

1. On CONTROLS PB "on", SOLO controllers power up.
2. On power up, "splash" screen shows firmware version (E.150) and output types (LRE).
3. After 3 seconds, enters Operation mode main screen with red PV/green SV display.
4. From main screen, press and hold SET for 3 seconds to enter Initial Setting mode, or press SET to enter Regulation mode.
5. Within a mode, press ROTATE to cycle through parameters, UP/DOWN to change parameters, then press SET to save parameter values. Press SET again to return to Operation mode main screen (Process temp and Setpoint temp).
6. To set up the SL 9696-LRE, check/change the following parameters per this sequence:

Press SET (Hold for 3 sec), press ROTATE

Id#	Initial Setting Mode	Parameter (red)	Value (green)	Comments
P3-1	Input Type	TYPE	K	T/C type K (-200 - 1300°C)
P3-2	Temperature Unit	TEMP	F	Temperature unit
P3-3	Input Range High	EP-H	1841	Highest temperature allowed for SV
P3-4	Input Range Low	EP-L	0	Lowest temperature allowed for SV
P3-5	Control Mode	CTRL	PID	PID control
P3-7	Heating/Cooling	S-HE	HEAT	Heat
P3-8	Alarm 1	AL1	8	Alarm 1 type (see Controller Quick Start Guide)
P3-9	Alarm 2	AL2	6	Alarm 2 type (see Controller Quick Start Guide)
P3-10	Alarm 3	AL3	4	Alarm 3 type (see Controller Quick Start Guide)
P3-11	System Alarm	SALA	OFF	System Alarm feature disabled
P3-12	On-Line Configuration	LOSH	on	Allows parameters to be set/changed via RS-485 port
P3-13	Modbus protocol	CSL	RTU	remote terminal unit
P3-14	Network address	C-NO	11	11,12,13 Zone1, Zone2, Zone3 addresses
P3-15	Baud rate	BPS	9600	
P3-16	Bit length	LEN	8	
P3-17	Parity	PRTY	EVEN	
P3-18	Stop bit	STOP	1	
All other parameters		---	No further adjustment required -- push SET to return to main screen	

Press ROTATE

Id#	Operating Settings Mode	Parameter (red)	Value (green)	Comments
		Process Temp (PV)	Setpoint Temp (SV)	T/C measured zone temp vs. setpoint temp
P2-1	Run/Stop (Event 1)	RS	run	Controller run/stop
P2-3	Decimal Point Position	SP	0	PV & SV display format: ##### (no decimal point)
P2-4	Alarm 1 High Limit	AL1H	18	SV + AL 1H °C, alert
P2-5	Alarm 1 Low Limit	AL1L	18	SV - AL 1L °C, alert
P2-6	Alarm 2 High Limit	AL2H	1841	SV + AL 2H °C, alarm -- lamp shutdown
P2-8	Alarm 3 High Limit	AL3H	18	SV + AL 3H °C, process ready condition
P2-9	Alarm 3 Low Limit	AL3L	18	SV - AL 3L °C, process ready condition
P2-10	Lock Mode	LOC	LOC2	Only UP, DOWN and SET keys for SV entry
P2-11	Output 1 Level	OUT1	000.0	Monitor output 1 level in % (read only)
return to main screen				

1. On CONTROLS PB "on", SOLO controllers power up.
2. On power up, "splash" screen shows firmware version (5200) and output types (LRE).
3. After 3 seconds, enters Operation mode main screen with red PV/green SV display.
4. From main screen, press SET and then press ROTATE.
5. PID4 may be set to AUTO or one of groups: PID3 (1560), PID2 (1200), PID1 (840), or PID0 (480)
 - To make changes to PID parameters, press DOWN arrow and select group to change and press SET.
6. Use ROTATE key to scroll through parameters for each group. Make changes on each zone controller according to the table below.
7. Make sure PID4 is set to AUTO when finished with above and before locking the controller.

Press SET, press ROTATE			Zone 1		Zone 2		Zone 3		Comments
Id#	PID Regulation Mode	Parameter (red)	Value (green)		Value (green)		Value (green)		
P1-1	Autotune PID Loop	RE	OFF (default)	Off	OFF (defau	Off	OFF (default	Off	Ignore during controller initialization.
P1-20	PID Parameter Group 0	PCD0	480	480	480	480	480	480	Active PID loop ID, Target SV values (read only)
P1-30	Target SV	SV0	480	480	480	480	480	480	°F
P1-40	Proportion Band	PD	110	110	110	110	110	110	PID proportional band setting
P1-50	Integral Time	TI	8	8	8	8	8	8	PID integral time
P1-60	Derivative Time	TD	1	1	2	2	1	1	PID derivative setting
P1-80	Integral Offset	COFF	10	10	8	8	4.5	4.5	startup offset
P1-21	PID Parameter Group 1	PCD1	840	840	840	840	840	840	Active PID loop ID, Target SV values (read only)
P1-31	Target SV	SV1	840	840	840	840	840	840	°F
P1-41	Proportion Band	PD	150	150	100	100	150	150	PID proportional band setting
P1-51	Integral Time	TI	6	6	8	8	6	6	PID integral time
P1-61	Derivative Time	TD	2	2	2	2	1	1	PID derivative setting
P1-81	Integral Offset	COFF	9	9	35	35	9	9	startup offset
P1-22	PID Parameter Group 2	PCD2	1200	1200	1200	1200	1200	1200	Active PID loop ID, Target SV values (read only)
P1-32	Target SV	SV2	1200	1200	1200	1200	1200	1200	°F
P1-42	Proportion Band	PD	70	70	70	70	80	80	PID integral time
P1-52	Integral Time	TI	12	12	8	8	12	12	PID derivative setting
P1-62	Derivative Time	TD	1	1	1	1	1	1	startup offset
P1-82	Integral Offset	COFF	50	50	50	50	50	50	PID derivative setting (41 default)
P1-23	PID Parameter Group 3	PCD3	1560	1560	1560	1560	1560	1560	Active PID loop ID, Target SV values (read only)
P1-33	Target SV	SV3	1560	1560	1560	1560	1560	1560	°F
P1-43	Proportion Band	PD	95	95	70	70	80	80	PID proportional band setting
P1-53	Integral Time	TI	10	10	8	8	10	10	PID integral time
P1-63	Derivative Time	TD	3	3	2	2	1	1	PID derivative setting
P1-73	Integral Offset	COFF	70	70	40	40	20	20	startup offset
Common parameters			---		---		---		
P1-12	Output 1 heating Period	HEPD	1	1	0-99 seconds. Default is 1				
P1-16	PV Offset	EPVF	0	0	range: -999 to 999, decimal point =0				
P1-17	Analog High Adjustment	EAHL	0	0	limits max signal to SCR				
P1-18	Analog Low Adjustment	ELAL	0	0					
return to main screen			No further adjustment required -- push SET to return to main screen						