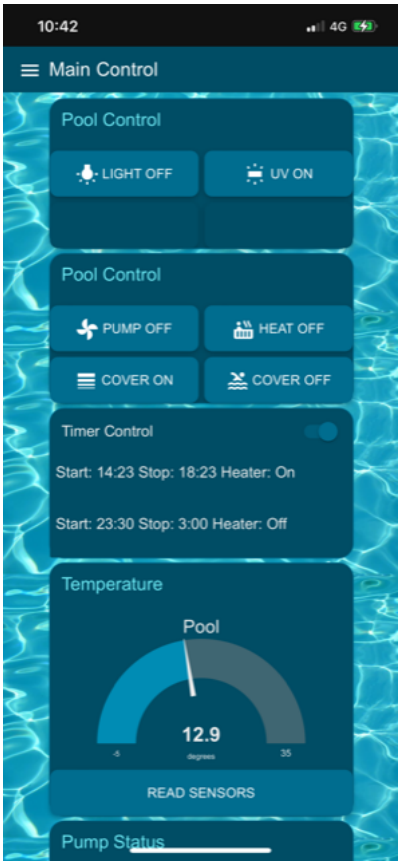
Congratulations on purchasing your new SmartPool System! Your swimming pool management is about to get a whole lot simpler.

Now, let's get you started…

The first thing you need to do is connect the SmartPool System to your home WiFi network. Sorry that this is a bit of a pain but you should only have to do it once. To do this, follow the steps below:

STARTING UP

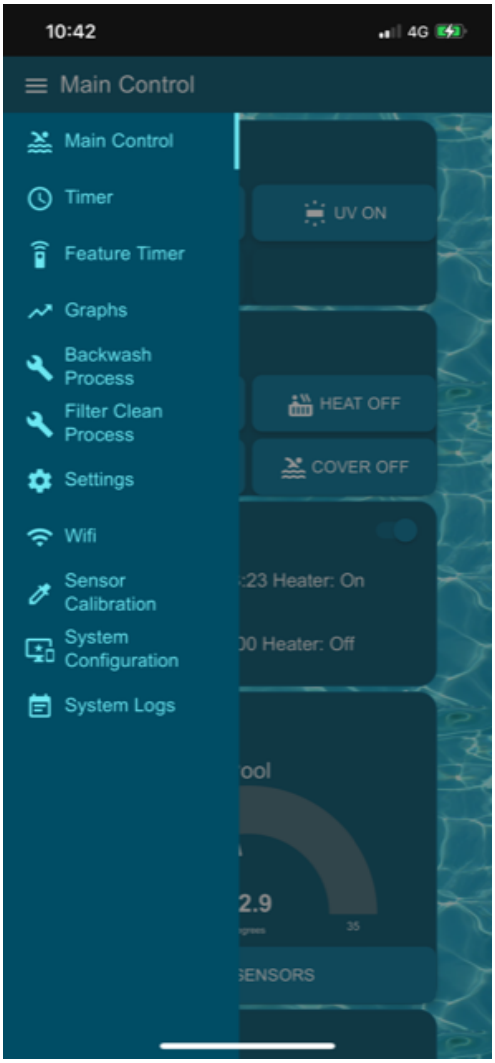
1. Turn on your SmartPool Hub. After a few minutes you will see a new WiFi network being displayed.
2. Connect your phone, tablet or computer to the hub WiFi. The network is called 'SmartPool' and the WiFi code is ***SmartPool***. This is used for the initial setup of the Hub. If after 5 minutes of powering the Hub, this network doesn't appear, just press and hold the reset button on the Hub for 10 seconds. This will allow the system to reset and reboot and after around 3 minutes the SmartPool WiFi will be displayed.
3. Once connected to the Hub's WiFi, you can open a web browser and connect to **smartpoolhub.local:7777/sps** . This will enable you to control and configure your SmartPool System.
4. The site should look like this:



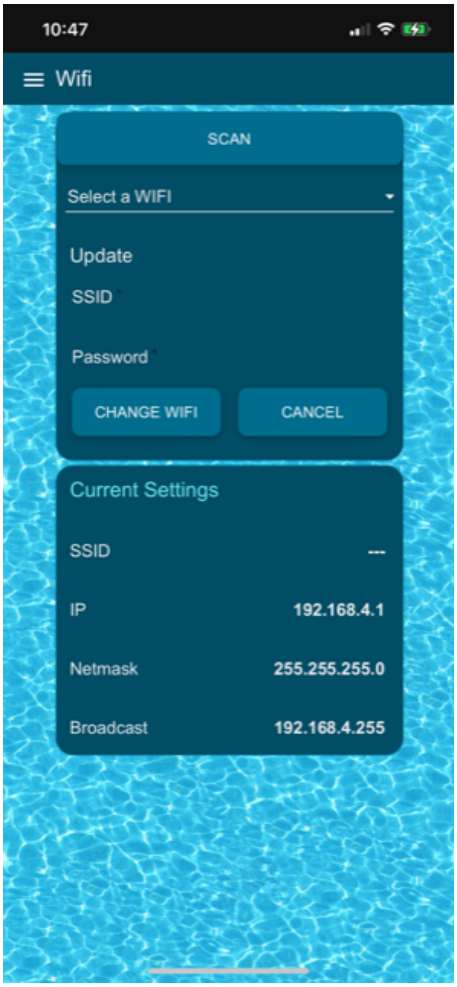
5. Now add this site to your home screen. For example, if you are using an iPhone, open the site using Safari and click on the ‘share’ icon (a little square with an arrow pointing up in it). Scroll down and select the ***‘add to home screen’*** option.
6. Once you have added the website to your home screen you should see the SmartPool icon on your phone or tablet and this will be your shortcut to controlling SmartPool. The icon has a light blue background with a swimmer in it.

Connecting to your home WiFi:

1. Once you have followed the above steps, click on the icon in the top left-hand corner next to ‘***Main Control’*** . Now scroll down and click on ‘WiFi’.



2. This WiFi screen allows you to scan for your local WiFi. You may have to tap “Scan” several times to discover your home network. After tapping scan tap the “Select a Wifi” drop down to see if SmartPool has found your home WiFi network.



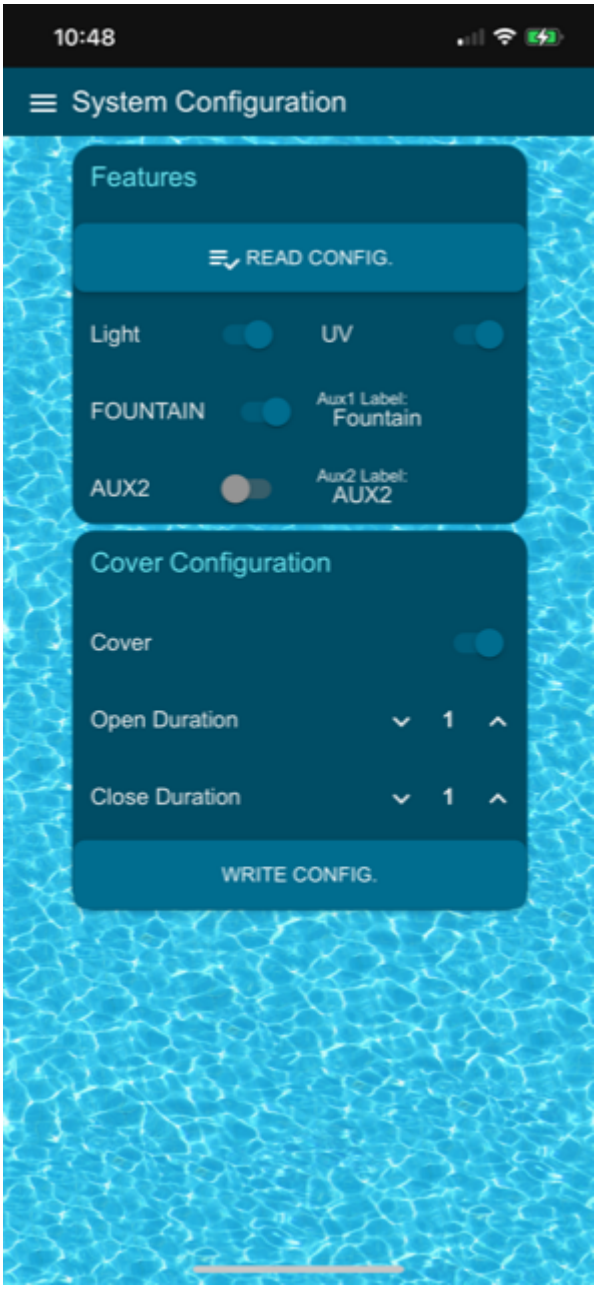
3. Select your network from the list.
4. Now tap on '**password**' and type in the password for your home network.
5. Once you have entered the correct ID and password, click on '**change WiFi'**. After about 2 minutes the device will restart and connect to your home network.

Congratulations! You can now connect your phone, tablet or PC to your home network and start enjoying your new SmartPool System.

Personalising the system:

SmartPool is a versatile, bespoke system. It can be tailored and personalised to your individual needs and your own swimming pool specifications. These next steps will enable you to select and control your chosen features. *(Please note, it is possible that your installation engineer will complete this for you in which case please skip this section)*.

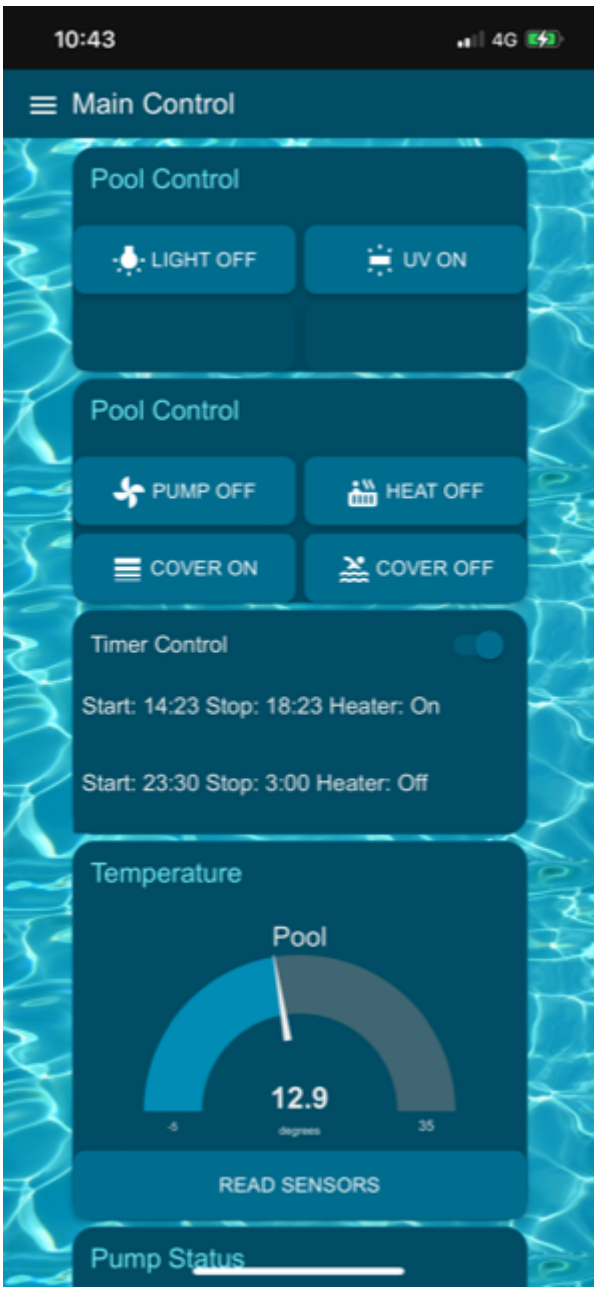
1. Tap the 'menu' icon in the top left-hand corner of the screen and select '**Systems Configuration'.**
2. To configure the system, tap on the relevant switches, confirming if your pool has a Pool light, UV light or Cover.



3. You can also control other electronic pool devices you own. There are two controllers available for this (Aux1 & Aux2). Use the switch to enable these devices. Clicking on the label box allows you to alter the name to your specific aux device, e.g. 'Swim Jet', 'Fountain', 'Deck Light'. **(*NOTE: the label is limited to 10 characters).***
   MAKE SURE YOU CLICK THE '**WRITE CONFIG'** BUTTON TO SAVE THE CHANGES.
4. Once you have set the configuration, your home screen will reflect the specific features of your pool that you have selected.

The Home Screen (Main Control Centre)

The home screen is the main hub of SmartPool. From here you can check the status of your pool and gain access to control all your swimming pool components.



Pool Control:

This section has buttons that you can simply tap to switch things on and off. For instance, opening an automatic cover or turning on and off a light.

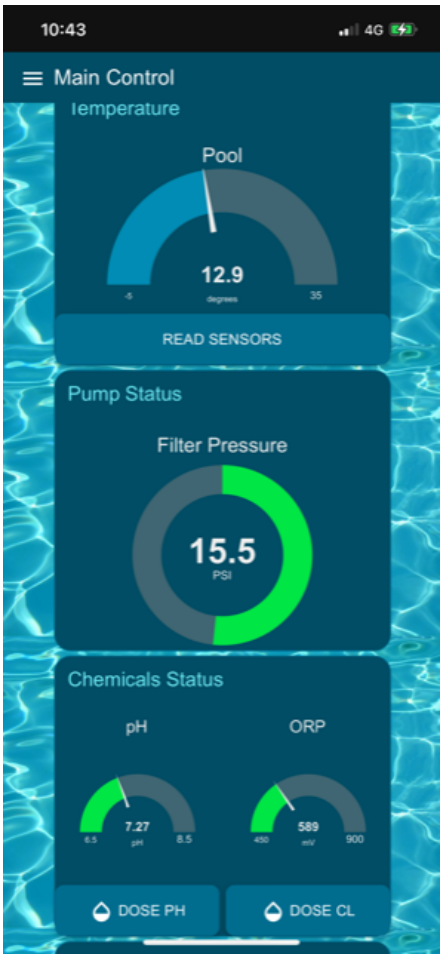
Timer Control:

This is where you control the timer for your pool once it is set up (see later section). *(NOTE: if you tap the '**Pump'** button to on/off, it will automatically cancel the timer and switch it to manual control).* Once you have completed manual control of the pump you will need to tap the button to turn it back to auto timer control.

Sensor Dials:

The home screen features dials displaying the water temperature, filter pressure, pH and ORP levels. For a current reading, you can tap the '**read sensor'** buttons, otherwise they will update periodically.

(NOTE: the readings are only accurate when the pump is running. This is because the water in the pipe will cool down when the pump is off, and the filter will only have pressure when the pump is on).



Temperature:

The temperature reading is taken from the water passing through the sensor rail from the pool. When the pump has been running for a few minutes, this water will be coming directly from the main body of the pool itself and the reading will be accurate, reflecting the actual temperature. Once the pump has been switched off, the water in the sensor rail will change to reflect the temperature in the air around it, which is likely to be different. Therefore, for an accurate reading, keep the pool pump running for a few minutes beforehand, to ensure that you are getting a sample from the main body of water in the pool.

Filter Pressure:

The reading of the filter pressure is taken from the sensor placed at the top of your pool filter. Each pool runs at a different pressure depending on the filter type and the power of

your pool pump. You should familiarise yourself with the “normal” pressure reading for your system rather than seek a specific value for this reading.

pH reading:

The pH reading is most accurate once the pool pump has been running for some time, so that it is being taken from the water in the main body of the pool, rather than from the pipe, where it may have been “standing” for some time.

The pH is a measure of the pool water acidity. Your pool service engineer will advise on the “right” pH reading for your pool, but as a guideline, a value of between 7.2 and 7.4 is good. You can add a “set-point” into your pool settings screen to specify the pH level that you would like to maintain when auto-dosing. Alternatively, you can tap the **‘Dose PH’** button to apply a manual dose of pH adjuster to your pool if required.
(NOTE: the pH Dose pump will only activate when the pump is running to prevent build-up of chemicals in the pipes).

ORP Reading:

As with the pH reading, the ORP reading is only accurate when the pump has been running for some time so that the sample water is coming from the main body of the pool, rather than from the pipes.

The ORP reading is the measure of the “ability” of the water to keep the water hygienic ***(see def below)***. Your swimming pool service engineer will advise you on the correct ORP level for your pool, but as a guideline, it is suggested that with a pH of 7.3 you should look to have an ORP level of 650-750 to ensure that your pool water is healthy and clean.

You can add a “set-point” into your pool settings screen to maintain the desired ORP level with auto-dosing of chlorine. Alternatively, you can tap the ‘**Dose Cl**’ button to apply a manual dose of chlorine to your pool if required. However, the dosing system will only activate while the pump is running to avoid chemical build-up.

Definition of ORP:

Oxidation-reduction potential (ORP) is the potential of a disinfectant to inactivate micro-organisms in a swimming pool or spa pool. It is a direct measure of disinfection power.

Oxidation-reduction potential (ORP, redox) measures the rate of oxidative disinfection caused by the addition of the effects of all oxidants in the pool water. ORP is determined by using a high quality ORP probe and meter. The unit of measurement of ORP is millivolts (mV).

Oxidisers (mainly disinfectants) consume electrons while reductants (mainly contaminants) donate electrons. As chlorine is continuously added to the swimming pool the disinfection action is mainly due to chlorine compounds, particularly hypochlorous acid (HOCl). The ORP is the potential of a disinfectant to do its work of inactivating micro-organisms and oxidising organic materials. The higher the millivolt reading, the more powerfully the swimming pool water is able to oxidise and disinfect.

Oxidisers cause the millivolt value to increase and therefore increase disinfection. Typical oxidisers are hypochlorous acid (a component of free chlorine), ozone, hydrogen peroxide, and potassium monopersulphate.

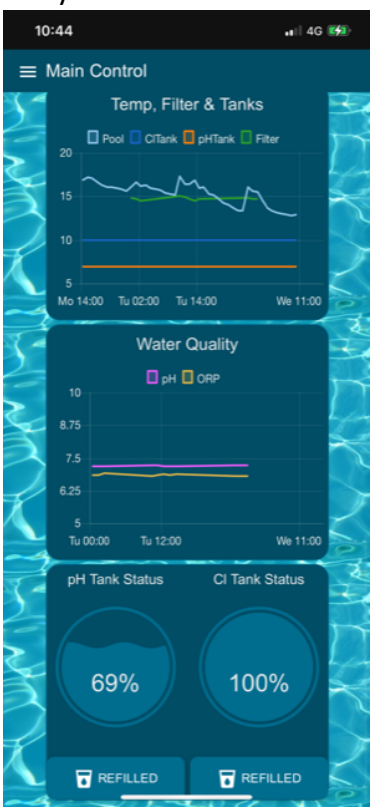
Reductants cause the millivolt value to decrease and therefore decrease disinfection. Typical reductants are the hypochlorite ion (a component of free chlorine), chloramines, cyanuric acid, organic matter (dust and dirt), urine, perspiration, sputum, micro-organisms, cosmetics, and faecal material.

A drop in the ORP indicates an increase in chlorine demand caused by reducing agents or contaminants entering the water. A decrease in ORP indicates that chemical reactions are about to occur. Compared to amperometric control, ORP is considered to be a more accurate measure of disinfection rate. Also, ORP controllers can automatically add disinfectant according to demand. They therefore anticipate the disinfecting and oxidising chemical reactions that are about to occur.

ORP is an indicator of micro-organism inactivation. Studies on specific micro-organisms have found a direct correlation between increasing ORP and micro-organism inactivation as shown in Graph 6.1. Drinking water is adequately disinfected at an ORP of 650 mV. In swimming pools, an ORP of 700 to 720 mV allows for both a quick disinfection and for breakpoint chlorination (destruction of chloramines) where conditions permit.

Home Screen Graphs:

Your home screen displays graphs indicating how your sensor readings have been changing over time. These are updated only when the pump is running, and readings are then taken every hour.



Tank Status:

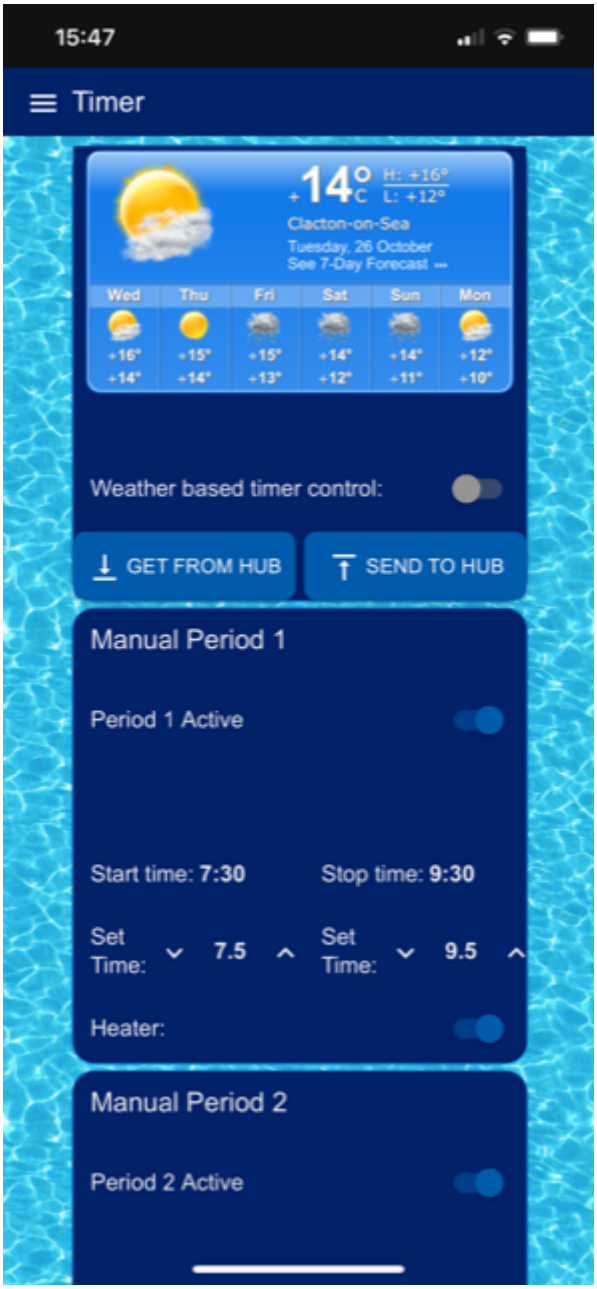
The two circles indicate the remaining quantity of dosing chemical in your tanks. For these to function, you need go to **'Settings'** and specify the size of your refill tank and quantity of each dose to be delivered**.** SmartPool will then track doses and calculate how much chemical you have remaining. When you replace or refill your dosing tanks, tap the '**REFILLED**' button, to confirm you have filled your tanks to take you back to 100%.

(NOTE: YOU MAY CONFIGURE YOUR SMARTPOOL TO AUTOMATICALLY EMAIL YOUR SUPPLIER TO REPLACE CHEMICALS WHEN YOU REACH LOWER THAN 10%. SEE SETTINGS SECTION).

The SmartPool Timer

The SmartPool System has an advanced timer for the pump and heater allowing you to select **‘standard’** or ‘**weather based’** timer.

To set up the Timer click the **‘menu’** button from the Main Control screen and select **‘Timer’** from the side menu bar. This will take you to the Timer Screen.



Standard Timer

To select **‘standard’** timer, tap the **‘weather based’** timer switch to “off”. This will present you with two manual periods, each for which can select whether they are enabled (active)

and a start/finish time. You may also select if the heater will be switched on during this time period.

When the SmartPool is in 'auto-timer' mode which is set on the Main Control screen it will activate the pump and heater at the times specified in the timer.
PLEASE ENSURE THAT YOU TAP 'SEND TO HUB' TO SAVE YOUR TIMER SETTINGS.

(NOTE: ANY MANUAL OVER-RIDE OF THE PUMP WILL TURN OFF AUTO-TIMER AND IT WILL NEED TO BE MANUALLY RE-ACTIVATED TO RESTART IT. JUST GO BACK TO THE MAIN CONTROL SCREEN AND TAP THE TIMER CONTROL SWITCH).

Weather-based Timer

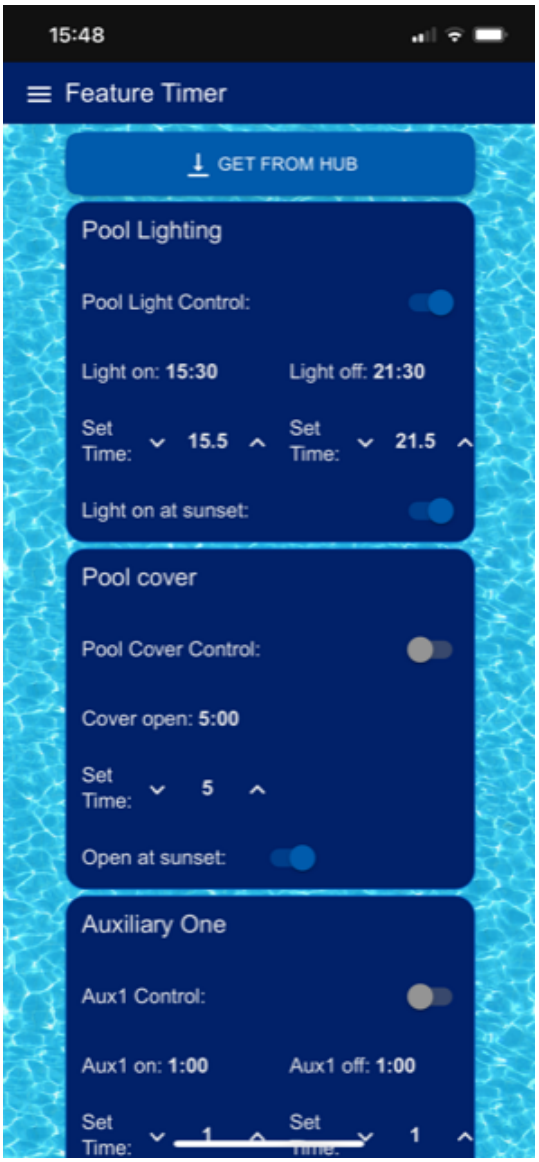
The second method for timer control is weather-based. This unique and innovative mechanism allows you to access your local weather forecast to dictate when the pump/heater are activated, thereby optimising efficiency, and reducing cost.

To enable this function, you must first tap the '**weather based'** time switch on the Timer screen.

Once the weather-based timer is enabled, you can specify a "duration" for your timer period. Every day at 7am, your SmartPool will download the daily weather forecast for your location *(see Settings section to select your location).* Once SmartPool has downloaded the forecast, it automatically calculates the start and stop times to run your heater/pump for the period set during the "warmest" part of the day. ***The benefit of doing this is that your heater will be more efficient during the warmest part of the day.***

In addition, you can set a second manual timer, should you wish the pool heater/pump to activate for 2 daily periods for example if you wish to run the pump/heater during the day and at night.

Feature Timers



SmartPool also allows you control other features, such as the lights and cover, and therefore it is fitted with a second timer. You can use the 'Feature Timer' screen to set a timer for each of your pool features.

There is even a '**sunset**' option to automatically light up your pool at sunset for added drama and effect! If you are fortunate enough to have an automated cover, pool light, water feature and patio lights, why not configure timers for each of these to activate at sunset, and wow your guests when the pool opens and lights up, just as the sun goes down!

Graphs

Your SmartPool tracks and records long term readings taken while the pool pump is active. These graphs provide an insight into the last 300 hours of readings whilst the pump has been

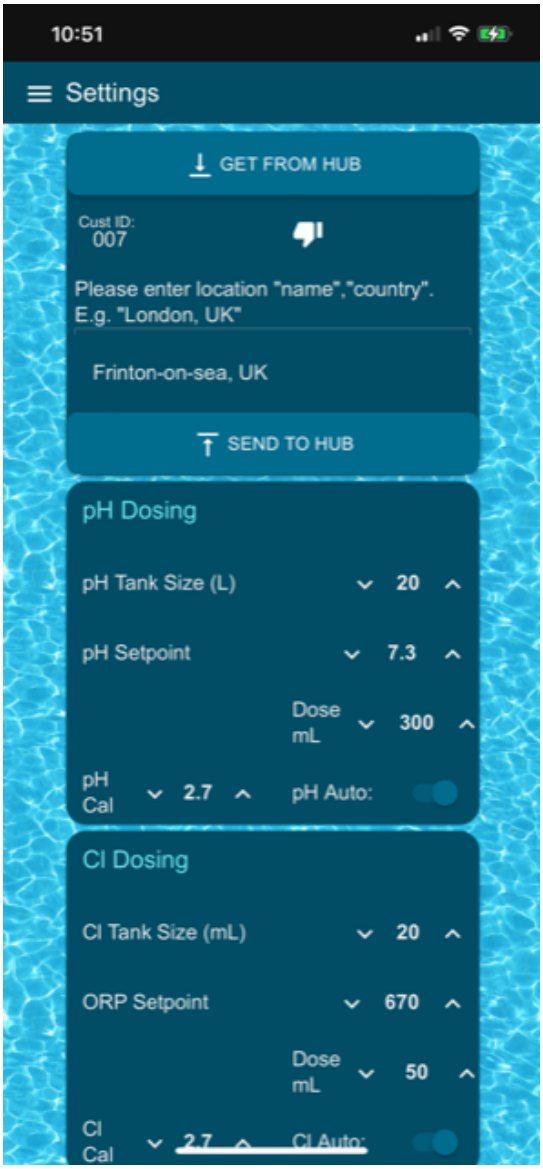
operational. As the pump can be controlled manually or via a timer, it is not possible to show readings against calendar time, but this function offers a useful insight into how readings are shifting and trending. This can be useful for tracking chemical usage over a long period of time.

Process Guides

SmartPool also includes simple step-by-step process guides to remind you of the procedures necessary to maintain your pool yourself. These are general guides, and you should refer to the specific instructions for your system where relevant.

Settings

You can click on the '**get from hub'** button to obtain the current settings from your hub.



Auto-notify

If you plan on using the 'auto notify' email option for ordering chemicals or sending log files, you should enter a customer ID number to be included in your email message. This number can be any number that allows your supplier to identify you. When they receive an email from your system indicating that you are at or below 10% chemicals remaining, your customer ID will be included in the email message, allowing the supplier to identify you and your address.

Location

To allow SmartPool to obtain the relevant weather forecast for your location you must enter the name of your town and country in the format "town,country" for example London,UK. Once you have entered this location please tap the '**Send to hub'** button and look for the 'Thumb' icon to change to thumbs up! This confirms that it has found you.

pH + Cl Auto-dosing

These both work in the same way and are used to configure settings for auto-dosing.

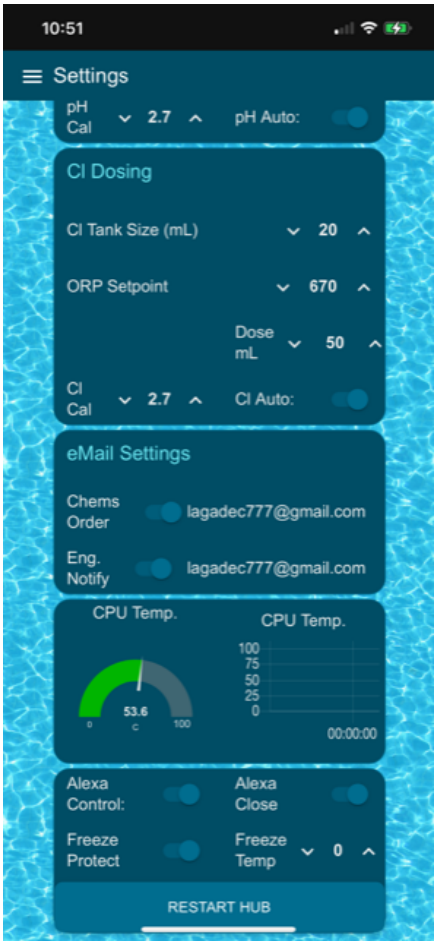
To get started you must specify the size of your dosing tank for pH adjuster or Chlorine dose. It is common for chemicals to be supplied in 20L or 25L sizes.

Next specify the setpoint that you would like to maintain for your system. Your service engineer will advise, but a good guide is 7.2 for pH and 720 for ORP.

If you then click the autodose switch to '**on'**, SmartPool will continuously monitor the chemical levels whilst the pump is running and automatically dose to maintain them at the optimum settings.

pH and Cl cal

Settings are specific to each installation and we recommend that your installation engineer sets this up for you. However, it is possible to set them yourself as follows. The calibration is an adjustment for how long the dosing pumps should run to deliver the desired amount of chemical. Because the pressure in each pool is different, it is impossible to accurately predict how much chemical can be injected into the system by the pumps for any given period.



email Settings

This section allows you to specify the email address of your supplier to notify when chemicals are running low. Add the email address to the input field and tap the switch to **'on'** to send an automatic notification to your supplier or engineer. ***(NOTE: the email will come from a SmartPool email account, and it will include your customer ID number agreed with your supplier).***

CPU Temp

This is a reading of the operational temperature of your SmartPool system for your service engineer.

Alexa Close

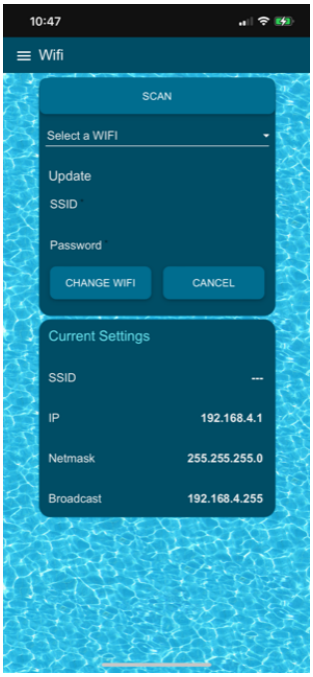
This setting is used to define if you can use Alexa voice control to close your pool cover. **PLEASE NOTE THAT USING ALEXA OR SMARTPOOL TO CLOSE YOUR COVER WITHOUT CHECKING THAT THE POOL IS CLEAR IS POTENTIALLY DANGEROUS AND SO YOU SHOULD ALWAYS CHECK THAT THE POOL IS CLEAR BEFORE YOU ACTIVATE THE 'CLOSE COVER' OPTION TO ENSURE THAT THERE ARE NO PEOPLE OR OBSTACLES IN THE POOL AT THE TIME.**

Freeze protect

This allows you to specify the temperature below which the pump will be switched on to help protect from freezing pipes. This is an added safety measure and does not guarantee protection but can potentially help avoid costly damage.

Wifl Setup

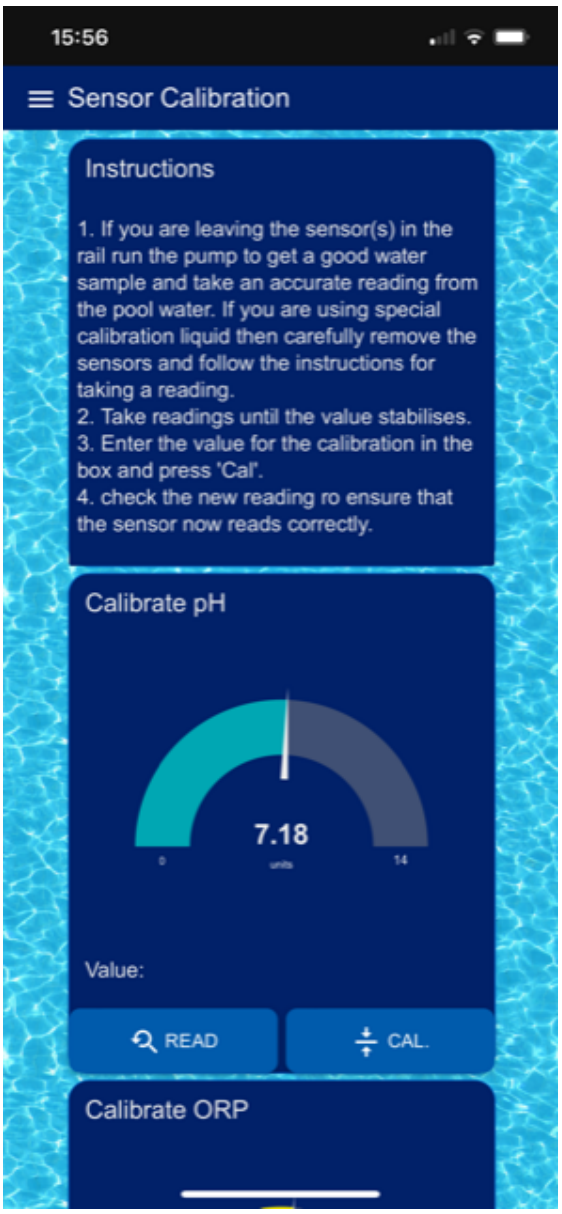
Here you can see your current WiFi settings and also change your WiFi network.



1. Scan the local networks. Please note you may have to press the ‘Scan’ button a few times for SmartPool to find your network.
2. Once the scan is complete, tap the **‘Select a WiFi’** dropdown and tap to select yours.
3. Enter the password for your network and tap ‘**Change WiFi’**. This will cause the System to restart and join your home network. Please note this can take 2 or 3 minutes to complete.
4. If you experience difficulties, please return to the ‘Getting Started’ procedure, page 1, and reset your SmartPool System.

Sensor Calibration

We strongly recommend that you ask your service engineer to set these calibrations. However, if you wish to do them yourself, you will need the “calibration fluid” for pH and/or ORP.



Repeatedly take readings until you get a stable/consistent reading. Once you have obtained a stable reading, i.e. one that only varies by 0.1, enter the actual value shown for the calibration fluid into the ‘Value input’ box and tap the ‘Cal’ button. This will calibrate the sensor to the fluid. Check the reading by tapping the ‘READ’ button and repeat the process if the reading is incorrect.

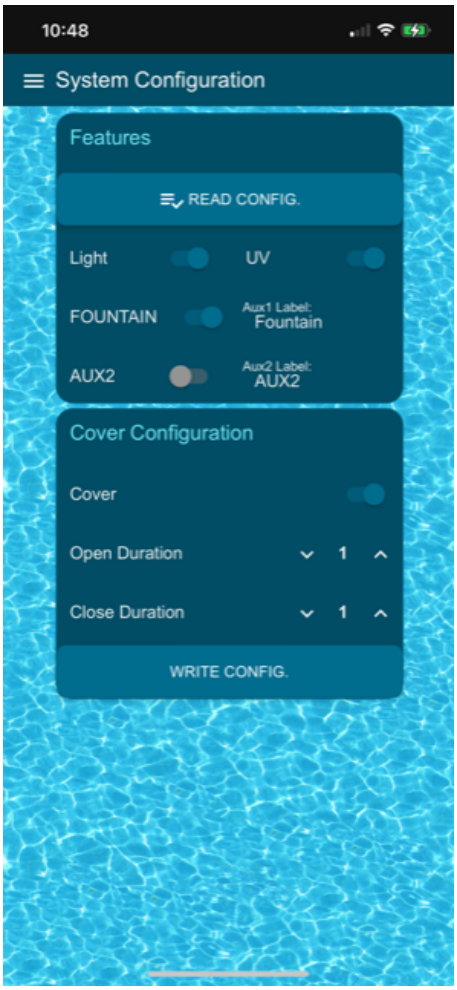
For pH you may wish to use two or three calibration solutions with different pH levels to set the correct readings and get the best results across the pH scale.

System Configuration

This tab allows you to specify the features of your specific pool. By default, SmartPool looks for configurations for Pool Light, UV Light and Pool Cover.

Additionally, you may specify up to 2 other devices which you can name yourself by changing the Aux1 and Aux2 labels. Please note that you have only 10 characters.

Once you have specified the individual features of your system, please remember to tap the **'Write Config'** button to update your SmartPool Hub.



Alexa Integration

Your SmartPool System is already Alexa compatible. To pair it with your Alexa you must first "discover" your SmartPool devices.

How to discover your SmartPool devices in Alexa:

1. Make sure that your Alexa devices and SmartPool Hub are on the same WiFi networks, or they will not be discoverable.
2. Check that your SmartPool Hub is powered on and connected to your home WiFi.
3. Ask Alexa to "discover devices" or go into the Alexa app on your phone and follow instructions to discover devices.
4. Your SmartPool will offer 4 devices to Alexa which you will be able to control with your Alexa system:
    a. Swimming Pool Light – **"On or Off"**
    b. Swimming Pool Cover – **"On or Off"**

c. Auxiliary One – **“On or Off”**
d. Auxiliary Two – **“On or Off”**

(NOTE: Alexa doesn’t understand swimming pool devices, so these will be indicated as “lights” in the Alexa app once the discovery process has completed look under lights in the devices section of you alexa app to see the SmartPool devices. You can use the Alexa app to change the name of the Auxiliary devices to something more meaningful to you. For example, you might rename AuxilaryOne to “Fountain” to allow you to say “Alexa, Fountain On”)