

POND WEED CONTROLLER

EL-WW-ECO
EL-WW-ECO +

MANUAL



www.water-weed.com
www.electrostoreonline.com

OPERATION MANUAL

Introduction

The pond weed controller is a complete self-monitoring weed growth suppressing system.

It can be installed easily without any special qualifications and minimal DIY skills. There is no plumbing required, as the existing pipe-work does not get disturbed.

For power, the Control Unit is simply plugged into a regular power outlet.

Once switched on, no further attention is required, there are no chemicals required, and with no moving parts, there is nothing to wear out.

PRODUCT CONTENTS

- Electronic Conditioner Unit
- Antenna lead(s) (plug each end) *
- Two cable ties per antenna

* ECO uses 1 antenna
ECO + uses 2 antennae

OPERATION MANUAL

User Guide

OPERATING

After installation, there is nothing to do, other than occasionally checking the LED display to confirm that everything is working normally. There is no routine maintenance required, but inspect for damage regularly. It can be left running all year, but should be run at least through spring to autumn, however it can be switched off through the winter unless the temperature is particularly mild.

IMPORTANT WARNING

All wiring should only be made by a competent electrician who is qualified for this type of work. In any case check local regulations that apply (i.e. building Regulations part P applies).

This product is meant to be wired directly and permanently into the same supply that is used for the pond's water pump. All connections must be adequately waterproof and inaccessible to children and pets. In some cases the cable must be protected by conduit. Ensure that the power cable is not damaged and cannot become damaged. If any part of the system appears damaged or is not functioning correctly, immediately isolate the supply.

The cores in the supply cable are in accordance with the following code: Brown = Live, Blue = Neutral. This product is double insulated and does not use an earth connection.

For safety, it is important that the electronic unit doesn't get flooded. However, the ECO is designed with this environment in mind, but it is important to check that the system remains undamaged and these instructions are understood and followed.

Note: there are no high voltages on the antenna.

OPERATION MANUAL

Installation Instructions

1. Check "Contents" above.
2. Check the power supply matches local supply voltage. It will be either "115" (110/120) or "230" (220/240) volts AC.
3. Refer to the diagrams below. Select the diagram that applies to your chosen model of pond weed controller.

ELECTRONIC UNIT

4. Choose a location where at least 100mm length of pipe is accessible (not under water), normally between the pump and filter.
5. A mains power supply is required. If there is no power within 3 metres then a suitable extension lead can be used.
6. Although the electronic controller is reasonably waterproof, choose a location that avoids water/flooding and extreme temperature. Do not mount near the ground and ideally the unit should be sited 1.5m from the pond.
7. Mount the electronic control unit securely on the wall adjacent to the pipe using only the external feet, and preferably above the pipe in case of condensation dripping from the pipe. **DO NOT OPEN THE CONTROL UNIT.**

ANTENNA

8. Wrap the antenna tightly around the pipe with a minimum of 12 turns, and secure using cable ties or tape. Note that the antenna must remain tight to be effective. Check there is enough free cable to comfortably reach the controller. Any spare wire can be used to add extra turns around the pipe.
9. Connect the free ends of the antenna together using only the fitted waterproof connector.
10. The system will work with all types of plastic pipe (and also thin-walled copper pipe).

POWER SUPPLY

11. The system should be connected to the supply by a qualified electrician, **SEE IMPORTANT WARNING** above.
12. As with all garden electrical devices, it must be fed through a 30mA (max) RCD.

OPERATION MANUAL

Installation Diagrams

ECO (1 ANTENNA)

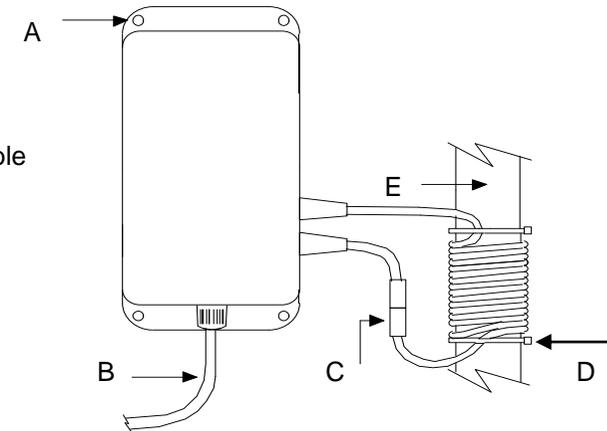
A Screw Fixings (4)

B Mains Power Cable

C Connector (1)

D Cable Ties (2)

E Water Pipe



ECO + (2 ANTENNAE)

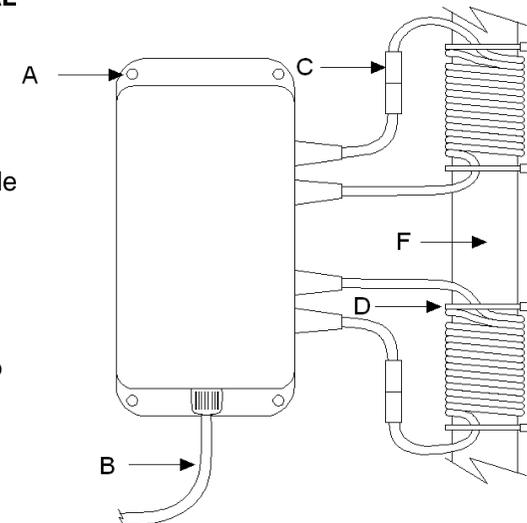
A Screw Fixings (4)

B Mains Power Cable

C Connector (2)

D Cable Ties (4)

F 50mm Centre Gap
(between coils)



OPERATION MANUAL

Running the System

On supplying power, the system will automatically start to work. If there are no LED lamps lit, then check the power supply.

A red LED indicates that power is present.

THERE ARE HAZARDOUS VOLTAGES INSIDE THE ELECTRONIC UNIT, DO NOT ATTEMPT TO OPEN IT, AND REMOVE POWER IF IT APPEARS DAMAGED.

Green LEDs indicate operation. Initially, when first powered, a self-test is run while the unit checks that the system is operating correctly. The green LED (one per antenna) will flash rapidly. After about ten seconds it will settle into a slower flashing to confirm normal conditioning. If at any time, the green LED remains lit (not flashing) it is warning of a fault, typically the antenna has become unplugged or broken.

If the system appears not to be working, especially if the red LED is off, check the power supply is live by checking supply fuses, RCDs etc.

Note: there are no hazardous voltages present on the antenna.

OPERATION MANUAL

Weed Control

The unit will be immediately effective at treating the calcium in the water. This means that further weed growth should be inhibited, and over time it will die off. Note that it can take two to three months to become fully effective and if weed is already strongly established the effects will not be obvious for a while. Blanket Weed grows because your water contains excess nutrients either from fish waste or fertilisers which the blanket weed utilises as a food source. Therefore it is advisable to balance the nutrients in the water to eliminate the cause of the blanket weed.

Note that Spirogyra grows underwater where it may not be noticed, but later it will float to the surface, so after installing ECO, especially in the Spring, there may initially be more weed noticeable on the surface while the controller gets to work.

The system works by changing the form and balance of calcium carbonate that in its typical form allows blanket weed (Spirogyra) to thrive, but in its other form, it dies. Nothing else in the water is changed and so a healthy pond will result, as the growth mechanism of Spirogyra doesn't apply to other plants and animals.

OPERATION MANUAL

Technical Information

The exact specification may alter, these figures are approximate.

- Antenna:** ECO has 1 antenna
ECO + has 2 antennae
Each is 3 metres long (minimum)
- Power Supply:** Either 230V(220/240) 50Hz or 115V(110/120) 60Hz,
depending on version purchased.
- Power Connectors:** Intended to be permanently wired to the supply.
The controller has 3 metres of power cable.
- Power Consumption:** 2-3 watts.
- Dimensions:** Control Unit case size:
120 x 80 x 40mm.
- Weights:** 200g (Control Unit).
- Mounting:** Screws fixing.
- Climate:** The Controller works in -10 to 50 °C air temperature.
It is designed for garden use, but will be more reliable
in a sheltered location where damp is avoided.
- Sealing:** Sealed case and antenna, rated IP65.
- System Self Test:** Continuous, including antenna integrity test.

OPERATION MANUAL

Guarantee

This product is guaranteed against manufacturing defects (labour or material) for 1 year from the date of purchase, under normal usage.

The product when purchased directly from electrostoreonline web site entitles you to a total of 2 years extended manufacturing guarantee and 90 days no-quibble money back guarantee.

"90 DAYS NO-QUIBBLE MONEY BACK GUARATEE", if you are not satisfied with the results of the blanket weed control after 90 days from installation, you may return your unit for a full rebate.

The guarantee DOES NOT APPLY in case of improper use, accidental damage, negligence or lack of maintenance to the unit. If the unit fails due to a manufacturing fault within the Guarantee period it will be either repaired or replaced free of charge. Liability is limited to replacement of the faulty product only; no other costs will be reimbursed.

This guarantee does not affect your statutory rights and cannot be transferred. This guarantee does not confer any rights other than those expressly set out above.

Contact us for more details:

ELECTROSTOREONLINE
Beechwood House
Falkland Close
Coventry CV4 8HQ
Tel: +44(0) 2476 466277
Fax: +44(0) 2476 465298
www.water-weed.com
www.electrostoreonline.com
Email: sales@electrostoreonline.com

