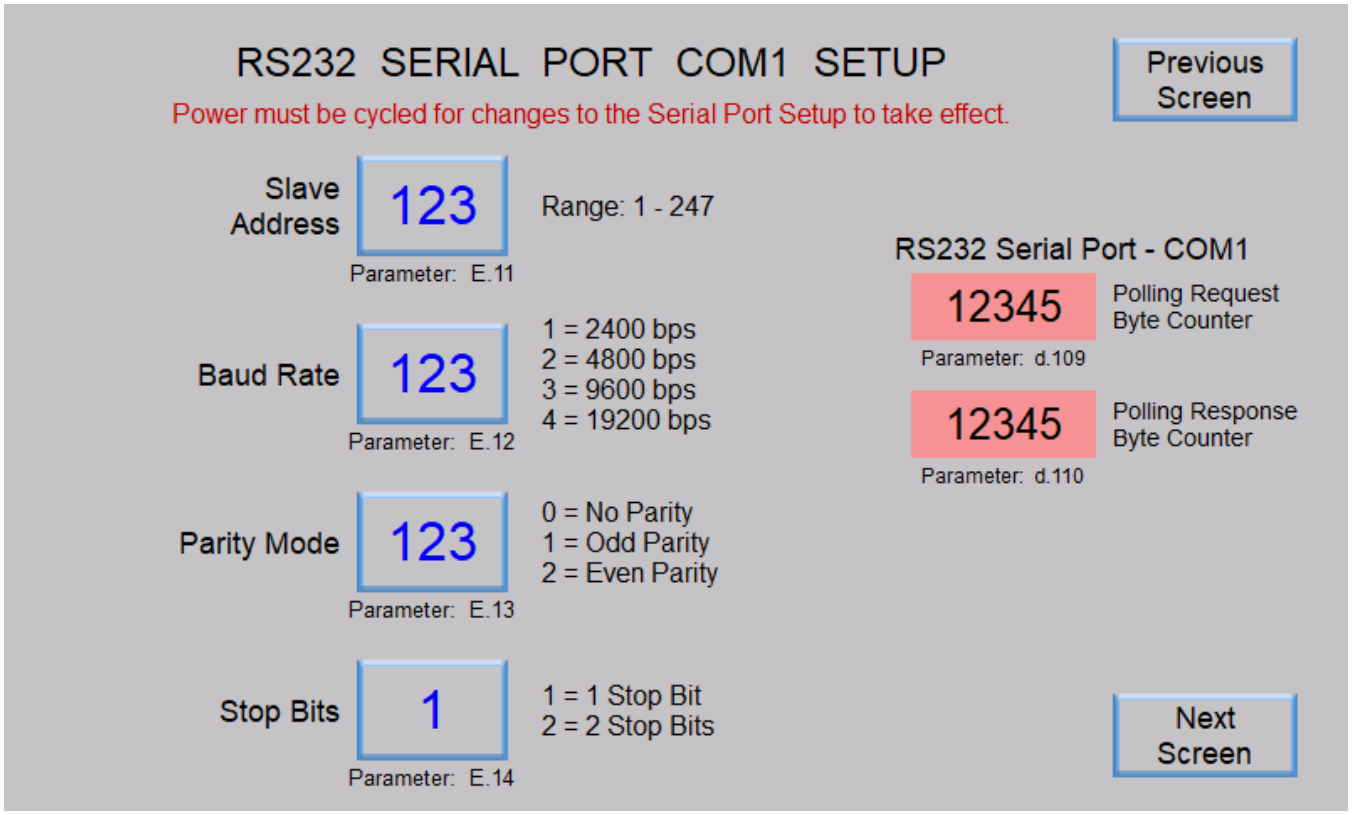
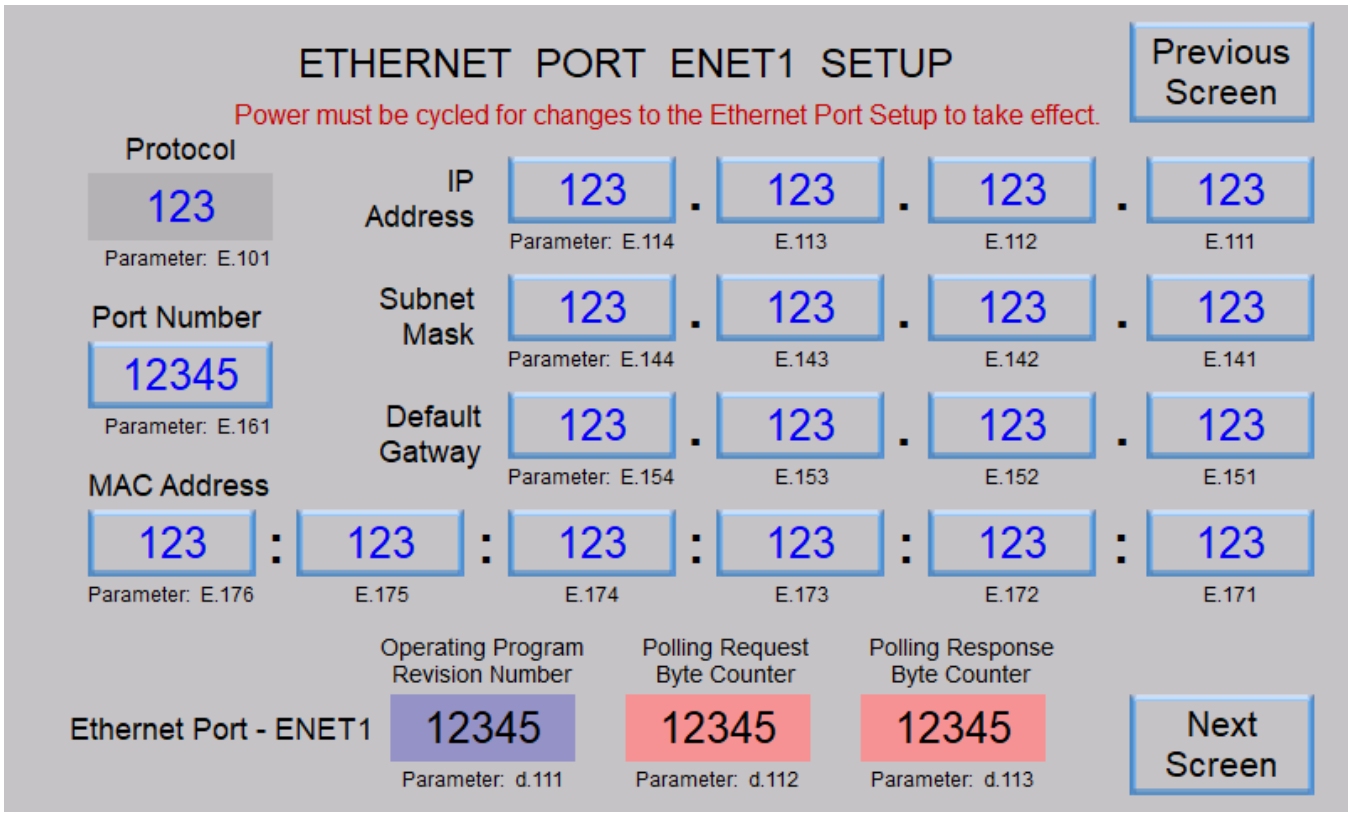



ANALOG INPUT STATUS
Previous Screen
ANALOG INPUT
STATUS
AIX1 —
1234
A.100
Parameter:
Analog Input Function:
Analog Level Meter ALM1
Note:
The Function of Analog Input AIX1 is fixed as the Analog Input to the Analog Level Meter ALM1 and can not be changed in the field.
Analog Input Calibrated for: 819 @ 4.00mA 4095 @ 20mA


ANALOG OUTPUT STATUS
Previous Screen
ANALOG OUTPUT
STATUS
AOX1 —
1234
A.200
Parameter:
Analog Output Function:
Copy of Wet Well Level
Note:
The Function of Analog Output AOX1 is fixed to provide an analog representation of the Wet Well Level and can not be changed in the field.
Analog Output Calibrated for: 819 @ 4.00mA 4095 @ 20mA

SC1000 MENU - Touchscreen HMI SCREEN





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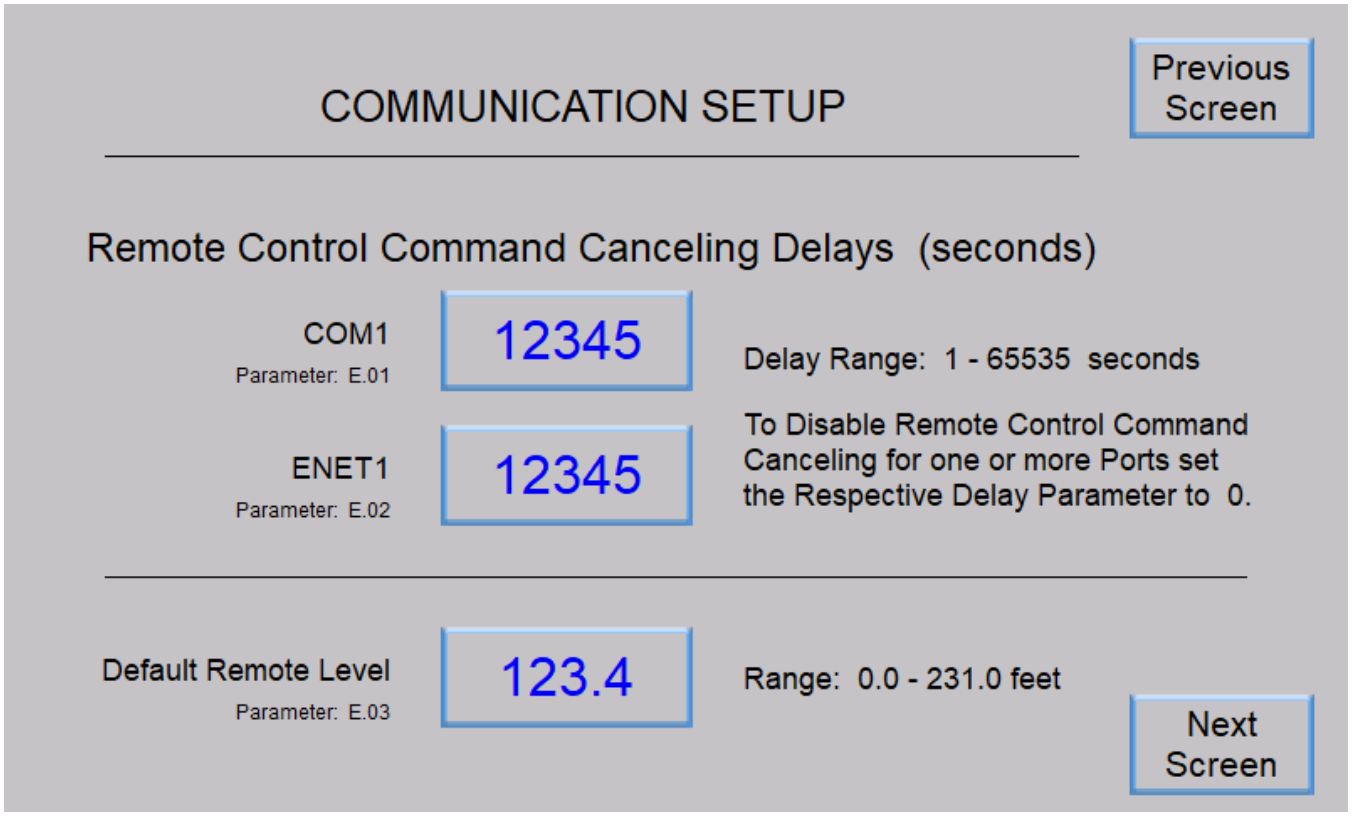
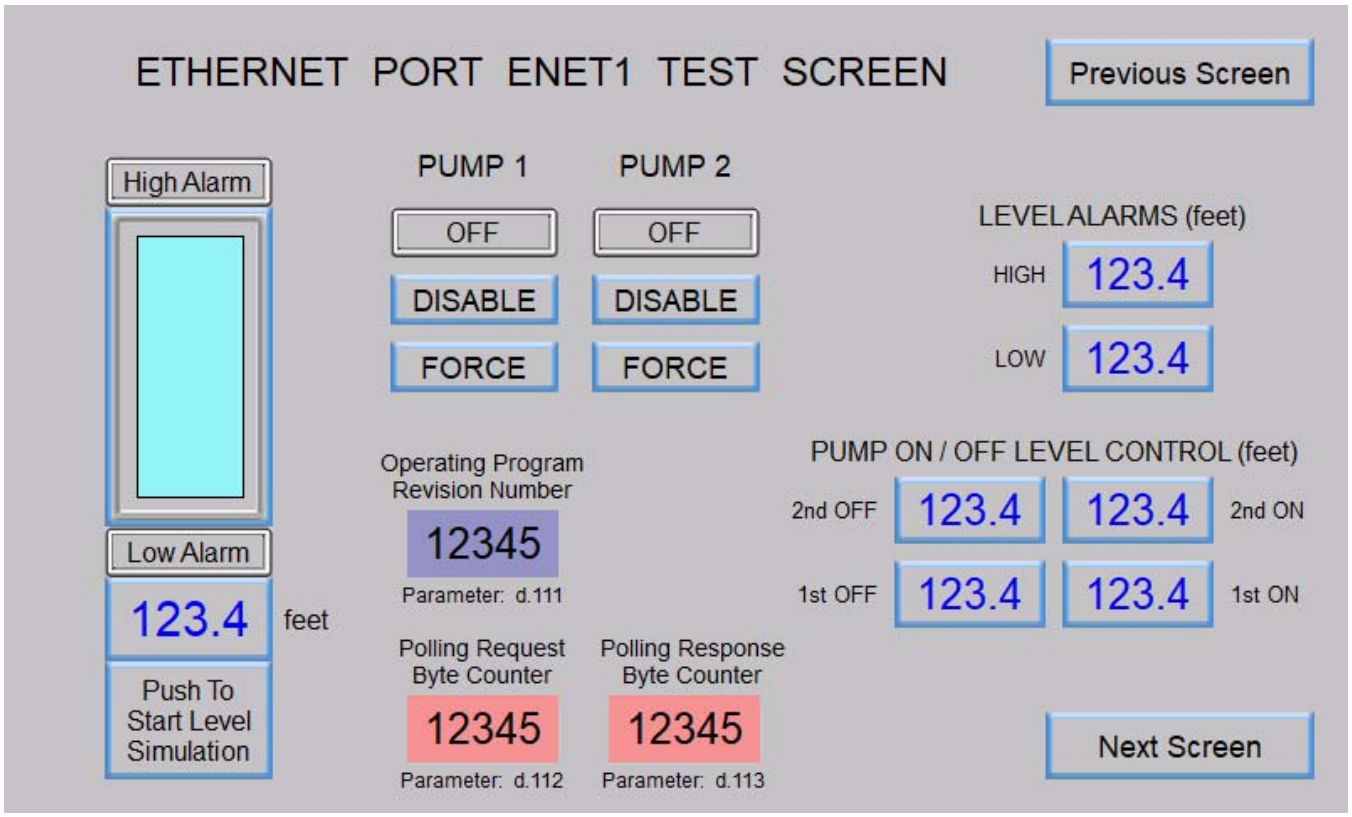




COMMUNICATION SETUP

Previous Screen

RX & TX LED MODE

1

Parameter: E.07

1 = Shows COM1 and ENET1 Communication
2 = Shows COM1 Communication Only
3 = Shows ENET1 Communication Only
4 = Shows Communication Between the Input Board and the Control Board Only

PUMP ALTERNATION SETUP

Previous Screen

1 Alternation Sequence Mode

Parameter: P.16

1 = Standard Alternation: Group 1: Pumps 1-3

2 = Pump 1 Always Lead: Group 1: Pump 1
Group 2: Pumps 2 - 3

3 = Pump 3 Always Last: Group 1: Pumps 1 - 2
Group 2: Pump 3

1 Alternation Sequence Modifier A

Parameter: P.17

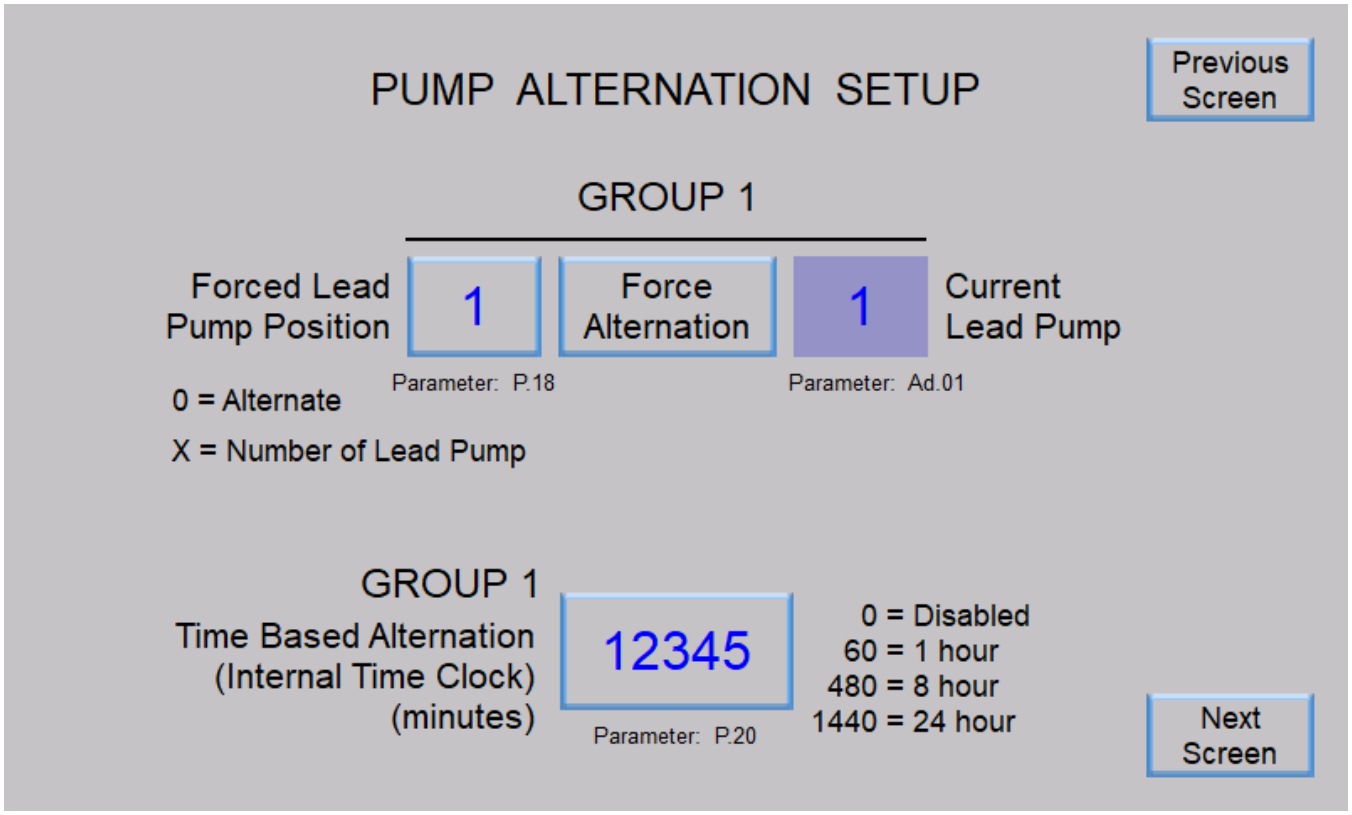
0 = Pump 1 is Allowed to Run with Pumps from Group 2

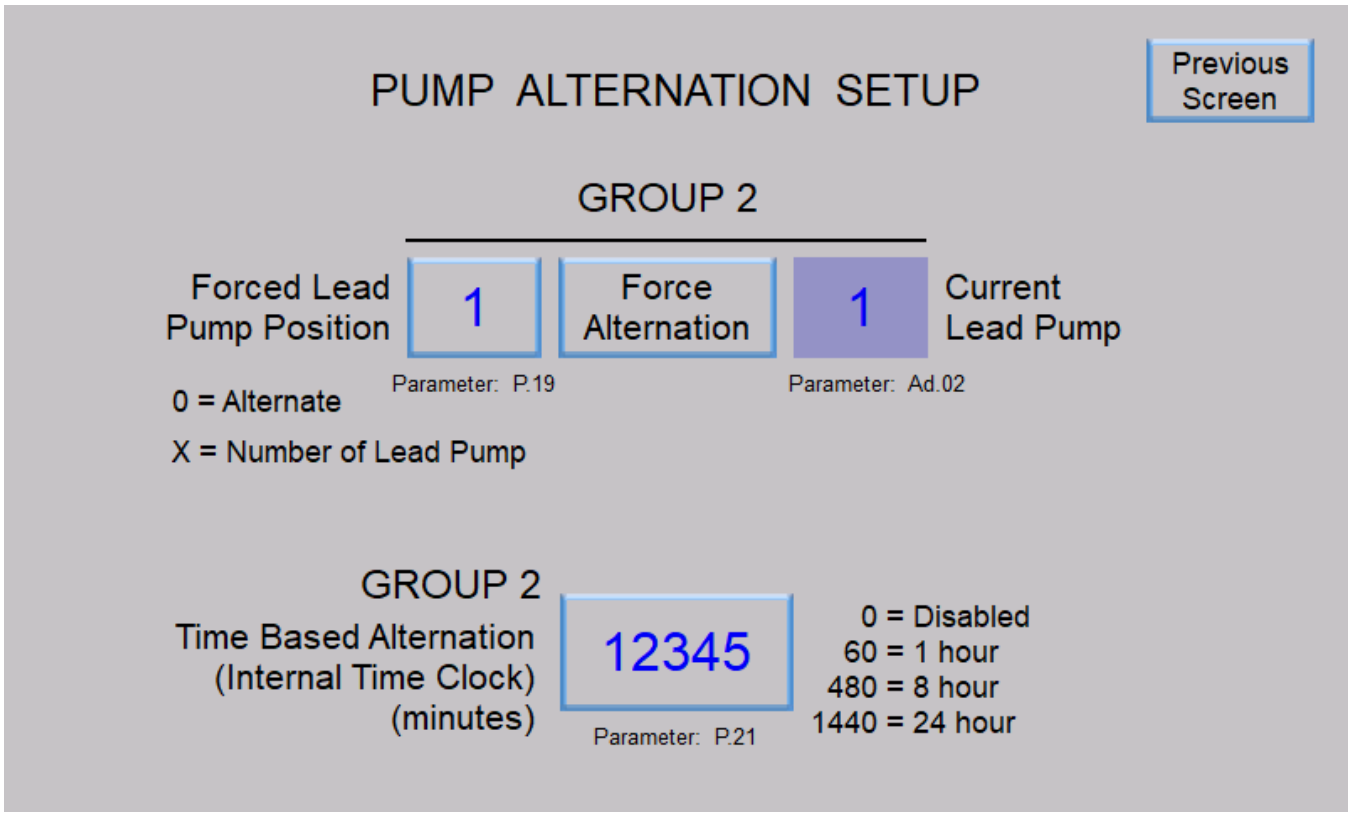
1 = Pump 1 is Not Allowed to Run with Pumps from Group 2

Alternation Sequence Modifier A only applies where Parameter P.16 = 2.

Next Screen

SC1000 MENU - Touchscreen HMI SCREEN





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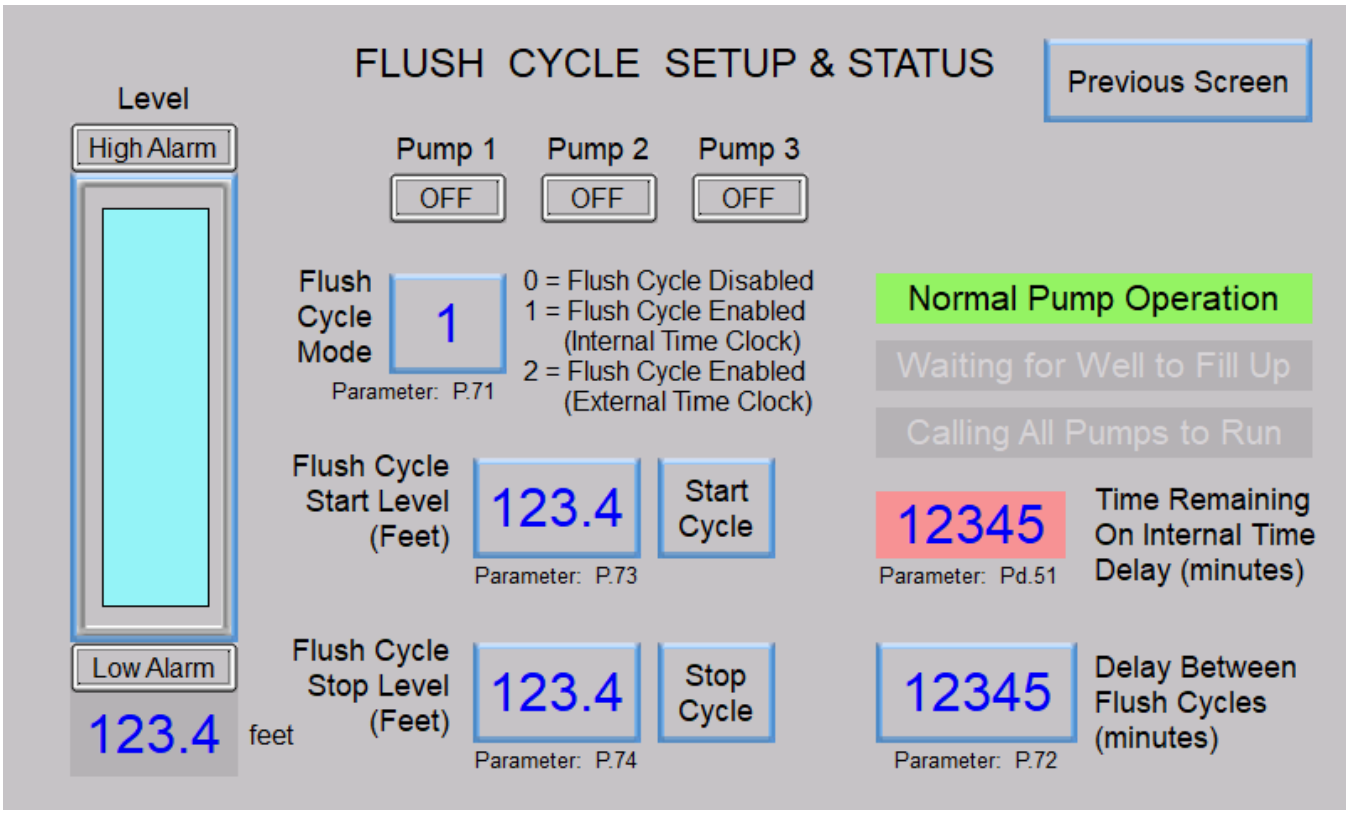

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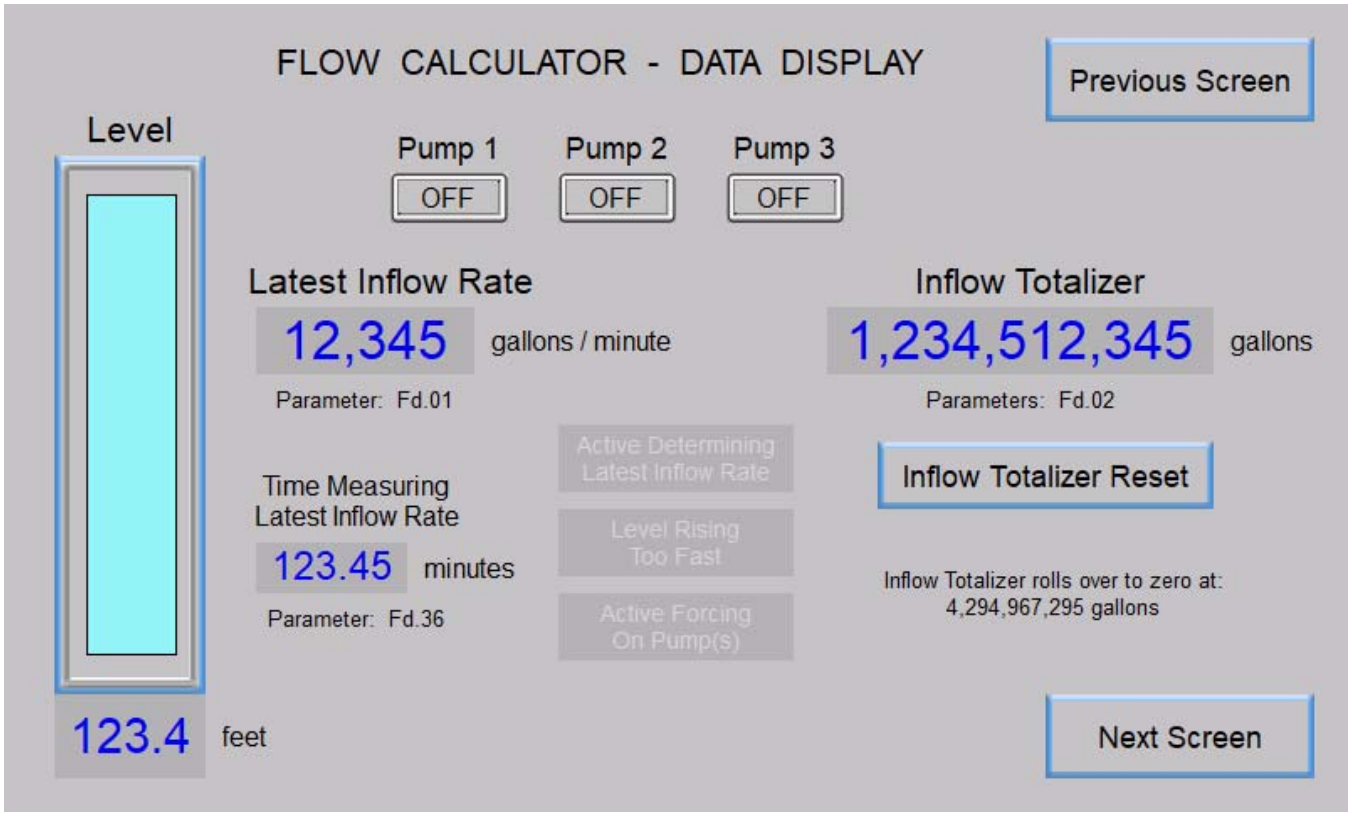

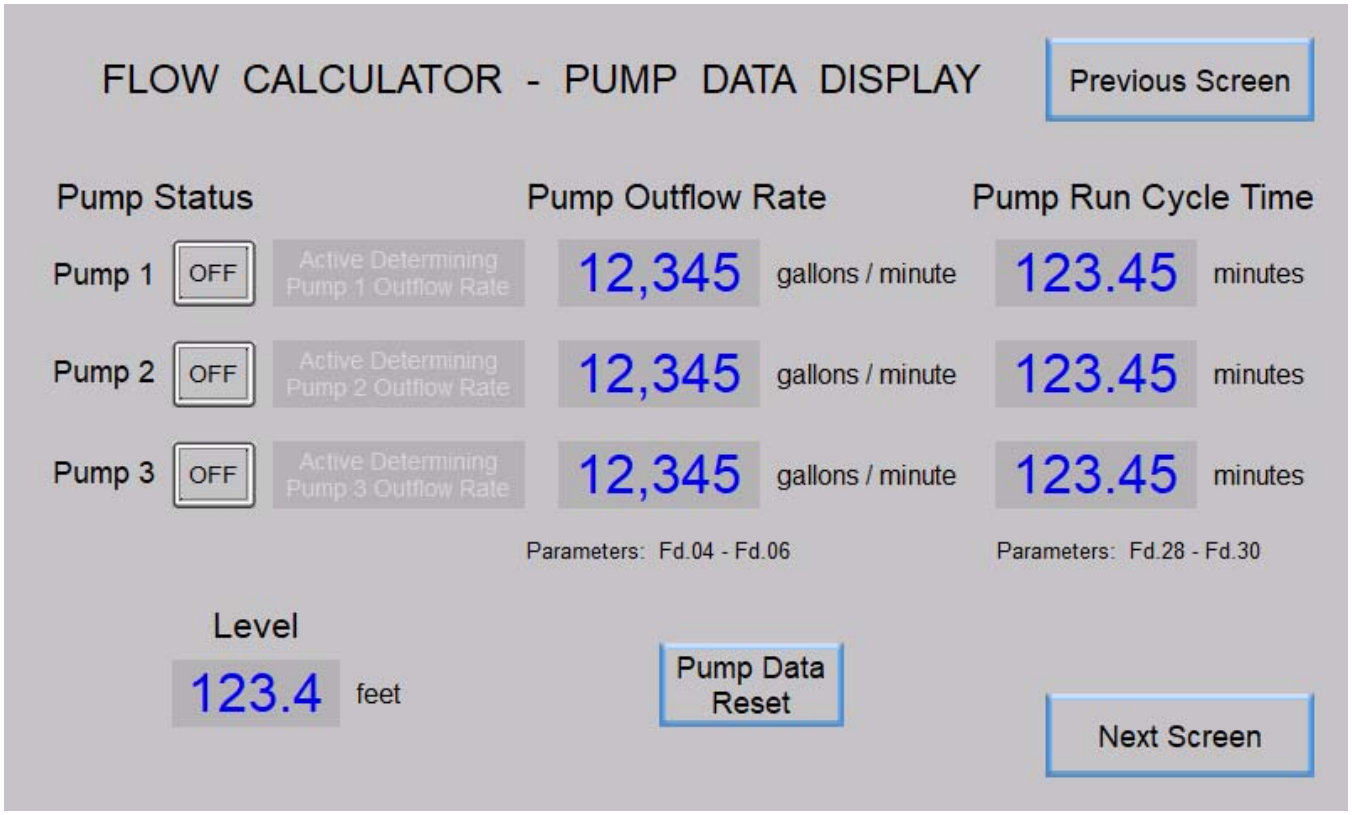

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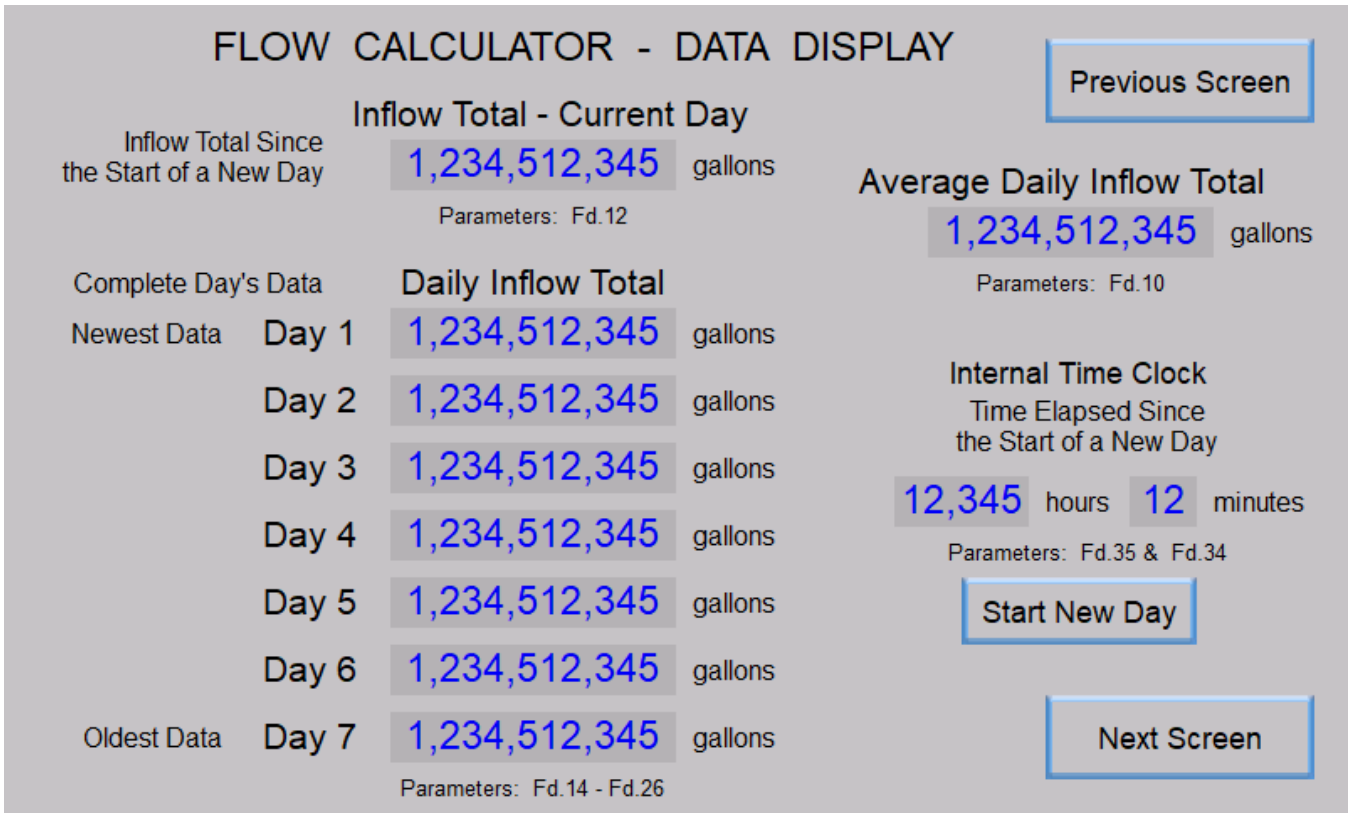

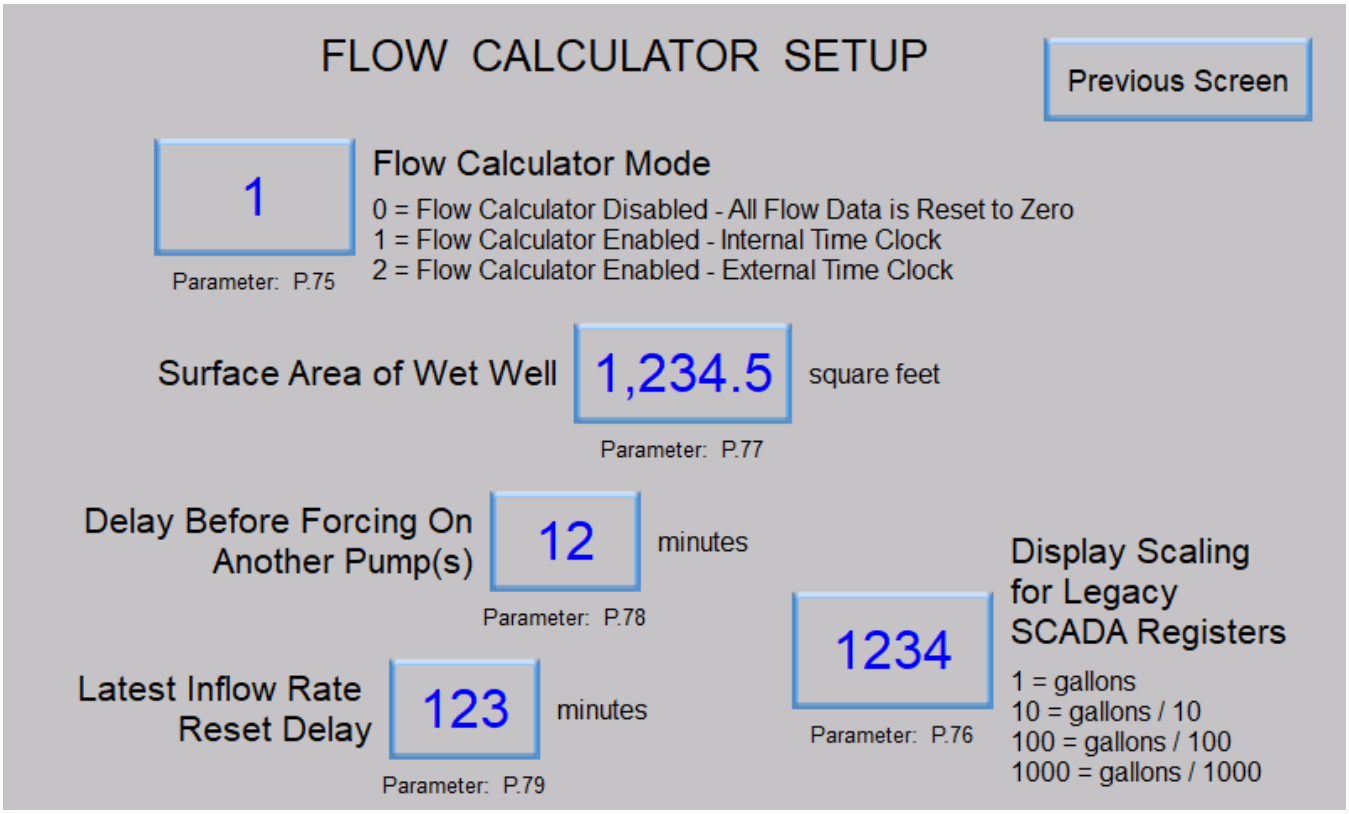

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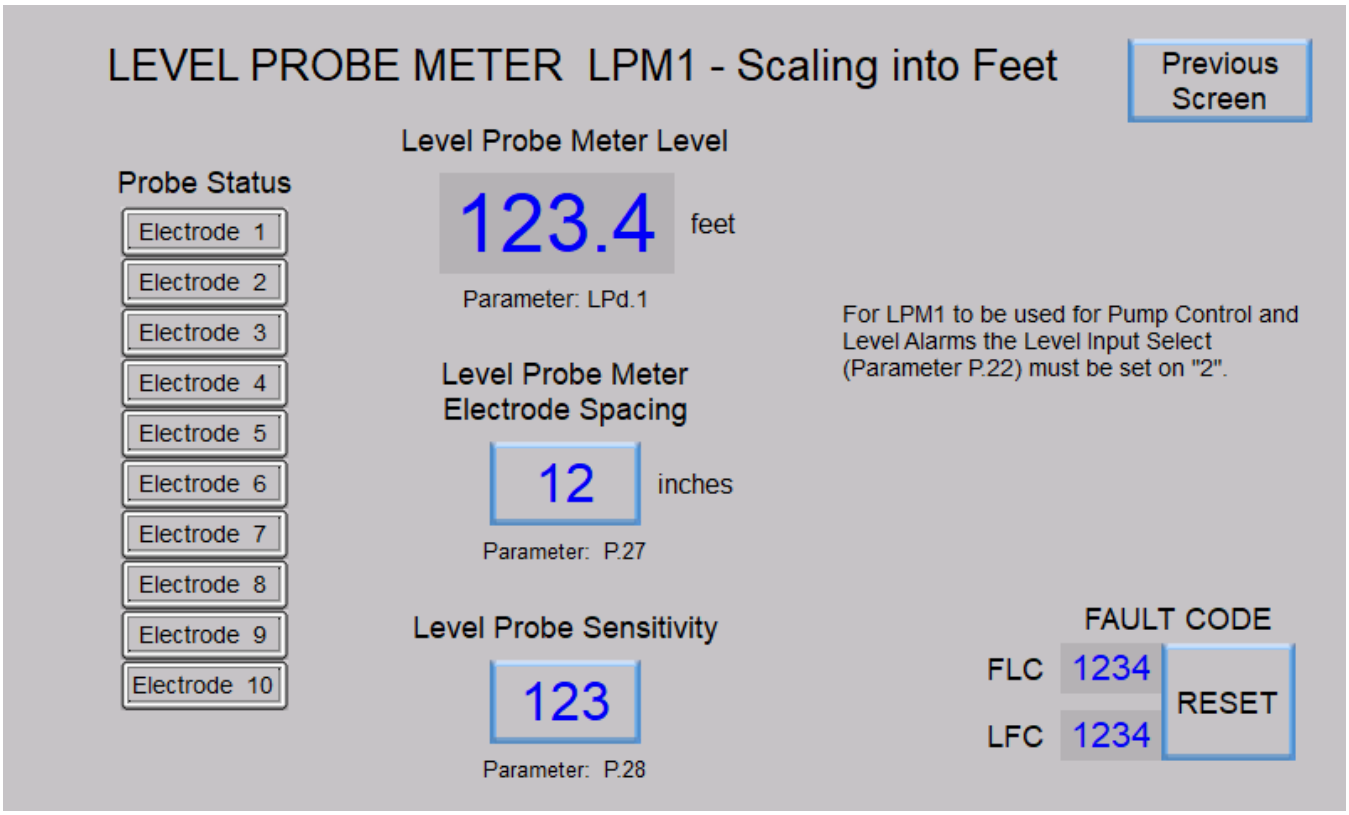

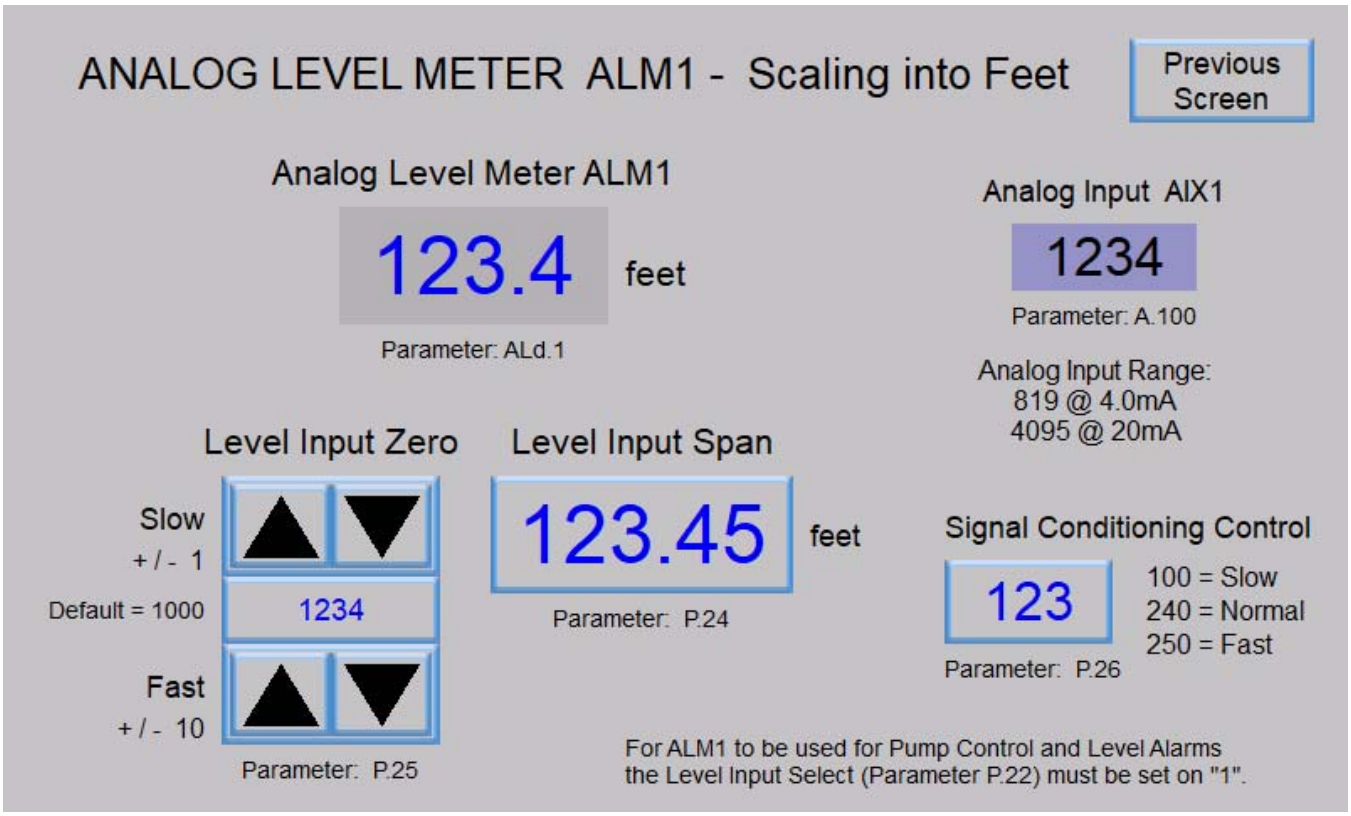

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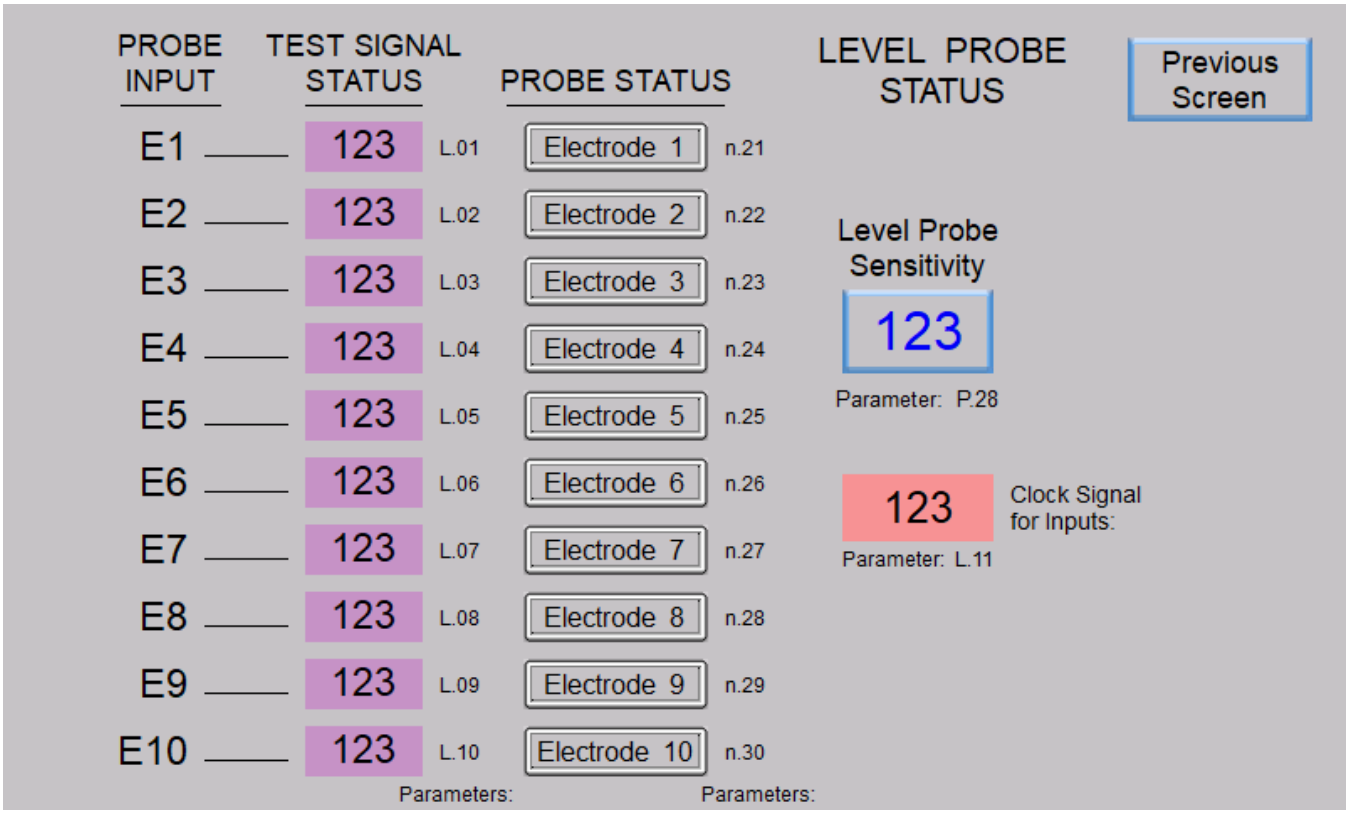

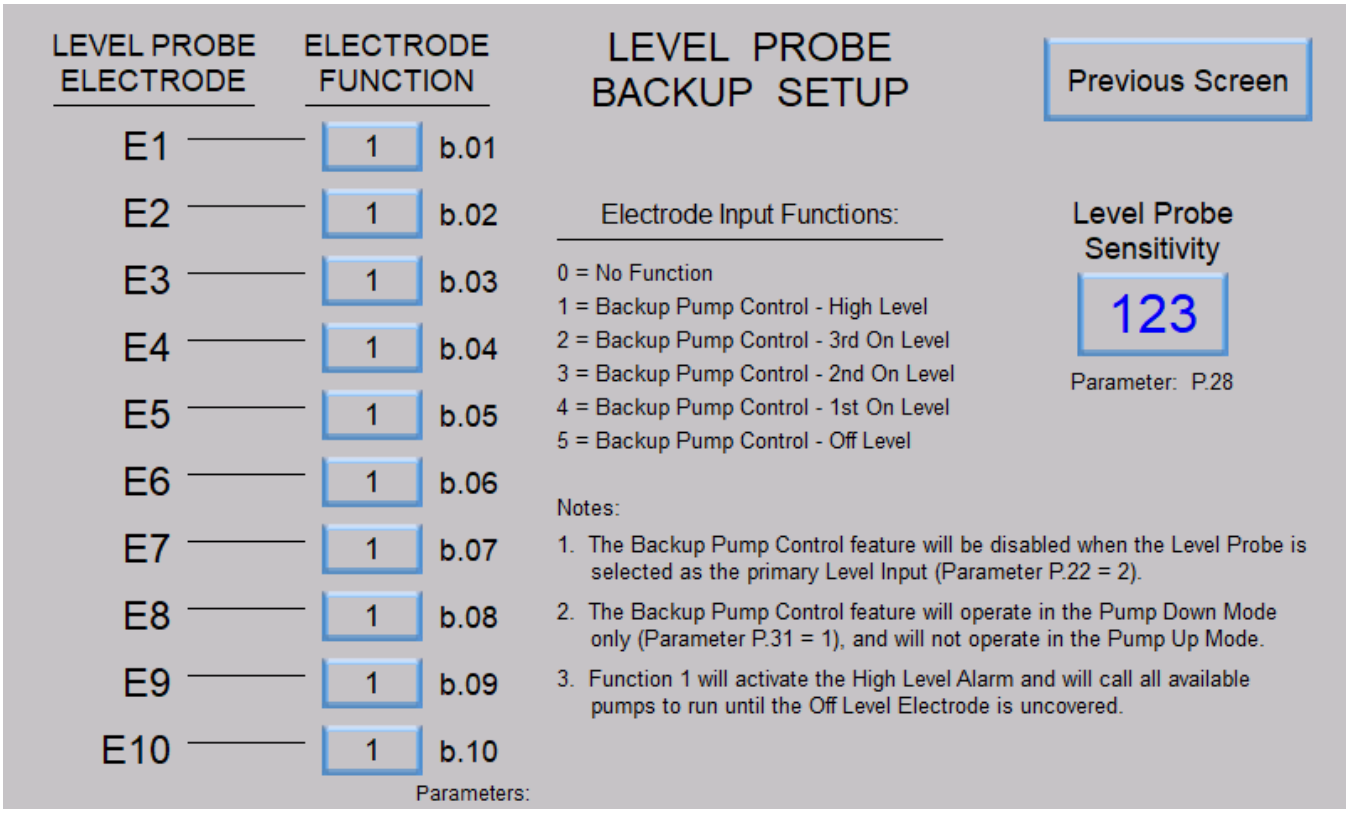

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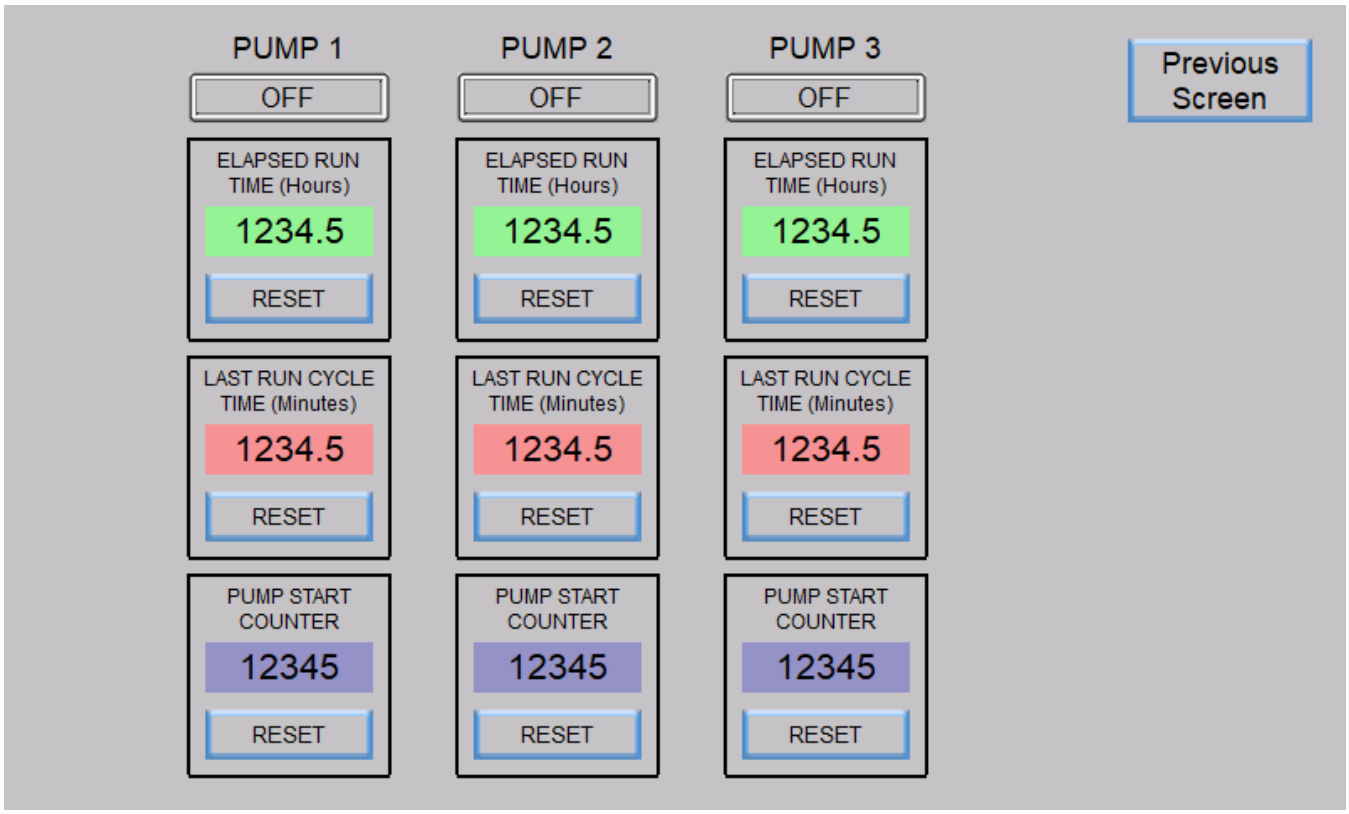

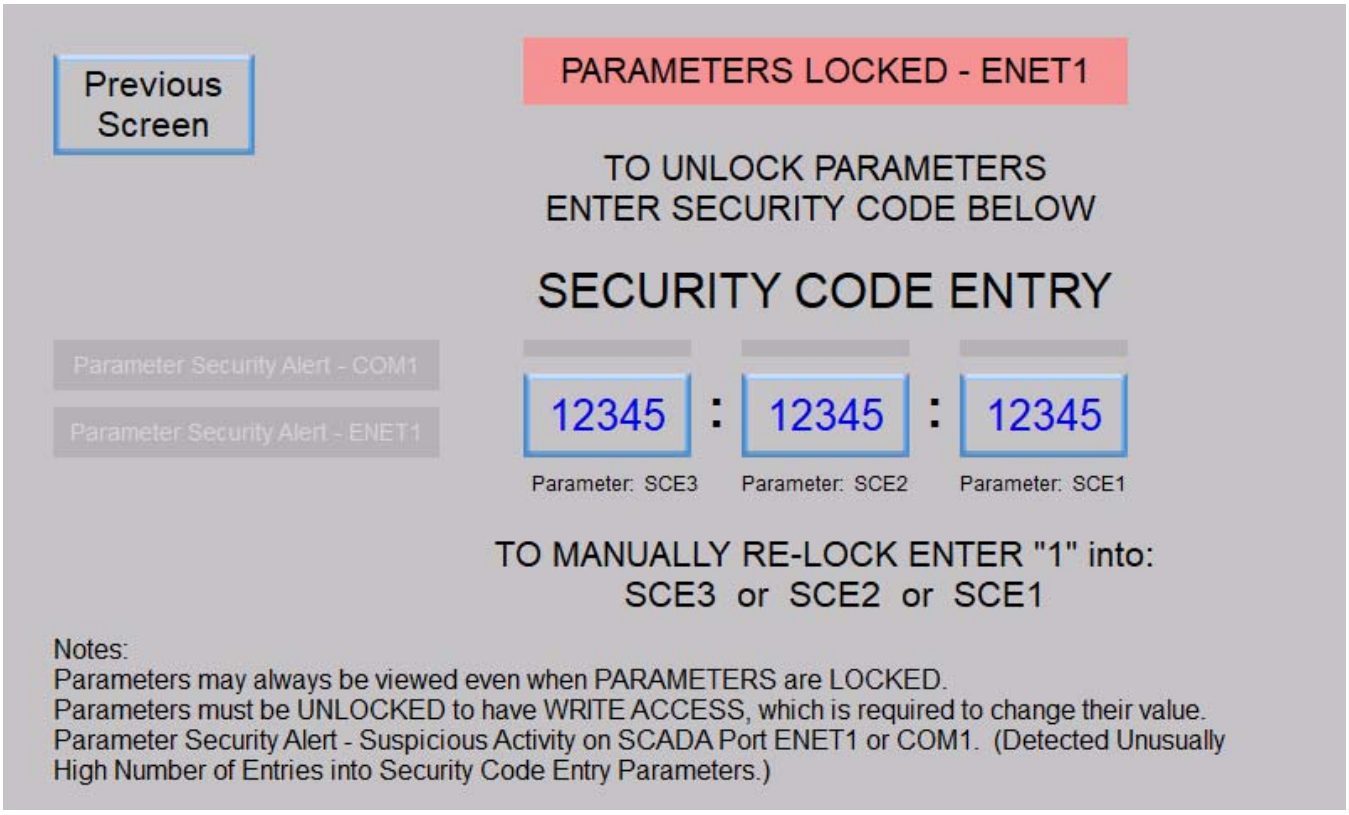

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