



GENERAL INFORMATION & INSTALLATION INSTRUCTIONS

Model WK1PP BLANKET WEED CONTROLLER WITH EXTERNAL TRANSFORMER

The WK1PP is waterproof and should continue to function even when submerged in water. However the LED may fail as a result of corrosion (Please see Maintenance and trouble shooting for further details). We do not recommend that this product is permanently immersed in water.

The aerials and power supply are directly wired and cannot be removed from the unit whose circuit board is encapsulated in epoxy resin. The Power Supply Unit Transformer must not be allowed to get wet or damp. It must be protected in the same way as a normal domestic plug in the home.

9 VOLT
POWER
SUPPLY

PLASTIC
CABLE TIES



WK1PP Unit

AERIAL TURNED
AROUND THE
PIPE AT LEAST 10
TIMES

AERIAL RUBBER
END CAP

GENERAL

Several methods have been used to control the problem of blanket weed, but none have yet proved as successful as Water-King. We do not claim to remove blanket weed completely, but simply to control it. There are a variety of weeds, and some of these can prove more stubborn than others.

A period of 7 weeks should be allowed from installation before the full effect of Water-King may be seen. The Water-King will also extend the life of the quartz sleeve in the U.V. system by keeping it free of scale deposits in hard water areas.

LOCATION

The unit should be installed as close as possible to the pipe. The unit will operate on any normal type of pipe material, including corrugated, plastic and waste pipe. The pipe to be treated must be full of water at all times which means that water must be flowing either under pressure or suction. A pump will cause electro-magnetic interference with the signals generated by the Water-King and installation immediately prior to a pump should be avoided. The optimum location is after the pump, filters and U.V. treatment on the return back to the pond.

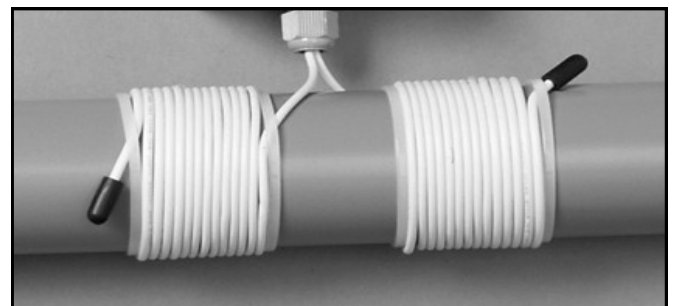
POWER SUPPLY

The Water-King requires a 230 volt power outlet for the transformer. Alternative transformers are available for different power supply or pin configuration. The transformer is rated for indoor use only, so it may be necessary to extend the low voltage power cable to an acceptable protected socket. Additional cable may be spliced into the existing lead between the transformer and its plug/socket. A waterproof seal should be made over the connections. Avoid short circuiting the wires as this can cause the transformer to fail. Satisfactory tests have been conducted on a cable extension of 500 meters. As the low

voltage power supply is AC, there is no need to be concerned about polarity.

SECURING THE AERIALS

Once you have decided where to locate the unit, start by wrapping the aerials around the pipe. It is normally easier to start by putting a plastic tie loosely around the pipe. Feed the end of an aerial wire through the tie and secure it so that there is the least amount of aerial left between the tie and the unit. The shorter this length of aerial the more you have available to wrap round the pipe and the better the Water-King will work. Wind the remaining aerial around the pipe so that there are at least 10 turns, more if possible. Secure the other end of the aerial with another plastic tie leaving the end cap in place. Repeat the process with the second aerial, leaving a gap of at least 25mm between the aerials, winding one aerial under the pipe and one aerial over the pipe (see above diagram). If your pond system has corrugated pipe, the aerials can be wound in the groove, this will not effect the operation of the unit. It is not important



which aerial goes under or over the pipe just as long as they are wrapped in opposite directions. Check that the aerials are wrapped around the pipe as tightly as possible. If they are loose

the process doesn't work so well. Do not cut off the caps at the end of the aerials as these prevent the aerial from corroding.

SECURING THE UNIT

The unit should be fixed to a firm surface using the molded fixing bracket attached to the unit.

PLUG / TRANSFORMER UNIT

Plug in the transformer and switch on the power supply. The LED on the bottom of the unit will flash, indicating that the unit is powered up and that the program is sequencing through the range of frequencies. If you need to protect the plug/socket from the elements, slide the heat shrink sleeve over the plug/socket and use a hair dryer to shrink it into place. This process will take a few minutes to generate enough heat. If you wish to unplug the power cable again, you will have to cut the sleeve away; be careful to avoid cutting the cable.

OPERATION

The LED on the Water-King unit indicates that the computer is going through the sequence of randomly selected frequencies that are programmed to transmit into the pond water. If you tune a portable radio to the low end of the medium wave frequency band and hold it close to the unit, you should hear a constant whistling noise. This indicates that the unit is working.

HOW THE UNIT WORKS!

Once the unit has been installed correctly on the pond system it will generate an electronic signal which will interfere with the calcium ions in the water. Blanket weed is a long filamentous structure and calcium plays an important role in the strength and structure of the membrane which is responsible for controlling the nutrient intake to the cell. The electronic signal will disrupt the equilibrium between the calcium present in the solution and the calcium in the cell membrane upsetting the cell metabolism. The membrane will have no means of preventing excess solution from entering or exiting the cell, and this means that the cell will either expand and explode, or shrink and die. Initially the process will encourage growth and the weed will expand, but once the water reaches a "super" conditioned state, the weed will begin to die away. The Water-King will control the growth of the blanket weed although it may not remove it completely.

DO I NEED TO DO ANYTHING ELSE?

Yes – It is important that you monitor the condition of your pond water during this time as high nitrate levels and pH fluctuations will cause the blanket weed to continue to grow. This is especially important if your pond is constructed of concrete as lime may leach into the pond water and cause a variation in the pH level. We recommend that the Nitrate level should be kept at around 25ppm or lower. It may become higher than this, depending upon the quality of the mains water and the filtration system installed on the pond. If you are in any doubt then seek advice from your local stockist.

We recommend that any dead or dying blanket weed is removed in order to prevent de-oxygenation and clogging of filters. Regular ammonia and nitrate tests should be carried out.

Ponds with excess amounts of decaying material can suffer from a disruption of the Nitrogen cycle, so a water change may be required. It is also advisable to keep feeding down to a minimum. Uneaten food, as well as dead weed left in the pond will encourage the return of blanket weed.

Water-King installed on a pond with a waterfall will take longer to have an impact on blanket weed growth. In some situations blanket weed growth can increase within the first two weeks of operation. This excess growth will cease when the

unit has "super" conditioned all of the pond water.

WINTER PRECAUTIONS!

When the water temperature falls and sun light diminishes in winter, blanket weed will naturally slow its own metabolic rate and start to die off. The blanket weed controller can stimulate growth under these circumstances and we recommend it is switched off once it becomes cold and only switched back on when growth is visible again in Spring.

MAINTENANCE AND TROUBLE SHOOTING!

The Water-King needs no maintenance or servicing but do check occasionally to see that the light is flashing. If the light on the unit is not flashing or stays on permanently, it is possible that the computer micro-chip has become locked due to a power surge. Switch the unit off at the mains, wait for 30 seconds, and switch it on again. This procedure resets the computer program and should get the unit working again.

If the 30 second reset period fails to fix this problem then it may be necessary to switch the unit off for a further 10 minutes to allow the computer chip a longer reset period.

If the unit has been immersed in water it is possible that the LED has failed because of corrosion, although the unit will continue to work. **LED failure due to immersion is not covered within the 5 year warranty.** Check that it is not just the LED that has failed by holding a radio close to the unit and tuning it to the low end of the medium wave band. You should hear a continuous tone interference if the unit is working.

If the unit still fails to work, then call us for advice on 01608 811707 before returning it. Normally we can identify the problem over the phone and there is no need to send the unit back to us or your stockist.

100 Day Money Back Guarantee

If, for any reason whatsoever, you are dissatisfied with your Water-King WK1PP, you may return it at any time during the first 100 days after purchase and the purchase price will be reimbursed in full. Simply return it to wherever it was purchased, together with your full name, address and proof of purchase, showing the price paid.

5 Year Manufacturers Warranty

Lifescience Products Ltd - Guarantees that it will repair or replace the WK1PP Blanket Weed Controller should it suffer from a manufacturing defect during its first five years of purchase. The unit must be returned to us properly boxed & wrapped together with the proof of purchase showing price paid. Proof of posting is not proof of delivery. This warranty excludes external transformer and corrosion of the LED due to immersion

Lifescience Products cannot accept any responsibility for loss or damage of goods when being returned.

LIFESCIENCE PRODUCTS LTD
Rangers Lodge, Cornbury Park,
Chipping Norton, Oxfordshire, UK. OX7 3HL
Tel : (44) - 01608 811707 Fax : (44) - 01608 819060
www.lifescience.co.uk e-mail: sales@lifescience.co.uk