**HAYWARD**®

# OmniHub
## Pool Automation Control

# Operation Manual

## Contents

HLOMNIHUB

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**www.hayward.com**

# IMPORTANT SAFETY INSTRUCTIONS

When using this electrical equipment, basic safety precautions should always be followed, including the following:

- READ AND FOLLOW ALL INSTRUCTIONS

- **WARNING:** Disconnect all AC power during installation.

- **WARNING:** Water in excess of 100 degrees Fahrenheit may be hazardous to your health.

- **WARNING:** To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.

- **WARNING:** Do not use the OmniHub to control fire pits or related equipment.

- A green colored terminal marked "Grounding" is located inside the wiring compartment. To reduce the risk of electric shock, this terminal must be connected to the grounding means provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors supplying the equipment.

- One bonding lug for US models (two for Canadian models) is provided on the external surface. To reduce the risk of electric shock, connect the local common bonding grid in the area of the swimming pool, spa, or hot tub to these terminals with an insulated or bare copper conductor not smaller than 8 AWG US / 6 AWG Canada.

- All field installed metal components such as rails, ladders, drains, or other similar hardware within 3 meters of the pool, spa or hot tub shall be bonded to the equipment grounding bus with copper conductors not smaller than 8 AWG US / 6 AWG Canada.

## SAVE THESE INSTRUCTIONS

# Introduction

This manual assumes that the OmniHub has been installed and configured according to the Installation Manual and is using the latest firmware version available from Hayward. The OmniHub can now be programmed with user desired settings such as schedules, themes, and favorites. This manual will also explain how to manually turn pool equipment on/off, program settings for specific equipment, view pool equipment status and conditions, and more.

Now that the initial configuration has been completed, the OmniHub will automatically go to the Home Screen or Idle Screen. All settings and operation functions can be accessed from the Home Screen. Note that if the OmniHub Control Pad is not touched for more than two minutes, the Idle Screen will be displayed.

## Using the Control Pad

The OmniHub uses the Control Pad touchscreen as the main interface with the device. Once configured, the OmniHub can be controlled remotely by internet enabled devices such as computers, tablets, and phones. The Control Pad must be used to access the Configuration Wizard. The Configuration Wizard is used for initial configuration (completed during the installation process) and for any changes to existing configuration.

## Idle Screen

The Control Pad will display the idle screen after two minutes of user inactivity. When the filter pump is on, the Idle Screen will display the current temperature of the pool on the left side of the screen. On the right side of the screen, the time will be displayed and the air temperature will toggle with the date as well as other information.
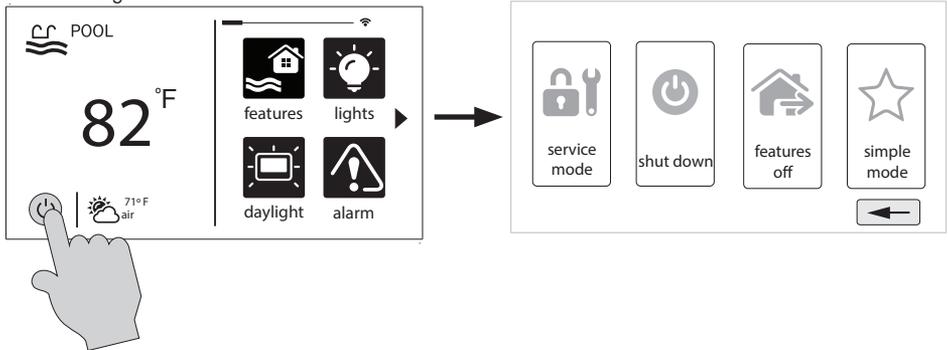


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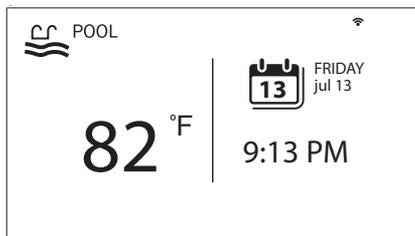
## Home Screen
When the Idle Screen is touched, the OmniHub will display the Home Screen. This screen will give the user access to all functions, settings, and configuration options.
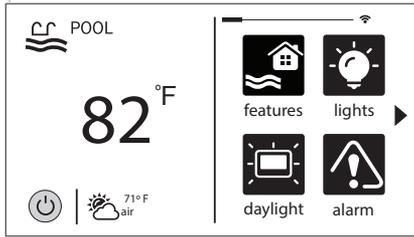


## Power Button
The power button is displayed at all times when the OmniHub is not idle. When touched, it offers the following 4 functions:



**Shut Down** - When Shut Down is selected, the OmniHub will turn off all pool equipment and report when it is safe to remove power. When this message is displayed, you can either power off the unit or restart the OmniHub by touching the large power button displayed on the left side of the screen.

**Service Mode** - Service Mode will turn off all pool equipment and disable all networked devices. Service Mode is useful to prevent scheduled operation and disable remote operation while servicing the pool. After selecting Service Mode, there are two options:

*Service Mode (Standard):* The OmniHub will remain in Service Mode until you manually exit. To exit Service Mode, touch the power button and select the Service Mode button again.

*Service Mode Timed:* Before entering Service Mode, you will select a Service Mode timeout. This is the amount of time that the OmniHub will stay in Service Mode before automatically exiting. The timeout can be set between 1-96 hours. There is no need to exit Service Mode manually.

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**Features Off** - Features Off offers a quick way to turn off all equipment (except the filter pump and lights if running because of a schedule) with a single touch of a button.

**Simple Mode** - Simple Mode is a customizable screen that can be set up for quick access to your Favorites (page 20).  You can set up only the Favorites that you want shown while in Simple Mode. Because it's customizable, Simple Mode can provide a convenient way to access the most common functions for owners as well as a handy solution to limit access to other users.  For information on how to create and delete Simple Mode functions, refer to the "Favorites" section in this manual. The MSP ID number (page 30) is needed when entering and exiting Simple Mode.
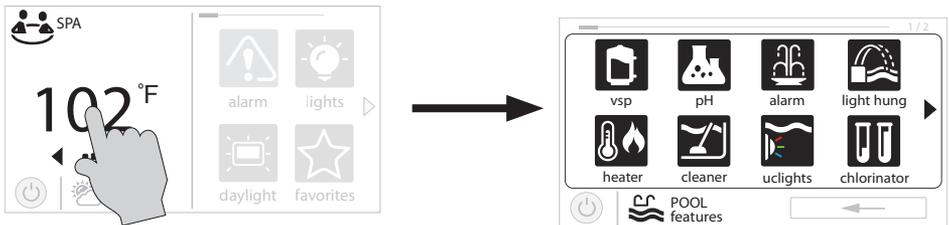
## Selecting a Body of Water - Left Side of Home Screen
The left side of the Home Screen allows you to select and control a Body of Water.   If more than one Body of Water is used (typically a pool and a spa), pressing the left and right arrows shown below toggle between the Bodies of Water. If just a pool is configured, there will be no arrows shown.



Use arrow buttons on left side of screen to change Body of Water.
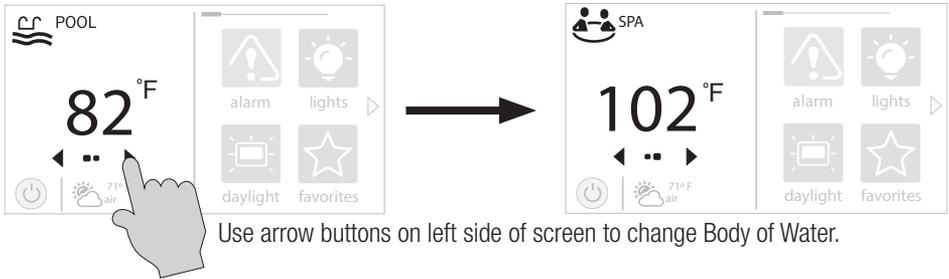
## Controlling a Body of Water
When the desired Body of Water is displayed, touch the left side of the screen to advance to the Body of Water Features Screens. The items shown on the Features Screen relate to that Body of Water ONLY. To control a different Body of Water, select the desired Body of Water at the Home Screen first, then go to the Features Screens.



When the desired Body of Water is displayed, touch left side of screen to enter Control Screens.

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# Features (left side of the Home Screen)

After selecting the desired Body of Water (if applicable), touch the left side of the screen to advance to the Features Screen. The various buttons shown in the Features Screen are related to initial configuration. For example, if you configured a heat pump to heat the pool, then the heater settings for the heat pump will be displayed.
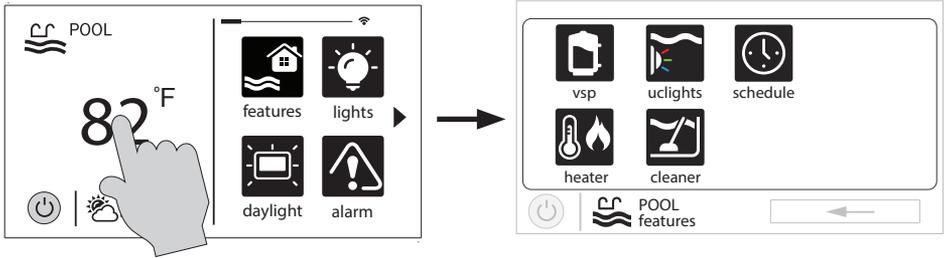


# Favorites - Right Side of Home Screen

The right side of the Home Screen is Favorites. These buttons offer universal control for all Bodies of Water and Backyard equipment. Up to four Favorite buttons will be shown on the Home screen. To access more Favorites, touch the arrows on the left or right of the Favorite buttons.

Note that some default buttons will appear on the Favorites Screen. These buttons are related to your initial configuration settings and are automatically created. In addition, custom "Favorite" buttons can also be added. The OmniHub supports up to 50 Favorites for quick, easy access to commonly used functions.
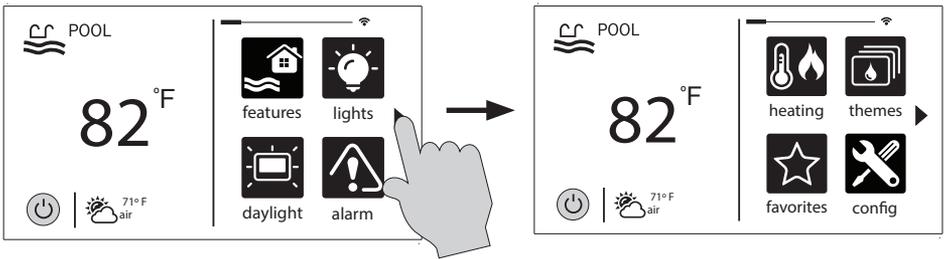


# Navigation

The OmniHub has been designed to be intuitive, allowing most users the ability to navigate with little instruction. Following is a list of commonly used buttons. As you navigate through the various screens, these buttons will likely be displayed. Some sections of this manual may refer to buttons that are specific to certain types of pool equipment. You'll find more information about those buttons under their corresponding section. If your installation does not include that particular equipment, those sections can be skipped.

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**Save** - Touch this button to save your selection.

**Cancel** - Touch this button to cancel your selection.

**Advance** - Touch this button to advance to the next screen.

**Back** - Touch this button to return to the previous screen.

**Add** - Touch this button to add an item.

**Delete** - Touch this button to delete a highlighted item.

**Turn On or Enable** - This button will either manually turn on pool equipment or enable a function.

**Turn Off or Disable** - This button will either manually turn off pool equipment or disable a function.

**Schedule** - Touch this button to schedule a function.

**Countdown Timer** - Touch this button to set a countdown timer.

**Back** - Touch this button to return to a previous screen.

## Features and Control Screens

As previously stated, the Features Screen allows you to control functions and equipment. The contents of the Features Screen is a result of how the OmniHub was configured using the Configuration Wizard. If equipment is missing or does not belong in the Features Screen, you may have to go back to the Configuration Wizard and correct the configuration of that equipment.

An example of a Features Screen is shown below. In this example, we are looking at the Pool (shown in the lower left of the screen) configured with a pump, a heater, a cleaner, and UCL lights.
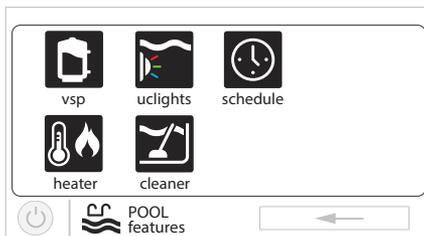


Depending on the equipment in your system, your screens will likely be different. The purpose of this section is to explain how Features and Control Screens work as well as show some common equipment examples which will help familiarize you with the interface. Even though some of your equipment may be different, you should see similarities in the following examples that will help you create and change settings for all the equipment in your Features Screens.

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Note that the following examples will be shown for the Pool only. All of the equipment shown in the Features Screens will have been initially configured in the Configuration Wizard to operate with a Pool body of water. You may have configured the OmniHub to share equipment with the Spa in which case the equipment will be shown in the Features Screen for both the Pool and Spa.

## Control Screens

After an item has been selected in the Features Screen, you'll be brought to a control screen. Control Screens are used to make changes to the pool's equipment settings. To change a setting, you'll first touch the left side of the Home Screen to enter the Features Screen, then select the equipment you'd like to set.

## Filter Pump

In the example below, a variable speed pump which was named "vsp" has been configured to be used with the Pool in the Configuration Wizard. Touching the "vsp" button in the Features Screen will bring you to a pump Control Screen which will let you manually turn on/off the pump, view the status, set a schedule, set a speed, start a countdown timer, or view the pump's diagnostics. Single speed and two speed pumps will have a similar Control Screen.

Pool Features Screen                    Pump Control Screen
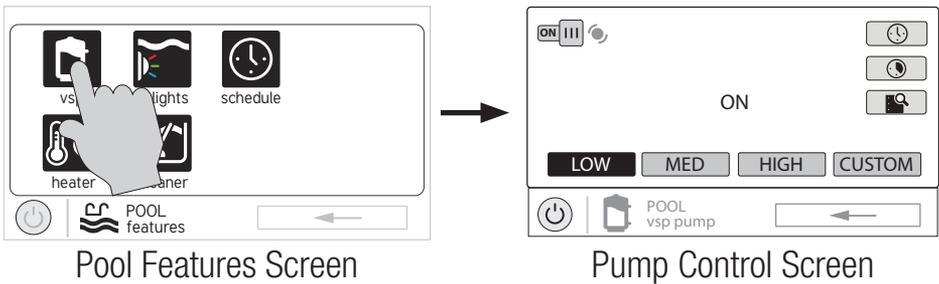
**Turn On / Turn Off** - Slide this switch manually to turn on/off the pump. This will override any schedules or timer settings.

**Status of Equipment** - This is an indicator only. When lit up and in motion (shown below), the equipment is active. When grayed out and stationary, the equipment is off.

**Set Schedule** - Touch this button to add/delete a schedule for the filter pump or to enable/disable an existing schedule.

**Change Speed** - Manually select the desired speed. This will not be shown for single speed pumps. Low, Med, and High are fixed speeds. The Custom button will bring you to a screen that allows you to select a speed based on percentage or RPM (determined during configuration).
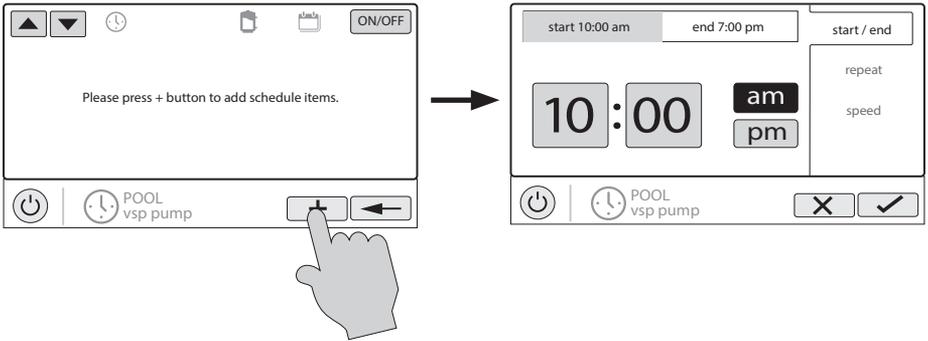
**Countdown Timer** - Touch this button to set a countdown timer for the filter pump.

**Diagnostics** - Touch this button to view the filter pump's diagnostics. This option only appears for variable speed pumps.

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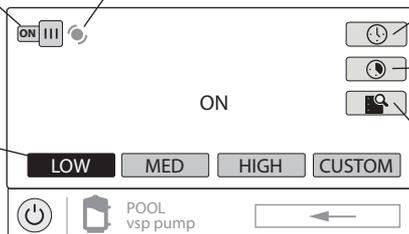
## Add a Schedule

If the "Set Schedule" button is touched, you'll be brought to the pump schedule screen below. Here you can add, delete, edit, enable, and disable schedules.  Because there have been no schedules set up, the screen is blank.  Touch the Add button (+) to add a schedule for the pool pump.

Please press + button to add schedule items.

POOL vsp pump

ON/OFF

start 10:00 am     end 7:00 pm     start / end

repeat

speed

10:00   am   pm

POOL vsp pump

## Set Schedule Time

Refer to the screen below to set the start and end times.  When finished, touch "repeat".

**Set End Time** - Select this button to edit the end time.  The pump cycle will end at the time shown.

**Set Start Time** - Select this button to edit the start time.  The pump will start at the time shown.

start 10:00 am     end 7:00 pm     start / end

repeat
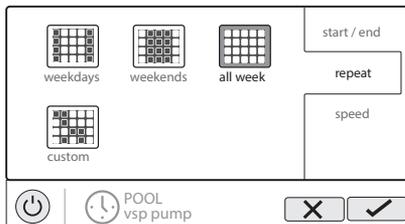
speed

10:00   am   pm

POOL vsp pump

**Set Schedule Frequency** - Select how often you'd like the schedule to run (weekdays, weekends, all week, custom).

**Set Pump Speed** - Select this button to change the pump speed for the schedule.  This option only appears for variable speed and two speed pumps.

**Edit Time** - Select the Hours, Minutes, or AM/PM fields to change the desired time.
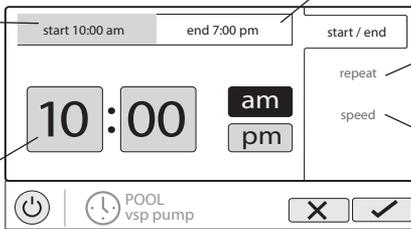
## Set Schedule Frequency

Refer to the screen below to select how often you'd like the schedule to run.  If "custom" is selected, you'll be asked which day(s) of the week you would like the pump to run.  Touch "speed" when finished.

weekdays     weekends     all week

custom

start / end

repeat

speed

POOL vsp pump

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## Set Pump Speed

Refer to the screen below to select the pump speed during the schedule. If custom is selected, you'll be asked to set the % pump speed or RPM depending on the setting. When finished, touch the Save button to save the schedule. NOTE: the speed setting only appears if the pump is a variable speed or a two speed pump.
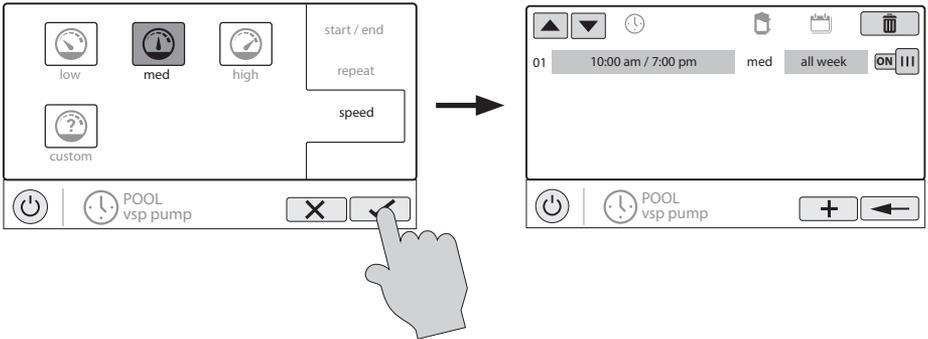
NOTE: if you intend to run the pump at different speeds throughout the day, create additional schedules. You can start a new schedule on the same minute that the previous one ends. If schedules overlap, the newest schedule's start time will take priority by ending the previous schedule early. You can create up to 100 total schedules on the system.
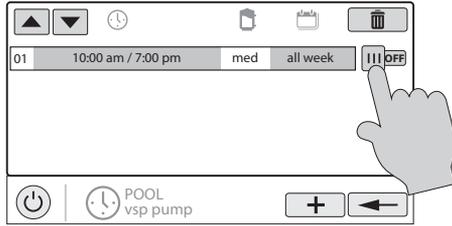
## Edit a Schedule

To edit a schedule, touch the schedule as shown below. You'll be brought back to the screen which will allow you to set times, speed and frequency.
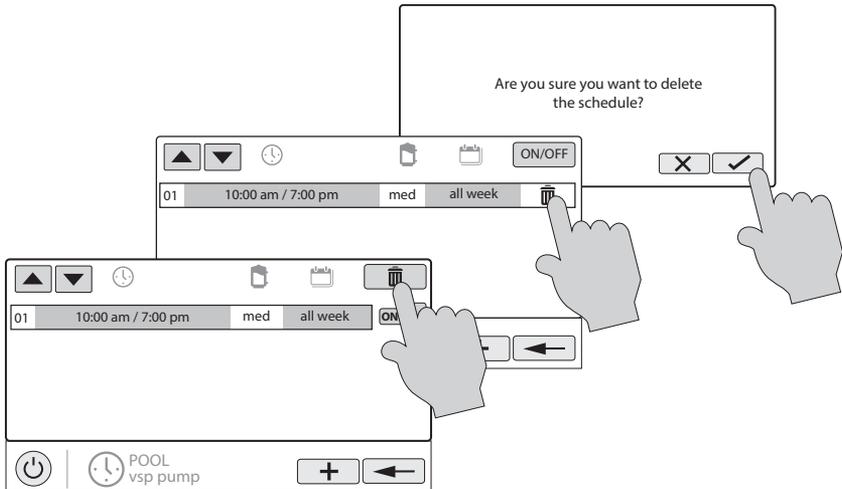
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# HAYWARD®
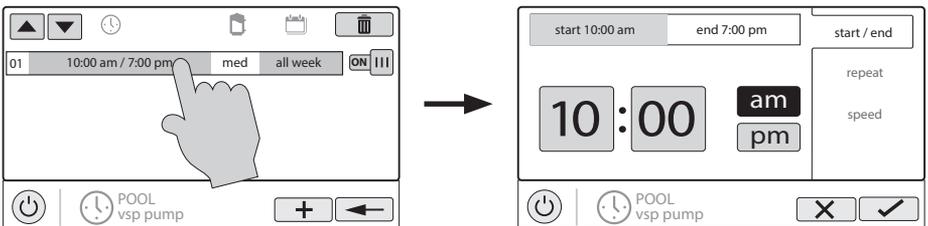
## Turning a Schedule Off

There may be circumstances when you will want to turn off a schedule temporarily. To do this, slide the On/Off button to "Off". The schedule will remain off until you go back to this screen and turn it off.

| 01 | 10:00 am / 7:00 pm | med | all week | III OFF |

POOL
vsp pump

## Deleting a Schedule

Schedules can be deleted when they are no longer necessary. To delete a schedule, select the schedule and touch Delete as shown below. A Delete button should appear on the side of the schedule. Touch this Delete button to remove the schedule.

Are you sure you want to delete
the schedule?

| 01 | 10:00 am / 7:00 pm | med | all week | ON/OFF |

| 01 | 10:00 am / 7:00 pm | med | all week | ON |

POOL
vsp pump

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## Countdown Timer

A countdown timer runs or enables equipment for the amount of time specified. You can initiate the countdown timer at the equipment's control screen. At the countdown screen, set the desired countdown time. In this case, the timer will run the pump for the specified countdown time. If the equipment is already running due to a schedule, the countdown timer setting will override the schedule and turn off at the end of the countdown interval. If the equipment is off, the countdown timer will turn it on for the duration/speed that has been set.
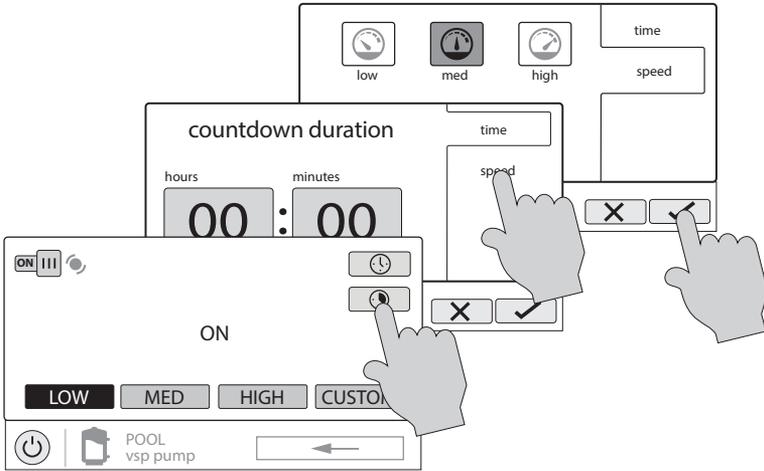


## Heater

The OmniHub has one output for a gas heater or heat pump. It can also provide solar heating using the valve output to divert water through installed solar equipment. Touching the Heater button in the Features Screen will let you enable or disable the heater, set priority, set temperature, set a schedule and view the status of the heater. An example of the heater Control Screen is shown below:
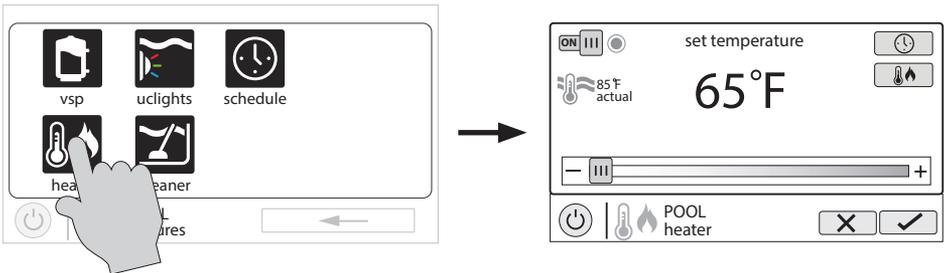
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**Enable / Disable -** Slide this switch to enable and disable the heater. The setting will not take effect until the Save button is touched. To turn on the heater, adjust the setpoint higher than the actual water temperature and then save.

**Status of Equipment -** When grayed out and stationary, equipment is currently idle. When in motion, the heater is actively heating.

**Set Schedule -** Touch this button to set a schedule for the heater.

**Set Priority -** If Solar heating is used in addition to a conventional heater, use this button to set priority and enable/disable heaters.

set temperature

ON

85°F actual

65°F

POOL heater

**Change Setting -** This slider will raise and lower the heater setpoint setting.
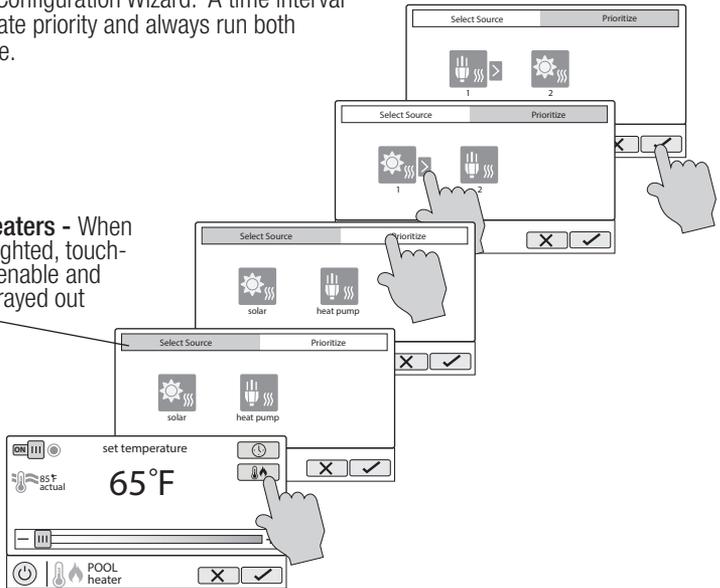
**Save Setting -** the settings is not saved until this button is pushed.
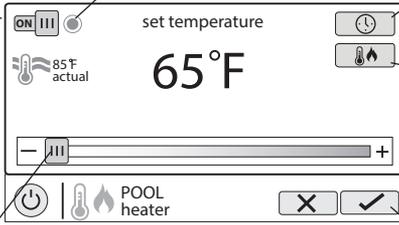
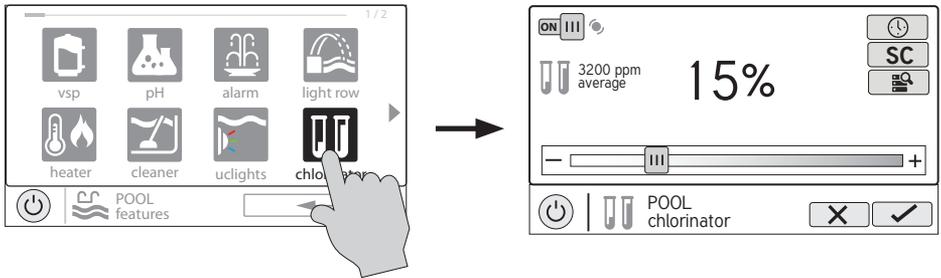## Setting and Changing Priority if using Solar Heating

If a solar heater is added, the Set Priority button will appear in the Heater Control Screen. If the priority heater cannot meet the demand for heat, the next heater will be allowed to operate. Use priorities to maximize efficiency by allowing the most cost effective heater to run first.

The example below shows how to change priority to run the solar heater first, then, if it can't meet the demand for heat, the heat pump will be allowed to operate. Note that the time interval used for heater priority can only be changed in the Configuration Wizard. A time interval setting of "0" will eliminate priority and always run both heaters at the same time.

Select Source          Prioritize

1          2

Select Source          Prioritize

1          2

**Enable and Disable Heaters -** When "Select Source" is highlighted, touching a heater button will enable and disable that heater. A grayed out heater is disabled.

Select Source          Prioritize

solar          heat pump

Select Source          Prioritize

solar          heat pump

set temperature

ON

85°F actual

65°F

POOL heater

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## Chlorinator

If a chlorinator has been configured in the Configuration Wizard, you will see a chlorinator icon in the Features Screen. Touching this will bring you to the Chlorinator Control Screen which is shown below (your display may be different depending on the type of chlorinator chosen during configuration). Use this screen to enable/disable the chlorinator, set a schedule, super chlorinate and view/change diagnostics. A sample screen is shown below. For schedules, refer to the previous examples in this manual.

**Change Setting**- This slider will raise and lower the chlorinator set-point setting. If an HL-CHEM is used and ORP is enabled, the adjustment will be displayed in "mV".

**Enable / Disable** - Slide this switch to enable and disable the chlorinator and then touch the Save button.

**Set Schedule** - Touch this button to set a schedule for the chlorinator.

**Super Chlorinate** - Touch this button to set the amount of hours that you'd like to super chlorinate.

**Chlorinator Diagnostics** - Touch this button to view diagnostics, set average salt, change polarity, and to reset the cell timer.
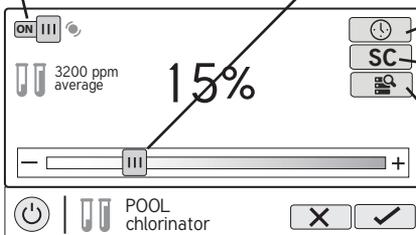
Chlorinator Control Screen

**If using an HL-CHEM -** The Hayward HL-CHEM Sense and Dispense accessory continuously tests the pool's sanitization and pH levels allowing the OmniHub to automatically generate/dispense the correct amount of chlorine and dispense the proper amount of pH reducer. If using the HL-CHEM and ORP has been enabled in the Configuration Wizard, the OmniHub will display chlorinator readings and settings in "mV" rather than "%". Refer to the following information+ as well as the HL-CHEM manual for configuration and operation instructions.

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**Chlorinator Setting** - The OmniHub can only generate/dispense chlorine while the filter pump is operating. If not using an HL-CHEM (optional with AquaRite only), set the percentage of run time that you desire chlorine generation. Raise this value to generate more chlorine. Lower to generate less.

NOTE: After the initial setting, you may need to raise the setting when the pool water temperature increases significantly, when there is higher than normal bather load or when your chlorinator cell ages. You may need to lower the setting when the pool water temperature decreases significantly or there are long periods of inactivity.

**Super Chlorinate** - When you have an unusually high bather load, a large amount of rain, a cloudy water condition, or any other condition that requires a large amount of chlorine to be introduced to the pool, activate the Super Chlorinate function. The OmniHub will turn on the filter pump (if not scheduled) and set the chlorine generator/dispenser to maximum output. The super chlorinate function will continue for the programmed number of hours overriding the normal filter pump schedule settings. At the end of the super chlorinate period, the pool will return to normal operation. If you manually turn off the filter pump, the super chlorinate function terminates.

## Chlorinator Diagnostics (AquaRite only)
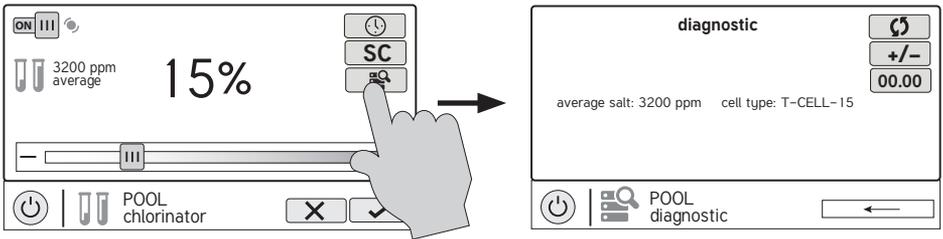
**Reverse Polarity** - Touch this button to reset the average salt reading.

**Restart Average Salt** - Touch this button to delete the existing average salt reading. The OmniHub will restart a new calculation using the instant salt level.

**Reset Cell Maintenance Timer** - Touch to restart the timer.

For the chlorinator to be operating, several conditions must exist: the filter pump must be running, the flow switch must detect flow, the chlorinator setting must be greater than 0%, the water temperature at the cell must be between 50°F and 140°F (superchlorinate will run under 50° except during freeze protection), and the salt level must be within the operating range. If any of these conditions are not met, the diagnostic screen will show that the chlorinator is off. Also, depending on the chlorinator setting, the OmniHub may be in between cycles and the chlorinator is at rest (cell current shows 0.00A). To force the start of the new cycle, you can touch the Reverse Polarity button.

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NOTE: If a conventional or solar heater is operating, it is likely that the temperature of the water at the cell is higher than the pool/spa water temperature displayed on the OmniHub default display.

**Restart Average Salt -** The OmniHub monitors salt level while chlorinating.  At any time, go to the chlorinator diagnostic screen to view the average salt based on an ongoing calculated average.  If you restart average salt, the previous average is deleted and the OmniHub begins calculating the new average from that moment.  The OmniHub will start with the instant salt reading and calculate an ongoing average.

**Reverse Polarity** - The OmniHub periodically reverses the polarity of the voltage applied to the chlorinator cell in order to automatically clean off any calcium deposits.  To check operation in both polarities, touch this button.  The chlorinator will turn off, wait for 15 seconds and then turn on in the opposite polarity.

**Reset Cell Maintenance Timer** - To maintain maximum performance, it is recommended that you open and visually inspect the chlorinator cell every 3 months or after cleaning your filter.  The OmniHub will remind you to do this by displaying a message to clean and inspect the cell after approximately 500 hours of operation.  You can restart the timer by touching this button.

## pH Dispense
**If using an HL-CHEM:**  The Hayward HL-CHEM Sense and Dispense accessory continuously tests the pool's sanitization and pH levels allowing the OmniHub to automatically generate the correct amount of chlorine and dispense the proper amount of pH reducer.   Refer to the information below as well as the HL-CHEM manual for configuration and operation instructions.
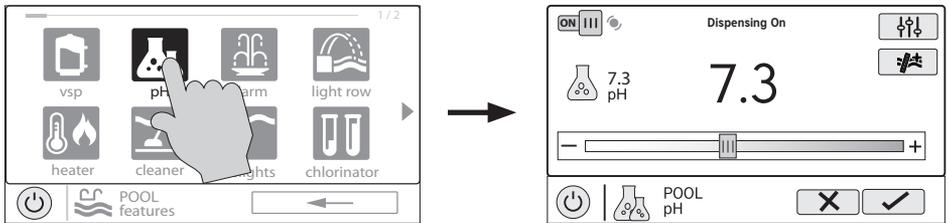


pH Dispense Control Screen

**Set pH Level** - Set the desired pH level.

**Calibrate** - Calibrate the pH reading if the OmniHub doesn't display the correct level.

**Enable / Disable** - Slide this switch to enable and disable the pH dispenser and then touch the Save button.

**Force 15 minute Run** Touching this button will force the dispenser to run for 15 minutes. This is only available in Service Mode.

**Current pH Level** - Shows the current pH reading in the pool or spa.



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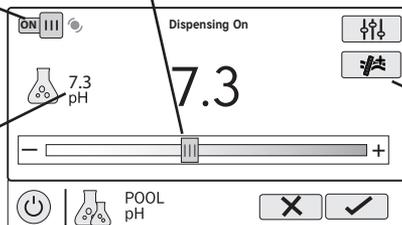
## pH Calibration

If the OmniHub pH reading differs from independent water tests, you can adjust the reading by touching the Calibrate button and using procedure below. You'll be asked for the difference between the displayed pH level and the true pH level. You'll want to select the amount needed to go from the displayed level to the true level. In the example below, the displayed level is 7.3 and the true level is 7.5. You need to add .2 to the displayed level to arrive at the true pH level.

**Calibrate reading from 7.3 to 7.5**
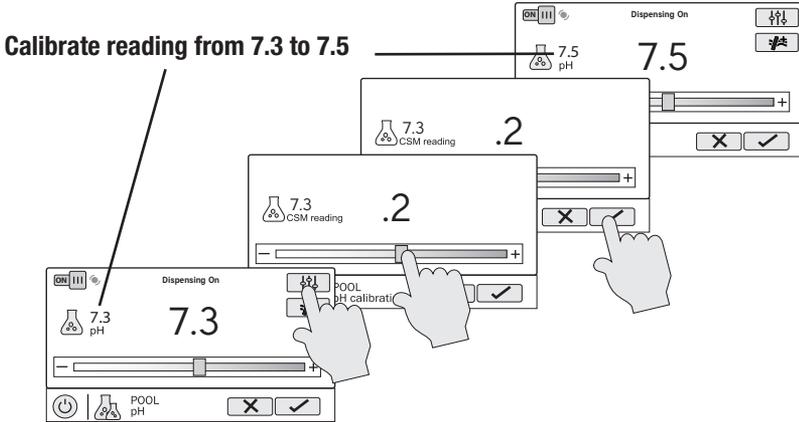
## ColorLogic Lights

**IMPORTANT:** Noise induced into the supply wiring from the inductive kick of the isolated low voltage transformer can sometimes interfere with ColorLogic operation. If your ColorLogic lights do not respond properly to commands, install a Hayward GLX-HAL-XSNUB snubber capacitor at the transformer. These are available from your local Hayward dealer.
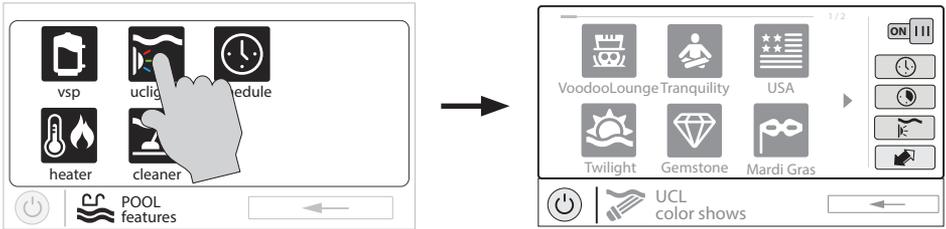
You can set schedules for the ColorLogic lights as well as countdown timers. This procedure has been previously shown. Note that after the countdown interval, the lights will go off regardless of their previous state.

**Light Show/Color** - From the ColorLogic Control Screen, select the desired show or color. Use the Advance button to show all of the available selections. Use the Light Show/Color button to switch between all light shows and all solid colors.

**Synchronize** - Because changing colors and shows requires interrupting power to the ColorLogic lights, there is a chance that the lights could lose synchronization due to timing issues. If you find that the color or show does not correspond with the selection that you've made, the lights may be out of sync. Touch the Synchronize button to re-sync the ColorLogic lights.

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**Turn on / Turn off -** Slide this switch to manually turn on/off the ColorLogic lights. This will override schedules or timer settings.

**Set Schedule -** Touch this button to set a schedule for the ColorLogic Lights.

**Selections -** Select the desired light show or solid color.

**ColorLogic Lights Control Screen**

**Countdown Timer -** Touch this button to set a countdown timer for the lights.

**Light Show/Color -** This button will change the selection between light shows and solid colors.

**Synchronize -** Touch this button to synchronize the ColorLogic lights. The lights will then default to Voodoo Lounge.

## Omni Direct Mode (Universal ColorLogic Lights built after June 2018)

Universal ColorLogic lights built after June 2018 are capable of Omni Direct mode. To run in this mode, select Omni Direct mode when configuring your lights in the Configuration Wizard (see Installation Manual). The OmniHub will test your lights during configuration to confirm that they support Omni Direct mode. If so, the ColorLogic Control Screen will display a Settings icon rather than a Synchronize button, which allows both Speed and Brightness control shown on the diagram below. Note that Settings will also be an option when setting up schedules and timers for lights running in Omni Direct mode. Refer to your Universal ColorLogic manual for more information about Omni Direct mode.
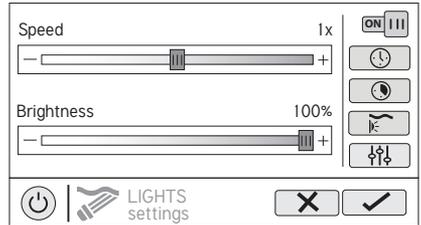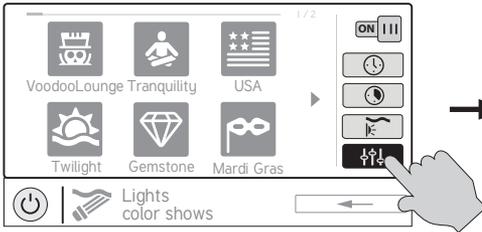
## Other Lights

You can turn other lights on/off, set schedules, and set a countdown timer at the Other Lights Control Screen shown below. These functions have been illustrated previously in this manual.
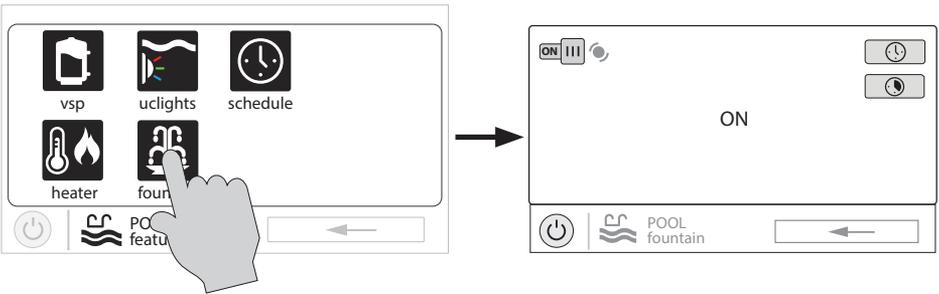
17

# HAYWARD®
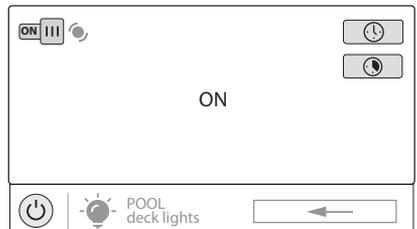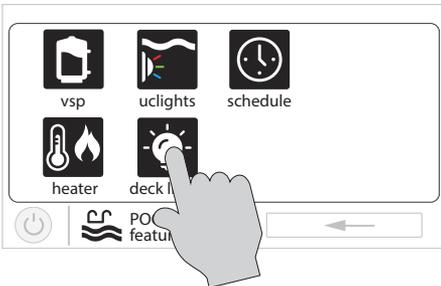
## Cleaners

You can turn the cleaner on/off, set schedules, and set countdown timers at the Cleaner Control Screen shown below. You can also set pump speed if a two speed or variable speed pump has been configured to be used with the cleaner.

| | | |
|---|---|---|
| vsp | uclights | schedule |
| heater | clea | |
| POOL featur | | |

ON

POOL
cleaner
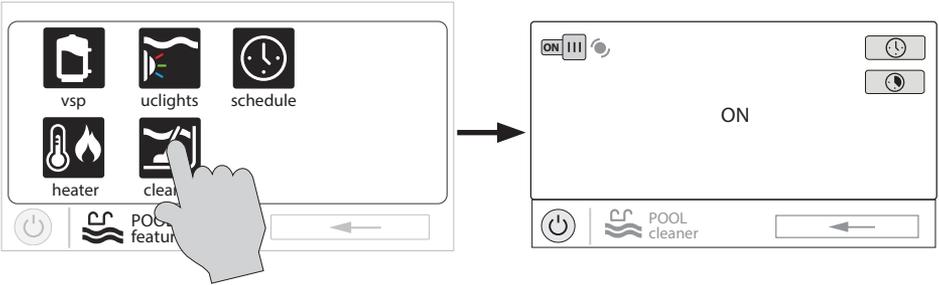
## Water Features

You can turn the water feature on/off, set schedules, and set countdown timers at the Water Features Control Screen shown below. You can also set pump speed if a two speed or variable speed pump has been configured to be used with the water feature.

| | | |
|---|---|---|
| vsp | uclights | schedule |
| heater | foun | |
| POOL featur | | |

ON

POOL
fountain

## Accessories

You can turn the accessories on/off, set schedules, and set countdown timers at the Accessories Control Screen shown below. You can also set pump speed if a two speed or variable speed pump has been configured to be used with the accessory.

| | | |
|---|---|---|
| vsp | uclights | schedule |
| heater | jet | |
| POO featur | | |

ON

POOL
jets

18

**HAYWARD**®
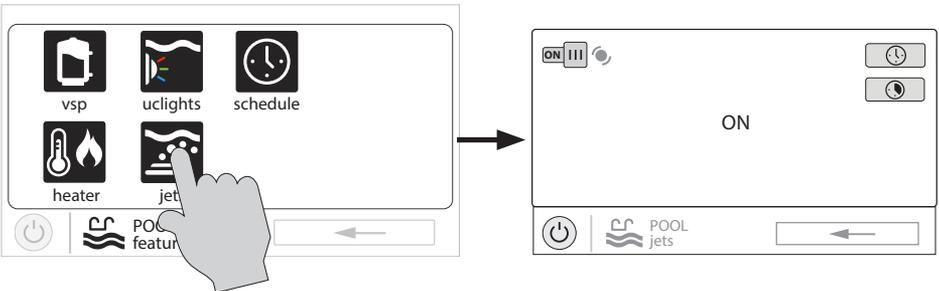
## Schedule

The Schedule button appears on the Features Screen regardless of what equipment has been configured in the Configuration Wizard. It offers a convenient way to create and edit schedules. Any equipment that has been configured and has an option for schedules, will be shown in the Schedule Control Screen. Equipment that has been assigned a schedule will show a clock symbol in the upper right side of the button. Touching any of these buttons will bring you to the schedule screen for that equipment. Create and edit schedules as shown on page 8.
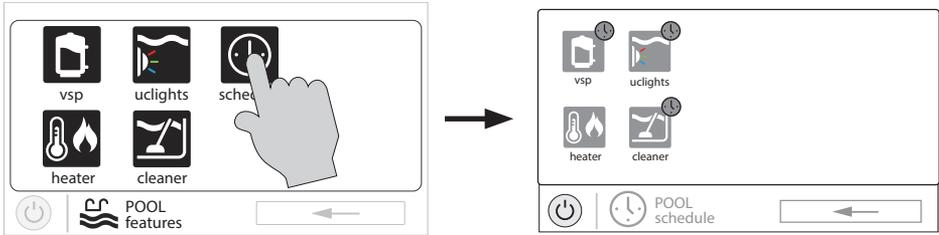


## Spillover

If spillover is configured, you can turn spillover on/off, set schedules, and set a countdown timer at the Spillover Control Screen. These functions have been illustrated previously in this manual.
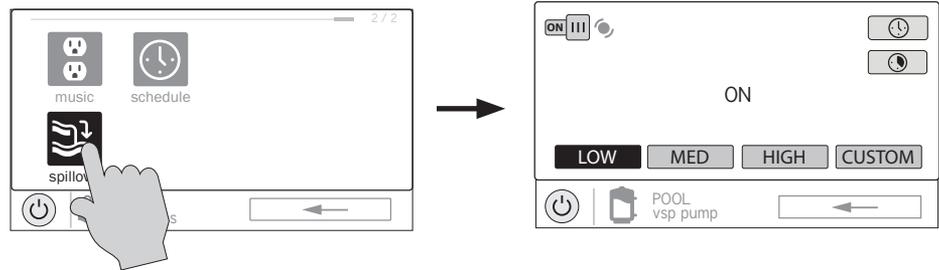


## Freeze Protect Override

If freeze protect is enabled AND the air temperature falls below the freeze threshold, the OmniHub will turn on the filter pump to circulate the water. Freeze protection can be overridden for 60 minutes by touching the Freeze Prot. button found on the Features Screen. IMPORTANT: Ensure that equipment is protected from a freeze condition before overriding this feature. To resume normal freeze protection, simply touch the Freeze Prot. button again.



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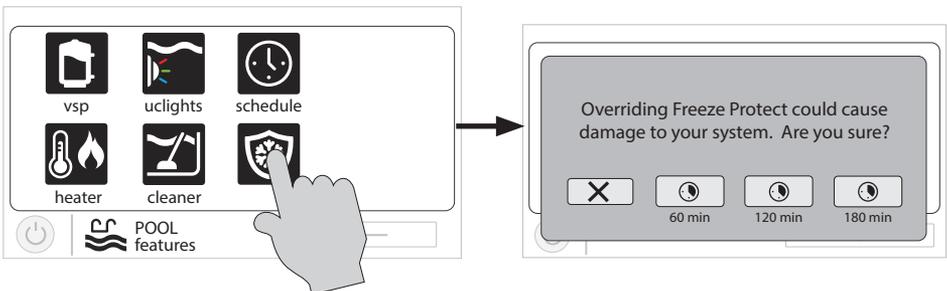
# Favorites

Favorites can be found on the right side of the Home Screen and offer control for equipment. Favorites are also used to control equipment that has been configured for the "Backyard". Favorites offer quick easy access to frequently used functions and most Favorites can be added to Simple Mode (page 33).

The OmniHub will automatically create some Favorites based on your system's configuration. You can also create your own Favorites. Once Favorites have been created, you can change the location in which they appear on the Home Screen. In addition, if you no longer require a Favorite, it can be deleted. The OmniHub supports up to a total of 50 Favorites.

In most cases, touching a Favorite button on the Home Screen will bring you to the same screens that have been covered in the Control Screens section of this manual. Refer to these screens if necessary.

## Alarms

An alarm condition will change the mood color of the entire touchscreen (if enabled) and display an "!" symbol in the upper right side of the associated button as shown below.

For more detail, use the Alarm button found in Favorites. Alarms are automatically generated when the OmniHub detects a condition outside of the normal operating parameters. The Alarm button found in Favorites will bring you to a screen that displays any active alarms (shown below). Some alarms can be manually deleted; others will remain until the alarm condition is corrected.
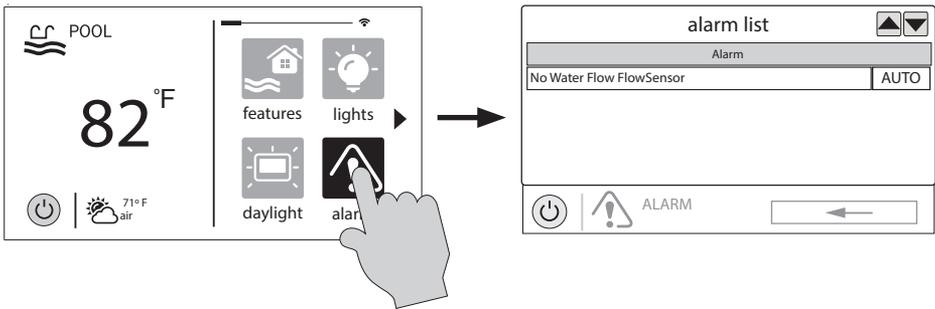


## Daylight

Daylight is another button that will appear in Favorites by default. This button is used to change the screen contrast for better viewing in bright sunshine. Touching this button will toggle Daylight viewing on and off.

## Features/Lights/Heaters/Backyard

These four buttons function similarly. If any water feature, light, heater, or backyard accessory has been configured in the Configuration Wizard, a Features, Lights, Heaters, and/or Backyard button will appear in Favorites. These buttons give you quick access to the control screens for all related pool equipment. These are the same control screens that you've used in the Pool Features and Control Screens section of this manual.

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## Edit Features/Lights/Heaters

When a feature, light, or backyard accessory is selected, you'll advance to the related Control Screen.

ON

select

jets

select

all bodies    pool

POOL

82°F

71°F air

features

daylight    alarm
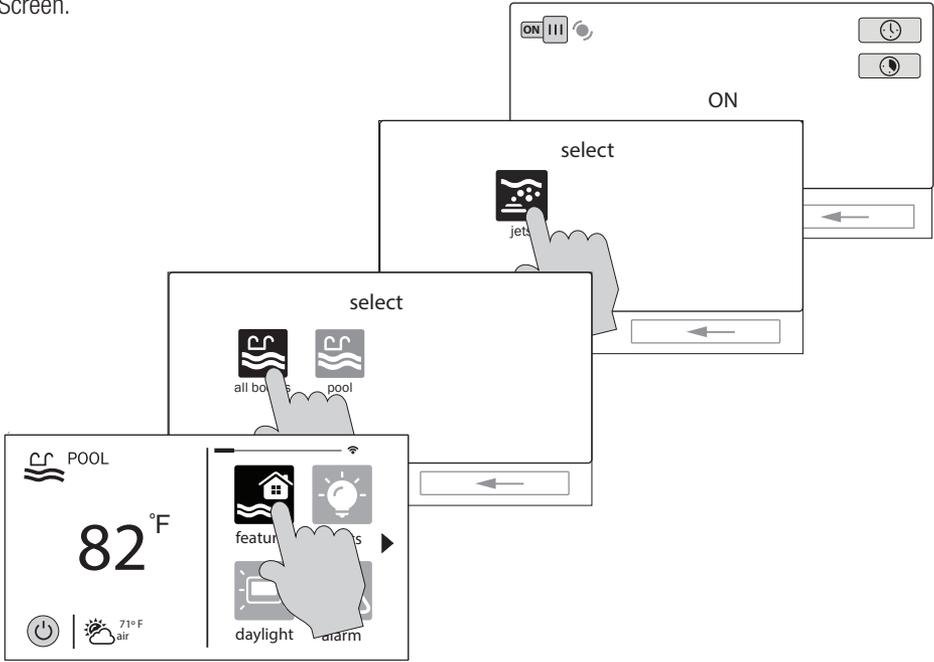
## Favorites Screen

All of the buttons on the right side of the Home Screen are referred to as "Favorites" but there is also a Favorites button.  Using this button, you can create and manage all of your favorites.
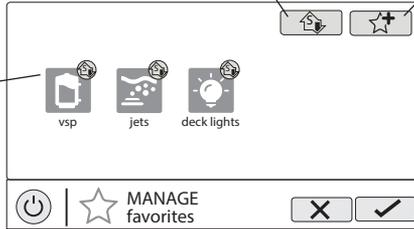
POOL

82°F

71°F air

heating    themes

favo        nfig

vsp    jets    deck lights

MANAGE favorites

21
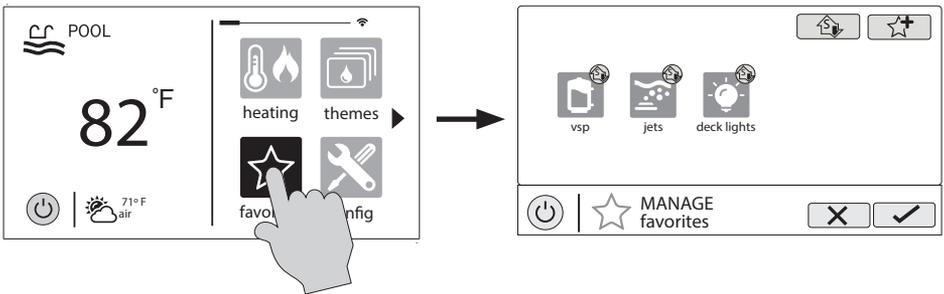
**Add to Simple Mode -** Touch this button to add a favorite to Simple Mode.

**Add Favorite -** Touch this button to add a favorite.

**Current Favorites -** These are favorites that have already been added. You can change the location of where they appear on the Home Screen.
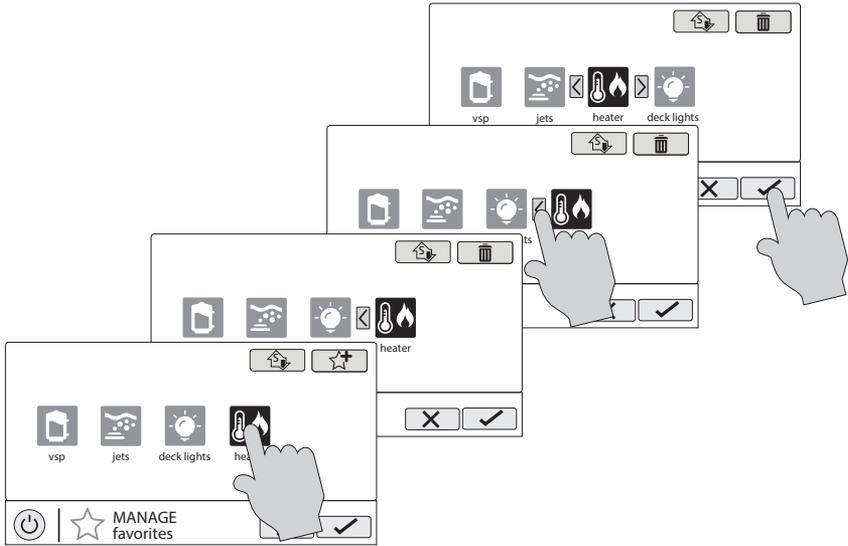
## Creating Favorites

Follow the procedure below for adding Favorites. This example shows how to create a Favorite for a heater. To find "heater" in our Add Favorites screen, we have to select "Pool" when prompted. The next screen will show all equipment configured for the Pool; in this case, just heater. Selecting heater and saving will add the heater to the Favorites screen. We can now move the heater button if desired.
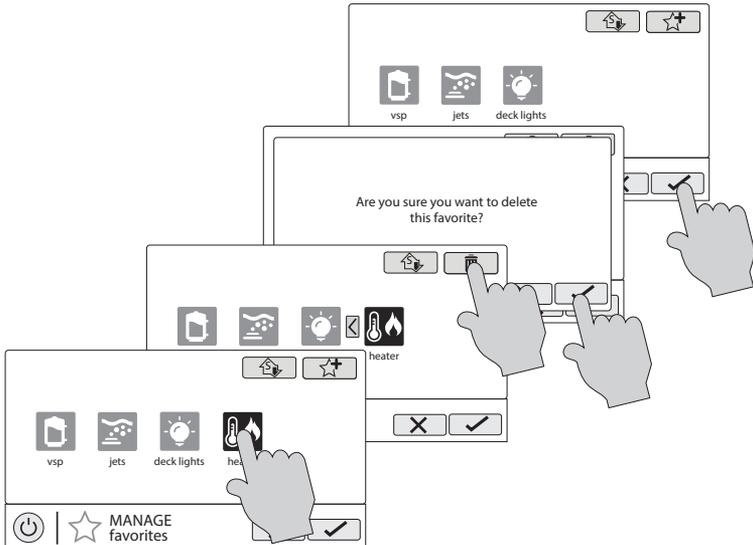


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# HAYWARD®
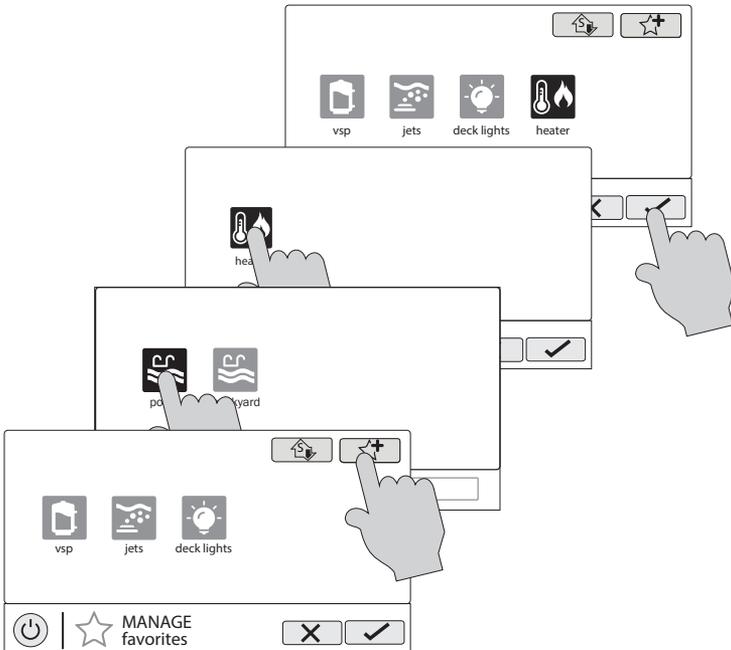
## Moving Favorites

Favorites will be displayed on the Home Screen in the order that they are shown on the Favorites Screen, from left to right. The default Favorites cannot be moved. To move Favorites, follow the procedure below.
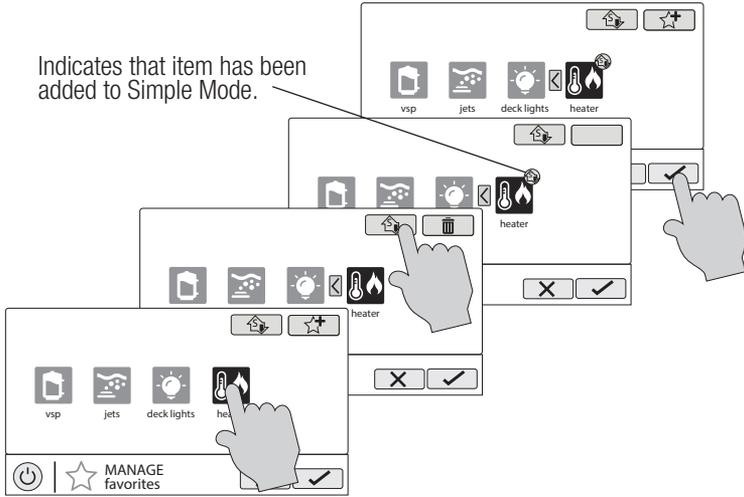


## Deleting Favorites

To delete Favorites, follow the procedure below. Default Favorites cannot be deleted.

## Adding Favorites to Simple Mode
For more information on Simple Mode, refer to page 33. Most Favorites can be added to Simple Mode but not all.  Follow the procedure below.  NOTE: If the Favorite has been added to Simple Mode, moving the button location on the Favorites screen will affect its position on the Simple Mode screen.

Indicates that item has been added to Simple Mode.

vsp    jets    deck lights    heater

heater

heater

vsp    jets    deck lights    he

MANAGE favorites

## Deleting Favorites from Simple Mode
Deleting Favorites from Simple Mode is similar to adding Favorites to Simple Mode.

heater

heater

vsp    jets    deck lights    he

MANAGE favorites

24

# HAYWARD®
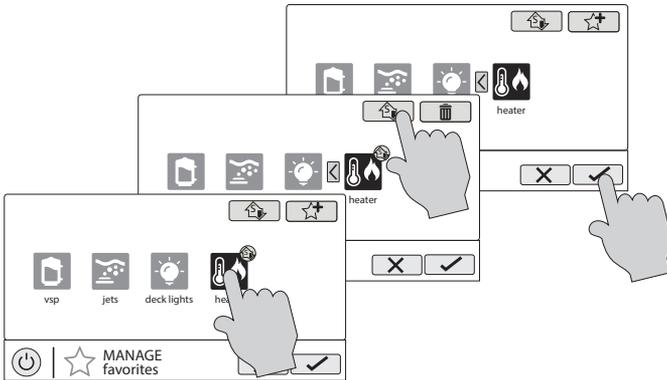
# Themes

Themes allow you to execute many pool functions with just one button. This can be handy for functions that require interaction with various pool equipment. For example, spending an evening in the spa might require you to turn on the spa jets, set the heater to 104ºF, and turn on the spa lighting. Rather than manually performing these functions, they can be saved as a Theme and executed with just one button. To create a Theme, put all of the equipment into the desired state. In the example above, you would set all the equipment as described. When creating Themes, the OmniHub takes a "snapshot" of the system state/settings. This snapshot is saved as a Theme. Refer to the following diagrams and information for creating and running Themes.
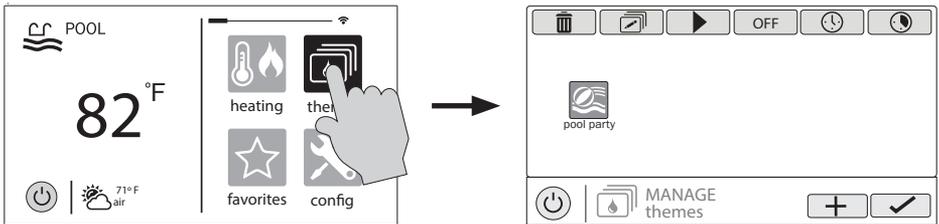
**Edit Theme** - After selecting a Theme, touch this button to edit the Theme. You can rename, change icon and set as favorite.

**Start Theme** - After selecting a Theme, touch this button to start the Theme.

**End Theme** - After selecting a Theme, touch this button to end the Theme.

**Select Theme** - Touch this button to select the desired Theme. You can now turn it on/off, edit, set a schedule, set a countdown timer, or delete the selection using the buttons above.

**Create a Theme** - Touch this button to create a Theme. Before creating, make sure all pool/spa/backyard equipment is in the desired state.

## Create a Theme
To create a Theme, put all of the equipment into the desired state and refer to the diagram on the top of the next page.
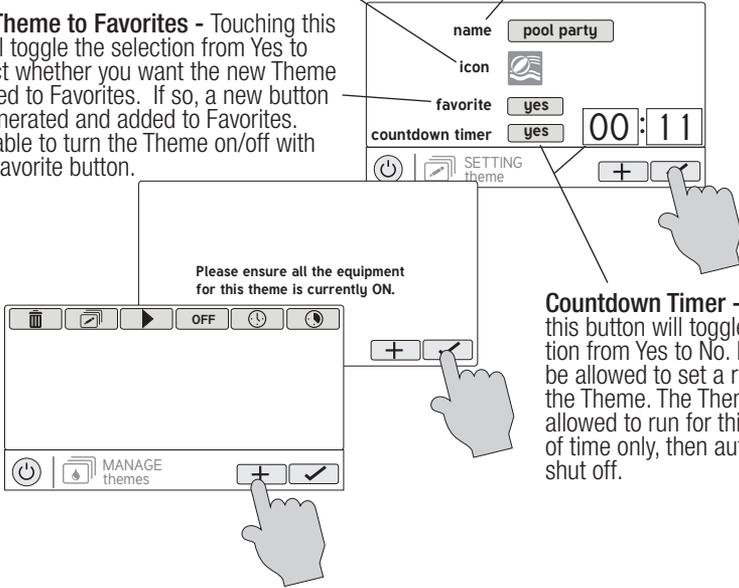
25

# HAYWARD®

**Select an Icon -** Touching this button will bring you to an icon selection screen. Touch the advance button to access more icons. Selecting and saving the icon will bring you back to this screen.

**Add the Theme to Favorites -** Touching this button will toggle the selection from Yes to No. Select whether you want the new Theme to be added to Favorites. If so, a new button will be generated and added to Favorites. You'll be able to turn the Theme on/off with the new Favorite button.

**Name the Theme -** Touching this button will bring you to a keyboard where you can enter a name for the theme. Saving the name will bring you back to this screen.

| | |
|---|---|
| name | pool party |
| icon | |
| favorite | yes |
| countdown timer | yes |

00 : 11

SETTING
theme

**Please ensure all the equipment for this theme is currently ON.**

MANAGE
themes

**Countdown Timer -** Touching this button will toggle the selection from Yes to No. If Yes, you'll be allowed to set a run time for the Theme. The Theme will be allowed to run for this amount of time only, then automatically shut off.

## Starting a Theme
If a Favorite was created for the Theme, run the Theme just as you would any other Favorite. To start a Theme within the "Manage Themes" screen, follow the procedure below. Note that only one Theme can run at a time.

OFF

pool party

OFF

pool

POOL

82°F

heating    the

favorites   config

71°F
air

26
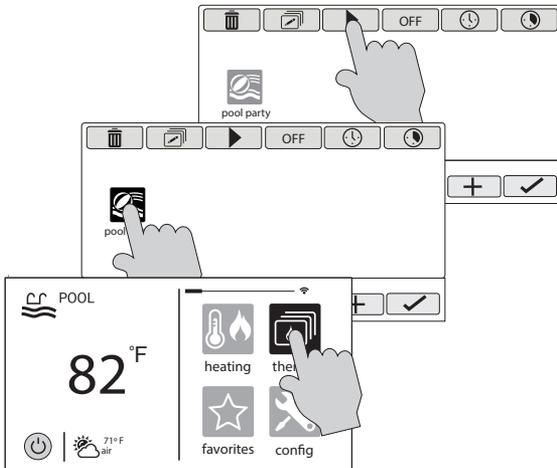
## Stopping a Theme

If a Favorite was created for the Theme, stop the Theme just as you would any other Favorite. To stop a Theme within the "Manage Themes" screen, follow the procedure below. Note that when stopping a Theme, all functions will turn off and the filter pump will return to any schedules that have been previously set.
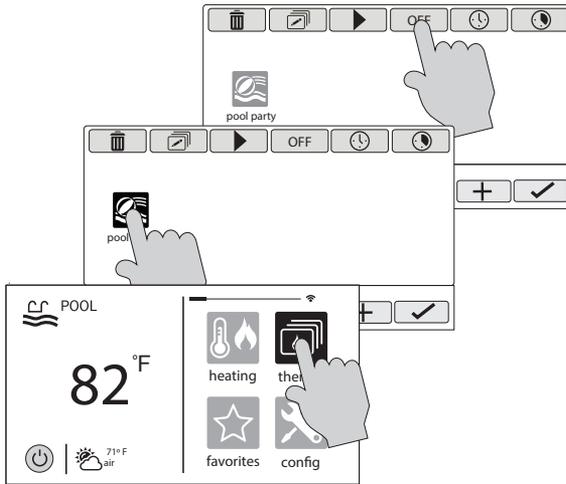
# Config

The Config button offers many options related to the configuration and operation of the OmniHub. You can view log files, backup configuration settings, restore configuration settings, modify display settings and more.
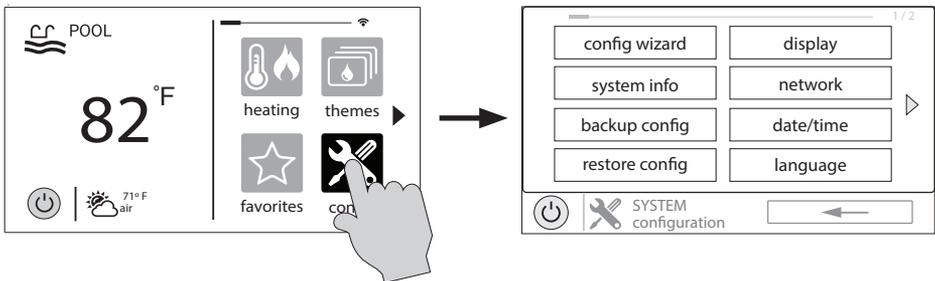
## Using a USB Thumb Drive

Some options require the use of a USB thumb drive (removable media) that will be inserted in the OmniHub. If logging is desired (page 29), the thumb drive should be left in the OmniHub during normal operation. This connection is not waterproof so care must be taken to protect the Control Pad while logging. The location of the USB port is shown in the Installation Manual.

## Config Wizard

The Configuration Wizard is used to add, remove, and configure pool equipment that is controlled by the OmniHub. Configuration should have already been completed at installation and should not be necessary unless a change has been made to the system. If a new configuration is saved, it will overwrite the old configuration and may require you to change previous equipment settings.

If pool equipment is added or removed from your system you may edit the existing Configuration. Quick Edit allows you to go directly to the equipment that you'd like to add/remove/configure. Refer to the Quick Edit Guide section in the Installation manual for more information.

## System Info

System Info will show the Hayward Unique Address (HUA) and version for all smart components (components that communicate with the OmniHub). This may be needed by Hayward Technical Service when troubleshooting or diagnosing system issues.

This screen will also display the MSP ID, which is used as a password for entering the Configuration Wizard as well as entering Simple Mode.

## Backup Config

You can back up your configuration settings, schedules, setpoints, etc. to the OmniHub's internal memory or to a USB thumb drive.

## Restore Config

You can overwrite the existing configuration with a backup that is stored internally or on a USB thumb drive. After selecting Restore Config, the following options will appear:

**restore backup 1** - this is the last backup that was saved to internal memory.
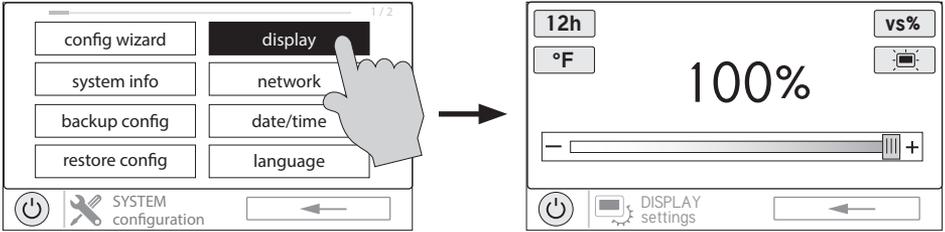**restore backup 2** - this is the second to last backup that was saved to internal memory.
**Restore from USB** - you can browse the USB drive and find available backups. Backup files will begin with "MSPCONFIGxxyyzz" where xx=month, yy=day, and zz=year (the date the file was created). The VS Omni will automatically create a backup file when a new configuration is saved. These files end with ".xml". Backup files that are created manually end with ".bak". Both types can be restored.

To restore a backup, make your selection from above and then touch Save.

# HAYWARD®

## Display
The Display Settings screen offers options to customize the way the OmniHub displays information.

| config wizard | display |
|---|---|
| system info | network |
| backup config | date/time |
| restore config | language |

SYSTEM configuration    1 / 2

12h    °F    100%    vs%
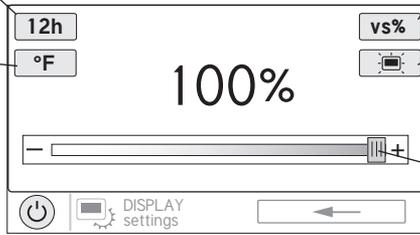
DISPLAY settings

**12/24 hour format -** Toggles between 12 hour and 24 hour time display.

**ºF/ºC -** Toggles between ºF and ºC.

**VSP Speed Display -** Display VSP pump speed in % or RPM.

**Display Settings -** Set display idle duration and default on settings.

12h    °F    100%    vs%

DISPLAY settings

**Display Brightness -** Set display brightness.

## Network
You can view the OmniHub ip address at this screen.  This is the address that the router will use to connect the OmniHub to the home network.  You can also turn the connection to the router on and off using the On/Off toggle.

## Date/Time
Set the Date/Time on this screen. Date and time can be set manually or you can choose to have it updated automatically from the internet.

## Language
Select a language.  If a desired language is not shown, it may be available from Hayward through their website at www.hayward.com/firmware.  Refer to page 32 for information on installing new languages.

## Data Log (requires a thumb drive, page 29)
Use this feature if instructed by Hayward Technical Service. The data log shows a log of daily operations and can help Hayward Technical Service diagnose or troubleshoot problems.  The data log options are:

**Clear Log File** - this will delete all data in the log file.
**Show Log File** - this will display the log file.

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**Restore Defaults** - this will return the data log settings to the factory default.
**Set Level** - you can change the amount of detail that is shown in the log file with this button.

You can also enable or disable data logging using the On/Off toggle.

# Upgrade

Additional functions, features, and languages may be available for your OmniHub.

## Determine if Firmware Upgrade is Available
The OmniHub's firmware is the basic operating system that runs the unit.  The OmniHub was shipped with the version of firmware that was available at the time of release.  There may be a newer version available and if so, we encourage you to upgrade.  Also, if you have experienced problems, Hayward Technical Service may advise you to upgrade your OmniHub firmware.  If this is the case, follow the instructions on the following page.
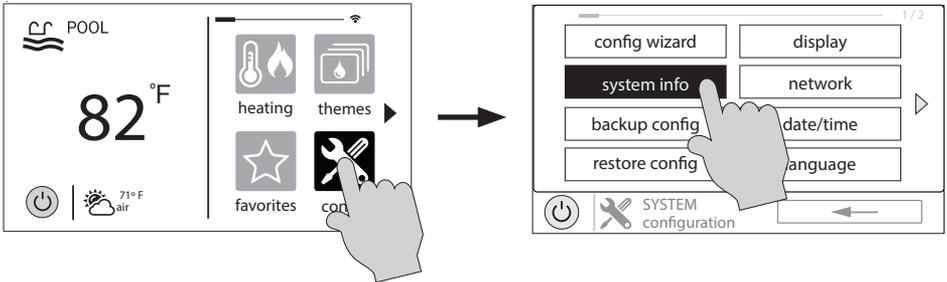


1.    Determine your current MSP firmware version.
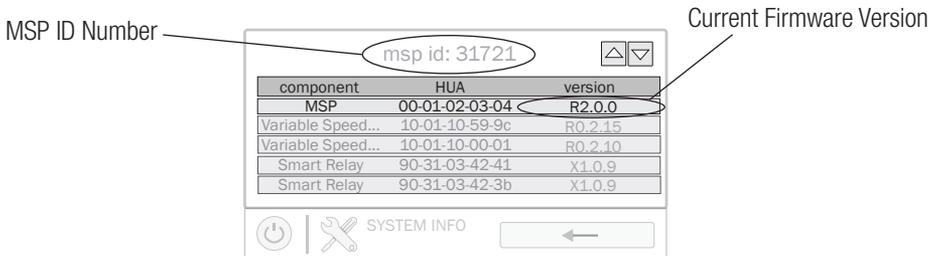


2.    Using an ordinary web browser, go to www.hayward.com/firmware and compare the latest available version on the web to the current firmware version.  If the firmware version on the web is greater (number is larger) than your current version, upgrade your OmniHub.  If not, periodically check the website and upgrade as newer firmware is released.

# HAYWARD®

## Upgrading Firmware (must be in Service Mode, page 3)

1. Insert your USB thumb drive into your computer.
2. Go to www.hayward.com/firmware.
3. Click on the link to download the latest firmware and save to the USB thumb drive.
4. Remove the USB thumb drive from the computer.
5. Locate the port on the underside of the OmniHub Control Pad and insert the thumb drive.
6. Apply power to the OmniHub (if not already powered) and allow the OmniHub to fully start.
7. Enter Service Mode (page 3)
8. Touch the Upgrade button
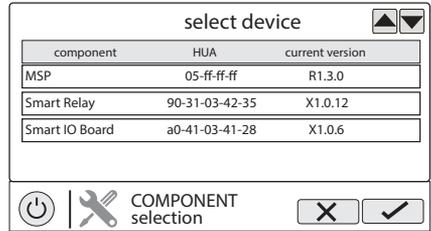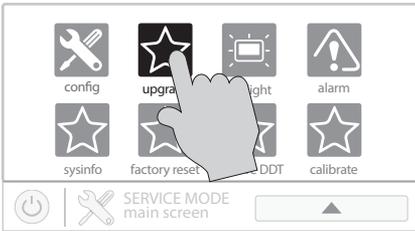


9. Select "MSP" and touch the Save button.
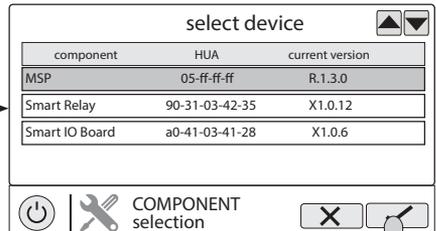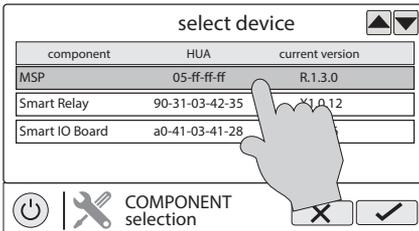


10. The OmniHub will now look at your USB thumb drive. Select the firmware file that was saved from the website and then touch the Save button.



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HAYWARD®

11. Touch Save to begin the upgrade. After the upgrade is finished, touch Save to restart.

| ready to upgrade | |
|---|---|
| component | firmware file |
| MSP | MSP_AR_BO140017 |
| 0% | |
| UPGRADE firmware | ✕  ✓ |

| success ready to restart | |
|---|---|
| component | firmware file |
| MSP | MSP_AR_BO140017 |
| 100% | |
| UPGRADE firmware | ✕  ✓ |

12. After the OmniHub has restarted, exit Service Mode and resume operation.
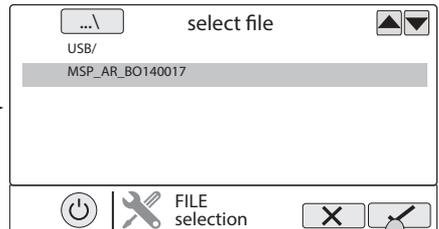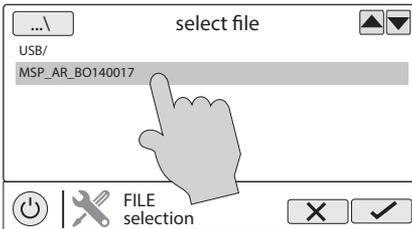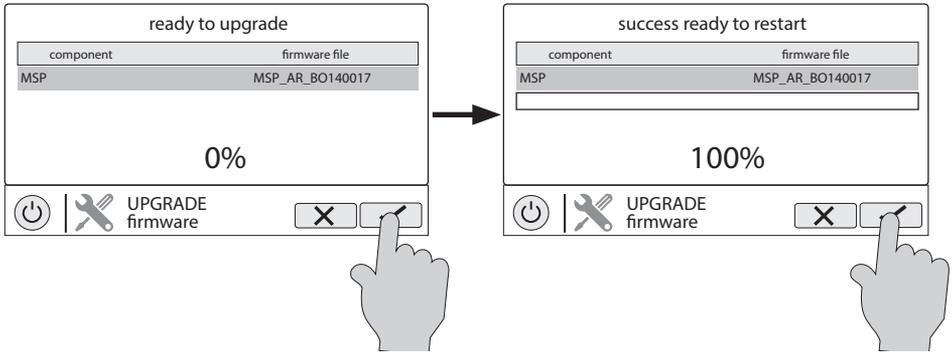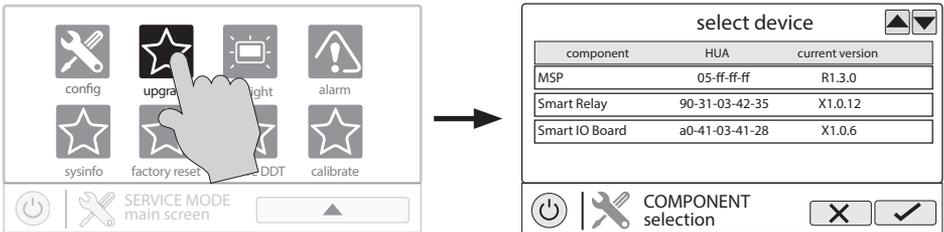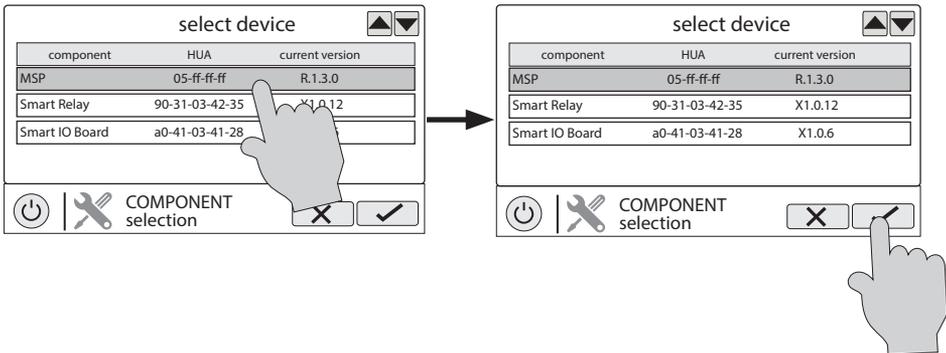
## Installing a New Language (must be in Service Mode, page 3)

1. Insert your USB thumb drive into your computer.
2. Go to www.hayward.com/firmware.
3. Click on the link to download the desired language and save to the USB thumb drive.
4. Remove the USB thumb drive from the computer
5. Locate the port on the underside of the Wiring Hub and insert the thumb drive.
6. Apply power to the OmniHub (if not already powered) and allow the OmniHub to fully start.
7. Enter Service Mode (page 3).
8. Touch the Upgrade button.

| config | upgrade | light | alarm |
|---|---|---|---|
| sysinfo | factory reset | DDT | calibrate |

SERVICE MODE
main screen

| select device | ▲▼ | |
|---|---|---|
| component | HUA | current version |
| MSP | 05-ff-ff-ff | R1.3.0 |
| Smart Relay | 90-31-03-42-35 | X1.0.12 |
| Smart IO Board | a0-41-03-41-28 | X1.0.6 |

COMPONENT
selection     ✕  ✓

9. Select "MSP" and touch the Save button.

| select device | ▲▼ | |
|---|---|---|
| component | HUA | current version |
| MSP | 05-ff-ff-ff | R.1.3.0 |
| Smart Relay | 90-31-03-42-35 | X1.0.12 |
| Smart IO Board | a0-41-03-41-28 | |

COMPONENT
selection     ✕  ✓

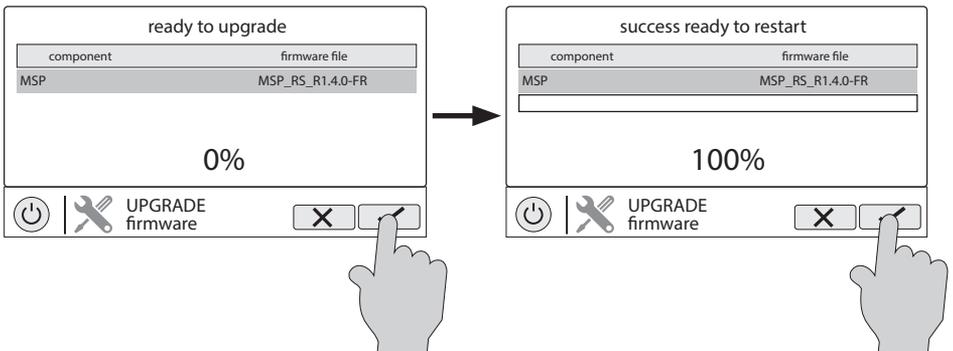| select device | ▲▼ | |
|---|---|---|
| component | HUA | current version |
| MSP | 05-ff-ff-ff | R.1.3.0 |
| Smart Relay | 90-31-03-42-35 | X1.0.12 |
| Smart IO Board | a0-41-03-41-28 | X1.0.6 |

COMPONENT
selection     ✕  ✓

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10. The OmniHub will now look at your USB thumb drive.  Select the language file that was saved from the website and then touch the Save button.
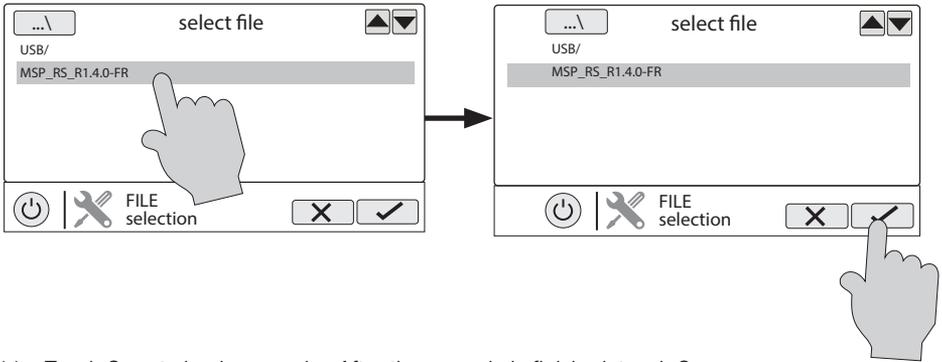


11. Touch Save to begin upgrade.  After the upgrade is finished, touch Save.



12. After OmniHub has restarted, exit Service Mode and resume operation.

# Simple Mode

Up to this point, you've been shown how to view the Home Screen and access all of the pool's functions by using the features screens (left side of Home Screen) and favorites (right side of Home Screen).  This method of access is called "Standard Mode" and offers the most informa-tion and control.  An alternative to Standard Mode is "Simple Mode".  Simple Mode eliminates the Home Screen and allows you to view and control only the Favorites that you specify.  Simple Mode is customizable and may be preferred to Standard Mode depending on your needs.  Simple Mode can provide a convenient way to access the most common functions for owners as well as a handy solution to limit access to other users.  Up to 24 Favorites can be displayed in Simple Mode. Depending on the pool equipment that has been configured, some default Favorites may appear in Simple Mode.  These default Favorites cannot be removed from Simple Mode.  For information on how to add and delete Simple Mode Favorites, refer to page 24.

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## Simple Mode Screen

**Status -** Items that are highlighted are active or "On". In this example, the VSP pump and heater are both On. Touching buttons in Simple Mode will turn the items On or Off.
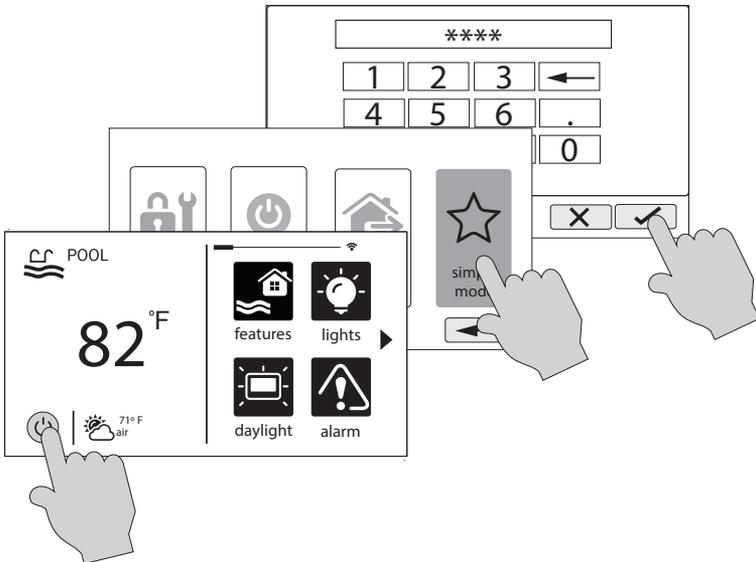
heating        vsp

daylight       cleaner

71° F
air
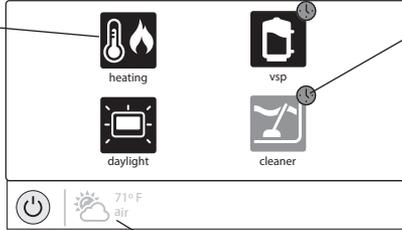
**Schedule Indicator -** Favorites that have been configured to operate on a schedule will display this indicator.

**Home Screen Information -** The same information that is displayed on the Home Screen is also displayed on the Simple Mode screen.

## Enter Simple Mode

To enter Simple Mode, go to the Home Screen and follow the procedure below. Entering and exiting Simple Mode will require your OmniHub's MSP ID number. This number is used as a password. To find your unit's MSP ID, refer to page 30.

****

| 1 | 2 | 3 | ← |
| 4 | 5 | 6 | . |
|   |   | 0 |   |

× ✓

simple
mode

POOL

82 °F

71° F
air

features    lights

daylight    alarm

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## Exit Simple Mode
To exit Simple Mode, follow the procedure below.

```
        ****
  1   2   3   ←
  4   5   6   .
              0
        ✗   ✓
```

| | | |
|---|---|---|
| heating | vsp | standard mode |
| daylight | cleaner | |

71° F
air

# HAYWARD®
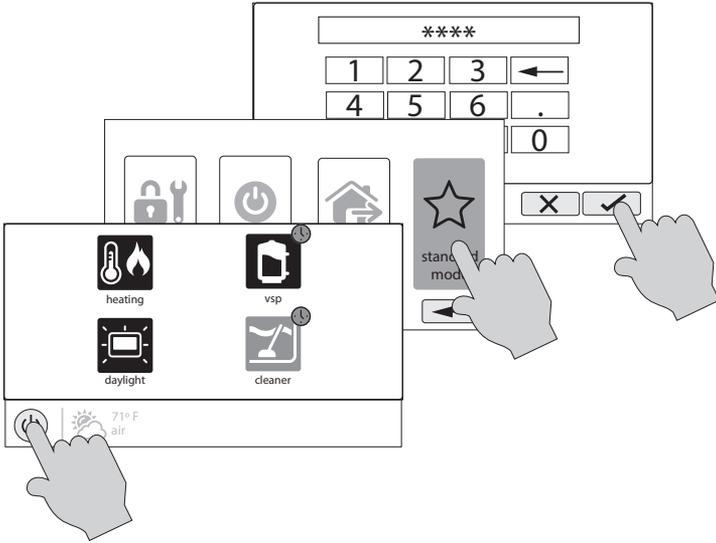
# Web Enabled Control

The OmniHub should have already been configured for use with the home's router to allow for remote control through the web. This procedure is covered in the Configuration Wizard information found in the Installation manual. After configuration, an account must be created to allow access to the OmniHub from web enabled devices. If this has not already been done by the installer, follow the procedure below.

1. Using an ordinary web browser, go to www.haywardomnilogic.com. If you don't already have an account, select "Register New User" and set up a new account.
2. Log in to your account.
3. Register your OmniHub. Registering will require you to answer a series of questions about your OmniHub. When asked for your Time Zone, be sure to enter the same time zone as the physical location of the installed OmniHub, otherwise schedules will be inaccurate. You'll also be asked for an MSP System ID. This number can be found directly from the OmniHub. To find your unit's MSP ID, follow the procedure below.

**MSP ID** _____
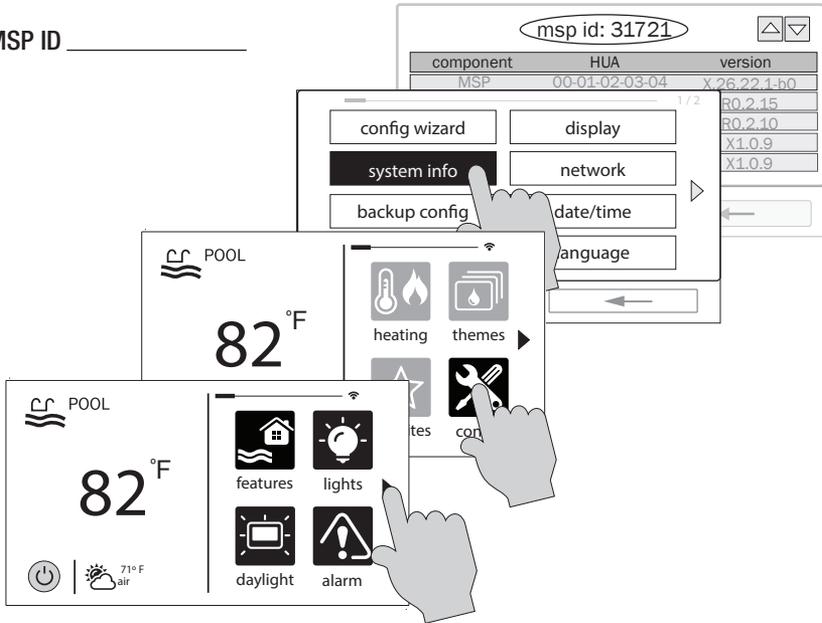


After the MSP is accepted, the OmniHub will be linked to your account. You'll be able to access the OmniHub at any time from your browser by logging into your account at haywardomnilogic.com. For mobile devices, download the "OmniLogic" app from your device's app store. Login to your account through the app and you should see the OmniHub.

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LIMITED WARRANTY (effective 03/01/12) Hayward warrants its OmniLogic, OmniHub, Pro Logic, OnCommand and E-Command pool automation products as well as its Aqua Rite, Aqua Rite Pro, Aqua Plus and SwimPure chlorination products to be free of defects in materials and workmanship, under normal use and service, for a period of three (3) years. Hayward also warrants its Aqua Trol chlorination products to be free of defects in materials and workmanship, under normal use and service for a period of one (1) year. These warranties are applicable from the initial date of purchase on private residential swimming pools in the US and Canada. Installations of product for use on commercial pools in the US and Canada is covered for a period of one (1) year for defects in materials and workmanship. Hayward warrants all accessories and replacement parts for the above-identified pool automation and chlorination products for a period of one (1) year. Accessories also include remotes, actuators, base stations, temperature sensors, flow switches and chemistry probes. Each of these warranties is not transferable and applies only to the original owner.

Hayward shall not be responsible for cartage, removal, repair or installation labor or any other such costs incurred in obtaining warranty replacements or repair.

Proof of purchase is required for warranty service. If written proof of purchase is not provided, the manufacturing date code will be the sole determinant of the date of installation of the product. To obtain warranty service or repair, please contact the place of purchase or the nearest Hayward authorized warranty service center. For more information on authorized service centers please contact the Hayward Technical Service Support Center (61 Whitecap Road, North Kingstown RI, 02852) or visit the Hayward web site at www.hayward.com.

WARRANTY EXCLUSIONS:

1. Material supplied or workmanship performed by others in process of installation.

2. Damage resulting from improper installation including installation on pools larger than the product rating.

3. Problems resulting from failure to install, operate or maintain the product(s) in accordance with the recommendations contained in the owners manual(s).

4. Problems resulting from failure to maintain pool water chemistry in accordance with the recommendations in the owners manual(s).

5. Problems resulting from tampering, accident, abuse, negligence, unauthorized repairs or alternations, fire, flood, lightning, freezing, external water, degradation of natural stone used in or immediately adjacent to a pool or spa, war or acts of God.

6. Use of a non-genuine Hayward replacement salt chlorination cell on any Hayward automation or chlorination product will void the warranty for that product.

The express limited warranty above constitutes the entire warranty of Hayward Pool Products with respect to its products and is in lieu of all other warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose. In no event shall Hayward Pool products be responsible for any consequential, special or incidental damages of any nature. Some states do not allow a limitation on how long an implied warranty lasts, or the exclusion of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

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For further information or consumer
technical support, visit our website at
www.hayward.com
US: 908-355-7995

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