



# AQUALIGHT

## MANUAL

## Introduction



The Aqualight is a Wifi based controller that is designed to enable Pool/Spa Lights to be turned On and Off remotely and enables the user to change the color of the lights, via a phone App. Different brands of lights and transformers, can be connected to the Aqualight and can be controlled independently.

## Installation & Setup

*Ideally, as with all pool equipment, the controller should be installed out of direct weather.*

- Find a suitable location to mount the control box.
- The controller should be mounted no closer than 3 metres from the water's edge, and at as higher position as practically possible.
- Fix the mounting bracket to a solid structure with the screw and wall plug kit provided. Slide the controller on, locking it into place. Adjust the screws on the back of unit to ensure a snug fit.
- To remove unit, lift and gently pull away from structure.

***Do Not turn the power on to the Aqualight Controller until all the following criteria has been met.***

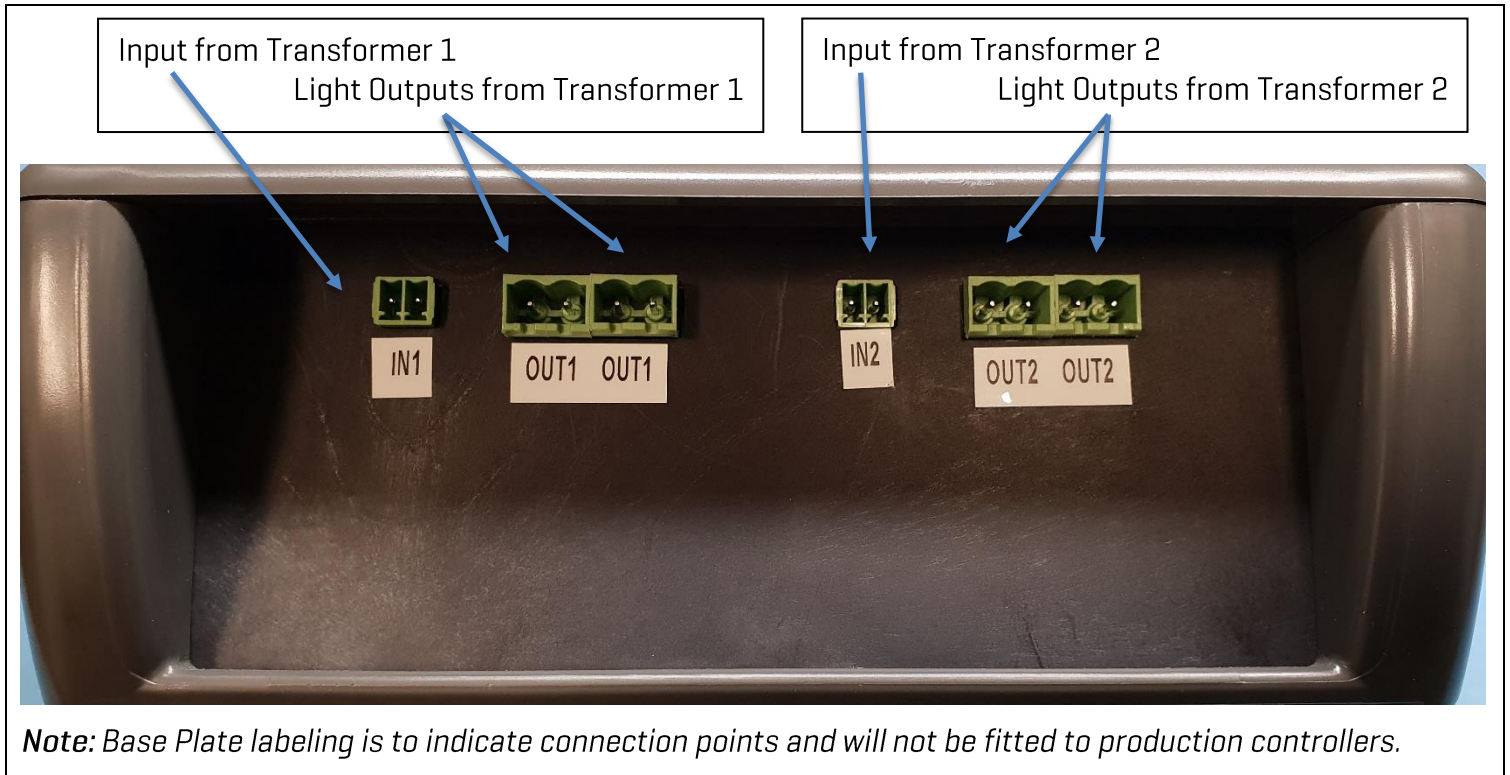
- Pool lights have been installed as per the manufacturer's instructions.
- The cable/s have been run from the light/s to the Aqualight controller and have been connected appropriately to the outputs.

***Note:*** You need to be aware of the light transformers power output so as not to overload the transformer, which may damage the transformer or the Aqualight or both.

- The Input cable has been run from the light transformer to the Input [1 and/or 2] located at the bottom of the Aqualight.
- The light transformer/s has been plugged into a power point.

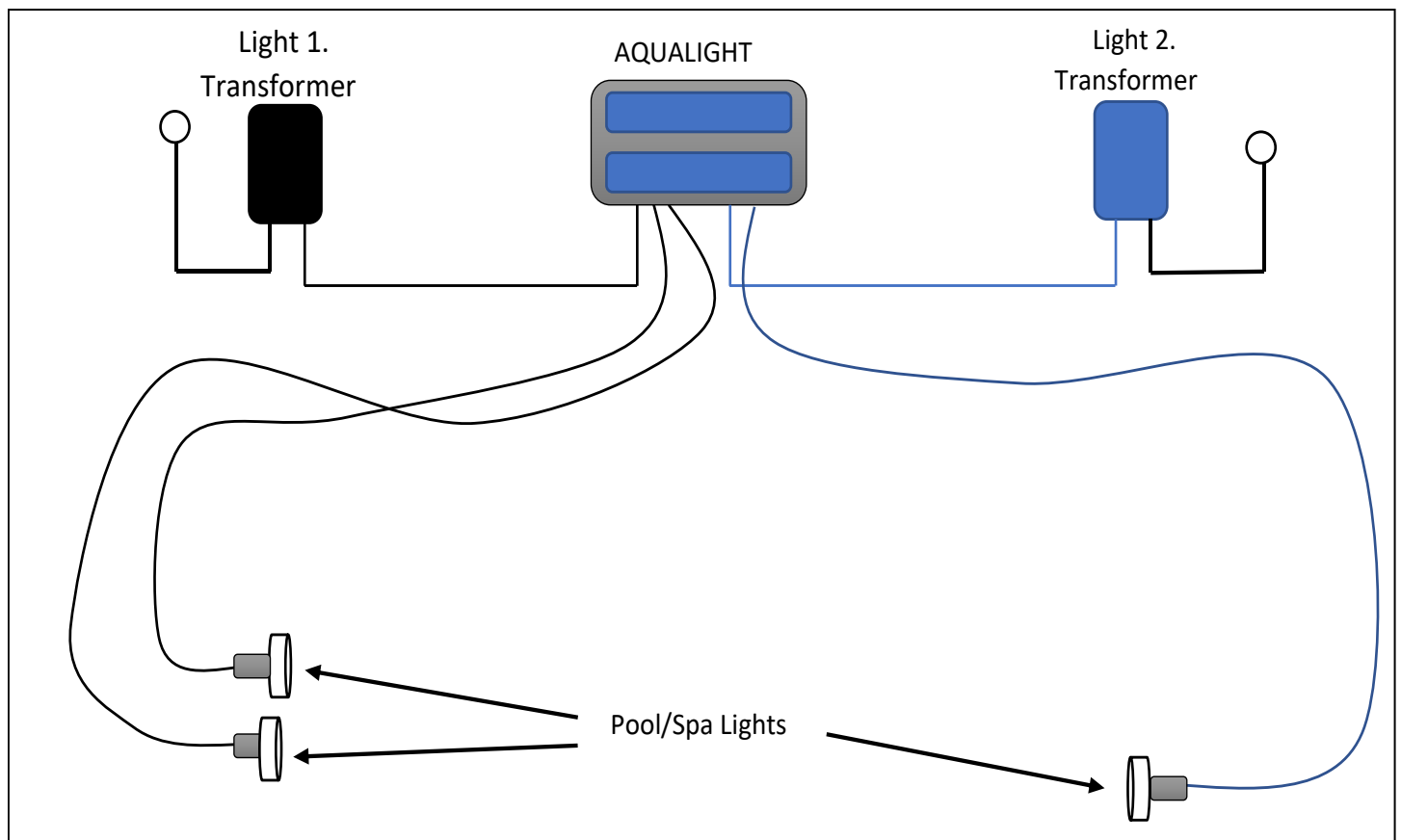
# Setup

## BASE PLATE:



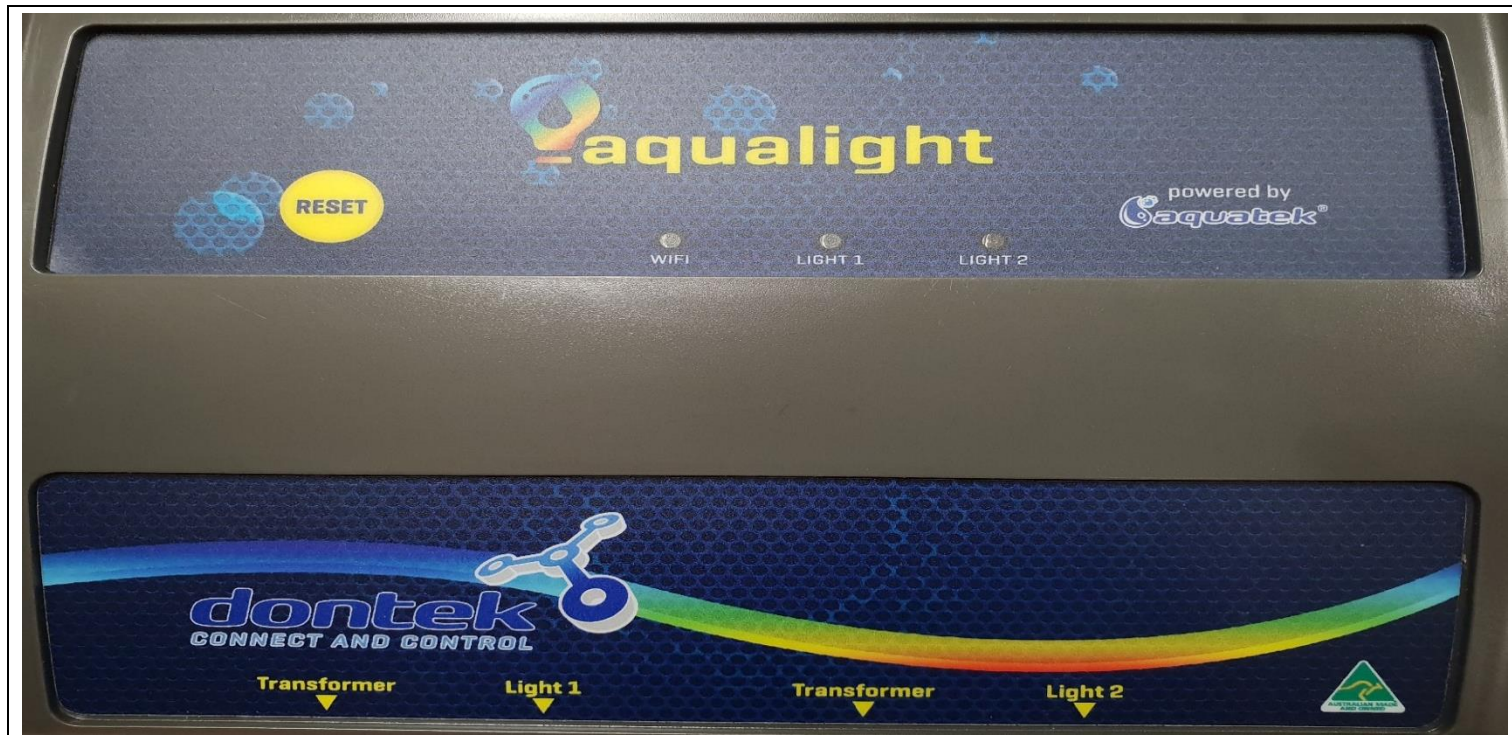
Below is an Example of how the Aqualight could be set up.

*Transformer 1 has a power output to run 2 lights, Transformer 2 only has a power output for one light.*



Connect the Aqualight to the Wifi network.

## Face Plate:



## App Based Setup

1. Download the APP prior to installation. Once the App is installed on your phone, it will ask you to scan the QR code of the controller.

**Note:** With I-Phones you must leave 'Location Services' & 'Camera' on.

The QR code is located on the back of the Aqualight Controller or on the front page of this Manual. Once the QR code has been scanned, you will need to go into the Setup Menu option of the App. All the menu options are located at the bottom of the App screen

2. Ensure all items the Aqualight will be controlling are connected, and plugged in.
3. **Make sure that the Wi-Fi network that the Aqualight will be connected to, is turned on and setup to run on 2.4Ghz frequency band only.**
4. Turn the power on to the Transformer/s. When the power to the transformer/s is turned on, the corresponding Light 1 or Light 2 LED's or both will light up to let you know the unit is powered.

When the controller is turned on, the Wifi LED light should blink once to indicate that power is on. If the Wifi Access Point is yet to be configured, the controller will automatically enter Configuration Mode and the Wifi LED will blink every .8 seconds. If the Wifi LED isn't blinking, turn the Light Transformer OFF and ON 5 times. This will re-institute the Wifi Configuration Mode [if required].

### App Menu Options.

Home

Timers

Setup

Systems





# Connecting your Aqualight to Wi-Fi

## Connecting to Wifi

With the Aqualight controller powered on, [and the LED blinking every .8 of a second] open the Setup Menu [located at the bottom of the App screen] in the App.

Tap the menu option Wi-Fi Connection 'Setup'.



When you enter Wi-Fi Connection 'Setup', the customers Wi-Fi network name should be displayed under Network Name.

You will need to enter their password on the line below and then press either proceed or confirm.

*Note 1: Needs to be done while the WiFi LED is blinking.*

**For Wifi networks running on Dual Bandwidths, follow the below instructions:**

**Apple I-Phones:** Walk slowly away from the controller until the Wifi signal strength drops to 1 bar. At this point the I-Phone will force the system to go to 2.4Ghz. You will be able to enter the Password and press Proceed to gain connection.

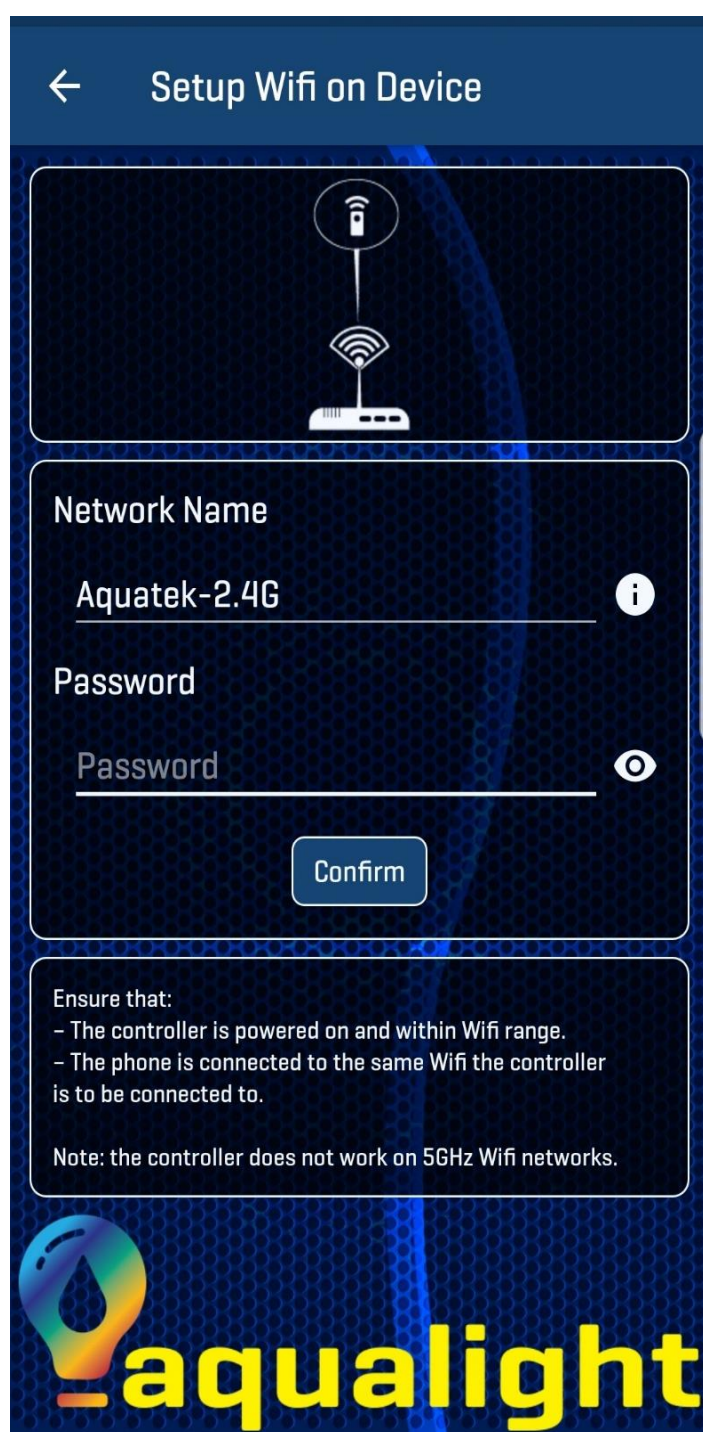
**Android Phones:** The connection screen will display a message saying that you can't connect to a 5Ghz network and the Confirm Button won't appear. Walk slowly away from the controller, until the message disappears and the Confirm Button appears. Enter the password and press Confirm to gain connection.

The App will display that the 'Device is Connected'.

**Note:** If you have entered the Password incorrectly the Wifi LED will blink at an interval of 5 seconds for 5 times and will then restart the configuration mode and blink every .8 seconds. You will need to re-enter the password.

**Note:** When the controller connects to the Wifi access point the LED will be on.

**Note:** When controller connects to the Wifi Server, the LED will blink at an interval of every 2 seconds.



# APP SETUP

## Setup

Once the controller has been connected to the Wifi Network, the rest of the controller setup can be completed through the App.

The first place to start is the Setup Menu.

Next to Light 1 and Light 2 is where you can select the brand and type of light that is installed.

Tap on the wording Single Colour, and a second screen will appear over the top and you can scroll through the list of lights. Select the brand and type that is installed into Input 1.

Repeat the above process for Light 2.

Note: Light 1 and 2 don't have to be the same brand or type of light. I.e Light 1 could be a Spa Electrics Multi-Plus and Light 2 could be a Mod-Lite.

Also in the Setup option is the ability to set the Date, Time and Location of the Aqualight system.

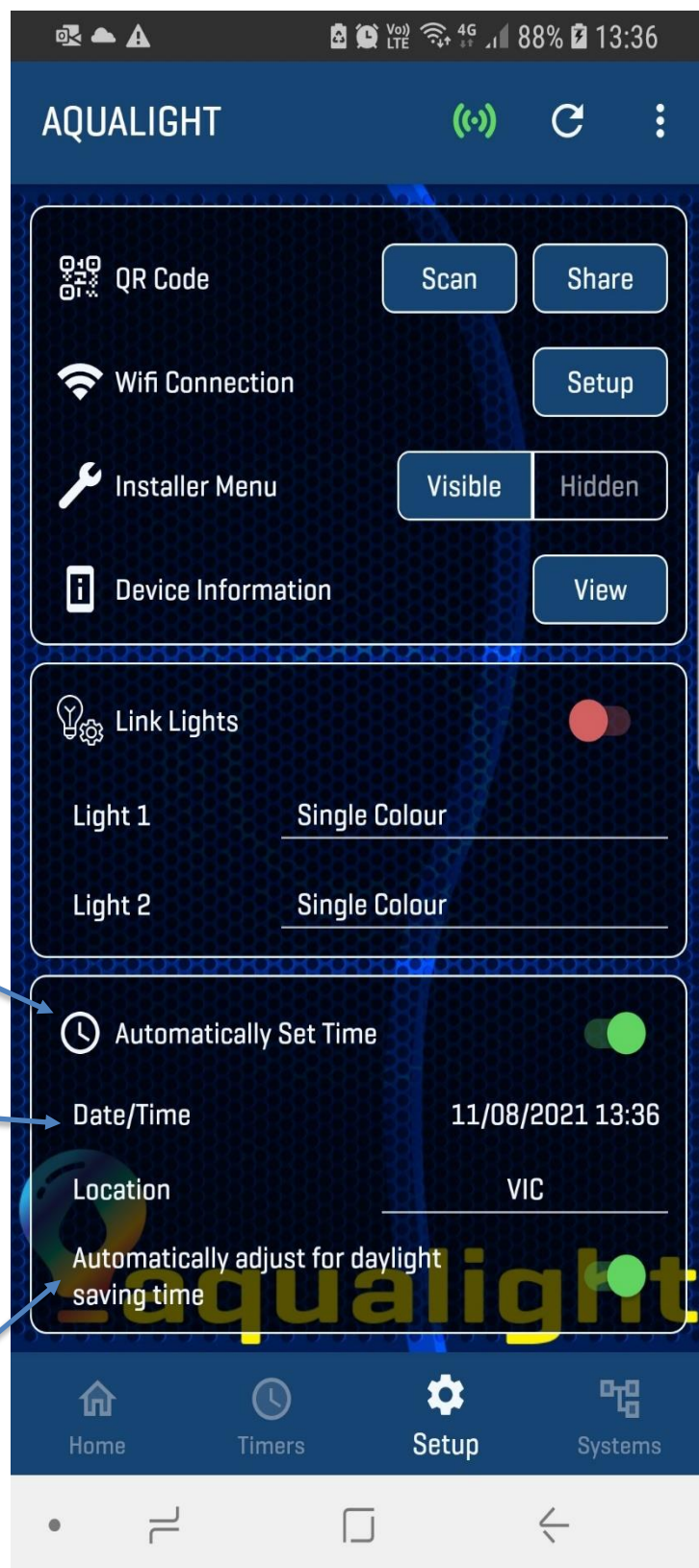
If you turn on the Automatically Set Time, the controller will continuously update the time and date while it's connected the Wifi network.

The Location of the system can be changed to suit Australian State/Territory that the system is located in. Tap on the current location and scroll through to the relevant State/Territory. This will mean that the controller will automatically update the time to suit the selected location.

The controller can also be set to Automatically adjust for Daylight Saving Time by tapping the button next to the wording.

**Note:** Light 1 refers to the 2 x Outputs 1 and Light 2 refers to the 2 x Outputs 2. Refer to the Base Plate diagram on page 2 of this manual.

**Note:** If you have 2 lights connected to Input 1, [2 X OUT 1] both of these lights will have to be the same brand and type of light. Both lights will be set to turn On as the same colour.





## Timers

In this menu option you are able to set timers for each of the Lights and also Sync the lights to correspond with what is displayed in the App.

When first setting up the Lights you will need to set Light 1 to be On by tapping the On button, then press the Sync button. The Aqualight controller will then begin the Syncing process with the light.

**Note:** Depending on the type of light this could take a couple of minutes. During the process the light/s will be turning on & off and changing colours.

When the first light has finished the Syncing process, turn it Off and repeat the process with Light 2 (if fitted).

Each Light can be turned either;

Off – the light is manually off,

On – the light is manually on and won't turn off until it is turned Off or into Auto, and

Auto – which is when the light will turn on & off depending on the Timer set for it.

Up to 2 times can be set for each of the lights to turn On & Off. Tap on the From: time and adjust to when you want the light to come On and tap the To: to adjust when you would like it to turn Off. You will then also need to tap the button beside the timer to set the Timer as active.

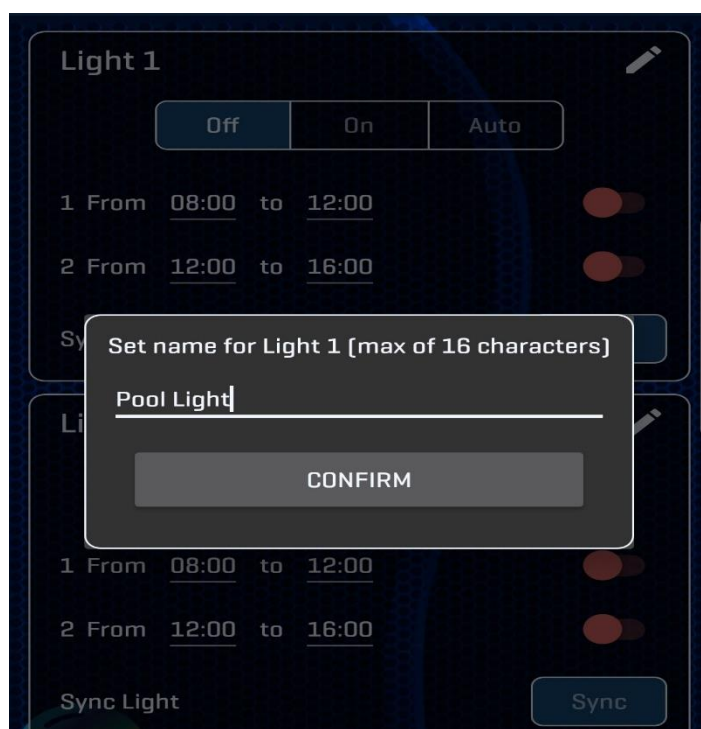
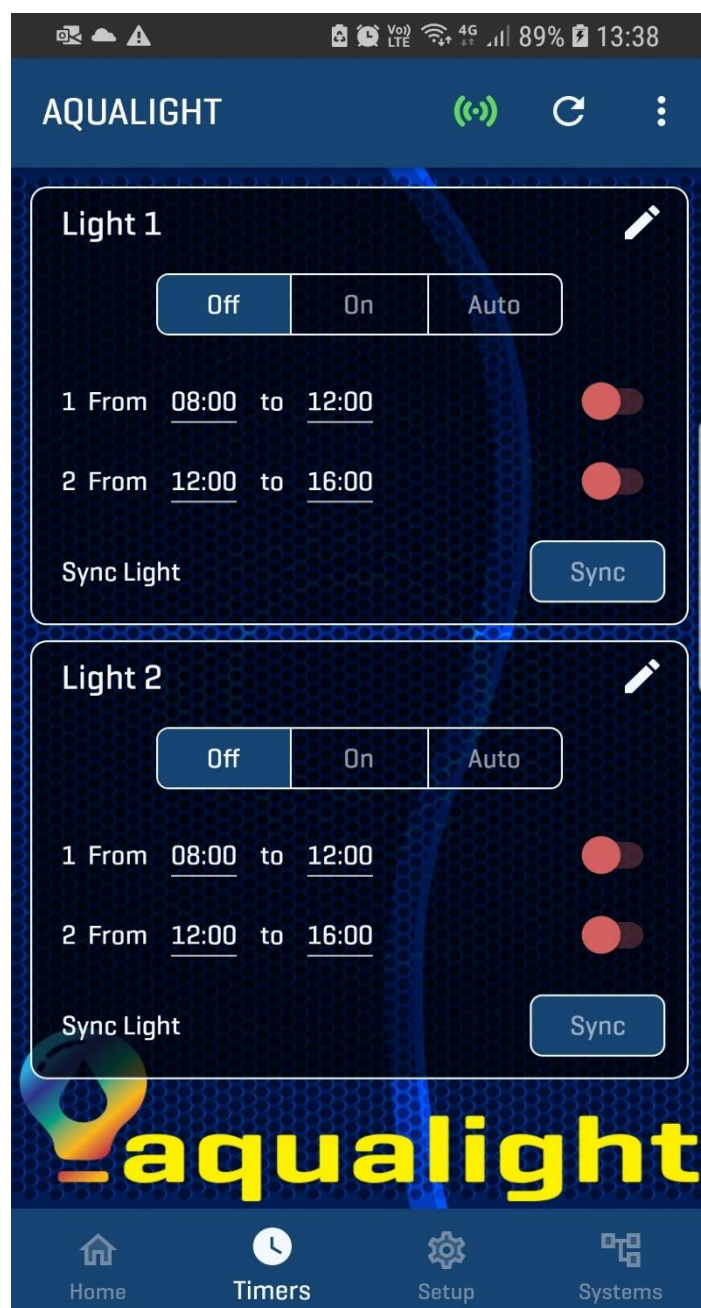
**Note:** If you don't set the Timer to active, the light won't turn On or Off to the set times.

## Set Name

The names of Light 1 and Light 2 can be re-named to anything that you like, ie Pool Lights, Spa Lights, Deck Lights, etc.

On the far right of the App screen beside Light 1 and Light 2 there is a pencil icon. If you tap on this the screen (pictured right) will be displayed.

You can enter any name that you like, press Confirm and the Light will be displayed as that name on the Home screen of the App.



## Home

The Home page of the App displays the Light or Lights connected and which colour they are currently set to display.

**Note:** In the example shown, the 'Pool Light' is one type/brand and Light 2 is another type/brand.

The centre of the colour wheel, shows what state the light/s is currently in, either; On, Off or Auto.

You can tap on any colour within the colour wheel and the controller will change to the selected colour.

**Note:** Different brands and types of lights will act differently. Some lights will go straight to the newly selected colour, other lights will go through the entire colour range before getting to the selected colour.

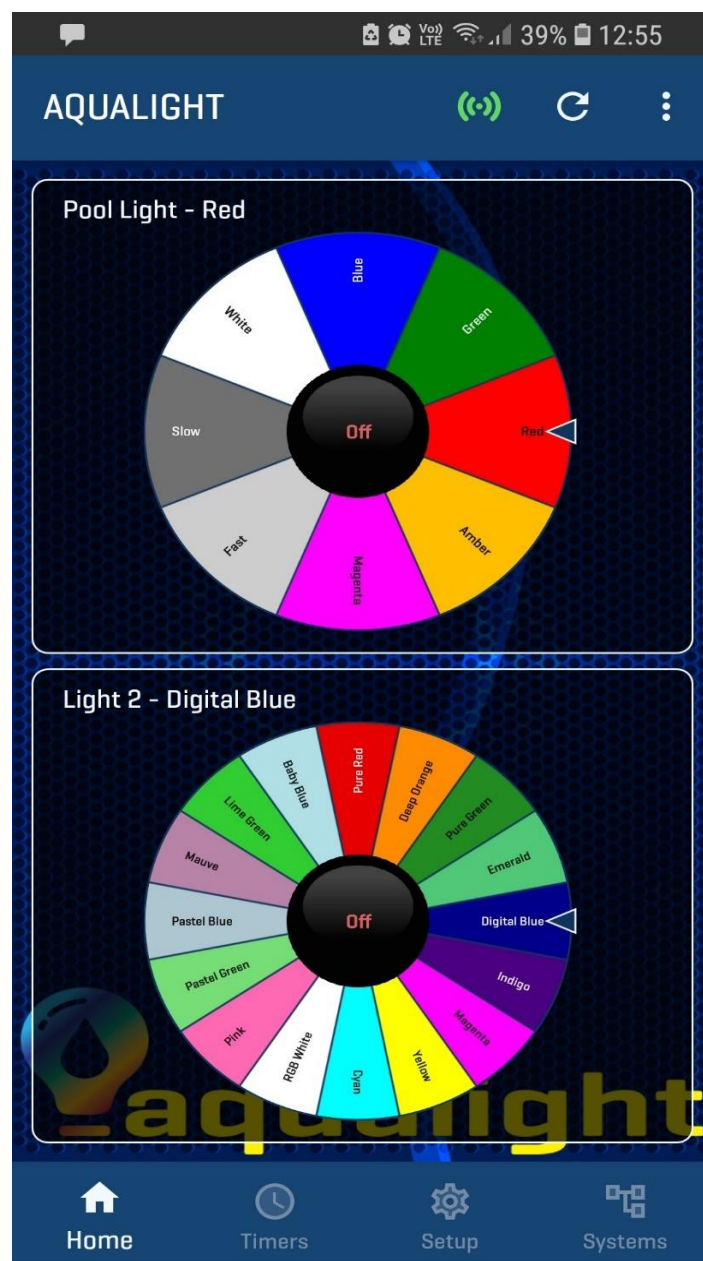
When the light gets to the new selected colour, some lights will turn off for a period before turning back on, others won't.

**Documentation:** PDF file of the Manual.

A copy of the Manual is available for download and viewing if required.

On an Android phone this is located on the home screen. Simply click on the 3 vertical dots located in the top right-hand corner of the app screen then select About.

On an iPhone, this feature is located in the menu option 'Setup', then click on 'Device Information' then 'About'.



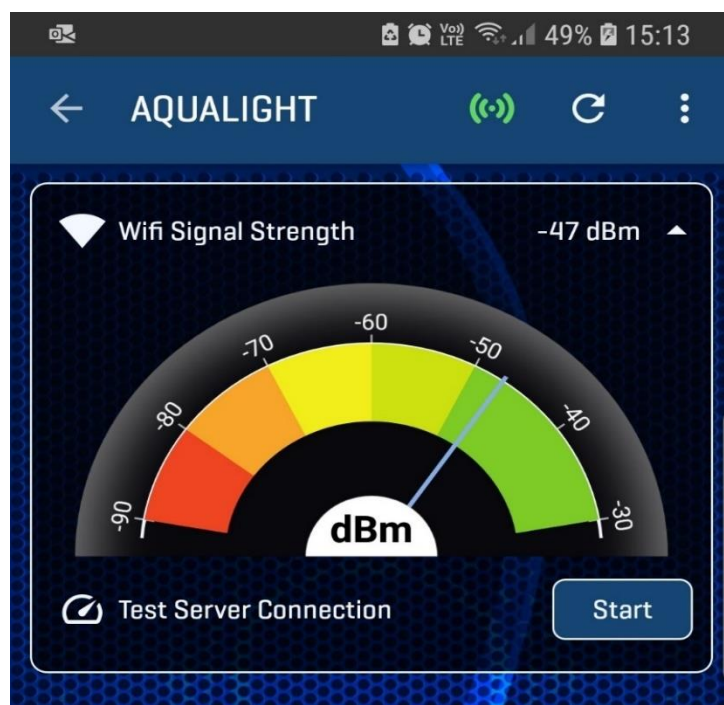
## Diagnostics

Once the controller is connected to the Wi-Fi network, you will be able to check the signal strength that the Aqualight is receiving. This can help determine if you require a Wi-Fi extender to ensure good quick connection.

On an Android phone this is located on the home screen. Simply click on the 3 vertical dots located in the top right-hand corner of the app screen then select Diagnostics.

On an iPhone, this feature is located in the menu option 'Setup', then click on 'Device Information' then 'Diagnostics'.

**Note:** The closer the number is to 30dBm the better the signal strength is. If your signal strength is above 60dBm, the weaker the signal is.





## Systems

### Have access to multiple systems saved in the App.

In the menu option [in the App] 'Systems' you are able to store up to 5 separate Aqualight systems that you have connected with at any stage.

To **Add** a system, open the menu in the App and select 'Systems'. When the next screen opens you will see at the top of the screen there are 3 options; 'Add System', 'Remove System' on the left and on the right, there is 'Set System'.

Select 'Add System' and a QR scanning window will appear and simply scan the QR code [or manually type in the QR code utilising the keyboard] of the controller that you wish to save.

To **Set** a system, you can enter into the system by swiping left or right to display the intended system and then press the 'Set System' button. A tick will then appear, indicating that you now have access to the system. Open the App menu and select home to show the now active system.

To **Remove** a system, swipe left or right to highlight the system and press the 'Remove System' button then press OK on the prompt screen that will be displayed. The system doesn't need to have been 'Set' to be removed, just displayed on the screen when 'Remove System' is selected.



### Reset Button:

The Reset button on the face of the Aqualight controller has 2 functions.

1. If the Reset button is pressed and held down for 3 seconds [within the first 10 seconds after the Aqualight controller is powered up], then the Wifi configuration will be reset and the controller will forget any previously configured Wifi access points.

**Note:** This can be used if the controller is moved to another location, a Wifi extender is added, or the Wifi provider has been changed.

2. If the Reset button is pressed and held down for 3 seconds [anytime, after the initial 10 seconds of the controller being powered up], the Aqualight controller will have its factory defaults re-instated, ie; timers, names, etc.





# APP FEATURES

## Software Update:

Notification of a software update

When you open the App on your phone, the system will automatically let you know if a new Software update is available by displaying a notice box at the top of the home page.

The notice box will look like this

If you press GO then the system will begin the process of updating the firmware of the controller.

Another box will appear on the App screen letting you know that the update is in progress, not to turn the controller off, and what percentage of the update has been completed. It will then let you know when the update has been completed and that the controller is restarting, or it will let you know if the update has failed.

If you press HIDE then the notification box will disappear until you either open the App again or go into the App menu and update the controller through the Setup Menu, then Device Information.

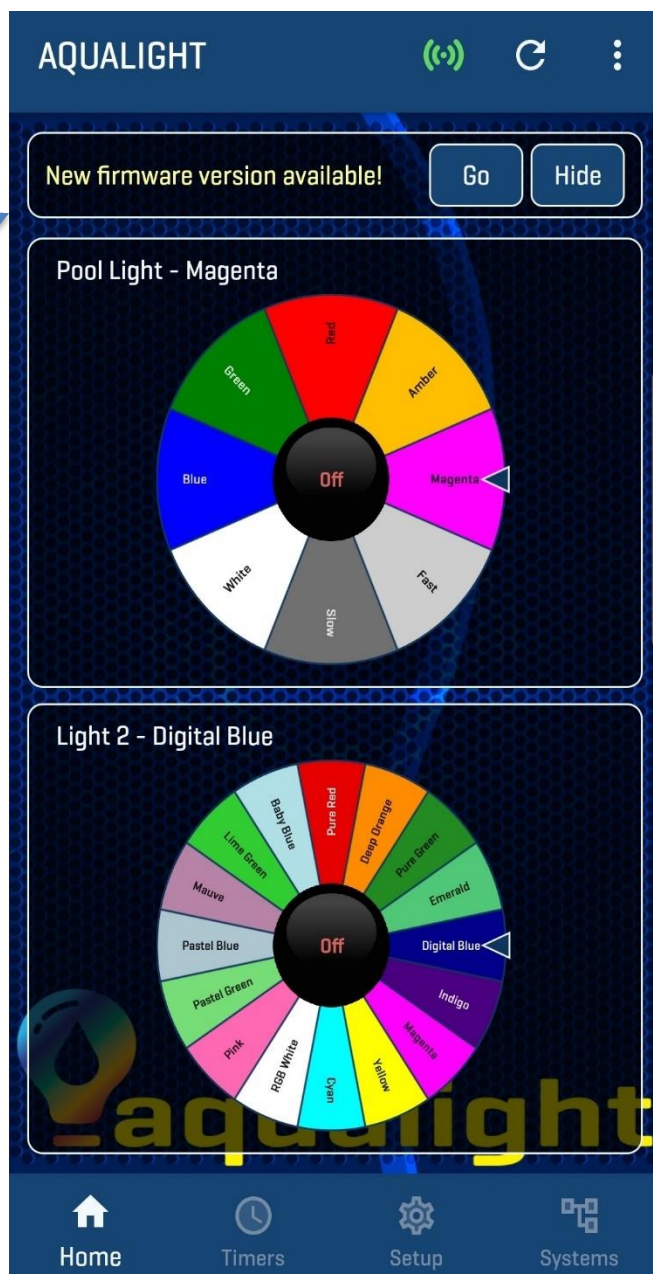
After the update has been completed you may notice some additional features or functions through the App depending on whether it was relevant to your system or what was involved in the update.

**Note:** If the update Fails to download, it would be best to try and download the new Firmware at another time [ie later in the evening or earlier in morning] when less traffic is utilising the Wifi networks.

Alternatively, the new Firmware Update can also be done through the Setup Menu.

Simply open the Setup Menu option, tap on 'View' beside Device Information, and this screen will appear.

Tap on the 'Update Available' button to complete the update.



## APP FEATURES (CONTINUED)

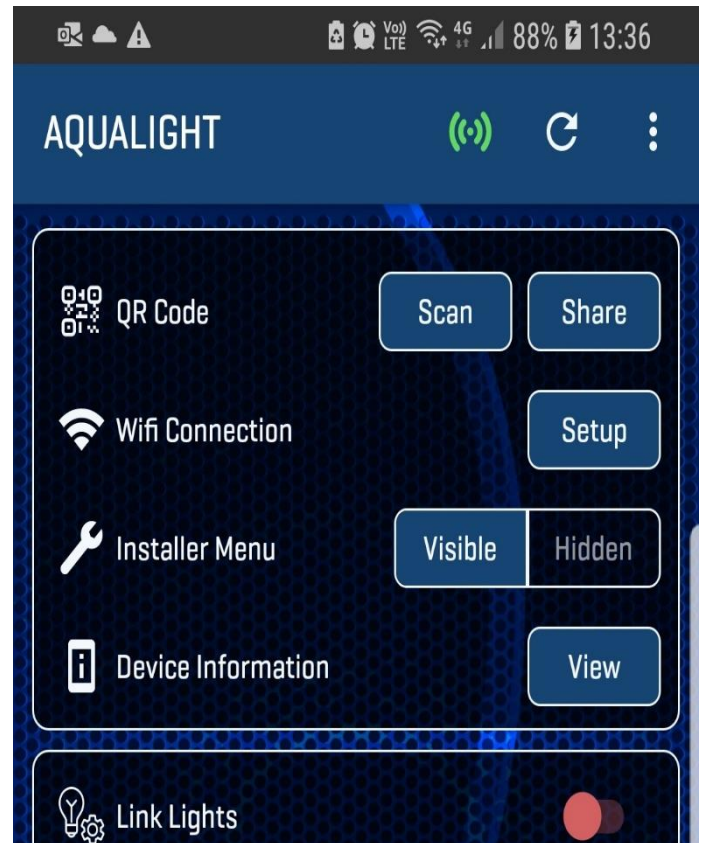
### QR Code – Scan/Share:

If you are unable to scan a QR code, you can still manually enter the QR code.

Go into the Setup Menu of the App and tap scan. On the top right [for an Android] or bottom right [for an I-Phone] you will see a keyboard symbol. Tap the symbol and the phones keyboard will appear and allow you to type the QR code in. Press Confirm.

A simple and easy way to add users that have downloaded the App.

Located through the menu option 'Setup', select the Share button and the QR code will appear on your phone screen. The user that is being added will instead press the scan button and scan the QR Code off your phone screen. The new user will then be able to see all settings that have been installed and have complete access to the system unless the Installer Menu is locked [see below].

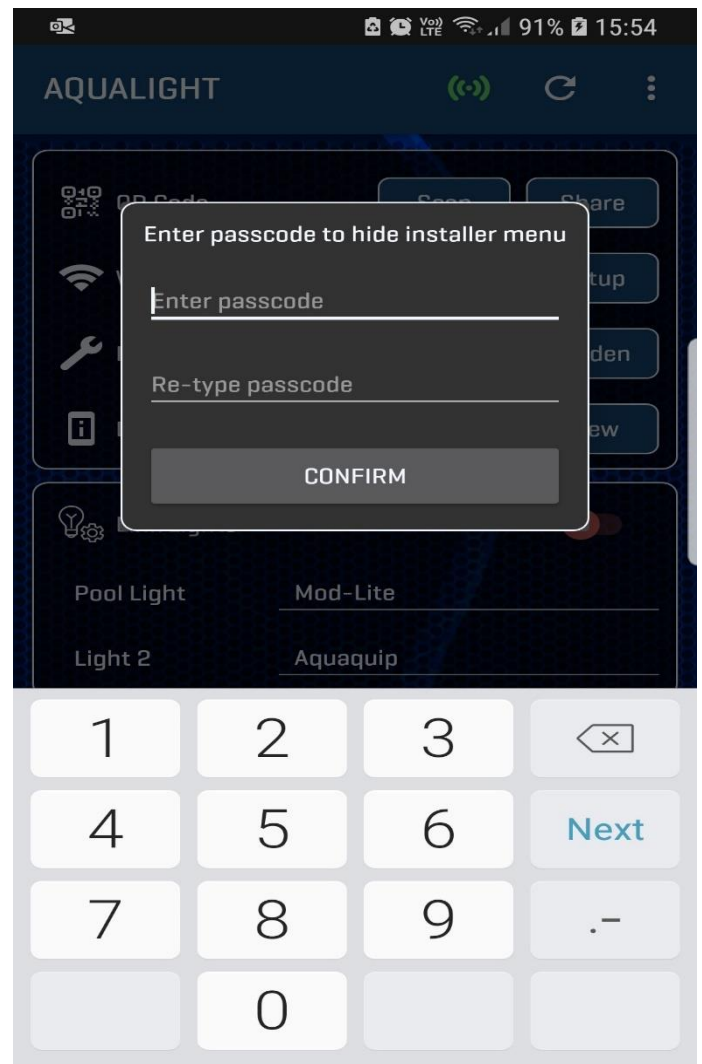


### Installer Menu:

Lock Access to the Installer Menu

Located through the menu option 'Setup', the Installer Menu [see image above] can be locked once the system is set up to prevent equipment settings being altered by users who may not know how the system needs to be set up. Doing this will only enable people with the password to have access to the Installer Menu. Once locked, the Installer Menu options won't be visible in the menu screen.

When you have locked the Installer Menu you will be asked to enter a password to unlock the Installer Menu options. When unlocked the Installer Menu options will be visible to allow alteration.





## APP FEATURES (CONTINUED)

### Link Lights

If you would like to, and have the same lights installed into both Light 1 and Light 2, you can link them to be turned On and Off under the same timer and turn On in the same colour.

In the Setup Menu, there is a button called 'Link Lights' that just needs to be turned on. You will see that instead of having Light 1 and Light 2 separate, they will merge into 1 called Lights, with the light type next to it.

**Note:** This option will only work properly if all the lights are the same brand and type, as the Aqualight will assume that Light 2 is the same as Light 1.

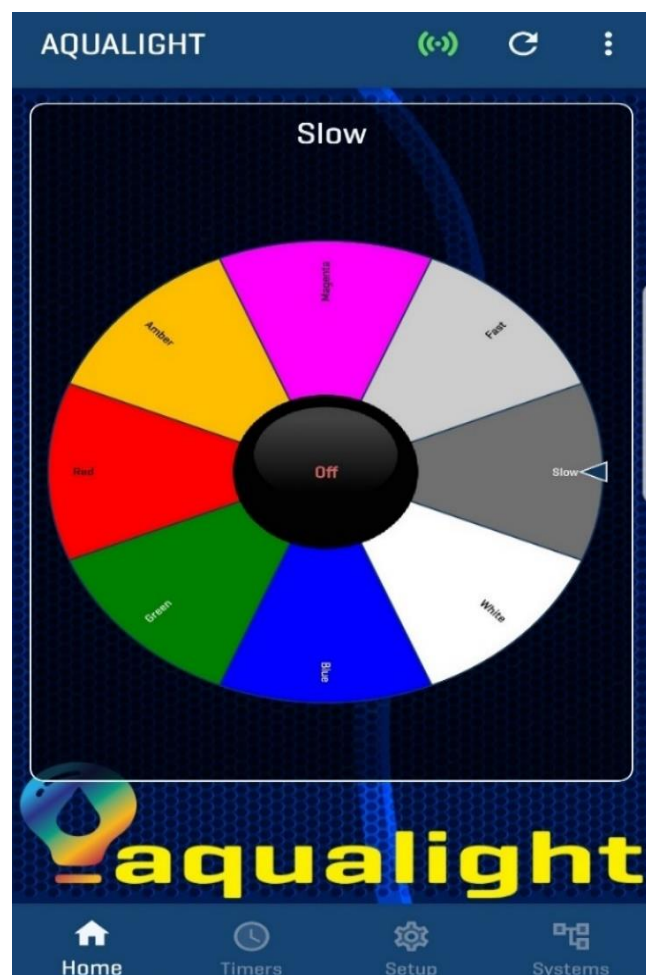
If they aren't the same, you will find that Light 1 works as it should but Light 2 won't work at all or will turn on in different colours to Light 1.



### Link Lights

Once you have Linked the Lights, the Home page will only display 1 colour wheel.

All the lights will turn on in the same colour and with the same input messages of On, Off, or Auto.



#### NOTES:

1. Should power be interrupted for any reason, the controller will resume normal operation when power is restored.  
In the instance that power is lost to the controller, some light brands and types will go out of Sync with what is displayed on the App screen. You will need to go into the Setup menu option, turn the Light On, and press the Sync button on the Light that has gone out of Sync.
2. Degree of protection against moisture: IP33.
3. Store pool chemicals safely, at least 3 metres away from all pool equipment.
4. Make sure that the Transformer/s connected the Aqualight controller is capable of handling the power output required for the number of lights being run.
5. Note: Different brands and types of lights will act differently. Some lights will go straight to the newly selected colour, other lights will go through the entire colour range before getting to the selected colour.
6. When the light gets to the new selected colour, some lights will turn off for a period of time before turning back on, others will immediately display the newly selected colour.
7. MAX combined rated output load for the Aqualight is 9.5 Amps.
8. Table of Wifi LED indications;

Status	LED
Unable to connect to Wifi Access Point	OFF
Connected to Wifi Access Point	ON
Connected to Wifi Server	Blink [interval 2 sec]
Incorrect Wifi password	Blink [interval 5 sec]
Waiting for Wifi configuration	Blink [interval .8 sec]
OTA update in progress	Blink [interval .2 sec]

## WARRANTY

- This range of product is covered by a limited 2 year warranty against component failure or faulty workmanship from the date of installation.
- Faulty units should be returned in the first instance to the dealer from which the unit was purchased. [Return to Base]
- Damage to the unit due to misuse, power surges, corrosion from pool chemical fumes, lightning strikes and or installation that is not in accordance with the manufacturer's instruction may void the warranty.
- Warranty does not include on-site labour or travel costs to or from installation site.

If the power cord is damaged, do not use the controller. Return the unit to the supplier for repair.

### CUSTOMER RECORD (To be retained by the customer)

DEALER/INSTALLER NAME

SERIAL NUMBER

DATE INSTALLED

For service assistance visit [www.dontek.com.au](http://www.dontek.com.au)

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