

HLW-15B Spa Control Panel Instructions

A. Chinese Luxury control system

1、 Illustration to buttons

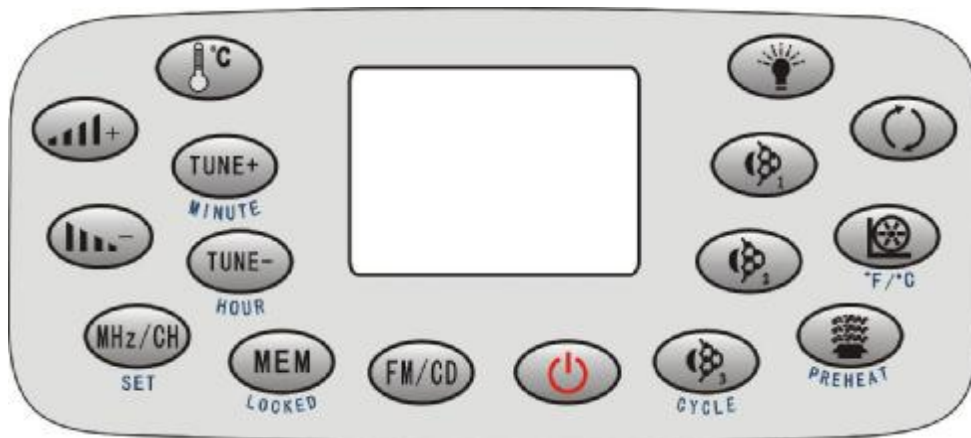


Fig.1: Control Panel

 “TUNE+ MINUTE”Frequency up- searching / Minute	 “”On-off/Setting confirm
 “TUNE- HOUR”Frequency down- searching/ Hour	 “FM/CD”Radio or CD Switch/ On-off
 “”Volume up	 “”Blower On-off/°F or °C Switch
 “”Volume down	 “”Spa Light On-off
 “MEM LOCKED”Radio channel Memory/ Lock	 “”Surfing pump 1 On-off
 “MHz/CH SET”Radio channel read / Set switch	 “”Surfing pump 2 On-off
 “”Lasting Circulation Cleaning On-off	 “”Surfing pump 3 On-off/Set Pre-circulation Cleaning Time
 “PREHEAT”Circulating pump/Heating On-off / Set Pre-heating	 “”Set Temperature
Note: .The functions listed with blue letters only works on the condition of turnoff	


2、 Function Summary


- (1) 3KW at top heating function, preset heating, and display and operation of water temperature.
- (2) One control panel could bear Three surfing pumps, One circulation pump, and One blower at most.
- (3) Color of Lights could be changed & changeless synchronization, also ozone and bottom led light.
- (4) CD frequency input. Display radio frequency, in normal condition, 5 channels can be stored automatically and 10 channels can be stored by hand search, and the adjustment of volume.
- (5) Long Circulation and Phase of time Circulation cleaning.
- (6) Display and set of 24-hour model.
- (7) Power-loss memory for all setting.
- (8) Fahrenheit & Celsius temperature shift.
- (9) Frozen preventing control.
- (10) colorful luxury LCD and Keys of Light function.
- (11) Lock of buttons of computer board.
- (12) Selection of 380-400VAC or 220-240VAC, And Single-Phase or Three Phase Four line mode.
- (13) Selection one AC power output when “CD” is working, which is used to supply power for DVD and CD chosen by customers.

3、Operations





(1) When first turning on the power, the backlight will bright of halt, and the LCD will show the present time and temperature. It will show “E1” if the sensor is open/short circuit. When part of radio frequency showed “---”, it indicates that the status of the system is “Waiting Mode”, so as well as the pre-heat and circulation cleaning.



Lock Mode (optional function) :

(2) This is a selective function. The lock will start work by pressing “” key in the status of “power off” when the keys of the spa have not been pressed for a period of 1 minute. When the spa is in locked status, no keys but power key and locked key can be

answered. If the “” key is pressed twice, the spa will become unlocked and the word “LOCKED” will disappear.



(3) Time setting operation







In the status of “Power off”, if the pre-heating and circulation cleaning have not been started, Pressing “” or “” to adjust time. The Minute and Hour display will flash at this time. It will add 1 hour when pressing “” each time and the hours can be adjusted continually when pressing the “” without stopping. The hour adjustment range is 0-23.

In the status of time setting It will add 1 minute when pressing “” each time and the minutes could be added continually when pressing the “” without stopping. The minute adjustment range is 0~59. The system will quit the time-setting status automatically after 6 seconds without pressing any buttons.






4、Set pre-circulation-cleaning:



When setting the pre-circulation-cleaning the display must be in the “Power off” status and the LCD display “---”

1) Press “” to enter pre-circulation-cleaning setting mode, the LCD shows “FLON” and flashes, and then the pre-circulation-cleaning works on. Press “” again to turn off the pre-circulation-cleaning, and the Circulation cleaning will disappear.

2) 、 Press “” (minutes) and “” (hours) to adjust the pre-circulation-cleaning start time. It will add 1 minute when pressing “” each time and the minutes could be added continually when pressing the “” without stopping. The adjustment range is 0~59. It will add 1 hour when pressing “” each time and the hours could be added continually when pressing the “” without stopping. The adjustment range is 0-23.

After setting the start time of the pre-circulation-cleaning, go to next step.

3)、 Press “” to set the circulation lasting time, the LCD displays “FLDU”, Press “” (minutes) and “” (hours) to adjust the pre-circulation-cleaning lasting time. It will add 5 minutes by pressing “” each time. It will add 1 hour by pressing “” each time. The maximum working time is 19 hours and 55 minutes. When you have completed this procedure, and then continue to the next setting.

4) 、 If all settings have been adjusted correctly, Press “” for confirmation, the system will quit this mode automatically (press key “” to clear settings and exit).
Notice





- a. All the setting of pre-circulation-cleaning must be set on Power OFF status
- b. Circulation PUMP and OZONE are not working while setting the pre-circulation cleaning.





5、Set preheating (if required) :




Only one pre-heating setting is allowed each day if required. The LCD can show clearly in the following figures



Whether pre-heating settings are set or not



Pre-heating is set when the spa is in the "Power off" status and the LCD display shows "--"

1) 、 Press  and enter Pre-heating setting mode, and the LCD displays "HTON" and flashes "ON", Press  again to turn off pre-heating. The LCD will show "OFF" without flashing. When the system enters into pre-heating set mode, the starting time of pre-heating will flash on the LCD at this moment,  and  are available to change the time

2) 、 It will add 1 hour when pressing  each time and hours could be added continually when pressing the  without stopping. The adjustment of hours is 0-23
It will add 1 minute when pressing  each time and minutes could be added continually when pressing the  without stopping. The adjustment range is 0~59
After start time setting of pre-heating, proceed to the next step.

3) 、 Press  to set the lasting time for pre-heating. It will show "HTDU" , and it will add 10 minutes by pressing  each time and it will add 1 hour when pressing  each time. Please note that the maximum continual time is 19 hours and 50 minutes. When you have correctly set the pre-heat times you may proceed to the next step.

4) 、 Press  again, It will show "HT-T" on the LCD panel. And Press  button, it changes the setting temperature. The range of temperature setting is: 15~43°C .

5) 、 When everything is set correctly, press the  to confirm, the system will quit the pre-heating setting mode, and into the default heating to working state with "off" shown on LCD, the symbol of heating will flash (press  to give up setting and quit)

Notice

(1) All settings of preheating must be in Power OFF mode, just turn on the spa, the LCD will display "---"

(2) Please note that it shows "on" or "off" on the LCD. "On" means preheating is turned on mode. When the time of pre-heating is as same as current time, the heater will start working.

"Off" means the heater won't start to work at any time.

(3) Circulation PUMP and HEATER without working while setting preheating.

6、 Operation of preheating:

When the preheating time is as same as the current time, the LCD screen shows “on” and the tub is also filled with water. The heater will start to work. The heater, circulation pump and time counting work at simultaneity. The countdown time will be shown on the LCD screen, till the preset time is finished.

During the preheating, the preheating will be turned off automatically once the preset time is finished.

Or Pressing the “” or “” key can stop preheating.

Notice


- a). When setting temperature is lower than or equal with water temperature, Even the Preheating is on, but the circulation PUMP and HEATER are not working.
- b). When the HEATER is “I” type frame, The power of circulation PUMP must reach 750W.

Otherwise the heater won't work due to not enough water pressure to drive pressure switch.



- c). Conditions meet the above “2”, and the HEATER is still not working, Please short the line of water pressure switch.

7、 Pre-circulation-cleaning:




As the current time is as same as the preset time, the preset is “on” too and the tub is filled with water, the circulation cleaning will start, the circulation pump works at the same time. The LCD shows the countdown time. All the surfing pumps and blower will work for 30 seconds at every 15 minutes. The Ozone works 15 minutes at every 2 hours.

The circulation cleaning will be turned off automatically once the countdown time is finished or by pressing the “” key to turn off directly.





8、 Operation to Power ON/ OFF

Pressing the key “” in “power-off” status to enter the “power-on” status. And press the “” in the status of “power-on” to enter the “power-off” status. The LCD screen shows the on or off.





9、 Temperature setting:



In the status of “Power-on” and “HEATER” being working, it will add 1 centigrade by press “” each time, the temperature will be added continually till reach 45 centigrade (113 Fahrenheit) by press “” without stop. Press “” again, and the temperature will show 15°C (59 Fahrenheit) .The range of adjustment is: 15~45°C (59~113 Fahrenheit) .

10、 Operation Radio & CD:

1) “” is the ON/OFF key for radio and CD, and it is only available in the status of power on. The first pressing “” is turning on the radio, the second pressing “” will turn off the radio and turn on the CD at the same time, and the third pressing “”, will turn off the radio and CD simultaneous.

2) LCD will show present frequency after turning on the radio.

3) In the working of radio, the present radio frequency can be changed by pressing “” and “” shortly, and the station will be searched up and down automatically if press “” and “” sequentially.









4) The volume can be changed by pressing key “” and “”.

5) Press the key “MEM” without stop, the radio will automatic searching radio station from “87.5MHZ-108.0MHZ” and memorize all the clear radio stations in different channels. The “MHZ” will be shining during searching stations, and out when it is over, then “MHZ” will stop flashing. Press “MHZ/CH” to change the channel downward till a station frequency is searched.


If there is noise station, press “” and “” to make it clear, and press “MEM” for short and there will be "SAVE" on LCD, then store the clear station.

11、 Operation of Pump:

The switches of water pimp1/2/3 are controlled by the buttons 1/2/3 separately. The manual of specification to different SPA is as follows:

“” pump, “” pump and “” pump control the switches of massages, when there are only 1 or 2 pumps in, “” pump, “” pump or “” will be of no use. “” is multiplex button, the function of filtering will be turned on when the button is pressed for the first time, and heater will be on when the button is turned on for the second time. Filtering and heater will be turned off for the button's being pressed for the third time. When there is no independent filter pump, one of the massage pumps will act as a filter pump, some function of the SPA is controlled by “”.

12、 Operation of lasting circulation cleaning:


Press the key “” at any time to turn on or off the lasting circulation cleaning, work mode is like the pre-circulation cleaning. The surfing pumps and blower work for 30 seconds at every 30 minutes. Ozonizer works for 15 minutes at every 105 minutes, and repeat this program again .Once any surfing pumps or blower start, the ozonizer stops working. The ozonizer can not work if the circulation pump is not working.

IMPORTANT: Please ensure that the ozone function is not in use while bathing in the spa

13、 Operation of spa lights:

Press the “” button to control “ON/OFF” of the spa lights.


14、 Setting the constant Temperature:

1) when pre-heating time arrives (pre-heating in the status of being opened). Pressing the “” button will start the constant temperature heating.


2) With the setting above, the circulation pump will work automatically.

3) If the temperature is set at 35°C, when the water temperature reaches or exceeds 36°C, the heater will be turned off automatically and the circulation pump will stop after 5 seconds. When the water temperature reaches or is lower than 34°C, the heater will start up again. When water temperature is over 46 Celsius degree, heater, water pumps and air pump will be turned off automatically.

4) In the case of an error shown on the LCD, the thermostatic heating system will NOT be available, the heater doesn't work.

5) The function “” is to turn on circulating pump, and heater will be on 5 minutes later.

15、 Operating the Air Blower:

The blower pump is controlled by “” but not water level, and the blower pump will be turned off automatically after 20 minutes functioning.

16、 Fahrenheit & Celsius Temperature shift:

In the status of “Power off” pressing the key “” can change the mode of Fahrenheit & Celsius degree

17、 When there is no water in the spa. All surfing pumps, blower and heating system can not be started up. However the corresponding signals will flash on the LCD.

18、 Prevent freezing function:

The heater & circulation pump will work automatically once the water temperature is below 5°C, when the water temperature is reach at 10°C, heating will stop. This function is only available while the spa is on normal power supply. In the status of anti-freezing, it will display “cool” while power is off and display “freezing” while power is on.

Maintenance of common stoppage

Number	Stoppage	Reason and code	Solution
1	Cannot start up	1、 protection switch of electricity leakage does not connect to power	1、 check if protection switch of electricity leakage is through, if not, reconnect to power
		2、 Wires between controller and electrical cabinet do not link well	2、 re-link controlling wires well
		3、 check if the transformer gets burnout	3、 replace a transformer
2	Temperature is abnormal and water pump not working	Temperature sensitive probe is broken("ERR" on screen)	Replace Temperature sensitive probe wires.
3	Full lightening on controller	1、 Wires between controller and electrical cabinet does not link well	1、 re-link controlling line well。
		2、 CPU is broken	2、 change CPU
4	Short of	1、 screen of controller is broken	1、 change controller

	picture shown on controller screen		
5	Radio cannot search the station	1、 antenna is not well connected or placed	1、 re-link tightly
		2、 radio board is broken	2、 change radio board
6	No volume on radio	1、 radio board is broken	1、 change radio board
		2、 speaker connector get loosened	2、 re-link tightly
		3、 speaker is broken	3、 change speaker
7	Bottom light cannot lighten	1、 connector of bottom light gets loosened	1、 re-link the line well
		2、 is the fuse of light burnout	2、 change fuse of the Same parameter
		3、 LED lamp is broken	3、 change new LED lamp
8	No movement for surfing motor	1、 lines connected wrongly	1、 check and re-link lines
		2、 water filled in does not reach water protection level	2、 add water to water protection level again
		3、 air controlling switch is not turned on	3、 open air switch
9	No heating	1、 temperature set is lower than that of the water in tub	1、 heighten temperature set
		2、 water filled in does not reach water protection level	2、 add water to water protection level again
		3、 heater is broken	3、 change the heater
		4、 heat controlling relay burnout	3、 change the relay controller
10	Tripping of the switches controlling heater and pumps	1、 check is there water-leakage in cabinet	1、 dry the electrical cabinet
		2、 break the heater and pumps, if no tripping for electricity leakage button, then there will be electricity leakage for heater or pumps	2、 change the heater or pump



Press FM/CD on the panel to change the mode into CD status, open the power key on TV control panel



By pressing the key of up, down and power to control the pop-up TV on the round panel

