



# BUBBLE COLUMNS ASSEMBLY & MAINTENANCE

## ASSEMBLY

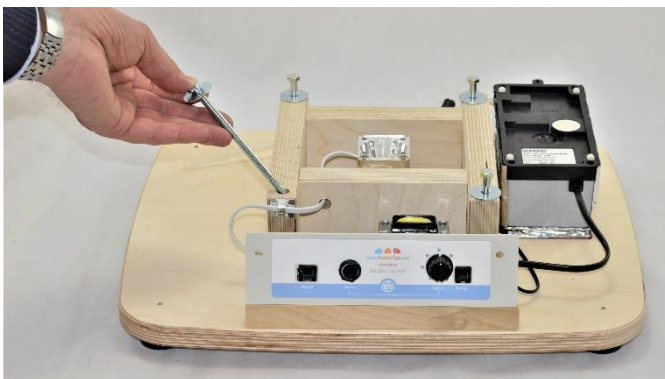
Each Bubble Column comprises of a robust wooden base with a white plastic shroud and a clear acrylic column assembly. They are shipped in separate boxes to avoid damage in transit.



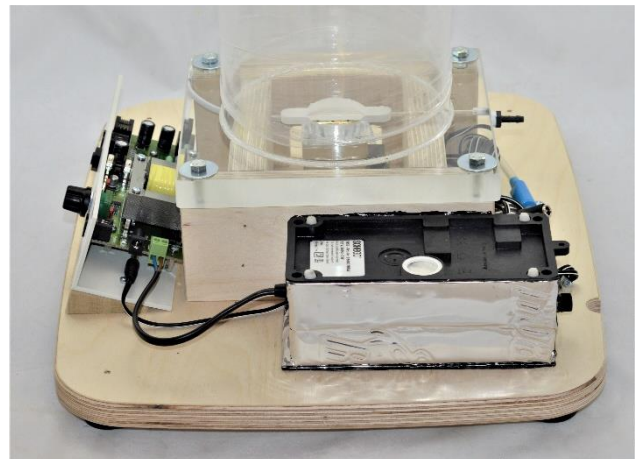
1. Remove the white plastic cap found at the top of the bubble column.



2. Undo the screws holding the white plastic shroud in place and gently remove it.

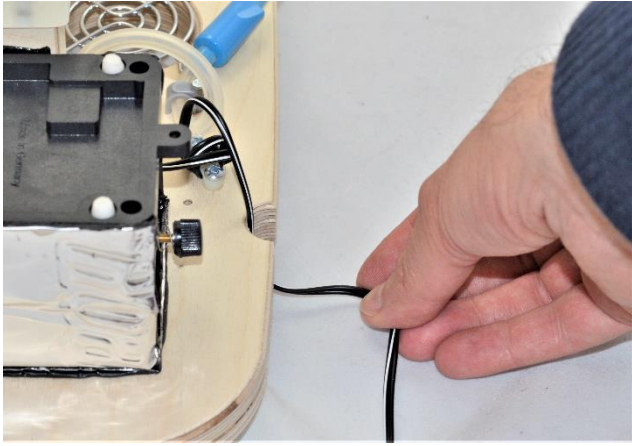


3. Remove the four 10mm bolts and washers and the box containing the power adaptor.

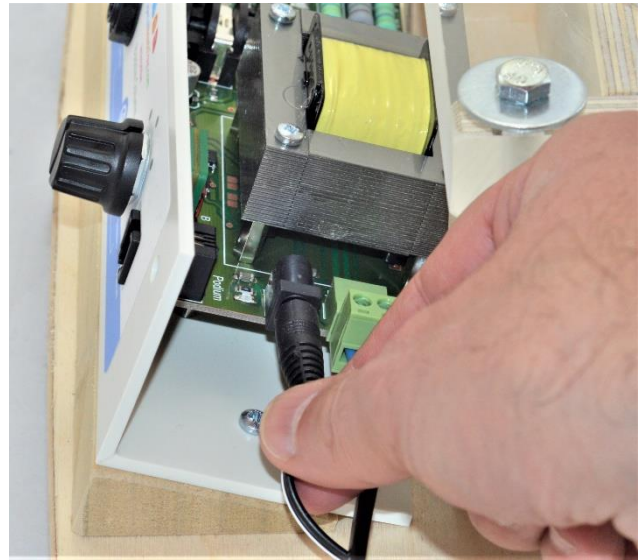


4. Place the clear column on the base with the air connector towards the back. Fix the column in place using the four bolts and washers.

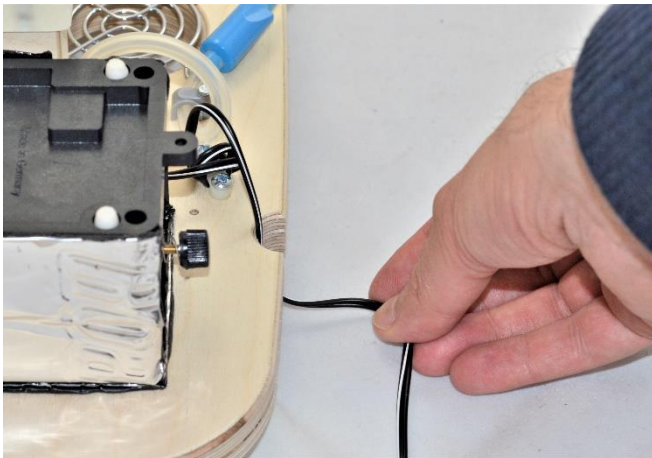
**OVERTIGHTENING THESE BOLTS CAN CRACK THE TUBE**



5. Push the clear silicone tube from the air pump and one-way valve onto the connector on the base of the column. It is important to check all connections along this flexible tube are tight to prevent water leaks.



6. Connect the small plug to its socket on the green circuit-board...



7. ...and run the wire carefully to the 'cut-out' in the wooden base.



8. Carefully slide the white plastic shroud over the column to cover the base. The bubble pattern selector needs to be 'eased' through the hole in the shroud.



9. ...and secure it using the screws previously removed.

**DO NOT OVERTIGHTEN THESE SCREWS.**



10. Attach the correct fitting to the power adaptor for your country [PHOTO] and plug this into an electrical socket. The Bubble Column is now ready for use.

## **BUBBLE CONTROL**

- Position 1 - Repeatedly cycles through the following six patterns.
- Position 2 - Pulses of bubbles with a short delay between.
- Position 3 - Pulses of bubbles with a long delay between.
- Position 4 - Pulses of bubbles with a very short delay between.
- Position 5 - Constant, low volume of bubbles.
- Position 6 - Constant, medium volume of bubbles.
- Position 7 - Constant, high volume of bubbles.

*Note: The 'dots' on the front panel are only approximations for each Position.*

## **ACCESSORIES**

The colour of the lights can be changed by a range of interactive controllers. These controllers can also switch the bubbles on and off. These include our 4-Button Controller, Wireless and Bluetooth receivers, iPad app. Cube Controller, Tilt and Roll Controller and others. Please contact our friendly sales team for further information. We do not have an answering service, just real people.

## **BUBBLE COLUMN MAINTENANCE**

The water inside the Bubble Column will become contaminated with use because of dust particles and bacteria in the air used to produce the bubbles. This does cause cloudiness after as little as 3 months. It can also produce a slimy deposit which will require thorough cleaning. In extreme cases green algae may form. This is the natural result of extended use and is accelerated by high ambient temperatures; 20C (70F) is reasonable but temperatures over 26C (80F) can reduce the service interval to as little as 4 weeks.

To drain and replace the water is a simple task. When refilling, we recommend that deionised water is used. Tap water should not be used even in small amounts. Top up with deionised or distilled water. The use of tap water will cause limescale clouding of the tube which can be removed with household descalers.

## **DRAINING, CLEANING AND REFILLING THE BUBBLE COLUMN.**

1. The easiest way to drain the Bubble Column is to push one end of a clean length of garden hose to the bottom of the water. Put the other end to a point outside a doorway or window which is lower than the bottom of the Bubble Tube.
2. Ensure that the 'exit' of the hose is outside, into a drain or bucket and start the siphon however you choose to. As soon as the water level starts to drop, ensure the hose is in the bottom of the Bubble Column and the water should fully drain in a few minutes.
3. If the Bubble Column is not soiled by slime, algae or other deposits it now a simple task to refill with clean (deionised) water. *Note: It is advisable to switch on the air pump while filling to avoid the sudden influx of water overloading the non-return valve in the airline which protects the pump.*
4. Preferably add the fresh water directly from its container. Do not use the same hose for refilling as draining.
5. If the Bubble Column needs cleaning it should be removed to a suitable area (outside or to a wet room) after first removing the 'Podium Top' and brackets (if fitted) and any connecting wires. The Bubble Column is not too heavy without the water but care must be taken to avoid any sharp knocks.
6. A good cleaning solution is to use a mild detergent. A very dilute bleach solution can also be used.

7. Add this to the tube then using a mop to spread this over the entire inside surface and leaving it for a short while to kill any organisms.
8. Add 2 or 3 Litres of water to the solution and mop again.
9. Thoroughly clean the column rinsing 2 or 3 times with several litres of clean water to remove all traces of detergent or bleach.
10. While the column is drained, inspect all the air tubes and the one-way valve in the Bubble Column's base for discolouring or contamination. This can drastically reduce the air flow or bubbles after a severe case of algae and also prevent the valve from closing. This could allow water to trickle back to the pump leading to its eventual failure.

**We advise you to fit a new valve when you replace the water. All parts are available from TFH so please ask for advice.**

11. When fitting new air lines, especially to valves, it is important to make sure that all surfaces are dry on assembly as trapped water can cause the tubes to slip off. Always check with a gentle tug.