



Controlling Algae *by* Ionisation



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Ionisers, as we now know them today, made their way across from South Africa where a mining engineer had become aware that water leaching from mine tailings had a most beneficial effect on ground water. When more closely examined, he found that this phenomenon was due mainly to the presence of trace minerals. Not only was the ground water of a clarity not usually seen, but of greater relevance to our activities, was the absence of the unsightly algal blooms which overpowered ground water generally. This then was the catalyst that caused him to look for ways of replicating that which was occurring in nature. The result was ionisation by electrolysis.

Over the next 5 decades, the process was refined and adopted by swimming pool owners who were keen to find a “greener” alternative to the complex chemical solutions being offered for their water quality issues. A number of local manufacturers – more recently Aquavac in July 2000 – then began to produce their own versions.

Whilst our core business is fresh “drinking quality” pool water, we have, over the years, offered our products to aid in the control of the algal blooms in water features and fountains, an example of which appears at the head of this article. A number of our regular customers now specialise *only* in water features and ornamental fountains.

Recent issues with the supply and expense of the alloy from which the anodes are cast, caused us to revisit our archives, particularly so a dossier on our early experiments with algae control in large ponds. One file in particular was located, dusted off - and our next generation of ionisers was born. Field testing of prototypes, both here and overseas, has since confirmed that, not only did the new ioniser variant out-perform those offered by others, but it was very much cheaper and far more energy efficient.

For a more detailed explanation of just how we can assist with your algae control issues, contact Aquavac:

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Aquavic “Aqua Soleil” Control Module

For the past decade, the beating heart of our basic entry-level ionisers was the “*New Millennium*” Series. Although they punched well above their weight, the one feature that they lacked was an on-board digital timer.

As can be seen in the above pic, the “**Aqua Soleil**” now not only has a battery-backed 24-hour time clock – but we’ve gone a step further and designed it to run off virtually any 12V DC power source. For most domestic applications, a conventional 12V Plug-in power pack is supplied.

And being 12V DC, it is ideal for remote solar applications, in which case the “PUMP” output can be utilised to run a small 12V DC centrifugal circulation pump making it the ideal choice for remote or “Off The Grid” applications. Suitable for bodies of water to 40,000 litres.

PV solar-powered battery pack not shown this view. POA

* Contact our office for details.



Aquavic “Series 3” Control Module

These versatile units are by far our best seller. They feature the very same fully programmable timer of our “**Aqua Soleil**” controller which controls the running times of the main circulating pump, the parallel auxiliaries 3 pin outlet, and the ionising start times.

A secondary selectable run-time feature controls the ionising run times thus giving the operator absolute control over the release of those all-important micro doses of copper ions, without affecting the pump and auxiliaries running times, effectively giving the operator “Whole of Pool” control from a single 10 Amp power outlet.

So versatile are these units that when paired with a single flowcell (page 6) they are suitable for water volumes from as little as 100 litres, and up to a maximum of 100,000 litres. And when paired with a second flowcell, *the same control unit* will comfortably handle water volumes up to 200,000 litres.

For water volumes greater than 200,000 litres have a chat with us about our “Sentinel” (page 5) or our unique “Cascade” system.



Aquavic “Sentinel” Ioniser

Controlling algal blooms in ponds > 200,000 litres requires a dramatic rethink in the design – and this is where our decades of experience comes to the fore.

As can be seen, we have retained the same digital timeclock required to give the operator absolute control over the release of the algaecide, but that is where the similarity ends.

A significant increase in the low voltage current required to drive multiple pairs of anodes is the primary difference. But what is not shown here are the flowcells required to house them. Details to follow.

For further information contact our office direct. Details on page 2.



Aquavic “AlgaeNON” Anodes (Pair)

Designed specifically for ease of maintenance and for our unique range of in-line flowcells, these anodes are sold in pairs and are supplied ready to install with terminals, seals, spacers, and hardware.

Note though, that as they are truly sacrificial, they must be replaced from time to time. Many factors determine their effective life but, as a “*rule of thumb*” their life expectancy in a typical fountain, pond or water feature is around 4 to 5 years.



The Federal Government Regulator has deemed ioniser anodes to be an “*Agricultural Chemical*” and, as such, must be registered with the APVMA. It is therefore illegal to sell unregistered electrodes in this country. To do so is to invite prosecution.

The registration number of our AlgaeNON anodes is: 94896



Aquavic Universal Flowcells

Flowcells are an integral component of all ioniser systems as they house the sacrificial anodes. Our flowcells are designed for in-line installation in the pool's pipework. They are made to suit 40-mm NB PVC pipework or can be supplied with poly pipe barbed connections if required.

The clear domed window allows any-time monitoring of the condition of the anodes, and removal of same gives easy access for cleaning or replacement as and when required.

When ordering, it is important to specify the size of your pool's pipework and preferred connections.

Schematics

