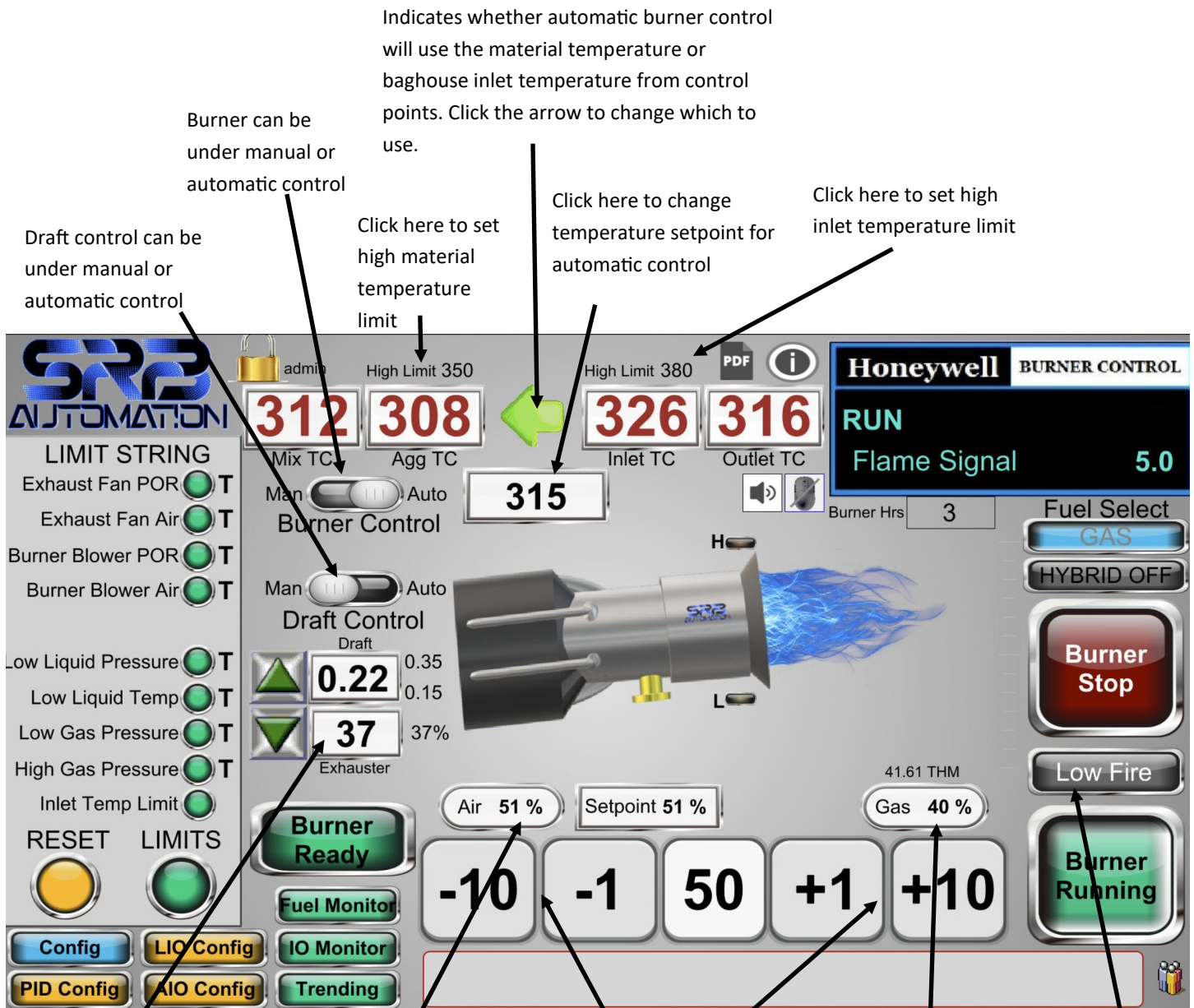
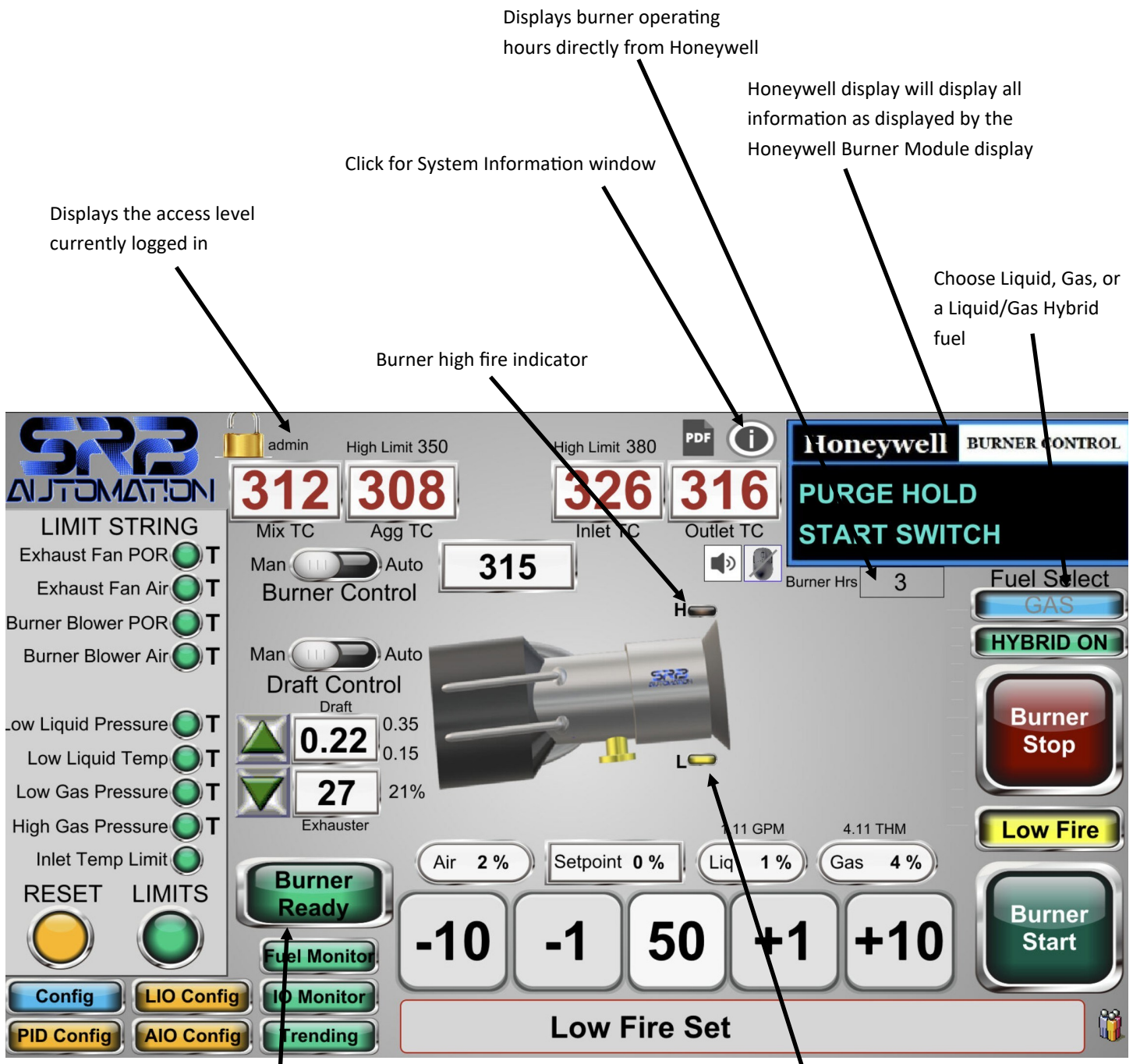


Burner Control Manual







Displays burner operating hours directly from Honeywell

Honeywell display will display all information as displayed by the Honeywell Burner Module display

Click for System Information window

Displays the access level currently logged in

Choose Liquid, Gas, or a Liquid/Gas Hybrid fuel

Burner high fire indicator



Burner Purge Status Display

Displays when burner is purging

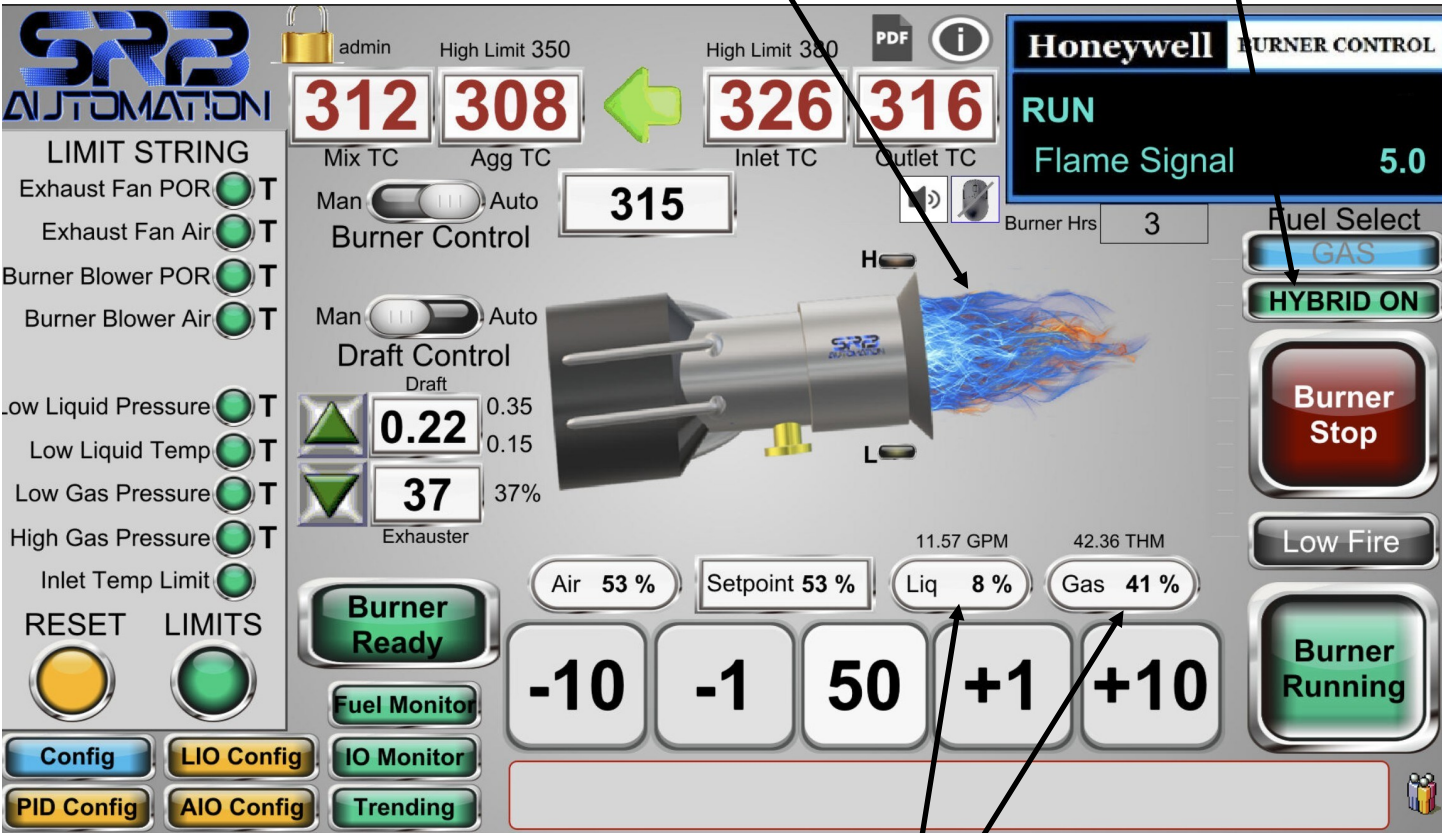
Displays when burner purge is complete

Displays when burner is ready to light

Burner low fire indicator

Click to run Hybrid fuel. A combination of both liquid and gas fuels. The fuel selected is considered the primary fuel. The secondary fuel can be configured as a percentage of the primary fuel or run by the fuel curve.

When running Hybrid fuel both the blue and red flame will be shown combined

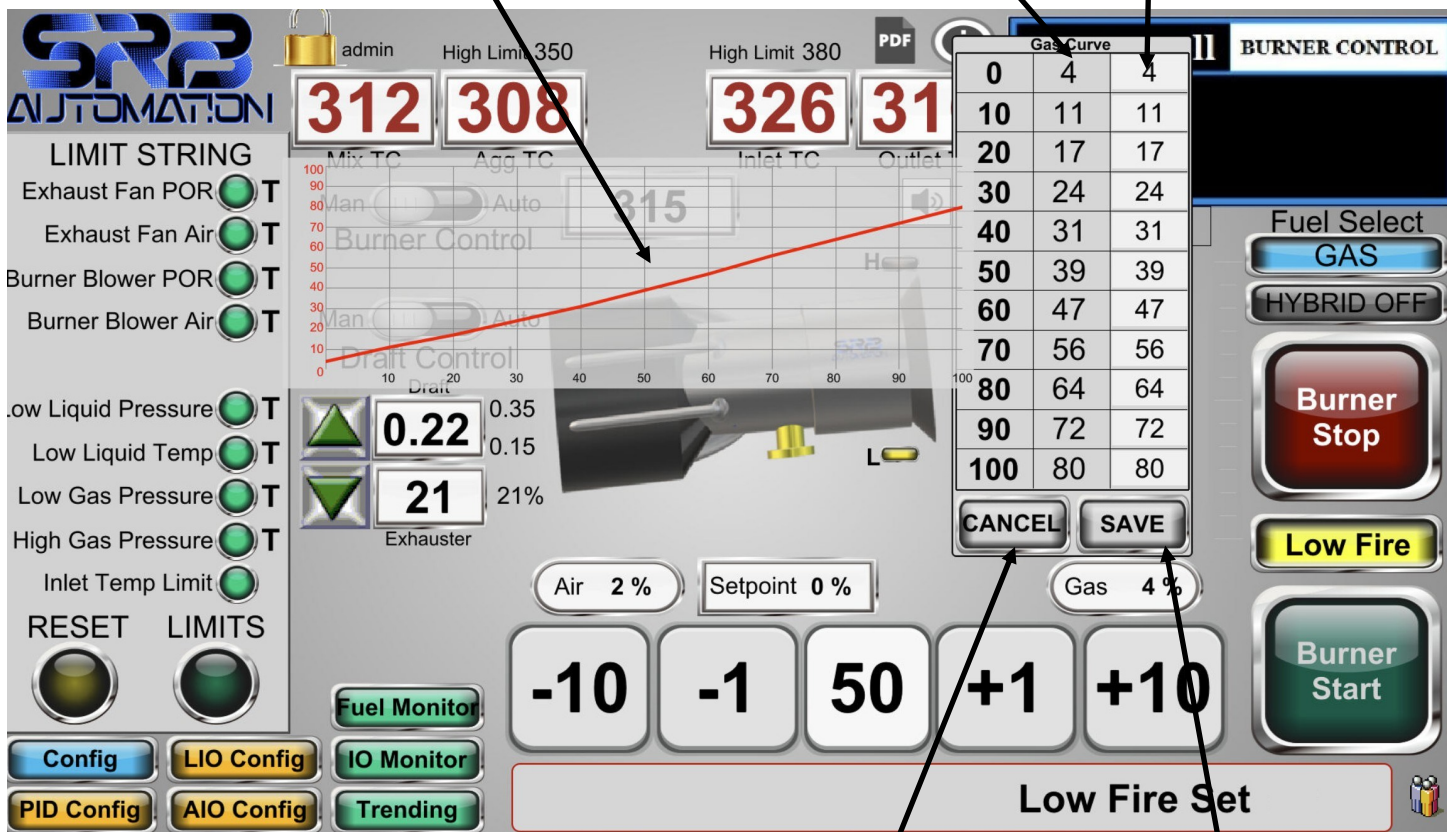


When running Hybrid fuel both liquid and gas positions will be displayed

Graphical display of the fuel curve. Changes as new values are entered.

Displays current fuel curve values

Enter new fuel curve values here



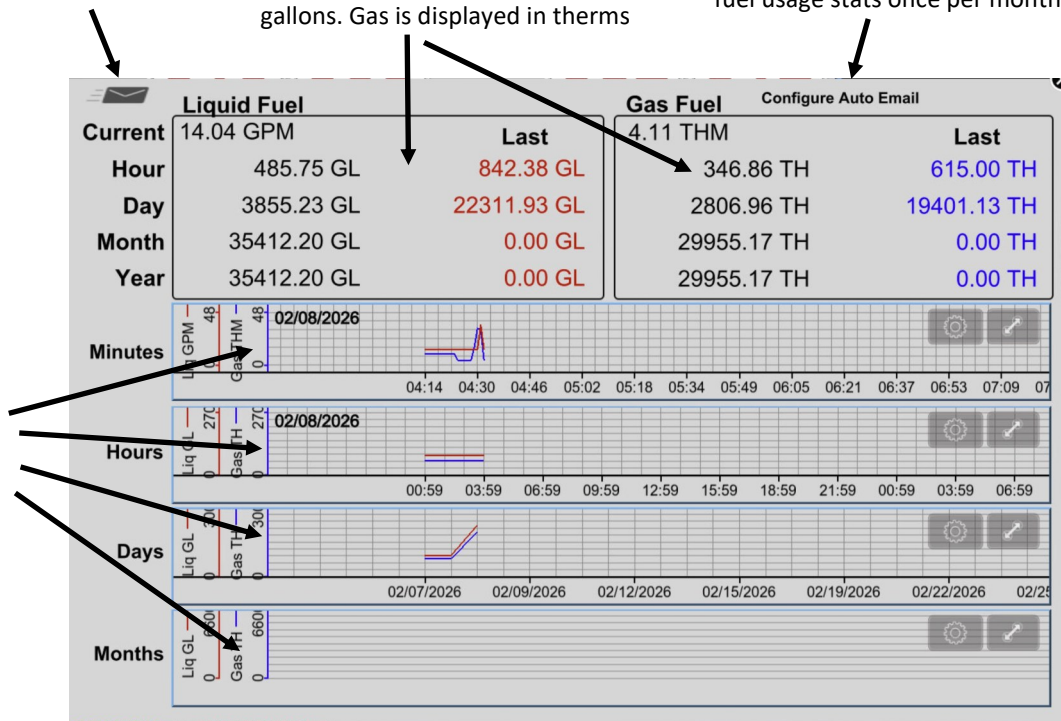
Cancels any proposed changes to fuel curve

Commits and saves all proposed changes to fuel curve

Click to manually send email with a screenshot of the fuel usage screen

Displays current and last period fuel usage. Liquid is displayed in gallons. Gas is displayed in therms

Click to configure automatically sending the screenshot of the fuel usage stats once per month



Configure Auto Send of fuel usage statistics email

The dialog box is titled "Configure Auto Send Fuel Usage Email". It contains the following fields and options:

- Day of Month to Send: 8
- Hour of Day to Send: 5
- Enable Auto Send: ☒

Fuel usage email will be sent once a month per the above configuration

Assign contacts to a group.

Add or remove contacts for emails

The interface shows a "Contact list" and a "Current group" section. The "Contact list" contains the following contacts:

Contact Name	Mail Address
Mark Stollar	mstollar@stollarservices.com

The "Current group" section shows the following contacts:

Contact Name	Mail Address
Mark Stollar	mstollar@stollarservices.com

At the bottom, there is a "Select group:" dropdown menu with "Group A" selected.

Select group. Group A is for fuel usage stat emails.

Select access level. Choose between Admin, Technician, or Operator.

Each access level has a unique password

Hit Login after entering password

The screenshot shows a web interface titled "Login / Logout" with a close button (X) in the top right corner. Below the title is a horizontal line, and then the text "Login by Index" is centered. Underneath, there are two rows of input fields and buttons. The first row has the label "Index" followed by a dropdown menu currently showing "Operator" and a blue checkmark icon. To the right of this dropdown is a blue button labeled "Login". The second row has the label "Password" followed by a white text input field. To the right of this field is a blue button labeled "Logout". Four arrows point from external text blocks to specific elements: one to the "Operator" dropdown, one to the "Login" button, one to the "Password" input field, and one to the "Logout" button.

After selecting access level enter the appropriate password and hit enter on the keyboard.

YOU MUST HIT "ENTER" AFTER ENTERING PASSWORD BEFORE HITTING LOGIN OR LOGIN WILL FAIL.

Hit to logout. No password is needed for logout.

System will automatically logout all access levels after 30 minutes of inactivity

Exhaust fan control options

Fault delay options.
Seconds before a fault
after loss of limit

Displays current air/fuel control
devices position

Air/Fuel curve settings

Use Draft Control ☒
Ex Fan VFD ☒
Ex Fan / Damper Purge ☒
Purge Percent 50%
Damper Pulse On Time 2 ms
Damper Pulse Off Time 1000 ms
Exhaust Fan VFD Step % 1%
Deviation Limit 10%

Temp Bias ☒ Use HW Comms ☒
Temp Filter 5 Logo ☒

Fault Delay
Exhaust Fan POR 2
Exhaust Fan Air 2
Burner Blower POR 2
Burner Blower Air 2
Liquid Pump POR 2
Low Liquid Pressure 2
Low Liquid Temp 2
Low Gas Pressure 2
High Gas Pressure 2
Air/Fuel Tolerance 15

Graph
Current Throttle 0.0
Air 1 2.0
Air 2 0.0
Gas Fuel 4.0
Liq Fuel 4.0

	Air 1	Air 2	Gas	Liquid
0	2	0	4	4
10	12	0	11	8
20	21	0	17	14
30	30	0	24	20
40	40	0	31	26
50	50	0	39	32
60	60	0	47	38
70	70	0	56	44
80	80	0	64	50
90	90	0	72	56
100	100	0	80	62

Enable Analog Low Purge High Dev
Fire Point Fire Limit

Air 1 Control ☒ 5 85 80 10%
Air 2 Control ☐ 0 10%
Gas Control ☒ 5 0 10%
Liq Control ☒ 5 0 10%

HYBRID Fuel
Enable ☒
Control Curve ☒ Percent
% of Primary Fuel 20%
Monitor Fuel Usage ☒

Maximum Wait Time 0 minutes
(enter 0 to disable)

CPU Load 23% Memory Load 45%

USB Drive Status Free HMI Memory 551464 KB
Free USB Memory 15331992 KB

Customer SRB Automation Location Indiana

LIO AIO PID User Log Graphics Parts List System Main Screen

Air/Fuel device control options

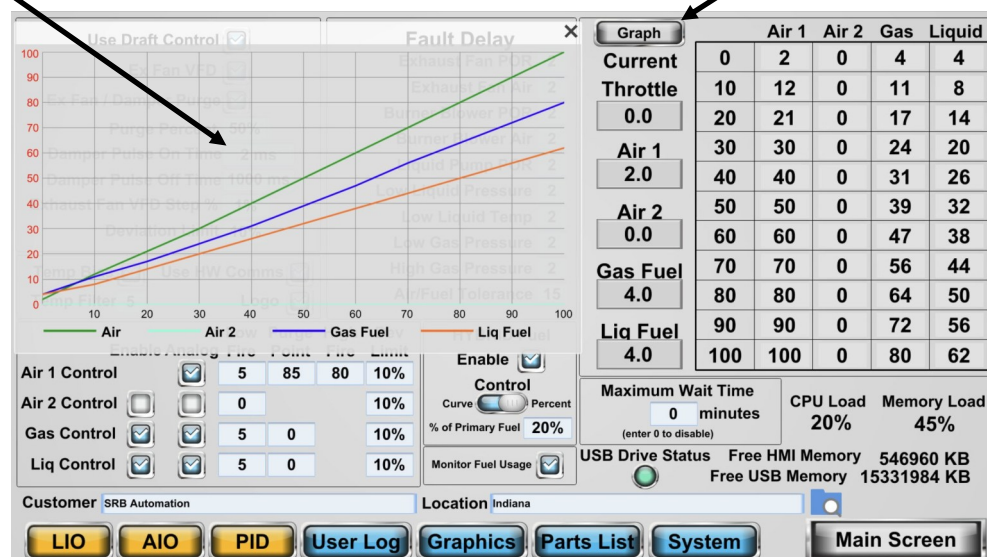
Hybrid Fuel Options

Maximum wait time after Burner
Ready status before requiring another
purge cycle

Displays current CPU and
Memory load information

Graphical representation of the complete Air/
Fuel Curve

Click the "Graph" button to display the
Air/Fuel curve graphics



Set limit to test mode. Not available for inlet temp limit. Not available for Operator level access.

Set if limit does not exist for customers burner configuration.

Customizable limit labels to match customer burner configuration.

Select which logical output from drop down list to assign for control devices

The screenshot shows a configuration interface for burner limits and controls. It is divided into several sections:

- Burner Limits:** Includes Air Limits (Exhaust Fan POR, Exhaust Fan Air, Burner Blower POR, Burner Blower Air), Liquid Limits (Low Liquid Pressure, Low Liquid Temp), Gas Limits (Low Gas Pressure, High Gas Pressure), and Inlet Temperature.
- Logical Input:** A list of input points (100-114) with dropdown menus for assignment.
- Testing:** Checkboxes for testing each input.
- DNE:** Checkboxes for 'Does Not Exist' for each input.
- Burner Control:** Includes Burner Start, Burner Stop/Limits OK, Liquid/Gas Fuel Relays, Burner Fault, Air 1/2 Open/Close, Gas/Liquid Fuel Open/Close, Exhaust Damper Open/Close, Fault Reset Relay, Low/High Fire, and High Fire.
- Logical Output:** A list of output points (200-215) with dropdown menus for assignment.
- Buttons:** 'IO Monitor' and 'DONE'.

Select which logical input from drop down list to assign for limits and control devices

Popup IO monitor screen

The popup IO monitor screen displays a grid of inputs and outputs. The 'Inputs' column shows values 100 through 119, and the 'Outputs' column shows values 200 through 215. The values are color-coded: green for active/assigned and red for inactive/unassigned. The background shows the same configuration interface as the previous screenshot, but the 'IO Monitor' button is highlighted.

Select to display logical IO monitor

Customizable thermocouple labels to match customers configuration

Select which analog input from drop down list to assign for limits and control devices

Select which analog output from drop down list to assign for control devices

The main configuration screen is divided into three main sections: **Analog Input**, **Temperatures**, and **Analog Output**. Each section contains a list of items with a dropdown arrow next to a numerical value.

Analog Input:

- Burner Control
- Air 1 Feedback 300
- Air 2 Feedback 999
- Gas Fuel Feedback 301
- Liquid Fuel Feedback 302
- Draft Pressure Feedback 304
- Gas CFM Feedback 311
- Liquid GPM Feedback 310
- Exhaust Fan Feedback 303
- Flame Signal 999

Temperatures:

- Material 1 Thermocouple 312
- Material 2 Thermocouple 313
- Baghouse Inlet Thermocouple 314
- Baghouse Outlet Thermocouple 315

Analog Output:

- Burner Control
- Air 1 Setpoint 400
- Air 2 Setpoint 999
- Gas Fuel Setpoint 401
- Liquid Fuel Setpoint 402
- Ex Fan VFD Setpoint 403

Label:

- Agg TC
- Mix TC
- Inlet TC
- Outlet TC

At the bottom, there are four buttons: **AIO Types**, **Input Span**, **IO Monitor**, and **DONE**.

Popup IO monitor screen

The popup IO monitor screen displays a table of analog input and output values. The table is titled "Analog IO Monitor" and has columns for "Inputs" and "Outputs".

Inputs		Outputs	
300	653	310	1308
301	1306	311	1315
302	1309	312	873
303	6945	313	869
304	2057	314	854
305	2056	315	857
306	2058	316	832
307	2063	317	841
308	2063	318	860
309	2063	319	863

Below the table, there are three buttons: **AIO Types**, **Input Span**, and **IO Monitor**. The **IO Monitor** button is highlighted with a green border.

Select to display analog IO monitor

This page is accessible by Admin or Technician level access. Analog inputs and output can be configured as V for 0-10VDC or C for 4-20mA signals. The thermocouple inputs can be set as J type or K type

Analog Inputs	TC Inputs	Analog Outputs
300 V	312 J	400 V
301 V	313 J	401 V
302 V	314 J	402 V
303 V	315 J	403 V
304 V	316 J	404 V
305 V	317 J	405 V
306 V	318 J	406 V
307 V	319 J	407 V
308 V		408 V
309 V		409 V
310 V		
311 V		

Use this page to configure the analog output PI(D) settings

	Air 1	Air 2	Gas	Liquid	Burner Auto	Ex Fan
Gain (P)	0.10	0.10	0.10	0.10	0.05	0.10
Reset (I)	0.20	0.20	0.20	0.20	8.00	1.00
Rate (D)					10.00	2.00
Sample Time	1000	1000	1000	1000	5000	1000
Deadband	0.100	0.100	0.100	0.100	1.000	0.300
Cycle Time	500	500	500	500		500

Displays the raw signal of the analog input Capture or enter the raw signal low point Capture or enter the raw signal high point Enter the low display value Enter the high display value

	Raw Signal	Low Signal	High Signal	Low Value	High Value	Value
Air 1 Feedback	981	0	32747	0.0	100.0	3.0
Air 2 Feedback	0	0	0	0.0	0.0	0.0
Gas Fuel Feedback	652	0	32713	0.0	100.0	2.0
Liquid Fuel Feedback	1310	0	32765	0.0	100.0	4.0
Draft Pressure Feedback	2072	0	32762	0.0	3.5	0.2
Gas CFM Transmitter Feedback	0	0	0	0.0	0.0	0.0
Liquid GPM Transmitter Feedback	0	0	0	0.0	0.0	0.0
Exhaust Fan Feedback	16292	0	32767	0.0	100.0	49.7
Flame Signal	0	0	0	0.0	0.0	0.0

Test Mode AIR 1 3 AIR 2 0 GAS 2 OIL 0 EX FAN 50

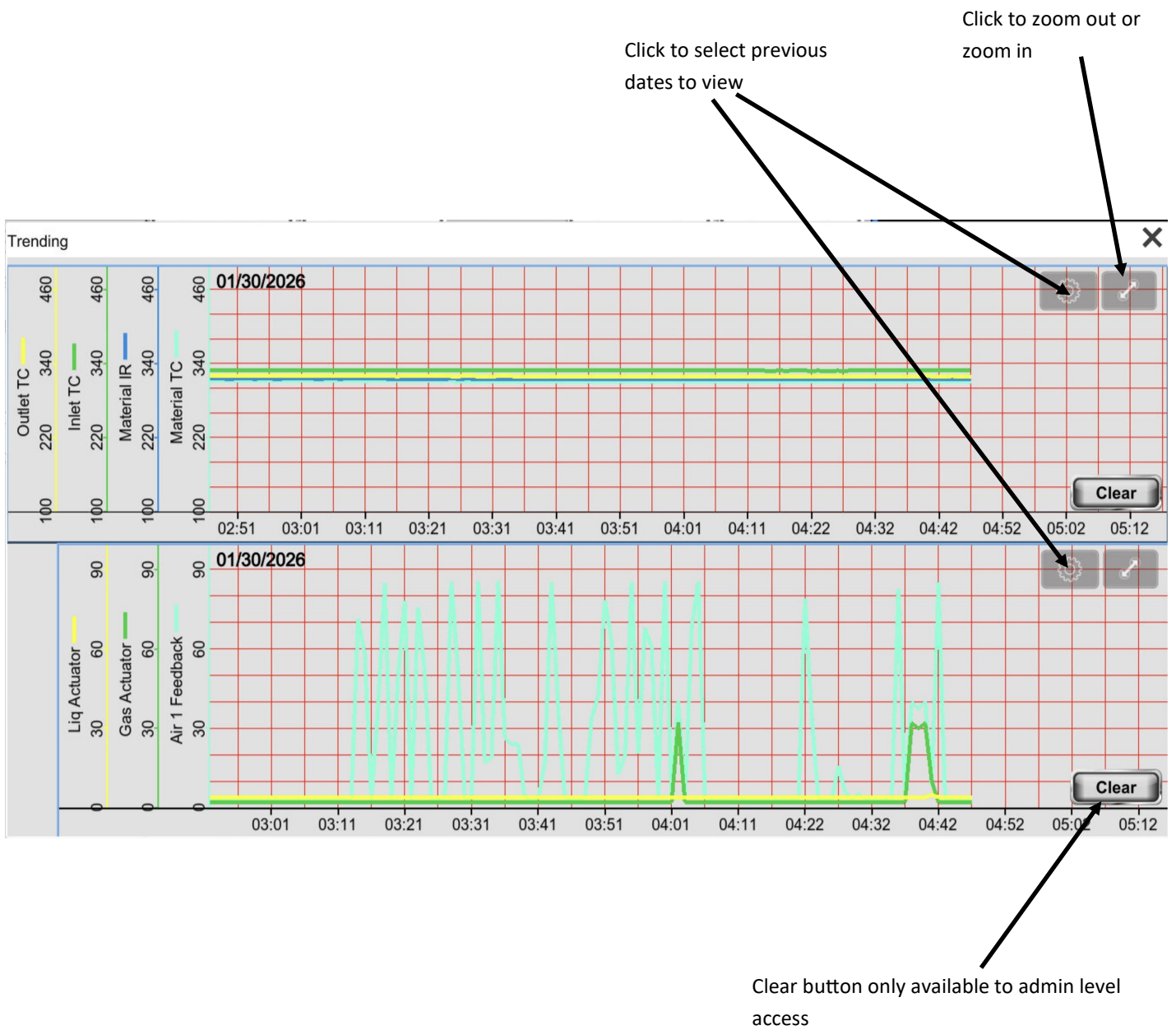
Click test mode then the device control button to set the output level. Test mode is not available when burner is lit. Leaving page will automatically turn "Test Mode" off and reset the device outputs to their default values.

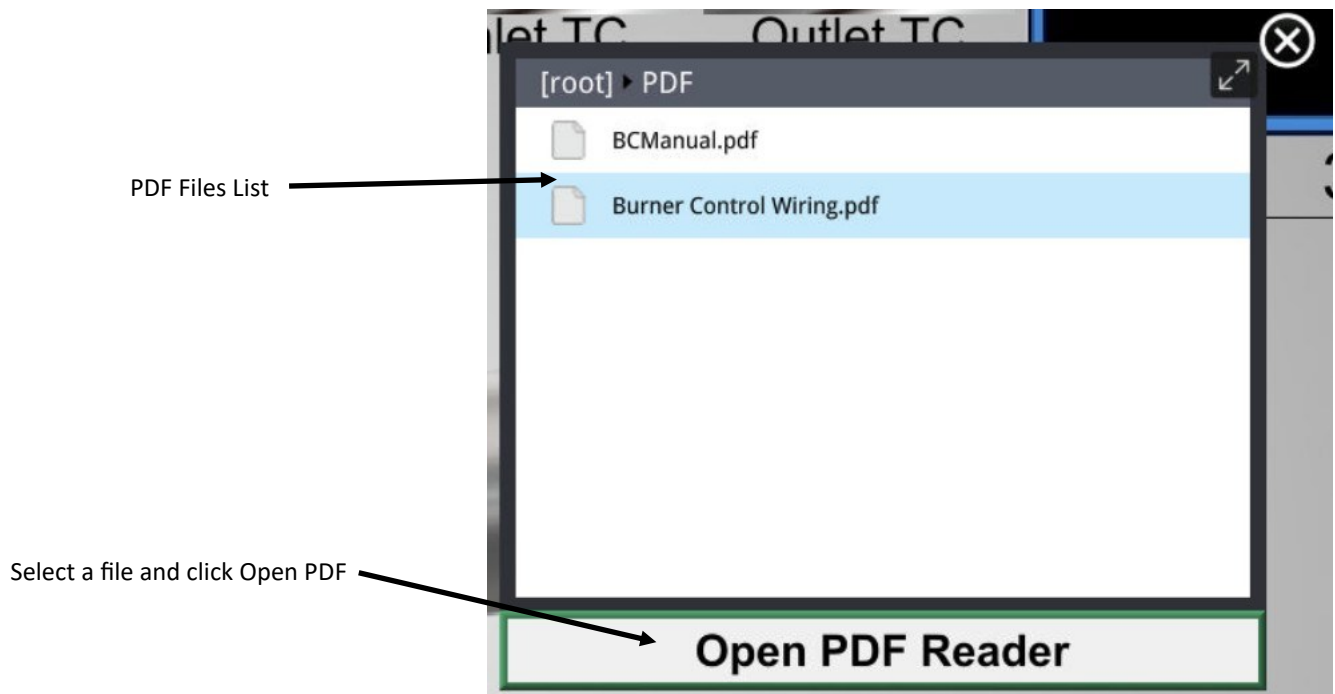
The user log displays information about logins and changes made while logged in.

Date	Time	User name	Action	Address	Information
01/26/2026	04:21:49	admin	Log in		admin logged in
01/26/2026	04:21:34	Technician	Log out		Technician logged out
01/26/2026	04:20:57	Technician	Log in		Technician logged in
01/26/2026	03:42:13	admin	Log out		admin logged out
01/26/2026	03:12:12	admin	Set words	NewCurve0 - LW-100 -> Ai	
01/26/2026	03:12:12	admin	Set OFF	AirCurveWindow - LB-23	bit set OFF
01/26/2026	03:12:11	admin	Set word	NewCurve0 - LW-100	write 5->3
01/26/2026	02:57:54	admin	Log in		admin logged in
01/25/2026	23:41:46	admin	Log in		admin logged in
01/25/2026	23:19:45	admin	Log out		admin logged out
01/25/2026	22:19:39	admin	Set words	NewCurve0 - LW-100 -> Ai	
01/25/2026	22:19:39	admin	Set OFF	AirCurveWindow - LB-23	bit set OFF
01/25/2026	22:19:37	admin	Set word	NewCurve0 - LW-100	write 3->5

Clear Log Start Log Stop Log Logging

Requires Admin level access to clear, start, or stop logging. Logging is on by default





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