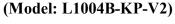
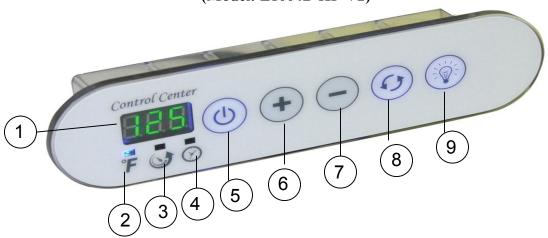
### **USER'S MANUAL**



## 5-Button Control Keypad with Temperature Display for VSC/BSC





**Understanding the Unit** 

		SCREEN OFF: Unit is in 'idle' mode		
1	Display			
		SCREEN ON: Unit is displaying temperature, speed, time remaining or		
		error information.		
2	Temperature in °F	When on, the screen displays temperature value in °F		
3	Speed level	When on, the screen displays speed level from 1 to 10		
4	Time remaining	When on, the screen displays the time remaining in minutes		
5	Power button	1 <sup>st</sup> press: Pump ON, Light ON, LED ON		
		2 <sup>nd</sup> press: Pump OFF, Light OFF, LED OFF, Display Idle		
6	Speed + button	Speed goes up, screen displays speed. Max. speed level is 10.		
7	Speed – button	Speed goes down, screen displays speed. Min. speed level is 1.		
8	Pulse mode button	1 <sup>st</sup> press: Pulse mode ON, LED ON		
		2 <sup>nd</sup> press: Pulse mode OFF, LED OFF		
9	Light button	1 <sup>st</sup> press: Light ON, LED ON		
		2 <sup>nd</sup> press: Light OFF, LED OFF		

### **Features**

- 1. **Pulsating Mode**: In this mode, the pump speed varies automatically with a cycle period of approximately 10 seconds.
- 2. By default, the pump speed level is set to 10. When the pump is turned OFF, the speed level during the time of turning OFF is saved.
- 3. When the pump is turned ON, the pump speed is softly ramped up to maximum speed in about 5 seconds, and then the pump speed goes back to saved speed level/ default level. During the 5 second soft ramp up, the 'Speed+', 'Speed-' and 'Pulse' mode button are disabled.
- 4. The unit has 20 minute in-built timer. So the unit will shut down after 20 minutes of operation and save the speed level for next cycle use.

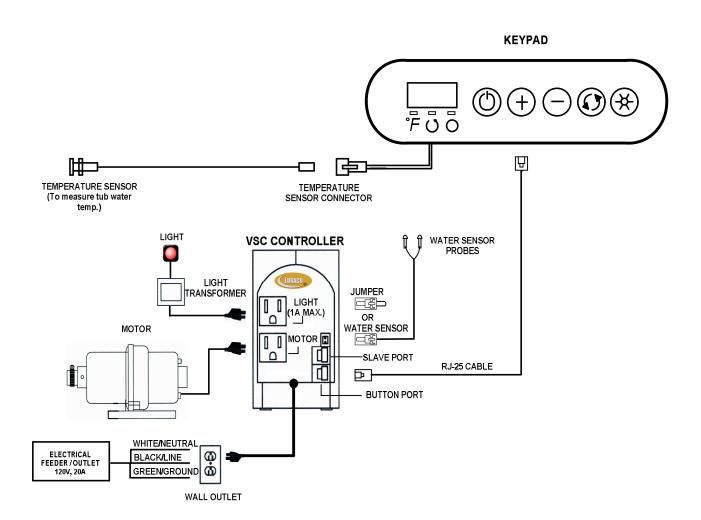
**Note:** Make sure that the water level sensor or a jumper is connected to VSC box. Otherwise, the unit will not turn on.

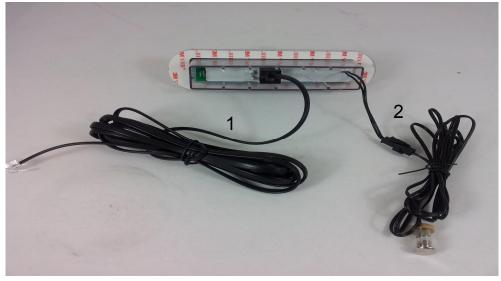
### **Error Codes**

The display screen has special error codes to determine and debug possible error conditions. They are as follows:

E-1	There is a connection problem between VSC/BSC to keypad. The power button LED	
	also blinks 'fast' to indicate the connection error. Try reconnecting the cable and reset	
	the power on VSC/BSC.	
NC	The temperature probe on the back of keypad is not connected. Try re-connecting	
	probe again.	
LO	Temperature value is Below 50 °F	
HI	Temperature value is Above 140 °F	
No H20	The power button LED also blinks 'slowly' to indicate this error. The unit will not	
	turn on because the water level sensor is detecting no water in tub. If water level	
	sensor is not used, a jumper should be connected at water sensor port of VSC/BSC.	
E-2	The unit shuts down due to over-heating. Check the fan connection in the VSC unit.	

# **Understanding the Setup**



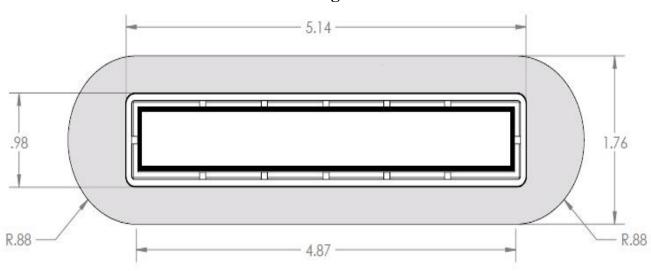


1	RJ25 Cable	Connect one end to the back of keypad and the other end to the 'button' port of VSC/BSC.
2	Temperature Probe	Connect the square female end of the probe to the male end of the
		keypad. Drop the probe on water.

### **Steps to Follow**

- 1. Connect keypad to VSC/BSC using RJ25 cable.
- 2. Connect the temperature probe on the back of keypad.
- 3. Connect water level sensor/jumper on the sensor port of VSC/BSC.
- 4. Connect Pump to the 'Pump outlet' and Light to the 'Light outlet' of the VSC/BSC.
- 5. Connect power cable to the power outlet and turn on the unit using power button on keypad.

## **2D Drawing**



Backside view of keypad (All dimensions in inch)

#### THANK YOU FOR BUYING LURACO TECHNOLOGIES' PRODUCTS

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