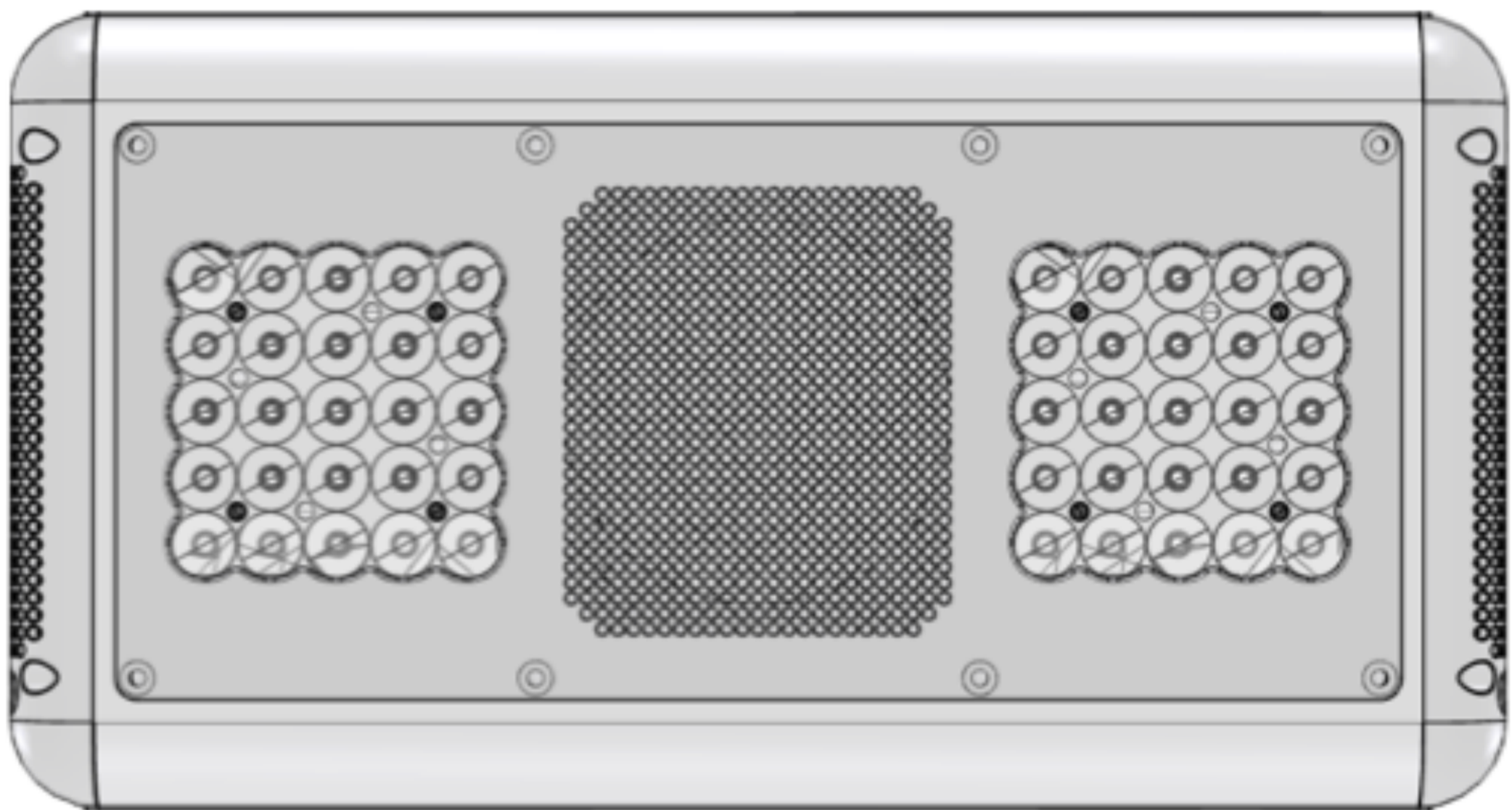


AngelTM

Premium Aquarium LED

A1/A1P User Guide



EUROQUATICSTM
A G A V I T A C O M P A N Y

Document

DOCUMENT	ANGEL A1/A1P USER GUIDE
PRODUCT	ANGEL A1 & A1P LED FIXTURES
DOC VERSION	1.0
DOC DATE	19, DECEMBER 2014

User Guide Introduction

Welcome to the User Guide for your Angel LED system. While we try to maintain the most complete user guide possible there are always questions that can come up that we miss or just don't have the space to cover in this manual. When that happens we welcome your questions and comments on our company FaceBook page, direct through our website, or to any of our dedicated outlets around the world!

For a complete listing of our international distributors please visit our site at www.euroquatics.com/where-to-buy and click on your region!

In this User Guide we cover the basic set up, the use of our free mobile app and the fixtures embedded website. We also have sections for firmware updates, trouble shooting as well as hardware info and a mounting template.

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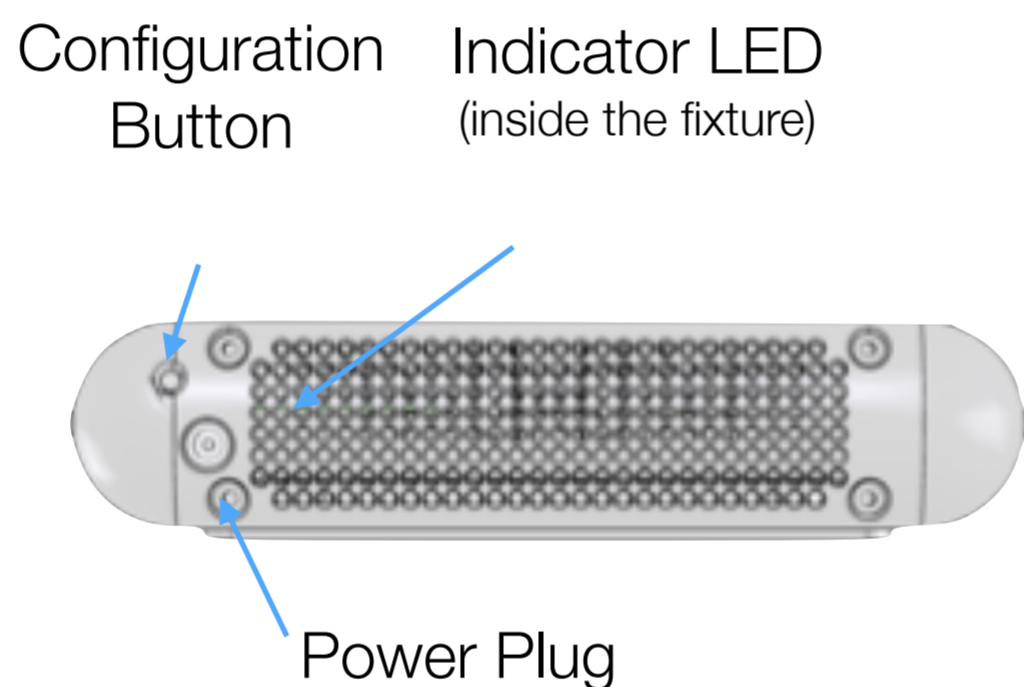
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Section 1 - Establishing Euronet™

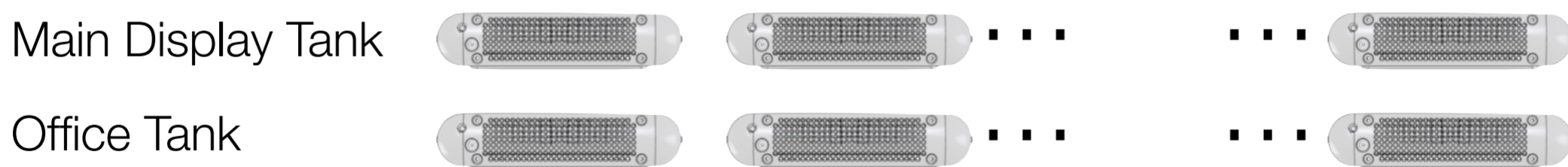
Connecting Multiple Lights to Euronet

Even though all Angel LED fixtures are tested at our factory, we suggest you perform your own initial test and configuration prior to installing your fixtures over your aquarium. This is a great way get a better understanding of your new LED fixtures without having to stay perched above your aquarium, and the Angel will save your setting so anything you configure will be saved.

1. Place each Angel fixture on the floor or a table, face up – but do not plug into power yet.
 - This is also a great time mount your fixtures if you're using our rail system.
 - Take care to never look directly into the fixture when powered on.
2. Next, plug in power to the units one at a time.
3. As you power additional units, enable the Euronet link. Here's how:
 - Press the configuration button on first fixture for 2 seconds, and then immediately press the configuration button on the second fixture for 2 seconds.
 - You will see the indicator LED pulsing rapidly until the two units link. After linking, the indicator lights will blink slowly to indicate pairing.
 - Repeat this step one at a time for each new fixture added to your system until complete.
 - We suggest using the button on the first fixture each time you pair a new fixture to the network.
 - Wait about 30 seconds between pairings to insure all units are properly synchronized.



Up to 100 fixtures!



The number of total systems depends on your home networks WiFi limits



Note:

Please refer to **Section 4** for a complete list of the Configuration Button functions.

Section 2 - Euroquatics Remote App Setup

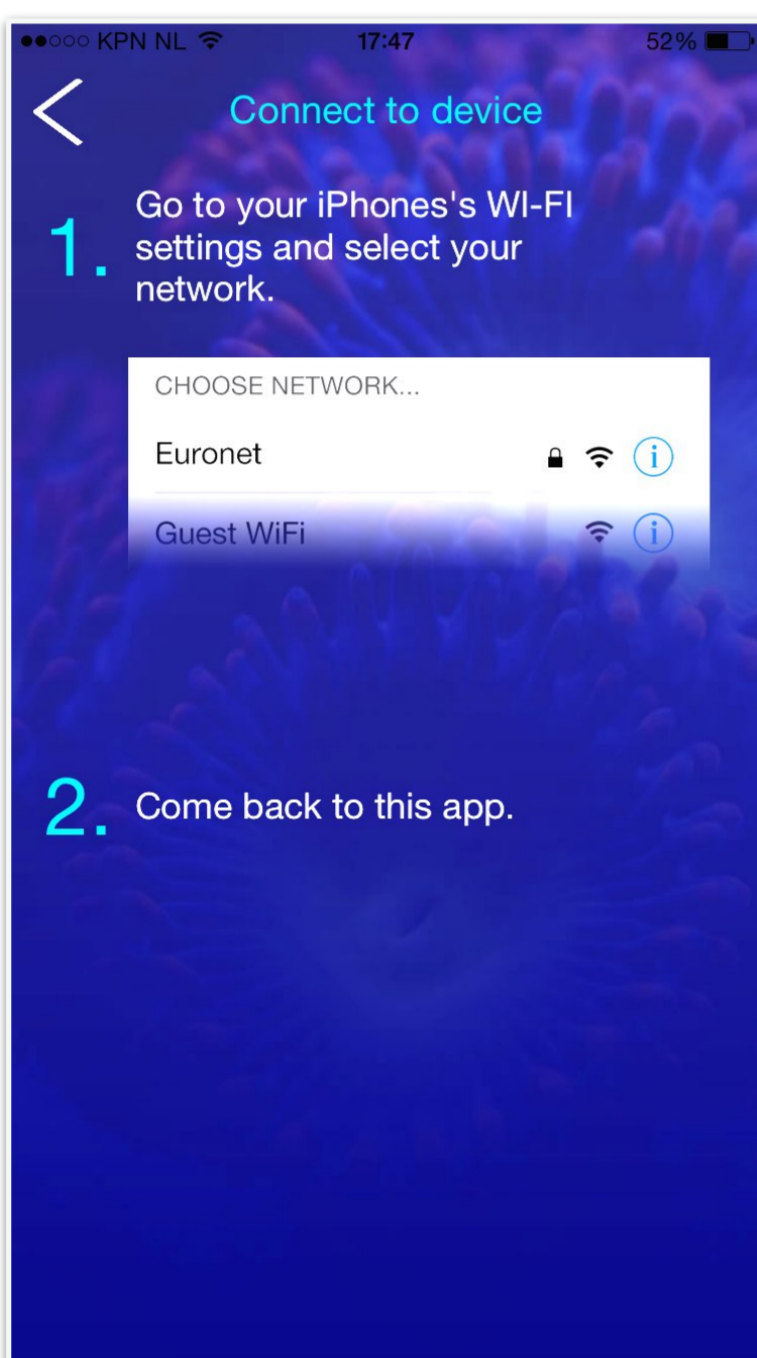
Connecting the Euroquatics Remote App to WiFi

All Angel fixtures come with built in WiFi capability. This allows you to quickly configure your LED system from smart phone (using our Euroquatics Remote app), or on a Windows or Mac computer (using our web-based interface).

Once you have your Euronet network completed, your system is in "Access Point" mode. This allows you to use your smart phone and our free Remote App to control your lighting. Here's how:

- Download our Remote App from the iOS App Store or the Android Play store for free by searching "Euroquatics."
- Open up your smart phone's WiFi settings and find the network named "Euronet" and select it as shown in picture #1.
- Open the Euroquatics Remote App on your phone.
- Select the Euronet network as shown in picture #2.
- After selecting the Euronet network, you'll be taken to the configuration/home screen.

Direct Connect



Picture #1

First time login

Default Password
"Admin123"

EURONET network



Picture #2

NOTE: The first time you log in the app will request the password for the system. The default password is "Admin123" and is case sensitive!

If you can see the Angel system but the app wont seem to open close the app and go into network settings and have your mobile device forget the network. Then reconnect and try again. Make sure you completely close the app and that it's not running in the background!

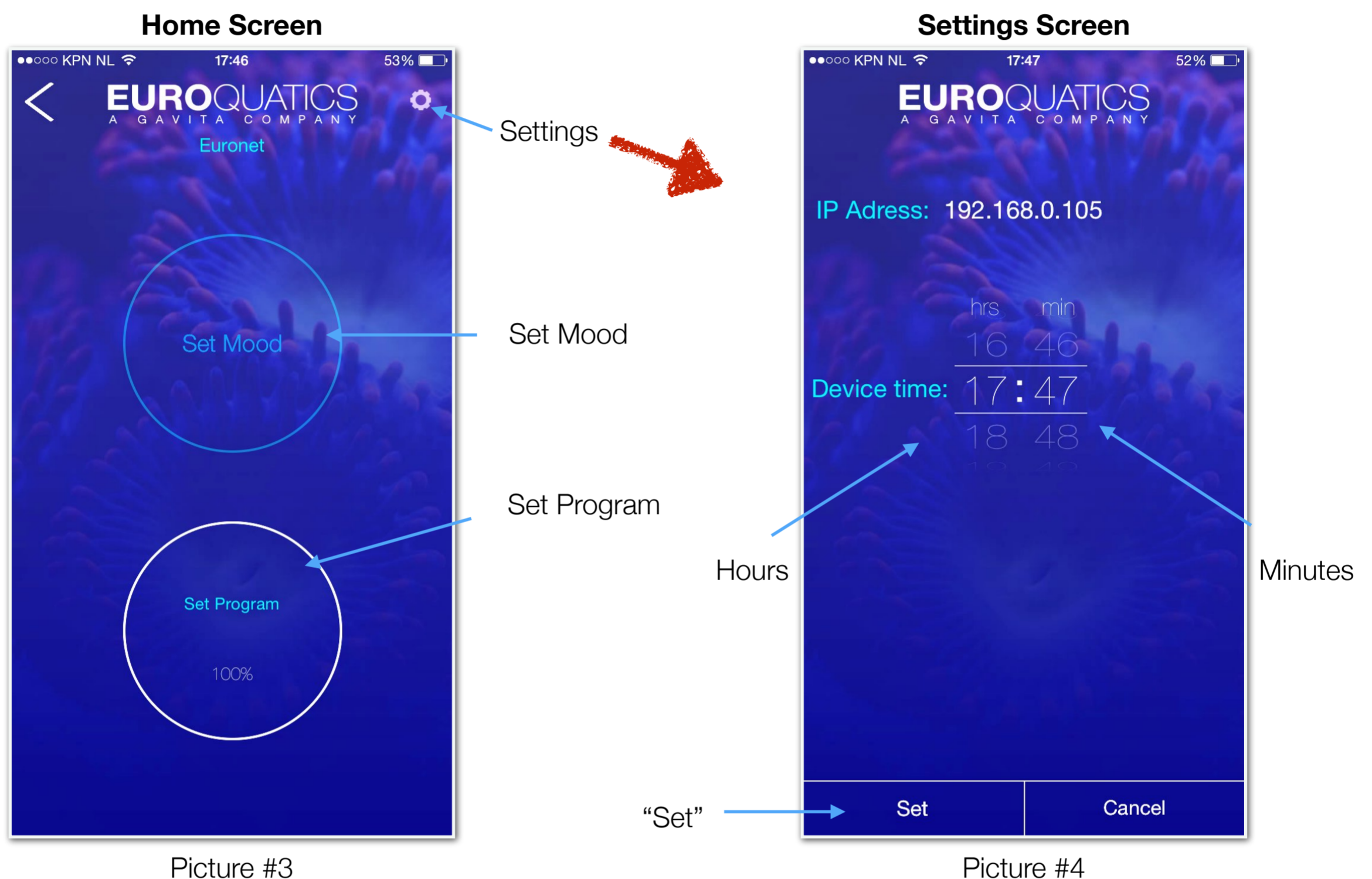
Section 2 - Euroquatics Remote App Setup

Overview of the Euroquatics Remote App

The Euroquatics Remote app gives you quick access to a number of preset Programs and Moods. The app is also able to set the time for the Euronet network, which is very important for time-based lighting control.

The home screen (picture #3) is the starting place for all Programs, Moods and system settings. You can: Here you can adjust some basic settings and get system info

- View system info
- Adjust basic settings
- Select a Program
- Set the Mood™



Setting the Time

The first thing you should do is set the time, particularly if you're using the Euroquatics Remote app as your primary configuration method. See picture #4.

- Open "Settings" by touching the gear icon in the upper right corner.
- Adjust the hours and minutes of the device on the next screen by scrolling up or down to the correct time and then touch "Set" at the bottom left of the screen.
- **NOTE:** Currently the time is set in 24-hour format. This will be adjustable in future releases.

Section 2 - Euroquatics Remote App Setup

Selecting a Preset Program or Mood

After setting the time (this is important), you can easily select from a number of Euroquatics presets that will light your tank in a variety of ways. A list of preset Programs and Moods can be found in the back of this manual.

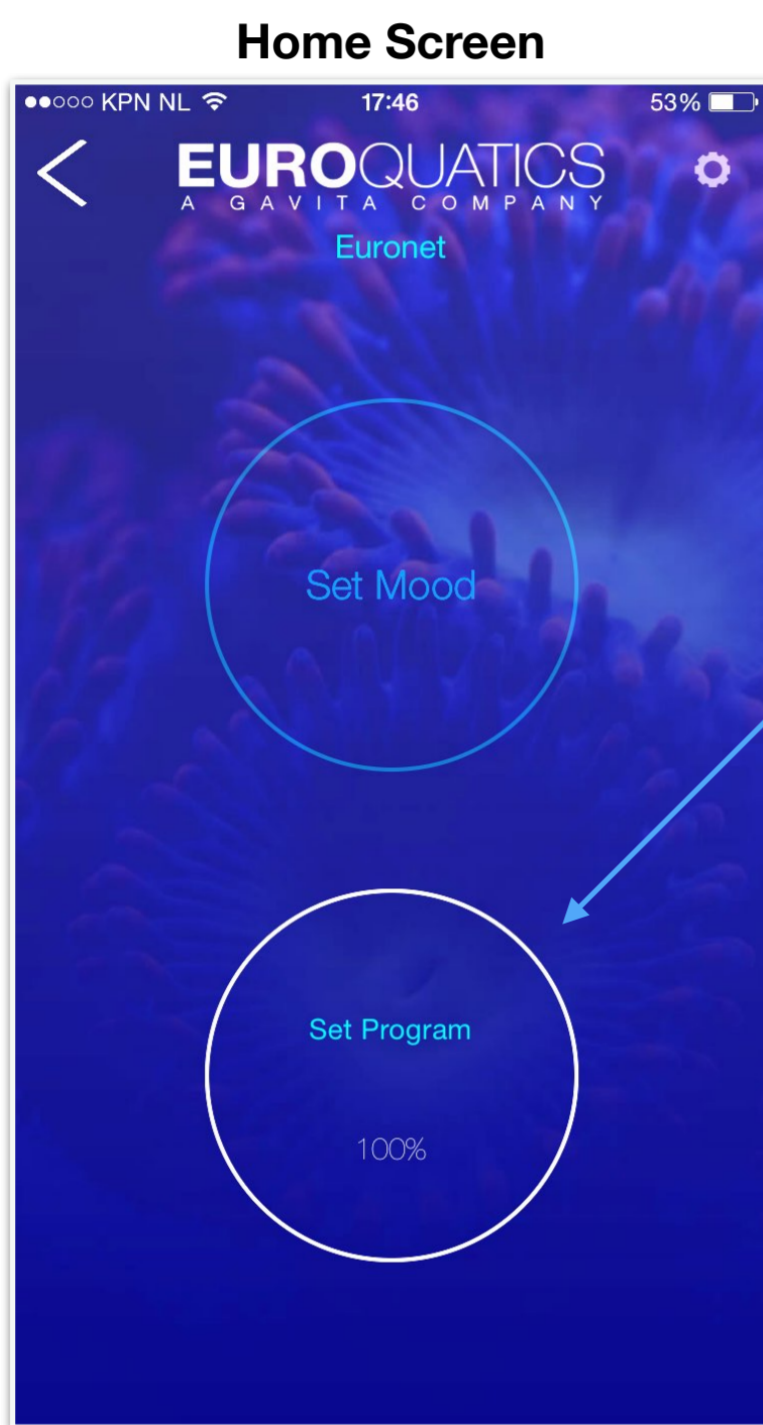
Start by touching the “Set Program” button on the screen.

You will be taken to the Program selection menu, where you can scroll up and down to pick a preset Program.

NOTE: You will also be able to access your personal Programs here once you’ve set those up. (See page 15 for more details).

Finally, touch the “Set” button and you’re done.

NOTE: The preset Programs are preconfigured to run on the time schedule of the lighting fixture. If the time is incorrect the Program will not function as expected.

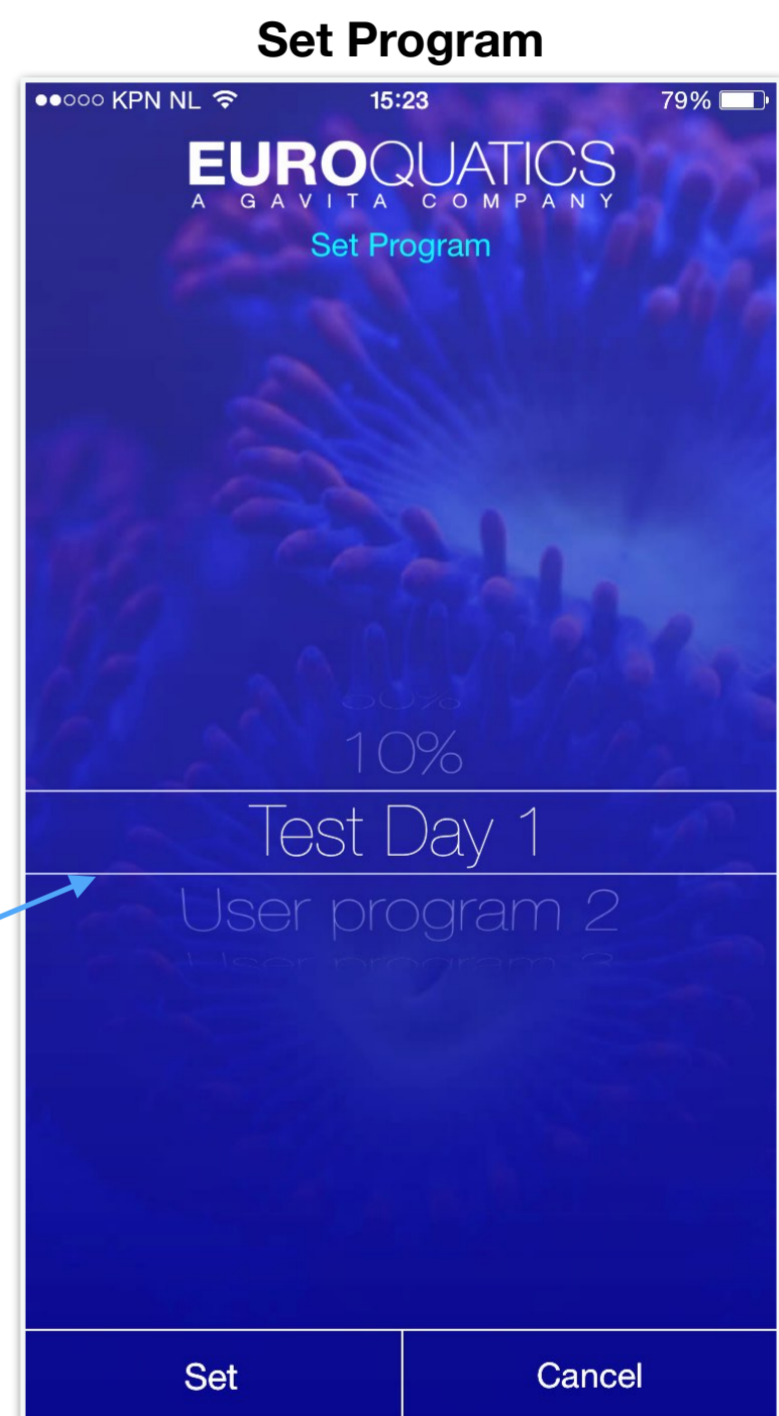


Picture #5

Set Program



Programs



Picture #6

Section 2 - Euroquatics Remote App Setup

Setting the Mood: Quick Change

An aquarium is meant to be enjoyed and shown off. But it never fails that when you have friends over, and you'd love to show off your aquarium, it's in a different part of the cycle or the lights are out completely.

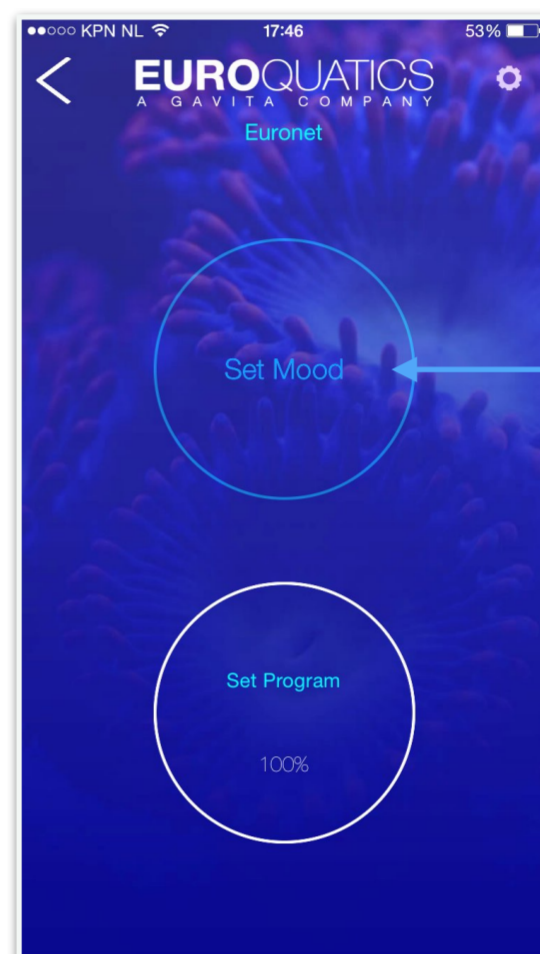
One way to rapidly change the overall look of your tank is to use the "Set the Mood" function. This feature enables you to quickly change your aquarium lighting to a preset state for a limited time. All you have to do is set the duration you want it to change, and you're done.

Once you set it, you forget it, because the Angel LED system will return to its normal operating Program state when the Mood expires. How simple is that?

We have a number of preset Moods and you're able to configure your own Moods based on what you like and what you want to show off.

- To select a Mood, enter the Euroquatics Remote app home screen and touch the "Set Mood" button. (Picture #7)
- On the next screen, select the Mood you'd like to see and set its duration. (Picture #8)
- To save, touch the "Set" button.
- You'll then see a timer count down on the home screen appear. You can cancel the Mood at any time by touching "cancel" or you can add more time quickly if needed. (Picture #9)

Home Screen



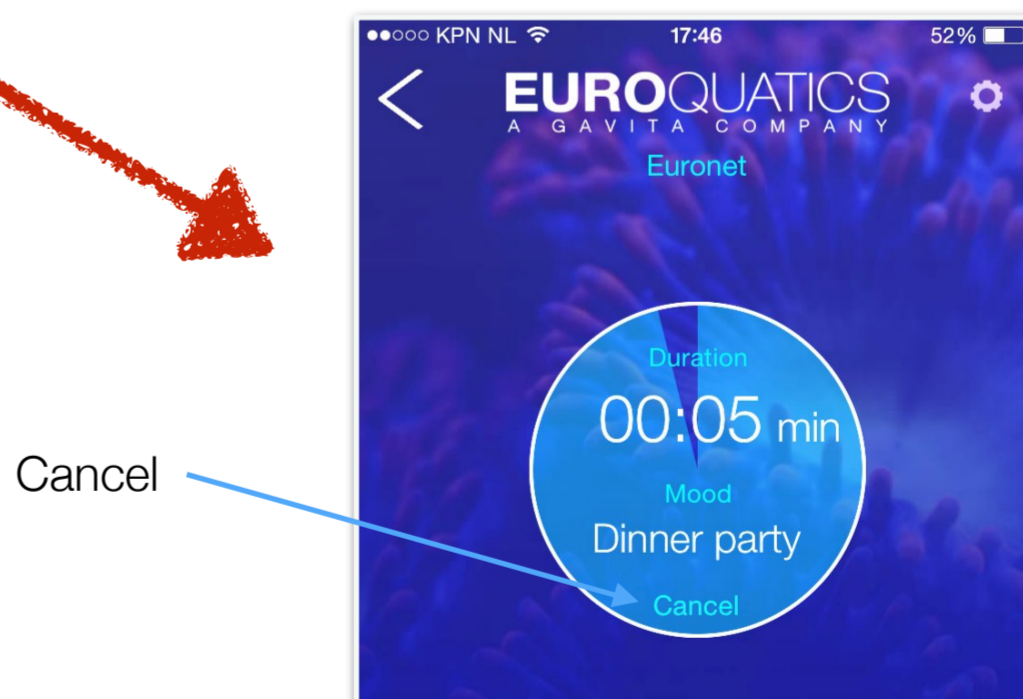
Picture #7

Set Mood Screen



Picture #8

Timer



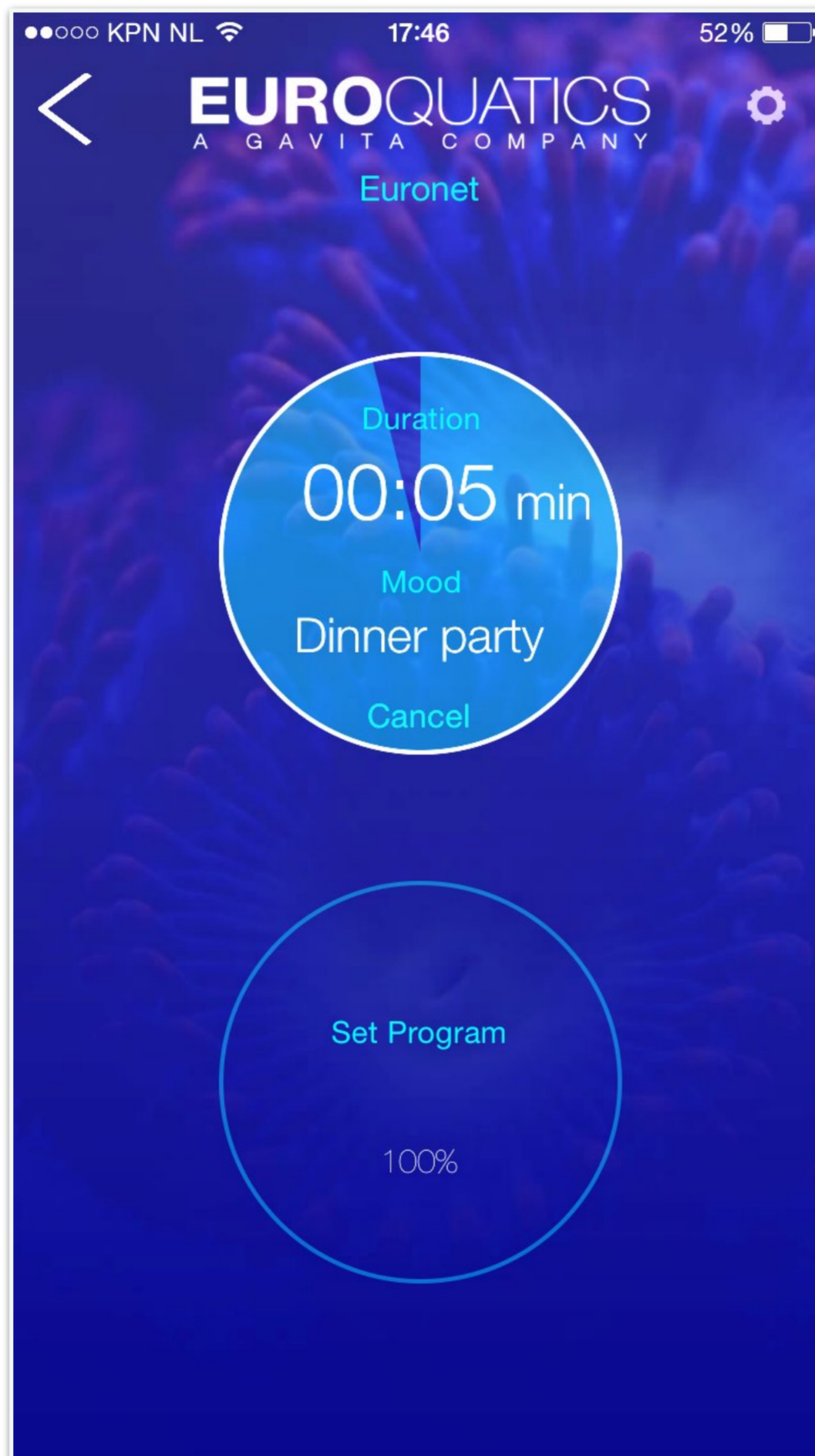
Picture #9

Section 2 - Euroquatics Remote App Setup

Basic Setup Is Complete

That's it! The Euroquatics Remote app was designed to be a quick access, easy-to-use tool to interface with your aquarium lighting. For more advanced options and configuration, use our web-based interface, accessible through a browser on both the Windows and Mac platforms (see next section.)

Home Screen



Section 3 - Accessing the Web Interface

Accessing the Web Interface

Included in Angle Premium LED fixtures with the builtin WiFi is the ability to use WPS for one button easy set up. Keep in mind this requires a WPS enabled router (which most modern routers have).

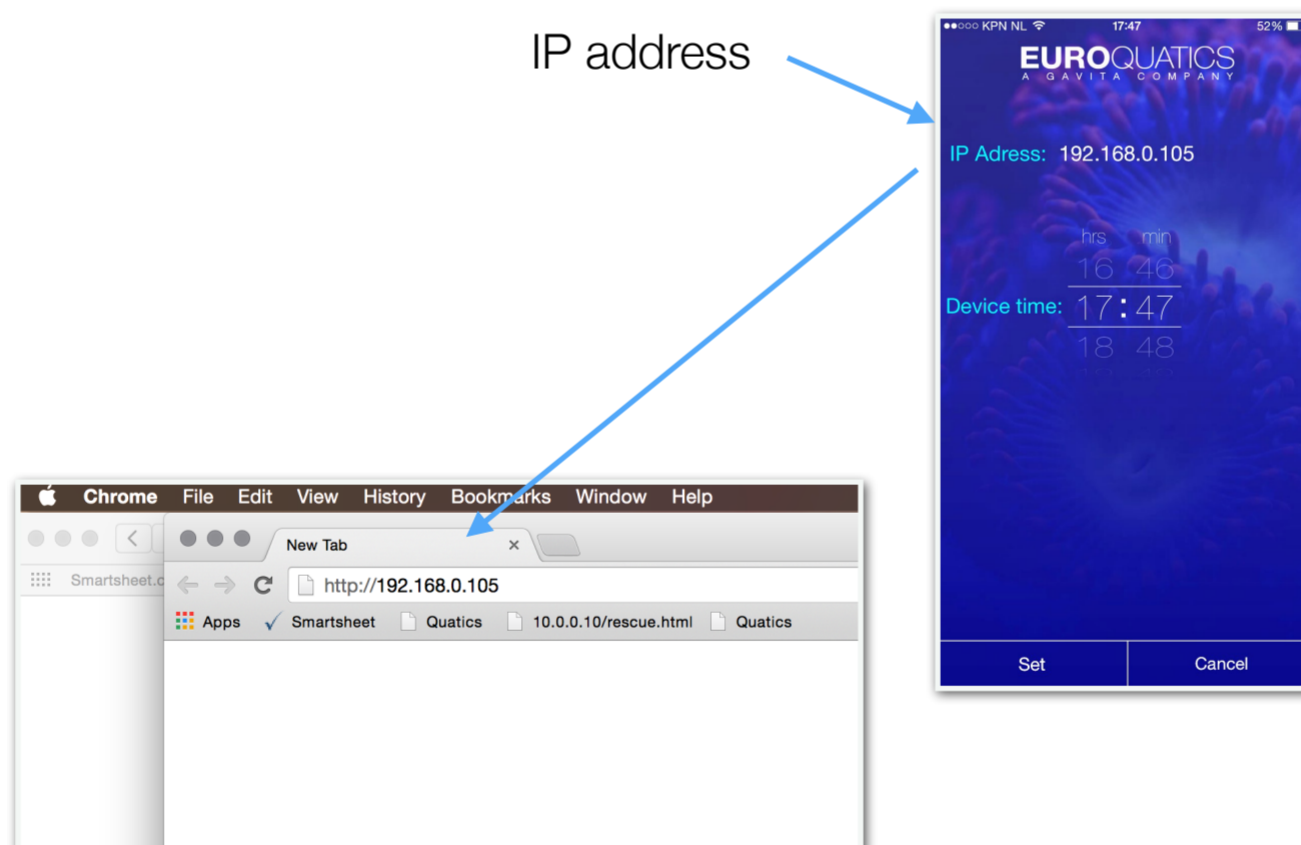
- Press and hold the WPS button on your home router (as outlined in its manual)
- Next, press and hold the configuration button on your Angel LED fixture.
 - **NOTE:** If you have multiple fixtures in a Euronet configuration, any of the fixtures can be used to make this link
 - **NOTE:** If you are planning to connect multiple Euronet networks to your home router, we strongly suggest completing the set up of one network at a time so that each network with a unique name (Default: Euronet) so you'll be able to identify them more easily on your mobile app or PC.

- Once linked with your home network you can use your mobile directly if it's on the same network. All instructions are the same as a direct connection just without the direct linking step.
- To access with your home PC you can use your mobile app to find the IP address assigned by your home router by going into the setting screen for that network.
- Type that IP address into your home PC and you will have access to the full web based interface.

NOTE: Give the page time to load. If you have issues with loading, try reloading the page after clearing your browser cache.



Settings Screen

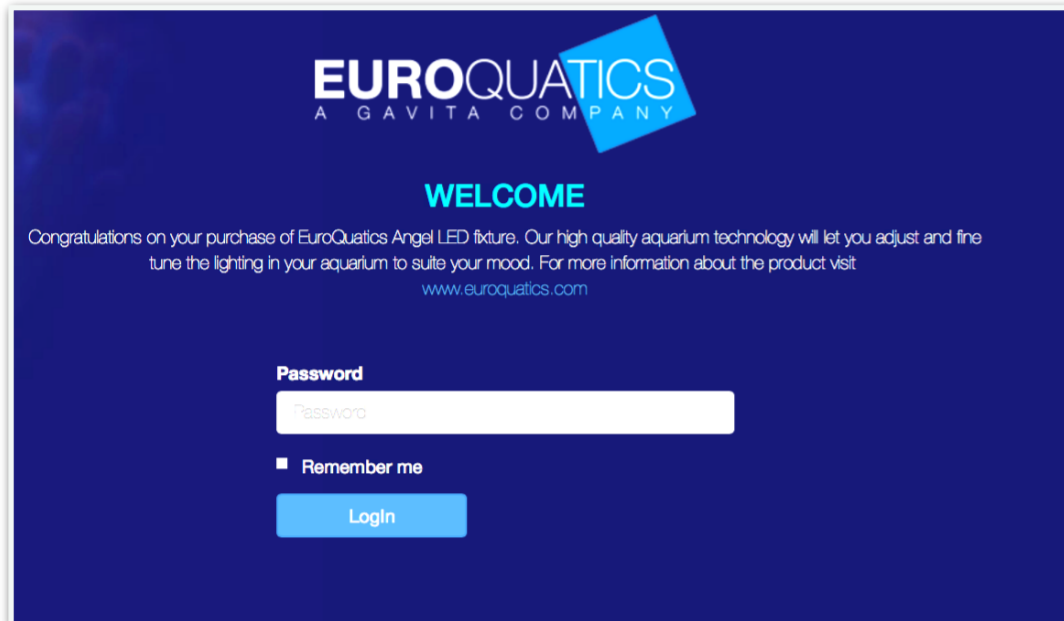


Section 3 - Using the Web Interface

Logging into the Web Interface

Here is your login page. You can have it remember your password if you'd like. The default password is "Admin123" — note that it is case-sensitive.

- **NOTE:** Once you change the password (see page 10), write the new password in the space below to help remember it.



Default password	Admin123
New Password	

Notes:

- In testing, the embedded website does not work smoothly on a tablet as several different mouse clicks are used.
- It is not necessary to "logout" of the system but it is an option and can be used for some trouble shooting if connection stability is an issue.

Section 3 - Using the Web Interface

Web Interface Overview

Here is the web interface home page. Once you've logged in, you can access everything you need to perform advanced configurations on your Angel LED fixtures.



Section 3 - Using the Web Interface

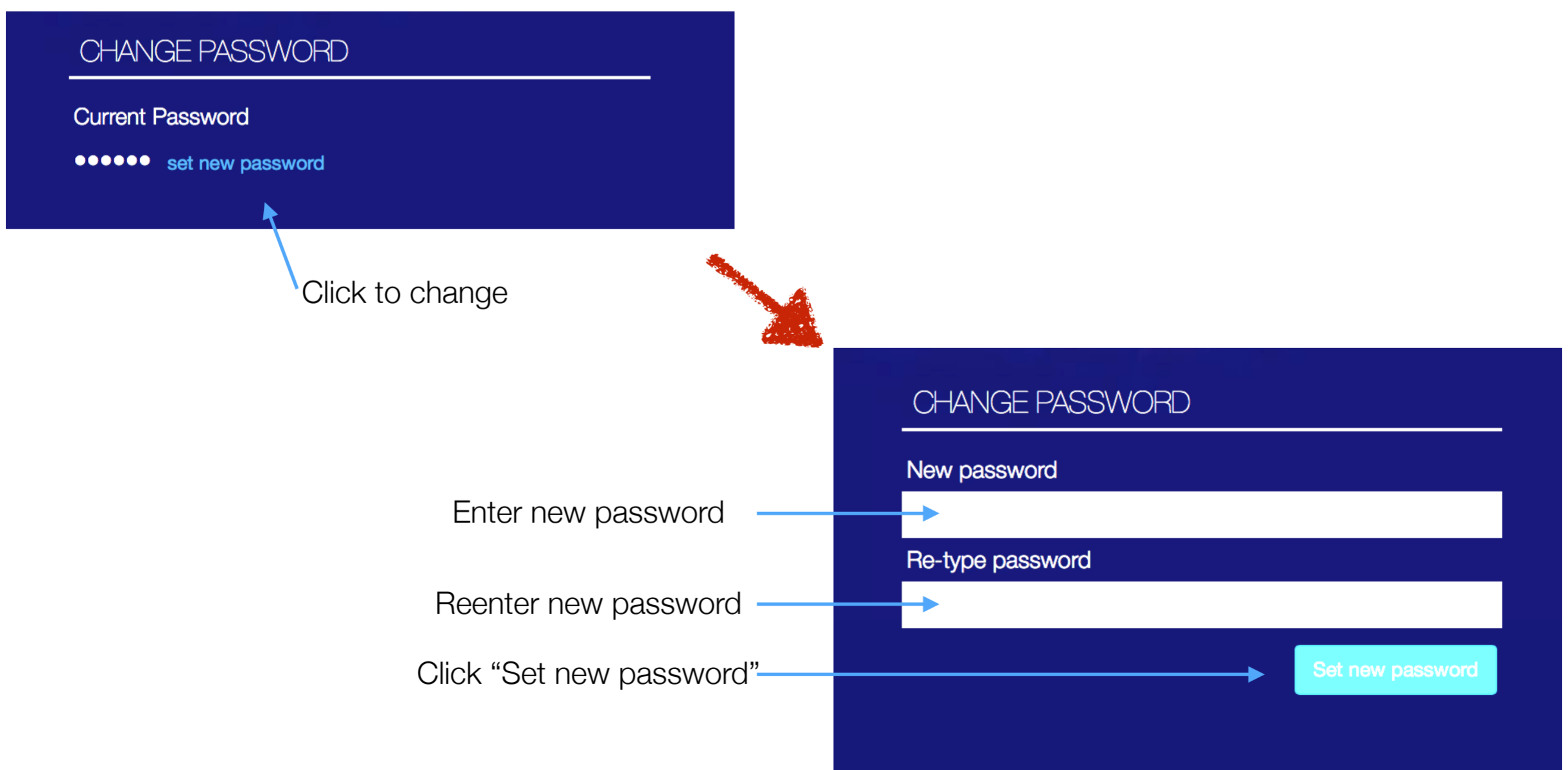
The Web Interface Settings Page

The Settings page provides access to administrative information and system data.

- Change network name
- Set or adjust time
- Change the password
- Retrieve overall system data



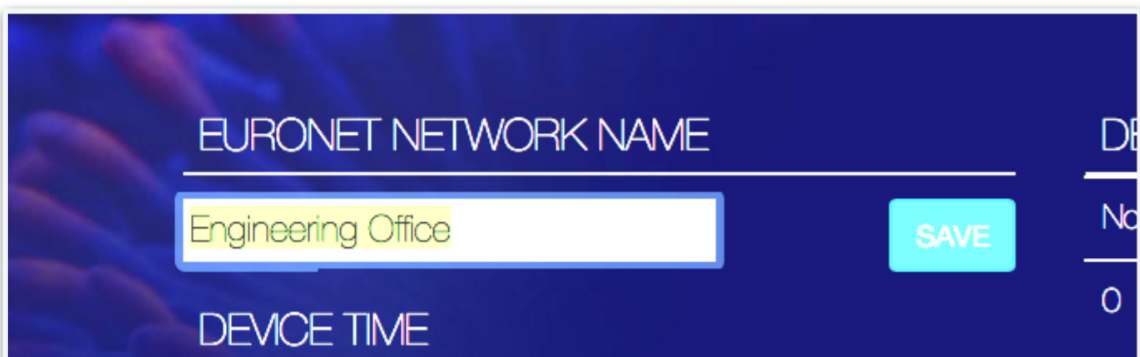
You can change the password on this page. When changing the password, you will have to reenter the new password to make sure you've entered it correctly. Note when you change the password, you will be promoted to reenter the password on the mobile app as they will no longer match.



Section 3 - Using the Web Interface

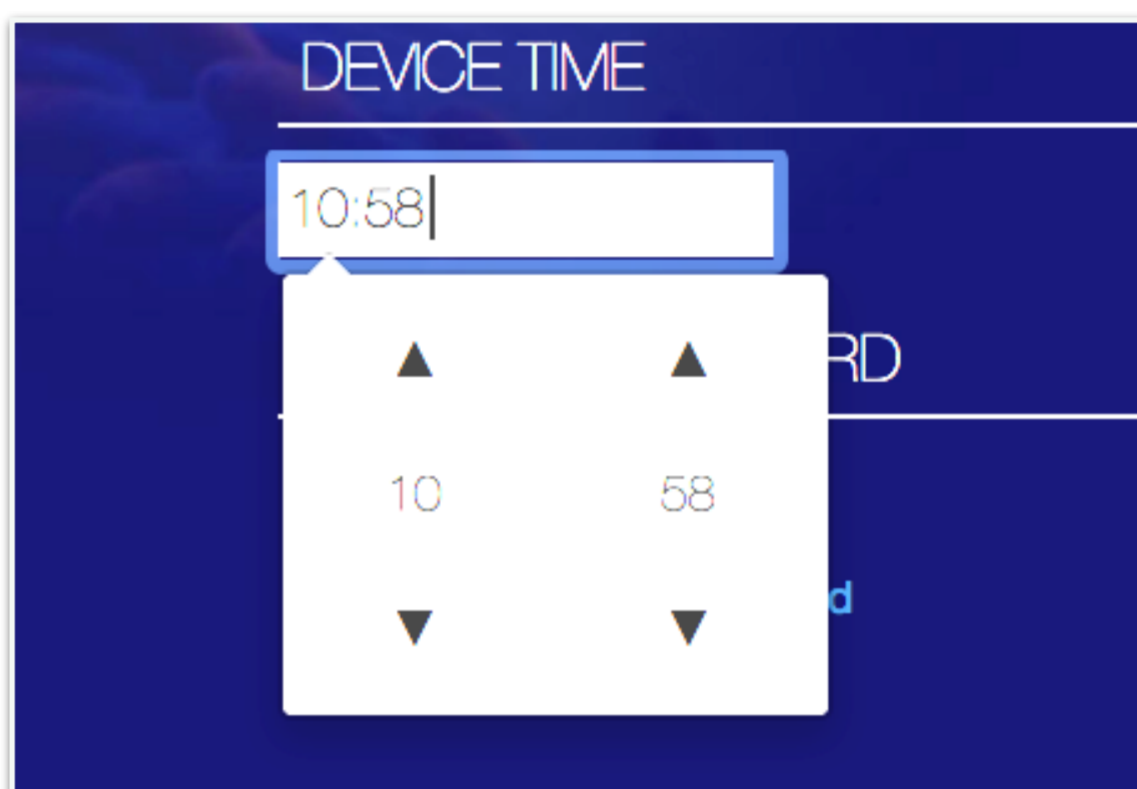
The Web Interface Settings Page (continued)

As with most settings, make sure to click save if you've made a change to the Network Name. However, the name will not take affect on your mobile app until you **power cycle*** the lighting system. This is the only setting that has this requirement.



**To power cycle the system, turn off power or unplug the system from its power supply.*

"Set time" enables you to set or update the system time. There is no "Save" required on this setting. (Setting time is important because your lights run on a time cycle.)



"Devices in Network" reports system information on a per-unit basis. It also allows you to edit a system by clicking "remove" on non-master devices in the network. Once you click remove, you will need to re-link the removed device to add it back to the system. (See page 1 for more details.) Once a device is paired with the system, it will be remembered until you remove it or take all devices in the system back to factory default.

DEVICES IN NETWORK							
Node #	Type	Device ID	Temp C°	Fan level	Version info	Active	
0	A1 PRO	222389276	28	40%	V1.0.3	Y	master

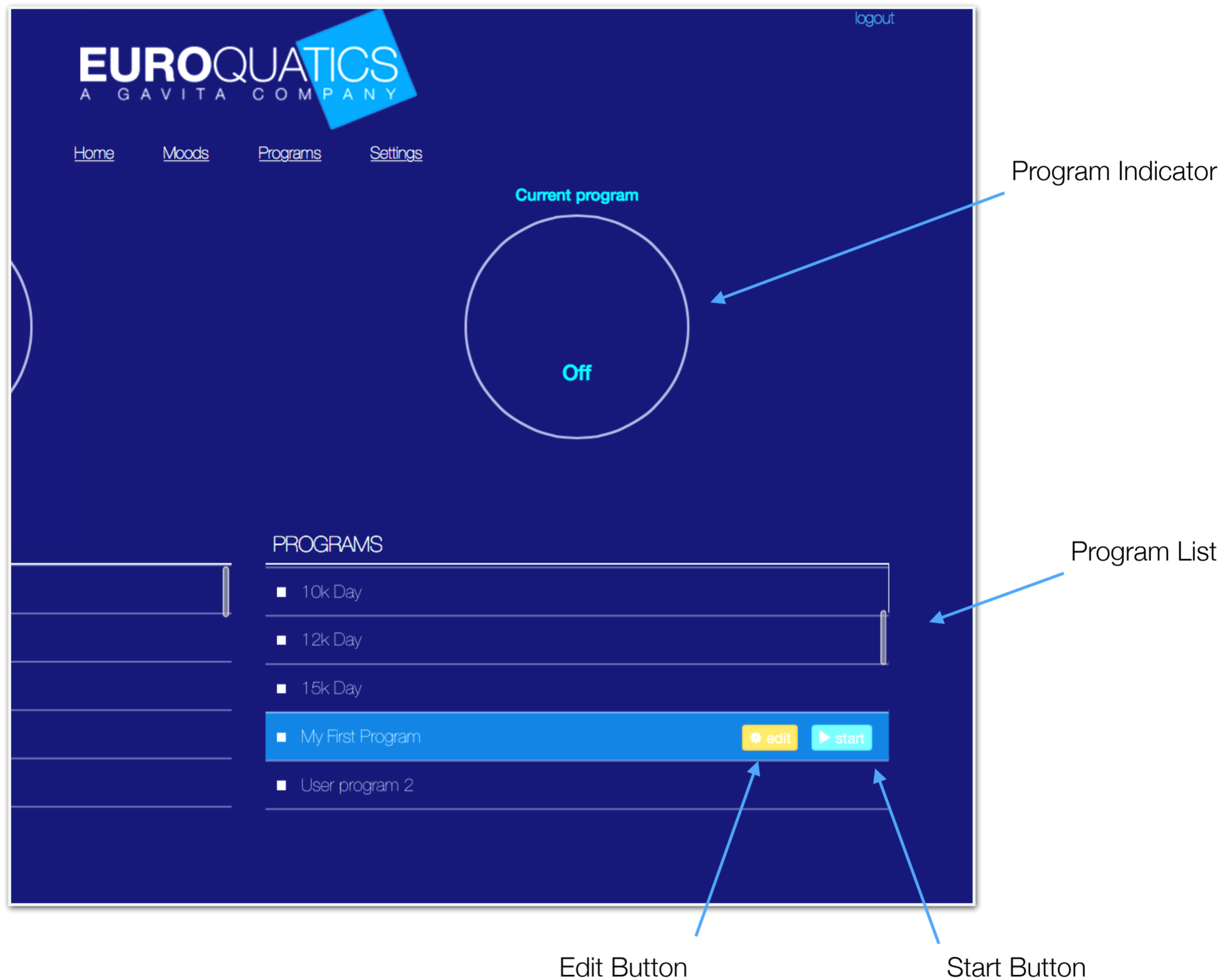
Section 3 - Using the Web Interface

Selecting a Program

You can use the web interface to select a Program just as you can on the Euroquatics Remote app on your smart phone. Here's how.

Scroll through the list of Programs and click "Start" on the Program you want running.

We'll get into editing later (see page 14), but you can also click the "Edit" button if you want to change the Program from here.



Notes:

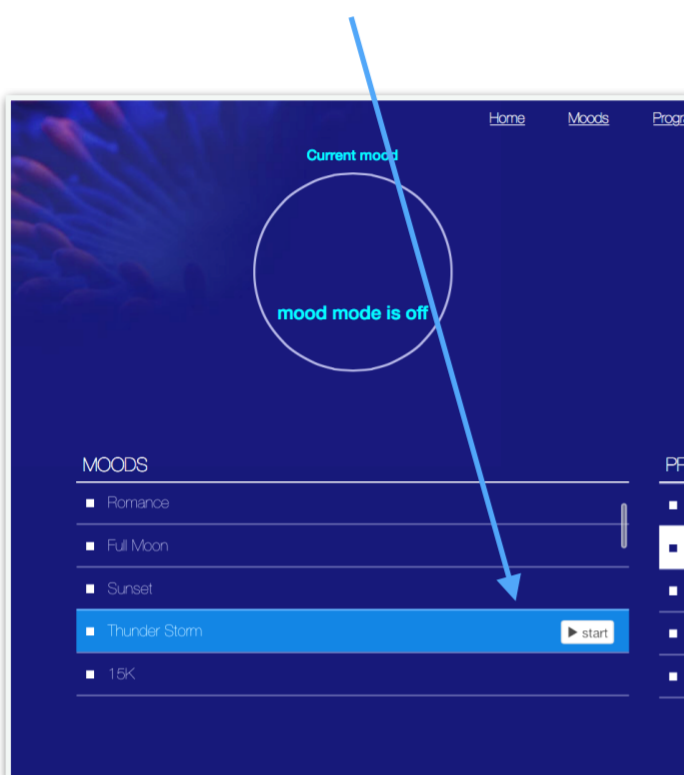
- You cannot edit the preset Programs.
- You can customize up to 15 of your own Programs

Section 3 - Using the Web Interface

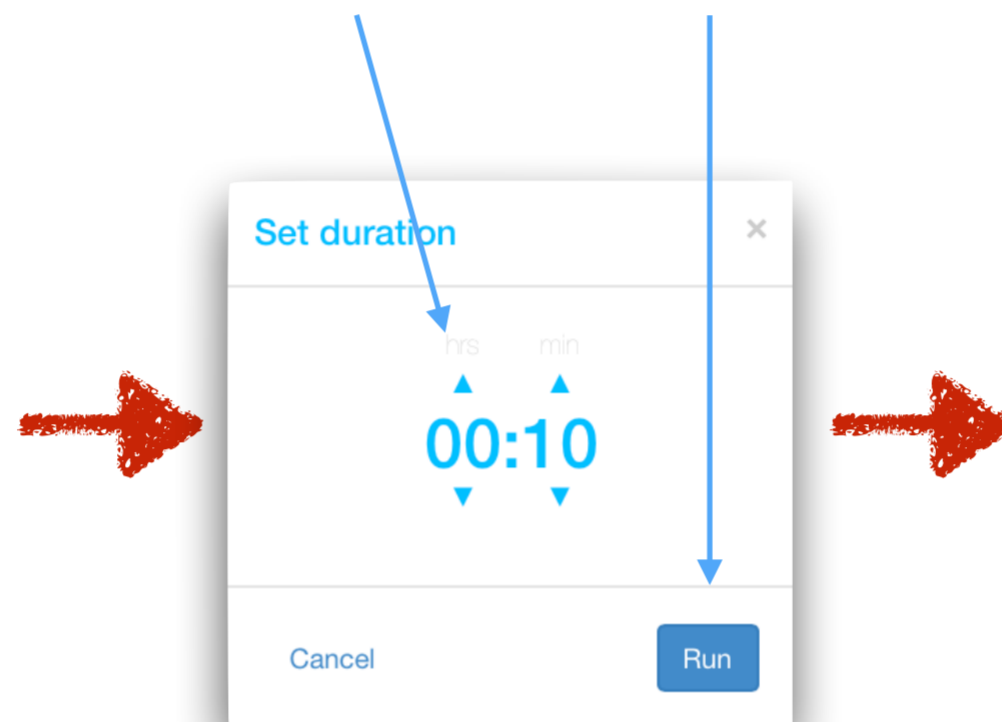
Setting The Mood

You can use the web interface to Set The Mood just as you can on the Euroquatics Remote app on your smart phone. Here's how

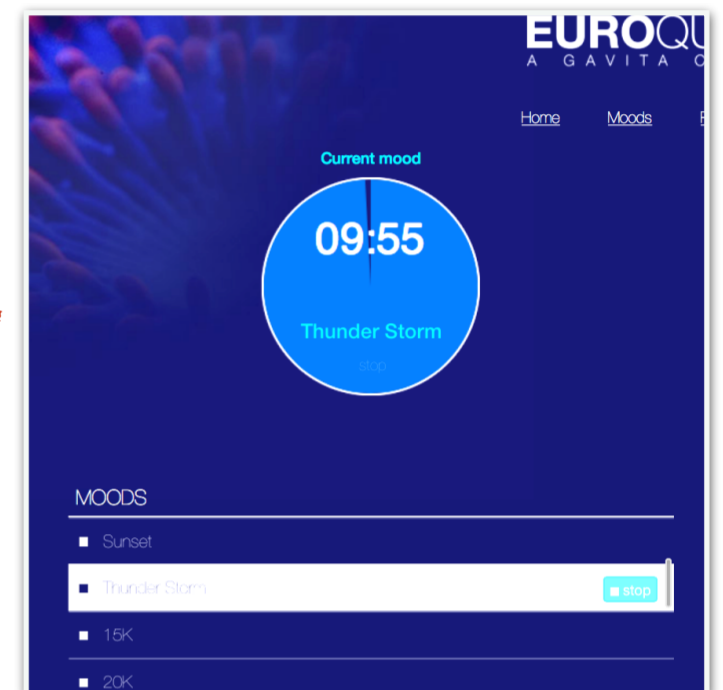
1) Click on the "Start" link for the Mood you want.



2) Set the time you want the Mood to run and click "Run."



3) The Home Page will now show the countdown timer.



NOTE: The system will return to normal operation when the timer has expired.

Section 3 - Using the Web Interface

Edit or Create a New Program

You can edit or create a new Program from the home screen or from the Program screen. (From the home screen, click the “Edit” button on a Program to enter the configuration window for that program.) We’ll start with “My First Program.”

The screenshot shows the 'PROGRAM SET UP' configuration window for 'My First Program'. The interface is dark-themed with white and blue text. At the top left, there is a 'Demo mode' toggle set to 'OFF' with 'Start' and 'Stop' buttons. The top right has a 'logout' link. The main content area includes a 'PROGRAM SET UP' section with a graph showing intensity over a 24-hour period. The graph has a y-axis from 0 to 100 and an x-axis from 0 to 24. A red vertical line marks the 'device time' at approximately 9:30. Below the graph is a legend for color profiles: Intensity, Warm white, Cool white, Blue, Royal blue, UV, Red, and Green. To the right of the graph is a 'Color profile' section with a list of color options: Intensity, Warm white, Cool white, Blue, Royal blue, UV, Red*, and Green*. Below this is a 'STORM MODE' toggle, which is currently turned on. Underneath are three sliders for 'Probability', 'Cloud cover', and 'Lightening', each with a 'random value' button. At the bottom of the configuration area are 'Save' and 'Cancel' buttons. The footer contains links for 'Contact Us', 'Manual', and 'FAQ', along with a copyright notice: '© Copyright 2014, Gavita Holland bv / Euroquatics'.

Demo/Test Mode

Program name

Program profile

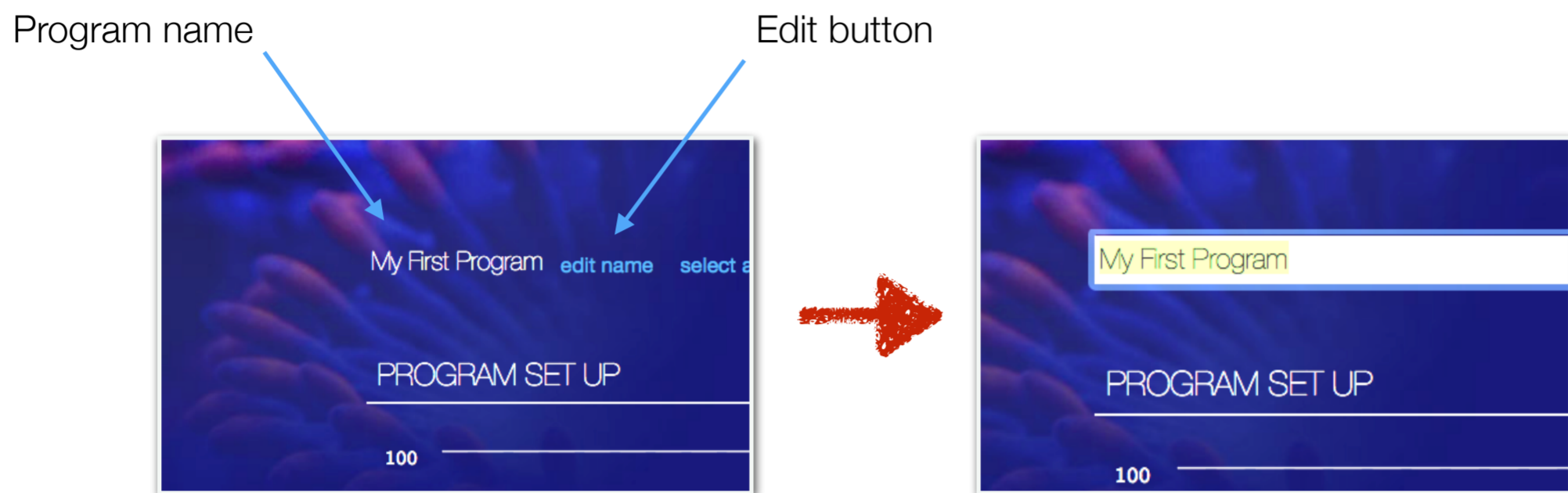
Storm Settings

Program Colors

Section 3 - Using the Web Interface

Changing the Program Name

The Program name can be edited to whatever you want. Simply click on “Edit” and then enter the new name.



NOTES:

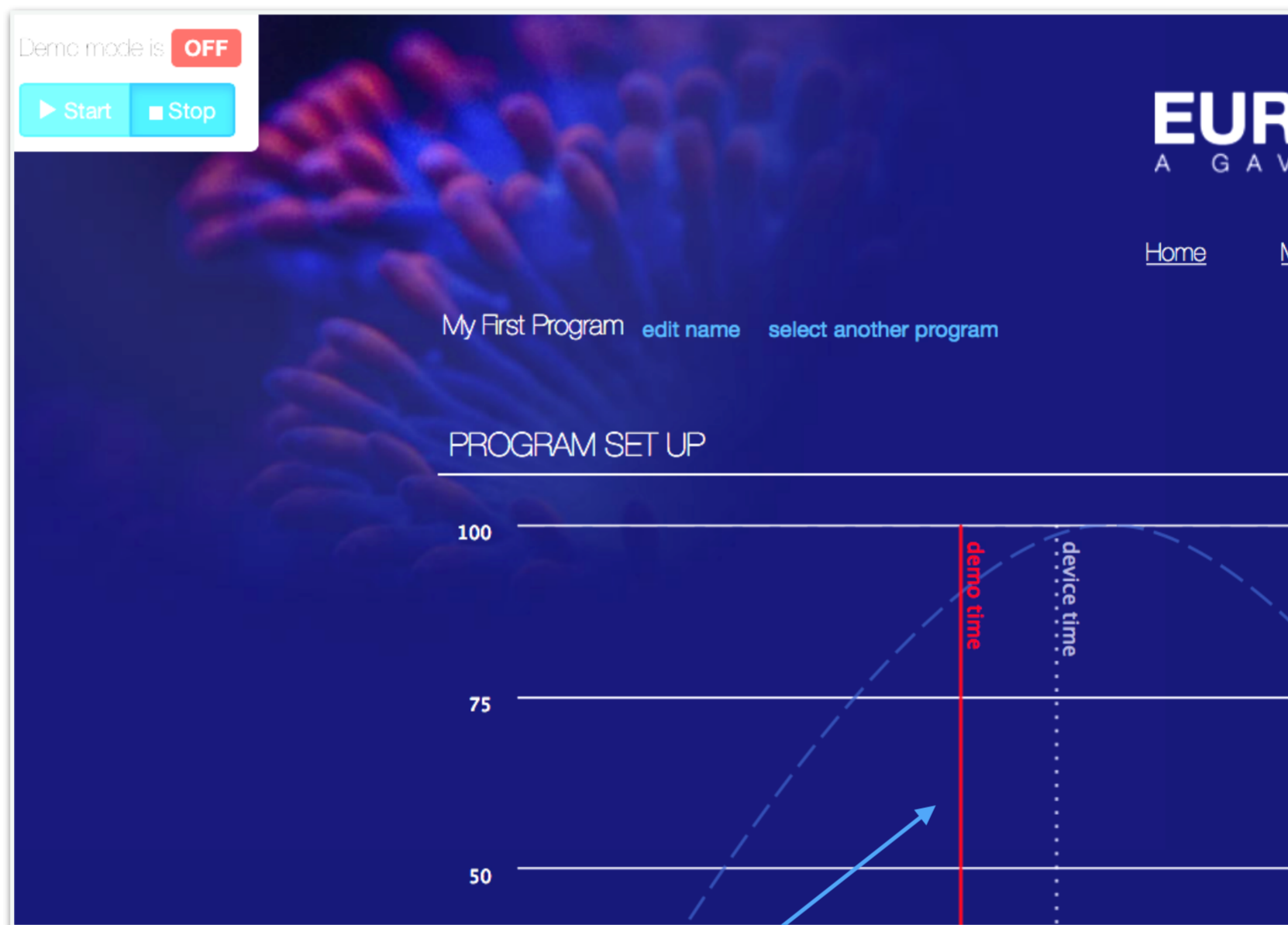
- When done renaming, just click outside the naming box and you're done
- You DO have to click “Save” at the bottom of the page for all changes to be retained

Section 3 - Using the Web Interface

Understanding Demo/Test Mode

Demo/Test Mode allows you to move the red slider around the program you've created to test the different levels at different times. Simply click and drag on the slider. When you release, the lights will show what the aquarium will look like at that point in time.

Demo/Test Mode



Demo Slider

Section 3 - Using the Web Interface

Understanding the Program Settings

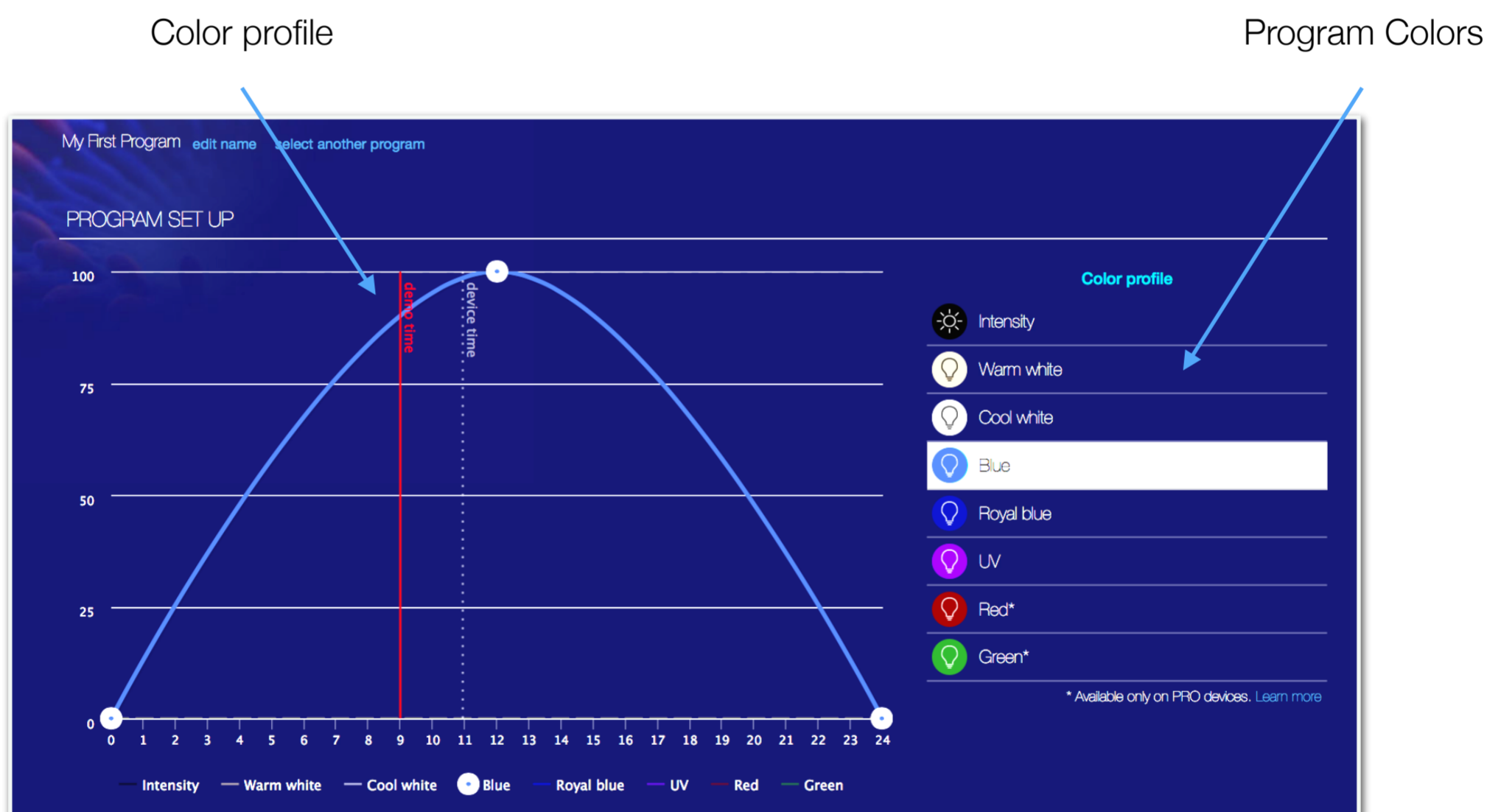
A Program is made up of several parts. While the details may not be overly important to you for basic use, we'll use many of these terms in the manual, so we'll review them now.



COLOR: The A1 has 5 color channels and the A1p has 7 color channels (with an extra red and green channel). Both units also have an “Intensity” profile that is just like a color but affects all color channels at once.

Time: Each color has a “curve” that is defined by time and intensity. There can be 12 unique points on a curve, each with its own time and intensity level. (All colors can have their own unique time curves.)

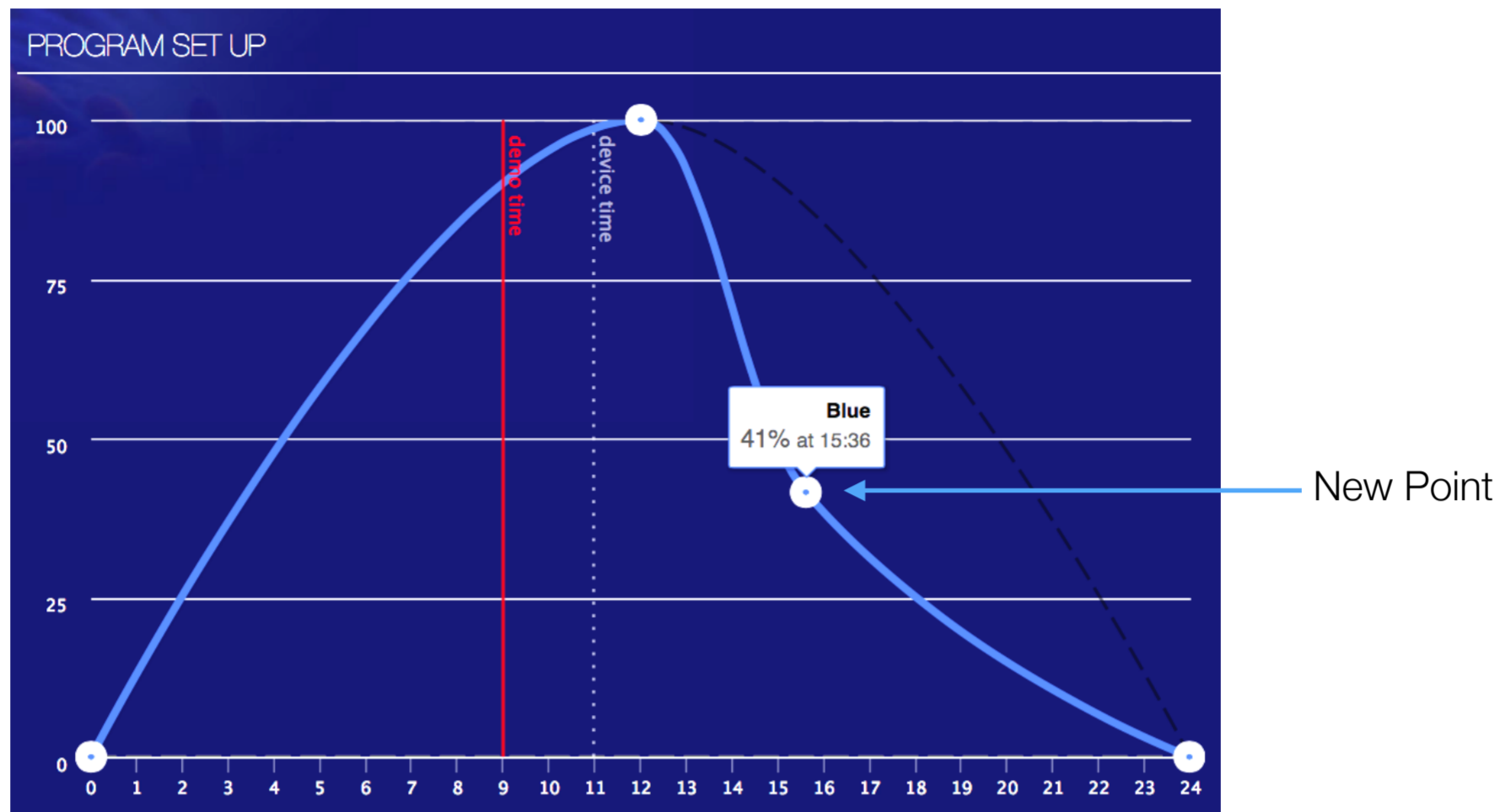
Profile: The Profile or lighting curve is the complete combination of time/value points for a single color (displayed as a curve as seen below), all the profiles are combined to make a Program. Here we have selected the “Blue” Profile and you can see it has three points on it’s curve.



Section 3 - Using the Web Interface

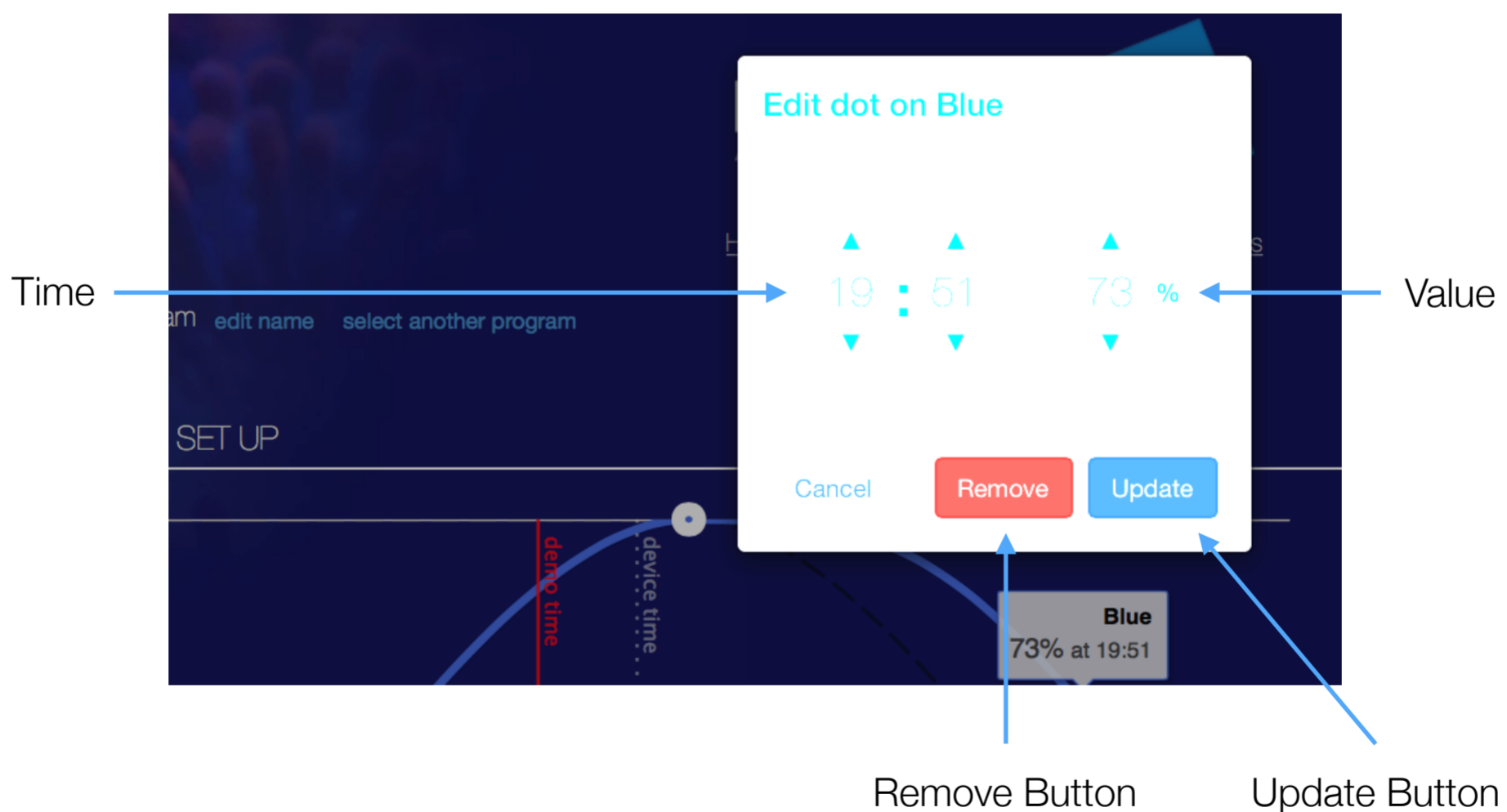
More on Editing a Profile

An individual color profile can have up to 12 unique points on its curve. Each point has a time (0-24hr) and a value (0-100%).



To add additional points, double click on any new point on the curve and a point will appear. You can click and drag the new point to where you want it to define the curve or you can right click on the point and manually edit the point with time and value.

You can also remove the point if desired.



Section 3 - Using the Web Interface

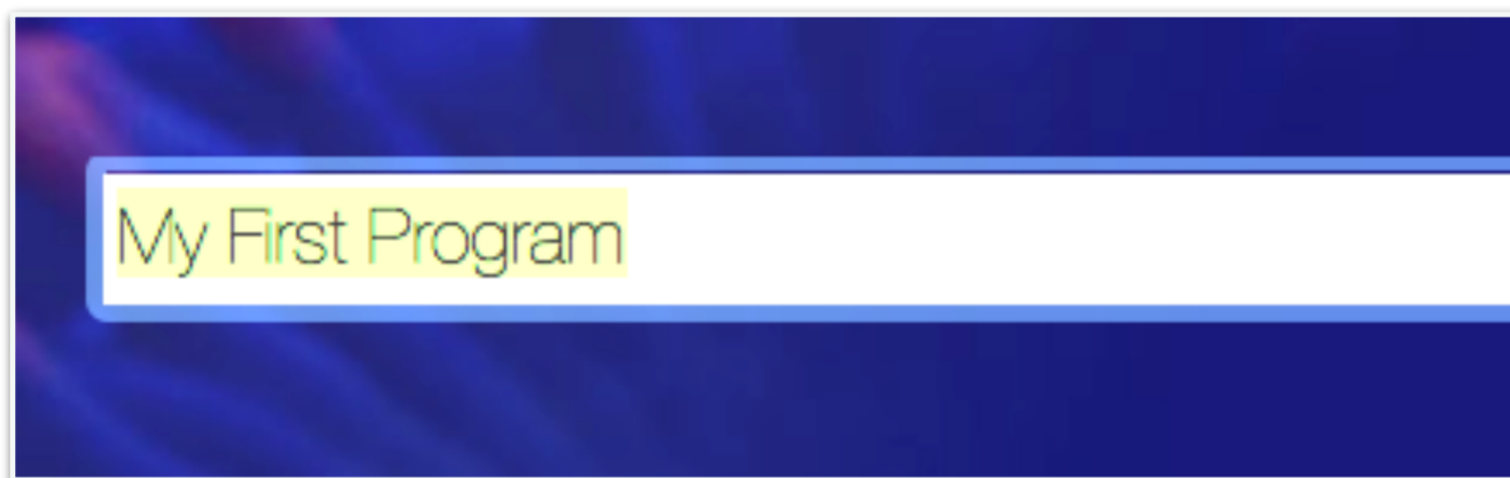
More on the Extra Color Option on the A1P

As stated, the red and green color control is only active on the A1P. However, if you mix A1s and A1Ps, you can control the Red and Green LEDs for the units that have those colors.



More on Program Naming

You can name Programs the same way you name Moods. Just make sure you to click "Save" whenever you are done making changes.



Section 3 - Using the Web Interface

Edit or Create a New Mood

You can edit or create a new Mood from the home screen or from the Mood screen. (From the home screen, click the “Edit” button on a Mood to enter the configuration window for that mood.) We’ll start with “My First Mood.”

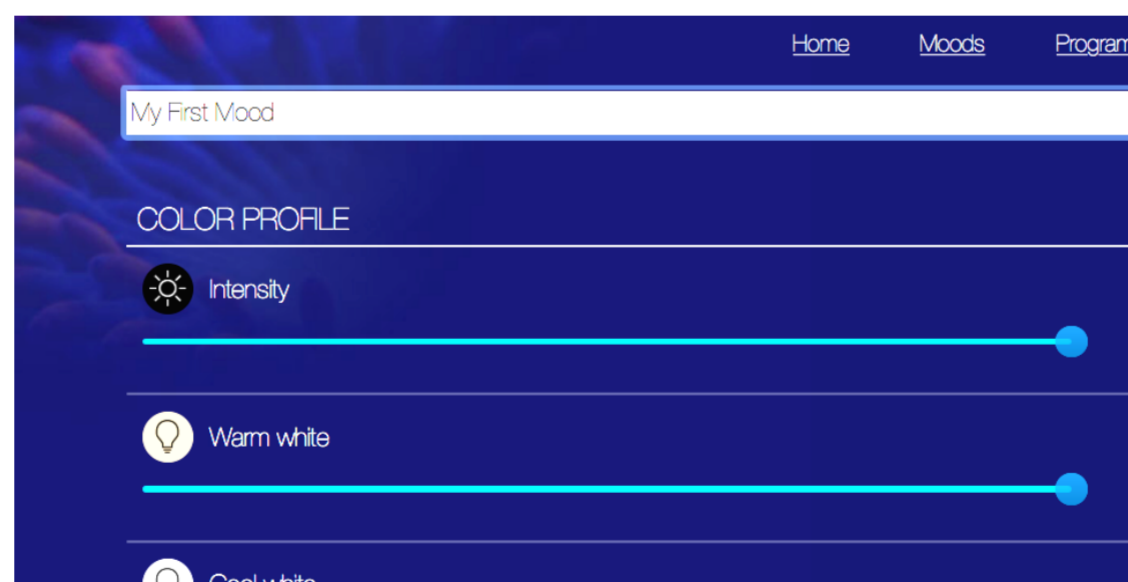
Move the sliders to tune the perfect look for your custom Mood. Once you have the right look, click “save” and you're done.

Demo/Test Mode



Changing the Mood Name

The Mood name can be edited to whatever you want. Simply click on “Edit” and then enter the new name.



NOTES:

- You cannot edit the preset Moods
- You can customize up to 15 of your own Moods
- When done renaming, just click outside the naming box and you're done
- You DO have to click “Save” at the bottom of the page for all changes to be retained

Section 4 - General Setup and Installation Notes

Button Actions

The Configuration Button is your one physical interface with the Angel system. It allows you to link/pair fixtures in the Euronet network, access the WPS feature for WiFi, do factory resets, and access the Manual Select feature.

Function	WiFi Mode	LED	Button sequence	New mode	LED	Timeout	Success	Fail
Manual select	Any	-	Tap (< 1 second)	-	Blink once	-	Next pre-set setting	-
RF Pair	Any	On	Hold 2s	RF Pairing	Flash rapid (Fading)	30sec	Slow blink LED 5s	Rapid blink LED 5s
WiFi Pair	Access point	On	Hold 4s	WiFi pairing mode	Flash slowly (Fading)	60sec	WiFi mode, Slow blink LED 5s	Access point, Rapid blink LED 5s
Switch between WiFi and AP	WiFi - WPS	On	Hold 8s	Access point	-	-	Slow blink LED 5s	Rapid blink LED 5s
	Access point			WiFi - WPS				
Factory reset	N/A	-	Hold during boot	Factory reset	Flash rapid (fading)	-	Slow blink LED 5s	Rapid blink LED 5s

Manual Select Levels

Manual Select is only available at the beginning of set up process. Once you've accessed the device via a WiFi connection, the manual selection will no longer work. Once you've selected a manual level you can connect the fixture(s) to a simple timer and it will retain that setting as power is switched on and off. This is a feature that allows very fast set up and installation if you do not have time to configure the system any other way.

Number	Name	Discription
1	100%	All LEDs at 100% on
2	50%	All LEDs at 50% on
3	10%	All LEDs at 10% on
4	20K	The fixture has a 20K look, very blue, rich color to make your "coral pop"
5	15K	The fixture has a 15K look with a soft blue feel
6	12K	The fixture has a 12k look that is a bit warmer and contributes more to coral growth
7	10K	The fixture has a 10k look with a true warm color very nice for coral propagation
8	ALL OFF	The fixture is all off

Section 4 - General Setup and Installation Notes

Preset Moods

Here is the list of preset Moods that can be accessed directly from the mobile app without any programming needed. In addition to these you can program up to 15 additional Moods to display your tank in any light you'd like!

Moods	Description
Dinner Party	Bright and cool
Spa Retreat	Soft and cool (good mix)
Romance	Dim lots of RB/B/V
Full Moon	Dim mostly CW with a touch of RB
Sunset	About 40% with more WW/R to warm it up
Thunderstorm	Like the current storm a bit less lighting
15K	
20K	
Actinic	

Preset Programs

Here is the list of preset Moods that can be accessed directly from the mobile app without any programming needed. In addition, you can program up to 15 additional Programs to display your tank in any light you'd like!

Programs	Description
Fiji Sunset	A warm feel with a long relaxing sunset sunset This program runs from 7am to 9pm in total, but the main day is over around 5pm.
Hawaiian Honeymoon	This a very bright, full day that runs from 7am to 5pm with a nice sun rise and set and a soft moon glow all night long.
Caribbean Vacation	This is a very balanced bright day with sun rise around 7am and sun set starting around 5pm.
10k Day	These programs hold the listed color temp and ramp up and down with a nice sunrise and sunset. The programs run from about 6am to 7pm in total with sunrise and sunset lasting about 1.5 hours each.
12k Day	
15K Day	

Section 4 - General Setup and Installation Notes

Recommendations and Warnings

Once you have your new Euroquatics system linked and confirmed you'll want to start working on the installation. Here are some recommendation and warning to get the best and safest results from your lighting system!

Recommendations

- Always mount your Angel A1 or Angel A1P fixtures at least 10" from your aquariums water level.
- Always make sure to run the latest firmware and interface on all fixtures. This insures the optimum compatibility between units and other hardware that may be used to control them.
- While Euroquatics offers a number of mounting options and hardware, we recommend mounting your lights in a fashion that best fits your aquarium and its needs.
- When/if connecting to a WiFi router, make sure your routers firmware is up to date and supports the latest standards available.
- Always change the password of your Euronet network to something you will remember, if you have to reset the system you will lose all your programs and saved data.

Warnings

- Make sure you have proper ventilation for the fixtures! If mounted in a hood, make sure the hood has good air flow through it.
- Make sure all power cords are well managed and kept out of the contact with water. Use drip loops whenever possible!
- Power supplies should be given good ventilation to maintain proper operation.
- NEVER allow the fixture to come into contact with water whether the light is powered or not. This will void the warranty!
- Use only Euroquatics brand replacement parts on your lighting system! Failure to do so will void the warranty.
- DO NOT open the casing of your Angel fixture! There are sensitive electronics inside that can be easily damaged when not protected. When performing any upgrades or services be sure to follow all instructions and precautions to maintain proper fixture operation.
- The A1 and A1P are designed for indoor use ONLY!
- NEVER look directly into the LEDs while powered!

Section 5 - Troubleshooting

Here are some common issues you may experience and how to work around them! If these simple checks don't solve your problem, please contact your dealer for more detailed support.

Issue	Things to Check
I cannot get additional fixtures to link in my Euronet system.	<ul style="list-style-type: none"> • Make sure you're pressing and holding the buttons on the fixtures one at a time, and do not hold the button too long. It requires only 2-3 seconds to see the steady, smooth pulse. (NOTE: If you see a very slow pulse you've held down the button too long.) • Make sure you are only trying to link two fixtures at one time. Confirm that each fixture has linked before linking another fixture. • Use the same first fixture to link all additional units to your network. • Make sure all fixtures have the same firmware version installed
I cannot access the system via WiFi.	<ul style="list-style-type: none"> • Make sure you are trying to access the system in the correct mode <ul style="list-style-type: none"> • Check for available WiFi access points if you see "EURONET" then the system is an Access Point Mode and you can connect directly. • Select the system and configure it directly OR connect the system to your home network using the WPS feature • If the system is connected to your home network via WPS, make sure your mobile device is also connected to the home network and use the Euroquatics Remote app to identify the IP address of the system. Type that IP address into your browser and the system should come up
I can see the network on my mobile app but it will not open.	<ul style="list-style-type: none"> • Go into your network setting and have your phone forget the network and then reconnect.
My LEDs do not turn on, but I can access the fixture via WiFi on my computer or smart phone.	<ul style="list-style-type: none"> • Make sure you have the time set correctly in your system and the lights are programmed to be on at the current time. • Make sure you've saved your Program setting properly in your program. • Make sure you are setting a Program and not a Mood.
My fixtures do not power up at all.	<ul style="list-style-type: none"> • Make sure the power supply is working. When you power cycle the device the fan should come on for a second. • Make sure the power supplies have power and that a breaker hasn't tripped.
My LEDs flicker.	<ul style="list-style-type: none"> • Make sure your power cord is securely plugged into the unit. • Make sure your unit has good ventilation
My interface webpage does not load properly or is incomplete.	<ul style="list-style-type: none"> • Refresh the web page. • Make sure you're giving the page time to load. It can take a few extra seconds the first time you log into the system. • Try clearing the cache in your browser. • The web interface does not work well on tablets as multiple types of mouse clicks are used, we do not recommend detailed programming via tablet devices.
One or more of the fixtures in my system seem to dim when they are not supposed to.	<ul style="list-style-type: none"> • Check the Settings page for the unit temperature. When the units get hot, they dim to self-protect. If they are reporting over 50°C (122° F), you should make sure there is good ventilation! • Make sure you hear the fan running. If a fan fails, a system can get hot very quickly and the self protection will kick in. • If the fan does not power up, it may need to be replaced.

Section 6 - Servicing and Upgrades

The Angel A1 and A1P have been designed to be serviceable and upgradable.

Part	Note
Lenses	<ul style="list-style-type: none">• There are a number of optic solutions for the A1 and A1P depending on your installation and needs. All optics come in pairs and are suitable for upgrading a single fixture. The kits come with complete instructions.• Some tools may be required for installation.• Care should be taken when performing this change.
Fan	<ul style="list-style-type: none">• The cooling system is a critical part of the A1 and A1P units. The fans are designed to be serviceable.• Several tools will be required to service the fan and care should be taken when performing this service. Be sure to follow all instructions carefully!
Replacement Power Supplies	<ul style="list-style-type: none">• Both the A1 and A1P power supplies can be replaced. Be sure to only use Euroquatics power supplies from a certified retailer.
Upgrading from an A1 to A1P	<ul style="list-style-type: none">• There is a kit available to upgrade your A1 to an A1P.<ul style="list-style-type: none">• The kit includes A1P LED packs (2), A1P power supply, and thermal paste.• Care should be take when performing this upgrade, special tools may be required to complete this upgrade. Be sure to follow all instructions carefully!
Cleaning/Servicing	<ul style="list-style-type: none">• Depending on your installation and tank environment, periodic cleaning of the airway may be needed. However, in most cases this will not be an issue.<ul style="list-style-type: none">• If you find that your unit starts to get warmer than normal you should look for dust on the air inlet and/or fan. Often you can use compressed air to clear the dust similar to cleaning your PC.

Section 7 - Firmware Updates

Firmware Update Overview

Below are the basic instructions for performing a firmware update to the units. Keep in mind that all units ship from Euroquatics with the latest firmware version we have. However, the store where you buy it may have the unit in stock for many months, and the firmware may be out of date. Always check to be sure.

- A computer is needed with access to the Euronet system.
- You will need to download the latest update from the Euroquatics webpage.

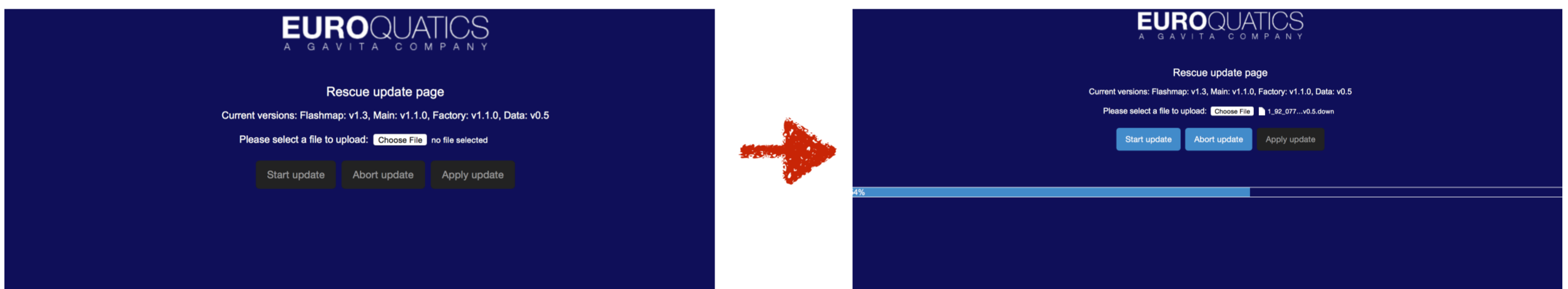
There are several possible updates that can be completed on a system. We've outlined them below and explained how to complete them.

1) Updating the unit's FIRMWARE

Whenever a firmware update is needed, typically to fix a bug or improve stability, you can simply navigate to the systems home page and append the URL with “/rescue.html”

For example: 10.0.0.10/rescue.html

This will take you to the update page (seen below) and you can load the firmware from your PC. If you have more than one Angel in your system, only a firmware update will be distributed to all devices in the system, not an interface update.



2) Updating the unit's USER INTERFACE

When an update needs to be done to the interface of a single unit, the update process is the same as above. However, the file will not be uploaded to multiple units. That's because this file is usually large, and it cannot be sent over the Euronet network reliably. And while technically, as long as the firmware in all systems is the same, only the “Master” device needs this update, we strongly recommend updating all units individually as outlined below.

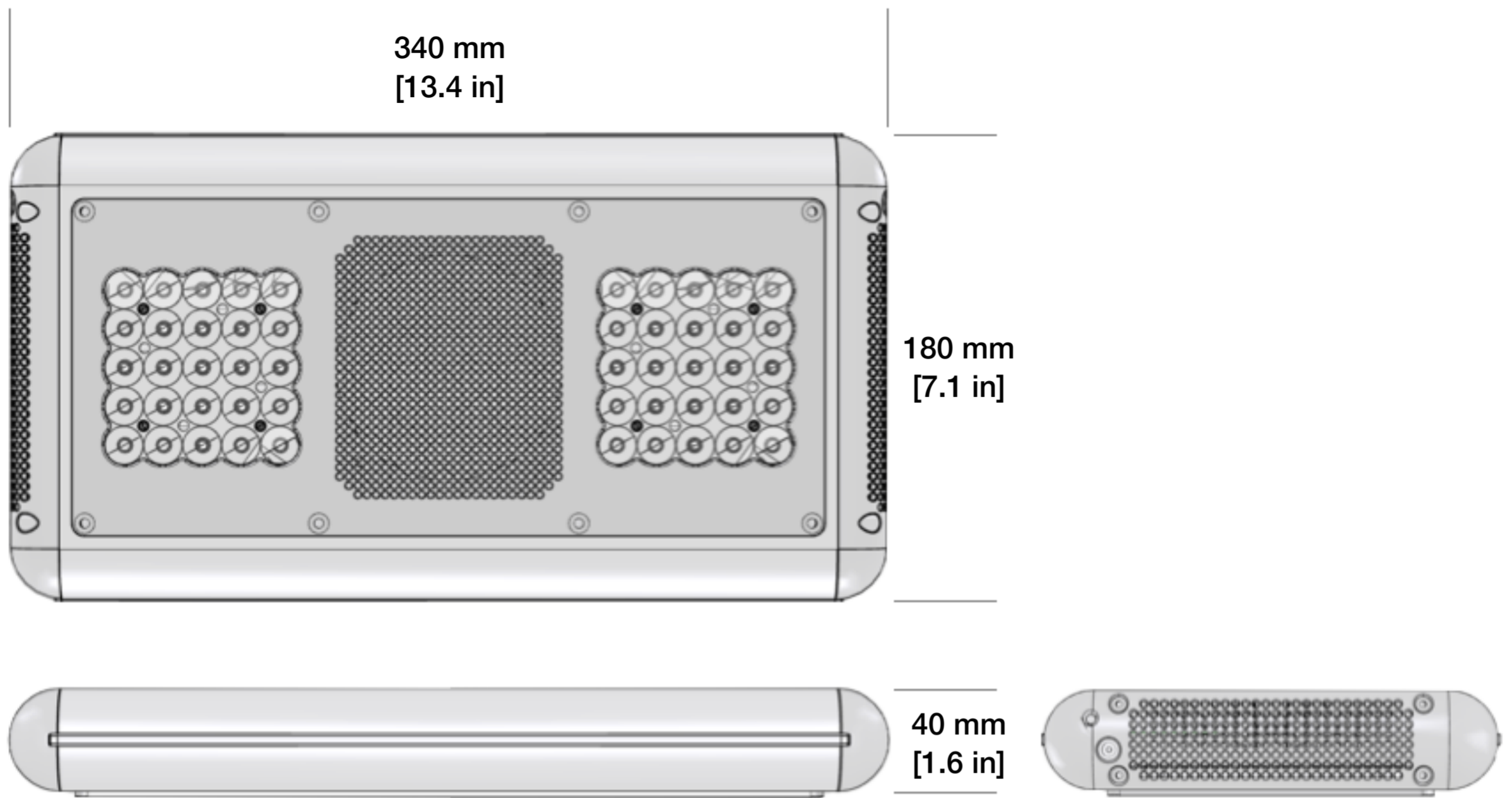
3) COMPLETE system update

In some cases we'll release a complete update of both the firmware and user interface. When this happens we strongly suggest following the steps below to unapt each unit independently. Start by removing power from all units. This is usually easiest to do at the fixture as you will need access to the configuration button.

- 1) While holding the configuration button, plug in power to the unit. Once the fan comes on, you can release the button.
- 2) Using your computers WiFi connection to connect with the device directly and type in the following IP address
 - 10.0.0.10/rescue.html
- 3) Once the update screen appears, you can upload the firmware.
- 4) Once the firmware has been updated, unplug the unit and move on to the next unit in your system until all units have been updated.
- 5) Once complete, go through the steps to relink all the units together in the Euronet network. If you use WPS, you'll need to relink the system to your home router. If not, you can now access the system and reprogram as desired.

Section 8 - Overview/Warranty

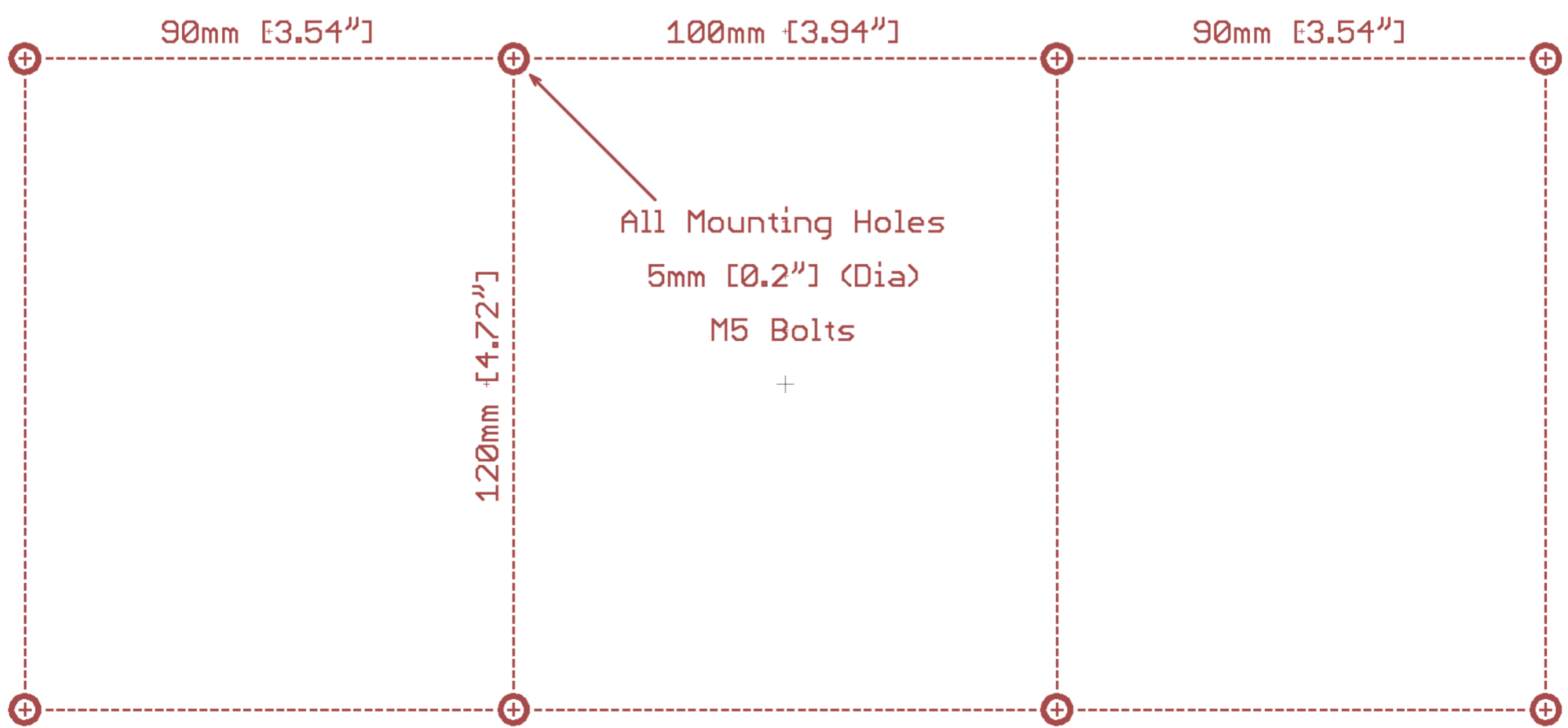
Dimensions



Mounting Template

(A full scale template is included with the Angel A1/A1P)

Note: We recommend only using 4 of the 8 mounting points and leaving the other 4 screws in place. (You can use any of the four screws that work best for your installation needs!)





Section 8 - Overview/Warranty

Product Hardware Overview

	A1	A1P
LED power output	95W (max)	150W (max)
Peak PAR* (Splash Guard/Standard Lens)	250/950	400/1500
LED controllable channels	5	7
True Full Spectrum	Yes	Yes
True UV (<400nm)	Yes	Yes
Lensing options	4	4
Limited Warranty	2 year	2 year

*Peak PAR depends on lensing option and measurement distance. PAR measurements were taken at on a 70cm x 70cm grid at 60cm high with two different lensing options (splash guard and standard lens)

Power Supply**	Marks/Certificaitons
A1 Input: 100-240VDC 50/60Hz Output: 24VDC, 120W (max***) 	
A1P (Mean Well) Input: 90-305VAC 50/60Hz, 127-431VDC (>93% EFF) Output: 36VDC, 185W (max***) 	

**Power Supplies may change without notice but will maintain these minimum ratings.

***The provided power supplies are selected to provide 10%-25% margin - they are not ran at 100% capacity to improve life. The listed value is the power supplies MAX output, that power is never reached.

Limited Two-Year Warranty

Gavita Holland bv (Euroquatics) warrants the mechanical and electronic components of their product to be free of defects in material and workmanship if used under normal operating conditions for a period of two (2) years from the original date of purchase. If the product shows any defects within this period and that defect is not due to user error or improper use Gavita Holland bv (Euroquatics) shall, at its discretion, either replace or repair the product using suitable new or reconditioned part or products. In case Gavita Holland (Euroquatics) decides to replace the entire product, this limited warranty shall apply to the replacement product for the remaining initial warranty period, i.e. two (2) years from the date of purchase of the original product.

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