

# Control panel operation instruction

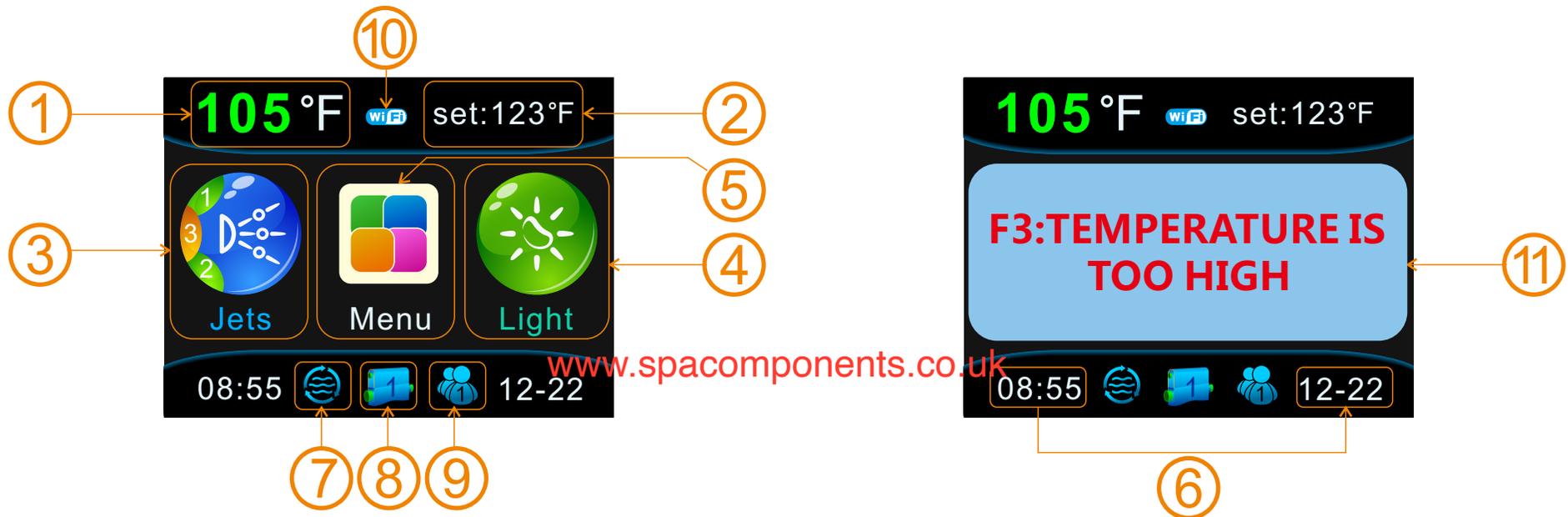
PB554 control panel image



PB554 control panel image

# Control panel operation instruction

Below is the main interface of PB554 control panel. Control panel PB554 can be connected to P20B29, P23B32 or P25B37 control system and display real time control system state.



## State displaying area:

When the control panel is connected to the control system, the screen in the control panel can display state for all the functions of the whole control system. User can easily learn the control system state with the symbols and words.

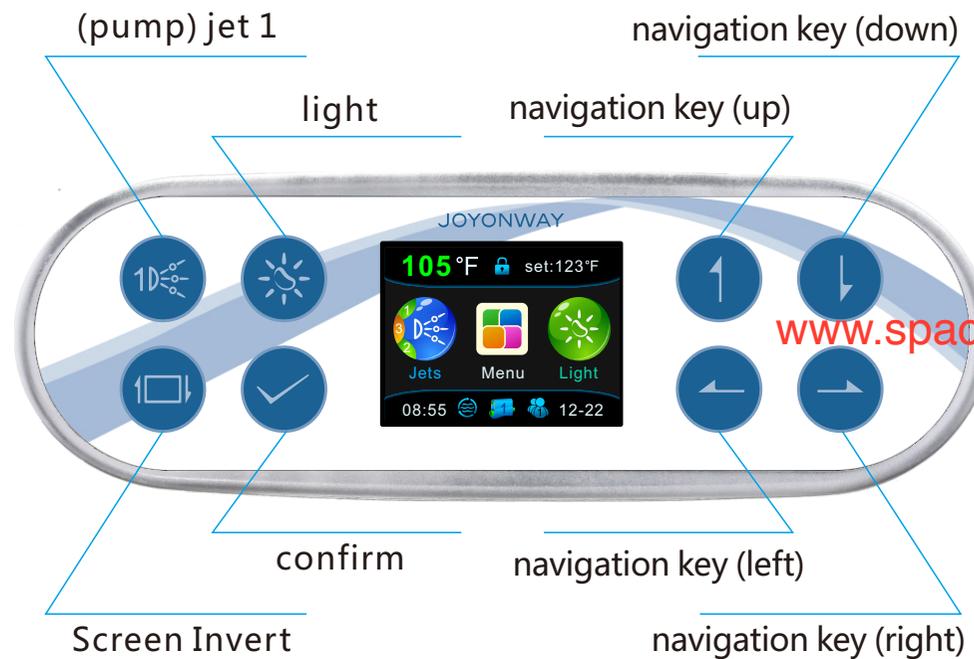
01) : display of current water temperature, unit option: ( °F ) or ( °C )

02) : to set the temperature, unit option: ( °F ) or ( °C )

- 03) : (pump)Jets status: Icon will be highlighted when any (pump) jet is started. the left part of the icon will show the (pump) jet series number and the working state (green=low speed, orange= high speed ) ; icon will show in half-transparent if all the (pump) jets are off.
- 04) : Lamp status: Icon will be highlighted when the light is on; icon will show in half-transparent if the light is off.
- 05) : Sub-menu symbol
- 06) : Date and time: time shows on lower left corner, date shows on lower right corner  
[www.spacomponents.co.uk](http://www.spacomponents.co.uk)
- 07) : Recycle filter and heating status: Icon will blink when heating is started, if the heating tube starts heating, the icon will be highlighted. If the heating function is off, the icon will be half transparent. When the recycle filter function is on, the icon will be highlighted; icon will be in half-transparent if the filter is off.
- 08) : When the control panel works with large control system, this icon will be shown. The number in the middle of the icon represent the series No. of the control system.
- 09) : User mode: The system can store 5 different modes. User can switch to the needed mode or set the modes themselves.
- 10) : Wifi status display.
- 11) : When errors occur or panel key is locked, the screen will display error and lock. User can solve the malfunction according to control system alarming information described before. If malfunction can not be solved, please stop using the control right away and seek help from the professional technician. They can locate the source of the malfunction with the information available.

# Control panel operation instruction

navigation key :



PB554 navigation key : "  ", "  ", "  ", "  ", "  ".

By pressing the navigation key, user can do all the operation. In the display interface, the green background of the words or symbol is the choosing cursor. In every interface only one item can be chosen. With navigation key, cursor location or correspondent setting can be changed.

PB554 control panel short-cut key "  ", "  ", "  ", . User can start or stop the correspondent function with short-cut key in any interface without returning to the main interface.

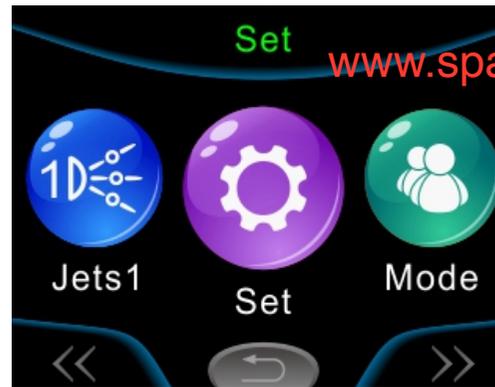
Short-cut key (pump) Jet 1: "  " , If (pump) jet 1 is single speed pump, then the key will be used to control the on and off of (pump) jet 1. If (pump) jet 1 is double speed, then keep pressing the key, it will switch from low speed pump, high speed pump to off. The sequence is: start low speed pump-> start high speed pump-> off.

Shortcut key light: "  " , To control the light working status: light has two modes. In on/off mode, pressing the key can start and turn off the light. In RGB mode, it has 9 statuses of auto color change, red, green, yellow, blue, purple, and cyan, white and off. User can switch among these statuses.

Short-cut key of Screen Invert: "  " , [www.spacomponents.co.uk](http://www.spacomponents.co.uk) , Press this button to turn the main interface upside down. And the direction of navigation key will be changed accordingly.

# Control panel operation instruction

## Function operation interface:



Press " ✓ " in the main interface to go to the function operation interface.

In the function operation interface, the icon will be shown in bigger size if the cursor is on it. Press " ↓ " to move the cursor to the " ↻ " . Press " ↑ " to move the cursor to the selected (bigger size) icon.

If cursor selects " ↻ " , press " ✓ " to go back to the main menu.

In the function operation interface, press " ← " or " → " to move the different function icons to the middle of the screen(to select the icons). The corresponding name and working status of the function will be showed in the upside of the screen, press " ✓ " to switch the working status of the controlled function.

# Control panel operation instruction

PB554 setting interface

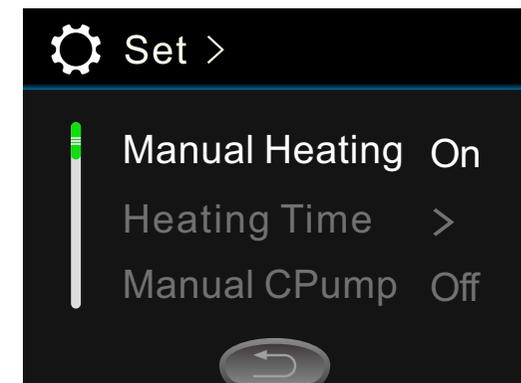
## Set interface:

In the function operation interface, press "←" and "→" to move the cursor to setting icon "⚙️". Press again "✓" to enter into set interface. In the set interface, the character will be highlighted if the cursor is on it. Press "↑" or "↓" to move the cursor location. Press "✓" to enter into the second level interface of the chosen function or change its status.



## Manual Heating

When the manual heating function is started, there will be a heating icon "🔥" added in the function operation interface. User can start heating function in the function operation interface manually. When the manual heating function is turned off, the icon will disappear.



# Control panel operation instruction

PB554 setting interface

## Heating time

When the control system is set as timing heating mode, heater can operate in two sets of time periods automatically. And the two time periods are independent from each other. And the time periods can overlap. For example, time period 1. 06:15---13:15, time period 2. 10:15---16:15. Then the heater will heat from 06:15---16:15. if the starting time is larger than the finishing time, then the heater will heat till the finishing time of the second day. For example, if set time period 20:00---10:00, then the heater will heat from the first day 20:00 till the second day 10:00. Please be noted that if the time period is set as on, then the heater will be started; if off, then the heater will be turned off.

When the green cursor is on " 1 " or " 2 " , press " ✓ " to set the time period as "on" or "off" . Press " → " to enter into time setting. In time setting, press " ✓ " to move the cursor. Press " ← " and " → " to operate time setting. Press " ↑ " and " ↓ " to exit the edited time period. The cursor will move back to the left side. When the time setting is finished, press " ↶ " to return and store the setting.



**Attention:** all the time setting is based on the system time. So user needs to keep the system time accurate before operating the time period setting.

# Control panel operation instruction

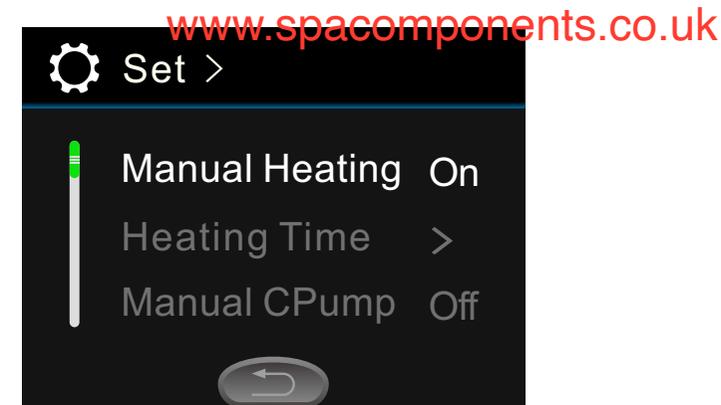
PB554 setting interface

## Manual Cpump

The manual cpump item will appear if there is separate pump in the system set as cycle pump. When the manual cycle pump is started, there will be a cycle pump icon "  " added in the function operation interface. User can start cycle pump manually in function operation interface. The item will disappear when the manual cycle pump function is turned off.

## Filter time

In order to purify water, maintain the cleanness of bath tub, timing filtering is necessary. Filter time and heating time are similar in setting. Please reference to the time setting of timing heating for time setting of timing filter. Please change the filter or strainer according to the water quality,



# Control panel operation instruction

## Mode

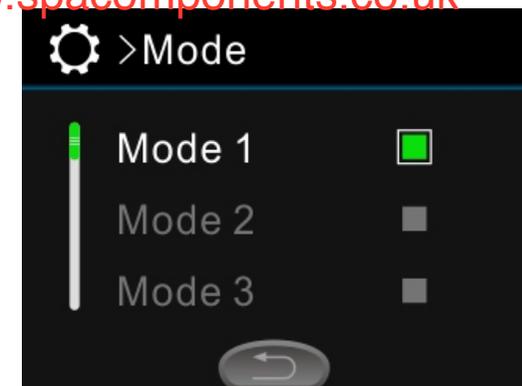
User can store the function setting according to their preference which is defined as mode. PB554 control panel can store four different modes. They can be stored and selected with navigation keys.

How to store the setting: first, set each function according to personal preference.

In " >Mode", by pressing " " and " " to move the cursor to the items need to be saved then press " ". If the square on the right side of the item is solid, then it indicates the current mode is stored. Mode of (pump) jets, blower, ozone, heat, and brightness can be stored.

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How to select the mode stored? In the function operation interface, by pressing " " and " " to move the cursor to " >Mode". Then press " " to select the stored the modes.



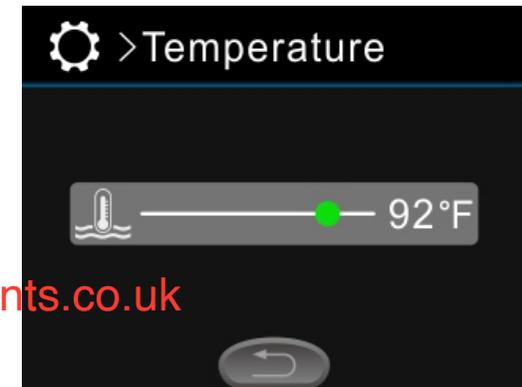
# Control panel operation instruction

PB554 setting interface

## Temp. unit

In "  Set > ", press "  " and "  " to move the cursor to " Temp unit" then press "  " to set the temperature as °C or °F .

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## Temperature

Temperature setting refers to the temperature of the water inside the tub. The setting range is 50°F ~ 104°F (10°C ~ 40°C). In Set-> Temperature, press "  " and "  " to set the value of the temperature. The set value will be automatically stored after exiting the menu. When the set temperature is higher than the current water temperature and the heating function is started, the heater will start heating automatically.

# Control panel operation instruction

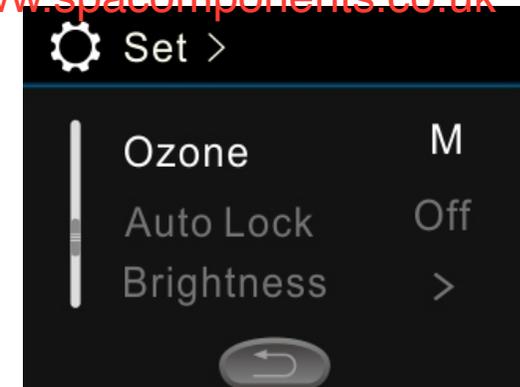
PB554 setting interface

## Ozone

Zone has two modes: auto and manual

In "⚙️ Set >" , press "⬆️" and "⬇️" to move the cursor to "Ozone" , then press "✅" , to set zone as auto mode or manual mode. Auto mode operation can refer to control system control regulation described before. When manual mode is started, there will be a "🔴 O<sub>3</sub>" added in the function operation interface. User can start the ozone generator manually. When the manual mode is turned off, the symbol "🔴 O<sub>3</sub>" will disappear.

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## Auto lock

To avoid inadvertent operation of the keys the panel has auto lock function.

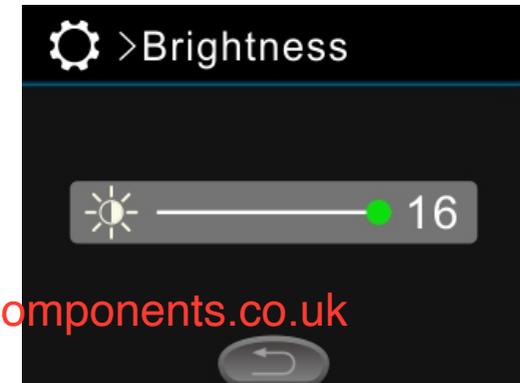
In "⚙️ Set >" , press "⬆️" and "⬇️" to move the cursor to "Auto lock" , then press "✅" to set the auto lock starting time as "30S" , "1 min" , "3min" or "off" .

When set as off, the lock function is turned off; when set as "30S" or other time value, the panel will return to main interface and start lock function if no operation is detected within the set time length. When lock function is started, press continuously "✅" for 3S till Auto lock disappear, then the panel is unlocked.

# Control panel operation instruction

## Brightness

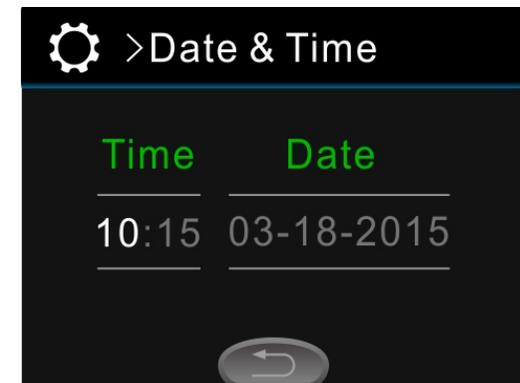
To ensure that user can use the control system comfortably with different lighting environment, the backlight brightness of the screen can be adjusted according to the environment lighting condition. Backlight brightness range is 1-16. In "  >Brightness " , pressing "  " and "  " to adjust the backlight brightness. The set value will be automatically stored when exiting the menu.



## Date & Time

Time accuracy is very important to the control system. All the timing function setting (timing heating and timing water cycle) is based on the control system time. So the user needs to set the control system time in ahead.

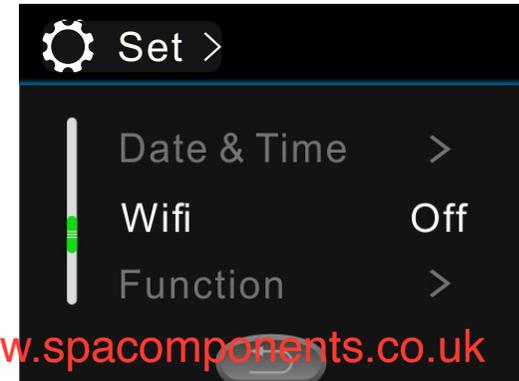
In "  >Date & Time " , press "  " to move the cursor, and set the date and time with "  " and "  " . The setting will be automatically stored after exiting the menu. If the control system is off power, the correct time setting can be kept for a few days.



# Control panel operation instruction

## Wifi

When control system is connected with Wifi module, then in "  Set > ", there is Wifi choice. Press "  " and "  " to move the cursor to "Wifi" and press "  ". Wifi can be set as AP mode , Sta mode, forget the connected Wifi or off. When Wifi module is working in AP mode, user can search Joyonway-xxxx with cell phone APP to connect to the control system; when wifi module is working in Sta mode, user can connect to control system with local area network or internet. For Wifi connecting and operating please refer to APP instruction.



## Function

Function is used to set control system loads and Panel ID. When the control system is allowed to be set (please refer to the description in control system connection and setting), find the item "Function>>" in the Set of menu, press "  " and "  " to move the cursor to item "Function>>" then press "  " to enter Set-> Function of the menu.

In Set-> Function of the menu, there are totally 12 items. They are (pump) Jet1, Jet 2, Jet 3, Jet 4, Light, Blower, Water cycle Ozone, Independent cycle, Heat, Water level and Panel ID as the picture shown below.

# Control panel operation instruction

PB554 setting interface

Pressing "  " and "  " , moving the cursor to the item to be set. Then press "  " to change its configuration parameter.

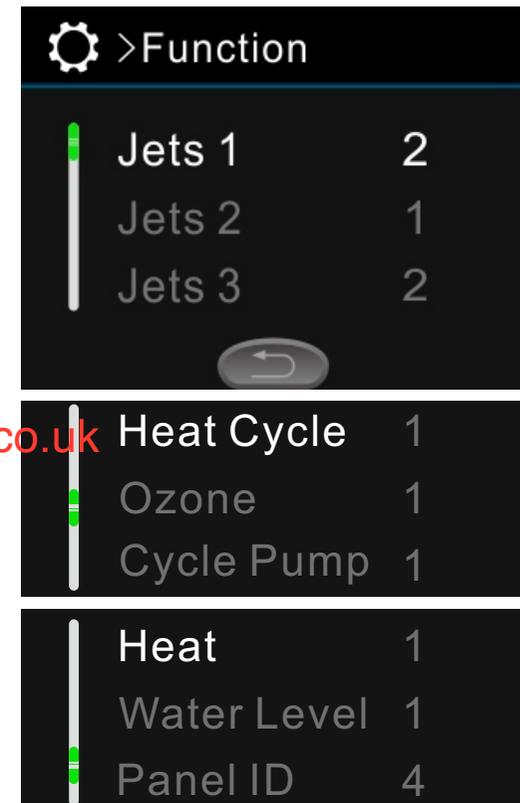
To (pump) jet (jet1, jet2, jet3, and jet4) , if the figure in "  " is 2, then it is double speed pump. If the figure in "  " is 1, then it is single speed pump. If the figure in "  " is 0, then it is invalid.

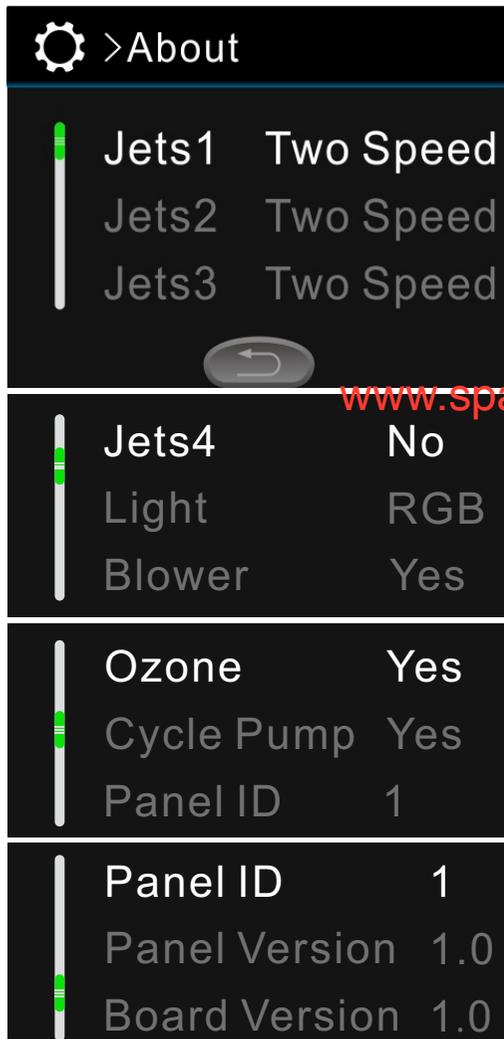
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To light, if the figure in "  " is 2, then it is in RGB mode, if the figure in "  " is 1, then it is in on/off mode. If the figure inside is 0 then the light is invalid.

To cycle pump, if the figure in "  " is 1, then control system is separately set with cycle pump; if the figure in "  " is 0, then the jet 1 low speed pump is set as cycle pump.

To panel ID, it can be set as 1, 2, 3, or 4. These numbers are used to differ different control panels and the control panel ID must be unique. To other loads, if the figure in "  " is 1, then this load has been set. If the figure in "  " is 0, then the load is invalid.





## About

In " Set > ", press " " and " " to move the cursor to item "About" . Then press " " to enter " >About " . In Set-> About of the menu, the current control system function configuration condition and software version is displayed.

In (pump) jet1, jet2, jet3 and jet4, "Two speeds" means double speeds pump. "One speed" Means single speed pump.

In choices of light, RGB means the light is set as RGB mode. "Yes" represents the light is set as on/OFF mode. "No" means it is invalid.

In blower, "Yes" means the blower function has been set and "No" means the blower is invalid.

In the choices of ozone, "yes" means ozone function is set, "No" means ozone function is invalid. In cycle pump, "yes" means control system is set with separate cycle pump. "No" means the low speed pump of Jet 1 is set as cycle pump. In panel ID, figure means control panel ID. NO.

In panel version and control system board version, figure means soft ware version NO.