



Reef flare Pro

User Manual



Dear customer, thank you for your purchase.



ENGLISH



Table of Contents

I. Installation of the device.....	3
II. Initial configuration.....	5
III. Lamp operating modes.....	9
IV. Presets.....	11
V. Additional features.....	14
VI. Resetting the device	16
VII. Changing the access password to the device.....	16
VIII. Device update.....	17
IX. Information and warnings.....	18
X. Warranty Conditions.....	20
XI. Dedicated power supply.....	23
XII. Technical information.....	25
XIII. Knowledge base and technical support.....	26



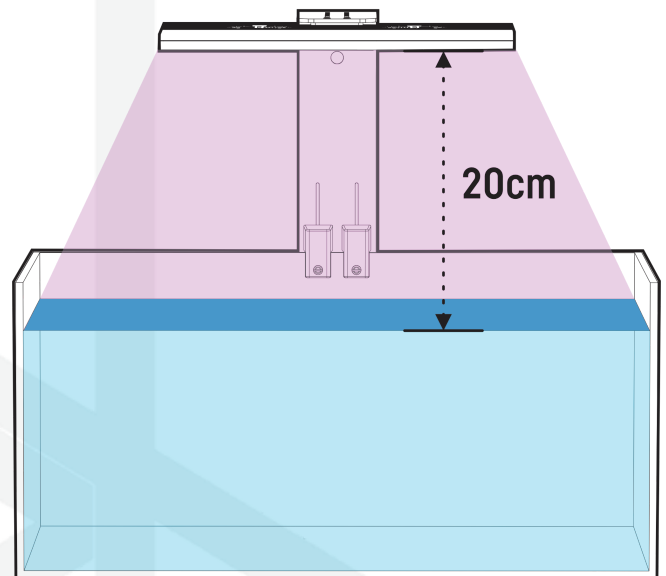
IMPORTANT! Please read the entire user manual carefully before setting up and using the device. There may be slight differences in the content between what is presented on the device's screen and the manual's descriptions.

I. Installation of the device

Installing the lamp

Using the dedicated mounting system, install the lamp above the aquarium so that it illuminates the bottom of the tank as much as possible.

The lamp should be installed at a minimum height of 20 cm above the waterline.



Use of Reef Factory mounts

To properly mount the lamp, use one of the dedicated mounting systems offered by Reef Factory. Follow the instructions attached to it. You can find it by scanning the QR code next to it or at this link www.reeffactory.com/flaremountingkit.

The mounting kit is sold separately.

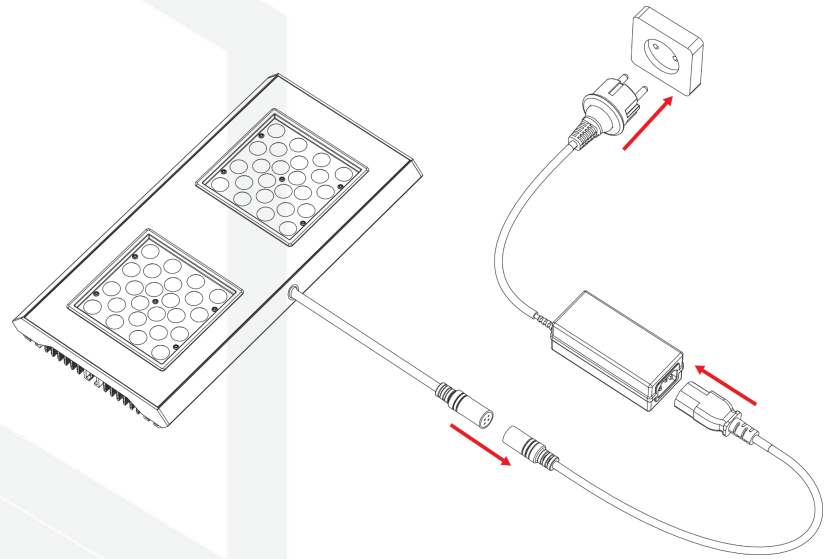


After assembly, check that all components are properly tightened to avoid possible damage to the device.

Connection to the power supply

After the installation, connect the power supply to the lamp using the dedicated power adapter included in the set, as shown in the picture.

Attach the cable between the lamp and the power supply according to the instructions in the assembly kit. Wind up the cable between the power supply and the AC network as shown in the picture.



Make sure that the lamp's cooling system can work freely, taking in air from above and distributing it to the sides. The hose or fitting must not block the airflow.

II. Initial configuration

To connect the device to your account using the Smart Reef app, the device must be connected to power and within range of your home network, and your phone or tablet. You can download the app from the Play store and the App store.

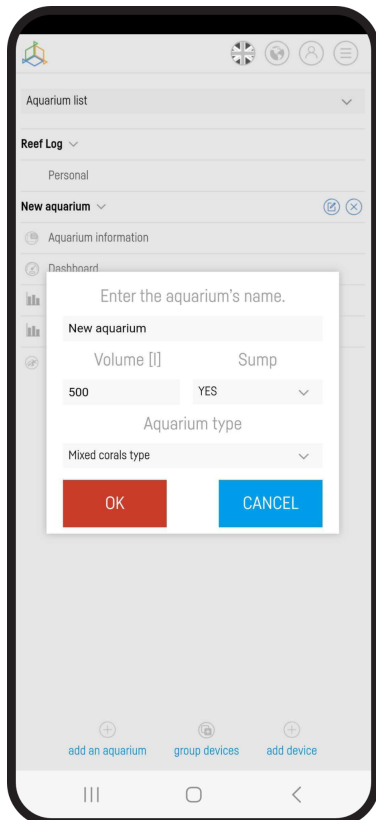
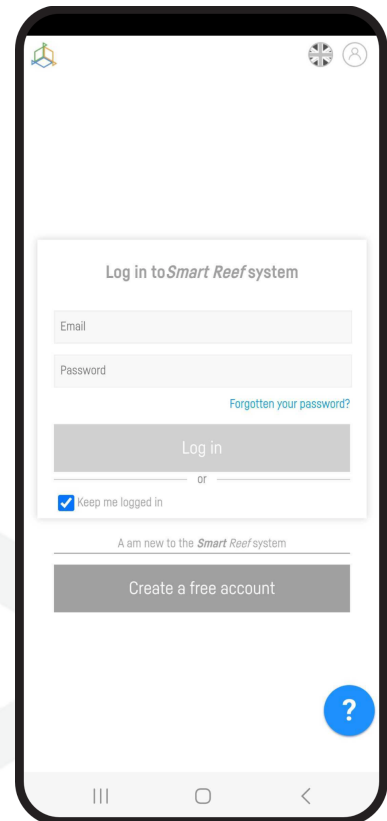
1. open the Smart Reef app on your mobile device and log in.

If you do not already have a Smart Reef account, select **"Create a free account"**.

Enter the email address you want to use in the Smart Reef application as well as the password, and then repeat it.



If you don't want to, log in every time you launch the application, check **"Keep me logged in"**.



2. Create your aquarium in the Smart Reef app.

If you do not have your aquarium yet, use the option "Add an aquarium" in the lower left corner of the screen and provide the necessary information.

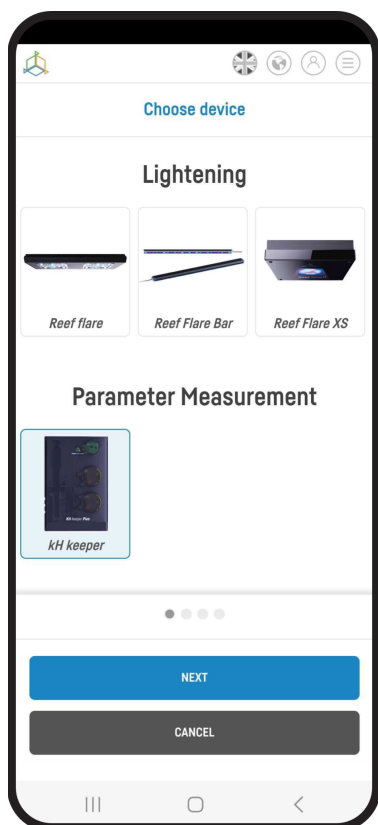
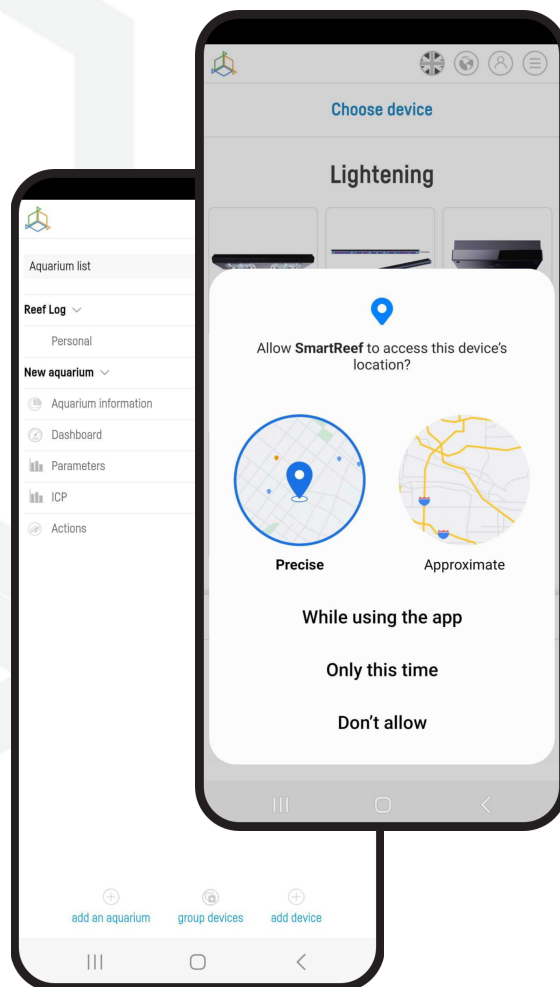


If you already have your aquarium in the Smart Reef app, proceed to the next step.

3. Add the device to your Smart Reef account

From the list of aquariums or the list of devices in the lower right corner of the screen, select **"add device."**

Allow the app to use your exact location when using the app. This allows the app to connect devices to Wi-Fi networks more easily.



Select from the scrolling list the device you want to add to your Smart Reef account and press **"NEXT"**.

4. Set up a Wi-Fi connection to your home router.

Enter the exact Wi-Fi network name of your home router.

Then enter the password for your home router, if required, and press **"NEXT"**.

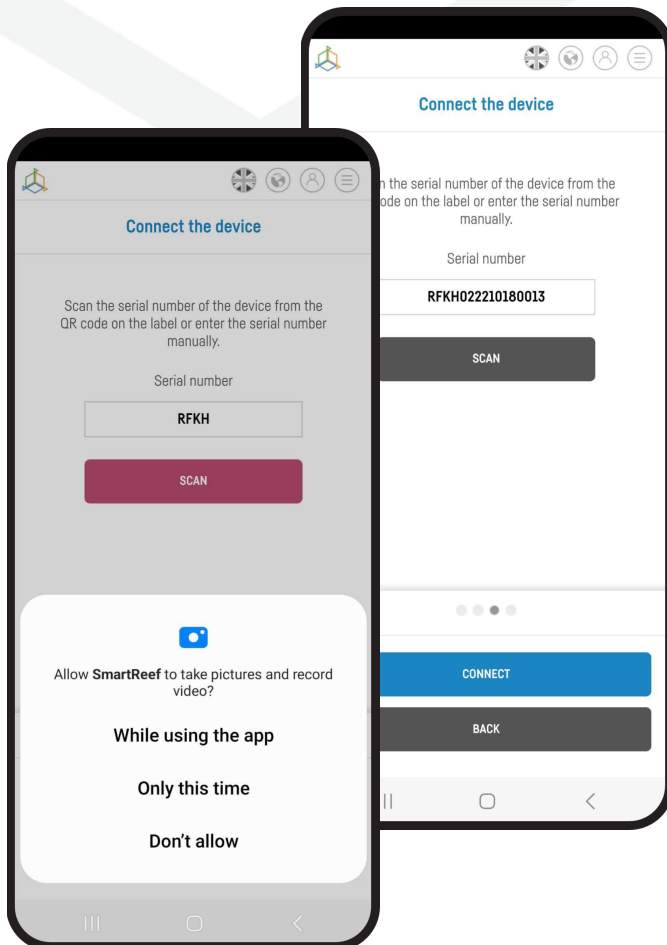
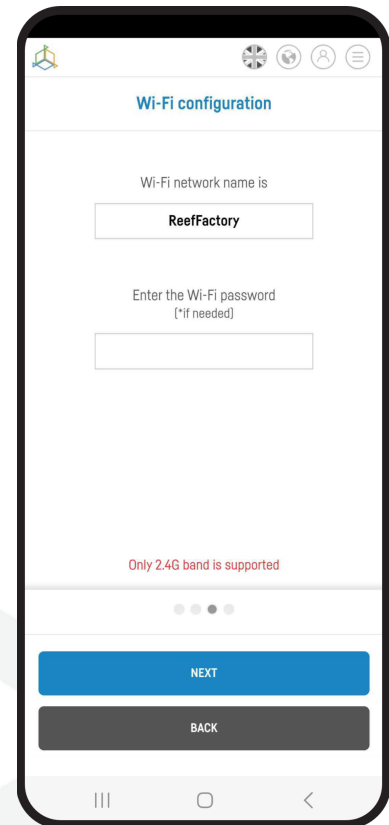


Pay attention to uppercase and lowercase characters.

NOTE: Special characters may not be supported if the name or password for your router contains such characters, change them in your router's settings.



NOTE: Reef Factory devices only support the 2.4 GHz Wi-Fi network band. If your router generates 2.4 GHz and 5 GHz bands, indicate the name of the 2.4 GHz network.



Select **"SCANNING"** to scan the QR code on the device, then allow the Smart Reef app to access the camera while using the app.

After pressing **"SCAN"**, hover your phone's camera over the QR code to scan it, or manually enter the device's serial number and select **"CONNECT"**.

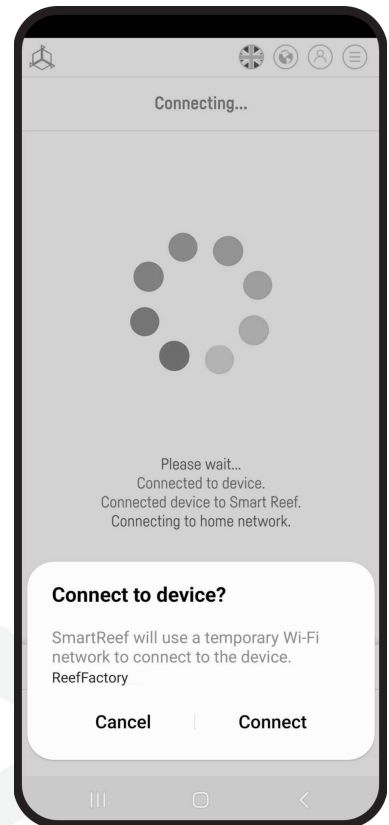


You can find the serial number on the device, on the packaging and as the generated Wi-Fi network.



The serial number starts with RF, an abbreviation of the device name, and a string of digits.

Allow the Smart Reef app, to temporarily connect to set up a Wi-Fi network.

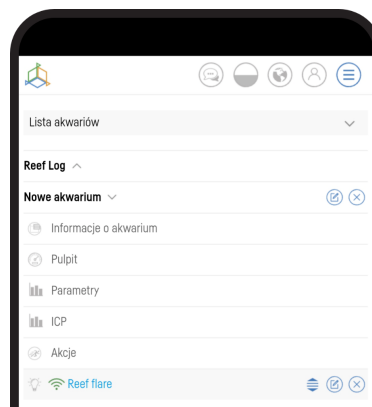


Congratulations! The device has been correctly added to your Smart Reef account and will appear in the list of devices within 60 seconds.

III. Lamp operating modes

The first thing you should do is to set the lamp lighting parameters.

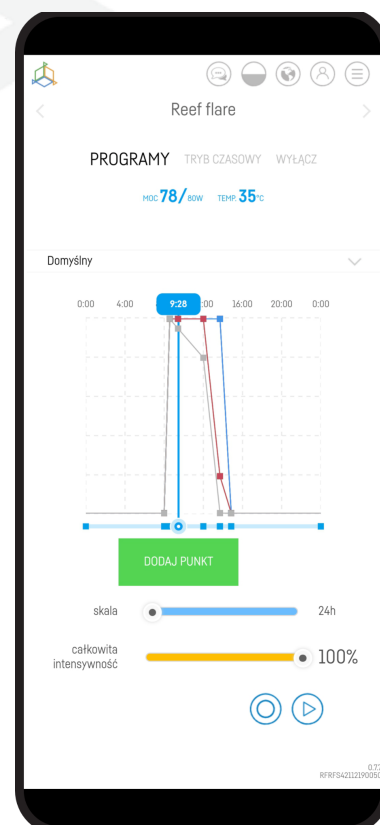
In order to perform the settings, log in to the Smart Reef system in the mobile application or at www.reeffactory.com. Then select the Reef Flare device from your aquarium list by clicking on its name.



By default, the lamp is programmed to emit a range of light in a way that corresponds to the natural mode of day and night. The user can change the parameters using the additional functions described below:

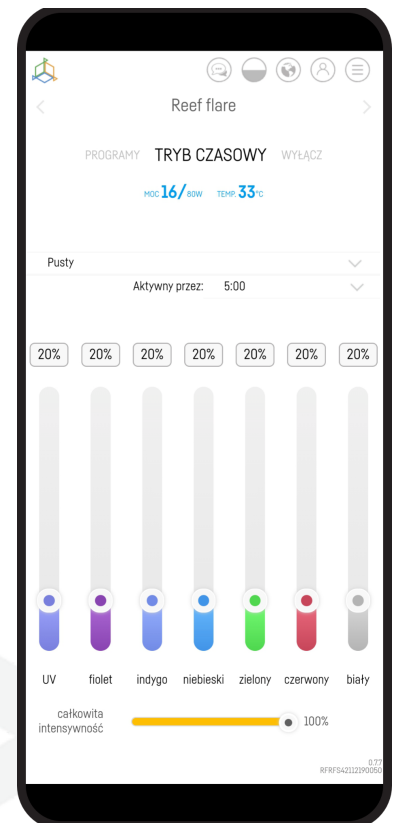
- **PROGRAMS** - allows you to individually set the time of switching on and off the lamp. At the same time, it is possible to adjust the lighting power. After setting the parameters, the lamp system suggests the current lamp power and its operating temperature. After setting the parameters of the lamp operation, remember to save its settings by adding your program (the function is available on the right side in the upper part of the screen). You can create many own lamp operation plans (so-called presets), each of them can be saved and run at any time. In addition, you can export your own settings (e.g. in order to transfer them to another person) or import other settings (e.g. from other users).

More about them in the chapter "**Presets**"



- **TIME MODE** - in this mode you can set the function of the lamp for a specific period time interval in the individual setting mode. After this time, the lamp will return to the PROGRAM mode and will work according to the set schedule. In the right part of the screen there is an active timer that indicates how much time is left until the TIME MODE is turned off. about aquarists and their animals. It allows you to return to the programmed lamp settings after a set time. to the programmed state and remained in continuous operation mode, it would lead to negative health effects of the animals. In the timed mode you can also save your programs (so-called presets), similarly to the PROGRAMS mode. This mode can be used, for example, as a timer.

At any time, you can extend the working time by clicking on the "Active now"



- **OFF** - this is the mode in which the lamp is turned off.

If the lamp temperature increases, the cooling system (fans) will be automatically activated. When the lamp temperature exceeds 62 degrees Celsius, the lamp's light output will be automatically reduced in order to limit its further heating). For safety, when the critical temperature is reached, the lamp will automatically turn off, and after it has cooled down, it will start again. The device generates significant amounts of heat during operation. To ensure proper air circulation, it is necessary to periodically (preferably once a month, but not less frequently than once a quarter) clean the area around the fans and remove accumulated dust. This will allow for more efficient heat dissipation to the environment by the lamp.



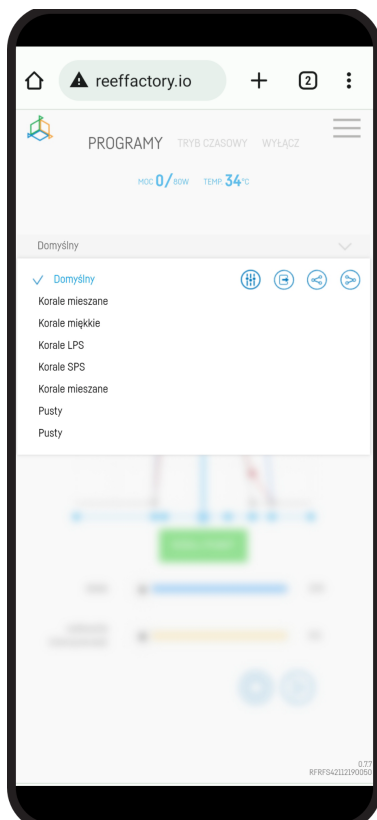
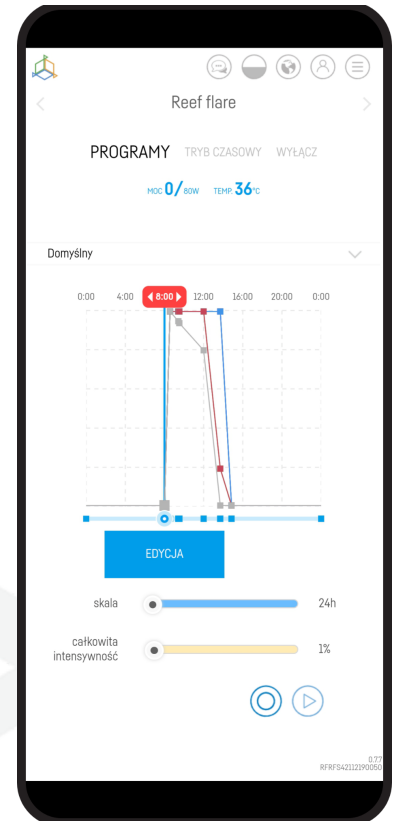
IV. Presets

To enable access to the so-called. "presets", you need to connect to the device via www.reeffactory.com in your device's browser.

This feature is not available in the application.





After connecting, the "PROGRAMS" tab will be displayed.

Then you need to click on the "Presets" tab. It is basically named "Default".



After pressing the tab, on the left side, a list of ready-made presets and places for the next ones, which are called "Empty", will be displayed.

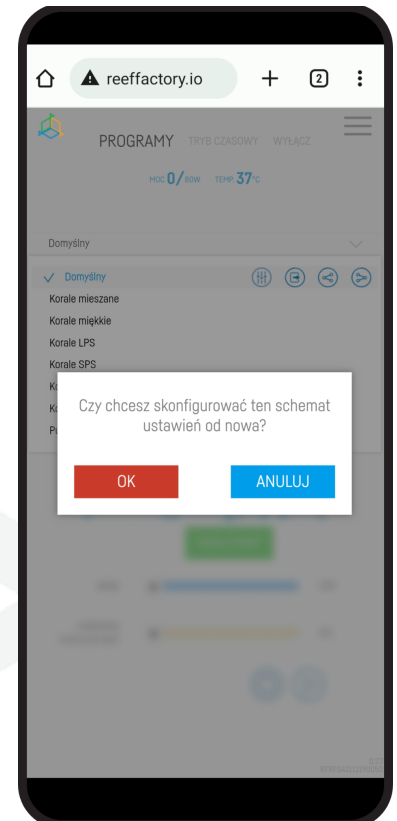
On the right side there are icons that briefly mean:

-  **Configure the settings scheme** - an option that allows you to change the lighting time, coral options and the intensity of the "preset" lighting
-  **Edit** - an option that allows you to change the name of the "preset"
-  **Export** - an option that allows you to export the current preset
-  **Import** - option for uploading an external preset



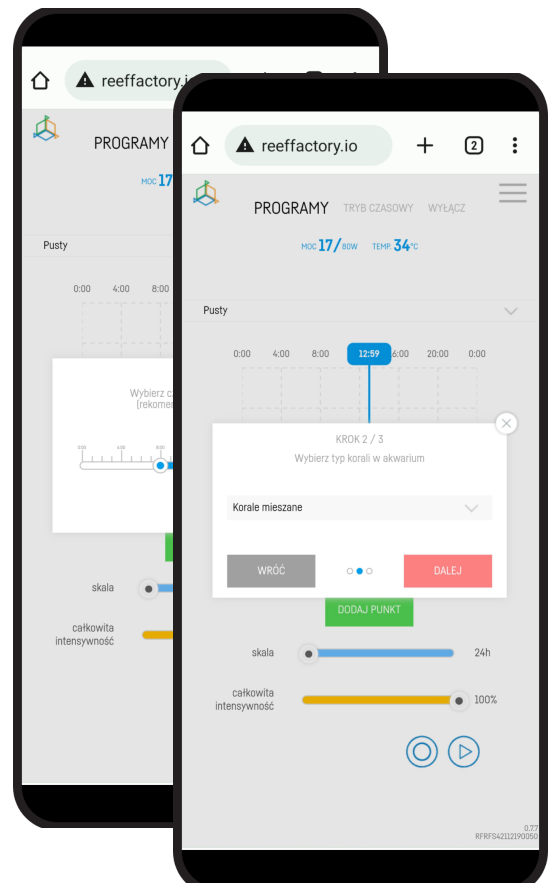
Configure settings scheme

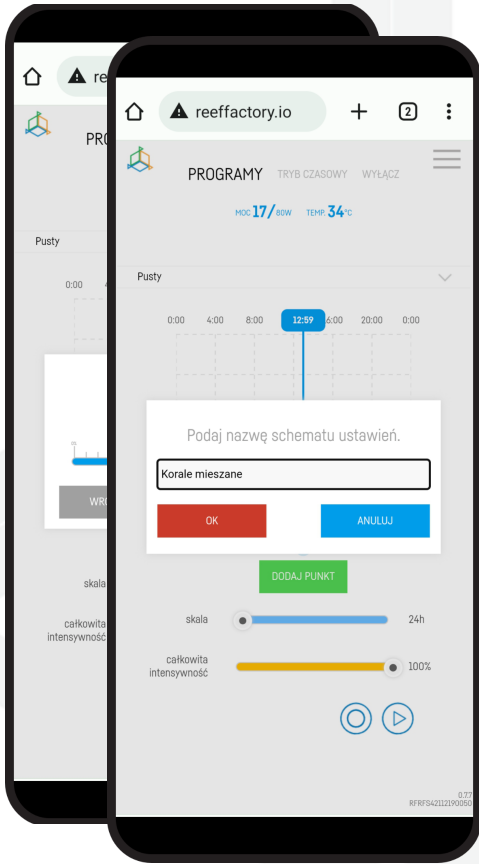
After pressing this option, the menu for editing settings will open. If you want to change the "preset", press the "OK" button.



After that, the following steps will be displayed as **in point 2. in Chapter II. "Device operation configuration"**, i.e.:

- operating hours of the device
- selection of corals that are in the aquarium
- device lighting intensity



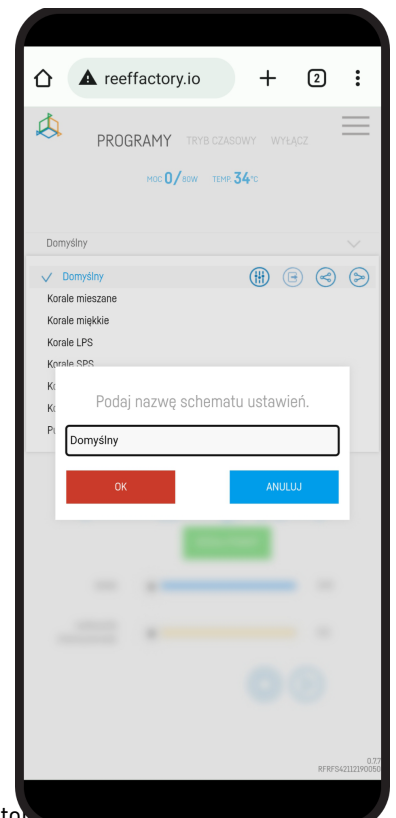


At the end, an option will be displayed to name the setting that has just been edited



Edit

After pressing this option, a window will appear in which you can enter a new name .





Export

After pressing the Export option, the "preset" will be downloaded to your device. The file will be in the "Downloads" folder by default.

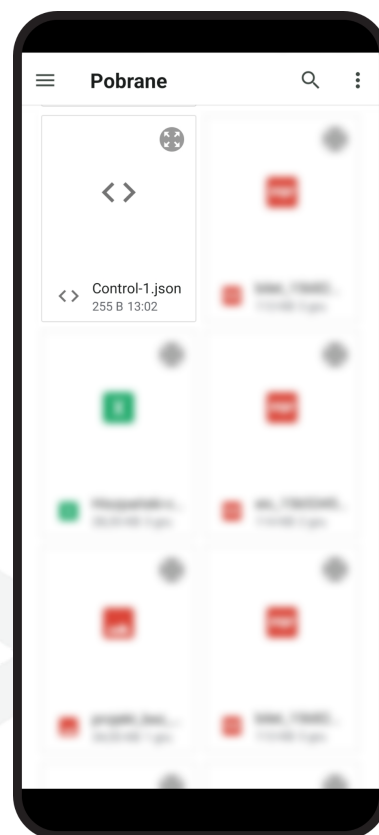


Import

On the other hand, to upload a "preset", click the "Import" icon. After that it will open the folder from your device from which you need to select the file which contains "preset".



Both files must be in the .json

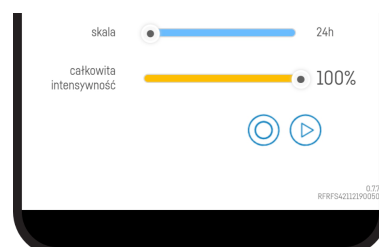



V. Additional functions

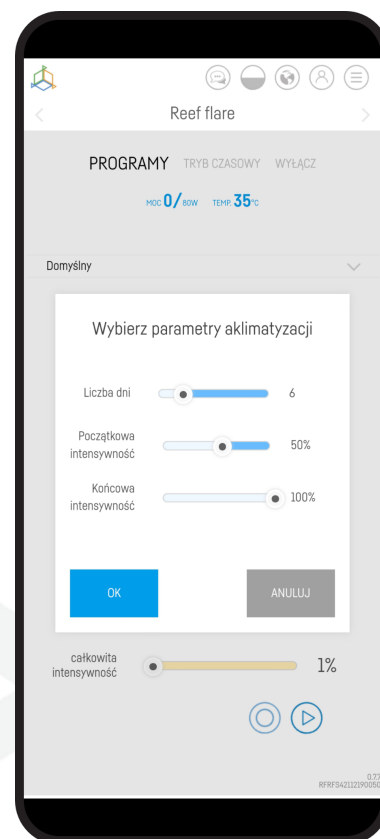
The lamp has additional functions, thanks to which its operation will be even easier for you. Below is their description:


- **SCALE** - this function allows you to expand and narrow the time axis, which allows for more precise setting of lighting parameters in individual time intervals.

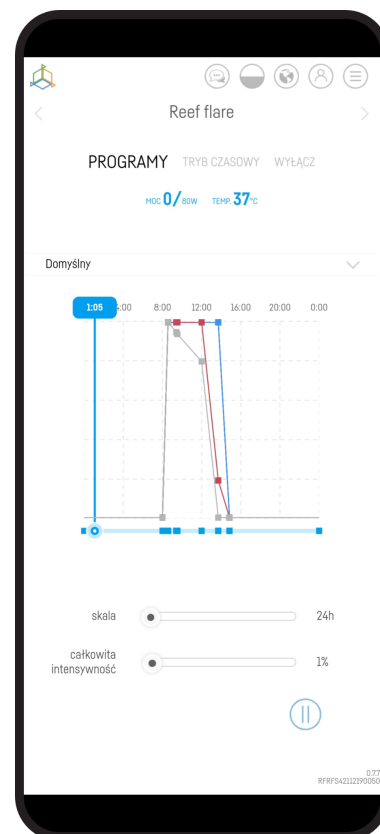
- **TOTAL INTENSITY** - this function allows you to increase and decrease the power of all colors at the same time. Thanks to it, you can brighten or dim the lamp faster without having to adjust individual colors. This function does not change the intensity of individual colors and maintains the color balance that you have set.



- **ACCLIMATIZATION**  - Reef Factory lamps are characterized by a very high intensity of light compared to other products on the market. Turning on the lamp at maximum power, e.g. due to the replacement of an old lamp from another manufacturer, may cause undesirable reactions of animals in your tank. For this purpose, our lamp has an acclimatization function. It allows you to gradually increase the light output by selecting the initial light output (by default 50%), the acclimatization time (lasting from two to thirty days) and the final lamp output (by default 100%)

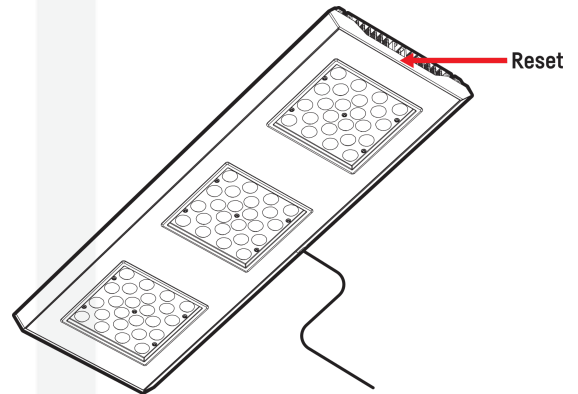


- **DAY SIMULATION**  - if you want to check how it will shine during the whole day, then use the simulation function. After pressing it, the lamp will brighten and dim at an accelerated pace, according to your settings



VI. Resetting the device

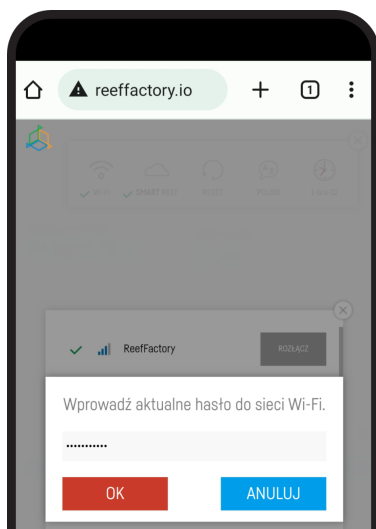
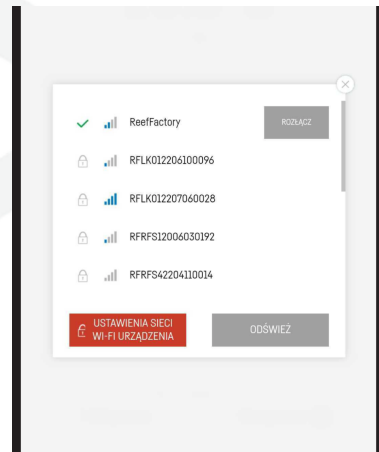
If your device is not working properly, you want to configure it again or you cannot connect to it despite several attempts, you can restore them to factory settings by applying a magnet (included in the set) to the lamp housing in the place marked in the picture



VII. Changing the access password to the device

For security reasons, it is recommended to change the standard password access to the device. The password should be complex enough to prevent you from connecting third party access to the device. Changing the password requires a direct connection to the device's Wi-Fi network as in step 4 of the initial device setup.

Once you are connected to the device, expand the list by clicking on the 3 bars in the upper right corner of the screen, then go to the Wi-Fi network settings.



Enter your current password (default is **reeffactory**) then press "OK".

In the next step, enter a new password and press "OK", then confirm the new password and press "OK".

Congratulations! The password has been changed successfully.

VIII. Updating the device

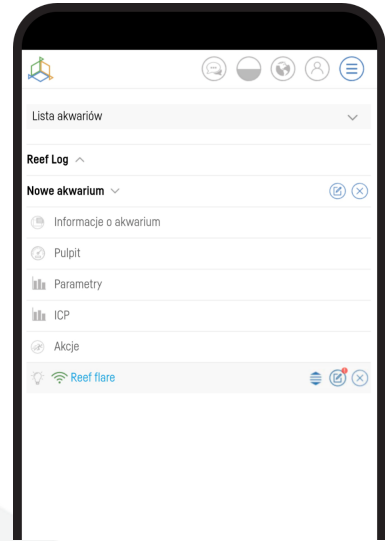
To update, log in to the Smart Reef system in the mobile application or at www.reeffactory.com.

Then press the "Edit" button next to which there is a red indicator informing about the available update.

In the next one you will see a message about the availability of a new version of the software. Press "OK" to update the software.



Note that after some updates, your device may need to be reconfigured or recalibrated.



After pressing the "OK" button, the device will automatically update.



During the update, do not disconnect the device from the power supply. If the update doesn't complete within 30 minutes, reset your device.

IX. Information and warnings



IMPORTANT INFORMATION! The Reef Flare Pro is not completely waterproof. Avoid immersion, splashing and high humidity. Exposure to these factors may cause permanent damage to the device.



IMPORTANT INFORMATION! The device operates under mains voltage - there is a risk of electric shock.



IMPORTANT INFORMATION! PACKAGING

The device was protected during transport by packaging. After unpacking the device, please dispose of the packaging in an environmentally friendly manner. All materials used for packaging are harmless to the environment and 100% recyclable. Packing materials (polyethylene bags, foams, bundle wires, etc.) should be kept away from children during unpacking. There is a risk of swallowing, aspiration and suffocation.



IMPORTANT INFORMATION! WITHDRAWAL FROM OPERATION

The device is marked in accordance with the European Directive 2012/19/EU and the Polish Act on waste electrical and electronic equipment with the symbol of a crossed-out waste container. Such marking informs that after the period of its use, this equipment cannot be placed together with other household waste. The user is obliged to hand it over to the waste electrical and electronic equipment collection centers. The collectors, including local collection points, shops and communal units, create an appropriate system enabling the disposal of this equipment. Proper handling of waste electrical and electronic equipment contributes to avoiding consequences harmful to human health and the natural environment, resulting from the presence of hazardous components and improper storage and processing of such equipment.

1. The manufacturer of the devices described in this manual is:

Reef Factory Sp. z o

. ul. Bydgoska 94

86-032 Niemcz

Poland

Manufacturer's website: www.reeffactory.com

2. The manufacturer declares that the offered products comply with the following standards:

RoHS 2011/65/EU,

RoHS 2015/863,

RED 2014/53/EU.

3. Reef Factory hereby declares that the devices are in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address:

<https://download.reeffactory.com/instructions/thermocontrol/ThermoControlCE.pdf>

4. Devices manufactured by Reef Factory are intended only for home use or stores operating in the aquarium industry , they are not dedicated to industrial applications.

5. The devices are adapted to dispensing liquids that are not hazardous substances, such as corrosive substances, highly concentrated acids or flammable substances. In case of doubt whether a given substance can be dosed using our devices, please contact us.

6. FCC Compliance Statement:

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation. Any changes or modifications not expressly approved by Reef Factory could void the user's authority to operate the RF Module and/or the product that incorporates the RF Module. The user is cautioned to maintain a 20 cm (8 inch) spacing from the product to ensure compliance with FCC regulations.

This device contains RF Module:

Part Number: ESP12F

FCC ID: 2AHMR-ESP12F

X. Warranty conditions

Reef Factory Sp. z o. o. does not warrant uninterrupted or error-free operation of this product. The warranty covers only technical hardware problems that occurred within the warranty period and under normal conditions of use.

1. Devices manufactured by Reef Factory are covered by a warranty for the period of:
 - 24 months for individual and business customers using consumer products.
 - 12 months for a business customer using demo products.
2. The accessories and spare parts for the devices are covered by a 6-month warranty.
3. The proof of the warranty for the product is the bill or invoice of purchase, on which the date of purchase and the name of the device are legibly marked.
4. Technical defects of the product revealed during the warranty period will be removed free of charge as soon as possible, not exceeding 14 days from the date of delivery of the device to the Authorized Service Center.
5. The User has the right to replace the product by the Guarantor with a new one, free from defects, in the event that:
 - Five repairs requiring replacement of components were made during the warranty period, and the product still shows defects, the
 - Authorized Service Center stated in writing that the defect is impossible to remove.
6. The condition for the warranty repair is:
 - Delivery of the product in the original factory packaging or other packaging protecting the device during transport to the Authorized Service Point.
 - Presentation of a copy of the original proof of purchase,
 - Description of the fault that occurs in the device.

7. warranty does not cover:
 - Normal wear and tear of materials and consumables (e.g. consumables such as probes, sensors, pump heads, hoses, etc.),
 - Mechanical damage and defects caused by it,
 - Damage caused by improper use or product storage,
 - Damage resulting from arbitrary repairs and alterations made by the Buyer or unauthorized persons,
 - Damage resulting from natural wear and tear, such as: scratches, dirt, abrasions, erasure of inscriptions, etc.
8. Employees of the Authorized Service Center are authorized to assess the causes of product defects.
9. The repair period may be extended in the event of disruptions caused by force majeure circumstances such as natural disasters, civil unrest, etc.
10. The warranty entitlements do not include the buyer's right to claim lost profits or losses incurred due to product defects.
11. The warranty period is extended by the time the device is in an authorized service center.
12. In matters not covered by the terms of this guarantee, the relevant provisions of the Civil Code shall apply.
13. The warranty does not exclude, limit or suspend the buyer's rights under the provisions on warranty for defects in the sold item.
14. A repaired or replaced product may contain new or refurbished components.
15. Please be advised that the repair or replacement of a product involves a significant risk of losing data stored in a given product (especially related to its configuration and history of measurements). Therefore, the Customer accepts that during the repair or replacement of the product, the data may be deleted.
16. The Guarantor is not responsible for the lack of full compatibility (compatibility) of the product in operation with accessories or devices from other manufacturers used by the Customer. In particular, this applies to network devices whose configuration may limit the ability to connect and exchange data between the device and the server.
17. The customer delivers the device for repair to the Authorized Service Center at his own expense, while the service, after performing the warranty repair, sends the device back to the customer at his own expense.

18. The Authorized Service Point may repair/reconstruct the device at the Customer's expense (post-warranty repair), however, the Customer must accept this cost before repairing it.
19. The Authorized Service Point may refuse to repair or replace a device that, after testing in service conditions, does not show any defects for the product in terms of its use (confirmation of the device's full efficiency).
20. The Authorized Service Center may refuse to repair or replace a device that has a damaged or illegible serial number label.
21. The Guarantor is not liable for incidental or consequential damages caused by breach of warranty or conditions or any other theory of law, including but not limited to loss of usability; loss of income; loss of actual and perceived profits (including loss of profits from contracts); loss of business; loss of opportunities; impairment of the company's value; loss of reputation.
22. The Guarantor is not liable for direct or indirect damages caused as a result of a defect or failure of the device and for damages arising during the period of repairs or replacement of the device related to the inability to use the device.

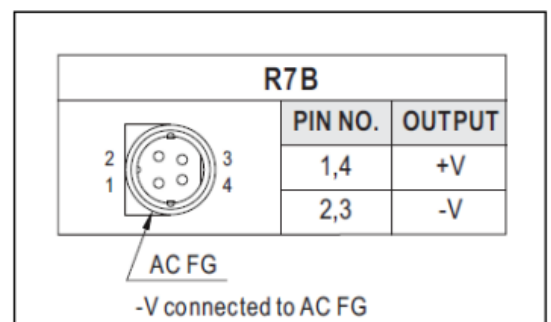
XI. Dedicated power supply

1. Be sure to connect the power supply to the device first, and then the power supply.
2. The power supply is supplied with mains voltage. There is a risk of electric shock. Please do not remove the power supply housing yourself!
3. There is a risk of fire or electric shock. Ventilation openings of the power supply should be left uncovered for natural air circulation, protected against foreign objects flooded with liquid.
4. Using the wrong DC plug or forcing the D0 plug into an electronic device may cause damage to the device or its failure.
5. Desktop power supplies should be placed on a stable surface. Its fall may cause permanent damage.
6. Please do not place the power supplies in places with high humidity or near water.
7. Please do not place the power adapters in places with high ambient temperatures or near a source of heat or fire.
8. The output current and output power must not exceed the rated values given in the specifications.
9. Disconnect the device from the power supply before cleaning. Do not use liquid cleaners or aerosol cleaners. Use only a damp cloth for wiping.
10. If you wish to dispose of this product, please contact your local, qualified recycler. Do not dispose of the power adapter in the mixed waste.

The table below presents a list of power supplies that are dedicated to our devices, along with the model and name of the device to which they can be used.

model PSU	parameters PSU	specification 26V	List of compatible devices
G8T120A24R7B	Desktop power supply 5A DC	Input voltage: 85V - 264V AC Operating frequency: 47Hz - 63Hz. Maximum input current 1.4A Output voltage: 24V DC [23.8V - 25.2V] Output current: 5A max Input connector type: R7B 4 PIN	Reef Flare Pro S
G8T220A24R7B	Desktop power supply 26V 9.2A DC	Input voltage: 86-264V AC Operating frequency: 67/63Hz Maximum input current Output voltage: 24V DC (23.8V - 25.2V) Output current: 9.2A max Input connector type: R7B 4 PIN	Reef Flare Pro M
G8T280A24R78	Desktop power supply 24V 1.67 DC	Input voltage: 85V - 264V AC Operating frequency: 47Hz - 63Hz Maximum input current 2.0A Output voltage: 24V DC [23.8V - 25.2V] Output current: 1.67A max Input connector type: R7BF 4 PIN	Reef Flare Pro L

R7B and R7BF connector description:



XII. Technical information

Device name	Reef Flare Pro S	Reef Flare Pro M	Reef Flare Pro L
Device model	RFRFS4E/F	RFRFM4E/F	RFRFL4E/F
Maximum power consumption	80 W	160 W	240 W
Power supply	100V-230V AC 50-60Hz	100V-230V AC 50-60Hz	230V AC 50-60Hz
Dimensions (mm)	162x162x28	338x162x28	475x162x28
Weight	2020 g	3230 g	4250 g

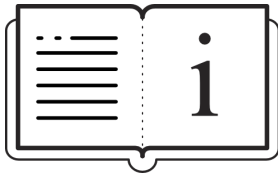
The device is manufactured with different versions of power cables and power sockets, depending on the country in which it will be used.



Need our help? - support@reeffactory.com

XIII. Knowledge base and technical support

Need our help?



Check out our knowledge base!

[Help Center - Jira Service Management](#)

Do you have more questions?



Use the form in the link above

or write us an email - support@reeffactory.com