

Sample Dosing Schedule

Two Part (Alkalinity and Calcium)

In order to maintain steady levels, dose calcium, and alkalinity at regular intervals throughout the day. Alkalinity and calcium should also be dosed at alternating time intervals to minimize the chance of precipitation. We recommend dosing one on the even hours and the other on the odd hours of the day.

To calculate the amount of each part needed, divide the total daily dose by 12.

Tip: If your daily dosage divided by 12 does not return a whole number, you have the following options.

- A. Adjust the amount so that the sum adds up to the total dosage. For example, a daily dosage of 100 mL divided by 12 is 8.33 mL. Since dosing 8.33 mL is not allowed, dose 8 mL eight times daily and 9 mL four times daily. In this example, the total daily dosage would be 100 mL.
- B. If you aren't concerned with it being exact, round the dosage to the nearest whole number. For example, a daily dosage of 100 mL divided by 12 is 8.33 mL or 8 mL twelve times daily. In this example, the total daily dosage would be 96 mL.

Sample two-part dosing schedule

based on a daily dosage of 120 mL (10 mL, 12-times per day)

Part One (Pump 1)		Part Two (Pump 2)	
Time	Amount	Time	Amount
0:00	10 mL	1:00	10 mL
2:00	10 mL	3:00	10 mL
4:00	10 mL	5:00	10 mL
6:00	10 mL	7:00	10 mL
8:00	10 mL	9:00	10 mL
10:00	10 mL	11:00	10 mL
12:00	10 mL	13:00	10 mL
14:00	10 mL	15:00	10 mL
16:00	10 mL	17:00	10 mL
18:00	10 mL	19:00	10 mL
20:00	10 mL	21:00	10 mL
22:00	10 mL	23:00	10 mL

Magnesium & Other Elements

For most tanks, magnesium and other additives can be introduced as a single, daily dose or less often, based on your system's needs. Add these at a different time than your two-part or other elements. For example if you dose part 1 or part 2 on the hour then dose any other additive on the half hour. If you prefer to break up the daily amount of any additive throughout the day, divide it as you see fit.

Safety Information

Please take great care when installing and using this pump. This is an electrical device and, as with any electrical device used in or around an aquarium, caution needs to be exercised. Failure to do so may result in electrocution, fire, serious bodily injury or even death. Please follow these safety requirements carefully, as failure to do so will void the warranty and could cause serious safety hazards.

- ⊘ **NEVER** operate the pump if it has been damaged or is malfunctioning.
- ⊘ **NEVER** operate the controller with wet hands or if the controller is wet.
- ⊘ **NEVER** re-wire, re-configure or modify the pump in any way.
- ⊘ **NEVER** use with generators.
- ⊘ **NEVER** grab the pump by the electrical cord as this may cause the wires to become exposed.
- ⊘ **NEVER** install the pump outdoors or in a wet environment.
- ⊘ **NEVER** subject the pump to direct heat, such as sunlight or heat lamps.
- ✔ **ALWAYS** unplug the pump from its power source before doing any work on the pump or placing hands in water.
- ✔ **ALWAYS** leave a bit of slack in the electrical cord to help absorb any pump vibrations.
- ✔ **ALWAYS** use a GFCI (Ground-fault Circuit Interrupter).
- ✔ **ALWAYS** keep away from children.
- ✔ **ALWAYS** run the pump with a drip loop in the power cord to prevent moisture from reaching your power receptacle.
- ✔ **ALWAYS** run the pump with adequate space to allow cooling.
- ✔ **ALWAYS** place the power supply in a cool, dry location.

Troubleshooting & Maintenance

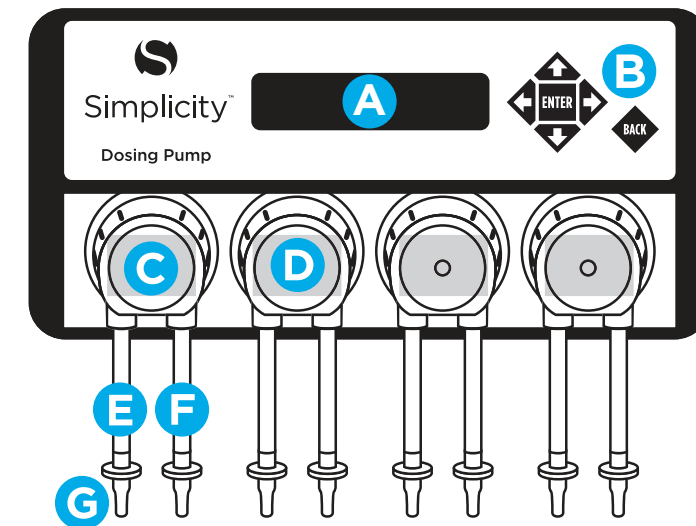
For troubleshooting, maintenance, and frequently asked questions, please visit simplicityaquatics.com/support/

Warranty & Contact Information

For warranty information, please visit simplicityaquatics.com/support/warranty/

Need more help? Please contact us at simplicityaquatics.com/contact/

Dosing Pump Quick Start Guide



Parts List

- Dosing Pump
- Pump Head Cover (Smoke Colored)
- Electronic Power Supply
- Check Valves (5)
- Spare Dosing Pump Head
- 100 mL Measuring Cup
- Pump Head Labels
- Mounting Hole Template
- #8 Mounting Screws

Controller Operation Key

- A. Display Screen
- B. Controller Buttons
- C. Pump Head
- D. Label Placement
- E. Input
- F. Output
- G. Connector



PROBLEM? PLEASE DO NOT RETURN THE PRODUCT TO THE PLACE OF PURCHASE.

Please visit our website at www.simplicityaquatics.com/support for additional information and videos. **Need more help?** Please contact us directly at customer@simplicityaquatics.com or 424-757-6150 and we'll be happy to help you out.



Calibrate Pump Heads

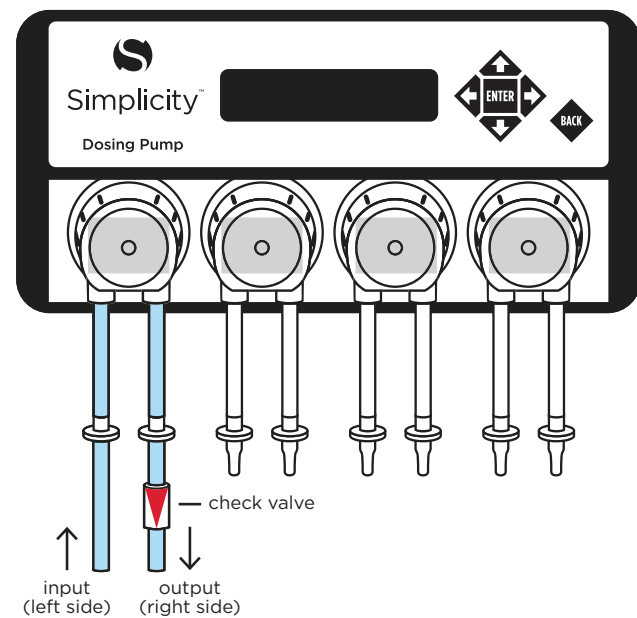
*** **ALWAYS** prime and calibrate the dosing pump in the exact location where you plan to use it. Moving the dosing pump or changing the length or location of the tubing afterward can cause inaccurate results ***

To calibrate, you will need the following:

- Dosing Pump
- Dosing Tubing
- 100 mL Measuring Cup
- Empty container with minimum capacity of 2 cups

Prime the Pumps

*** Before calibrating or using your dosing pump, each pump head must first be primed. The priming process fills the input and output lines with liquid and removes all air bubbles. ***



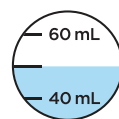
1. Place the dosing pump where you plan to use it during regular operation, with the input and output of the pump heads pointing straight down. The dosing pump can be set on a shelf or mounted to the wall. (For information on how to mount the dosing pump to a wall, please see **Mounting the Dosing Pump** in this guide.)
2. Attach dosing tubing to the clear plastic connector on the input line (left side) of the first pump head. Place the other side of the tubing into the empty container. Use the same length, route, and location of dosing tubing that you will use during standard pump operation.
3. Cut a 1-inch section of standard dosing tubing. Attach this section of tubing to the clear plastic connector on output line (right side) of the first pump head. Add a check valve to the other end of the 1-inch section of tubing. Ensure the smaller internal tip of the check valve is pointing downwards towards the final dosing location.

4. Attach another dosing tubing section to the check valve's output. Place the other side of the tubing back into the empty container. Use the same length of dosing tubing that you will use during standard pump operation.
5. Fill the empty container with RO-DI water.
6. Press **▶** on the controller. The controller screen should display **Manu Mode**, indicating manual or user-controlled mode.
7. Select pump 1.
8. Press and hold **ENTER** for about thirty seconds until the water flows without any air bubbles in the input and output lines. If the pump head will not prime, move the container with the RO/DI water closer to the dosing pump.
9. Visually check the input and output dosing tubing for any air bubbles. If air bubbles are present, hold **ENTER** for ten additional seconds. Check for air bubbles again and repeat this process until no air bubbles remain. The goal of priming is to remove all air bubbles.
10. Repeat steps 2-9 for each dosing pump head.

Calibrating the Pump Heads

*** Do NOT calibrate the pumps without properly priming them first. ***

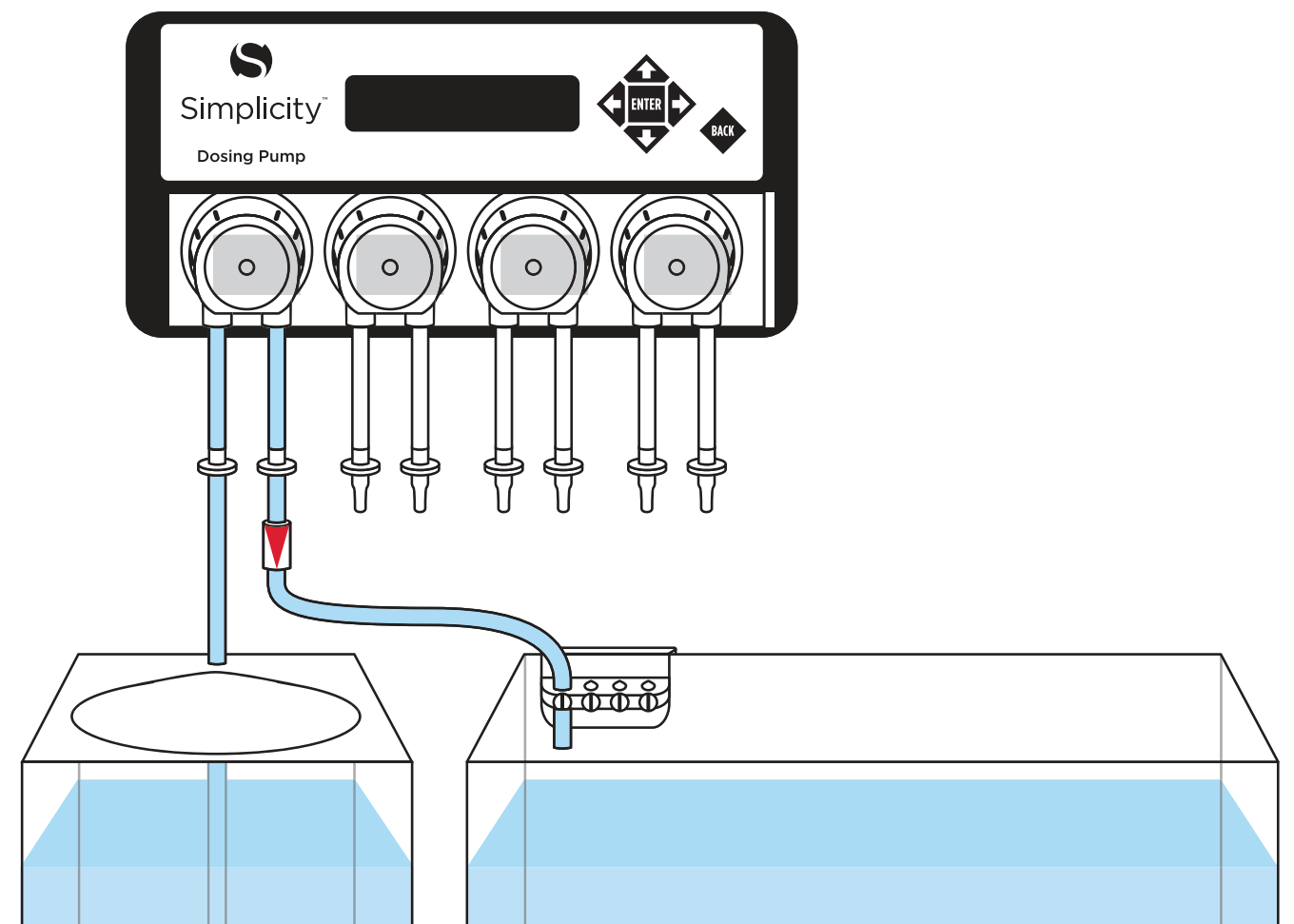
1. Place the input line for the first pump head into a container filled with RO-DI water.
2. Place the empty 100mL measuring cup below the output line of the first pump head.
3. Press **▲** on the controller. Select pump number 1 and press **ENTER**.
4. Press **▲** on the controller to begin the calibration process.
5. Carefully watch the measuring cup fill with water. Upon reaching the 50 mL level, immediately press **▲** again. Pump calibration is now complete.
6. With the input line removed from the water source, remove the RO-DI water from the line by running the pump in manual mode (**Manu Mode**).
7. Repeat this process for each dosing pump head.
8. Repeat the calibration process every six months.



Set-up

Set Date & Time

1. Press **ENTER**.
2. Select **Set Date & Time** and press **ENTER**.
3. Select **Year** using **◀** and **▶**. Select the current year using **▲** and **▼**. Repeat this process for **Month** and **Day**.
4. Once the date is correct, press **ENTER**.



5. Follow the same process to set the time. The controller uses military time, so if it's 3:30 PM, set the time to 15:30.
6. Once the time is correct, press **ENTER**.

Programming

1. Press **ENTER**.
2. Select **Set Program** and press **ENTER**.
3. Select the number of the pump that you would like to program. We recommend using pumps 1 and 2 for two-part dosing and pumps 3 and 4 for additional components. Please see **Sample Dosing Schedule** in this guide for an example.
4. Select **Times Per Day** and set between 1 and 24. (This is the number of times the pump will dose on a given day.) Press **ENTER** after making your selection.

Note: Although the dosing pump can dose up to 24-times daily, this is excessive for most hobbyists. For two-part dosing, we recommend 12-times per day. For most other additives, once per day is sufficient.
5. Select **Interval Day** and set between 0 and 30. An interval of 0 doses every day starting today, an interval of 1 doses every other day starting tomorrow, and an interval of 30 doses once every 30 days. Press **ENTER** after making your selection.

6. Select **Dosing Volume** and set in mL for the first dosing interval. Press **ENTER** after making your selection.
7. Select **Dosing Time** and set the first dosing interval in military time format. Press **ENTER** after making your selection.
8. Repeat steps 6 and 7 for each dosing point.
9. Prime the dosing pump with the dosing chemical.
10. Repeat this process for each pump head.

Mounting the Dosing Pump

Mount the unit to the wall using the provided mounting hole template and two $\frac{5}{8}$ -inch long wood screws.

Requirements:

- A. The input and output of the pump heads must be pointing straight down.
- B. The distance between the dosing pump and dosing container, as well as the distance between the dosing pump and sump, can be a maximum of five feet. However, placing the dosing pump closer to the dosing chemicals will result in a more consistent performance.