

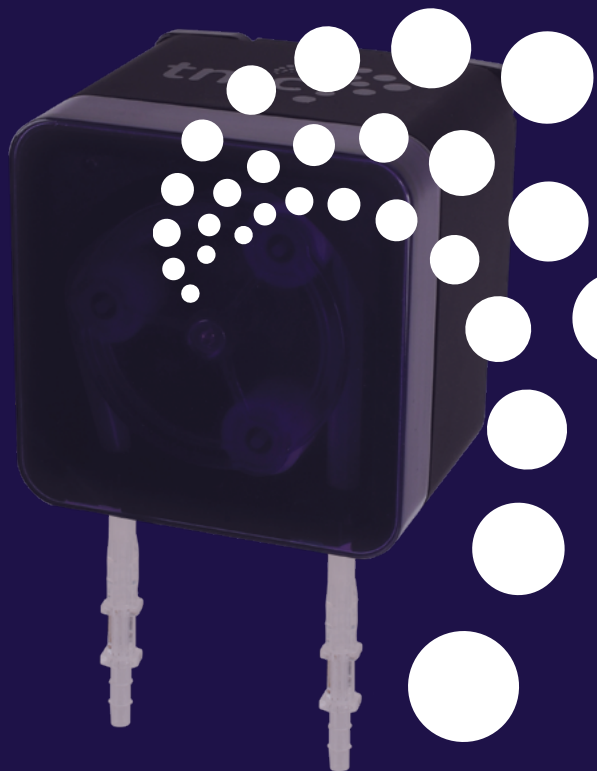


# Reef AccuDose

## Instructions

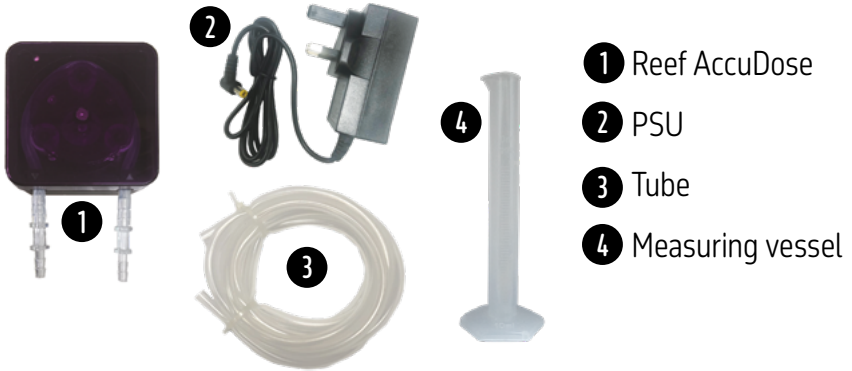


-  Instruções
-  Instrucciones
-  Instructies
-  Istruzioni

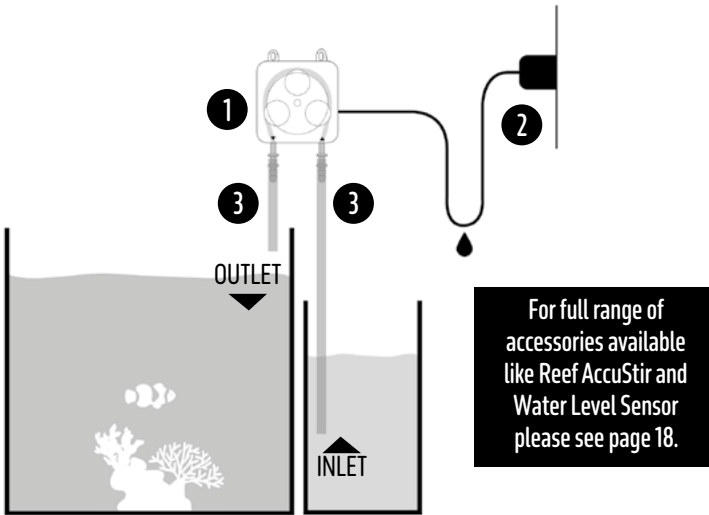




## PARTS LIST



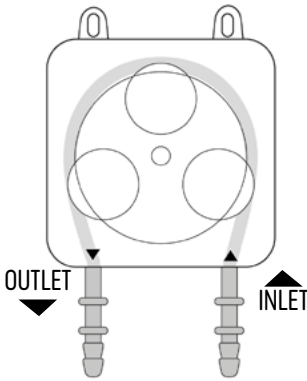
## SET UP



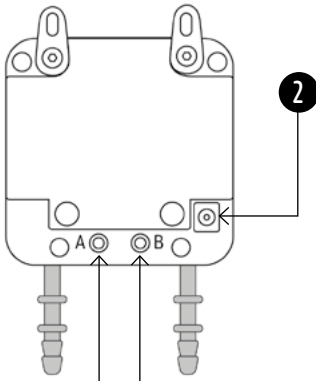
Code	9280
Model	Reef AccuDose
Accuracy	± 1% or less depending on dosing volume
Dose Rate	0.1-105ml/min
Daily Volume	0.1 - 2000ml/day
PSU Voltage	100-240V 50/60Hz
Tubing connection	4mm ID, 6mm OD
Dimensions mm	72 x 67 x 72mm

## CONNECTIONS

FRONT VIEW



BACK VIEW



Accessory port A: Stirrer  
Water level sensor

Accessory port B: Water level sensor ONLY  
as extra safety

### IMPORTANT

Reef AccuStir and Water Level Sensor cannot be used together

Ensure all connections are tightly secured and that the Reef AccuDose unit is installed correctly before operating

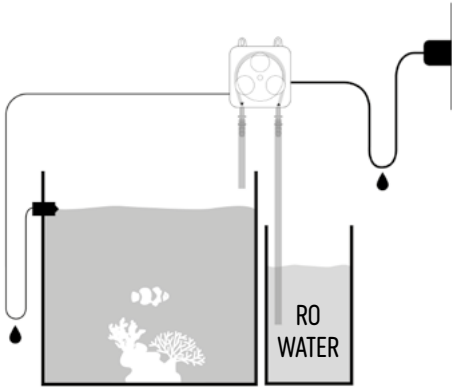
Failure to do so could result in leaks or operating problems

## PARTS REQUIRED FOR INSTALLATION AND OPERATION

(NOT SUPPLIED)

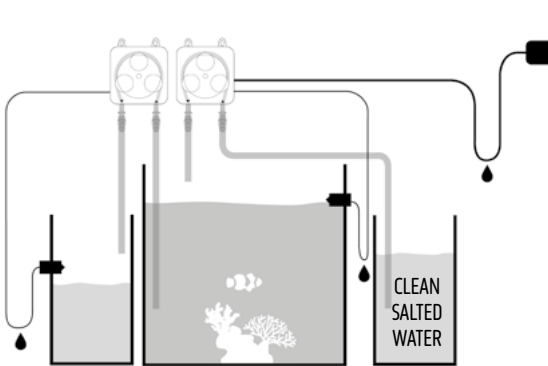
- Residual current device (RCD) with a rated residual operating current not exceeding 30mA.
- Additional silicone hosing and hosing connectors (depending on individual installation requirements).
- Scissors for cutting the silicone hosing to the required length.

## SET UP FOR AUTO TOP UP



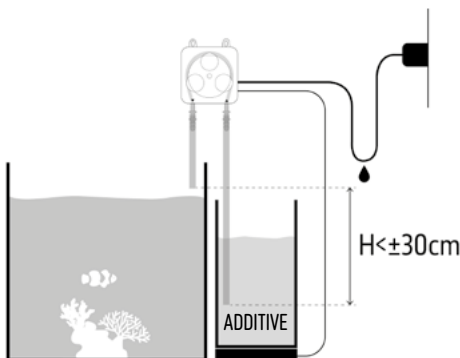
Plug Water Level Sensor into accessory port A and/or B

## SET UP FOR AUTO WATER CHANGE



**USING 2 REEF ACCUDOSE**  
Plug Water Level Sensor into accessory port A and/or B

## SET UP FOR DOSING



If using a Reef AccuStir (sold separately - see page 17) please note that it must be plugged into accessory port A ONLY

### **IMPORTANT**

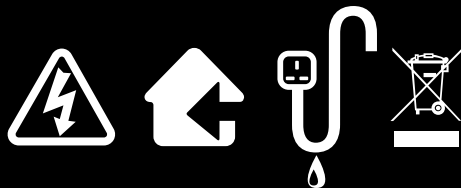
It's recommended that the height difference between the outlet and the inlet is less than 30cm.



## INSTRUCTIONS FOR INSTALLATION AND USE

### Important Safety Information - Please Read Carefully

- Always isolate from the mains electricity before installing or carrying out any maintenance to the Reef AccuDose dosing system.
- Power to the Reef AccuDose dosing system must be supplied through a Residual Current Device (RCD) with a rated residual operating current not exceeding 30mA.
- Mains Input: 100-240V, 50Hz unless marked otherwise.
- Do not operate any appliance if it has a damaged cord or plug, if it is malfunctioning, or if it has been dropped or damaged in any way.
- This unit is designed to be used indoors and is not suitable for any outdoor applications.
- Ensure the Reef AccuDose dosing system is safely positioned before operating.
- **Caution:** The Reef AccuDose dosing system is not waterproof and therefore must not be mounted above the aquarium or sump, or in any position where it may accidentally fall into water or be splashed by water, or in a humid environment.
- **Please note:** It is advisable to consider the quantity and concentration of the additive in your dosing container in order to reduce any risks of overdosing your tank. Thought should be given to the unlikely event that the dosing system is set up incorrectly and the total amount of product in the dosing container dosed into your tank.
- It is advised not to exceed a volume/concentration that would lead to your water parameters being affected to a degree that could result in harm to the tank inhabitants. Please refer to the dosing instructions of the additive to be added for maximum recommended dose rates.
- Always leave a drip-loop in the cables to prevent water running down the cable and reaching the power source [see below].



Dispose of this unit responsibly. Check with your local authority for disposal information.

[www.tropicalmarinecentre.com](http://www.tropicalmarinecentre.com)

## IMPORTANT

- **In the event of a power outage the Reef AccuDose's internal clock will keep running, ensuring that the program resumes when power is reconnected. DOSES DURING THE POWER OUTAGE WILL BE MISSED.**
- **We recommend to replace the inner tube every 100-150L dosing.**
- **We recommend that the height difference between the outlet and the inlet is less than 30cm [see page 5].**
- Please calibrate your dosing pump with the same height difference between the inlet and outlet as normal running.
- If you find air in the tube, please check the inlet is fully submerged in your chosen liquid and check the tube for signs of degradation. Replace the tube accordingly.
- It is recommended to apply white lithium grease on the inner rollers every month.

## MONTHLY MAINTENANCE

- Calibrate your dosing pump once a month.
- Apply white lithium grease on the inner rollers every month.

### HOW TO APPLY WHITE LITHIUM GREASE - page 9

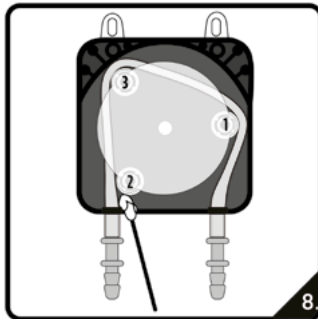
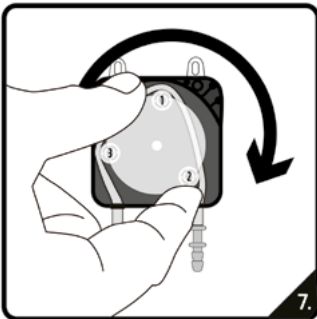
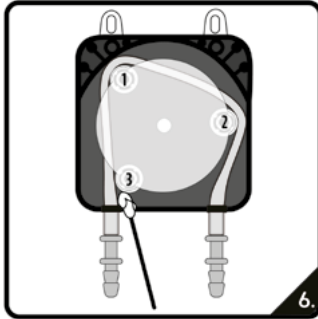
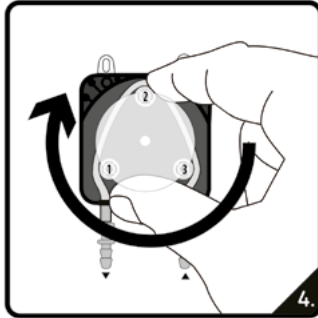
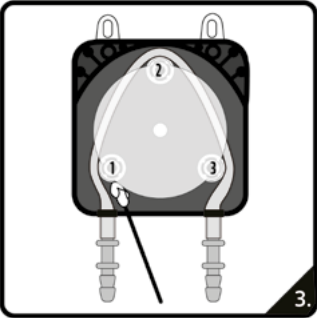
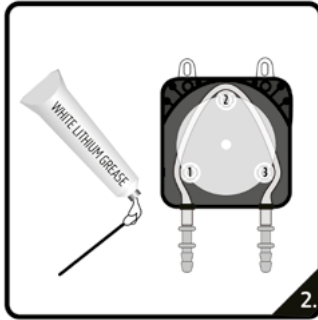
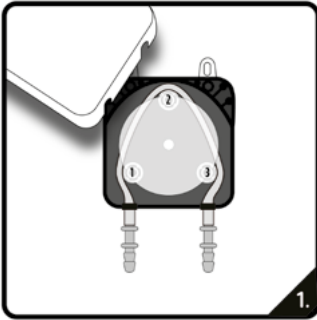
- Open the purple cover (image 1)
- Dab a little white lithium grease on a cotton swab and apply it to the white roller at the lower left corner (image 2 & 3)
- Rotate the purple disc clockwise by hand (image 4 & 5)
- Repeat the above steps until the inner tube is fully coated (image 6-8)
- Close the purple cover.

### HOW TO REPLACE THE INNER TUBE (Replacement code: 9288) - page 10

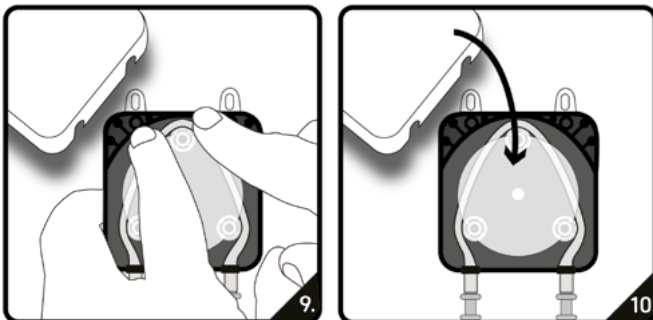
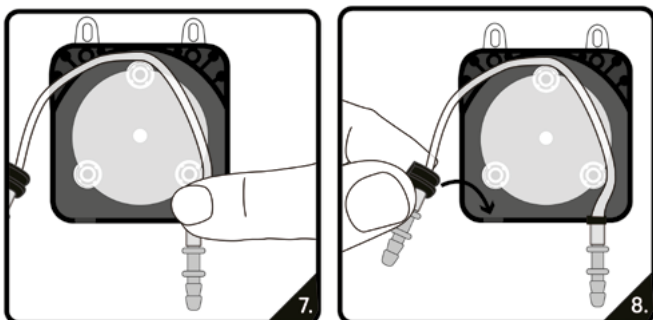
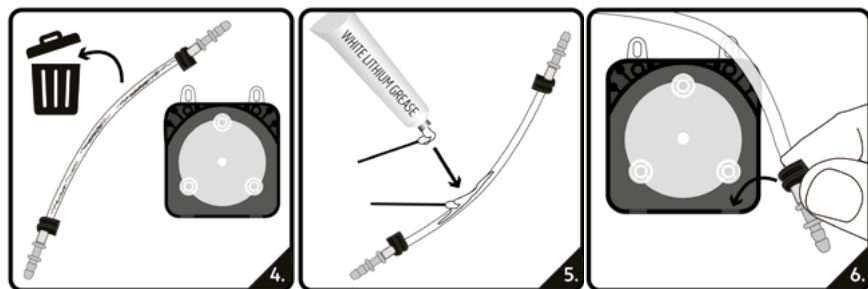
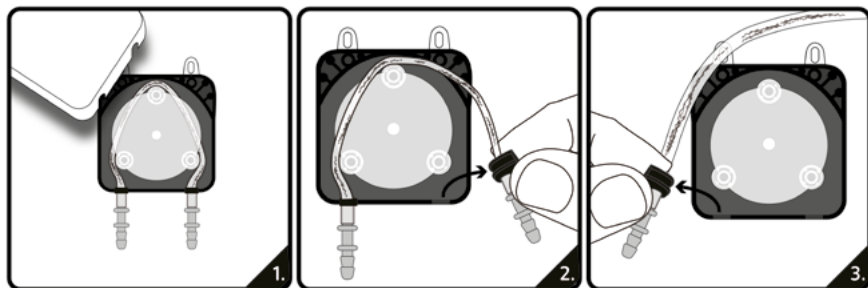
- Open the purple cover (image 1)
- Pull one of black rubber tube retainer from the frame (image 2)
- Gently remove the tube together with the second rubber retainer (image 3)
- Discard the dirty tube (image 4)
- Apply white lithium grease to the new tube (image 5)
- Push in place one rubber tube retainer, feeding the tube around the rollers (image 7) then push in place the second rubber retainer (image 8) and secure the tube (image 9)
- Close the purple cover (image 10).



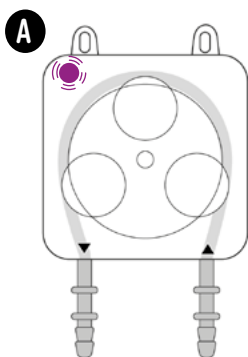
## HOW TO APPLY WHITE LITHIUM GREASE



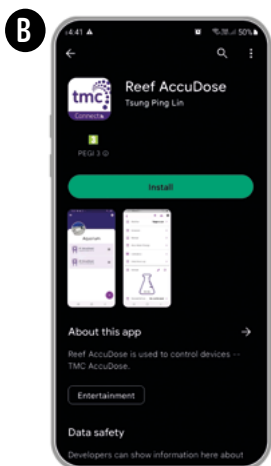
## HOW TO REPLACE THE INNER TUBE



## Reef AccuDose STEP BY STEP - QUICK START



1. Connect the Reef AccuDose pump as per the diagrams on page 5
2. Turn on the power
3. The light on the front of the Reef AccuDose will flash twice to indicate power on (A)
4. Download and install Reef AccuDose app on your smart phone iOS/Android (B) - See cover for QR codes
5. Open app
6. Press '+' in bottom right and choose the doser from the list (C)



7. Name the doser (D). **NOTE:** the doser can be renamed or deleted by swiping left (E)

### Repeat step 6 and 7 to add multiple pumps:

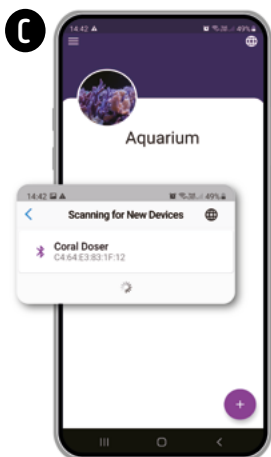
If using multiple Reef AccuDose pumps you can group them by swiping right (G). This allows you to prevent chemical interaction, ensuring a user set gap between each pump's doses - see page 16.

**IMPORTANT:** The chemical interaction period should be set **AFTER** the pumps' programs are setup.

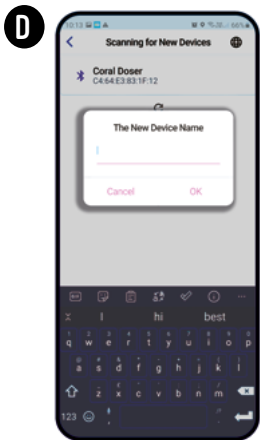
8. Select the doser you want to set up.
9. Once connected, the LED on the dosing pump will pulse slowly (F).

**NOTE:** On the doser menu you can select the LED icon in the top right to make the selected doser flash briefly for identification purposes

**NOTE:** If connection is lost you can select the Bluetooth symbol in the top right to reconnect.



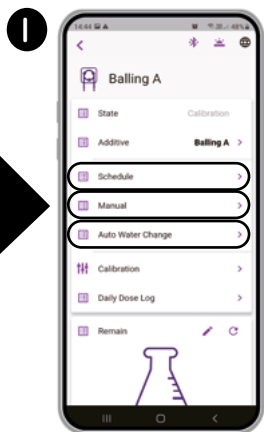
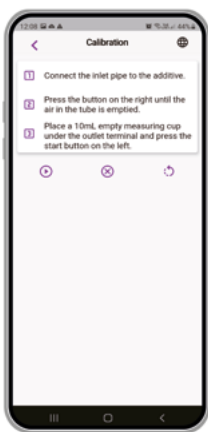
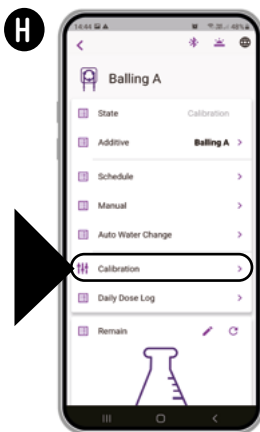
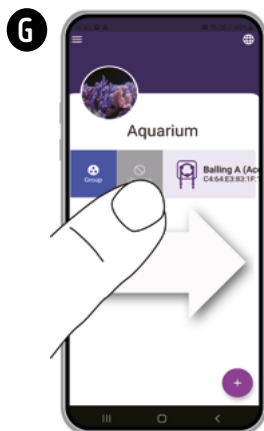
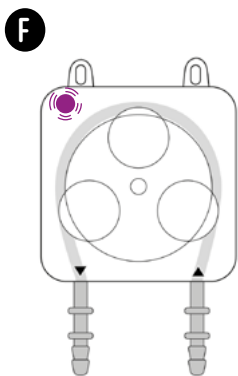
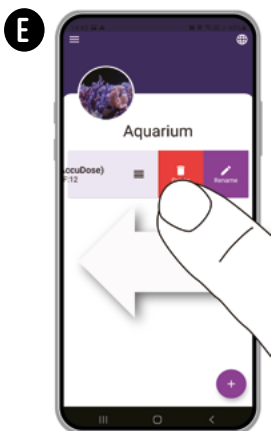
10. Select the additive you wish to dose.
11. Choose 'calibration' (H) - calibration instructions in app. **OPTIONAL:** Once calibrated you can add the remaining amount of liquid in the container to be drawn from by selecting the pencil icon next to the flask. You can also set a reminder for when it is starting to run low. **NOTE:** you will need to allow notifications on the app settings for the reminders to work.



12. Then choose how you wish to use the connected Reef AccuDose unit (I) [see following 3 pages]:

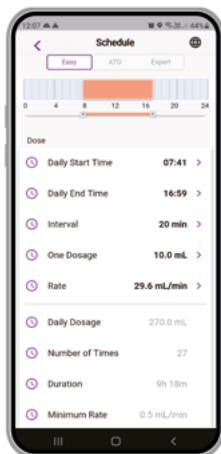
- **SCHEDULE DOSING/ATO** (NOTE: 1 or 2 water level sensors are needed for ATO. Sold separately)
- **MANUAL DOSING/ATO** (NOTE: 1 or 2 water level sensors are needed for ATO. Sold separately)
- **AUTO WATER CHANGE** (NOTE: this mode requires 2 Reef AccuDose units and at least 2 water level sensors. Sold separately).

**NOTE: level sensors and stirrers CANNOT be used together.**



# SCHEDULE DOSING ATO / Automatic Dosing

## EASY



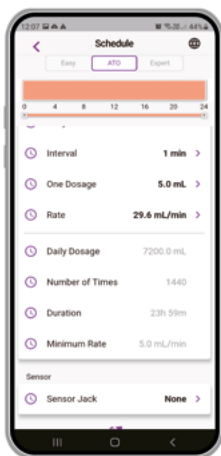
For setting regular dosing across a set time period each day

1. Select the start time and end time of the dosing period.
2. Select the interval between each dose.
3. Select the volume of each dose.
4. Select the desired dose rate.

**NOTE:** the app will not allow entry of values that are not possible (i.e. they overlap)

5. The app will calculate and display your total daily dosage, number of doses, total duration and overall rate of dosing.
6. If an AccuStir is connected then you can set the time and speed of stirring which will happen prior to each dose.
7. Once finished, select the upload icon to send the new settings to the pump.

## ATO



For using the Reef AccuDose to apply controlled doses of RO water at certain times of day to ensure system water level is maintained

**NOTE:** at least one water level sensor is required for this mode to prevent flooding. The pump will not dose when the water level is at or above the sensor's centre point.

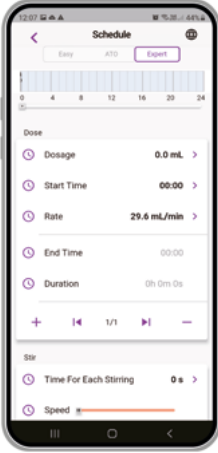
1. Set up the dosing pump with your RO water (see page 5).
2. Select the start time and end time of the dosing period.
3. Select the interval between each dose.
4. Select the volume of each dose.
5. Select the desired dose rate.

**NOTE:** the app will not allow entry of values that are not possible (i.e. they overlap)

6. The app will calculate and display your total daily dosage, number of doses, total duration and overall rate of dosing.
7. Once finished, select the upload icon to send the new settings to the pump.

## EXPERT

### For setting different dose amounts and rates across 24 hours each day



1. Set each dose throughout a 24 hour period.
2. Use + to add a new dose
3. Use - to remove a dose
4. Use < and > to scroll through the doses

**NOTE:** the app will not allow entry of the above values that are not possible (i.e. they overlap)

5. If an AccuStir is connected then you can set the time and speed of stirring which will happen prior to each dose. This will be the same for all doses.
6. Once finished, select the upload icon to send the new settings to the pump.

## MANUAL DOSING ATO / For One-Off dosing

1. Select the desired dosage and dose rate. The app will calculate the duration of the dose based on those parameters.
2. If an AccuStir is connected then you can set the time and speed of stirring which will happen prior to each dose.
3. Select the upload icon and the stir/dose program will run.
4. Select the X at any time to cancel.

## MANUAL ATO

### For one-off ro water top up when gradual addition of water is required

1. Select the input jack that the water level sensor is connected to.  
**NOTE:** if using two sensors for extra safety, input A & B should be selected
2. Select the desired dosage and dose rate. The app will calculate the duration of the dose based on those parameters.
3. Select the upload icon and the top up program will run until it is complete or the water reaches the centre point of the sensor.
4. Select the X at any time to cancel.

## **AUTO WATER CHANGE**

### **2 Reef AccuDose required for a controlled automatic water change**

**NOTE:** Water Level Sensors (sold separately) are not essential but are recommended to prevent chance of flooding.

1. Setup two Reef AccuDose pumps as per the diagram with clean salted water (see page 5).

**NOTE:** ensure that the inlet and outlet of the two pumps are situated as far from each other as possible to avoid pulling out the same new water that you are putting in.

2. Set the amount you want to change and the dose rate.
3. Choose the other pump.
4. At this point you can choose a different dosing volume and rate.

**NOTE:** it is recommended that you use the same volume and rate to ensure a hassle free water change

5. You can set a reminder to let you know when the water change will be finishing.
6. Select the upload icon to start.
7. Select the X at any time to cancel.

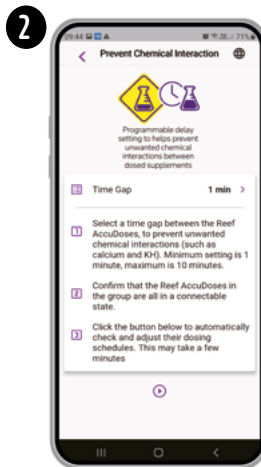
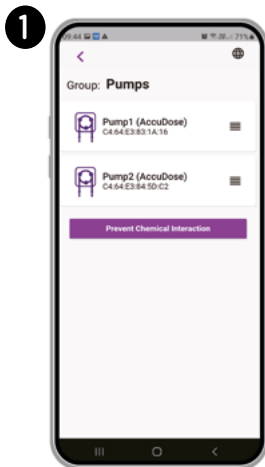
## **DAILY DOSE LOG**

Once up and running, each pump will record the amount dosed per day and will display as a bar graph for the last 30 days.

## PREVENT CHEMICAL INTERACTION (once all Reef AccuDoses in the group are set up)

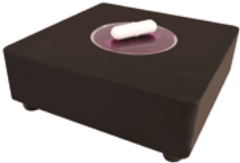





If using multiple grouped pumps you can now set the Prevent Chemical Interaction period that ensures both pumps don't dose at the same time.

1. Select Prevent Chemical Interaction
2. Select the time gap you require
3. Select the play icon and which schedule programs you have set for each pump
4. The app will then calculate and apply the required schedule change. If it is not possible to offset the doses, then the pumps' programs will need to be adjusted to allow for this.










## ACCESSORIES & SPARE PARTS

Code	Product	
9281	Reef AccuStir	 A black, rectangular, low-profile device with a circular opening on top containing a white stirrer.
9285	Reef AccuDose PSU	 A grey power supply unit with a black power cord and a black cable with a yellow connector.
9286	Reef AccuDose 2-Way PSU	 A grey power supply unit with multiple black cables and connectors. The number 9287 is printed below the unit.
9287	Reef AccuDose 4-Way PSU	 A grey power supply unit with multiple black cables and connectors. The number 9287 is printed below the unit.
9288	Reef AccuDose Replacement Inner Tube	 A long, thin, clear plastic tube with black caps at both ends.
9289	Reef AccuDose Water Level Sensor	 A black, cylindrical sensor with a clear lens and a black cable.

## ACCESSORIES & SPARE PARTS

Code	Product	
9536	Reef Easi Dose Dosing Container 1.5 Litre	
9537	Reef Easi Dose Dosing Container 2.5 Litre	
9538	Reef Easi Dose Dosing Container 4.5 Litre	
9539	Reef Easi Dose Dosing Container 5 Litre	
9540	Reef Easi Dose Dosing Tube Clamp	

For details of all TMC products please visit our website:  
**[www.tropicalmarinecentre.com](http://www.tropicalmarinecentre.com)**  
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Tel: +44[0] 1923 284151  
[info@tropicalmarinecentre.co.uk](mailto:info@tropicalmarinecentre.co.uk)





Solesbridge Lane  
Chorleywood  
Hertfordshire  
WD3 5SX

Call +44 [0]1923 284151

[info@tropicalmarinecentre.co.uk](mailto:info@tropicalmarinecentre.co.uk)

[tropicalmarinecentre.com](http://tropicalmarinecentre.com)

