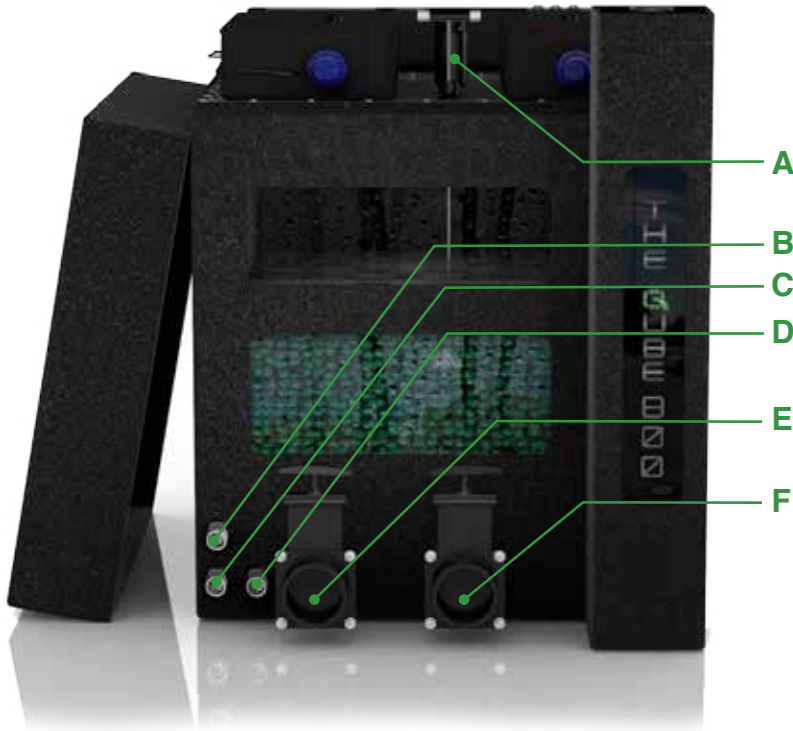


# THE QUBE

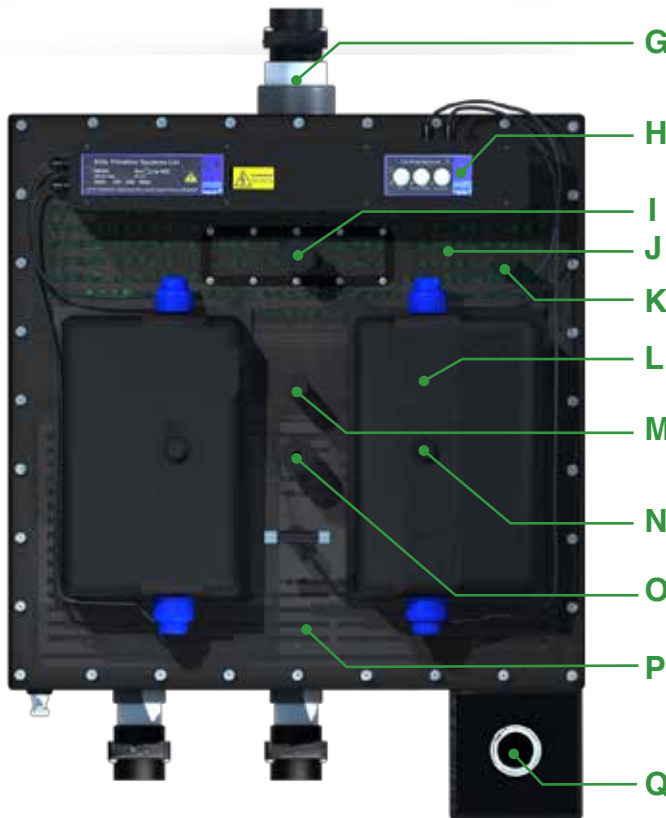
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## THE QUBE 800 - USER GUIDE



### KEY

- A** Sliding Grill
- B** Drainage Plate Air Valve
- C** Bio Reactor 2 Air Valve
- D** Bio Reactor 1 Air Valve
- E** Bio Reactor 1 Waste Valve
- F** Bio Reactor 2 Waste Valve



### KEY

- G** 2" Inlet Valve
- H** Control Switches
- I** Bio Reactor 1 Mechanical Tri Valve
- J** Bio Reactor 1 Top Grill Plate
- K** Bio Reactor 1 Manual Air Valve
- L** UV Box
- M** Bio Reactor 2 Manual Air Valve
- N** Air Bleed Valve
- O** Bio Reactor 2 Mechanical Tri Valve
- P** Bio Reactor 2 Top Grill Plate
- Q** Weir Box

## THE QUBE 800 - USER GUIDE

### Pump Fed Filling Instructions

- 1 Open the Manual Air Release Valves located on top of the unit. **(K) (M)**
- 2 Switch on the water pump. **(H)**
- 3 Partially open the 2" Inch Inlet Valve **(G)** (only open the valve enough to allow a small amount of water to enter the unit). This allows trapped air to escape through the manual air release valves and Mechanical Tri-Valves.
- 4 When the water level rises up to Bio-reactor one's top grill plate **(J)** close the rear Manual Air Release Valve. **(K)**
- 5 When the water level rises up to Bio-reactor two's top grill plate **(P)** close the front Manual Air Release Valve. **(M)**
- 6 Carry on filling the unit until the Mechanical Tri-Valves seal themselves **(I) (O)**; this happens when a small white ball appears at the top of the valve.
- 7 Open the Air Bleed valve on top of the UV boxes **(N)** to expel the remaining air from inside the unit. It is advisable to do this one UV unit at a time. Open the 2" inlet valve **(G)** until the desired flow rate is achieved.



### Pump Fed Cleaning Instructions

#### Cleaning Bio-Reactor Two

- 1 Switch off the main water pump **(H)** and close the 2" inlet valve **(G)**
- 2 Switch off the UV. **(H)**
- 3 Open Bio-reactor two's Waste Water Valve **(F)** (middle valve) and allow the water level to drop just above the top grill plate, approximately 10 to 15mm.
- 4 Close Waste Water Valve. **(F)**
- 5 Open Bio-reactor two's Manual Release Valve (very important). **(M)**
- 6 Pull up the Sliding Grill via the handle on top of the unit. **(A)**
- 7 Switch on your air pump (max 90 lpm) plug the airline into the bottom left hand air valve **(C)**; this supplies Bio-reactor two's air cleaning system.
- 8 The Orbs media will start to bubble and rotate; this dislodges debris from the media.

- 9 After two to three minutes, partially drain to waste by opening the Waste Water Valve **(F)**. Allow the water level to drop until the media stops bubbling.
- 10 Unplug the airline (it is important to unplug the airline when refilling). **(C)**
- 11 Refill Bio-reactor two by switching on the pump **(H)** and partially opening the 2" Inlet Valve **(G)**. Stop the pump and close 2" Inlet Valve when the water level is approximately 10 to 15mm above the grill.
- 12 Repeat the cleaning process of Bio-reactor two until the Orbs media are clean. Once you are satisfied they are clean you can fully empty Bio-reactor two to waste and close the Waste Water valve. **(F)**

## Pump Fed Cleaning Instructions Cleaning Bio-Reactor Two

- 1 Open Bio-reactor one Waste Water Valve **(E)** (left hand valve) and allow the water level to drop just above the top grill plate **(J)**, approximately 10 to 15mm. If the water level is too low switch on the pump and partially open the 2" Inlet Valve **(G)** until the desired level is reached. Close the valve and switch off the pump. **(H)**
- 2 Open Bio-reactor one's Manual Release Valve (very important). **(K)**
- 3 Switch on your air pump **(H)** and plug the airline into the bottom right hand air valve **(D)**. This supplies Bio-reactor one's air cleaning system.
- 4 The Orbs media will start to bubble and rotate; this dislodges debris from the media.
- 5 After two to three minutes, partially drain to waste **(E)** by allowing the water level to drop until the media stops bubbling.
- 6 Switch on your air pump **(H)** (max 90 lpm) plug the airline into the bottom left hand air valve; this supplies Bio-reactor one's air cleaning system.
- 7 Switch on the water pump **(H)** and partially open the 2" Inlet Valve **(G)** fill to approximately 10 to 15mm above the top grill plate **(J)**. Close the valve and switch off the pump.
- 8 Plug in the airline. **(D)**
- 9 Repeat the cleaning process of Bio-reactor one until the Orbs media are clean. Once you are satisfied they are clean you can fully empty Bio-reactor one to waste. **(E)**
- 10 Unplug the airline. **(D)**
- 11 Switch off the air pump **(H)**
- 12 Switch on the water pump **(H)** and partially open the 2" Inlet Valve. **(G)**
- 13 When the water level reaches Bio-reactor one's top grill plate **(J)**, close Bio-reactor one's Manual Release Valve **(K)**.

- 14 Carry on filling the unit until the water level reaches Bio-reactor two's top grill plate **(P)**.  
Close Bio-reactor two's Manual Release Valve **(M)** . The Mechanical Tri-Valves will seal themselves.
- 15 Push down the Sliding Handle. **(A)**
- 16 Open the Air bleed Valve on top of the UV boxes to expel all the air from inside the unit.  
It is advisable to do this one UV unit at a time. **(N)**
- 17 Finally, open the Weir Box until the desired flow rate is achieved. **(Q)**

## Rinsing Bio-Reactor Two

- 1 Switch off the main water pump **(H)** close the 2" inlet valve Weir **(G)**
- 2 Switch off the UV. **(H)**
- 3 Open Bio-reactor two Waste Water Valve **(F)** (middle valve) allow the water level to drop to approximately 100mm from the bottom of the unit.
- 4 Close Waste Water Valve. **(F)**
- 5 Open Bio-reactor two Manual Release Valve (very important). **(M)**
- 6 Switch on your air pump **(H)** and plug the airline into the top left hand air valve **(B)**. This supplies Bio-reactor two's base cleaning system.
- 7 Any build up of debris will be agitated and can then be removed to waste by opening the middle waste valve. **(F)**
- 8 Switch on the water pump **(H)**, partially open the 2" Inlet Valve **(G)** and fill to the same level as before. Close the valve and switch off the pump.
- 9 Repeat this process until the water is visibly clear.
- 10 Switch on the water pump **(H)** and partially open the 2" Inlet Valve. **(G)**
- 11 When the water level reaches Bio-reactor two's top grill plate **(P)**, close Bio-reactor two's Manual Release Valve **(M)**.
- 12 Carry on filling the unit until the water level reaches Bio-reactor two's top grill plate **(P)**.  
Close Bio-reactor two's Manual Release Valve. The Mechanical Tri-Valves will seal themselves.
- 13 Open the Air Bleed Valve on top of the UV boxes to expel all the air from inside the unit.  
It is advisable to do this one UV unit at a time. **(N)**
- 14 Finally open the 2" inlet valve until the desired flow rate is achieved. **(G)**

## TROUBLESHOOTING

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### **Water returns to the pond before the unit is full.**

The slide valve was opened too fast when filling. Opening the valve too much does not allow the air to escape and be replaced by the water.

### **When cleaning the unit, water is returned back to the pond.**

The manual air release valves are not open fully. The incoming air is not escaping fast enough, forcing the air downwards and pushing the water back through the return pipe.

### **Can I fit a valve on the return pipe?**

This is not advisable. You could fail to re-open the valve after cleaning. If you then switched on the main pump, back pressure would occur and damage would be caused to the unit.

### **When cleaning bio-reactor two the water level rises, water exits the manual air release valve and the ball seals the Mechanical Tri-Valve.**

If you see the water level rise when cleaning bio-reactor two drain some water to waste. Maintain a 10 to 15mm water level above the grill plate when cleaning.

### **When I switch off the pump, the unit syphon's back to the pond.**

When installing the bio-qube units above ground it is necessary to install a vacuum release valve. This valve should be fitted immediately after the pipe exits the unit.

