



BLACK SERIES



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Follow this step by step guide to complete the installation of your system.

SYSTEM SET-UP

Place your pots in the desired location taking care to place them evenly and on a level surface. There is enough pipe included in the kit for the 15L pots to be 50-60cm plant centres and 30L pots at 60-75cm centres.

Examples:

15L 16 pot system – $2 \times 2m$ (50cm centres) or max 2.4 x 2.4m (60cm centres). 30L 16 pot system – $2.4 \times 2.4m$ (60cm centres) or max $3 \times 3m$ (75cm centres).

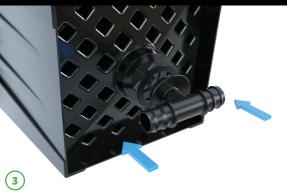
Pipe lengths between pots: 15L - 50cm plant centres = 45cm 15L - 60cm plant centres = 55cm

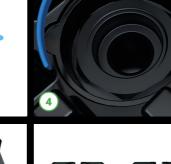
30L - 60cm plant centres = 55cm 30L - 75cm plant centres = 70cm

- Lay the pots down on their side. Fit the 32mm threaded fittings into
 the holes at the bottom of the pots. The rubber washer must be on the
 outside. Secure the nut on the inside with the spanner provided. Tees are
 used on all pots except for the end of line where elbows are used.
- Measure the distance between the barbed fittings. Taking note of the
 maximum pipe lengths, cut and fit the 32mm green pipe. Use warm
 water or a heat gun to make the pipe more pliable.
- Place a pair of stands under each pot.
- Fit a tee to the header pot. Refer to the bird's eye images for 2, 3 and 4
 row systems. The 48 pot system is a 6 row system. Connect the header
 to the pots using 32mm tees & elbows. Locating the header further away from the system is possible with extra fittings available on the website. 32mm-1.5" straight & 32mm barbed tee.
- 12 Place a drain cover in the bottom of each pot.
- 13 Push-fit the pot clips into the slots on the side of the pots.
- Push-fit the two lid clips into the rectangle holes in the RAIN™ Lids and place one on top of each pot.
- (15) If you have a 2 row system (4, 6, 8 or 10 pots), the valves with green taps are screwed directly to the header pot. **Note:** 4 and 6 pot systems may require the valves to be closed slightly to avoid splashing.
- (16) For 3, 4 and 6 row systems, screw the valves on to the threaded tees and elbows as shown. 9, 12, 15, 16 & 18 pot systems use 19mm threaded tees & elbows, 21 pot systems upwards use 25mm.









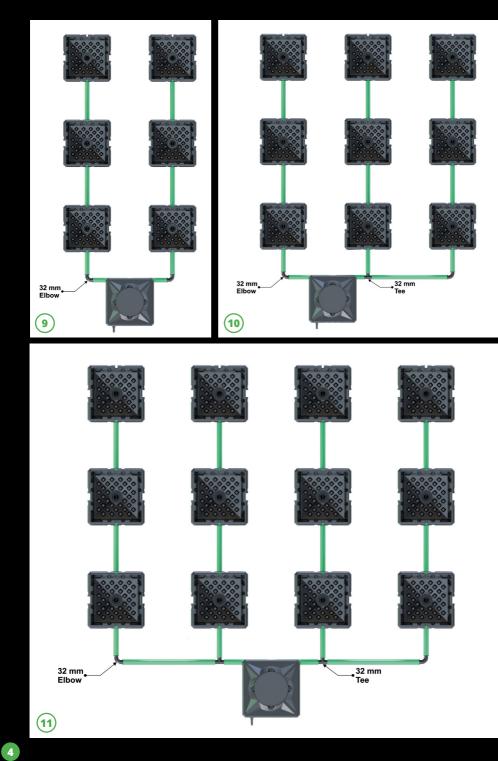












Place the valves as shown and connect them with blue pipe. Use the
 smaller size of jubilee clips to secure.

Use green 16mm pipe to install the reducing tees in line with the lidclip and attach pieces of 4mm pipe through the slot in the lid clip.

The green 16mm pipe runs the length of the system from the valves to the last pot. Fit 16mm blanks at the end of each line.

CAMO[®] Tank

21 (10) (23)

Assemble the tank using the leaflet provided. The tank can be located inside or outside of the grow room. If located outside, depending on distance, more pipe may be required.

RAIN[™] Pump

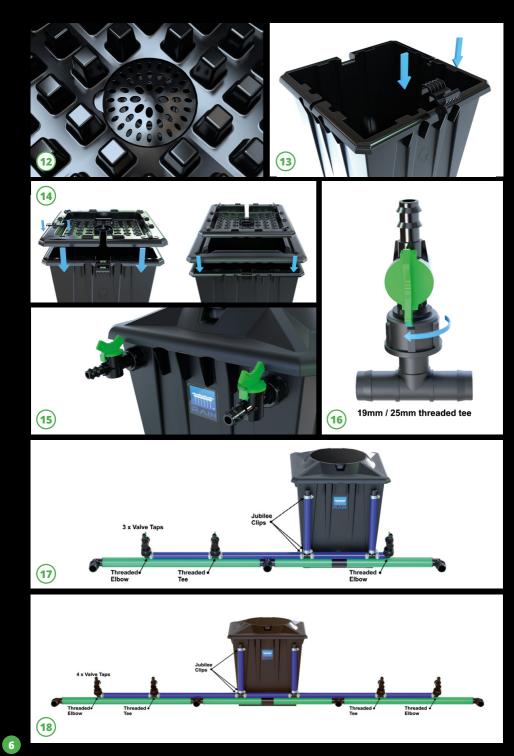
Fit the blue pipe to the RAIN[™] pump and secure with a Jubilee clip.
 4 - 18 pot systems use 25mm pipe. 21 pot systems upwards use
 40mm pipe. The pump sizes are shown here.

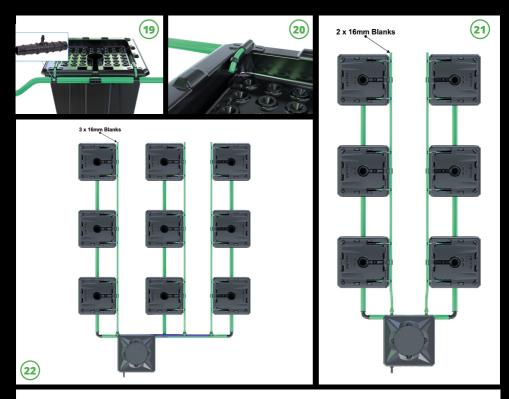
Place the RAIN™ pump at the bottom of the tank and fit the
 25mm/40mm siphon tee as shown just underneath the lid. Put a piece of pipe through the hole in the tank lid and fit 2 x elbows. Use hose clips to secure all connections on the blue feed line. The drain siphon tee is 19mm and is connected in the same way but without clips. Black 19mm elbows and pipe are used here.

- Connect the blue feed line and black drain line to the fittings on the
 header. Secure feed line with clips.
- Secure the RAIN[™] Brain to a wall, away from possible water contact. Connections to "Power" and "RAIN[™] pump" are shown.
- Connect the cable from the red drain pump in the header pot to the ALIEN[®] adaptor by pushing the connector in and securing the lock nut. You may have a different style of adaptor than the one shown. This should remain powered 24/7. Whenever the pump senses water it will engage and drain the header.

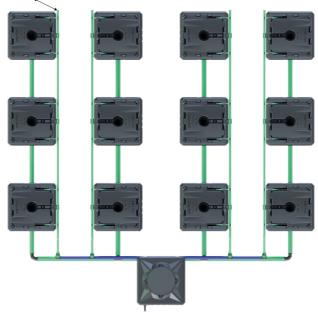
Planting into the system

31 The fabric pot sits inside the plastic pot. It is made of a thick composite material and helps prevent the medium from entering into the system.





4 x 16mm Blanks

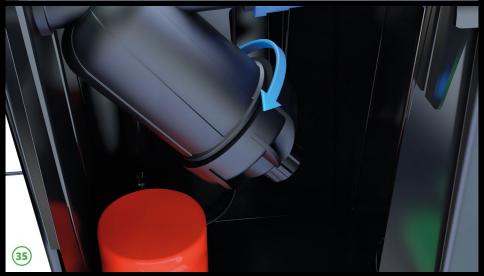






1.5





- We recommend adding the medium to the pot once placed inside the plastic pot. If filled outside of the pot the weight of the medium can cause the walls of the pot to swell. The medium should be filled to 30mm below the top of the fabric to allow the fitting of the RAIN[™] Lid.
- Trim lower branches that are growing under the lid cover. If the plant is not tall enough to protrude the lid cover, run the system without the lid covers until the plants are tall enough.

SYSTEM OPERATION

Filling the system

Use a hose pipe to fill the tank. Add the required amount of nutrients. After the first feed, top up the tank as some water will remain in the system.

RAIN[™] Brain

When you select a "Run -Time" position, the RAIN™ pump will engage. When the selected "Run-Time" expires, the system will remain idle until the next feed cycle which is selected by the "Frequency".

Frequency Dial

This is how often you require a feed cycle. It depends mostly on the medium being used and the size of the plant. Soil may require watering once every 1-3 days so the "24 - 72hr" setting would be selected. Clay pebbles would be more in the range of once every 2-3 hours. Note, the RAIN[™] system will require slightly less watering than hand watering. This is due to the fact that the RAIN[™] Lid and cover purposely slow evaporation.

Run-time Dial

This is the amount of time that the RAIN[™] pump will run. These pumps have a high flow rate so the "Run-Time" is normally around "30-60 seconds". This is a guide as mediums, moisture content and desired run off times could require a slightly different setting.

For example, if you want to water the plants at 4pm every day for 60 seconds. At 4pm today, select "Frequency" 24hrs and then "Run-Time" 60 seconds. The plants will be watered now and then again tomorrow at 4pm.

Warning: The 'ON' setting should only be used for cleaning the system. If left on permanently, pots can overfill.

Cleaning the system

(35) The filter should be checked regularly. If using mineral based nutrients the filter should require minimal cleaning. Be aware using organic based nutrients and additives will require regular cleaning. Unscrew the lid of the filter and remove the cartridge for cleaning.

At the end of a crop cycle, drain down the system and fill with clean water. Clean the inside of the pots with a cloth. ROOT ROT X[™] can be used to flush the system through. Run the red drain pump pipe to waste.

The fabric pots can be washed and reused several times. Refer to the label for cleaning instructions.

Draining the CAMO® Tank

To perform a nutrient change or to drain the system.

Options:

- 1. Disconnect the pipe from the RAIN[™] pump and connect a drain line.
- 2. Drain from the green tap at the bottom of the tank.
- 3. Use a separate water pump.
- 4. Pump the water through the system, use the red water pump to drain the system.

WARNING: Pots can overfill

Check the blog on alienhydroponics.co.uk for further info & updates.

Use **ROOT ROT X[™]** in your system to prevent Pythium, maintain a healthy white root zone and sterilise water lines.

- ELIMINATES PYTHIUM
- BREAKS DOWN BIOFILM
- INHIBITS BIOFILM REGENERATION PH NEUTRAL

USFS

- CLEAN CUTTINGS
- FLUSHING STAGE

- ROOTS STAY HEALTHY & WHITE
- DISSOLVES NUTRIENT BUILD-UP

LIEN

OOT ROT

- POWDERY MILDEW
- STERILISE EQUIPMENT

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alienhydroponics.co.uk



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Don't forget to check us out on social media: **@alienhydroponics**

