

Hydroponics in Action™

Setup Guide for the flat recirculating nutrient flow technique system

Included :

Included :

Parts List, (Page 2)

Setup for a single tray system, (pg 3 - 5)



Compiled by Graham Large (NDip Nat Con)

Recirculating Nutrient Flow Technique System (RNFT System)

Hydroponics is the method of growing plants in a soilless medium whereby they get their nutrition through

Single tray parts

1. Nutrient tray x1
2. Pot holder trays x 2

3. Adjustable flow control outlet x 1
4. Pump x 1
5. 2m of 15mm polyprop pipe x 1
6. 500 Grams of coir (coconut hair) x 1
7. 1kg each of nutrient (1kg hydroflow and 1 kg of calcium nitrate) x 1
8. Worm clamps x 5
9. 15mm elbows x 2
10. 600 Gram block of coco peat x 1
11. 5cm pots x 75 and 7.5cm pots x 25
12. 50mm PVC 90° elbows x 2
13. 50mm PVC 45° elbows x 2
14. 1m 50mm PVC pipe x 1
15. 50mm PVC insert joiners x 3
16. PVC glue x 1
17. Small electronic scale (optional)
18. 100 litre plastic sump (optional)
19. Mixing buckets x 2 (optional)
20. Weather proof plug box and 5m extension cord x 1 (optional)
21. Stand (not included)

1. Setup Instructions for a single tray

1. Place the nutrient tray on a flat level surface ensuring that the lip extends over the edge of the stand or tab



Checking tray levels



Close up of level



Closeup of level

2. Attach the flow control outlet through the hole whilst making sure the O ring, seals against the nutrient tra



Inside view of outlet



Inside and outside
view of outlet

3. Attach the return pipe to the flow control outlet making sure it has a downward angle, which allows the nutrient solution to flow into the sump



Return pipe attached to flow control outlet
(2 x 45° elbows and 1 x 90° elbow)



Downward angle of return pipe to the sump

4. Attach the pipe provided to the pump outlet using the clamp to ensure a good seal (no 6 Spanner or flat screwdriver)



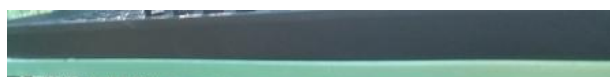
Pipe attached to pump outlet with

5. Place your sump in such a way that the pipe from the pump lets water flow into the nutrient tray at the open end of the outlet



Both pictures showing inflow

6. Your sump should not be more than 1.2m below the Nutrient tray (This is to make sure there is water flowing)



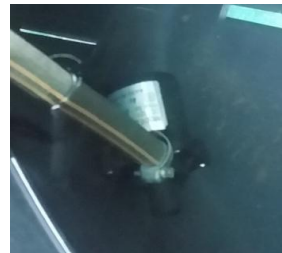


Sump is less than 1.2m below the nutrient trays

7. Fill the sump with water
8. Place the pump into the sump whilst making sure it is fully submersed.
9. Plug the pump into the power socket and Switch on
10. Getting your sump levels right - once the water is circulating, ie. Nutrient tray is full and water is returning sump, switch the pump off. Water will flow into the sump from the outlet of the nutrient tray until it drops the level of the flow control outlet. You sump is now full. Mark the level in the sump because when refilling the level you will refill to. This will give an accurate volume of water when calculating the nutrient amount. When flowing the nutrient tray holds approx 30 litres of water, with the pump off approx 15 litres remain in nutrient tray.
11. Check for leaks and that the water is flowing into and out of the nutrient tray back to the sump for complete recirculation.
12. Please make sure that the outlet allows the water to flow into the sump.

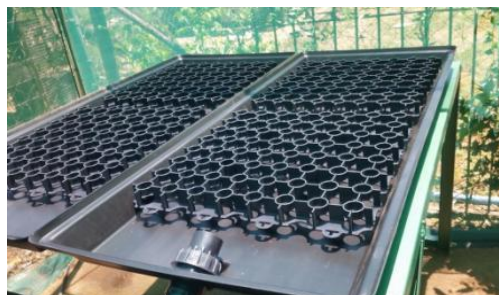


Sump filled with water (Point 7)
Outlet flowing into the sump (Point 11)



Fully submerged pump (point 8)

13. Once this is done place the pot holder trays into the nutrient tray.



Pot holder trays fitted into the
nutrient tray



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