

KEGLAND Temperature Controller

KegLand

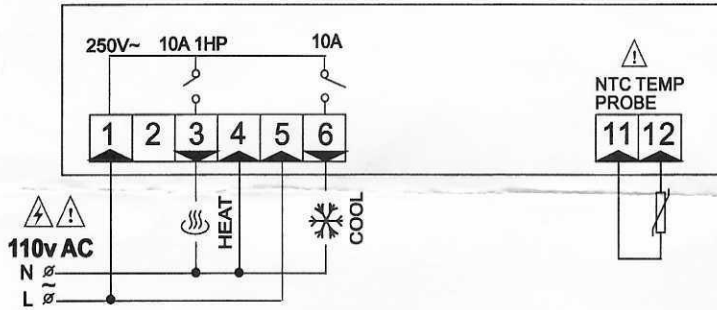
Model No#: KL01946

Power Supply: 10A, 110V/AC ±10%, 50/60Hz

Relay voltage: 12~24v DC / 110~240v AC

NEMA Protection Rating-Housing	Ip20
Power Supply	10A, 110V/ AC ±10%, Max 1100W, 50/60Hz
Power Consumption	<3W
Display Range	-45 to 99C
Accuracy	+/- 0.5C
Resolution	0.1C

WIRING DIAGRAM



Note: Because of cable power limit (Max 1100W), compressor and heater could not enable at same time

ICON LEGEND

ICON	MODE	FUNCTION
	On	Cooling Relay On
	Flashing	Cooling & Relay Delayed Start
	On	Heating Relay On
	On	Alarm
	On	Temperature Unit

SETTING THE SET POINT

1. Push and immediately release the **SET** key. The display will show the set point value.
2. Use the up and down arrow keys to change the set point
3. wait 6 seconds to return to the home screen.

RESUME FACTORY DEFAULT SETTING

Push the down key for 1 second. While holding down the down key also push the up key at the same time. Once the up and down key are both depressed then release the down key and keep holding the up key for a further 6 seconds.

CHANGING THE ADVANCED SETTINGS

For more advanced users the temperature controller has a significantly advanced settings menu that can be accessed. The advanced settings allow further instructions to be given to the controller such as different cooling start delay times, tighter temperature hysteresis settings, distillation control or even sequential temperature settings. Some of the advanced settings are show in the table below:

Function Setting	Range	Default
E3 Temperature hysteresis	0.1 ~ 10°C	1°C
E4 Cooling Start delay time at power on	00 ~ 10min	00
E5 Cooling Start delay	00 ~ 10min	02
E6 Calibration offset setting	-20°C ~ +20°C	00
t1 Delay time between heating and cooling turning on	00 ~ 30min	05
H1 High temp alarm	H2 ~ 99°C	99°C
H2 Low temp alarm	-45°C ~ H1	-45°C
H5 Alarm start delay time at power on	00 ~ 180min	00
H6 Alarm delay time	00 ~ 180min	00
C1 Temperature unit	00=°C 01=°F	00
d1 Advanced function mode (EXPLAINED IN DETAIL BELOW)	00=Nomrl 01=Sequential 02=Distillation	00
d2 Time Unit	00=Second 01=Minute 02=Hour 03=Day	01
d3 Time allocated to each sequential step	00 ~ 200	01

SEQUENTIAL TEMP SETTINGS BELOW BECOME VISABLE WHEN YOU SET "d1" to "01"

F1 Sequential Temp 1	-40 ~ +99°C	20°C
F2 Sequential Temp 2	-40 ~ +99°C	20°C
F3 Sequential Temp 3	-40 ~ +99°C	20°C
F4 Sequential Temp 4	-40 ~ +99°C	20°C
F5 Sequential Temp 5	-40 ~ +99°C	20°C
F6 Sequential Temp 6	-40 ~ +99°C	20°C
F7 Sequential Temp 7	-40 ~ +99°C	20°C
F8 Sequential Temp 8	-40 ~ +99°C	20°C
F9 Sequential Temp 9	-40 ~ +99°C	20°C
F10 Sequential Temp 10	-40 ~ +99°C	20°C
F11 Sequential Temp 11	-40 ~ +99°C	20°C
F12 Sequential Temp 12	-40 ~ +99°C	20°C

1. To access the advanced settings (above) push the **SET** key for 6seconds until E3 flashes.
2. Use the arrow keys to navigate to the advanced setting and then use set key to select the advanced setting then use the arrow key to change the advanced setting.
3. After the advanced settings have been set use the set key to return to the advanced setting display or just wait 6 seconds to return to the home screen. Alternatively if you would like to return to the home screen quickly simply press the "X" button to instantly return to the home screen.

d1 ADVANCED FUNCTION MODE

The advanced function mode has three different settings:
d1= 00 - This is just normal operation

d1=01 - Sequential Mode

In sequential mode a series of set temperatures can be setup so the temperature control will cycle through a number of different set temperatures before returning to the original set temp. This can be particularly useful if you

the temperature would increase by 2°C every 2 days then crash chill and dropped the temperature down to 0°C at the end. To set up sequential mode:

1. Set d1 to 01
2. Navigate to d2 and set the time unit to either minutes, seconds, hours or days.
3. Navigate to d3 and set the time for each sequential step. For example if d2 has been set to 01 (for minutes) and you set d3 to 15. Then each sequential set temperature will last for 15 minutes before moving to the next sequential set temperature.
4. Navigate from F1 to F12 and set the temperature for each sequential stage.
5. If you do not want to use any of the sequential stages simply set the F1~F12 setting to "no". This can be done by pressing the down arrow until you get to -40°C then press the down arrow again and it will display "no". In the "no" setting the sequential step will be skipped. If the F1~F12 setting is set to "no" the controller will jump to the next programmed sequence.
6. If at any point you need to re-start the sequential mode from F1 simply press the down arrow and set key at the same time for 6seconds and the sequential mode will start from the beginning.

NOTE: While in sequential mode the display will cycle between the probe temperature and the "F1~F12" sequential stage. If at any time you would like to see the set temperature for that sequential stage simply press the "X" key and the sequential set temperature will be displayed.

d1=02 - Distillation Mode

When distilling alcohol or other liquids it can take several hours. Digital temperature controllers such as this one can help automate the process so you don't need to monitor the still so closely and the controller can turn off the still and pump when the distillation process is finished. When in distillation mode the controller will only cycle the heating relay once. So for instance if you set the temperature to 80C the controller will turn on the heating relay until the temperature gets up to 80C. Once it reaches 80C it will sound the alarm and turn off the heating relay until it is manually reset.

If you did not use distillation mode the temperature controller would turn on the boiler and the temperature would only go up to 80C. However once the boiler cools down the controller would turn the boiler back on and the temperature would keep getting pushed up to 80C so the boiler would keep getting cycled on and off repeatedly this issue highlights the need for the distillation mode.