















4 Plant Black Bucket DWC System Instructions

1. (1) 4 Outlet Air Pump 
2. (4) 6" Net Pot Bucket Lids 
3. (1) 5 Gallon Bucket (Master Reservoir)
(4) 5 Gallon Bucket (Site Reservoirs) 
4. (1) Bucket Lid 
5. (6) Super Starter Plugs 
6. (4) 4" Air Stone  
7. (1) 50 Liters ViaStone Expanded Clay
8. (6) 1/2" Grommet 
9. (5) 1/2" Shut-Off Valve 
10. (3) 1/2" Barbed "T" 
11. (2) 1/2" Barbed "L" 
12. (1) 5' Length of 1/2" Black Tubing 
13. (1) 10' length of 1/4" Clear Tubing 
14. (1) 18" Transparent Blue 1/2" Tubing 

Preparation:

1. Wash and rinse your ViaStone Clay Rocks thoroughly before placing them in the 6" Net Pot Bucket Lid.
2. The Super Starter Plugs are provided to germinate seeds or to propagate cuttings in. Place the seeds at the recommended planting depth and keep them moist, but not saturated with water. They should always be moist but never soggy. Seedlings generally thrive at 75-85° with 60%+ humidity. When the seedlings are ready to transplant, bury each Super Starter Plug into the 6" Net Pot Bucket Lid so that the top of the Super Starter Plug is covered with a thin layer of ViaStone Clay Rocks. Make sure that the bottom of the seedling root system will be in contact with the bubbling water-nutrient solution. As the roots grow, decrease the water-nutrient solution level to keep the root mass from being submerged completely.

System Assembly: (See parts layout fig.1-2; See fig.6 for the picture of an assembled system)

1. The Master Control Bucket will be the 5 Gallon Bucket that has 2 pre-drilled holes (the other four 5 Gallon Buckets will have only 1). Insert the 1/2" Grommet into the pre-drilled hole in the bottom of the side wall, then insert one side of the Barbed "L" until it is firmly seated inside of the grommet with the exposed end facing up. Now push the 18" length of transparent blue tubing over the open end of the Barbed "L". This length of tubing will be used as your water level indicator and will allow you to visually inspect the water level inside of the system without removing the lid. Make sure the transparent blue tubing is pointed up.
2. Insert the other 1/2" Grommet into the second pre-drilled hole of the Master Control Bucket, then insert a 1/2" Shut-Off Valve until firmly secured.
3. Preparing the Site Reservoir Buckets
 - Place the remaining 1/2" Grommets into the pre-drilled holes in the bottom of the side wall of the remaining four 5 Gallon Buckets.
 - Insert the remaining 1/2" Shut-Off Valves into the 1/2" Grommets. If you have difficulty, a small dab of liquid dish soap can be used as a lubricant (it will need to be washed off when finished).
 - Cut four 9" -12" lengths of the 1/2" Black Tubing, and attach one to each of the 1/2" Shut-Off Valves that are now at the base of the four 5 Gallon Buckets.
4. Build the 1/2" Manifold
 - Cut the remaining 1/2" Black Tubing into four equal lengths.
 - Starting at the Master Control Bucket, attach 1 length of tubing to the 1/2" Shut-Off Valve and the other side to a 1/2" Barbed "T."
 - To the other side of the "T" attach another piece of 1/2" Black Tubing.
 - Attach another "T" to the Black Tubing making sure it points the opposite direction of the first "T."
 - To the other side of the "T" attach another piece of 1/2" tubing and the last 1/2" "T" facing the same direction as the first "T."
 - Then connect the last length of 1/2" tubing to the "T" and the other side of the tubing to the 1/2" Barbed "L."
5. Connecting the Site Reservoirs to the 1/2" Manifold (fig.3-4)
 - Finally connect all four 5 Gallon Buckets to the manifold by pushing all of the 1/2" Black Tubing onto the open ends of either the Barbed "T's" or the Barbed "L's."
6. Cut the 1/4" Clear Tubing into four equal lengths. Attach one end of the 1/4" Clear Tubing lengths to each of the four 4" Air Stones by gently pushing the tubing over blue plastic barb on the Air Stone nipple. Now place one 4" Air Stone at the bottom of each of the four 5 Gallon Buckets.
7. Attach the open end of each of the four 1/4" Clear Tubing lengths to an Air Pump nipple (there are four nipples). The Air Pump should be elevated above the height of the system at all times. This will prevent water from entering the Air Pump and damaging it. (fig.5)
9. Fill the Master Control Bucket with a water-nutrient solution.
8. Plug in the Air Pump and you are ready to grow! The system will recirculate the water-nutrient solution until it runs low. Refill the Master Control Bucket (reservoir) as needed.

