PERFORMING A RELEARN OR RESET LOCKOUTS ON A SIMPLICITY SMART EQUIPMENT

CONTROL BOARD

RELEARN

On occasion it is possible to have the red fault light blinking on the SSE control board where you find the faults indicated are aronias, meaning the faults relate to sensors or options that are not even installed in the unit or were there and now have been disconnected or removed. Now what? In this case a procedure called <u>RELEARN</u> can be performed to make the control board rediscover what is connected to it. The location of the <u>RELEARN</u> parameter in the SSE Quick Start Guide menu varies depending on the firmware version. To view what version of firmware the board has, joystick down to the parameter called <u>UPDATE</u>, push <u>Enter</u> then <u>View Version</u> push <u>Enter</u> to view.

*Before performing the Relearn function we recommend that the unit not be operating. Unplug the thermostat plugs at the SSE control board or set the thermostat to off.

With **firmware Version 1.0 to 3.2** Relearn is located under the parameter called Controller, sub menu SysCntlrs, sub menu Misc. Use the below steps to perform a relearn.

From IDLE, Joystick down to Controller then push Enter. Joystick down to SysCntIrs, push Enter. With the arrow on Misc push Enter. With the arrow on RELEARN push Enter and the word False should be in the display. Move the joystick to the right until the word False changes to True then push Enter. The display may say, board may reset confirm, Push the Enter button, and wait until the word True changes back to False. In some cases, the board will go through the two-minute reboot, if not push the Cancel button multiple times to get back to the beginning, IDLE. Check to see if the faults have been cleared.

With **firmware versions 3.3 and higher** Relearn is located under the parameter Controller sub menu, Network. Use the below steps to perform a relearn.

From <u>IDLE</u> Joystick down to the parameter <u>Controller</u>, push <u>Enter</u>. Then <u>Network</u> push <u>Enter</u>. Then Joystick down to <u>RELEARN</u>, push <u>Enter</u> and the word <u>False</u> should be in the display. Move the joystick to the right until the word <u>False</u> changes to <u>True</u> then push <u>Enter</u>. The display may say, board may reset confirm, Push the <u>Enter</u> button, and wait until the word <u>True</u> changes back to <u>False</u>. In some cases, the board will go through the two-minute reboot. If not push the <u>Cancel</u> button multiple times to get back to the beginning, <u>IDLE</u>. Check to see if the faults have been cleared.

After performing the **Relearn** if faults still exist and depending on what they are it would then be recommended that you recheck the commissioning parameters to be sure the SSE control is configured correctly for the unit type, application and options installed.

RESET LOCKOUTS

On occasion it is possible to have the red fault light blinking on the SSE control board where you find the fault indicates a **LOCKOUT** has occurred preventing the operation of a particular load or mode of operation or complete unit shut down. In this case a procedure called **RESET LOCKOUTS** can be performed to make the control board reset the fault and allow the unit to restart its operation. <u>Note</u>: if the reason for the lockout has not been resolved, example high- or low-pressure switch is still open, performing the reset lockout will not allow the fault to be reset because the faults are considered Critical and require some attention as to why they are occurring. The location of the **Reset LO** parameter in the SSE menu varies depending on the firmware version. **To view what version of firmware the board has, go to parameter called UPDATE push Enter then View Version push Enter to view**.

With **firmware Version 1.0 to 3.2** <u>ResetLO</u> is located under the parameter called Details, sub menu Unit. Use the below steps to perform a relearn.

From <u>IDLE</u> Joystick down to the parameter <u>Details</u>, push <u>Enter</u>. Joystick down to <u>Unit</u> then push <u>Enter</u>. Then Joystick down to <u>ResetLO</u>, push <u>Enter</u>, and the display should say <u>OFF</u>. Move the joystick to the right until the word <u>OFF</u> changes to <u>ON</u>, then push <u>Enter</u>. Wait until the word <u>ON</u> changes back to <u>OFF</u>. If the lockout did not reset, most likely the fault still exists, and further troubleshooting is required to determine what is causing the fault to occur. Push the <u>Cancel</u> button multiple times to get back to the beginning, <u>IDLE</u>. Check to see if the faults have been cleared.

With **firmware Version 3.3 to 3.4** ResetLO is located under the parameter called Summary, sub menu Sensors, sub menu Unit. Use the below steps to perform a relearn.

 From IDLE Joystick down to the parameter Summary, push Enter. Joystick down to Sensors then push Enter. Then Joystick down to Unit, push Enter Joystick down to ResetLO push Enter Move the joystick to the right until the word OFF changes to ON, then push Enter. Wait until the word ON changes back to OFF. If the lockout did not reset most likely the fault still exists and further troubleshooting is required to determine what is causing the fault to occur. Push the Cancel button multiple times to get back to the beginning, IDLE. Check to see if the faults have been cleared.

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With **firmware Version 4.0 and higher** ResetLO is located under the parameter called Summary, sub menu Unit. Use the below steps to perform a relearn.

From <u>IDLE</u> Joystick down to the parameter <u>Summary</u>, push <u>Enter</u>. Then Joystick down to <u>Unit</u>, push <u>Enter</u> Joystick down to <u>ResetLO</u> push <u>Enter</u>. Move the joystick to the right until the word <u>OFF</u> changes to <u>ON</u>, then push <u>Enter</u>. Wait until the word <u>ON</u> changes back to <u>OFF</u>. If the lockout did not reset most likely the fault still exists and further troubleshooting is required to determine what is causing the fault to occur. Push the <u>Cancel</u> button multiple times to get back to the beginning, <u>IDLE</u>. Check to see if the faults have been cleared. Refer to SSE troubleshooting Guide for more information. Visit <u>www.us-ac.com</u> Training tab sub menu Technical Literature sub menu Commercial to get a copy.

Severity	Alarm	How It Happens
Critical	C1 Locked Out Due to High Pressure	Three HPS1 trips within two hours.
	C2 Locked Out Due to High Pressure	Three HPS2 trips within two hours.
	C3 Locked Out Due to High Pressure	Three HPS3 trips within two hours.
	C4 Locked Out Due to High Pressure	Three HPS4 trips within two hours.
	C1 Locked Out Due to Low Pressure	Three LPS1 trips within one hour.
	C2 Locked Out Due to Low Pressure	Three LPS2 trips within one hour.
	C3 Locked Out Due to Low Pressure	Three LPS3 trips within one hour.
	C4 Locked Out Due to Low Pressure	Three LPS4 trips within one hour.
	C1 Locked Out Due to Coil Freeze	Three FS1 trips within two hours. (Evap Coil Temp < Evap Coil Temp Cutout SP)
	C2 Locked Out Due to Coil Freeze	Three FS2 trips within two hours. (Evap Coil Temp < Evap Coil Temp Cutout SP)
	C3 Locked Out Due to Coil Freeze	Three FS3 trips within two hours. (Evap Coil Temp < Evap Coil Temp Cutout SP)
	C4 Locked Out Due to Coil Freeze	Three FS4 trips within two hours. (Evap Coil Temp < Evap Coil Temp Cutout SP)
	Exhaust Fan VFD Failure	EX VFD BI trips (must be set up as Exhaust or Variable Frequency Fan)
	HS1 Locked Out Due to Limit Switch	Three LS1 trips within one hour.
	HS2 Locked Out Due to Limit Switch	Three LS2 trips within one hour.
	HS3 Locked Out Due to Limit Switch	Three LS3 trips within one hour.
	Unit Shutdown Due to Smoke, etc.	SD input loses 24 VAC.
	Supply Fan VFD Failure	Fan VFD Input trips (must be set up as NOT Single Speed)
	No Heat-Cool Due to Unreliable Space-T	Input Unreliable
	4-Stage Communication Failure	4-Stage board goes from Online to Offline.
	Economizer Communication Failure	Economizer board goes from Online to Offline.
	Outputs Disabled Due to Low Input V	Blackout Conditions
	Outputs Limited Due Brownout Input V	Brownout Conditions
	Unit Locked Out Due to APS	Three APS trips within 1.5 hours. (if APS is installed or based on Duct Pressure if Variable Speed Fan enabled).
	Unit Locked Out Due to Supply Fan OL	Three FAN OVR trips within two hours.
	Unit Locked Out Due to High Duct-P	Duct Static Pressure is greater than the High Duct Static Pressure Setpoint.
Service Priority	Evaporator Coil Temp 1 Sensor Failure	Input unreliable and Number of Cooling Stages >= 1
	Condenser Coil Temp 1 Sensor Failure	Input unreliable and Number of Cooling Stages >= 1
	Evaporator Coil Temp 2 Sensor Failure	Input unreliable and Number of Cooling Stages >= 2
	Condenser Coil Temp 2 Sensor Failure	Input unreliable and Number of Cooling Stages >= 2

Below are common Alarms that will require a Reset Lockout.

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Notes:

- These instructions are not intended to replace the manufactures instruction which also should be used when commissioning any unit with Simplicity Controls.
- All safety requirements specific to the manufactures unit also need to be reviewed and followed when working with any unit.
- This information is provided by US Air Conditioning Distributors Customer Assurance Department and is intended to add to your understanding of commissioning a Simplicity Smart Equipment controller.
- If there are any questions at all, please contact US Air Conditioning Distributors Customer Assurance Technical Support. <u>usacdtech@us-ac.com</u> or call 866-437-5730