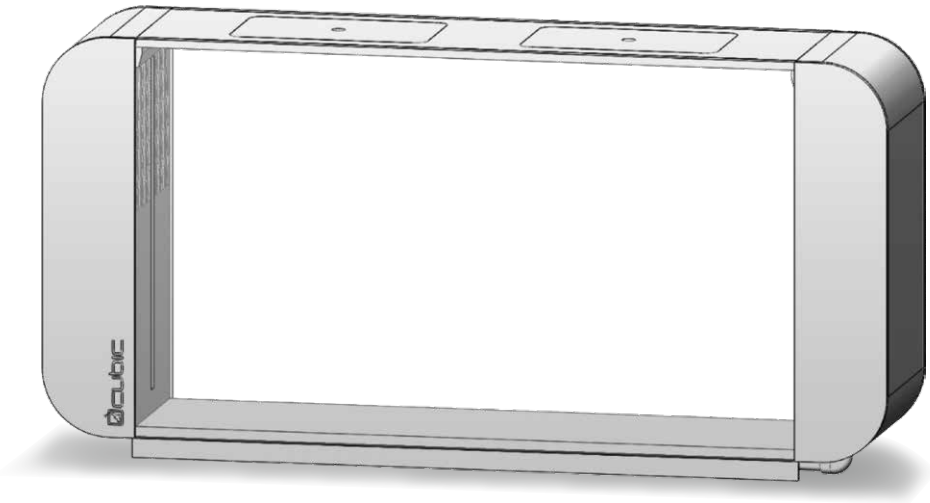


cubic
AQUARIUM SYSTEMS

PULSE 160

USER GUIDE

Thank you for purchasing this Pulse 160 Jellyfish Aquarium by Cubic Aquarium Systems.
The Pulse 160 has been carefully designed to offer many years of reliable service when set-up and maintained in accordance with these instructions and we hope it provides much pleasure and enjoyment wherever it is located.

The following instructions should be read in full and followed prior to the installation, running, or addition of any live animals into your aquarium.

For best results, we recommend the use of this manual combined with the 'Jellyfish husbandry guide' which is available for download at www.cubicaquarium.com/download

BEFORE ASSEMBLY

The aquarium and all components should be carefully removed from its packaging and inspected to ensure there has been no damage while in transit. If damage is evident, you should contact your dealer as soon as possible before setting up the aquarium.

Your aquarium package will include the following

- 1 x Pulse160 aquarium
- 2 x Top lid panel
- 2 x Filtration cover
- 2 x Water diffusers
- 2 x Water level adjusters
- 2 x Filter sponge
- 4 bags x Bio Media
- 2 x Water pumps
- 1 x Remote control for the LED lighting system
- 2 x Removable LED light strips
- 1 x Power supply for LED lights
- 1 x Power cable for water pumps
- 1 x Power split cable
- 1 x PVC pipe to connect filtration chambers
- 4 x union valves (2 for standard setup and extra 2 for hard plumbing)
- 2 x Set of hose barbs for optional external connection
- 1 x User guide

The Pulse Jellyfish Aquarium range has been carefully developed and rigorously tested to ensure that it offers the best conditions and caters for the very specific needs of Jellyfish.

IMPORTANT: When keeping planktonic jellyfish under no circumstances should any form of media, substrate or decoration be added to the main display area.

IMPORTANT: When filled and operating, the aquarium will weigh approximately 90kg. The aquarium should therefore be placed on a flat level surface of sturdy construction capable of supporting a minimum recommended 120kg and withstanding accidental contact.

IMPORTANT: The aquarium should be sited out of the reach of young children and away from direct sunlight where possible as this may induce excessive algal growth and overheating of the water which can result in stress and damage to any livestock present.

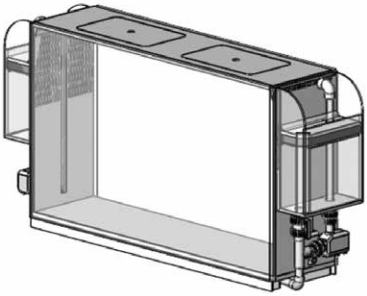
IMPORTANT: Under no circumstances should power be supplied to the aquarium prior to it being filled. Running the pump dry may result in severe damage to the pump internals and result in loss of applicable warranties.

Section 1. Setup Options

1.1: **STANDARD SETUP**

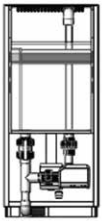
Standard set up does not require any external filter, pump, or additional parts. The pumps on both sides will create water flow inside the aquarium, and the pipe under the aquarium will keep the water level in the filtration boxes at same level.

PLAN VIEW



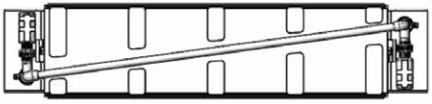
ISOMETRIC VIEW

FRONT VIEW



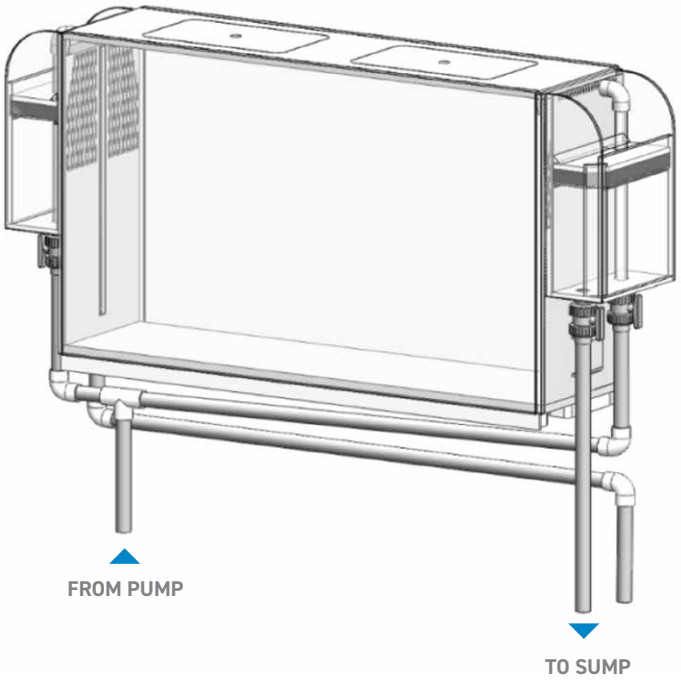
SIDE VIEW

BOTTOM VIEW



1.2: **EXTERNAL SUMP SET UP**

This option is recommended for those who would like to have an external sump for more filtration capacity. A protein skimmer, UV sterilizer or temperature cotroll unit is easier to incorporated with this set up option. This option can be achieved either by soft plumbing with provided hose connectors or PVC hard plumbing.



Section 2. Aquarium function

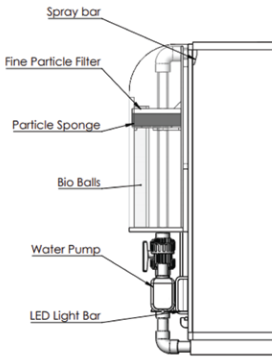


FIG.1

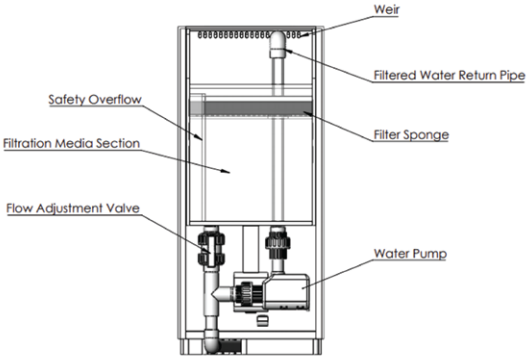


FIG.2

FIGURE 1 & 2. **EXPLANATION OF THE AQUARIUM FUNCTION**

The Pulse 160 has been designed specifically to house delicate organisms that would not survive in a traditional aquarium. A circular (gyre) flow is created inside the aquarium by a spray bar. The water flows into the tank in a way that keeps the aquarium occupants away from the outlet vent where water is drawn into the filtration system.

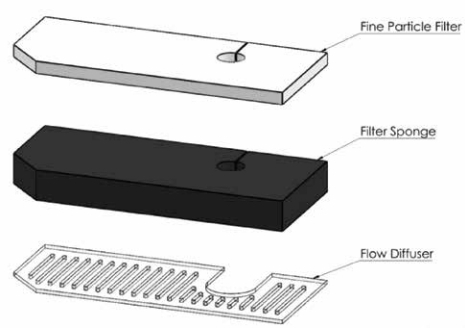


FIG.3

The water falls from the weir, then passes through a mesh and sponge filter where any particles are trapped allowing them to be easily removed. Next, the water passes through an acrylic panel which spreads the flow over the trickle filter (Fig. 3). This type of filter both oxygenates the water and breaks down any waste. The water exits the bottom of the filter section and is pushed back to the spray bar via the pump.

Section 3: Setting up aquarium

IMPORTANT: These aquariums have been designed to run on a level surface. If the surface it is placed on is not level the filter boxes will not run evenly leading to bubbles being sucked into the display. If this issue should occur, please refer to section 6 for a solution.

01 Place the aquarium on a flat and level surface

02 Remove all components packed inside the aquarium

03 Remove any tape or plastic that has been used to protect or secure the tank whilst in transit

04 Connect the pumps, unions and pipes and check they are in place and secure as shown in figure 2

05 Connect the pump power lead and LED power lead into their corresponding connections on the bottom of the filter chamber. Please be noted that the Pulse 160 requires 2 power supplies, one for LEDs and another for pumps.

06 Rinse the bio media thoroughly, and place them into the filtration chambers

07 Add water to the aquarium until the water falls into the filtration chambers, fill it up to the Max level marked on the filtration chambers

08 Plug the power supplies into the wall sockets

09 As pumps start to push the water to the aquarium, the water level in the filtration chambers will drop. Please add some more water until water levels stay at the Max level in the filtration chambers.

10 Adjust the water adjustment valves on both sides until water levels in both filtration chambers stay the same. The water adjustment valves should be set at about 50% open (see section 6 for more details)

11 The water level inside the aquarium can be set at 2 different levels by placing or removing water level adjuster (see next section 3.1 for more details)

3.1 **SETTING THE WATER LEVEL**

The aquarium has been designed to allow the internal water level to be set at two different heights. The water's surface can be brought to the top of the aquarium making it invisible to the eye. In order to do this simply place the provided acrylic strip inside the top of the filtration weir. (Fig.4)

When cleaning the tank, or adding/removing jellyfish, you may find it easier to lower the water level slightly. This can be done by removing the acrylic strip from the top of the weir. Please take note that removing the acrylic strip will increase the water level in the filtration chambers.

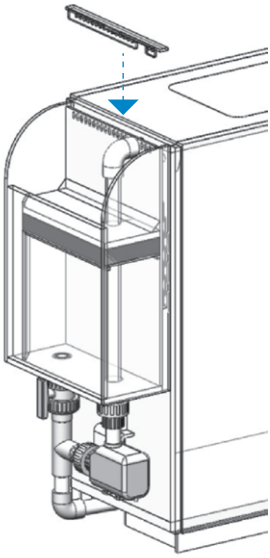


FIG.4

3.2 **CONNECTING TO EXTERNAL DEVICES BY HOSE BARBS**

To connect an external device, such as a canister filter or chiller by soft hoses, attach the supplied hose barbs to the barrel unions as shown in Fig. 5. Run two rubber hoses out of the bottom of the filter section to your external unit via an appropriately sized external pump.

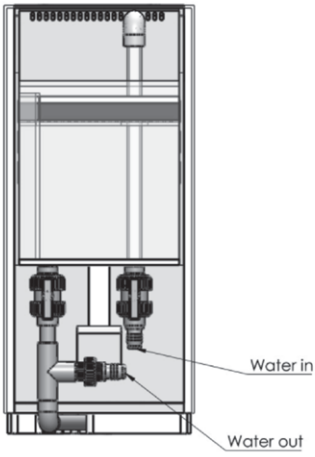


FIG.5

Section 4. Salt Water

The use of tap water is not recommended as it may contain excess pollutants or high concentrations of Chlorine and other contaminants which may be extremely harmful to the aquarium inhabitants.

We highly recommend the use of natural sea water or pure Reverse Osmosis/deionised water mixed with a good quality aquarium salt when keeping jellyfish. Pure Reverse Osmosis or deionised water should also be used when replacing water that has evaporated from the tank.

Section 5. Maturing the Aquarium

Water Maturity

Jellyfish are highly sensitive to freshly mixed salt water and thus water maturity is very important.
a. If using fresh mixed salt water and/or artificial media that require maturation, then the aquarium should be left to run for two weeks prior to the addition of any livestock.

Why? The settling period allows the water to 'age' and stabilise chemically. This period also allows the bacterial colonies to establish on and within the media.
b. If using fresh mixed water with a pre-matured biologically active filter (live rock rubble) then the settling period may be reduced to 1 week.

Section 6: Flow Rate and balancing filter chambers

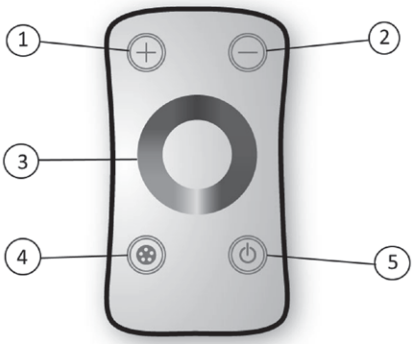
The flow rate can be adjusted on each filter section by turning the handle on the valve situated below the filter chambers. The flow rate from both sides needs to be as similar as possible to keep an even flow inside aquarium, as well as to keep the water level same in filtration chambers.

IMPORTANT: The valve should never be completely shut off whilst the pump is running. This may damage your pump and result in loss of applicable warranties.

For best results with Jellyfish, the flow rate should be such that the animals are very gently circulated around the aquarium at a rate no more than that required to prevent the jellyfish from settling on the bottom. This rate of flow will also help keep food suspended in the water column where the jellyfish can feed effectively.

Please read the 'Jellyfish Husbandry Guide' which can be downloaded from cubicaquarium.com/download/ for information specifically relating to keeping jellyfish and water quality testing

Section 7. Using the Remote Control



The remote control communicates with your aquarium using radio signals and allows you to:

01	Increase speed/brightness
02	Decrease speed/brightness
03	Set the colour
04	Set the light function
05	Turn the power on/off

Section 8: Choosing Your Jellyfish

This aquarium has been designed to maintain the correct flow and water filtration to allow you to keep most species of jellyfish. The limiting factors when choosing jellyfish species are:

Temperature

The aquarium has no inbuilt temperature control. This means when choosing your jellyfish you first need to know that maximum and minimum temperature of the room where the aquarium will be placed. Once you know this information, you can choose a jellyfish species that will thrive within that temperature range.

All of the Pulse range of aquariums have external connections allowing the tank to connect to an external chiller or filter. When connecting your aquarium to an external device, please refer to section 1.2 for hard plumbing and section 3.2 for soft plumbing.

Size

There are various of species of jellyfish available but many of them grow to large sizes. It is important when choosing jellyfish that you consider its rate of growth and maximum size.

If you choose to keep jellyfish with a very small maximum size, you can feed heavily but when keeping species with a large maximum size it is important to balance food intake. This way you can control growth rates ensuring you can keep it in your Pulse aquarium for as long as possible before it has to be rehoused or returned to the pet shop.

Please check our 'Jellyfish Husbandry Guide' for more information on jellyfish species and their husbandry requirements, and on how to acclimatise Jellyfish when adding to the tank

IMPORTANT: When adding jellyfish remember to lower water level first

Section 9: Aquarium Cleaning and Maintenance

Keeping your Pulse jellyfish aquarium clean and well maintained will prolong the life of your jellyfish and keep the aquarium running for many years.

IMPORTANT: Under no circumstances should:

a. detergents, spray cleaners or any other chemical agent be used on or near the aquarium.
Why? Using such materials can harm the inhabitants and/or damage the acrylic finish and tank construction. Any such use will invalidate applicable warranties.

b. excessive pressure be used when cleaning, nor any form of harsh abrasive material be used.
Why? The use of such materials may damage the vulnerable acrylic surface impairing its clarity and tendency to resist further biofilm accumulation.

How to...

Feed Jellyfish

Gently add prepared food to the aquarium chamber. Please refer to the Feeding section of 'Jellyfish Husbandry Guide' for details on preparing jellyfish food. Feeding frequency will depend on the variety of jellyfish and the size to which you wish your stock to grow.

Clean External Surfaces

Use a soft lint-free cloth made damp with clean water or Reverse Osmosis water. Any smears or minor marks may be polished away afterwards by wiping down with a second soft lint-free dry cloth.

Clean Internal Surfaces

Over time the internal surfaces of the aquarium including the viewing panes may show a build-up or fine film, commonly known as a 'biofilm' consisting of bacteria and minor algal populations. These may be removed by regular gentle wiping with a suitable soft sponge or dedicated acrylic cleaning pad available from your aquatic retailer.

Clean Filter Sponge

The internal filter sponges will need regular routine cleaning. The regularity of maintenance required will depend on the number of animals kept and the amount/types of food used. As a general recommendation, it is suggested that the sponge be removed and rinsed under hot running water before being given a final rinse in Reverse Osmosis water at least once every two weeks.

Check Water Salt Levels

We suggest using a refractometer or digital salinity meter to test the salinity of your water. Salinity reading should be between 1.022-1.026 specific gravity and 30-35 parts per thousand.

How to...

Change Water

Regular water changes are an essential and accepted part of maintaining a healthy aquatic environment.

Whilst the built-in filtration system will help break down a large percentage of any waste and uneaten food generated, the accumulation of organic material and lowering of water quality over time mean that a regular routine of water changes are essential to both dilute unwanted accumulations and to replenish vital trace elements that are provided in the salt water. It is therefore recommended that a minimum 20% of the aquariums water be exchanged for new on a monthly basis.

Ideally water changes should be split across at least two changes over the month. The addition of a small amount of new salt water will have no adverse effect on any animals present as long as it is well mixed and aerated prior to addition.

Add new water to the filter compartment. It is advisable to turn off the circulation pump when conducting water changes to prevent the pump scavenging air.

We recommend the following routine

Daily	• Feed jellyfish once or twice as necessary • Remove uneaten food
Weekly	• Gently wipe the inside of the tank to remove algae • Check water salt levels
Monthly	• Remove filter sponge and rinse under the tap
Every 3 Months	• Thoroughly clean the filter and filter sponge • Remove and clean the pump

Section 10. Disposing of jellyfish in the event they die or become too large for the tank

It is extremely important that under no circumstances are jellyfish to be released into the natural ecosystem by direct release or lavatory flushing. Even dead jellyfish can produce planula (jellyfish larva) which can attach to rock and begin producing baby jellyfish, and this can have disastrous consequences for the local environment.

Dead jellyfish should first be placed in a bucket of water and sterilised with a cap of bleach before being disposed of in a bag, in the trash.

If jellyfish become too large for the tank many pet shops will offer a buy back policy where they will exchange the jellyfish for cash or store credit.

For further information visit
cubicaquarium.com

For Technical support, warranty claims and spare parts email
info@cubicaquarium.com

Issue January 2021