# P1 Dosing Pump Quick start guide







## • P1 Dosing Pump Unit • Power Adapter

- Graduated Cylinder
- Transparent PVC Tubing
- Power Link Cable

### SPECIFICATIONS

Dosing Channel: 1 Dosing Times: 12 times / day up to once / 31 days Fluid Volume: 0.1ml - 6000ml Accuracy: <+/-2% Pump Life: >2000 hours

# THANK YOU

Thank you for purchasing this D-D The Aquarium Solution product. Please be sure to visit our website for more details, tips and installation FAQs on our product **www.theaquariumsolution.com** 

# 12 MONTH LIMITED WARRANTY

D-D The Aquarium Solution warrants to the original purchaser only that the P1 Dosing Pump will be free from defects in material and workmanship under normal use for a period of one year provided that the product is installed and used properly and consistent with the product manual. This limited warranty applies only to the original purchaser and is not transferable from the original consumer purchaser. In the event of a limited warranty claim, proof of purchase will be required.

# INSTALLATION

The P1 Dosing Pump is the latest state of the art controllable dosing system from D-D The Aquarium Solution. The pump can be easily controlled using an app to form a direct wireless connection using the Bluetooth functionality of your mobile device.

1. Attach the dosing pump head to the main unit by lining up the centre of the dosing head onto the shaft on the front of P1 unit and push the head in until it snaps into place. You can install the head with the tubing up, down, left or right to suit your particular setup.



2. Choose a position for your P1 with easy access; it should be close to an electrical power source, close to sump or location where the dosing tubing will be installed and also have easy access to dosing containers that will hold the solutions. The unit should also be installed higher than the sump but not directly above water - this is to prevent siphoning.

3. Connect the tubing by attaching the included PVC clear tubing to the unions already attached to the doser head and then we are ready to configure the P1. The intake is the right most tube and the output to the left when installed facing downwards.

## OPERATION

The P1 Pump is a custom version of the Kamoer X1 Pump made specifically for D-D The Aquarium Solution and uses the standard **'X1 Pump'** App.

1. Download and install the '**X1 Pump**' App from the Google Play or Apple App Store and make sure that Bluetooth is enabled on your mobile device.





2. Start the app and click on the upper left-hand corner '**Plus Symbo**' to add a new device. Tap on the Bluetooth symbol to let the app scan the surrounding area and find your P1 pump. All done! Your P1 device is now connected.

**3**. Name your pump by tapping on the three dots to the right of the pump and select '**Set Nickname**'. Type in your new name and tap '**Confirm**'.



If you have multiple P1 Pumps, you can daisy-chain them together and easily assign them to different groups to make things a little more organised. To create or assign an P1 pump to a group, just tap on the three dots to the right of the P1 pump and tap on '**Group Select**'. Type in or select your already created group name. This feature is great if you have multiple systems with multiple P1 Pumps.

# CALIBRATION

1. After connecting to the P1 Pump, the next step in the process is to calibrate it. Tap on the pump name to load the configuration page. Now tap on 'Settings' located on the upper right-hand corner. Now select 'Flow Calibration'.

2. Prime the line to purge out any excess air. If air is still in the line the calibration will be inaccurate. Once you see all air has been purged from the line and water starts to pour out, tap on '**Stop**'.

3. Enter the volume of liquid in the measuring cylinder and tap on 'Complete'. For increased accuracy, we recommend that you calibrate the P1 pump every 4-6 weeks.

#### DOSING METHODS

The P1 has two methods of operation, 'Manual' for single one-time dosing and 'Planned' for a custom 12 stage, 24 hour dosing schedule.



#### MANUAL ADD

To dose manually, select 'Manual Add' from the. 'Main' screen. Tap the centre of the circle to enter your volume amount in millilitres. Tap on 'Confirm' and then tap on 'Start adding'. The screen will show you a real-time countdown as the solution is being added.

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#### PLANNED ADD

**Planned Add** allows you to create a more intricate schedule of up to 12 different time points in a 24 hour period or to automate a single dosing on a daily basis at the same time each day.

To create a new plan, just tap on the pump name you wish to configure and from the top menu, select '**Plan Add**'. At the top of the screen you will see the container section. This is a really handy section that allows you to approximate how much solution there is left in the container based on your current dosing schedule. In order for this to work correctly, you must enter the volume of your container to the best of your ability.

The next section is the cycle. Here you are able to determine if you want to dose on a daily basis or as infrequent as once every 31 days.

You can also set the pump to dose on a weekly basis which allows you to then select which days of the week you want to dose.

To select the days of the week you want to dose, just tap on the day until a blue check mark is added to the right side.

The final and bottom section is your actual schedule. Here you can tell the doser to administer a daily total volume and spread it evenly 12 times in a day.

To create a repeating schedule, tap on the '**Plus Symbol**' at the bottom right of the app.

For an automated single dose regiment that repeats itself daily, select 'Add Plan'. To create a more intricate schedule that divides a total volume into multiple equal amounts, then select 'Quick Plan'.

The Anti-chemical interference setting allows you have another plan or pump dosing at the same time, one pump will delay administering the chemical by 5 minutes to ensure that the two chemicals do not mix.

Once you have configured all settings, tap on '**Save**' at the upper right hand corner. The main screen will now show your entire dosing schedule and is now set to begin automatically dosing.



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