

Fluorescent plant lighting

LightWave[®] T5



INSTRUCTIONS FOR USE

You have selected a **LightWave T5** light fitting. This is one of the most highly developed fluorescent light fittings available and it will give unparalleled success with the propagation and cultivation of plants.

To be sure of getting the maximum satisfaction from this product please read the instructions carefully.

Features

- High output, slim-line fluorescent tubes that are highly efficient, extracting maximum light from the electricity consumed.
- Wide dispersion reflector for optimal coverage.
- A fixture design that can be used in a horizontal or in a vertical mode.

Installing (or replacing) the T5 tubes

Unpack the unit carefully. Depending on which LightWave T5 model you have, the T5 tubes may be supplied ready fitted, or they may be packed separately. They are fragile so handle with great care.

1. First ensure that the unit is NOT plugged into the mains.
2. To remove an old tube – grasp at both ends, make a ¼ turn in either direction and carefully slide the tube out of the slot.
3. To insert a new tube, just guide the two pins at each end into the slot. Make sure that both ends are fully seated and then make a ¼ turn in the tube – so the ends lock into place.
4. Finally, wipe the tube with a soft cloth to remove finger marks.

Setting up the LightWave Fixture

The LightWave can be used horizontally or vertically. The most common application is a horizontal position over plants. LightWave is a heavy unit and must be securely mounted and supported. Strong cord or light chain can be used to suspend it from the ceiling.

Ratchet Hangers are highly recommended as they allow the fixture to be easily raised and lowered. This allows precise adjustment to match the changing height of a growing crop.

Safety advice:

- For added safety, always use an RCD (RCCB) with any electrical product.
- Before doing anything with the unit, make sure that the power supply is disconnected.
- Keep away from children and pets.
- The tubes will get hot during use. If the tubes have been on, leave them to cool before touching them and never touch the tubes while they are switched on!
- Never switch the unit on without the tubes being fitted.
- Never tamper with the unit as there are no user serviceable parts inside and this will void the guarantee.
- Never place plastic sheeting close to the fitting – always ensure a good clear space around it.

Growing with the LightWave

The unit can be suspended directly over plants and is ideal for the propagation of new plants from seeds or cuttings.

Light should be supplied to young seedlings as soon as they emerge and should be kept close to the young plants. If they are too far away they will have a tendency to stretch and become 'leggy' in appearance. LightWave has the potential to produce compact, bushy, young plants but this requires placement close to the light source.

Maintaining the T5

For maximum reflectivity and performance it is essential to keep the tubes and reflector free of dirt and dust. Use a soft damp cloth to wipe tubes and the reflective surfaces.

Ensure that unit is unplugged before you carry out any cleaning procedure.

T5 Tubes

Two different T5 tubes are available – a blue white one (6500K) for vegetative growth, and a warmer, redder light (2700K) for flowering plants. These lights are interchangeable and can be used in the same LightWave fixture simultaneously. For general plant growth we would recommend the 6500K tube which looks much brighter and which shows plants in their natural colours.

Ratchet Hangers

Ratchet Hangers can be used to suspend the LightWave unit over growing plants, allowing it to be raised or lowered according to the plants' requirements.

Available from your LightWave retailer.



Positioning your LightWave T5

It is well-known that the intensity of a light source is diminished as the light is moved further from the object. This effect is especially pronounced with a "point source" like a traditional light bulb, where the intensity reduces in proportion to the square of the distance – this is known as the "inverse square law". It means that if the light source is twice as far away, then the light intensity is reduced by a factor of four (2^2) – so the actual light delivered is only 1/4 of the intensity.

There are two ways to improve this situation. The first is to use a light source with a large area, because the fall-off is significantly less than for a point source. The larger **LightWave T5** units, or a bank of units, are especially good in this respect. Then secondly, positioning the lights close to the plants delivers the maximum intensity, especially close to the edges of the area.

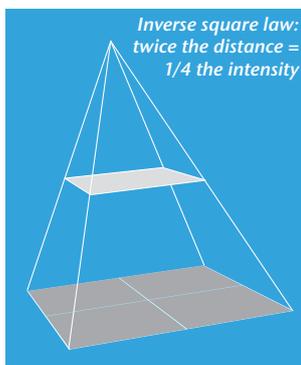
In principle, the **LightWave T5** should be placed as close as possible to the plants. This is easy if they are all at the same size and stage of growth. If plants of different sizes are being grown it will be best to keep the T5 horizontal and at a suitable height for the tallest plants. The shorter plants can easily be raised, closer to the light, by placing them on plastic boxes or pots. In this way the tops of all the plants can be at a similar height and all can obtain maximum light intensity from the T5.

Warning

It is difficult for plants to be given 'too much light'. Remember that no artificial lighting, even the amazing T5, is anywhere near as bright as the noonday sun. So most plants will simply lap up the abundant luminance of T5 and respond with luxuriant growth. For some plants, however, the T5 in close proximity can be just too bright. This applies especially to new cuttings that have just come out of propagators, and to plants such as ferns that prefer a shady habitat.

Plants that are too close to the light source will quickly exhibit symptoms of discomfort. Leaves will often become pale and will begin to distort, crinkling up at the edges.

At the first sign of discomfort, or discolouration, the plants should be moved away from the light and they will usually settle down very quickly. Once they are showing healthy growth they can be moved closer to the light, shifting them in small increments, until they find their ideal position.



Troubleshooting the LightWave T5

If the unit fails to operate – NO LIGHTS ON – please follow this procedure.

1. Turn off unit at the mains and remove the plug from wall socket.
2. Check that wall socket is working by plugging in a known working device.
3. If the supply is okay then remove and exchange the fuse in the plug with a known good fuse. Fuse should be rated at 13 amps.

If the unit still fails to operate – NO LIGHTS ON – then it must be returned to your supplier.

If there is a failure of one or more tubes – SOME LIGHTS ON – please follow this procedure:

If a tube fails to ignite it may be necessary to replace that tube.

1. Turn off unit at the mains and remove the plug from wall socket.
2. Remove the tube that doesn't work and replace with a known good one from another position within the unit. If possible add a new tube into the vacant position.
3. Turn on the LightWave again. If the 'new' tube is working then you just need another tube and everything is fine.

If the replacement tube fails to solve the problem – SOME LIGHTS STILL OFF – then the unit must be returned to your supplier.

LightWave – One Year Limited Warranty

The manufacturer provides to the original purchaser of the LightWave unit a warranty in respect of the components, including the digital ballasts, of the LightWave unit. This warranty shall extend for a period of twelve months from the original date of purchase of the unit.

If the manufacturer shall determine, at its sole discretion, that any components are defective in material or in workmanship, then the manufacturer will, at its sole discretion, repair or replace the faulty components at an authorised centre of repair.

The Warranty will only be considered valid if the following conditions are met:

1. The retailer or manufacturer is provided, by the original purchaser, with a proof of purchase, such as a receipt, for the sale made to the original purchaser.
2. The components have not been replaced, altered, repaired or tampered with by unauthorised persons. Attempted repairs or alterations will render this Warranty void.
3. The unit has not been damaged by abusive or inappropriate usage, inadequate maintenance or supplemental damage.

The manufacturer shall not be responsible for any damage caused by operation of the unit, be it incidental or consequential; or of any type; including, without limitation, damage or injury, caused to other products, machinery, or buildings. Nor will responsibility be accepted for loss of time or profit, loss of finished product, or for any inconvenience caused in any way whatsoever.

To obtain Warranty Service please return product to the place of purchase according to the retailer's policy on returns issues.