AutoPot



save water... grow beautiful plants watering products for the home, garden, greenhouse and school

2010

www.autopot.co.uk

Welcome to AutoPot

AutoPot are specialists in self-watering systems, with emphasis being strongly placed on efficiency and preservation. AutoPot delivers products that are considered the most environmentally friendly watering systems in the world to both domestic and commercial markets. Our systems ensure this claim as the plant uses everything that is supplied to it; there is no loss of water, run-off or leakage.

All AutoPot products require NO POWER, PUMPS, MAINS WATER PRESSURE OR TIMERS to operate, GRAVITY PRESSURE IS ALL THAT'S NEEDED from a tank or water butt.

The systems are undoubtedly some of the simplest to use and can be left unattended for weeks due to the capability of the AQUAvalve to deliver all that is required by the plant. AutoPot is now an international market leader in irrigation systems, with an established global reputation for providing durable, environmentally friendly and innovative watering solutions to a range of growing scenarios.

From the greenhouse in your garden to acres of commercial glasshouses AutoPot can provide any grower of any ability

with a system, large or small, that will far exceed his or her expectations. Our aim is to provide the horticultural market place with easy to use watering systems that will allow the consumer to grow beautiful plants time and time again. There is an AutoPot system to suit every type of gardener, we have a great success record from the home to one of the UK's largest commercial nurseries. AutoPot systems have been proven to reduce consumption of water and feed by an impressive 40%, whilst increasing yields.

With escalating concerns over water conservation and the environment becoming prominent in our lives we are sure at AutoPot that more and more people will realise the advantages of using our self-watering systems. This is a completely new concept in irrigation technology and one that the horticultural world has been waiting for.

Jason S Ralph-Smith CEO

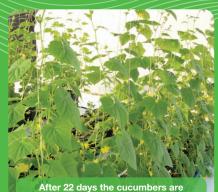
Prolific cucumber growth in Thailand



Cucumbers growing in Thailand, using 2Pot Extension Kits



Rapid growth after 10 days.



After 22 days the cucumbers are over 7 feet tall and in full flower.

Welcome to AutoPot

AQUAVALVE	the heart of all AutoPot systems	4 – 5
1POT SYSTEM	ideal for large plants	6 – 7
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no more daily watering can be left unattended for we	oPot watering systems?	
easily extended in minutes		

3

easily extended in minutes no power / timers / mains water required simply gravity fed from a tank / water butt saves water, no water is ever wasted environmentally friendly

perfect for...

tomatoes sweet peppers... herbs... chilli peppers... cucumbers... aubergines... melons... in fact anything edible or ornamental can be grown

AQUAvalve... how it works

AQUAvalve[™]

The AQUAvalve is a simple but very effective watering device but needs to be treated with care. Keep the AQUAvalve and the tray it sits in clean, free of obstructions, soil particles and it will help you water & feed your plants for many years. The AQUAvalve is guaranteed for 12 months.

The AQUAvalve is supplied with all the AutoPot systems. Once connected to the water supply the AQUAvalve will control the flow of water to the plants, by simple gravity pressure from a tank or water butt, no pumps, mains water pressure, electricity or timers are required. Once connected to the tank the AQUAvalve will open and allow water to fill the tray, to a pre-set level of 20mm. When the level is reached the AQUAvalve will shut off and prevent any further water from entering the tray until all the water has been consumed by the plants. When all the water has been consumed and the tray is empty the AQUAvalve will re-open and allow more water to enter the tray. As the plants grow larger the AQUAvalve will open and close more often and will perform in accordance with the plants needs, filling the tray and then allowing it to completely empty before it is re-filled allowing the plants to go through a wet & dry cycle. At AutoPot we call this technology PCI or "Plant Controlled Irrigation".



The AQUAvalve is supplied with the 1 Pot System, the easy2grow Kit, AQUAbox and the 2Pot extension kit

Advice

Remember to pre-set your AQUAvalve before use. When connecting up using 6mm or 16mm pipe always ensure that the end of the pipe is dipped in hot water, this will make connecting much easier.

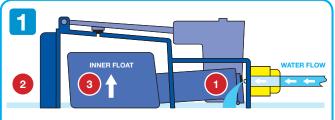
AQUAvalve cover

The AQUAvalve cover if used in conjunction with the AQUAvalve allows the grower to create their own basic but very effective hobby watering system. All that is needed is a flat tray of any shape or size. The user simply places the AQUAvalve in the tray & places the AQUAvalve cover over the top of it. A small weight of any kind needs to be placed on the AQUAvalve cover to weigh it down and the AQUAvalve beneath it, a small pot of compost or a stone will suffice.

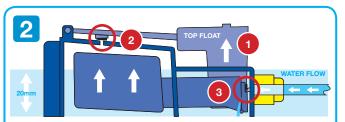
Ensure the small hole on the top of the AQUAvalve cover is not blocked.

Advice

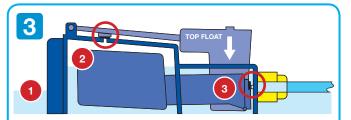
Keep the tray & AQUAvalve clean and free of floating growing medium, use a small hand brush to remove any soil stuck to the sides & bottom of the pots before you place them into the tray.



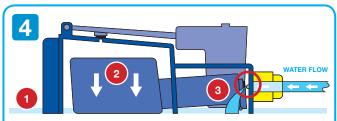
Once the tank is filled with water and liquid feed, it will begin to travel through the pipe from the tank. It will pass through the AQUAvalve nozzle (1) and into the tray. As the tray fills (2) with water air is trapped inside the main body and around the 'inner float' causing it to try and rise (3).



As the water level increases in the tray the 'top float' will rise (1). Releasing the trapped air inside the main body (2). This will in turn allow the 'inner float' to rise and shut off the supply (3). The water level is now 20mm.



Potted plants in the tray will start to reduce the water level (1). As the water level reduces the 'top float' will close creating a vacuum inside the 'main body' of the AQUAvalve (2). This vacuum traps water inside the 'main body' and in turn keeps the 'inner float' up and the incoming water shut off (3).



When the water level in the tray has run out completely (1) the surface tension around the main body of the AQUAvalve will break, this can take up to 30 minutes. As this happens all the water that is trapped inside the 'main body', keeping the 'inner float' up and the water supply shut off is released, allowing the 'inner float' (2) to drop and open the water supply (3).





1Pot system



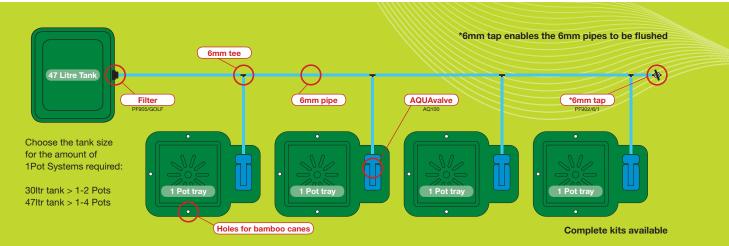
The 1Pot System is extremely versatile and can be used for a wide range of plant types and sizes. Seasonal flowering plants and perennial shrubs thrive and produce an abundance of blooms and foliage because of the unique action of the AQUAvalve, which is designed to allow the plant to go through a wet & dry cycle.

The 1Pot System is easily extended so many pots can be linked to a single tank. Please see examples of typical layouts using 6mm pipe or 16mm pipe. The pots & trays can be easily moved at will, if the plants grow too large they can be spaced further apart with ease. Once set up and a tank is filled with water & liquid feed this extremely versatile system will completely take care of all your plants needs.

All you need to do is remember to fill up your tank from time to time. Tanks and filters sold separately

Always use a 6mm or 16mm filter with each tank. Use good quality compost, soil or coco with a 30% – 50% mix of perlite.

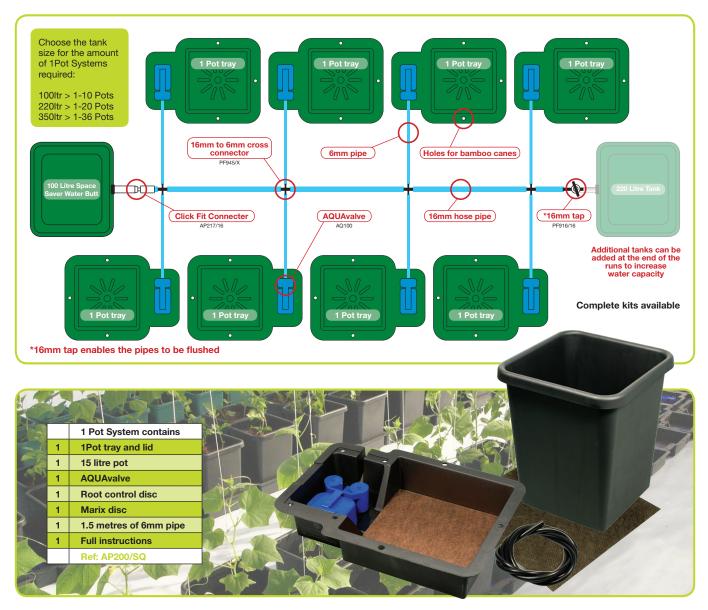
1Pot System layouts are endless – see example below using 6mm pipe



Advice

1Pot system

For larger set-ups - see example below using 16mm pipe (hosepipe)



easy2grow kit



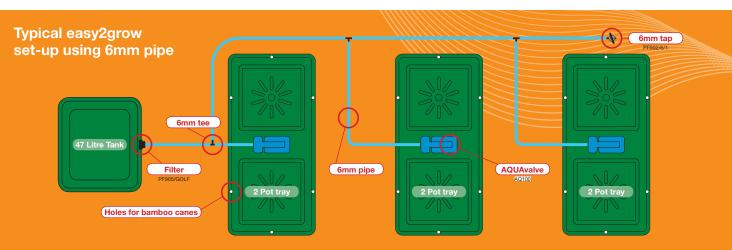
The easy2grow kit is the only complete kit in the world that will water & feed your plants without the need for pumps, timers or electricity, the water supply is gravity fed from the 47ltr tank supplied with the kit.

Simply top up the tank every few weeks adding liquid feed at the same time to provide nutrients. Any greenhouse crop can be grown in this system. The system can be easily extended to feed six pots, by adding the 2Pot Extension Kits.

Advice

Always raise your tank to a minimum of 150mm above the highest AQUAvalve and re-fill the tank when there is approximately a 1/3 of the solution left.



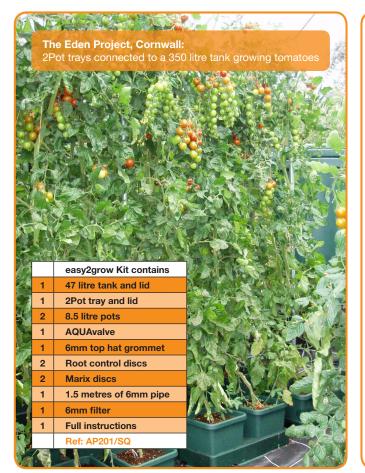


AutoPot recommends that a maximum of 3 trays are attached to the easy2grow Kit 47 ltr tank.

extending your easy2grow kit

The 2Pot Extension Kit is simply connected to the easy2grow kit, by using the 6mm tee included in your kit.

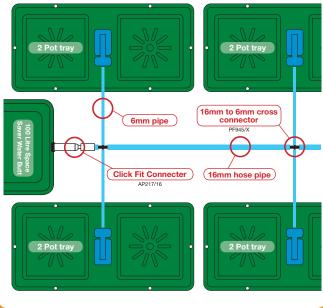
If you wish to increase the size of your system you can easily do so by either purchasing another 47ltr tank so that you have two tanks at either end of your trays, providing water from both ends. Alternatively you can use larger AutoPot tanks and use larger pipe, such as hosepipe to supply the water & feed.





	2Pot Extension Kit contains		
1	2Pot tray and lid	2	Marix discs
2	8.5 litre pots	1	6mm tee
1	AQUAvalve	1	1.5 metres of 6mm pipe
2	Root control disc	1	Full instructions
	Ref: AP204/SQ		

Typical easy2grow set-up using 16mm pipe



AQUAbox

The AQUAbox incorporates the AQUAvalve technology but is designed to be placed directly in the ground.

Ideal for:



The AQUAbox is simply placed in the ground and connected to a waterbutt or tank. The capillary wicks pull the water from the AQUAbox and distribute it into the soil. In trials over the last 18 months we have successfully been irrigating 1 metre square beds with just one AQUAbox.

Advice

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Ensure the AQUAbox is level in the soil by using the circular spirit level in the lid.

how the AQUAbox works In gate area up to Square metro AQUAvalve Water is drawn from the AQUAbox by the strips of capillary matting AQUAbox Mathematical AQUAbox AQUAbox

incorporating the AQUAvalve™ As the roots develop and the plants grow the roots will search for the water source and attach to the capillary matting.



The picture to the left shows the AQUAbox being used in a 20 metre x 1 metre raised bed growing local Thai vegetables.

Many AQUAboxes have been linked together to irrigate this 20 metre raised bed. The roots from the plants simply head to the water source which is supplied by the capillary matting.

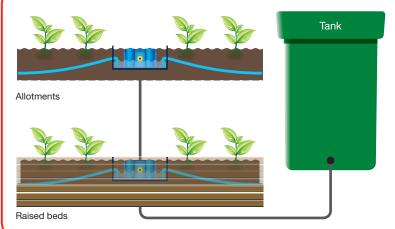
Once the roots reach the water source they attach to the matting drawing water & liquid feed from the AQUAbox as & when they require it.

The diagrams below show how versatile the AQUAbox can be. Any size tank can be used to supply the water and liquid feed (if required).

We are confident at AutoPot that there is nothing available worldwide that offers such versatility for direct soil watering and at the same time harnesses all of the AutoPot values.



Make sure the capillary strips are touching the bottom of the AQUAbox either side of the AQUAvalve once they have been threaded through.





Tanks & filters sold separately

AirDome



The AirDome has been designed to increase the amount of air around the root zone in the pot. If you are lucky enough to have power in your greenhouse this little addition can increase yields by up to 130%.

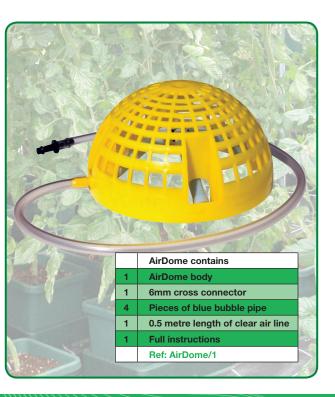
It is very simple to use once assembled, which

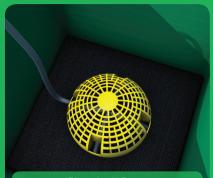
will take less than 30 seconds. The AirDome is placed at the bottom of the pot, covered with compost and then connected to an air pump.

Advice

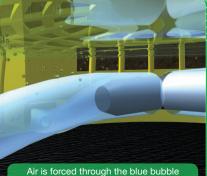
To maximize the effectiveness of the AirDome use a 'fluffy' mix, such as 50% good quality compost and 50% perlite.

Do not use peat as this will compress reducing the effectiveness of the AirDome.





Place the AirDome in the bottom of the pot



pipe aerating the water in the tray



CONTRACTOR OF

easy2grow Liquid Feed



We are now happy to announce the availability of easy2grow Liquid Plant Fertiliser. This feed out performed all the rest during trials in 2007 and is now available in branded 1 litre, 5 litre and 20 litre bottles. The liquid fertiliser has been formulated to be used with all the AutoPot products when using a good quality compost/soil/perlite mix.

Although many of the well known liquid feeds available to the public provide a balanced feed for the plants in question. Many of them are not very clean; some of them just do not mix with water at all and are really designed to be poured from a watering can once mixed with water. In other words they leave large amounts of sediment/salt deposits in the tank that can be dragged through the pipes and into the AQUAvalves, causing unsuspected blockages and ultimately dead plants.

easy2grow Liquid Plant Fertiliser will leave minimal sediment and is formulated to grow all kinds of vegetables and fruit, not just tomatoes and it works extremely well with any of the AutoPot products.

Available in 1 litre, 5 litre and 20 litre packs

Advice

For excellent results - use good quality compost or soil with a 30% – 50% mix of perlite. All available from your local garden centre.



Compound fluid fertiliser containing magnesium, sulphur and trace elements.

Also contains: nickel; humic and fulvic acids; pure kelp extracts.

Analysis	% w/v
Nitrogen (N)	1.5
Nitrate nitrogen	1.4
Ammoniacal nitrogen	0.1
Phosphorus pentoxide (P_2O_5) water soluble (P)	1.35 (0.6)
Potassium oxide (K ₂ O) (K)	2.5 (2.0)
Magnesium (MgO) (Mg)	0.55 (0.33)
Calcium oxide (CaO) (Ca)	1.1 (0.8)
Sulphate (SO ₃) (S)	0.29 (0.12)
Boron (B)	0.002
Cobalt (Co)	0.0005
Copper (Cu) chelated by EDTA	0.0014
Iron (Fe) chelated by EDTA	0.02
Manganese (Mn) chelated by EDTA	0.008
Molybdenum (Mo)	0.0005
Zinc (Zn) chelated by EDTA	0.002

Little Growers - Encouraging Children to Grow at School



AutoPot are the proud and long standing sponsors of Little Growers...

Every parent wants their children to have what's best for them; to eat fresh fruit and vegetables as part of a healthy nourishing diet. If only it were that simple! But that's the challenge taken on by Jason Ralph-Smith, founder of Little Growers. He

believes that getting youngsters to grow tasty produce is an exciting and educational way of involving them in what they eat.

Little Growers is responding to the nationally identified need for improved eating habits and better nutrition. Recent research in inner city areas of the UK found that many young children do not associate a carrot stick with a carrot grown in the ground or a chip with a potato. So there's plenty to be done and Little Growers is taking up the challenge and their philosophy is taking root in schools around the UK. Launched in 2008, Little Growers, a community interest company, now works with over sixty five schools around the UK. These include a school for disabled children and a community school for disadvantaged and troubled youngsters. Over 1,350 children ranging from 4 to 19 years old now have direct contact with Little Growers initiatives.

At the heart of the Little Growers project is the unique AutoPot self watering technology invented by Jason Ralph-Smith. It is ideal for use in schools as it is environmentally friendly, extremely safe and very simple to manage. The added advantage is they can be left unattended several weeks, ideal for school weekends and holiday breaks.

When they come on board, all schools are provided with complete growing

kits free of charge including polytunnels, AutoPot self-watering systems, water butts, raised beds, liquid fertilizer, seeds & propagation units, so they can get started immediately. They select which seeds to plant and learn what they need to make them grow. Their fresh produce is then used throughout the school; during lessons, in the canteen and after school clubs and also sold at local farmers markets, giving children a taste of 'home-grown' fruit and vegetables.

I cannot sing the praises of this scheme enough, it has been educational and fun for all involved, in respect of our Eco schemes but also with regard to healthy eating. I sincerely hope this project can continue to grow to enable all school children to reap the benefits we have been fortunate enough to have during this last year. Hillside Primary

Jo Morsman, Green Team Project Leader

Visit The Little Growers website www.littlegrowers.co.uk which has photographs and progress updates on our present activities.

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AutoPot around the world



AutoPot's global presence in the horticultural irrigation market continues to grow and grow with new international distributors joining all the time...



the UK

AutoPot has been firmly established within the UK for eight years. We have numerous large distributors throughout the country that continue to go from strength to strength with our products leading the way in the UK irrigation horticultural market. The portfolio of projects within the UK include a long term project at The Eden Project, hugely successful trials with Valley Grown Nurseries suppliers to supermarket leaders Waitrose and Sainsburys and best selling product in five years for Sutton Seeds.



Thailand

We now have an appointed distributor in Thailand managing a 23,000 square meter trial site in Ko Samui with 600 sweet coconut plants each with their own AQUAbox. In Northern Thailand a self sustainable show site that utilises the AutoPot technology is underway with a 30 meter x 10 meter greenhouse, providing exposure and education to Thai businesses large and small.



South Africa

This region has been successfully distributing AutoPot products for 2 years which have proved very popular in the commercial market. AutoPot's charity, Little Growers is now launching in conjunction with the South African education initiative Learning Tree.



Europe

The European market has adopted AutoPot without hesitation, we now have distributors in France, Germany, Spain, Norway, Finland, Denmark and Sweden. Interest in the company continues to grow at an unprecedented rate.



Japan

We have an AutoPot representative and distributor here who is working in both the commercial and educational sectors providing AutoPot to a keen and receptive audience.



USA

AutoPot reached the States two and a half years ago with our distribution focused in Michigan and continues to thrive.



Maldives

Trials are underway here, with talks being held to facilitate each individual island with a tailored AutoPot set up to provide irrigation to the commercial crop market.

As the ever-growing interest in AutoPot continues and our statistics reflect a keen interest from visitors overseas, we are pleased to announce that the AutoPot website is now available as a localised version through the new language options which can be found at the bottom of the website.



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