## <u>Lakeshore Model 340 Temperature Controller Sensor and</u> <u>Heater Quick Start Guide</u>

1. Lakeshore 340 Sensor Selection and Set Up



Figure 1

1.1 Press input setup (Figure 2).

Input Setup -	Tote Settings Base Program 7 8 9	Selection Arrows
	P 0 Control Grapping   Heater France Control Grapping   Heater France Control Grapping   Heater France Control Grapping   Heater France Loop1   Loop1 Selent Grapping   Heater France Control Grapping   Heater France Control Grapping   Heater France Control France   Heater France Control France	Enter Key
	ACCESS AND	



1.2 Using selection arrows, select appropriate input (Figure 2) and (Figure 3).



Figure 3

1.3 Using the enter key, select sensor type (Figure 4).



Figure 4

- 1.4 Using the selection arrows, select the appropriate sensor type.
- 1.5 Using the enter key, select the curve (Figure 5).

	0.0 1.0 patrometric		
LakeShore	34	D	
Input: A INPUT	SETUP		
Enable: ON	Type: Silicon Diode		
	Sensor Unit: U		
Curve: 1 DI-470	Excitation: 10uA	1	
240 Temperature Controller	Range: 22.50		
LS 22	REV007		
		ļ	
CIDHOL'S LOADED IN	2010		
	State & rest contract of the second second		
Lake Shore			
CRYCTHONICS			
Model 336 Temperature Controller			
Figure F			
rigure 5			

- 1.6 Using the selection arrows, select the appropriate curve.
- 1.7 Once the appropriate sensor type and curve have been selected, press the save screen key (Figure 6).



Figure 6

- 1.8 Press cancel screen key to return to home screen displaying temperature sensor readings (Figure 1).
- 1.9 If multiple temperature sensors are being used, repeat steps 1.1-1.9.
- 2. Lakeshore 340 Heater Set Up
  - 2.1 Press control setup (Figure 6).
  - 2.2 Using enter key, select enable (Figure 7).



Figure 7

- 2.3 Using selection arrow keys, select enable on (Figure 7).
- 2.4 Using enter key, select heater resistance (Figure 8).

	Laga	
	0.010	
LakeShore		3402
Enable: ON Power Up: OFF Setp Unit: TEMP K	ROL SETUP Ctrl Mode: M Filter: O	<more> IANUAL PID FF</more>
240 Temperature Controller S 22	REVO	07
SURVES LÖNDED S	0/2016	
Figure 8		

- 2.5 Using number keys, enter appropriate heater resistance value (Figure 6).
- 2.6 Press save screen to set resistance value (Figure 6).
- 2.7 Press more key (Figure 6).
- 2.8 Using enter key, select max heater current (Figure 9).



- 2.9 Using selection arrows, select the appropriate max current value.
- 2.10 Using enter key, select max power range (Figure 10).



Figure 10

- 2.11 Using selection arrows, select the appropriate max power setting.
- 2.12 Press save screen to set the values.
- 2.13 Press save screen to return to the home screen.
- 2.14 Press heater range key (Figure 11).



Figure 11

2.15 Using selection arrows, select the appropriate heater range (Figure 12).

		And Char + 4.5 + 56417 to unite with contact with contact.
West States		
	LakeShore	3402
	<sup>θ</sup> T-OVER κ	<sup>®</sup> T-OVER κ
	Loop 1 Channel A Setp 0.0000 K Heat 0.0% 0 2.5m	P 50.0 I 20.0 MOut D 0 + 0.00%
CLS 2	240 Temperature Controller	REV007
BTCU	IRVES LOADED 5/6/	2016
No. of Concession, Name		And the second
	ake Shore	

Figure 12

- 2.16 Press save screen to set value.
- 2.17 Ensure control channel is set to appropriate input (Figure 13). If control channel needs to be changed, press control channel (Figure 11).

		-
	LakeShore	340
	<sup>A</sup> .T-OVER. к Loop 1 Channel II Setp 0.0000 K Heat 0.0% 3 OFF	<sup>в</sup> .T-OVER. к <sup>Р 50.0</sup> 1 20.0 + 0.00t
LS 2	240 Temperature Controller	REV007
784	RVES LOADED 5/6/	2016
1	akeShore	

Figure 13

- 2.18 Using selection arrows, select appropriate control input.
- 2.19 Press save screen to set value.

STEP 1.1-2.19

## NOTE

Refer to either equipment logbook or equipment label to find appropriate sensor and heater information. Contact a member of the Sample Environment staff with any questions.