

## Spec SD controller settings

These instructions are designed for a new control that has not been configured previously. If you are reconfiguring a control for a different machine, you must first clear the lockout to level 0 at the end of the setup menu before you can enter the operations table. Then you can make changes in both menus. Once in a menu table, press the advance (blue) button to advance through the setting prompts. Press the up or down arrow buttons to change the setting values. Pressing the infinity button returns you to normal control mode (Home) at any time.

### Setup menu

Enter setup menu by holding both the up and down arrow buttons for 3 seconds. Make the following settings in this menu:

<b>Parameter</b>	<b>setting</b>	<b>description</b>
<b>SEn</b>	<b>tc</b>	<b>Sensor type</b>
<b>L in</b>	<b>H</b>	<b>T/C linearization</b>
<b>C-F</b>	<b>C</b>	<b>temperature scale</b>
<b>S.dEC</b>	<b>0</b>	<b>temperature decimal units</b>
<b>P.dEC</b>	<b>0</b>	<b>process decimal units</b>
<b>IS.En</b>	<b>no</b>	<b>sensor sync</b>
<b>SP.Lo</b>	<b>0</b>	<b>set point low limit</b>
<b>SP.hi</b>	<b>600</b>	<b>set point limit high</b>
<b>Ftr.E</b>	<b>diSP</b>	<b>filter display input</b>
<b>FLtr</b>	<b>1.0</b>	<b>Filter value</b>
<b>Ot 1</b>	<b>hEA</b>	<b>primary output function</b>
<b>Ctrl</b>	<b>Ftb</b>	<b>Control method</b>
<b>Ftb1</b>	<b>0.3</b>	<b>cycle time</b>
<b>PL 1</b>	<b>100.0</b>	<b>power limit</b>
<b>PSL1</b>	<b>0.00</b>	<b>power scale low</b>
<b>PSH1</b>	<b>100.0</b>	<b>power scale high</b>
<b>nLF1</b>	<b>OFF</b>	<b>nonlinear output curves disabled</b>
<b>Unit</b>	<b>US</b>	<b>measurement units</b>
<b>I.err</b>	<b>nLAt</b>	<b>input error latching</b>
<b>FAIL</b>	<b>bPLS</b>	<b>input error failure mode</b>
<b>dSP</b>	<b>nor</b>	<b>display mode</b>
<b>rP</b>	<b>OFF</b>	<b>ramping mode</b>
<b>LOC</b>	<b>0 (or) 3</b>	<b>lockout levels</b>

*Setting the lockout to level 3 will deny access to the operations table. Set to 0 until you finish the settings in the next section.*

Press the infinity button to return to normal control mode (home page).

## Operations menu

Press the blue advance button to enter the operations menu and to step through the parameters. Arrow keys will change settings. Enter the following values:

Parameter	setting	description
Po.ht		current heat power % (unadjustable)
A – M	Auto	auto – manual mode
Aut	OFF	Autotune (don't use this)
CAL	0	calibration offset
ht. M	PId	heat control mode
Pb.ht	15	proportional band
rE.ht	0.03	reset timing
rA.h	0.00	rate heat

Pressing the blue advance button one more time returns you to the home (control mode) page. You should now go back into the setup page and set the lockouts to level 3. this will prevent accidental changes from being made in the configuration menu's

## Settings stored and restored

This control can save two different setups. Configuration for your machine is saved in both locations at Sinclair Equipment Company when your machine is built.

To restore a lost or damaged configuration, hold both arrow buttons down for 6 or more seconds. You will enter the Factory page. Press the advance (blue) button 6 times to get to **USr.r** menu item. Scroll down 1 ( the green display will change to **SET 1**) to restore original configuration. When the display “**SET 1**” clears, push the infinity button. Then go to the **LOC** prompt in the setup page and set the lockouts to level 3.

To save a new configuration, hold both arrow buttons down for 6 or more seconds. You will enter the Factory page. Press the advance (blue) button 7 times to get to **USr.s** menu item. Scroll down 1 (green display will change to **SET 1**) to save this configuration. Scroll down 2 times to save in the second location, the green display will read **SET 2** for a moment. You can save in either or both locations. Push the infinity button to return to normal control mode.