

# KL8-3H PROGRAMMING INSTRUCTIONS

## 1. key note

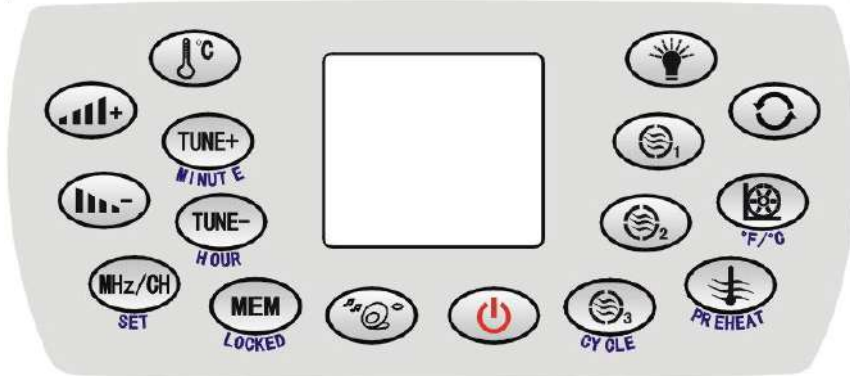


Figure 1.1: Conventional panel structure

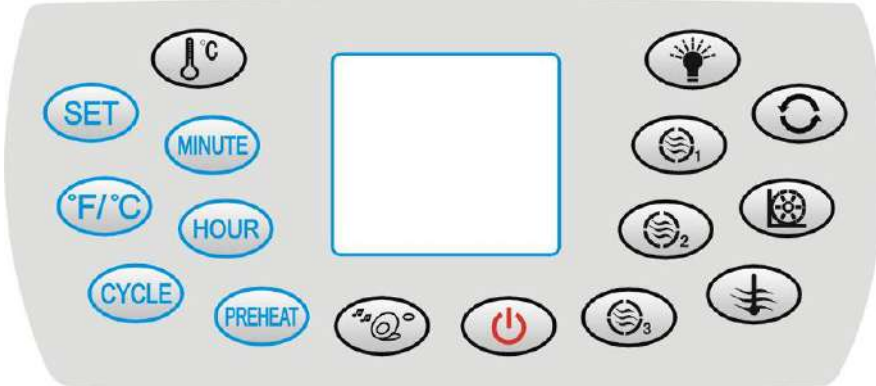


Figure 1.3: with TV / DVD's DC12V power mask map

"TUNE+ MINUTE" Frequency up-searching / Minute	"The total on/off & setting confirm
"TUNE- HOUR" Frequency down- searching/ Hour	"Radio / CD input key
"Volume up	Blower on/ Off & Temperature Mode Shift

"Volume down	"Pool lights key
"MEM LOCKED" Radio memory / lock button	"Surf pump 1 key
"MHz/CH SET" Radio searching / setting	"Surf pump 2 key
"Long circulation cleaning	"Setting Of circulation Cleaning & pump 3
"Preheat setting & Heater On/ Off	"Temperature setting key
<b>Note:</b> Only part of the blue button in the shutdown state in order to operate.	

## 2. Functional overview

- 6KW features the largest heating thermostat, pre-heating function, temperature display and setting function.
- Surf up to three pumps (KL8-3H-CAA6), a circulating pump, a pump typhoon.
- Synchronous multi-color light color and the bottom set features light and ozone.
- CD audio input capabilities. Radio frequency display, and access to 10 channels.
- 87 shows the volume and volume adjustable.
- Long cycle time cycle of cleaning and cleaning function.
- 24-hour clock display and setting function.
- With all the settings down memory parameters.
- Fahrenheit and Celsius temperature switch function.
- Water anti-freeze function.
- Backlight function keys.
- Board computer function key lock.
- Three-phase or single phase, optional 110-120VAC or 220-240VAC.
- When the use of "CD" when there is all the way synchronous AC power output for DVD or TV
- Three power control mode.

## 3. Instructions

- When the initial power, semi-bright backlight, LCD displays the current clock, and display the current temperature, such as sensor open / short circuit shows "E1". Parts of the radio frequency display shows " - - - " indicates that the system is turned off, pre-heating and cleaning cycle in a closed state.

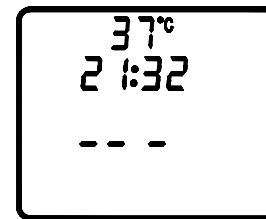


Figure 3: normal temperature display

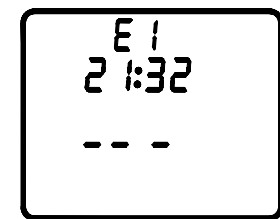


Figure 4: Sensor Open / Short show

2、 Lock operation:

This feature is optional for function, 30 minutes without key operation or shutdown state click

“MEM LOCKED” Key, key lock to start.

In the “LOCKED (key lock)” state, even by the second “MEM LOCKED” Key to open the lock button, then “LOCKED” signs disappear.

3、 The operation of the clock settings:

In the waiting state and pre-heating & circulation cleaning is no setting up or no working, Press “TUNE+ MINUTE” or “TUNE- HOUR” Key to enter the clock settings, and at this time “:” symbol is no longer flashing, and the hours and minutes appear flashing.

In the clock settings, and every time “TUNE- HOUR” Button to increase the 1 hour, press and hold “TUNE- HOUR” Key will be for increased hours. Hour adjustment range is: 0 ~ 23.

In the clock settings, and every time “TUNE+ MINUTE” Key, increased by 1 minute, hold down the “TUNE+ MINUTE” Key will be for increased minutes. Minute adjustment range: 0 ~ 59.

Set up to wait for 6 seconds after the completion of the system clock set automatically from the state.

4、 Set up the operation of circulation cleaning:

Can only be set once a day circulation cleaning cycle. Set whether or not to start the clean cycle? In the LCD can be at a glance. See the figure below:

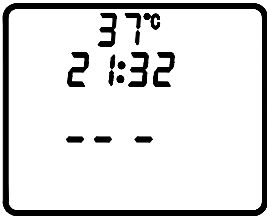


Figure 5: Set the closure of cleaning cycle

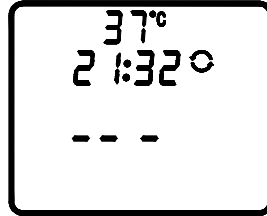


Figure 6: Clean cycle set to open

all the settings of circulation cleaning must be in the waiting state, at this time will be displayed on the LCD “- - -”.

1)、press “CYCLE” Key, enter the circulation cleaning settings, and at this time on the LCD “CYCLE” Show, At the same time, “CYCLE” flashing signs appear, and one clock is flash, but “:” no flashing, The flashing clock is “Circulation clean start time” (see Note 2). Again “CYCLE” Key, related Closed settings (see Note 1).

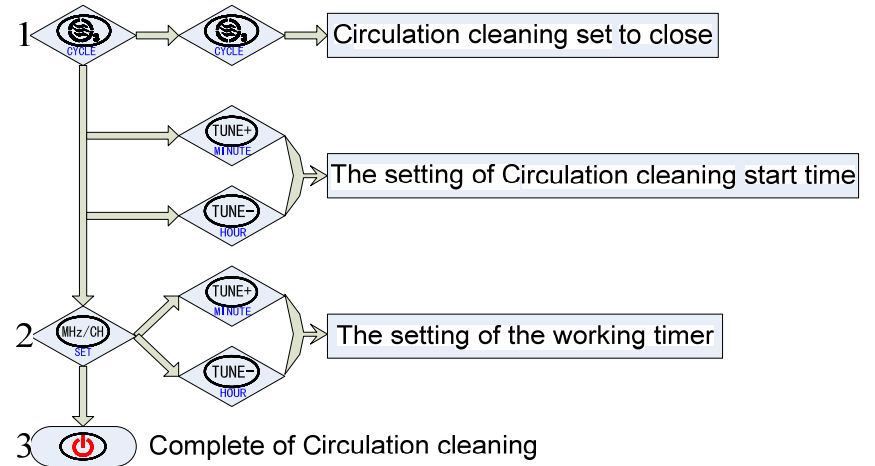
2)、Press “TUNE+ MINUTE” (Minutes keys) and “TUNE- HOUR” (Hours key) that can change “Circulation clean start time”. Every time “TUNE+ MINUTE” Key, increased by 1 minute, hold down the “TUNE+ MINUTE” Key will be for increased minutes.

Every time “TUNE- HOUR” Button to increase the 1 hour, press and hold “TUNE- HOUR” Key will be for

increased hours. The longest continuous working hours for 19 hours and 55 minutes.

After the time set to open access to the next step.

Circulation cleaning setting



3、After all the settings and then click “POWER” Button to confirm, the system automatically set the state to withdraw from circulation cleaning (according to “CYCLE” To give up the keys and the eject button).

\*\*\*Note\*\*\*

- 1、 Circulation cleaning all the settings must be in the standby mode.
- 2、 In the entire set up process, the circulating pump and ozone will not work.

5、 Pre-heat settings:

Can only be set once a day pre-heating, Whether or not to start pre-heating? In the LCD can be at a glance. See the figure below:

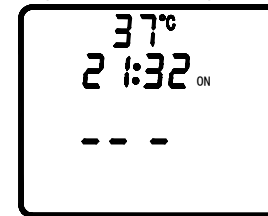


Figure 7: Pre-heating is turned on

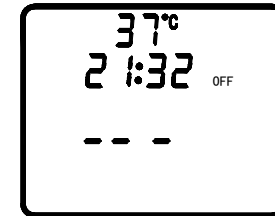
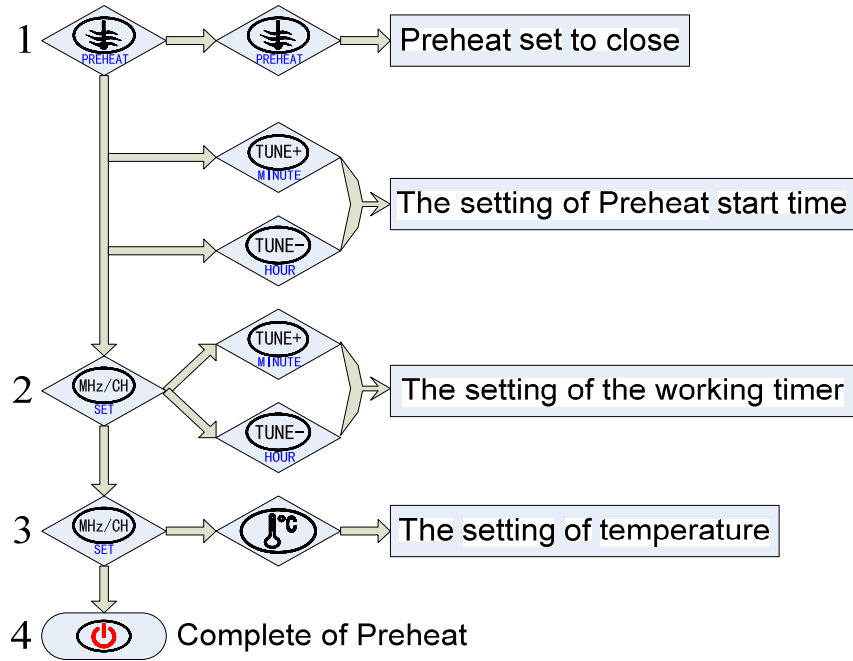


Figure 8: Pre-heat the closure of

All the settings of pre-heating must be in the waiting state, at this time will be displayed on the LCD “- - -”.

1)、By “PREHEAT” Key, set the state to enter the pre-heating, when the LCD on the “ON” signs indicate that “PREHEAT” Flashing signs will appear, At the same time, one clock time (pre-heating start working time) is flashing too, but “:” no flashing (see Note 2). Again “PREHEAT” Key, Closed set (see Note 1).

## Preheat setting



2)、Press “” (Minutes keys) and “” (Hours key) that can change “Pre-heating start working time”. Every time “” Key, increased by 1 minute. hold down the “” Key will be for increased minutes. Minute adjustment range: 0 ~ 59。

Every time “” Button to increase the 1 hour, press and hold “” Key will be for increased hours. Hour adjustment range is: 0-23。

3)、 “” Key to switch to the pre-heating time for the continuing work of the set state, LCD displays the time at least 10 minutes, the duration will not be flashing. Every time “” key, an increase of 10 minutes. every time “” increase in 1 hours. the longest continuous working hours for 19 hours and 50 minutes. After the time set to open access to the next step.

4)、 Then click “” To enter a state of temperature setting. LCD on at this time there will be “SET” signs, according to “” Key to change the set temperature. Temperature range:

15 ~ 42 ℃。

5) After all the set and then click “” Button to confirm, the system automatically set the status from the pre-heating.

\*\*\* Note \*\*\*

1, pre-heating of all the settings and work must be in the waiting state.

2, please refer to LCD is the display “ON” or “OFF”, shows “ON”, said pre-heating is turned on when the pre-heating start working time and the current settings at the same clock, it will start pre-heating. Shown as “OFF” at any time when it will not start pre-heating.

3, set in the entire pre-heating process, the constant temperature furnace and water pump will not start the work cycle.

6、 pre-heating of the work:

When real-time clock and pre-heating setting start working time consistent, pre-heating is set to “ON” and the bathtub with water, it will start the pre-heating. circulating pump and automatic constant temperature system work at the same time. LCD display position on the countdown clock time (“:” are no longer flashing).

Work in the pre-heating process, when the end of the countdown time, the system automatically

shut down pre-heating: At this point you can also “” Closed pre-heating.

\*\*\*Note\*\*\*

1, when the temperature is too low (less than or equal to the water temperature), although the start of pre-heating, but the constant temperature furnace and the circulation pump will not start.

2, each state (no water、 still water、 flowing water) switching time of 30 seconds.

7、 the work of circulation cleaning:

When the real-time clock and the setting start working time of circulation cleaning consistent,

the circulation cleaning is set to “on” (the mark “” of LCD panel is on), and the bathtub with water, it will start the circulation cleaning, At this point LCD display on the part of the countdown time clock (“:” are no longer flashing).

All the surf PUMPS and BLOWER will activate, the working time is 30 seconds, Synchronized to start circulating pump, Ozone after 15 minutes of each work will be shut down for 15 minutes.

In the course of the circulation cleaning, when the countdown to the end or “” Key to close the cycle of cleaning.

8、 on / off operation

In the waiting state by “” Key to enter the working state. State in the working state by “” Can enter the waiting state, LCD display can be seen whether the state boot?

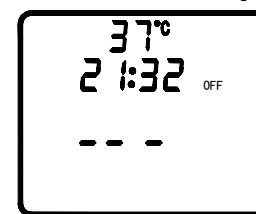


Figure 8: waiting state

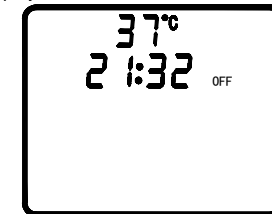


Figure 9: working state

**9、the operation temperature settings:**

In working state, the temperature settings can operate. Every time “” Key, set the temperature increases 1 °C, hold down the “” Letting go, and set the temperature continued to increase until 42 °C, Again “” Key, set the temperature to 15 °C, Set temperature range: 15 ~ 42 °C.

**10、radio and CD operation:**


Figure 11: The frequency of the radio onto 105.2MHz location 3 (memory) the frequency of location3 (105.2MHz) put the current transfer

I、 “” Key for the radio and CD's on key can only be turned on to operate. The first time by “” Open radio; the second time by “” close radio, at the same time to open CD; the third time by “” close radio, also bear in CD.

II, In the radio turned on, LCD displays the current radio frequency and the size of the current volume.

III, In the radio turned on the state, through “” and “” Change the current frequency.

IV、 In the radio to open the state, through “” key out of the radio frequency storage. Row by “” Key to a different location to check out the frequency, When the position of non-data, the show “- - -”.

V、 In the radio to open the state, through “”key, The frequency of the current is store, Row by “” Key to keeping the frequency of the former to a different location. Keep up to 10 units, respectively, for 0-9.

VI、 By “” and “” Keys to change the size of the volume.

**11、the operation of surf pumps:**

KEY of “Pump1/2/3” are control surf pump1/2/3. Key of “Pump 3” are control pump3, When the surf pump is two, The Pump3 are circulation pump at the same time. All surf PUMP will auto off when working 1 hour later.

**12、long circulation cleaning:**

At any time by “” Key to on / off a long circulation cleaning. After a long work cycle patterns and cleaning cycle time is the same: surf pump & blower will be activated within 30 minutes

every time, working time is 30 seconds, ozone work for 15 minutes, 15 minutes for clearance.

Water surf PUMPS and BLOWER is turned on, ozone can not work; circulating pump is turned off, the ozone can not work.

**13、the bottom light steps:**

The first by “” Key, to open the underwater lights, the color slowly changes; the second time by “”, The color of the current fixed; the third time by “”, The closure of the underwater lights.

**14、constant temperature heating steps:**

1), in the pre-heating time to the pre-heating case opened or by “” Key can be turned on the heating system thermostat.

2)、When heating the normal opening for the time by “” Key to open the heater, the circulation pump will work automatism.

3)、heating thermostat open, the furnace is turned on when the thermostat has been circulating pump rotation.

4)、such as temperature set to 35 °C, when the temperature reached or exceeded 36 °C, the heater shut down, 5 seconds after circulating pump will stop working (cleaning pump did not start the case); and when the water temperature at or below 34 °C, circulating pump restart, and re-open the heater.

**15、the operation of blower:**

Button “” Control of the wind pump on / off.

Blower is activated, as in the absence of circumstances, the work of 20 minutes will be automatically closed.

**16、Fahrenheit and Celsius temperature switch:**

In the waiting state by “” Button, the temperature in Fahrenheit and Celsius temperature switch.

17、when the pool water, the three-way water pump and thermostat systems are not activated, but the LCD display on the corresponding symbol will be flashing.

**18、Frozen preventing control function**

When the water temperature below 5 °C, the heater and circulation pump will automatically start the water heating, when the water reached 10 °C, the heating stopped.

This function must ensure that the normal power supply.

**19、power control function (only of KL8-3H-BAA6)**


There are one power control modes: PC1: the latter priority.


Power control all the high-voltage load is divided into two groups, one for A: heater + circulating pump, and the other group B: surf pumps+ blower .


1), PC1: the latter priority mode:


When opening Group A or B in any one of the load, and load a group of self-closing, such as: open PUMP1, heater and circulating pump shut down automatically; the same token, open the heating, The surfing pumps and blower shut down automatically.

2), Setting of power control mode:

In the waiting state, click “” Key, LCD blinking on the “PC” logo, indicating that the system state into the power control settings. Without power control at this time. Then click

“” From the set state.

Power control settings in the state, “PC” logo will always be flashing, this time by “”

PC1 key set to the state. Settings are completed, and then click “” From the set state.

#### 20、Common Errors instructions:

Error flag	Wrong reasons	Error Handling
E1	A, temperature sensor or disconnect missed. B, temperature sensor short circuit	Check the heater and the main electrical box between the cable 5-pin plug or plug is good.
FF	Not a good temperature sensor	
E2	A, the flow sensor is not received or disconnect B, short-circuit flow sensor	
EP	A, circulating pump damage B, non-flow through the internal heater	A, circulating pump for damage. B, whether or not to plug the filter inlet

## 4. Electric parameters

### (1) Performance index:

Rated voltage: 220VAC/50Hz。 Maximum working current: 60A/220V  
(110VAC/60Hz) (100A/110V)

Voltage-resistance: Isolative resistance : >=200M $\Omega$   
1250V/1 minute without penetration。

Water resistance grade: IPX5。 Electric shock resistance: first grade

### (2) Output loading index

Heater: AC220V/6KW。 Surf Water pump: AC220V/3 HP  
(AC110V/3KW) (AC110V/2HP)

Circulation water pump: AC220V/1HP。 Blower: AC220V/1HP

Hot tub under water lamp: AC12V/10W。 Ozone: AC12V/15W

DC12V/10W

Radio: 1) Frequency Range: FM: 87.0~108.0MHz

2) Maximum Output Power: 20W

3) Speaker: 8 $\Omega$  damp proof speaker