

Aphena Pharma Solutions 7978 Industrial Park Rd Easton, MD 21601

PHARMA ULTRAFLOW 110 PORTABLE CIP SYSTEM

SANI-MATIC # 107657

HUMAN MACHINE INTERFACE USER MANUAL

Table of Contents

U	ILTRAFLOW 110 CIP SYSTEM PV+ /	3
1.	.1 POWER-UP	3
1.	.2 LOGIN	
1.	.3 MAIN MENU SCREEN	8
1.	.4 CONTROLLER SCREEN	
1.	.5 MANUAL/OFF/AUTO POPUP SCREEN	11
1.	.6 MANUAL/OFF/AUTO DRAIN FLOW MODULATION VALVE POPUP SCREEN	12
1.	.7 MONITOR SCREEN	
1.	.8 ALARM BANNER	
1.	.9 ALARMS SCREEN	
1.	.10 RECIPE RUN SELECT SCREEN	16
1.	.11 UTILITY SCREEN	17
1.	.12 EDIT MENU SCREEN	
1.	.13 RECIPE EDIT SELECT SCREEN	19
1.	.14 EDIT RECIPE & SETPOINTS SCREEN	
Ε	DIT RECIPIE & SETPOINTS SCREEN (CONTINUED)	21
1.	.15 RECIPE OPCODES & TIMES SCREEN	22
1.	.16 OPCODE LIST SCREEN	
1.	.17 TEMPERATURE SETPOINTS SCREEN	25
1.	.18 CONDUCTIVITY SETPOINTS SCREEN #1	26
1.	.19 CONDUCTIVITY SETPOINTS SCREEN #2	27
1.	.20 CONDUCTIVITY SETPOINTS SCREEN #3	28
1.	.21 LEVEL SETPOINTS SCREEN	29
1.	.22 FLOW SETPOINTS SCREEN	
1.	.23 PRESSURE SETPOINTS SCREEN	
1.	.24 DRAIN COOLING SETPOINTS SCREEN	32
1.	.25 EQUIPMENT SELECT SETPOINTS SCREEN	33
1.	.26 VALVE PULSING SETPOINTS SCREEN	
1.	.27 PRINT SETPOINTS SCREEN	35
1.	.28 MANUAL FUNCTIONS WARNING SCREEN #1	
1.	.29 MAINTENANCE MENU SCREEN	37
	.30 MANUAL/OFF/AUTO OUTPUTS #1 SCREEN	
1.	.31 MANUAL/OFF/AUTO OUTPUTS #2 SCREEN	
1.	.32 INPUT STATUS SCREEN	40
	.33 SUPPLY FLOW PID CONTROLLER SCREEN	41
	.34 DRAIN COOLING TEMPERATURE PID CONTROLLER SCREEN	
	.35 MANUAL FUNCTIONS WARNING SCREEN #2	
1.	.36 EDIT USER SECURITY SCREEN #1	
1.	.42 EDIT DATE & TIME	
1.	.43 CONFIGURE PANELVIEW PLUS SCREEN	
1.	.44 ALARM HISTORY SCREEN	
1.	.45 ABOUT SCREEN	53

1 ULTRAFLOW 110 CIP SYSTEM PV+ 7

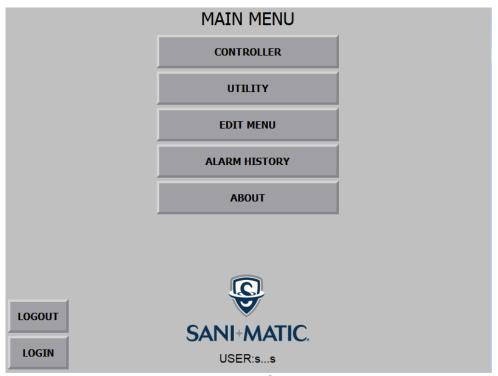
1.1 POWER-UP

This UltraFlow 110 CIP System Human Machine Interface (HMI) utilizes the Allen Bradley PV+ 7. On power-up, the unit automatically displays to the MAIN MENU screen. The operator or authorized personnel must LOGIN to access the following screens:

- CONTROLLER: (User access: Level 1, Level 2, Level 3)
- UTILITY: (User access: Level 1, Level 2, Level 3)
- EDIT MENU: (User access: Level 2, Level 3)

Access to the following screens does not require a LOGIN:

- MAIN MENU (Default)
- ALARM HISTORY (Default)
- ABOUT (Default)



Main Menu Screen

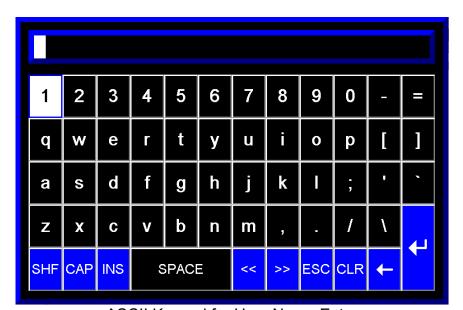
1.2 LOGIN



Login Entry Field Screen

Pressing the LOGIN key on the Main Menu screen displays the Login screen.

Pressing the ENTER USER NAME key on the Login screen displays an ASCII keypad screen for the Enter User Name Login.



ASCII Keypad for User Name Entry

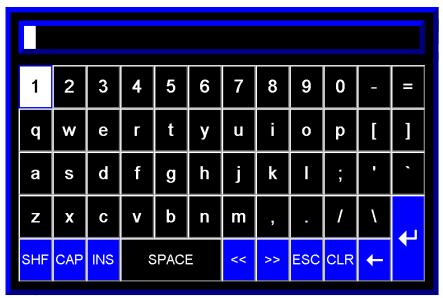
All alpha and numeric characters may be selected from the HMI ASCII keypad screen. Entering a correct User Name and pressing the Enter key () accepts the User Name entry.

LOGIN (cont.)



Login Entry Field Screen

Pressing the ENTER USER PASSWORD key from the Login screen displays an ASCII keypad screen for the Enter User Password Login.



ASCII Keypad for Password Entry

All alpha and numeric characters may be selected from the HMI ASCII keypad screen. Entering a correct password and pressing the Enter key () accepts the Password entry.

LOGIN (cont.)



Login Entry Field Screen

Pressing the Enter key (↵) key after entering the correct User Name and User Password accepts the Login and displays the USER name on the Main Menu screen.

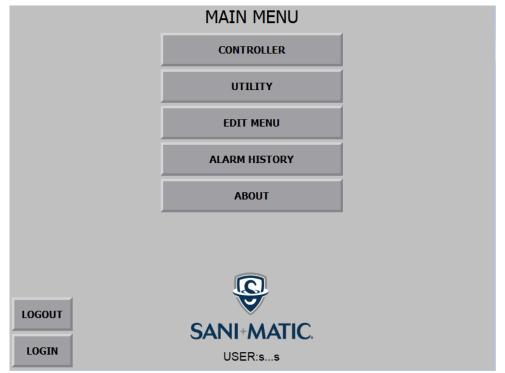
Pressing the Enter key (∠) key after entering an incorrect User Name and/or User Password, displays invalid User Name and/or Password.

Pressing the ESC key (Escape) before or after any login entry will clear the login entry field and display the Main Menu screen.



Main Menu

LOGIN (cont.)



Main Menu Screen

Pressing the LOGOUT key removes the USER from their logged in security level and displays DEFAULT in the USER field.

A DEFAULT user is prohibited from using the CONTROLLER, UTILITY and EDIT MENU screens.

1.3 MAIN MENU SCREEN

The MAIN MENU screen may only be used to access other screen areas of the PanelView.

Pressing the CONTROLLER key displays the CONTROLLER screen.

(User access: Level 1, Level 2, Level 3)

Pressing the UTILITY key displays the UTILITY screen.

(User access: Level 1, Level 2, Level 3)

Pressing the EDIT MENU key displays the EDIT MENU screen.

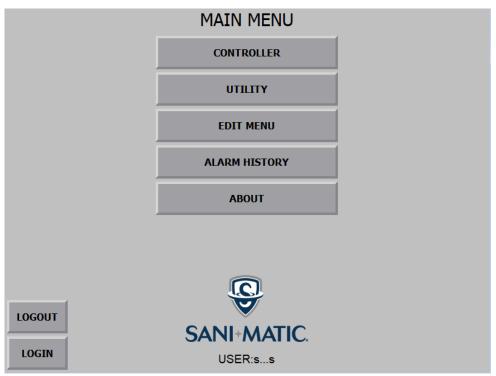
(User access: Level 2, Level 3)

Pressing the ALARM HISTORY key displays the ALARM HISTORY screen.

(User access: No login required)

Pressing the ABOUT key displays the ABOUT screen.

(User access: No login required)



Main Menu Screen

1.4 CONTROLLER SCREEN

The CONTROLLER screen is selected from the MAIN MENU screen and displays the current system status. If the system is running a recipe the screen displays the current Recipe, Operation, Time, Step #, and Messages.

Pressing the START key starts the recipe.

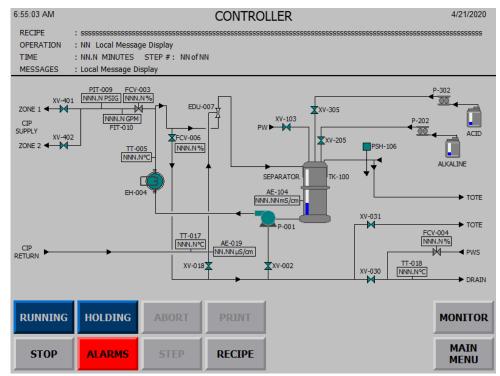
Pressing the STOP key stops the recipe - all outputs will be de-energized. The Time, Operation and Step are held at their current positions.

Pressing the HOLD key extends the current recipe step by holding or "freezing" the recipe timer. (User access: Level 2)

Pressing the ALARMS key displays the ALARMS screen.

Pressing the ABORT key after pressing the STOP key resets the recipe to the home position.

Pressing the STEP key after pressing the STOP key allows a user to advance the recipe to the next step manually. (User access: Level 2)



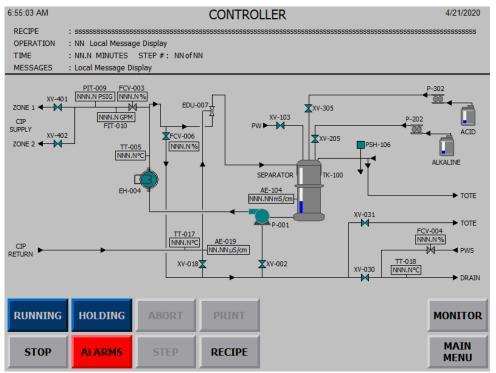
Controller Screen

CONTROLLER SCREEN (continued)

Pressing the RECIPE key displays the RECIPE RUN SELECT screen. The selection made in the RECIPE RUN SELECT screen will appear after the word "RECIPE" at the top of the CONTROLLER screen.

Pressing the MONITOR key displays the MONITOR screen.

Pressing the MAIN MENU key displays the MAIN MENU screen.



Controller Screen

RECIPE: displays the current active recipe in use or to be used.

OPERATION: displays the OpCode number and name of the OpCode that is currently being performed in the cleaning recipe.

TIME: displays time remaining in the current step (in tenths of minutes).

STEP #: displays the recipe step being performed in the cleaning recipe.

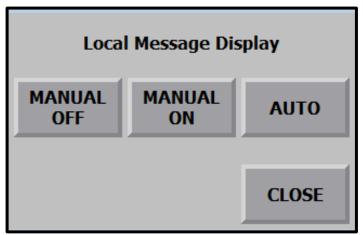
MESSAGES: displays all active messages.

1.5 MANUAL/OFF/AUTO POPUP SCREEN

The user may force an output On or Off in manual mode or may revert to fully Automatic operation.

Pressing the device on the CONTROLLER screen will display a POPUP screen which will allow manual control with the appropriate security LOGIN. (User access: Level 2)

Selecting CLOSE removes the Manual/Off/Auto pop up.



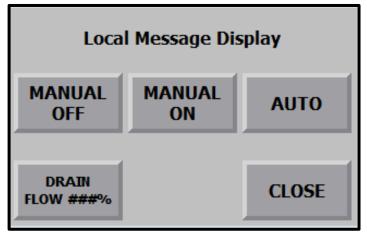
Manual/Off/Auto Pop Up

1.6 MANUAL/OFF/AUTO DRAIN FLOW MODULATION VALVE POPUP SCREEN

The user may force the output On or Off in manual mode or may revert to fully Automatic operation.

Pressing the DRAIN FLOW ### % key displays a keypad for the operator to enter a value to enable the DRAIN FLOW MODULATION VALVE.

Selecting CLOSE removes the Manual/Off/Auto pop up.



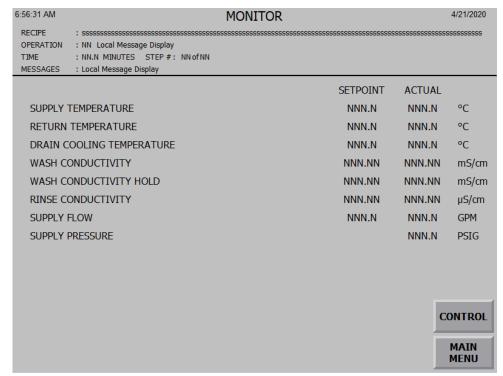
Manual/Off//Auto Drain Flow Modulation Valve Popup Screen

1.7 MONITOR SCREEN

The MONITOR screen is selected from the CONTROLLER screen and displays the current readings from all the system analog instruments. It also displays the current recipe setpoint for each of the instruments. If the system is running a recipe the screen displays the current Recipe, Operation, Time, and Step #, as well as any Messages.

Pressing the CONTROL key displays the CONTROLLER screen.

Pressing the MAIN MENU key displays the MAIN MENU screen.



Monitor Screen

RECIPE: displays the current active recipe in use or to be used.

OPERATION: displays the OpCode number and name of the OpCode that is currently being performed in the cleaning recipe.

TIME: displays time remaining in the current step (in tenths of minutes).

STEP #: displays the recipe step being performed in the cleaning recipe.

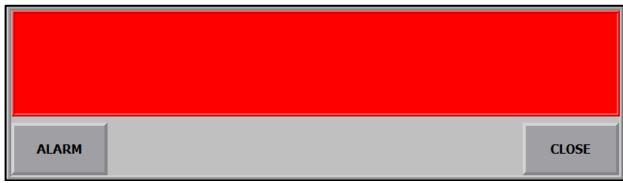
MESSAGES: displays all active messages.

1.8 ALARM BANNER

The ALARM BANNER is displayed when a system shut down alarm occurs.

Pressing the ALARM key displays the ALARMS screen.

Pressing the CLOSE key removes the Alarm Banner from the screen.



Alarm Banner

1.9 ALARMS SCREEN

The ALARMS screen is displayed when the ALARM key is selected on the ALARM BANNER screen or by pressing the ALARMS key on the CONTROLLER screen.

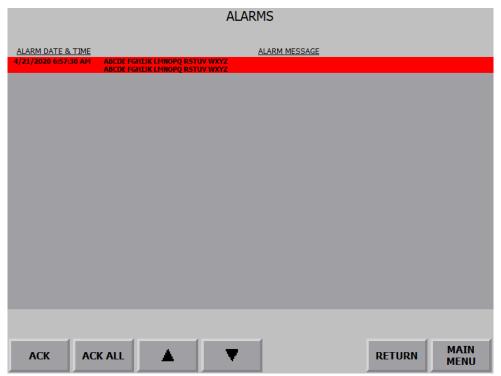
Pressing the up and down arrow keys allows the operator to scroll through the alarms displayed on the screen.

Pressing the ACK key acknowledges the alarm actively highlighted on the screen. After an alarm is acknowledged, the alarm message is removed from the screen and displayed on the ALARM HISTORY screen. If an alarm condition is still present, the alarm delay timer times out and the alarm is displayed again.

Pressing the ACK ALL key acknowledges all alarms actively displayed on the screen. After ACK ALL is pressed, all of the alarm messages are removed from the screen and displayed on the ALARM HISTORY screen. If an alarm condition is still present, the alarm delay timer times out and the alarm is displayed again.

Pressing the RETURN key displays the CONTROLLER screen.

Pressing the MAIN MENU key displays the MAIN MENU screen.

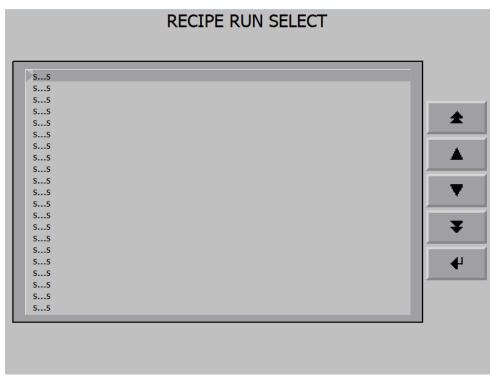


Alarms Screen

1.10 RECIPE RUN SELECT SCREEN

The RECIPE RUN SELECT screen is displayed when the RECIPE key is selected from the CONTROLLER screen.

Selecting a recipe using the up and down arrow keys and pressing the Enter () key will display the CONTROLLER screen and the recipe selected will appear after the word **RECIPE** near the top of the screen.



Recipe Run Select Screen

1.11 UTILITY SCREEN

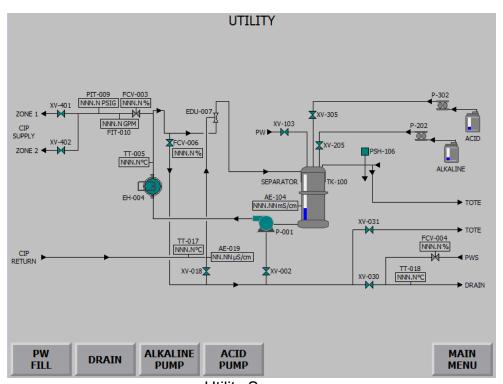
The UTILITY screen is selected from the MAIN MENU screen and may be used to operate common manual functions on the system.

All outputs are de-energized on a loss of power, pressing the E-stop button, or when the operator returns to the MAIN MENU screen.

Pressing a function key associated with an output will cause the output to go on and the key to turn from gray to blue.

Pressing the function key, a second time will disable the output and the key will turn from blue to gray.

Pressing the MAIN MENU key displays the MAIN MENU screen.



Utility Screen

1.12 EDIT MENU SCREEN

The EDIT MENU screen is selected from the MAIN MENU screen. Access to the edit level selections on the Edit Menu screen is based on the password level login. All Passwords are edited through the Edit User Security screens. (see below)

Pressing the EDIT RECIPE & SETPOINTS key displays the RECIPE EDIT SELECT screen. (User access: Level 3)

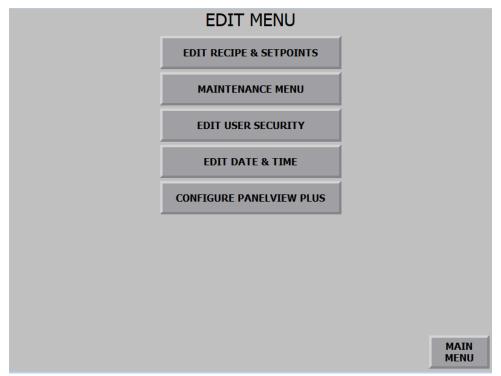
Pressing the MAINTENANCE MENU key displays the first MANUAL FUNCTIONS WARNING screen to the MAINTENANCE MENU screen. (User access: Level 2, Level 3)

Pressing the EDIT USER SECURITY key displays the EDIT USER SECURITY screen. (User access: Level 3)

Pressing the EDIT DATE & TIME key displays the EDIT DATE & TIME screen. (User access: Level 3)

Pressing the CONFIGURE PANELVIEW PLUS key displays the CONFIGURE PANELVIEW PLUS screen. (User access: Level 3)

Pressing the MAIN MENU key displays the MAIN MENU screen.



Edit Menu Screen

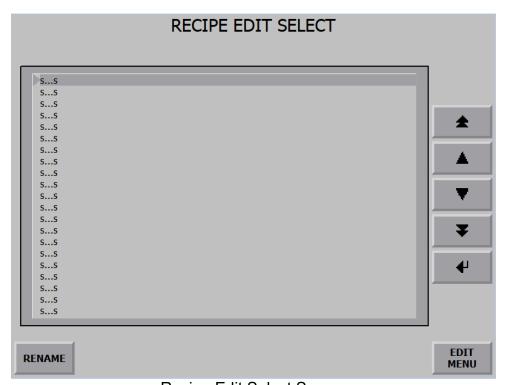
1.13 RECIPE EDIT SELECT SCREEN

The RECIPE EDIT SELECT screen is displayed when EDIT RECIPE & SETPOINTS is selected from the EDIT MENU screen. This screen displays all of the available recipe selections. The recipe selection is displayed on the edit recipe setpoint screens after the word **RECIPE** at the top of each screen.

Press the up or down arrow keys to the desired recipe selection then press the enter key $(\ \)$ to display the EDIT RECIPE & SETPOINTS screen.

Pressing the RENAME key displays an ASCII keypad screen to let the USER change the selected recipe name.

Pressing the EDIT MENU key displays the EDIT MENU screen.



Recipe Edit Select Screen

1.14 EDIT RECIPE & SETPOINTS SCREEN

The EDIT RECIPE & SETPOINTS screen displays all the available Setpoint screen selections.

Pressing the RECIPE OPCODES & TIMES key displays the RECIPE OPCODES & TIMES screen.

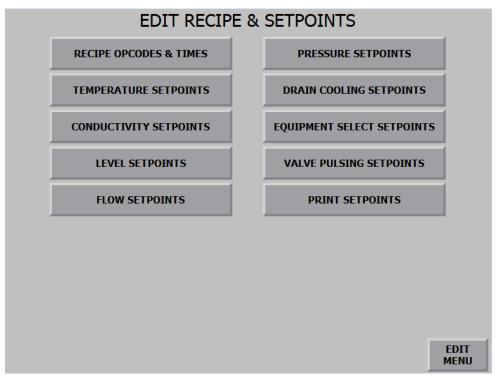
Pressing the TEMPERATURE SETPOINTS key displays the TEMPERATURE SETPOINTS screen.

Pressing the CONDUCTIVITY SETPOINTS key displays the first CONDUCTIVITY SETPOINTS screen.

Pressing the LEVEL SETPOINTS key displays the LEVEL SETPOINTS screen.

Pressing the FLOW SETPOINTS key displays the FLOW SETPOINTS screen.

Pressing the PRESSURE SETPOINTS key displays the PRESSURE SETPOINTS screen.



Edit Recipe & Setpoints Screen

EDIT RECIPIE & SETPOINTS SCREEN (continued)

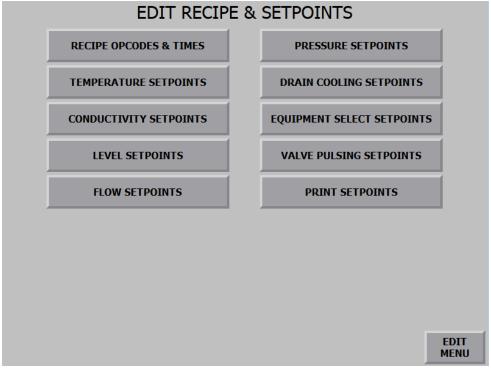
Pressing the DRAIN COOLING SETPOINTS key displays the DRAIN COOLING SETPOINTS screen.

Pressing the EQUIPMENT SELECT SETPOINTS key displays the EQUIPMENT SELECT SETPOINTS screen.

Pressing the VALVE PULSING SETPOINTS key displays the VALVE PULSING SETPOINTS screen.

Pressing the PRINT SETPOINTS key displays the PRINT SETPOINTS screen.

Pressing the EDIT MENU key displays the EDIT MENU screen.



Edit Recipe & Setpoints Screen

1.15 RECIPE OPCODES & TIMES SCREEN

The RECIPE OPCODES & TIMES screen is displayed when the RECIPE OPCODES & TIMES key is selected from the EDIT RECIPE & SETPOINTS screen. This screen allows authorized personnel to edit the selected recipe OpCodes and Times step by step.

To select an OpCode or Time, press the up and down arrow keys to highlight the desired selection.

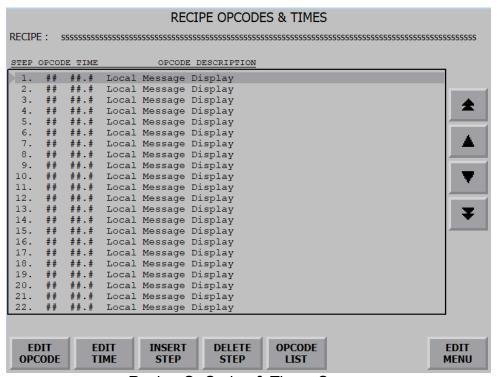
Pressing the EDIT OPCODE key displays a number keypad, prompting the user for a new value to enter for the opcode number. When the new number is entered, the number keypad is removed and the new number is in the selected display.

Pressing the EDIT TIME key displays a number keypad, prompting the user for a new value to enter for the time value. When the new number is entered, the number keypad is removed and the new number is in the selected display.

Pressing the INSERT STEP key inserts a new step and indexes the remaining steps down by one.

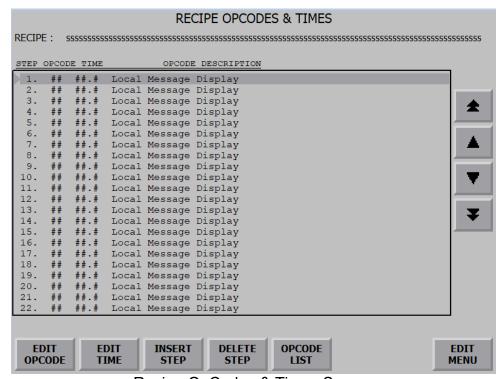
Pressing the DELETE STEP key removes the current step selected and indexes the remaining steps up by one.

Pressing the OPCODE LIST key displays the OPCODE LIST screen.



Recipe OpCodes & Times Screen

RECIPE OPCODES & TIMES SCREEN (continued)



Recipe OpCodes & Times Screen

RECIPE: displays the current recipe to be edited.

STEP #: displays the current recipe step.

OPCODE: displays the OpCode number and name of the operation.

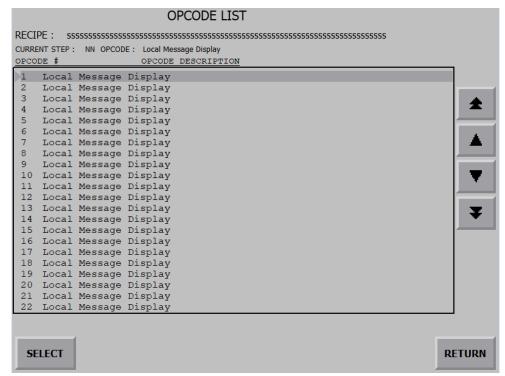
TIME: displays time in the current step (in tenths of minutes) and represents the length of a step once conditions are met.

1.16 OPCODE LIST SCREEN

The OPCODE LIST screen is selected from the EDIT RECIPE OPCODES & TIMES screen.

The up / down cursor keys are used to highlight the desired opcode selection. Pressing the SELECT key adds the selected OpCode to the recipe being edited in the step (Current Step) displayed.

Pressing the RETURN key displays the RECIPE OPCODES & TIMES screen.



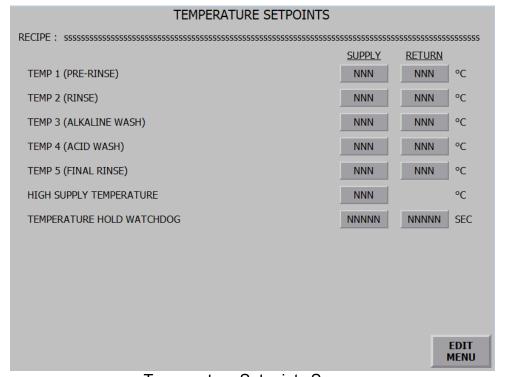
OpCode List Screen

1.17 TEMPERATURE SETPOINTS SCREEN

The TEMPERATURE SETPOINTS screen is displayed when the TEMPERATURE SETPOINTS key is pressed on the EDIT RECIPE & SETPOINTS screen. Authorized personnel may edit the selected recipe with specific Supply and Return Temperature settings.

RECIPE: displays the current recipe to be edited.

Pressing a data field key [NNN] displays a keypad prompting the operator for a new setpoint value. When the new setpoint is entered and the ENTER key (-) is pressed, the keypad is removed and the new setpoint is displayed in the selected field.



Temperature Setpoints Screen

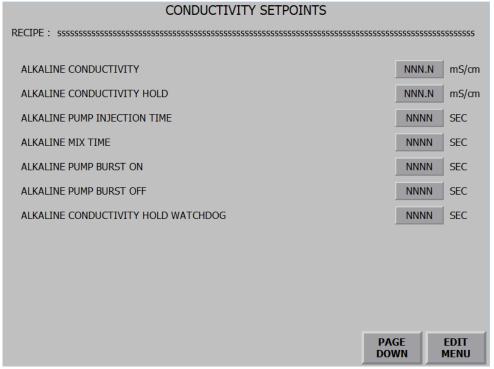
1.18 CONDUCTIVITY SETPOINTS SCREEN #1

The first CONDUCTIVITY SETPOINTS screen is displayed when the CONDUCTIVITY SETPOINTS key is pressed on the EDIT RECIPE & SETPOINTS screen. Authorized personnel may edit the selected recipe Alkaline Conductivity settings.

RECIPE: displays the current recipe to be edited.

Pressing a data field key [NNN] displays a keypad prompting the operator for a new setpoint value. When the new setpoint is entered and the ENTER key (-) is pressed, the keypad is removed and the new setpoint is displayed in the selected field.

Pressing the PAGE DOWN key displays the second CONDUCTIVITY SETPOINTS screen.



Conductivity Setpoints Screen #1

1.19 CONDUCTIVITY SETPOINTS SCREEN #2

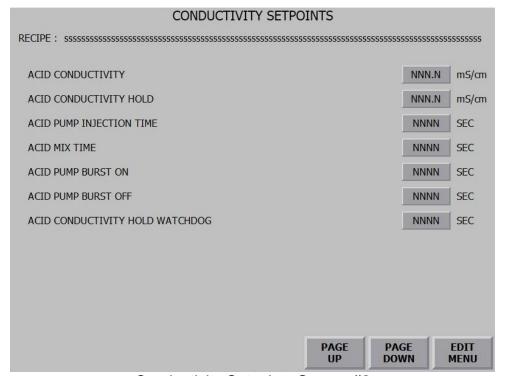
The second CONDUCTIVITY SETPOINTS screen is displayed when the PAGE DOWN key is pressed on the first CONDUCTIVITY SETPOINTS screen. Authorized personnel may edit the selected recipe Acid Conductivity settings.

RECIPE: displays the current recipe to be edited.

Pressing a data field key [NNN] displays a keypad prompting the operator for a new setpoint value. When the new setpoint is entered and the ENTER key (-) is pressed, the keypad is removed and the new setpoint is displayed in the selected field.

Pressing the PAGE UP key displays the first CONDUCTIVITY SETPOINTS screen.

Pressing the PAGE DOWN key displays the third CONDUCTIVITY SETPOINTS screen.



Conductivity Setpoints Screen #2

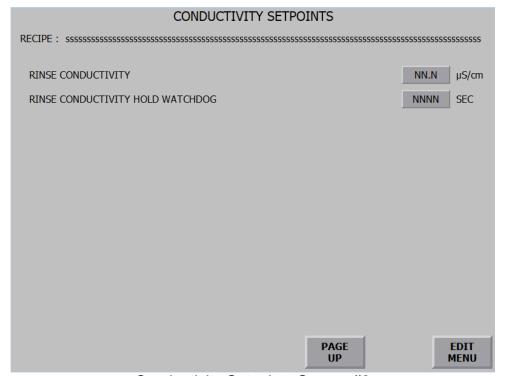
1.20 CONDUCTIVITY SETPOINTS SCREEN #3

The third CONDUCTIVITY SETPOINTS screen is displayed when the PAGE DOWN key is pressed on the second CONDUCTIVITY SETPOINTS screen. Authorized personnel may edit the selected recipe Rinse Conductivity settings.

RECIPE: displays the current recipe to be edited.

Pressing a data field key [NNN] displays a keypad prompting the operator for a new setpoint value. When the new setpoint is entered and the ENTER key (-) is pressed, the keypad is removed and the new setpoint is displayed in the selected field.

Pressing the PAGE UP key displays the second CONDUCTIVITY SETPOINTS screen.



Conductivity Setpoints Screen #3

1.21 LEVEL SETPOINTS SCREEN

The LEVEL SETPOINTS screen is displayed when the LEVEL SETPOINTS key is pressed on the EDIT RECIPE & SETPOINTS screen. Authorized personnel may edit the selected recipe Separator Level settings.

RECIPE: displays the current recipe to be edited.

Pressing a data field key [NNN] displays a keypad prompting the user for a new setpoint value. When the new setpoint is entered and the ENTER key (-!) is pressed, the keypad is removed and the new setpoint is displayed in the selected field.



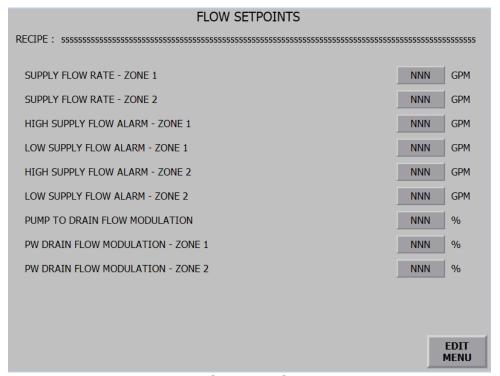
Level Setpoints Screen

1.22 FLOW SETPOINTS SCREEN

The FLOW SETPOINTS screen is displayed when the FLOW SETPOINTS key is pressed on the EDIT RECIPE & SETPOINTS screen. Authorized personnel may edit the selected recipe Flow settings.

RECIPE: displays the current recipe to be edited.

Pressing a data field key [NNN] displays a keypad prompting the operator for a new setpoint value. When the new setpoint is entered and the ENTER key (-) is pressed, the keypad is removed and the new setpoint is displayed in the selected field.



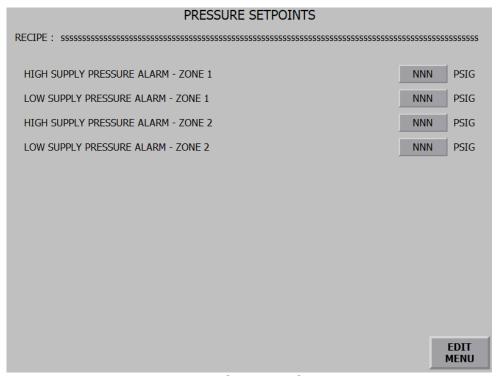
Flow Setpoints Screen

1.23 PRESSURE SETPOINTS SCREEN

The PRESSURE SETPOINTS screen is displayed when the PRESSURE SETPOINTS key is pressed on the EDIT RECIPE & SETPOINTS screen. Authorized personnel may edit the selected recipe Pressure settings.

RECIPE: displays the current recipe to be edited.

Pressing a data field key [NNN] displays a keypad prompting the operator for a new setpoint value. When the new setpoint is entered and the ENTER key (-) is pressed, the keypad is removed and the new setpoint is displayed in the selected field.



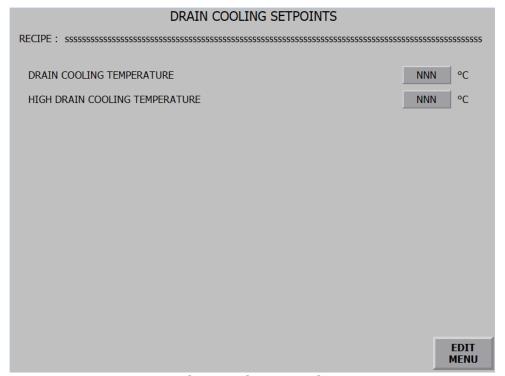
Pressure Setpoints Screen

1.24 DRAIN COOLING SETPOINTS SCREEN

The DRAIN COOLING SETPOINTS screen is displayed when the DRAIN COOLING SETPOINTS key is pressed on the EDIT RECIPE & SETPOINTS screen. Authorized personnel may edit the selected recipe Drain Cooling settings.

RECIPE: displays the current recipe to be edited.

Pressing a data field key [NNN] displays a keypad prompting the operator for a new setpoint value. When the new setpoint is entered and the ENTER key (-) is pressed, the keypad is removed and the new setpoint is displayed in the selected field.



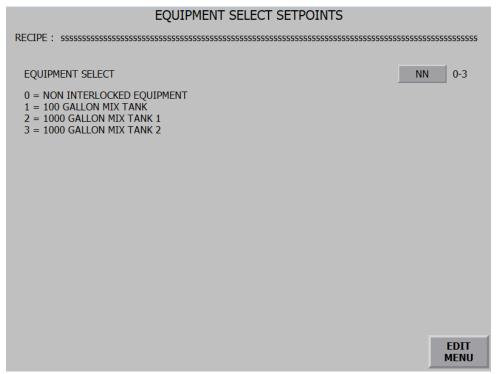
Drain Cooling Setpoints Screen

1.25 EQUIPMENT SELECT SETPOINTS SCREEN

The EQUIPMENT SELECT SETPOINTS screen is displayed when the EQUIPMENT SELECT SETPOINTS key is pressed on the EDIT RECIPE & SETPOINTS screen. Authorized personnel may edit the selected recipe Equipment settings.

RECIPE: displays the current recipe to be edited.

Pressing a data field key [NNN] displays a keypad prompting the operator for a new setpoint value. When the new setpoint is entered and the ENTER key (-) is pressed, the keypad is removed and the new setpoint is displayed in the selected field.



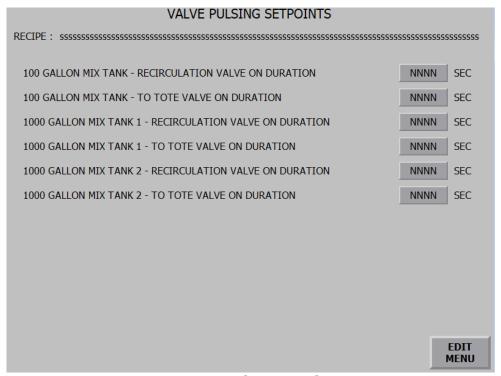
Equipment Select Setpoints Screen

1.26 VALVE PULSING SETPOINTS SCREEN

The VALVE PULSING SETPOINTS screen is displayed when the VALVE PULSING SETPOINTS key is pressed on the EDIT RECIPE & SETPOINTS screen. Authorized personnel may edit the selected recipe Valve settings.

RECIPE: displays the current recipe to be edited.

Pressing a data field key [NNN] displays a keypad prompting the operator for a new setpoint value. When the new setpoint is entered and the ENTER key (-) is pressed, the keypad is removed and the new setpoint is displayed in the selected field.



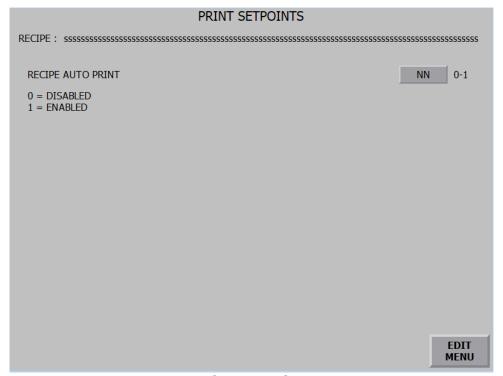
Valve Pulsing Setpoints Screen

1.27 PRINT SETPOINTS SCREEN

The PRINT SETPOINTS screen is displayed when the PRINT SETPOINTS key is pressed on the EDIT RECIPE & SETPOINTS screen. Authorized personnel may edit the selected recipe Recipe Print settings.

RECIPE: displays the current recipe to be edited.

Pressing a data field key [NNN] displays a keypad prompting the operator for a new setpoint value. When the new setpoint is entered and the ENTER key (-) is pressed, the keypad is removed and the new setpoint is displayed in the selected field.



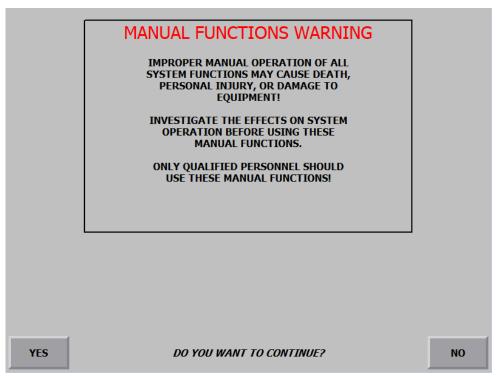
Print Setpoints Screen

1.28 MANUAL FUNCTIONS WARNING SCREEN #1

The first MANUAL FUNCTIONS WARNING screen is displayed when MAINTENANCE MENU is selected from the EDIT MENU screen.

Pressing the YES key displays the MAINTENANCE MENU screen.

Pressing the NO key displays EDIT MENU screen.



Maintenance Disclaimer Screen

1.29 MAINTENANCE MENU SCREEN

The MAINTENANCE MENU screen is displayed when the YES key is selected from the MAINTENANCE DISCLAIMER screen and allows authorized personnel to display the available screen selections.

Pressing the MANUAL/OFF/AUTO OUTPUTS #1 key displays the MANUAL/OFF/AUTO OUTPUTS #1 screen.

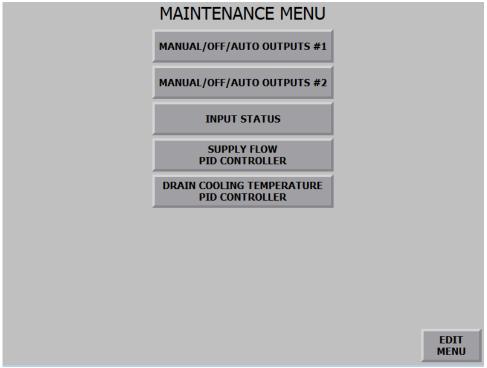
Pressing the MANUAL/OFF/AUTO OUTPUTS #2 key displays the MANUAL/OFF/AUTO OUTPUTS #2 screen.

Pressing the INPUT STATUS key displays the INPUT STATUS screen.

Pressing the SUPPLY FLOW PID CONTROLLER key displays the SUPPLY FLOW PID CONTROLLER screen.

Pressing the DRAIN COOLING TEMPERATURE PID CONTROLLER key displays the DRAIN COOLING TEMPERATURE PID CONTROLLER screen.

Pressing the EDIT MENU key displays the MAINTENANCE WARNING screen.



Maintenance Menu Screen

1.30 MANUAL/OFF/AUTO OUTPUTS #1 SCREEN

The MANUAL/OFF/AUTO OUTPUTS #1 screen is selected from the MAINTENANCE MENU screen and allows authorized personnel to force any solenoid, valve, pump, or other output device associated with the system into an unconditional ON or OFF state.

Pressing the E-stop button de-energizes all outputs.

To select a device, press the up or down arrow keys to highlight the desired selection.

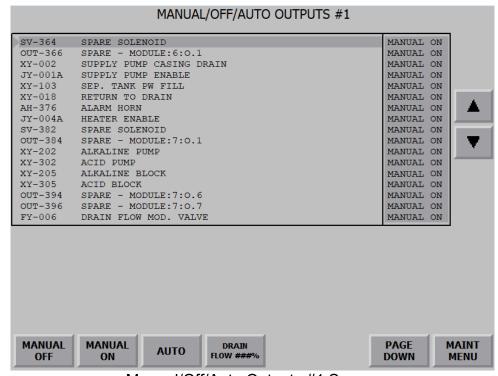
Pressing the MANUAL OFF key sets the selected device in a MANUAL OFF unconditional state.

Pressing the MANUAL ON key sets the selected device in a MANUAL ON unconditional state.

Pressing the AUTO key sets the selected device in an AUTOMATIC MODE to enable the processor to activate that device.

Pressing the DRAIN FLOW ###% key will enable the DRAIN FLOW MODULATION VALVE.

Pressing the PAGE DOWN key displays the MANUAL/OFF/AUTO OUTPUTS #2 screen.



Manual/Off/Auto Outputs #1 Screen

1.31 MANUAL/OFF/AUTO OUTPUTS #2 SCREEN

The MANUAL/OFF/AUTO OUTPUTS #2 screen is selected from the MAINTENANCE MENU screen and allows authorized personnel to force any solenoid, valve, pump, or other output device associated with the system into an unconditional ON or OFF state.

Pressing the E-stop button de-energizes all outputs.

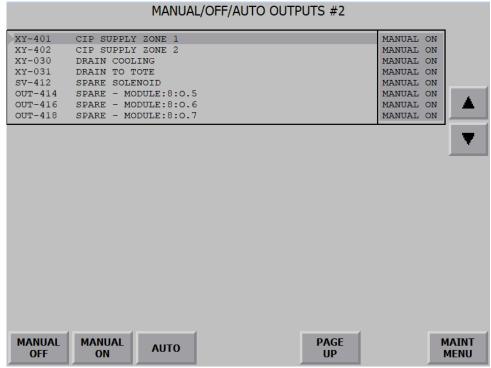
To select a device, press the up or down arrow keys to highlight the desired selection.

Pressing the MANUAL OFF key sets the selected device in a MANUAL OFF unconditional state.

Pressing the MANUAL ON key sets the selected device in a MANUAL ON unconditional state.

Pressing the AUTO key sets the selected device in an AUTOMATIC MODE to enable the processor to activate that device.

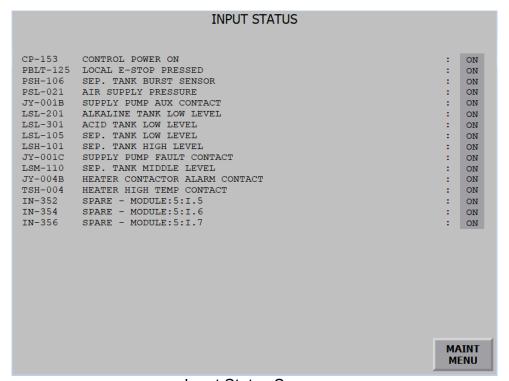
Pressing the PAGE UP key displays MANUAL/OFF/AUTO OUTPUTS #1 screen.



Manual/Off/Auto Outputs #2 Screen

1.32 INPUT STATUS SCREEN

The INPUT STATUS screen is selected from the MAINTENANCE MENU screen and allows authorized personnel to view the ON or OFF condition of any digital input device associated with the system.



Input Status Screen

1.33 SUPPLY FLOW PID CONTROLLER SCREEN

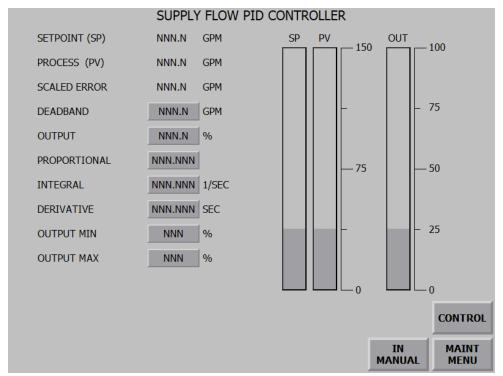
The SUPPLY FLOW PID CONTROLLER screen is selected from the MAINTENANCE MENU screen and allows authorized personnel access to tuning parameters and manual output control.

Pressing a data field key [NNN] displays a keypad prompting the operator for a new setpoint value. When the new setpoint is entered and the ENTER key (◄) is pressed, the keypad is removed and the new setpoint is displayed in the selected field.

Pressing the IN MANUAL key toggles the key display between MANUAL and AUTO. Pressing the IN MANUAL key will change the key from IN MANUAL to IN AUTO and place the PID control into an auto mode. When "IN AUTO" is displayed, the PLC enters a value into the OUTPUT % field.

Pressing the IN AUTO key toggles the key display between AUTO and MANUAL. Pressing the IN AUTO key will change the key from IN AUTO to IN MANUAL and place the PID control into a manual mode. When "IN MANUAL" is displayed, a value can be entered in the OUTPUT % field.

Pressing the CONTROL key displays the CONTROLLER screen.



Supply Flow PID Controller Screen

1.34 DRAIN COOLING TEMPERATURE PID CONTROLLER SCREEN

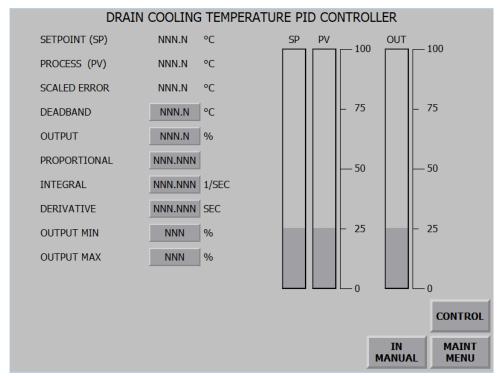
The DRAIN COOLING TEMPERATURE PID CONTROLLER screen is selected from the MAINTENANCE MENU screen and allows authorized personnel access to tuning parameters and manual output control.

Pressing a data field key [NNN] displays a keypad prompting the operator for a new setpoint value. When the new setpoint is entered and the ENTER key (-) is pressed, the keypad is removed and the new setpoint is displayed in the selected field.

Pressing the IN MANUAL key toggles the key display between MANUAL and AUTO. Pressing the IN MANUAL key will change the key from IN MANUAL to IN AUTO and place the PID control into an auto mode. When "IN AUTO" is displayed, the PLC enters a value into the OUTPUT % field.

Pressing the IN AUTO key toggles the key display between AUTO and MANUAL. Pressing the IN AUTO key will change the key from IN AUTO to IN MANUAL and place the PID control into a manual mode. When "IN MANUAL" is displayed, a value can be entered in the OUTPUT % field.

Pressing the CONTROL key displays the CONTROLLER screen.

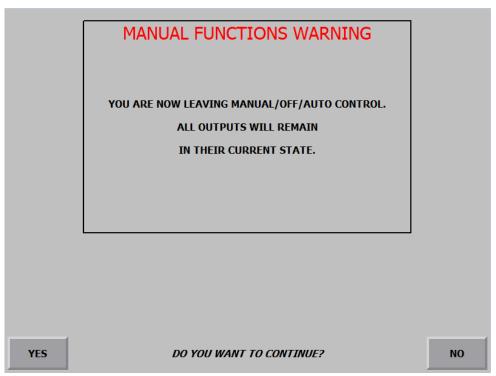


Drain Cooling Temperature PID Controller Screen

1.35 MANUAL FUNCTIONS WARNING SCREEN #2

The MANUAL FUNCTIONS WARNING screen #2 is displayed when the EDIT MENU key is selected from the MAINTENANCE MENU screen.

Pressing the YES key displays the EDIT MENU screen.

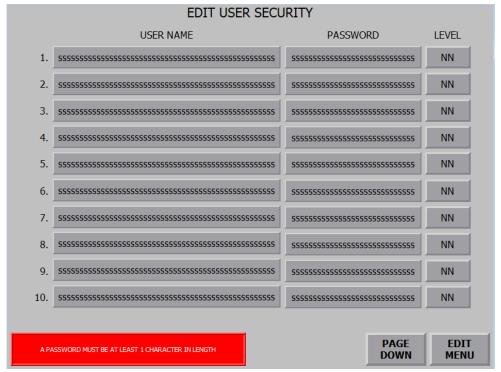


Maintenance Warning Screen

1.36 EDIT USER SECURITY SCREEN #1

The first EDIT USER SECURITY screen is selected from the EDIT MENU screen and allows authorized personnel to make changes to a User Name, Password and Level.

Pressing the PAGE DOWN key displays the second EDIT USER SECURITY screen.



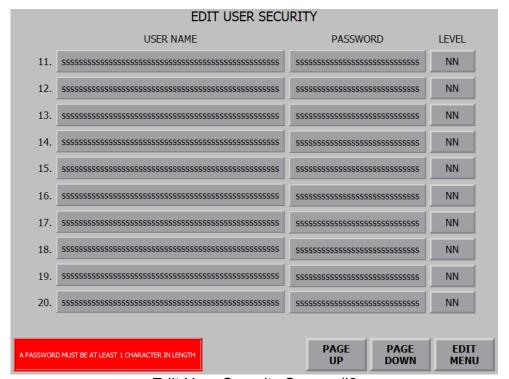
Edit User Security Screen #1

1.37 EDIT USER SECURITY SCREEN #2

The second EDIT USER SECURITY screen is displayed when the PAGE DOWN key is selected from the first EDIT USER SECURITY screen. This screen allows authorized personnel to make changes to a User Name, Password and Level.

Pressing the PAGE UP key displays the first EDIT USER SECURITY screen.

Pressing the PAGE DOWN key displays the third EDIT USER SECURITY screen.



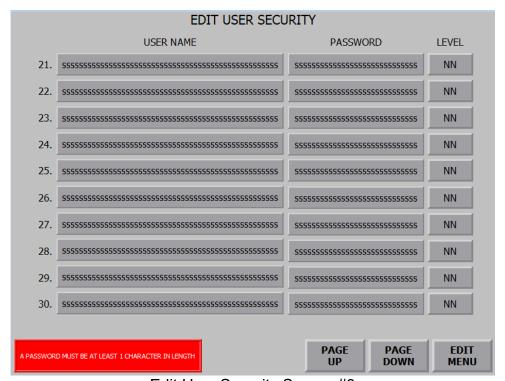
Edit User Security Screen #2

1.38 EDIT USER SECURITY SCREEN #3

The third EDIT USER SECURITY screen is displayed when the PAGE DOWN key is selected from the second EDIT USER SECURITY screen. This screen allows authorized personnel to make changes to a User Name, Password and Level.

Pressing the PAGE UP key displays the second EDIT USER SECURITY screen.

Pressing the PAGE DOWN key displays the fourth EDIT USER SECURITY screen.



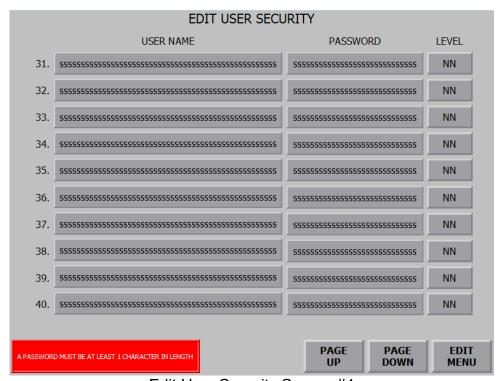
Edit User Security Screen #3

1.39 EDIT USER SECURITY SCREEN #4

The fourth EDIT USER SECURITY screen is displayed when the PAGE DOWN key is selected from the third EDIT USER SECURITY screen. This screen allows authorized personnel to make changes to a User Name, Password and Level.

Pressing the PAGE UP key displays the third EDIT USER SECURITY screen.

Pressing the PAGE DOWN key displays the fifth EDIT USER SECURITY screen.



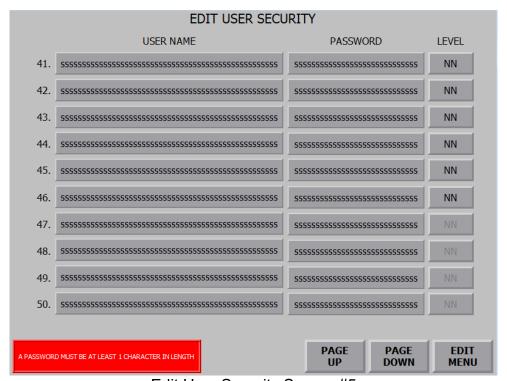
Edit User Security Screen #4

1.40 EDIT USER SECURITY SCREEN #5

The fifth EDIT USER SECURITY #5 screen is displayed when the PAGE DOWN key is selected from the fourth EDIT USER SECURITY screen. This screen allows authorized personnel to make changes to a User Name, Password and Level.

Pressing the PAGE UP key displays the fourth EDIT USER SECURITY screen.

Pressing the PAGE DOWN key displays the sixth EDIT USER SECURITY screen.

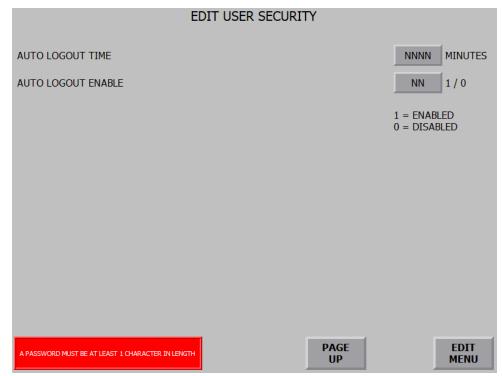


Edit User Security Screen #5

1.41 EDIT USER SECURITY SCREEN #6

The sixth EDIT USER SECURITY screen is displayed when the PAGE DOWN key is selected from the fifth EDIT USER SECURITY screen. This screen allows authorized personnel to change the AUTO LOGOUT TIME and enable or disable the AUTO LOGOUT.

Pressing the PAGE UP key displays the fifth EDIT USER SECURITY screen.



Edit Security Screen #6

1.42 EDIT DATE & TIME

The EDIT DATE & TIME screen is selected from the EDIT MENU screen and allows authorized personnel access to adjust the date and time on the PLC.

Pressing a data field key [NNN] to edit a setpoint displays a keypad prompting the operator for a new setpoint value. When the new setpoint is entered and the ENTER key (-) is pressed, the keypad is removed and the new setpoint is displayed in the selected field.

Press the UPDATE key to save the new data entered.

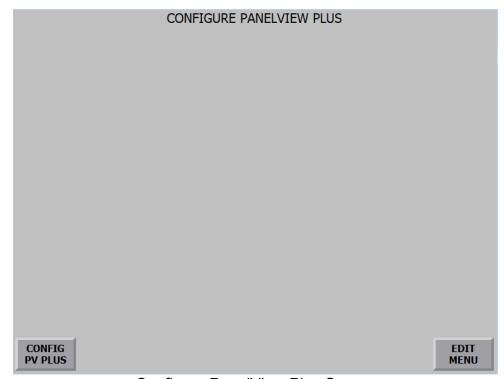


Edit Date & Time Screen

1.43 CONFIGURE PANELVIEW PLUS SCREEN

The CONFIGURE PANELVIEW PLUS screen is displayed when the user selects CONFIGURE PANELVIEW PLUS from the EDIT MENU screen. This screen allows authorized personnel to access the PanelView Human Machine Interface Terminal parameters.

Pressing the CONFIG PV PLUS key displays the ALLEN-BRADLEY PANELVIEW PLUS CONFIGURE screen.



Configure PanelView Plus Screen

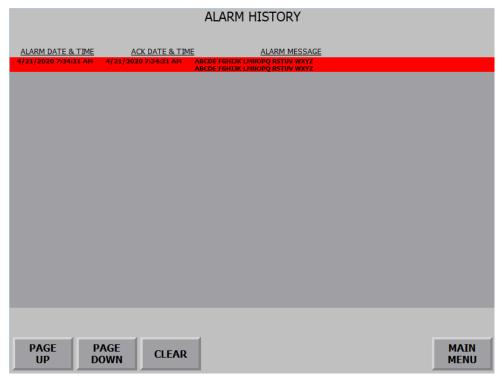
1.44 ALARM HISTORY SCREEN

The ALARM HISTORY screen is selected from the MAIN MENU screen and allows personnel access to the alarm history.

Pressing the PAGE UP key scrolls up through any alarms remaining in the history file.

Pressing the PAGE DOWN key scrolls down through any alarms remaining in the history file.

Pressing the CLEAR key clears the alarm list from the ALARM HISTORY screen. (User access: Level 3)



Alarm History Screen

1.45 ABOUT SCREEN

The ABOUT screen is selected from the MAIN MENU screen and displays Sani-Matic's contact information as well as the equipment sales order number.



About Screen