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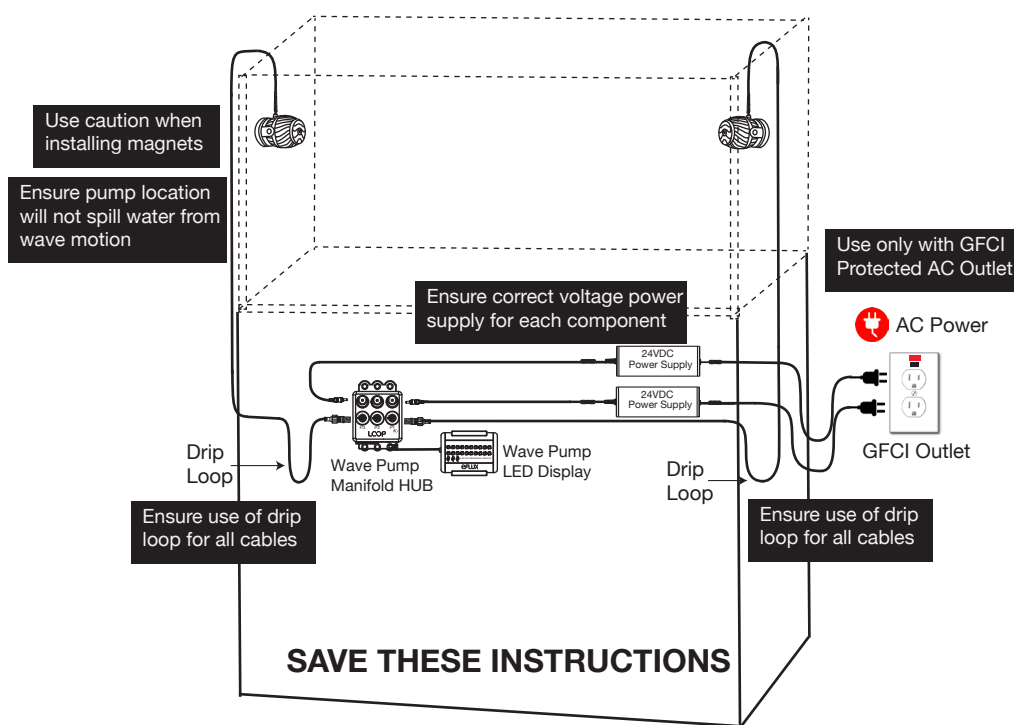
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Thank You!
For purchasing our eFlux Wave Pump Kit.
Please read all instructions before
getting in the LOOP!

Safety Instructions & Warnings

IMPORTANT: Please refer to additional safety warnings on last page.

- eFlux wave pumps create a tremendous amount of water flow. Do not install pump where the strong current can harm corals or animals.
- Do not install pump too close to the sand bed where it will not stir/suck the sand.
- Pumps can also produce powerful waves in both wave and surge mode. Ensure your aquarium is designed for wave pumps and ensure pumps are mounted low enough not to push water out of the aquarium.
- Magnet mounting assembly is very powerful. Be cautious not to cause injury to fingers.
- Keep out of reach of children.
- Never place magnets or pump near sensitive electronics, sharp objects or attractive surfaces.
- Never run wave pump dry or out of water.
- Always place spacer between magnets when not in use.
- Always unplug with dry hands for any maintenance or service.
- eFlux wave pumps are 24VDC. Ensure one 24VDC UL® transformer is used per wave pump.
- Ensure 24VDC UL® transformer is plugged into a GFCI approved outlet with a drip loop.
- Turn controller OFF and disconnect pump from power before performing any service
- Ensure eFlux wave pumps and any accessories all have a drip loop installed before plugging into the wave pump manifold HUB as shown below.



Additional Help

For additional installation instructions & videos, please visit our website at www.current-usa.com

What's Included

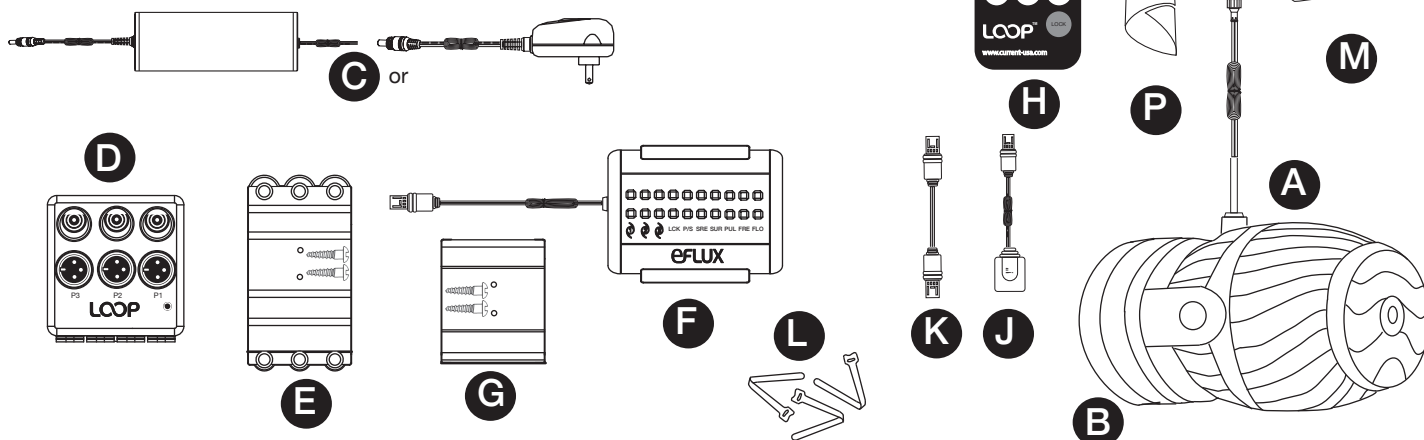
Each eFlux Wave Pump Kit includes:

Item	Description	Quantity
A	eFlux DC Wave Pump	1
B	Magnet Swivel Bracket Assembly (pre-installed)	1
C	24V DC Transformer, UL® Listed	1
D	Wave Pump HUB Controller w/Silicone Cover	1
E	Pump HUB Mounting Bracket w/2 Screws	1
F	eFlux Wave Pump LED Display	1
G	eFlux LED Display Bracket w/2 Screws	1
H	eFlux Wave Pump Wireless IR Remote Control	1
J	IR Sensor	1
K	Micro USB Communications Cable	1
L	Cable Wraps	3
M	Wave Pump Prefilter	1
P	Pump Cable Wrapping	1

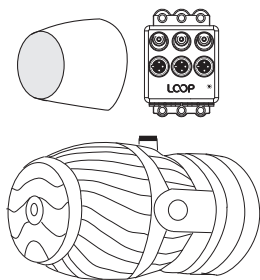
Note:

If your eFlux wave pump is missing any components, please contact us directly at www.current-usa.com.

DO NOT RETURN TO RETAILER



Optional Accessories and Replacement Parts



eFLUX Accessory Wave Pumps

#1685 EFlux Wave Pump Manifold HUB
(controls up to 3 wave pumps)
#6004 Accessory Wave Pump, 660 GPH
#6005 Accessory Wave Pump, 1050 GPH
#6006 Accessory Wave Pump, 2100 GPH
#4180 LOOP® Extension Cable, 9 ft./3M

Replacement Parts

#3239 EFlux Pump 660 Prefiler Pack of 3
#3240 EFlux Pump 1050 Prefiler Pack of 3
#3241 EFlux Pump 2100 Prefiler Pack of 3
#3231 EFlux Pump 660 Impeller
#3232 EFlux Pump 1050 Impeller
#3233 EFlux Pump 2100 Impeller
#3036 24VDC 60w Transformer

Installation Instructions

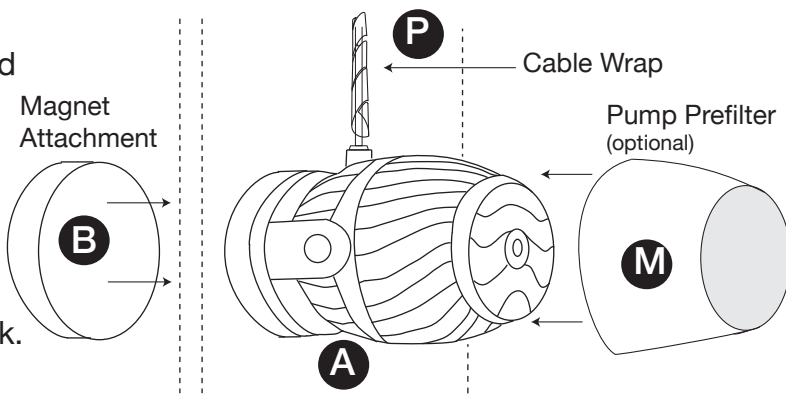
IMPORTANT: Before installation, read ALL SAFETY INSTRUCTIONS & WARNINGS

Step 1. Ensure all components are unpacked, unwrap cords and ensure there is no damage.

Step 2. Choose a mounting location inside the aquarium vertical wall for your pump. Clean location of any dirt, algae or calcium deposits.

Step 3. Install cable wrap wrapping (P) around wave pump cable. This protects the pump cable from triggerfish, urchins and other animals that may damage pump cable. Place pump prefilter (M) over pump end (optional).

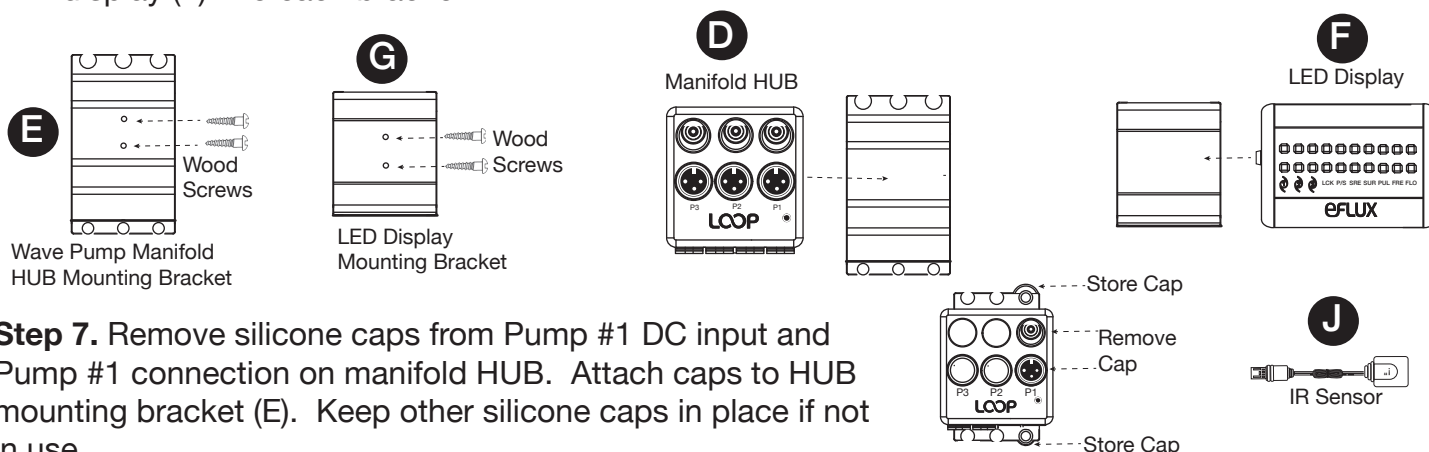
Step 4. Carefully separate magnet (B) from pump and place pump (A) into position in tank. Attach pump to tank using magnet. Swivel and adjust pump as desired.



INSTALLING WAVE PUMP MANIFOLD HUB AND EFLUX LED DISPLAY

Step 5. Choose a location underneath your aquarium cabinet free of excessive moisture and/or saltwater creep. Note: if you want the eFlux wave pump LED display outside cabinet, ensure the mounting location is 6"-10" away from where the wave pump manifold HUB will be mounted.

Step 6. Using included wood mounting screws, mount the eFlux wave pump HUB mounting bracket (E) and eFlux pump LED display bracket (G) to stand. Slide wave pump manifold HUB (D) and pump LED display (F) into each bracket.



Step 7. Remove silicone caps from Pump #1 DC input and Pump #1 connection on manifold HUB. Attach caps to HUB mounting bracket (E). Keep other silicone caps in place if not in use.

Step 8. Choose a location for the IR Sensor (J) outside stand. The IR sensor is what receives control and on-demand command signals from the wireless remote. Unwrap cable and attach the IR sensor clip to your stand, attach IR sensor cable into the sensor clip. Ensure cable can reach wave pump manifold HUB (D).

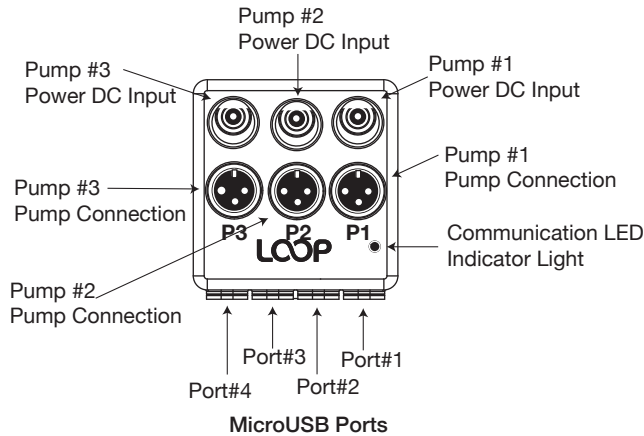
Installation Instructions

CABLE CONNECTIONS

Important:

Before connecting all of the components together, please review the following specifications in regards to the Wave Pump Manifold HUB and appropriate connections:

Wave Pump Manifold HUB



Specifications:

Pump DC Inputs:

Voltage: 24VDC

Max. DC Input per Channel: 72w@24VDC

Max. DC Output per Channel: 60w@24VDC

Pump Connections:

P1 Pump#1= Main/Primary Wave Pump

P2 Pump#2= Secondary (Gyre) Wave Pump

P3 Pump#3= Steady/Stream Wave Pump**

Note: Pump#3 ONLY operates in steady/stream mode

Micro USB Ports:

Port#1= Communications

Port#2= Wave Pump LED Display Only

Port#3= Communications

Port#4= Communications

Step 9. Connect cables in the following order:

- A** Connect LED Display micro USB cable into Port#2
- B** Connect IR Sensor micro USB cable into Port#1
- C** Connect eFlux Wave Pump into P1 Pump Connection
- D** Connect 24V DC cable into P1 Power DC input

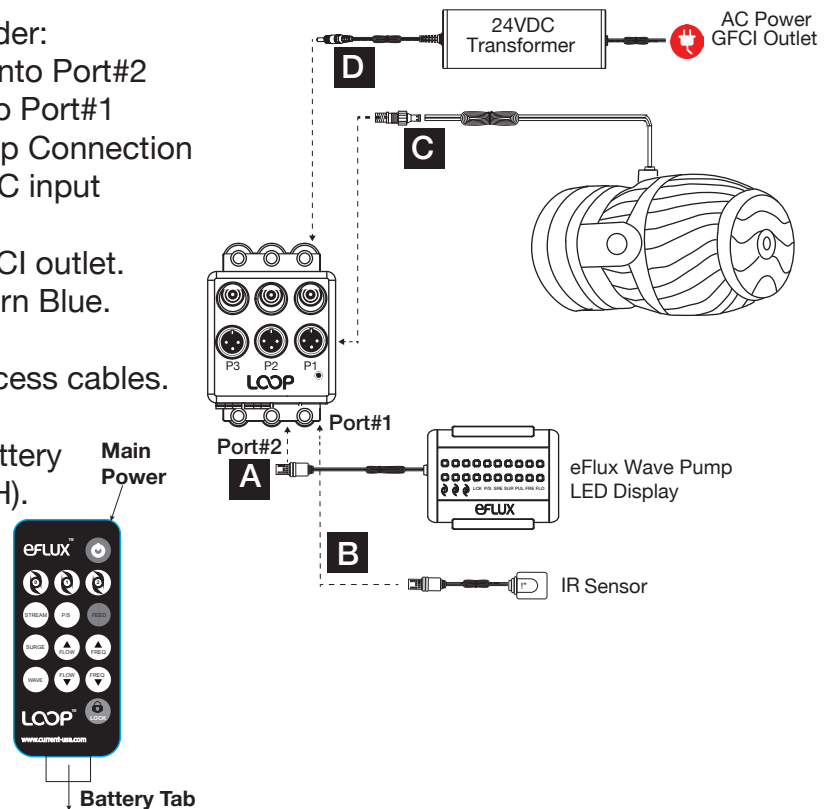
Step 10. Plug 24V DC transformer into GFCI outlet. LED indicator light on manifold HUB will turn Blue.

Step 11. Use velcro cable wraps (L) for excess cables.

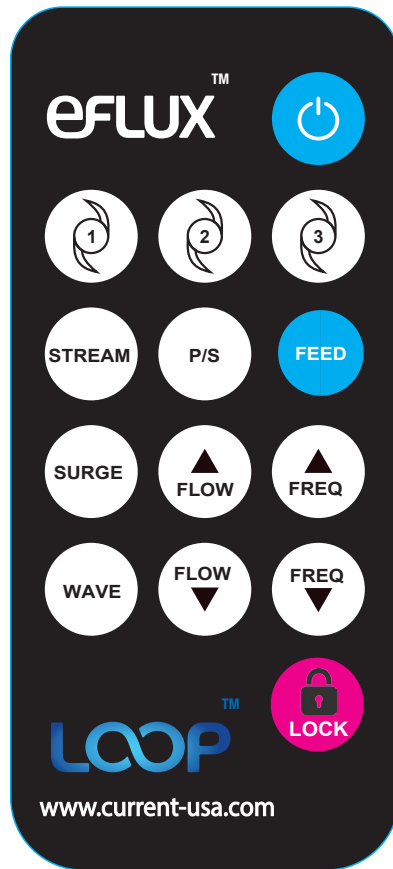
Step 12. Remove clear plastic tab from battery compartment on wireless remote control (H).















Step 13. Press Main Power Key to turn pump ON. Pump will operate in default setting of Stream/Steady Flow Mode at 100% flow.

Step 14. Follow programming guide on next page.

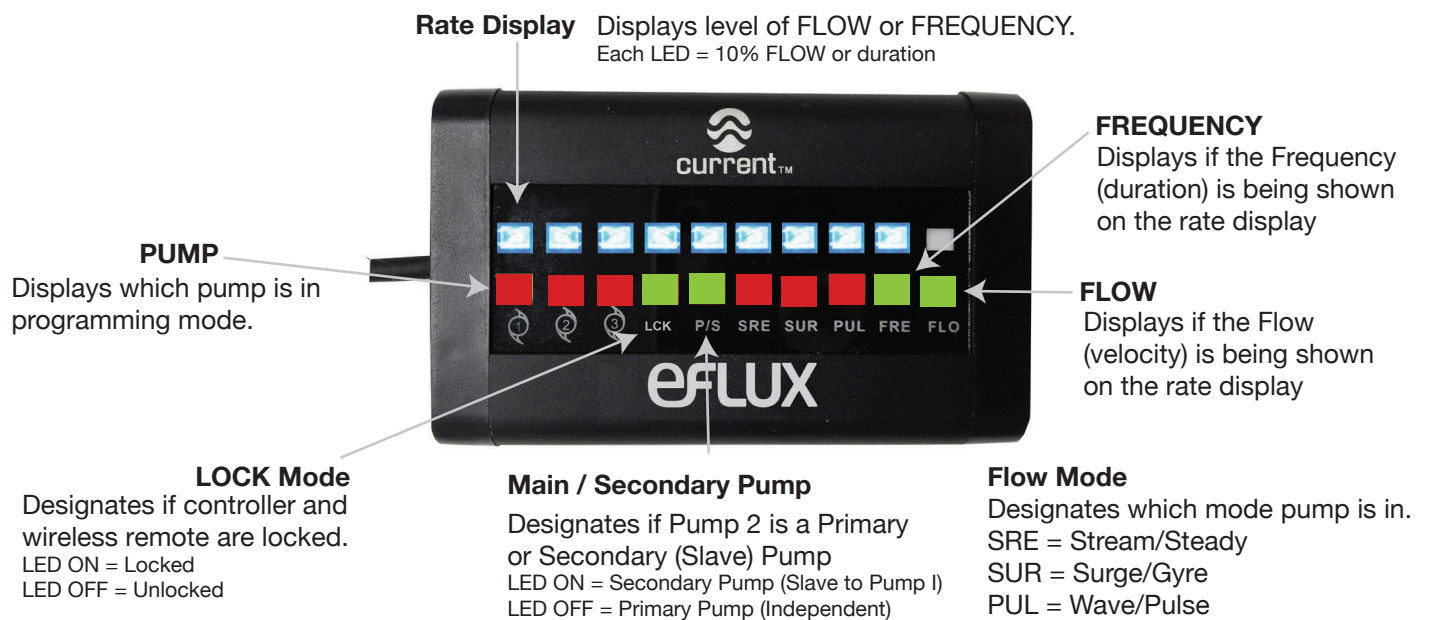


Remote Control Overview




-  Main On/Off
-  Pump 1, Primary Wave Pump
-  Pump 2, Secondary Wave Pump
-  Pump 3, Flow/Stream Mode Only
-  Primary/Secondary Pump
-  FEED Mode
-  Lock/Unlock Key
-  Stream / Steady Flow Mode
-  Surge / Gyre Mode
-  Wave / Pulse Mode
-   Increase / Decrease Flow Rate
-   Increase / Decrease Frequency

Pump LED Display Overview






Programming Guide

Step 1: Turning pumps ON/OFF

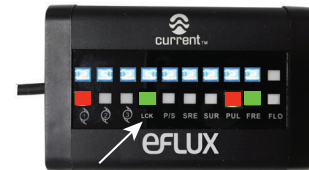
Press the Main ON/OFF key  to turn all of the pumps and pump display ON or OFF. When pumps are on, LEDs on display will illuminate. If all pumps are turned off, all LEDs on display will be off.

Step 2: Turning individual pumps ON/OFF

To individually turn each pump ON/OFF, hold the designated Pump Key    for 5 seconds. Pump will turn ON or OFF.

Step 3: LOCK / unlock remote

To Lock settings and IR remote communication, press Lock key and hold for 5 seconds, the LED over LCK on the pump display will turn green.




LED ON = Locked

To unlock settings and IR remote communication, press Lock key again for 5 seconds, the LED over LCK on the pump display will turn off. The wireless remote will not operate and communicate with the HUB and LED display.



LED OFF = Unlocked

Step 4: FEED Mode

To set all pumps into feeding mode, press the FEED Mode key . All pumps within the LOOP network will go into idle speed for 10 minutes. After 10 minutes, all pumps will ramp back into their previously programmed flow mode.



Display remains same during FEED Mode

Step 5: Programming Flow Modes

Operational Flow Modes

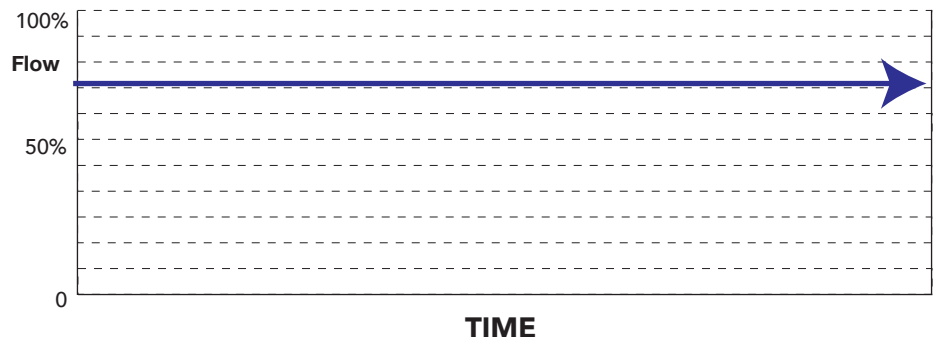
There are three modes of water flow available for Pumps 1 and 2; Stream/Steady, Surge/Gyre and Wave/Pulse. Note that Pump 3 is designated as a circulation pump and can only be programmed in Stream/Steady Flow Mode.



STREAM/STEADY MODE

When a pump is in Stream/Steady mode, the pump will constantly circulate water at the programmed speed.

Flow rate is adjustable from 0-100% in 10% increments by pressing:



Programming Guide



SURGE/GYRE FLOW

Flow rate is adjustable from 0-100% in 10% increments by pressing FLOW keys on wireless remote.



Frequency (time duration) is adjustable:

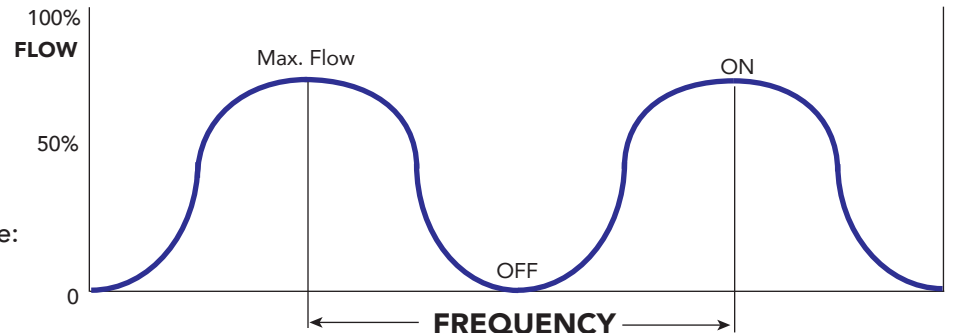


Press to increase frequency of pulse (decrease time interval)



Press to decrease frequency of pulse (increase time interval)

When a pump is in Surge/Gyre mode, the pump will gently ramp up and down to the maximum flow speed based on the frequency (time) programmed. This mode mimics back and forth water surges found in the ocean. See GYRE for using 2 pumps and creating Gyre flow.



FREQUENCY (seconds) 10s 15s 20s 25s 30s 40s 50s 70s 80s 90s



WAVE/PULSE MODE

Flow rate is adjustable from 0-100% in 10% increments by pressing FLOW keys on wireless remote.



Frequency (time duration) is adjustable:

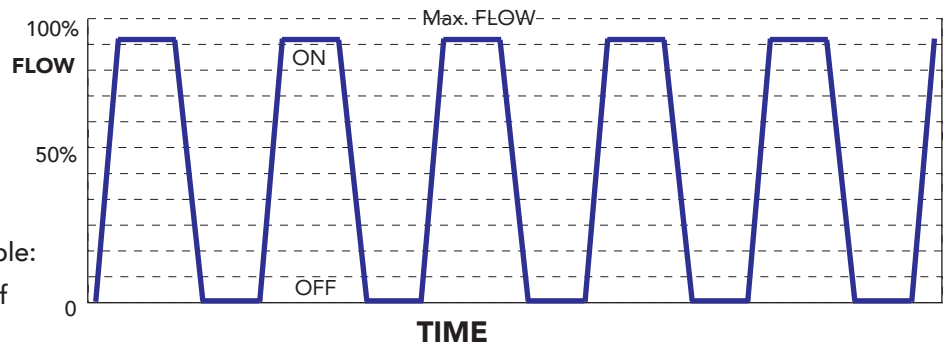


Press to increase frequency of pulse (decrease time interval)



Press to decrease frequency of pulse (increase time interval)

When a pump is in Wave/Pulse mode, the pump will turn on/off, creating a pulsing between the maximum flow and off. This flow simulates waves commonly found on reef crests.



FREQUENCY (seconds)	.3s	.5s	.7s	1s	2s	3s	4s	5s	6s	7s
Pump ON	.3s	.5s	.7s	1s	2s	3s	4s	5s	6s	7s
Pump OFF	.3s	.5s	.7s	1s	2s	3s	4s	5s	6s	7s

Choosing flow modes

Every aquarium is different and eFlux wave pumps provide multiple modes of flow for a wide variety of applications.



STREAM/STEADY MODE

Steady, constant flow stream (adjustable)
Mimics strong, flowing water currents
Adjustable flow speed only, 0-100%
Excellent circulation in specific areas



SURGE/GYRE MODE

Alternates a slow ramp up/down
Mimics surging water currents
Flow 0-100%, frequency 10-90 sec.
Ideal for soft corals and anemones



WAVE/PULSE MODE

Alternates a short pulsing action
Mimics wave type action
Flow 0-100%, frequency 0.3-7 sec.
Ideal for SPS corals

Programming Guide

Step 5A: Designate pump to program (1, 2, or 3)

Press the pump you pick to program by pressing the designated pump key on the wireless remote.



Pump icon will illuminate on LED display.



Step 5B: Designate water flow mode

Press the FLOW mode you wish to run the pump in by pressing the designated flow key on wireless remote.

Flow icon will illuminate on the LED display.

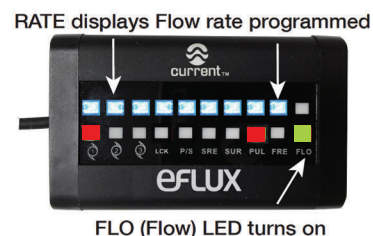


FLOW mode designation, LED turns on.
SRE = Stream/Steady
SUR = Surge/Gyre
PUL - Wave/Pulse

Step 5C: Program the maximum FLOW

Press the increase/decrease FLOW keys to adjust the pumps maximum flow rate until you have reached the desired flow. FLO will illuminate on the LED display.

The RATE display will show the flow from 0-100% in 10% flow increments on LED display.



Step 5D: Designate FREQUENCY setting

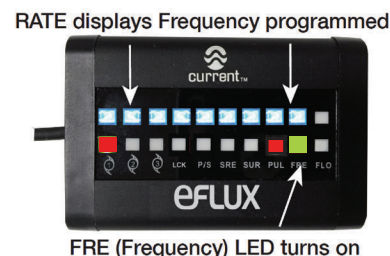
If programming the pump in either SURGE or WAVE mode, adjust the FREQUENCY setting by pressing the increase/decrease FREQ keys on wireless remote until the desired frequency/duration is reach.

The RATE display will show the FREQUENCY in 10 settings as follows:

SURGE/GYRE
Frequency Setting

10s 15s 20s 25s 30s 40s 50s 70s 80s 90s

		.3s	.5s	.7s	1s	2s	3s	4s	5s	6s	7s
Wave/Pulse Frequency Setting	Pump ON	.3s	.5s	.7s	1s	2s	3s	4s	5s	6s	7s
	Pump OFF	.3s	.5s	.7s	1s	2s	3s	4s	5s	6s	7s



Note: Decreasing FREQUENCY increases the time duration between min/max flow. It will appear opposite in your aquarium (lowering frequency/duration will increase wave motion).

Your setting will automatically be saved into memory.
No additional keys need to be set to save your settings.

Programming Guide

Primary/Secondary Pump Syncing (GYRE)

A pump group consists of one Primary pump and at least one Secondary pump. The eFlux Wave Pump manifold HUB automatically designates Pump 1 as a Primary pump. Pump 2 can be designated as a Primary pump (controlled independently), or as a Secondary pump (runs opposite of Primary pump). Running two pumps in tandem (Primary/Secondary) automatically synchronizes the pumps in opposite flow modes (WAVE or SURGE), providing stronger wave flow and/or gyre flow in your aquarium. Note: Primary/Secondary mode is not available using Stream Mode.

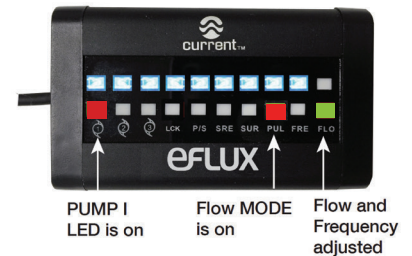
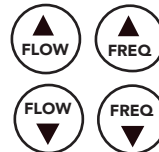
To sync your pumps as Primary/Secondary (GYRE Flow):

Step 1: Program Pump 1 into desired mode

Press PUMP 1 key on wireless remote, pump 1 LED will illuminate on the LED display.

Press WAVE or SURGE mode, mode LED will illuminate on the LED display.

Adjust both FLOW (Flow) and FRE (Frequency) to the desired amount using increase/decrease arrow keys.

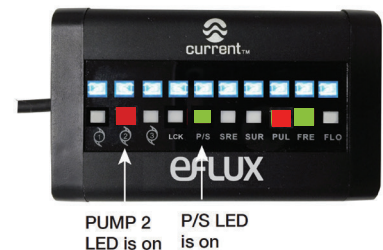


Step 2: Program Pump 2 as Secondary Pump

Press PUMP 2 key on wireless remote, pump 2 LED will illuminate on LED display.

Press the P/S key on the wireless remote.

P/S will illuminate on the LED display when Pump 2 is designated as a Secondary pump.



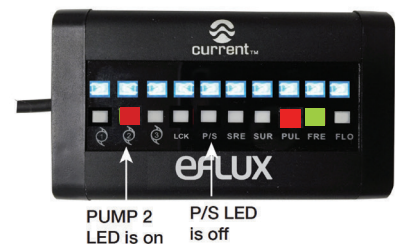
Pumps will now operate in Sync.

Step 3: Program Pump 2 as Primary Pump (Independent)

Press PUMP 2 key on wireless remote, pump 2 LED will illuminate on LED display.

Press the P/S key on the wireless remote.

P/S LED will turn off on LED display when Pump 2 is designated as a Primary pump.



Pump can now be programmed independently of Pump 1.

NOTE: PUMP 3 is ONLY a Primary Pump (independent) and ONLY in Steady/Stream Mode.

Safety Warnings and Warranty

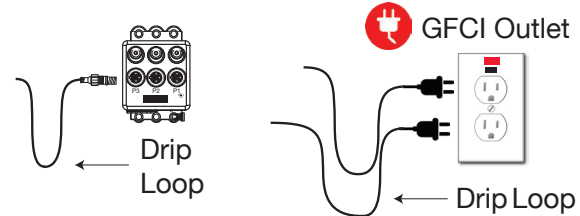
IMPORTANT WARNINGS | SAVE THESE INSTRUCTIONS

This is NOT a page of legalese. It contains important safety information that you should read and save for future reference. Remember you can always quickly access instructions for all our products at www.current-usa.com.

- Never attempt repairs yourself; return the appliance to an authorized service facility for service or discard the appliance.
- Carefully examine the fixture after installation and BEFORE you plug it into the GFCI wall outlet. Be sure there is no water on any part of the light fixture or the timer.
- Never plug in a wet cord. If a plugged in unit or socket does get wet, DON'T touch it. Instead, promptly disconnect the fuse or circuit breaker that supplies power to the fixture. Then, you may unplug the fixture and examine for the presence of water.
- Never operate a fixture that is damaged or malfunctioning, discontinue use immediately and return the appliance to an authorized service facility.
- Close supervision is necessary when any appliance is used by or near children.
- Always unplug the fixture when not in use, before putting on or taking off parts, and before cleaning. Never pull the cord to unplug from the GFCI.
- Do not use the fixture for anything other than intended use. The use of attachments not recommended or sold by the fixture manufacturer may cause an unsafe condition and will void your warranty.
- Do not install or store the fixture where it will be exposed to the weather or to temperatures below 0° Celsius or 32° Fahrenheit.
- Do not operate at temperatures above 50° Celsius or 122° Fahrenheit.
- Ensure the fixture is securely installed before supplying power to the unit.
- Read and observe all the important notices and warnings on the fixture and power cord. DO NOT REMOVE THE WARNING LABEL.
- If an extension cord is necessary, a cord with a rating at least 15 amperes should be used. A cord rated for less amperes or watts than the fixture rating may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
- Do not look directly into the LEDs.
- Do not install pumps where strong currents can harm animals. Do not install close to sand bed where it can suck/stir sand.
- Pumps can produce powerful wave action in both wave and surge modes. Ensure your aquarium is designed for wave pumps and ensure pumps are mounted low enough not to push water out of the aquarium tank.
- Magnet assembly is VERY powerful. Be cautious not to cause injury to fingers.
- Keep magnets and all accessories out of reach of children.
- Never place magnets or pump near sensitive electronics, sharp objects or other attractive surfaces.
- Do not run pumps dry or out of water.
- Always place spacer between magnets when not in use.
- Always unplug with dry hands for maintenance or servicing.
- Turn all controllers OFF and disconnect power supply before performing any service or maintenance.
- This product MUST be powered by a UL or ETL listed power supply.
- To avoid possible electric shock, power supply MUST be plugged into a GFCI wall outlet installed by a certified electrician in accordance with all local codes. All products must have a drip loop.

Important Warnings | Drip Loops

Drip Loops should always be used to help prevent water from traveling along the cord and coming into contact with an electrical outlet. Drip loops must always be below the level of the outlet.



Current-USA One Year Limited Warranty

This product **MUST** be purchased from an authorized Current-USA reseller. Visit our website for a list of unauthorized resellers. Current USA, Inc. warrants this product against defects in materials and workmanship for **ONE (1) YEAR** from the date of original retail purchase and is none transferable.

Warranty on all Products, including Aquariums, is limited to replacement of the product and does not cover fish loss, personal injury, property loss or direct, incidental or consequential damage arising from the use of this product.

Note: Current-USA, Inc. One-Year Limited Warranty does not cover damage caused by the following: improper installation, saltwater corrosion, electrical surges, or modifications.

If you discover a defect, please see your retail store or point of purchase. Current USA, Inc. will, at it's option, repair or replace the product at no charge to you, provided you return it during the warranty period. A copy of the bill of sale is required as proof of original purchase date in the event the product needs repairs within the warranty period. Please see your dealer for return options and warranty replacement parts. This warranty applies only to products by or for Current USA, Inc. that can be identified by trade name, or logo affixed to them. Current-USA, Inc. does not warrant any products that are not Current-USA, Inc..

This warranty does not apply if the product has been damaged by accident, abuse, misuse or misapplication or if the product has been modified without the written permission of Current-USA, Inc.; or if any Current-USA, Inc. logos have been removed or defaced.

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