

BLACK SERIES



Designed, manufactured and distributed by

ALIEN[®]
THE EVOLUTION OF HYDROPONICS

SET UP INSTRUCTIONS

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 x 2m (50cm centres) or max 2.4 x 2.4m (60cm centres).

30L 16 pot system – 2.4 x 2.4m (60cm centres) or max 3 x 3m (75cm centres).

Pipe lengths between pots:

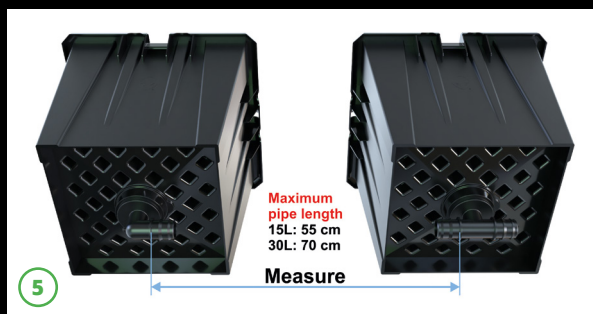
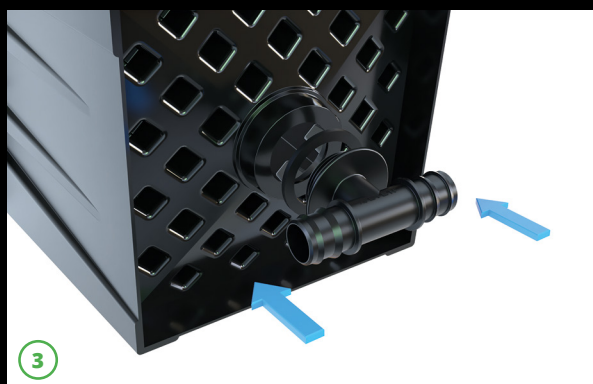
15L - 50cm plant centres = 45cm

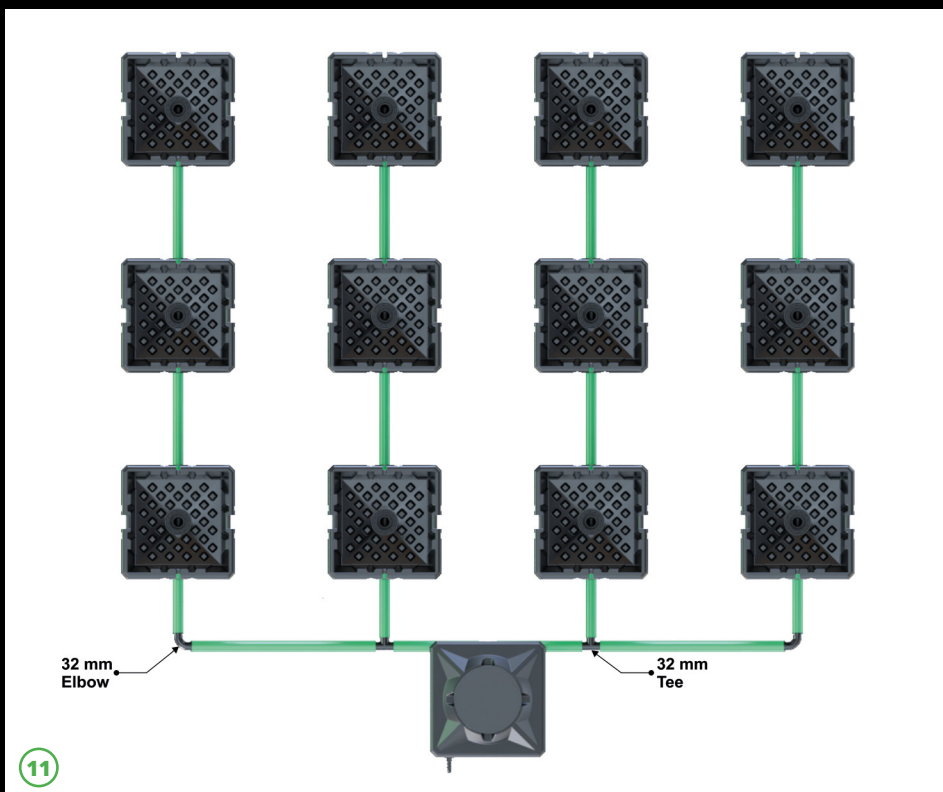
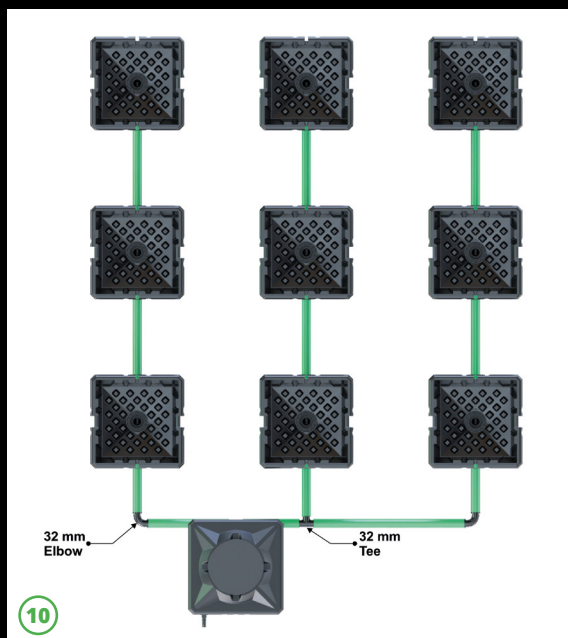
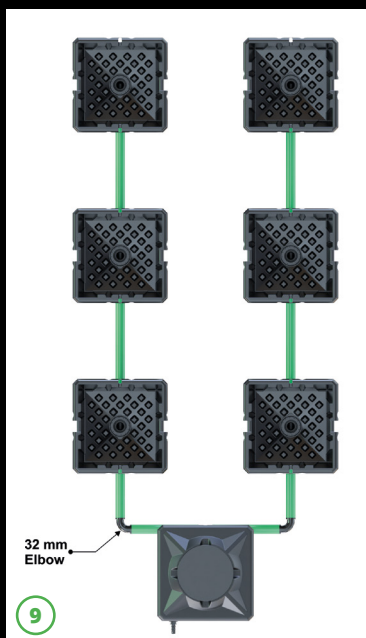
30L - 60cm plant centres = 55cm

15L - 60cm plant centres = 55cm

30L - 75cm plant centres = 70cm

- 1** 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. Ties are used on all pots except for the end of line where elbows are used.
- 2**
- 3**
- 4**
- 5** Measure the distance between the barbed fittings. Taking note of the maximum pipe lengths, cut and fit the 32mm green pipe.
- 6**
- 7** Place a pair of stands under each pot.
- 8** 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.
- 9**
- 10**
- 11**
- 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.
- 14**
- 14a** Push-fit two grommets into each lid and place a lid on every pot.
- 14b**
- 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.
- 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.





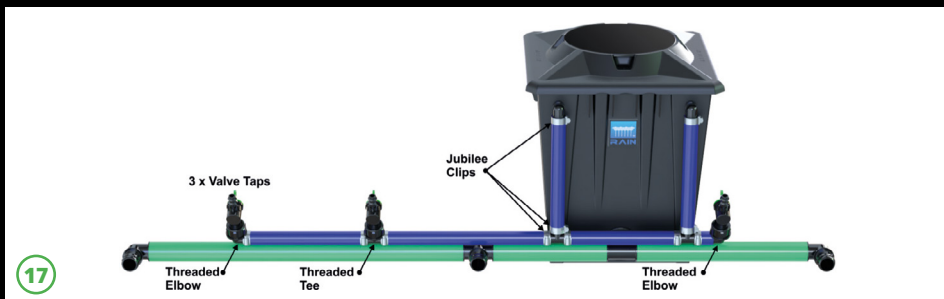
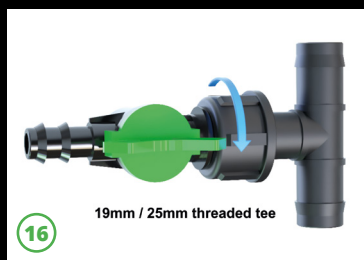
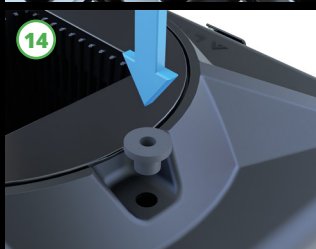
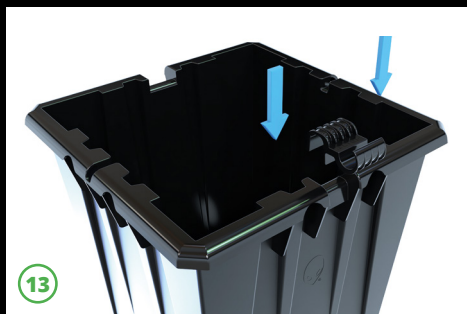
- 17 Place the valves as shown and connect them with blue pipe. Use the smaller size of jubilee clips to secure.
- 18
- 19 Use green 16mm pipe to install the reducing tees in line with the lid clip and attach pieces of 4mm pipe through the slot in the lid clip.
- 20 Fit lengths of the 4mm pink pipe to the reducing tee's, push the other end through the grommet so 4cm of pipe is showing. This will avoid water splashing between the pot and lid and also hit the net pot in the correct place. (We recommend running the system for 60 seconds without the sprinklers to remove any debris present in the pipes). Push-fit the sprinklers when ready. Blue 90° sprinklers are used on the 15L pots.
- 21
- 22 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.
- to
- 24

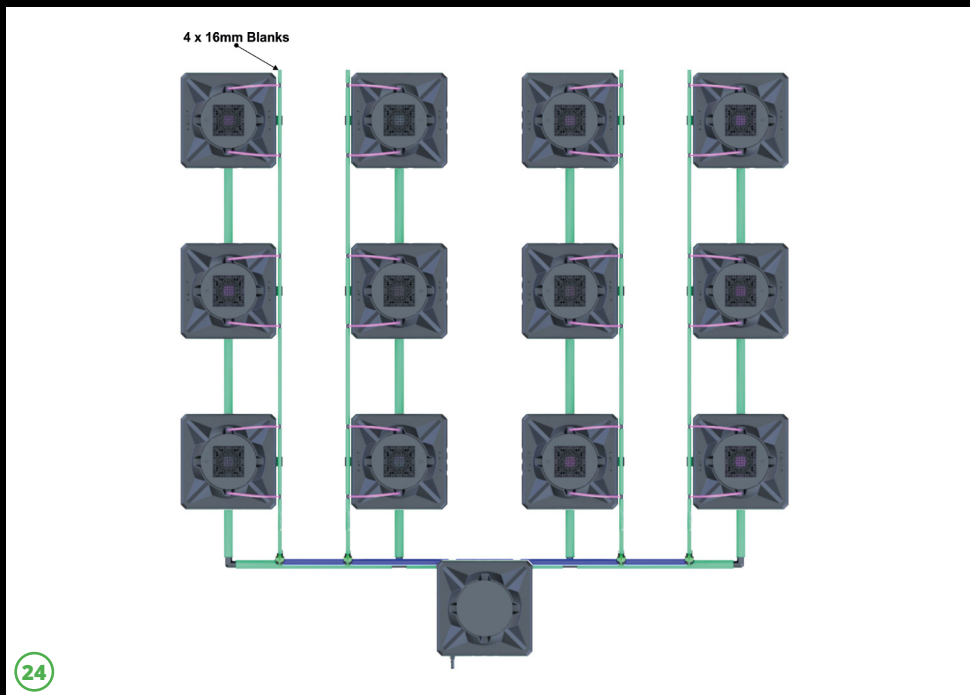
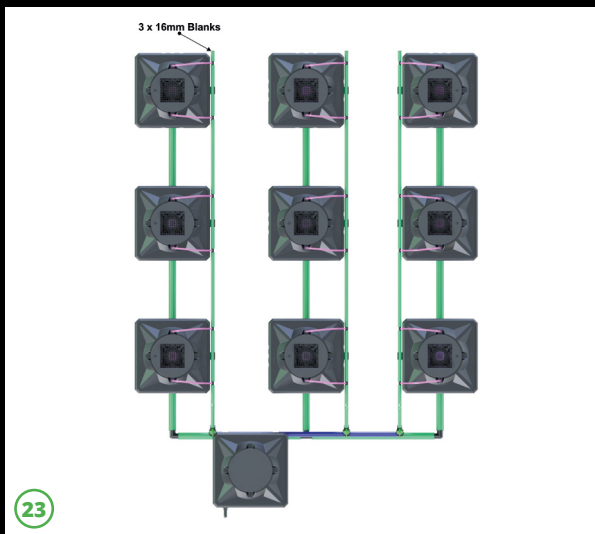
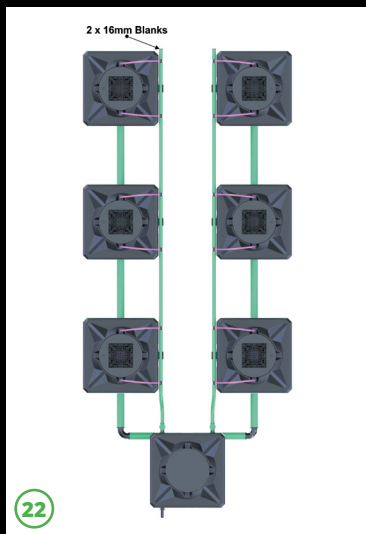
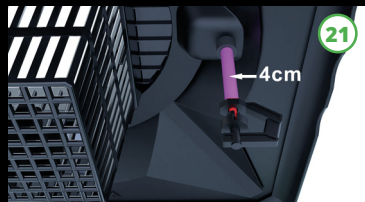
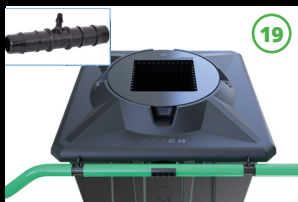
CAMO® Tank

- 25 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

- 26 Fit the blue pipe to the RAIN™ pump and secure with a Jubilee clip.
- 26a 4 - 18 pot systems use 25mm pipe. 21 pot systems upwards use 40mm pipe. The pump sizes are shown here.
- 26b
- 27 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.
- 28
- 29 The drain siphon tee is 19mm and is connected in the same way but without clips. Black 19mm elbows and pipe are used here.
- 30 Connect the blue feed line and black drain line to the fittings on the header. Secure feed line with clips.
- 31 Secure the RAIN™ Brain to a wall, away from possible water contact. Connections to "Power" and "RAIN™ pump" are shown.
- 32 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.







25



26

3500lph



26a

5000lph

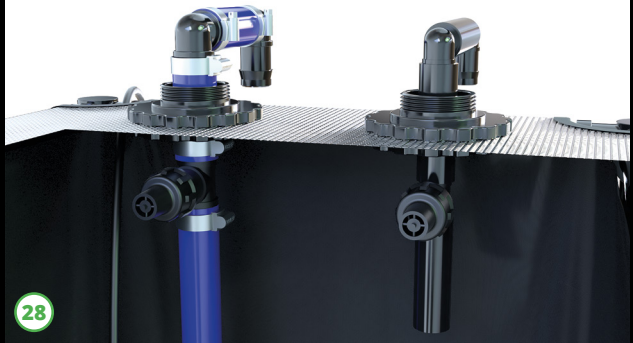


26b

7000lph
11000lph



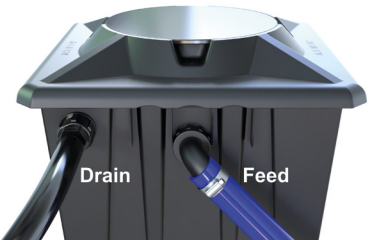
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28



29



30

Drain

Feed



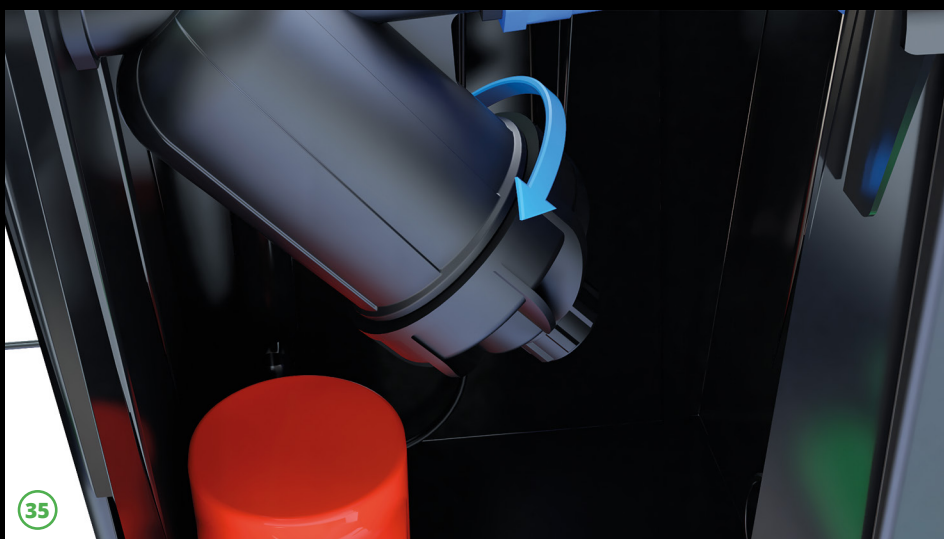
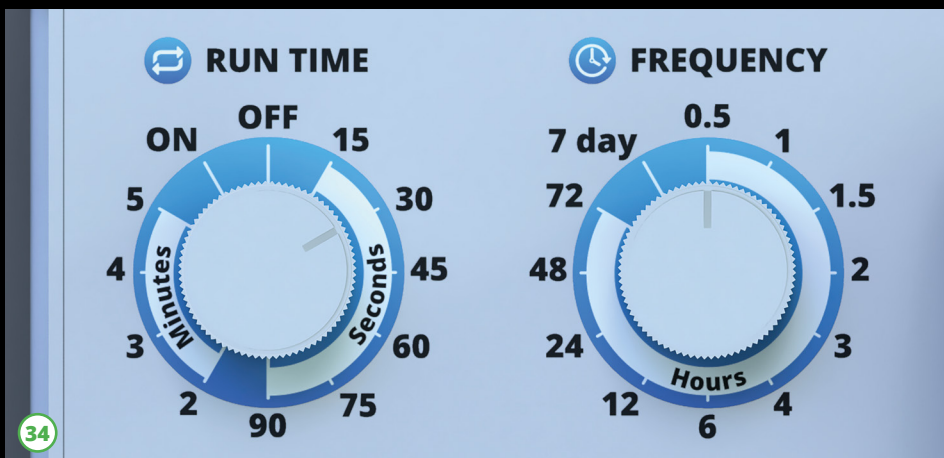
31

Rain Pump Plug

Power



32



Planting into the system

- 33 Put a layer of substrate into the bottom of the net pot level with the raised grid.
- 33a
- 33b Water the cutting before transplanting. Place the rooted cutting into the pot and fill the remaining void with substrate.

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.

The AERO™ system uses the air culture technique in which the plants roots are suspended in the air. This technique requires feeding little and often.

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.

Run-time Dial

- 34 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”.

A suggested setting for the AERO™ system is 30 seconds on, 30-60 minutes off. If you do not want your plants to be watered at night you can simply plug the RAIN™ Brain into a segment timer and select the off period. We advise having one feed in the middle of the “off” period.

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

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 tank and fill with clean water and ROOT ROT X™. Run the system and check that all sprinklers are working correctly by placing your hand through the lid hole and ensure water is coming from both sides. Clean the inside of the pots with a cloth. Run the red drain pump pipe to waste.

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 overflow

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

USES:

- CLEAN CUTTINGS
- FLUSHING STAGE
- POWDERY MILDEW
- STERILISE EQUIPMENT

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