



## Instruction Manual





Thank you for purchasing the Floatron - the easiest and most cost effective way of maintaining your koi fish pond.

If you experience any difficulties with your Floatron unit, please first review this operating guide. If you still experience difficulties with using the Floatron unit, please contact your distributor.

**Important Note:**

We strongly advise reading this operating guide in its entirety prior to assembling and using your Floatron.

In order to maintain top performance of your Floatron cleaning must be done weekly (see cleaning page 8)

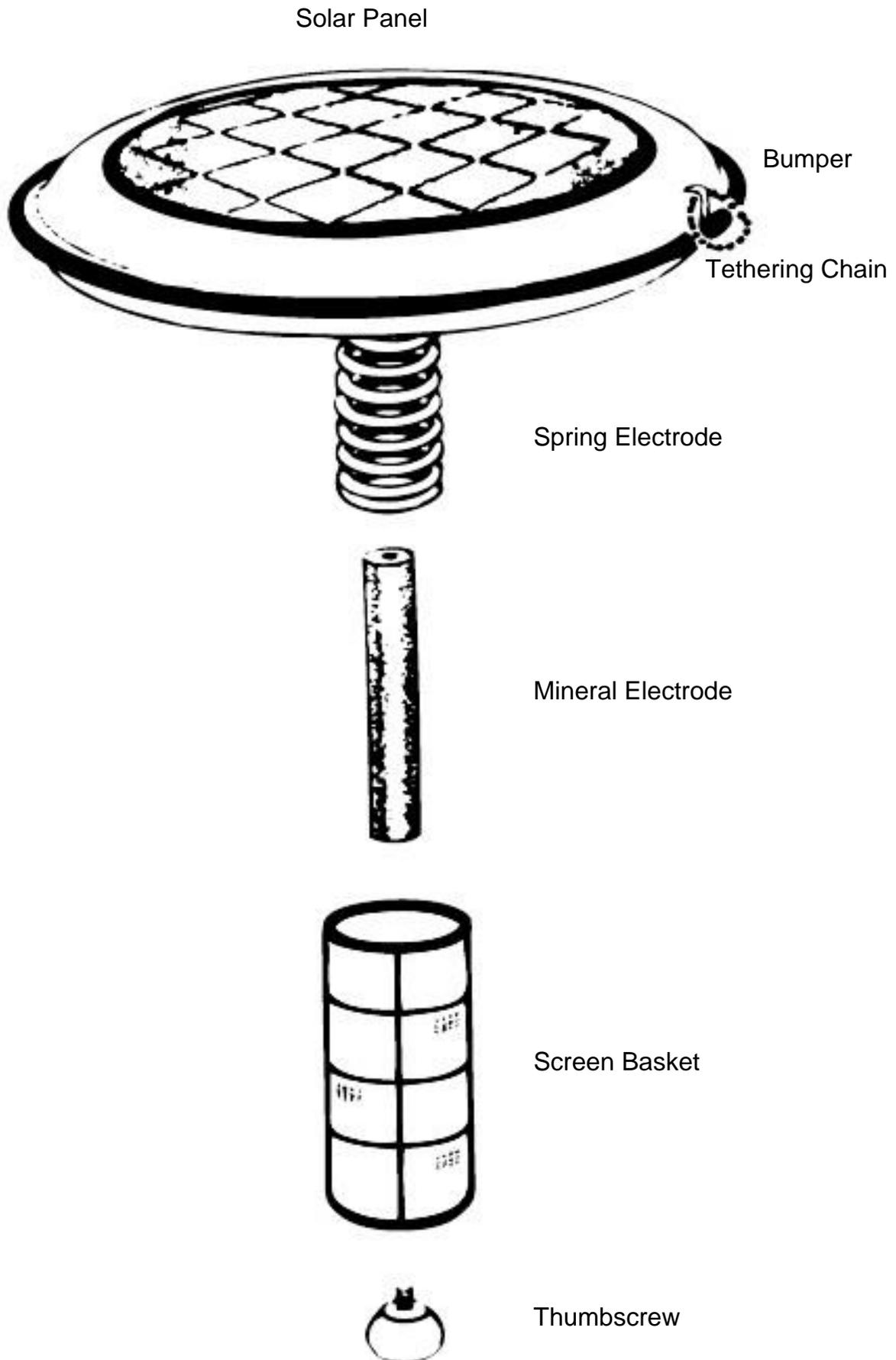


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# The Floatron



## The Concept And Composition Of Electrode

The Floatron is the original portable and solar powered water purifier with the primary function to control algae and good and bad bacteria. The composition of the electrode which is copper and silver is designed to eliminate the bad bacteria and maintain the good bacteria by the introduction of mineral ions called solar ionization. As the sunlight strikes the solar panel a harmless low power electric current is generated which energizes a special alloyed copper and silver (mineral) electrode below the waterline. As water flows by the electrode the charged ions are accepted and transported to surrounding water.

Algae control has proved to be a real problem for applications with fish in water. Accordingly, use of algacides, chemicals, etc. are not desirable and will usually result in a fish kill. This leaves the Floatron as a unique solution - able to do the job and in a simple non-toxic and cost effective way

## Requirements For Use with Koi & Gold Fish

A few basic requirements must be met in order to use the Floatron.

1. The body of water must have a recirculating pump system.
2. The water must be captive; i.e. no inflow or outflow of new water.
3. Total capacity should be approximately 30,000 gallons (114,000 litres) or less.
4. Sunlight must directly illuminate the solar panel.

Because the Floatron is a trickle charger, instant results should not be expected. As with any sizeable body of water, quick and fast changes are to be avoided; slow, deliberate and longer lasting changes will prove to be advantageous and result in higher quality over the long term. The Floatron can do an outstanding job, but you must allow it time to do so.

If possible, start with a cleaned out enclosure, with new water. It is better to prevent algae than to eliminate existing algae.

## Basic Pond / Water Garden / Water Feature Procedure:

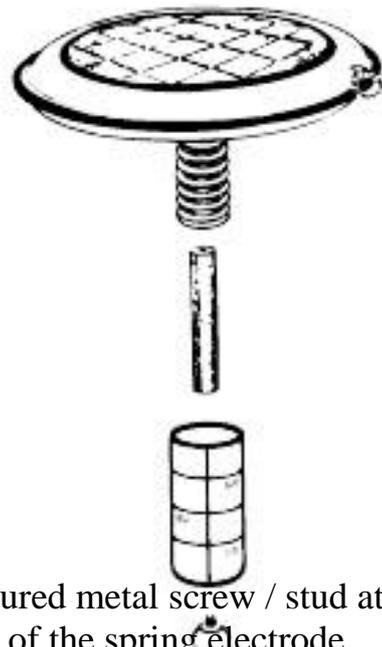
1. Float the unit in sunlight, preferably near the pump inlet or outlet. Tether as necessary. This will ensure adequate mineral ion mixing with the complete water volume.
2. Initially float the unit constantly and clean the electrodes.



## Initial Assembly

Once you unpack the Floatron unit, ensure that all parts listed in the diagram have been included. If you are missing any parts, please contact the place of purchase immediately.

1. Inspect the solar panel for any visual damage or imperfections which may have occurred during shipping. If any discrepancies are noticed, please contact the place of purchase.
2. Lay the unit face down on a smooth surface. With one hand, hold the spring electrode down in a compressed condition to allow unobstructed access for the mineral electrode installation.
3. Engage (clockwise) the threaded end of the mineral electrode onto the silver coloured metal screw / stud at the centre of the unit, which is also at the centre of the spring electrode.
4. Tighten snugly by hand, about a quarter turn after making contact with the black rubber seal at the base.
5. Place screen assembly over the electrodes and centre the hole in the cage with the bore in the mineral electrode end.
6. Screw plastic thumbscrew in bore to lock screen assembly into mineral electrode.



### Important Notes:

- The spring electrode is permanently installed and is not removable. Do not attempt removal by twisting or pulling. Permanent deformation may result.
- The purpose of the screen cage is to trap any deposits or residues which form on the electrodes during normal operation. The screen prevents any particles from falling into the water.

## Ion Testing

The mineral electrode is made of a unique alloy of several specific metals, predominantly copper. The ion test kit detects the presence of the copper ion, thereby enabling you to determine if the water has an adequate level of minerals.

The reagents in the kit are very sensitive, and reading can be affected by various interferences. Accordingly, use the ion test as a basic and general indicator. Test only once a week; more often is unnecessary.

1. Read ion test kit instructions on the test kit.
2. Weekly checks should show an increasing concentration over time.
3. When algae begins to die off and turn brown, remove the Floatron. If water is clear enough, the ion test kit which compares colours can be used to establish an ion level of 0.2-0.3 PPM approximately. If starting with new water and without existing algae, use the test kit to determine ion level and floating time.
4. Keep the Floatron out of the water until algae appears to regain growth. At that point, refloat the unit until brown / dead algae reappears.
5. Total capacity for one Floatron is approximately 30,000 gallons (114,000 liters) should your pool exceed this extra Floatron will be required please note large bodies of water will require up to full time floating

The objective is to float the unit as little as possible to achieve the desired results. Note that large bodies of water will require up to full-time floating, while smaller systems will suffice with part time.

Environmental factors such as cloudiness, rain, temperature etc will affect floating time. If some algae is preferred versus complete obliteration, float just enough to maintain the desired balance.

It is important to spend a few minutes a week to check the ion level and to keep the electrodes clean.

## Electrode Cleaning

The Floatron is the only purifier which, in addition to generating beneficial mineral ions, collects undesirable minerals such as calcium and iron. This has the effect of softening your water. The sacrificial mineral electrode is designed to slowly erode away, and in the process will form a scale buildup which will require occasional cleaning. The spring electrode may also form a scale, which normally consists of calcium, and should also be cleaned. The initial rate of buildup will be quicker in harder water, and will slow as the water becomes progressively softened.

Heavily scaled electrodes will restrict electrical flow and slow the ionization process, therefore it is advantageous to clean them on a weekly basis.

1. Lay unit face down, preferably on grass.
2. Remove thumbscrew fastener and screen.
3. Blast with a jet of water from garden hose nozzle, from different directions, to knock off loose material and scale.
4. Reduce the water flow, and with water running over the electrodes, attack buildup with the cleaning brush to remove most of the remainder of residues.
5. With water running over the electrodes, slide the spring up and down while making contact with the centre electrode from various directions. The residues will wash away with the water.
6. For EASY SPRING AND ELECTRODE CLEANING. Sit the Floatron unit with plastic screen off on top of a large jar of vinegar with the spring only immersed in vinegar and leave over night. The electrode can also be left in vinegar over night making it easy to clean in the morning

The centre electrode need not be cleaned down to bare metal, although the spring is relatively easy to clean completely. If the majority of the scale is removed, your Floatron will perform satisfactorily. It is not possible to clean the electrodes too much or too often. The cleaner the electrodes, the more efficient the operation.

Occasionally, the screen will require cleaning to ensure a free flow of water and ion exchange. Because the mesh is very fine, deposits can slowly choke

the openings in the screen and restrict water flow. To clean the white mesh screen:

1. Hose out loose debris
2. Immerse screen in a jar of vinegar overnight until visually free of Blue / White scale buildup.

## Routine

It is important to spend a few minutes a week to monitor the water balance, clean the unit and learn the trends. After a month or two of experience, you should have a good idea about how much floating time does the job. Remember that simplicity is the key.



## Electrode Replacement

The mineral electrode is sacrificial and designed to slowly disintegrate. After an average of 2 - 4 months depending on conditions, the electrode will wear away and require replacement. You will know this when it is “pencil thin”, or about  $\frac{1}{8}$  inch at the centre. To remove the spent electrode:

1. Remove screen assembly and clean the parts.
2. While compressing the spring electrode with one hand, rotate centre electrode counter clockwise. If necessary, use pliers for advantage.
3. Continue to unthread until free.

Note: The procedure for installing the electrode is in the reverse order or can be found under “initial assembly”.



## Operational Checklist

It is unlikely that your Floatron will not generate ions. Should there be any doubt, the following quick check will visually verify the electrical output.

1. Fill a clear, glass or plastic quart sized jar or equivalent with tap water.
2. Clean electrodes and leave screen off.
3. Place the Floatron on the top of the jar, resting on the lip, with electrodes

immersed in water.

4. With a full sun shining on the solar panel, very fine bubbles will be observed originating from the spring coils within seconds. This demonstrates that the electrical current is being generated. Absence of any bubbles indicates a problem.

## Tips

- Read the operating guide a few times if unsure before attempting to set up your Floatron.
- When replacing the mineral electrode, ensure that the threads are dry and free of water or corrosion.
- Low ion reading does not necessarily indicate that your Floatron is not functioning correctly. In this situation, contact the place of purchase.
- Store ion test kit in refrigerator.
- Use kitchen cleanser to clean the white plastic floater.
- The mineral electrode residues have been found to benefit vegetative growth. By cleaning your unit in the vicinity of plants, bushes, trees etc, enhanced growth rates and plant size can be realised. As with any fertilizer, do not over apply, or do not clean in one particular spot for too long. Move around the yard for weekly cleaning.
- Do not automatically take advice for granted from those who are not experienced with the Floatron.
- Addition of algaecide is unnecessary as the Floatron is an algaecide generator.
- When using the ion test kit, be sure to sight through the sampling tube from top to bottom for colour comparison, not through the side. A low reading will result if viewed through the side.

## Replacement Parts

1. Mineral electrode
  2. Cleaning brush for the electrode
  3. Plastic screen
  4. Ion test kit complete
- (For price on replacement parts see supplier)

## Warranty

Floatron Australia guarantees its solar powered water purifiers to be free from defects in material or workmanship for a period of 24 months from the date of purchase. If a problem develops within this period, the fault part or assembly will be repaired or replaced, at the manufacturers discretion, free of charge.

### Not Covered By Warranty:

- Electrode wear and tear.
- Conditions resulting from misuse, abuse, negligence, accident, alteration, disassembly or:
- Situations resulting from departure from recommended instructions and applications.

Contact the place of purchase for service information.

Please save your receipt as proof of purchase.



