PLANT!T

aeros™ IV master

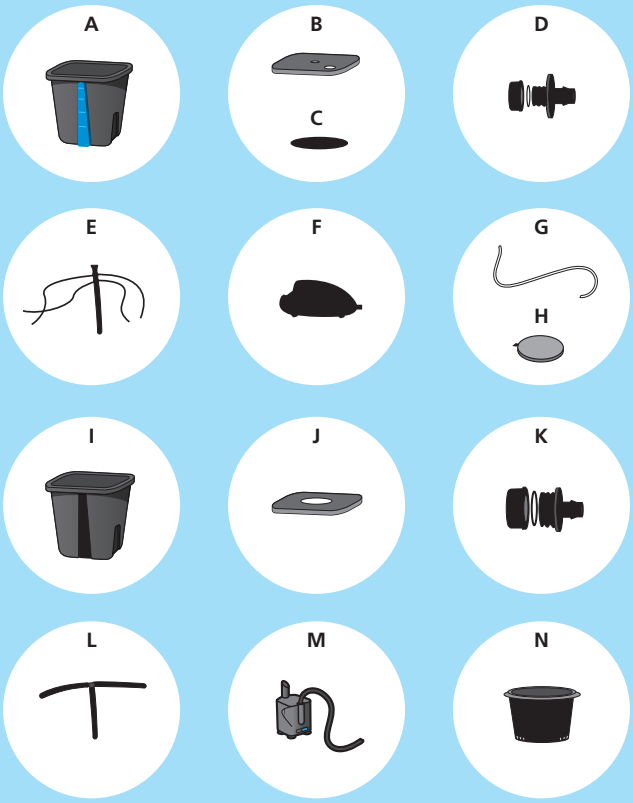
AERATED DWC HYDROPONIC SYSTEM

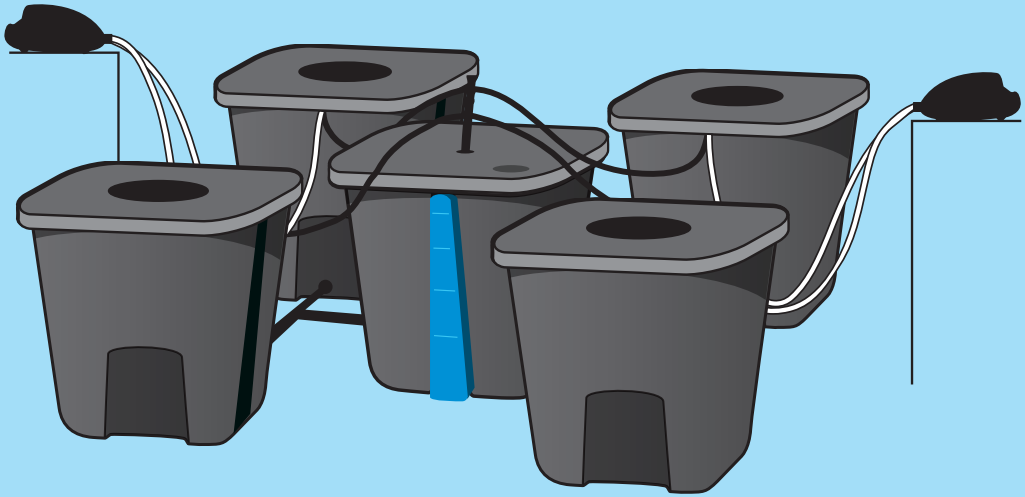
GB

Kit Contents

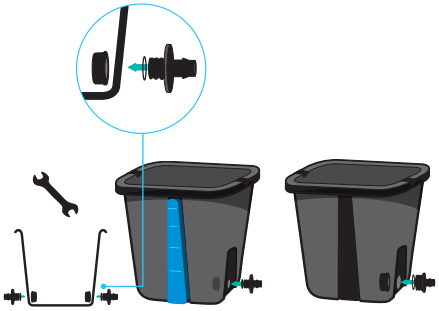
- **A** 1 x Master Tank with Level Indicator
- **B** 1 x Master Lid
- **C** 1 x Inspection port cover
- **D** 2 x 13mm Barb to ½" Thread connector
- **E** 1 x Master Delivery Assembly
- **F** 2 x Two Outlet Air-Pump*
- **G** 4 x Silicon Air-line clear tube 1m length
- **H** 4 x Air-stone
- **I** 4 x Planter Tank
- **J** 4 x Planter Lid with 127mm (5" hole)
- **K** 4 x 13mm Barb to ¾" Thread connector
- **L** 2 x Master Return Assembly
- **M** 1 x Water Pump*
- **N** 4 x Mesh Bottom Pot

*Read specific Water Pump and Air-Pump instructions carefully before use.

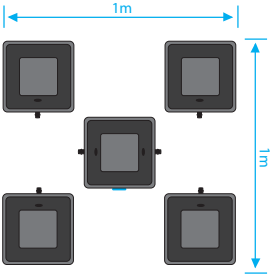




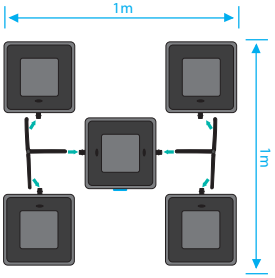
ASSEMBLY INSTRUCTIONS



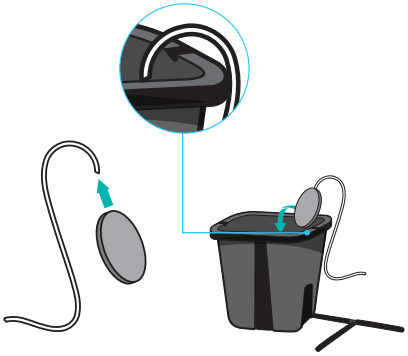
1 Fit the two 13mm Barb to ½" Thread connector to the holes in the Master Tank with Level Indicator, and one 13mm Barb to ¾" Thread connector to each of the four Planter Tanks, with the barb fitting and the rubber washer to the outside – use a spanner or similar to ensure it is nipped up for watertight seal.



2 Position the Tanks on a level surface (like the dots on the 5 side of a die) with the Planter Tanks thread connectors facing each other in pairs and the Master Tank connectors facing these. The assembled system will require 1m² of floorspace.



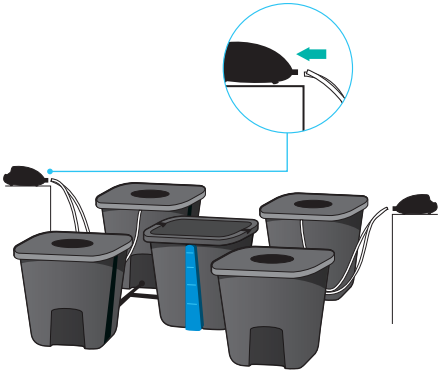
3 Connect the Master Tank to a pair of Planter Tanks on either side, by fitting a Master Return Assembly to the barb fittings on the Thread connectors. Dipping the end of the tube in a jug of warm water will make it easier to push the tube onto the fittings.



4 Fit a length of Silicon Air-line to each Air-stone. Position one Air-stone centrally on the base of each Planter Tank and feed the Air-line out via one of the grooves on the rim of the Tank – whichever you use depends on where you plan to position the Air-Pump.

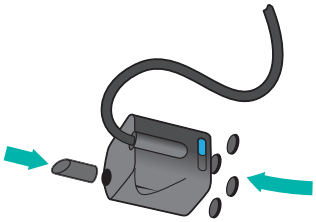
For further information and video instructions, visit
www.plantit-growit.com

5 Position a Planter Lid on each Planter Tank with the shaped handles over the Air-line inlet grooves, though do not press down to fit at this stage.



6 Position the Air-Pumps. They should be higher than the water level (when the Tanks are full - so ideally, on something that is at least as tall as the Tanks), to prevent back-siphoning when the pumps are switched off. Connect two Air-lines to each Air-Pump.

7 Position one Mesh Pot in the hole of each Planter Lid.



8 Fit the rubber feet and connector piece to the Water Pump.

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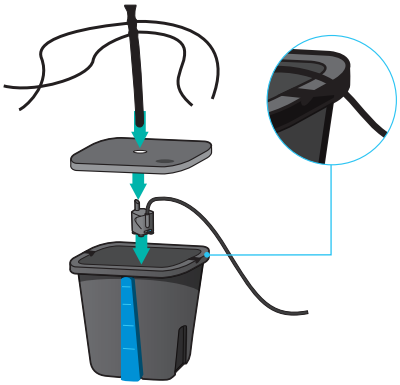
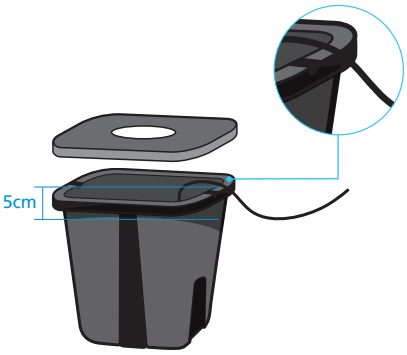


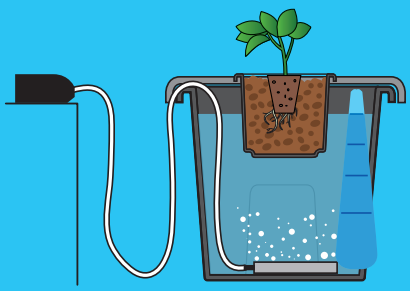
9 From the top, push the Master Delivery Assembly through the 20mm hole in the Master Lid, and connect to the pump. Position the Master Lid with Assembly and Pump on the Master Tank, ensuring the pump plug is outside with the cable resting in one of the grooves, and the shaped handles over the grooves, though do not press down to fit at this stage.



10 Position one of the thin lengths of delivery tube from the Master Delivery Assembly, in the nearest groove on the rim of each Planter Tank, so the open end is at least 5cm over the Tank, and this time press the Planter Lid down to fit, holding the tube in place.

11 Push the Master Lid over to one side, so you can part fill the system – water will flow into the 4 Planter Tanks from the Master Tank. To check all the seals are watertight, plug the Water Pump in (socket should be off the floor for safety) to test water is circulating properly around the system – you may need to lift the Mesh Pots from position to ensure flow from each delivery tube – the water level throughout should remain constant. You may also at this point wish to plug in the Air-Pumps to test that bubbles flow from every Air-stone. Once you are happy the system is functioning correctly, press the Master Lid down to fit.

Fill level



Young Plant

Established Plant

Starting-up and planting aeros

Fill the system with nutrient solution via the Master Tank, to the top marker on the Level Indicator (approx. 75L), this will be about half-way up the Mesh Pots. Switch on the Air-Pump and you should see the bubbles fizzing vigorously in each Planter. It is recommended to use clay pebbles as the planting media for the Mesh Pot – they should be rinsed thoroughly, to remove all dust particles, before use. PLANT!T® Clay Pebbles are ideal.

TIP: For young plants, a low/half dose of Hydroponic nutrient is advised – see your nutrient instructions for further advice.

Planting
Choose only strong healthy transplants to put in your aeros system (if selected plant has been propagated in soil/coco/soil-type media, it is advisable to gently wash the root-ball to remove as much of the media as possible). Ideally the plants will have been started in propagation plugs, and be well-rooted.

Part fill the Mesh Pots with clay pebbles (or suitable alternative inert media) and place plants so that the base of the plugs/blocks, or the roots, are just in contact with the nutrient solution. Then fill around them with more pebbles – ideally just covering the surface of the plugs/blocks.

Ensure no pebbles fall into the Planter Tank, as they may block the Master Return Assembly.

Running aeros IV master

The Air-Pumps should be run continuously, including at night. The Water Pump should also be run continuously, except when doing solution changes. As the plants establish, the water level should be allowed to drop to the second marker on the Level Indicator (approx. 60L) – this should be your ongoing fill level.

The Master Return Assembly must not become blocked. If growing plants with particularly vigorous root systems, once they are established and the roots are starting to fill the Planter, re-position the round Air-stone over the outlet fitting and the shaped depression, and the rising bubbles will naturally keep roots away.

Ongoing maintenance

Topping-up with nutrient solution should be done as frequently as possible, ideally maintaining as close to chosen 'full' volume as possible. The lowest level line on the level indicator should be treated as an absolute minimum level. Topping-up should be done primarily via the Master Tank, either using the inspection port if you top up with a watering can or easy-pour jug, or by lifting the lid and pushing over to one side (take care the Master Delivery Assembly does not come away from the water pump), if using a bucket or larger jug.

TIP: When topping-up with nutrient solution, you may wish to pour some through the pebbles directly into each Planter to help prevent a build-up of unsightly mineral salts on the pebbles' surface.

Solution changing will be necessary to prevent build-up of impurities and to maintain the balance of nutrients in the solution. This can be done in two ways:

1. Occasional full solution change – requiring a complete emptying and refilling of the system. Recommended at least fortnightly (do not be concerned about small volumes left in the base of the Tanks).
2. Frequent partial water changes – requiring removal of about 5 litres prior to topping-up (every time you do so).

This should be done from the Master Tank and the Water Pump (with an extra piece of 13mm/ ½" hose) can be used. There is no need to turn off the Air-Pumps during this process.

Nutrient Solution Monitoring can be done via the inspection port on the Master Tank, which is large enough to facilitate most pH or EC meters. The re-circulating nature of the aeros IV master means the pH and EC will always be equal throughout the system. Always carefully replace the inspection port cover to prevent algae.

Re-using the aeros

All the parts are re-usable though everything should be cleaned thoroughly and preferably sterilised (with boiling water or weak hydrogen peroxide solution – do not use detergents or alternative bleaching agents).

PLANT!T

aeros™ iv master

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PLANTING

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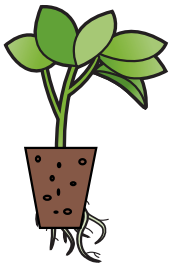
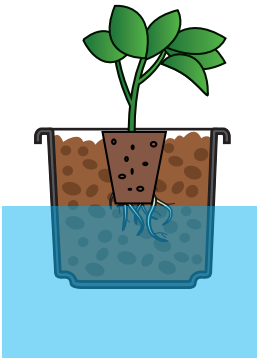


OR

Seedlings or cuttings grown in ROOT!T® Natural Rooting Sponges or stonewool can be planted directly.

Seedlings or cuttings grown in soil need the media washing off the roots before planting.



Part fill the Mesh Pot with clay pebbles (or suitable alternative inert media) and place the plant, so that the base of the plug/block or the roots are just in contact with the nutrient solution. Then fill around it with more pebbles – ideally just covering the surface of the plug/block.

USEFUL INFORMATION

When propagating plants, we recommend using products from ROOT!T®. For more details visit:

ROOT!T

The latest innovation in propagation

www.propagateplants.com

To feed your system, we recommend VitaLink Max or VitaLink easy. For more details visit:

VITALINK®

Nutrients, additives and growing media

www.vitalink.eu

PowerPlant is a range of horticultural lighting equipment and accessories. For more details visit:

POWERPLANT®

Horticultural lighting equipment

www.plant-lighting.com