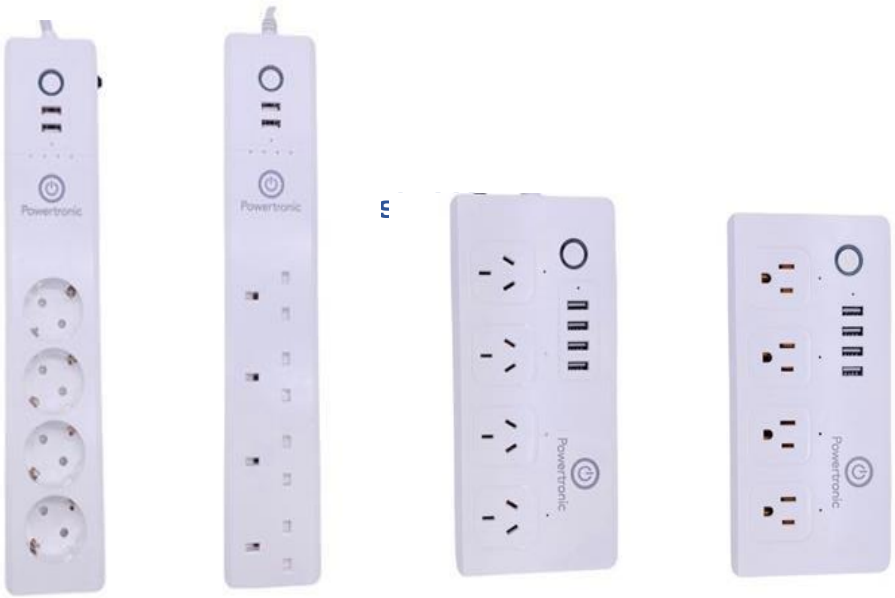
FOCUSTRONIC

SETTING NEW STANDARDS

Water Stability Through True Integration & Automation



Powertronic

User Manual English V1

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Focustronic Limited Warranty

Focustronic, warrants ***to the original purchaser*** only that the Focustronic products ("Product(s)") sold will be free from defects in material and workmanship under normal use for a period of ***one (1)*** year from the date of original purchase, unless said Products are repaired or refurbished in which case the time period shall be thirty (30) days from the date of the repair or purchase (the "Warranty Period"). This limited warranty applies only to Products that are:-

(i) **Properly registered** through the registration process.
(www.focustronic.com "Blue registration Tab" right hand side)

(ii) **Installed, operated, maintained, and used properly and consistent with the product manual.** No representation or warranty by any Focustronic, dealer, agent representative, employee, or any other individual or entity acting or purporting to act on behalf of Focustronic, shall be binding upon Focustronic other than as expressly set forth herein. ***This limited warranty applies only to the original purchaser in which the Product was purchased from a retailer authorized by Focustronic to sell the Product and is not transferable from the original consumer purchaser***. In the event of a limited warranty claim, proof of purchase will be required.

(iii) Focustronic 's limited warranty shall not apply:
To any damaged Product that has been subjected to accident, misuse, neglect, alteration, acts of God, improper handling, improper transport, improper storage, improper use or application, improper installation, improper testing or unauthorised repair, operation outside recommended parameters (as described in the applicable product manual),
Damage from saltwater spray, heat, power fluctuation or failure, subjection to abnormal physical or electrical stress, use of incompatible or unauthorised products, non-approved power supplies/connections, or similar circumstances,
To any Product where any non-water submersible product has been exposed to water,
To cosmetic problems or defects that result from normal wear and tear under ordinary use, and do not affect the performance or use of the product.

(iv) Focustronic 's limited warranty applies only to a product that is manufactured by or for Focustronic and identified by the Focustronic or Focustronic trade name or product identification logo affixed to the product. If you notice a problem with your Focustronic Product, do not attempt to repair it yourself. Any attempts at self-repair shall void this limited warranty.

For full warranty information concerning Focustronic Products



NOTE: FOR THE ONE (1) YEAR WARRANTY TO BECOME EFFECTIVE, THE PRODUCT TO WHICH THIS LIMITED WARRANTY APPLIES MUST BE REGISTERED WITHIN THIRTY (30) DAYS OF PURCHASE.
PRESS *"CLICK HERE"* TO REGISTER NOW!!





Safety information Be careful when handling the Powertronic. Remember like all Power units they must be is a dry and well-ventilated areas. Do not attempt to put it near water source where splashing may occur. Focustronic has no responsibility of any kind of injury or damage related to above mentioned.

Support Information

If there are any issues with the Powertronic please go to www.focustronic.com and log a support ticket. This is the only way to get help for Warranty issues.



There is also a great Knowledge Base draw on and search for answers at www.focustronic.com/support



You can also join the *"Official owners Group"* on Facebook called *"The Official Focustronic's Owners Club"* to ask questions and queries that other users can and will answer. Focustronic monitor this page so the information will be correct. There is no such thing as a dumb question because we have all been there.
Please note: there are a couple of other groups on face book but they are not associated with Focustronic

What's in the box

- Powertronic x 1
- Quick Setup Guide x 1

Specification

- Input: 110-240VAC
- Output (Sockets): 16A
- Output (USB): 2.1A
- Radio Frequency: WiFi 2.4GHz



Pic shows Units for different Countries.

Feature Highlights:

- WiFi controllable sockets
- 24-hour schedules with 30 minute intervals
- Automation based on real time live data from Alkatronic and/or Mastertronic • Intuitive app (Focustronic All in One)

Introduction

Thank you for choosing the Powertronic for your reef system. Powertronic is a specialized WiFi controlled power socket to work with the Focustronic product range. It allows simple and straight forward control, based on tested parameters.

Basic Philosophy

Reefing today is so different than in the past, especially when we are referring to reefing automation. In the past, reef automation is very limited because users do not have the live data of tested parameters to trigger the needed actions. With our automatic tester range such as Alkatronic and Mastertronic, we can get over 10 parameters in real time! Each parameter can trigger more than 1 action such as an extra dose via Dosetronic or triggering power on or off for a socket on the Powertronic. This allows real time automated actions without user interaction on day-to-day activities while keeping the needed parameters in check. With the Focustronic All in One app, the setup cannot be easier! Below is an example of what can be done.

Case 1:

- Mastertronic measures the dKH and is over the high reference level and the system is running a calcium reactor. The user has set a rule that when dKH is over 8.5 dKH, the socket 1 on the Powertronic will be switched off. This is the feed pump of the calcium reactor. When the dKH falls back within range, the socket will be switch back on.

Case 2:

- One of the features of the Powertronic is to set a schedule based on time of day with 30min intervals. Based on the above case of a calcium reactor setup, there will be a daily swing of dKH during the 24 hours because the reactor output is kept at a constant while the dKH uptake by the corals may vary during lights on and off period. During the night, the Powertronic can reduce the swing by having an on/off schedule to reduce the night swing.

Case 3:

- Nutrients play a big role in reef keeping and a protein skimmer is the most common way for exporting excess nutrients. Similar to the above cases, the skimmer can be set with a schedule and also be powered off for a set period of time (i.e. 1 hour) when NO3 or PO4 is reading too LOW. This allows nutrients to build up again and reduce the corals being starved which is likely to cause bleaching or STN.

Setup Procedures

Safety Precautions



A. Do not handle or install the device if/when your hands are wet.
B. The unit is not designed to be used in water.
C. Apply caution when installing over your aquarium and do not allow water to get onto or inside the unit.
D. Unit must be placed in dry and well-ventilated areas. Do not place in area where water may splash on it.
E. Follow the installation instruction carefully. If in any doubt, contact official support before proceeding.
F. To reduce risk of electric shock or fire, do not expose this device to water, moisture, dripping or splashing.

Placement

Powertronic must be placed in dry and well-ventilated areas. Do not attempt to put it near water source where splashing may occur.



IMPORTANT READ THIS FIRST **Do NOT power on the Powertronic yet!**

If this is your first Focustronic product you will not have an account yet, *start with downloading and creating an account on the Focustronic APP.*

(iOS) App Store (Android). Play Store

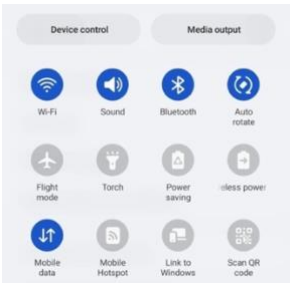
Connect to WIFI

The next step is to establish a Wi-Fi connection between the Focustronic App on a phone/tablet and the Powertronic The app is running on the internet/Wi-Fi.

Android Connection

Power on the Powertonic and make sure the All-in-one APP is logged in – but APP "closed"(*See troubleshooting if you have not done this before)

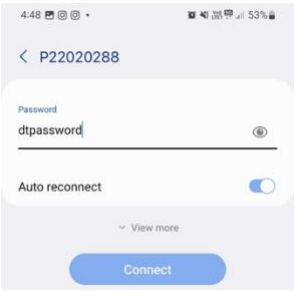
a. Turn off 4G/ mobile data on the phone
.



b. Open Wi-Fi settings on your phone/tablet and wait for Wi-Fi to find Dosetronic SSID
c. Dosetronic will show up in "other networks" with its serial number "***Pxxxxxxxx***"

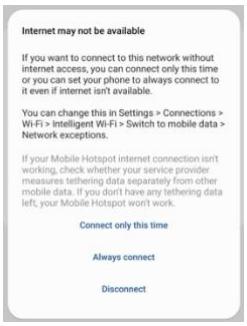


d. Connect to Dosetronic WI-FI (Pxxxxxxxx) and use the password: ***ptpassword. "Save"***





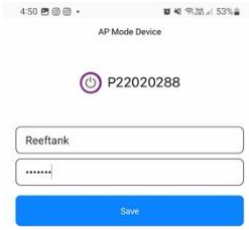
e. It may ask you if you want to stay connected despite no internet access. Or "Connect only this time" Chose this.
.



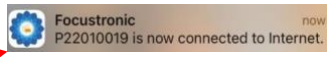
f. Open the App you will see the logo and a spinning wheel.



g. Now the SSID Page pops up and is asking you to connect to your home router.

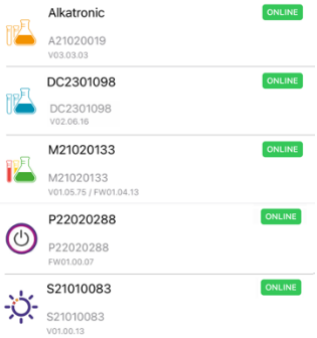


h. Enter your 2.4GHZ router's SSID and password (Wifi name and password) -**Press Save** wait for confirmation then **Close** the app again.
Your Dosetronic is now connecting to your router.



i. Powertronic will now do an internal reboot and you will get an notificaiton once it is connected to the internet

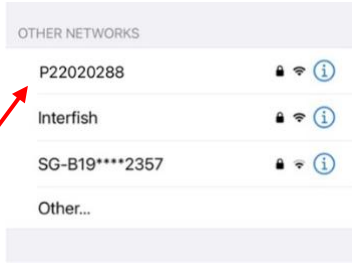
Under **"Tank List"** in the Focustronic App Please check under **"default"** "device list". Please wait till you get a notification. Check that the Powertonic is online.
(You may have to wait up to 5 min)
If you don't get a connection please repeat above.



Apple Connection

Power on the Powertonic and make sure the All-in-one APP is logged in – but APP "closed"(*See troubleshooting if you have not done this before)

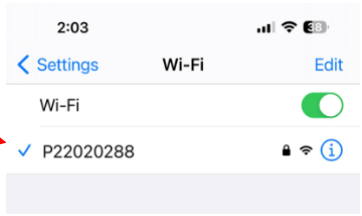
a. Power on the Powertonic and make sure the All in one APP is logged in – but APP "closed" (*See troubleshooting if you have not done this before)



b. Open Wi-Fi settings on your phone/tablet and wait for Wi-Fi to find Powertonic SSID Powertonic will show up in "**other networks**" with its serial number" **P220xxxxx***"*



c. Connect to Powertonic WI-FI **(P220xxxxx)** and use the password: ***ptpassword. "Press Join"***
Note: It can say "no internet" under the DC SSID



d. Open the Focustronic APP and you will see **the logo** and a **spinning wheel.**



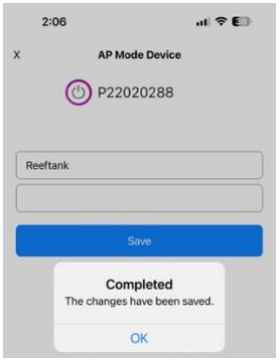
e. Wait for the SSID and Password screen, should pop up!
(If not, the app was not Closed and repeat)

f. Now it's asking you to connect to your home router. Enter your 2.4GHZ router's SSID only and Password ***"Press Save"***



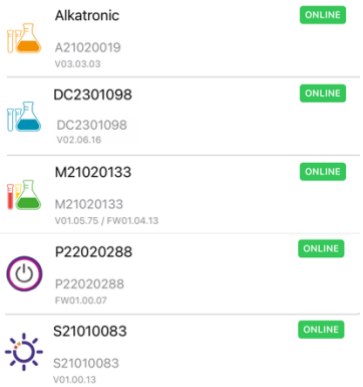
g. Your Powertonic is now connecting to your router.

h. After it says Completed closed the app and please do and Manuel Reboot. *Power off for 30sec and power on.*



i. Under **"Tank List"** in the All in one app Please check under **"default"** "device list" Please wait till you get a notification. Check that the Powertonic is online.
(You may have to wait up to 10 min)

If you don't get a connection, please repeat above.



Note: You can have more than 1 Powertronic per tank and each Powertronic can carry its own settings. The Powertronic also does not appear on the cloud interface list of units.

App - Features

Settings

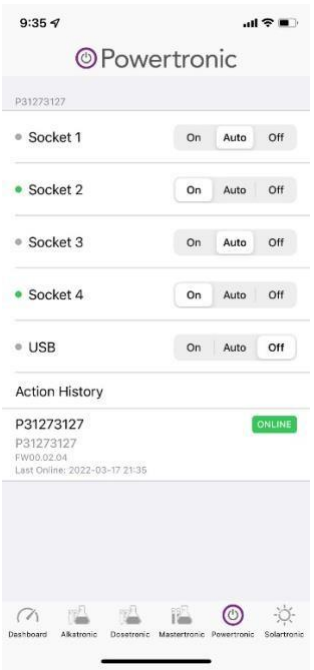
ON – when the socket is manually set to ON, it will be on continuously, disregarding any settings or rules.

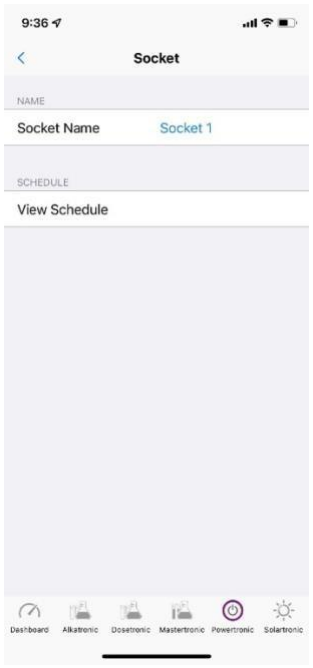
Off – when the socket is manually set to OFF, it will be off continuously any settings or rules.

Auto – in this setting, the unit is working based on the defined schedule (24 hours) and will also accept rules that is set from Alkatronic and/or Mastertronic.

Powertronic / Socket / Schedule

On this page, you will have an overview of the current status of all the sockets and USB outputs. By tapping the socket name, you will enter the settings menu of the selected socket. The socket name can be changed to match what is being plugged into it for easy reference. When viewing the schedule, you can select the time slots for switching on/off with 30 minutes interval. In the below picture, the socket 1 will turn on during 15:00-15:30 and 16:00-16:30 while all other time slots are in the off state.







Automation with Mastertronic/Alkatronic Test Results

One of the main features for the Powertronic is the ability to set automation rules based on the test results of Mastertronic and/or Alkatronic. In the below example, the socket 1 will be turned on/off based on the Nitrate result from Mastertronic. In order for the Powertronic to know which Mastertronic to follow, all is needed is to make sure both devices (Powertronic and Mastertronic) are in the same tank within the app. You can also check the settings in Mastertronic showing the correct SN of the Powertronic.





Case Study (Socket 1 is running a protein skimmer)

- The socket 1 will be following the schedule which is already set within the Powertronic page.
- The condition is that when NO3 is lower than 1.00 mg/L, t he socket will be turned OFF for 3 hours. This will reduce the risk of starving the corals with too low nutrients and allow nutrients to build up during the period.
- When NO3 is above 5.00 mg/L, the socket will remain unchanged and follow the preset schedule in the schedule page

User can set more than 1 parameter to each socket, but the condition of the socket will be based on the last triggered action. This feature allows the user to control more than 1 parameter for that equipment and in the above case, the protein skimmer.

Other Case Study applications for your Powertronic

There are a lot of different cases that you can use the Powertronic's amazing abilities for. This is based on direct test results from either the Mastertronic or Alkatronic individual results to adjust instantly other pieces of equipment on your tank. This is true automation based on test results.

E.G

*Calcium Reactor feed or effluent Pump

*Phosphate Reactor feed pump

*Refugium lights

*Algae Scrubber lights

*Sulphur Reactor feed pump

*Kalkwasser Reactor feed pump

*3rd party Doses

*Algae Reactors lights

*Carborne Reactor feed pump

*Fish feeder

LED Status / Manual On / Manual Off

There is a LED status indicator on the manual button on the Powertronic. User can trigger an ALL ON or ALL OFF command by pushing the button. On the third press, the sockets will follow back the schedule settings.

- Manual All OFF (**Blinking Blue** / **Red)**
- Manual All ON (**Solid Blue** / **Red**)
- Schedule Settings, WiFi Connected (**Solid Blue**)
- WiFi not connected (**Blinking Red**)
- AP Mode for phone direct WiFi connection (**Blinking Blue**)

FAQ

Q1: what state will the sockets be after a reboot?

A1: if the unit is in schedule settings (solid blue), it would resume the previous state.

Q2: Which socket is #1? (indicated with a red dot in below pictures)

A2: For the longer Powertronics (UK and Europe plugs), it is the socket farthest one from the LED status light.

A2: For the rectangular Powertronics (USA and Australia), it is the socket below the LED status light.






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Dosetronic
Mastertronic
Solartronic
Powertronic
Filtertronic