

DIY 32 Site Aeroponic Unit - Grow 2 lbs Every 2 Months

Inspired by [See More Buds Volume 1](#)
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Items needed:



- * Large tote app. 45-60 gal, measuring app. 2' x 4' x 18" deep \$23 (Home Depot)
- * 10 ft. ½ pvc pipe \$2 (Menards – it may have been a buck, but Lowes is 2)
- * 36 – 330 degree EZ Clone sprayers @ \$.60 ea. \$22 (local hydroponics shop)
- * 32 – 3" net pots @ \$.29 ea. \$10 (local hydroponics shop)
- * Eco Plus (or equivalent) 633 GPH water pump \$45 (local hydroponics shop)
- * 7 – ½ T pvc connectors app. \$3 (Menards)
- * 4 – 90 degree pvc elbow connectors less than \$2 (Menards)
- * 8 x 10 plexiglass sheet \$1.50 (Home Depot or Lowes)
- * Vinyl sheet or trash bag cut into 8" wide strip to circle inside of tote

Total - \$108.50

I had to spend an additional \$18 for a bit to drill the 3" holes.

After contemplating this project for months I finally worked it out only to find that there are many of these out there in DIY land. I became interested in aeroponics after seeing "See More Buds 1" and how the grower maximized his growing space. Instantly I was reminded of my Chicago buddy's words "we go to the store and see how the item is designed, then build our own." After watching that video repeatedly, and investigating the EZ Clone up close, I came up with this spin on the Aquamist 32 site:



Get you a XL tub (45 gal. and up). Try to find one with a secure fitting lid and that is unwarped even in the bottom. This is a 54 gal measuring 42.5 x 21.5 x 18.6.



For best results, find a tote with a flat (or semi-flat) lid.

Next, you will need to secure a tray in the center of the bottom to hold your pump. I found an 8 x 10 sheet of plexiglass for \$1.50 at the hardware store and cut it in half. I then used Gorilla Glue to secure it to the tub. Hmm. I hope Gorilla Glue is safe.



Cut 3" holes spaced evenly apart. This will give you app. 9 sites per square foot. As documented in the first See More Buds video, the grower used 3 different sized tables, side by side. One 2 x 4 table had app. 100 - 2" sites, one had 32 - 4" sites and the last had 16 - 6" sites. Each table produced close to 2 lbs., with the 100 site producing more. The plants were grown to full maturity (one weighing 2 oz.) in 2" cups. So, I decided to go in between the 2" and 4" cups. 32 fit perfectly with enough room for a great SOG or SCOG.



Take your plastic sheet and secure it to the inside of the lid using silicone, adhesive or duct tape. It should hang as a curtain to cover the gap between lid and tote. This is the area I haven't spent much time on...obviously.

At this point you may want to add a drain plug and maybe a reservoir level meter (clear tubing up side). I was in a hurry and went straight to the manifold.

For this large manifold you will need your 1/2" PVC.

Cut:

13 - 6" pieces.

2 - 2.5" pieces

Take 10 of the 6" pipes and make drill hole marks at $1\frac{1}{4}$, 3, and $4\frac{3}{4}$ inches on each pipe. Take 2 more 6" pipes and make the marks at 2 and 4 inches. Leave the last 6" piece intact. Next, mark the 2.5" pieces with one mark each at 1 inch from either end. To re-cap, 10 of the 6 inchers will have 3 holes, 2 will have only two holes, and 1 will be left as is. 2 of the 2.5" pieces will have only 1 hole in each.

Now, you can drill your holes with an 11/64 drill bit if you have the same EZ Clone sprayers.

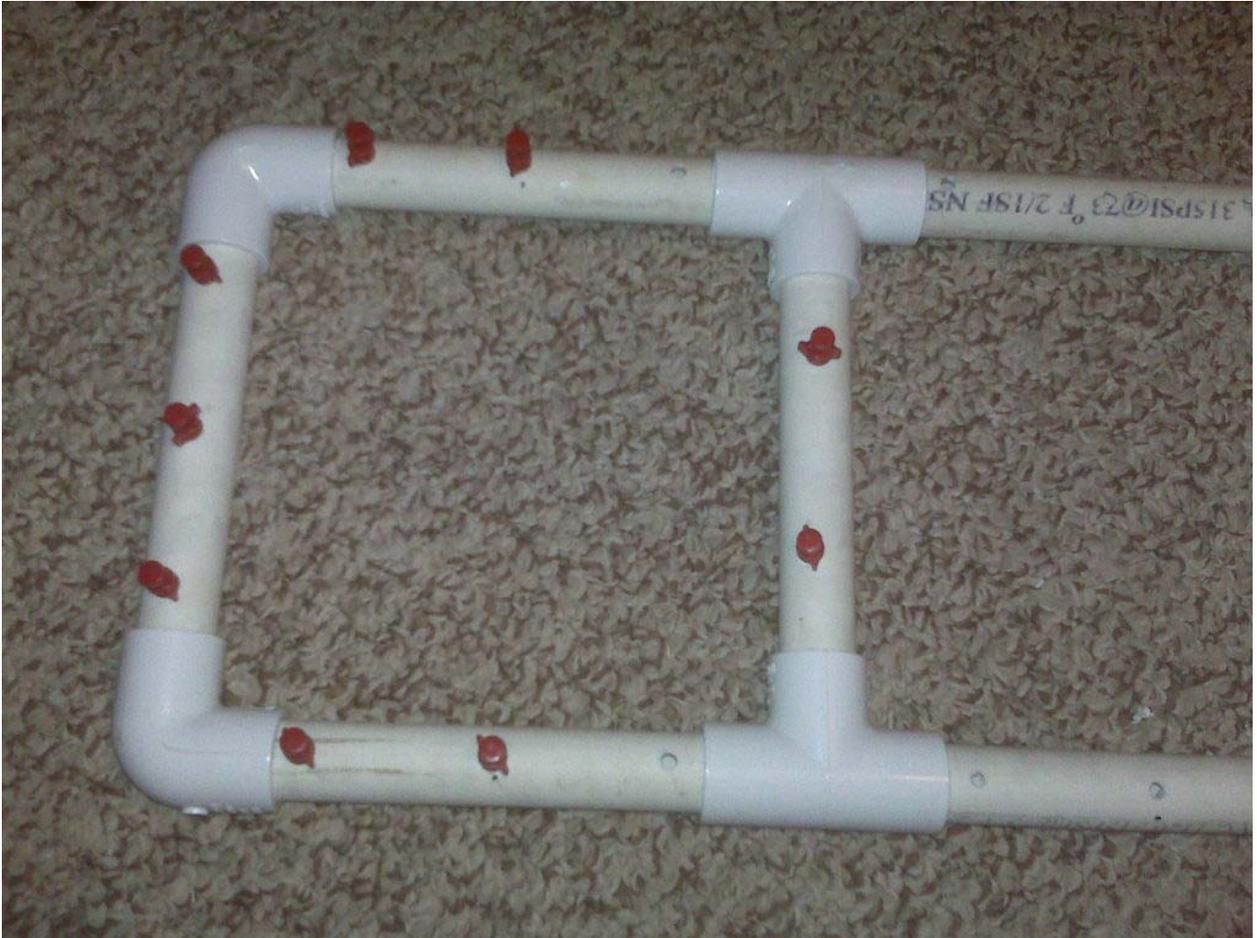


If not, practice the whole sizes on a scrap piece of pipe until you have the correct size to accommodate your sprayers, and insert them.

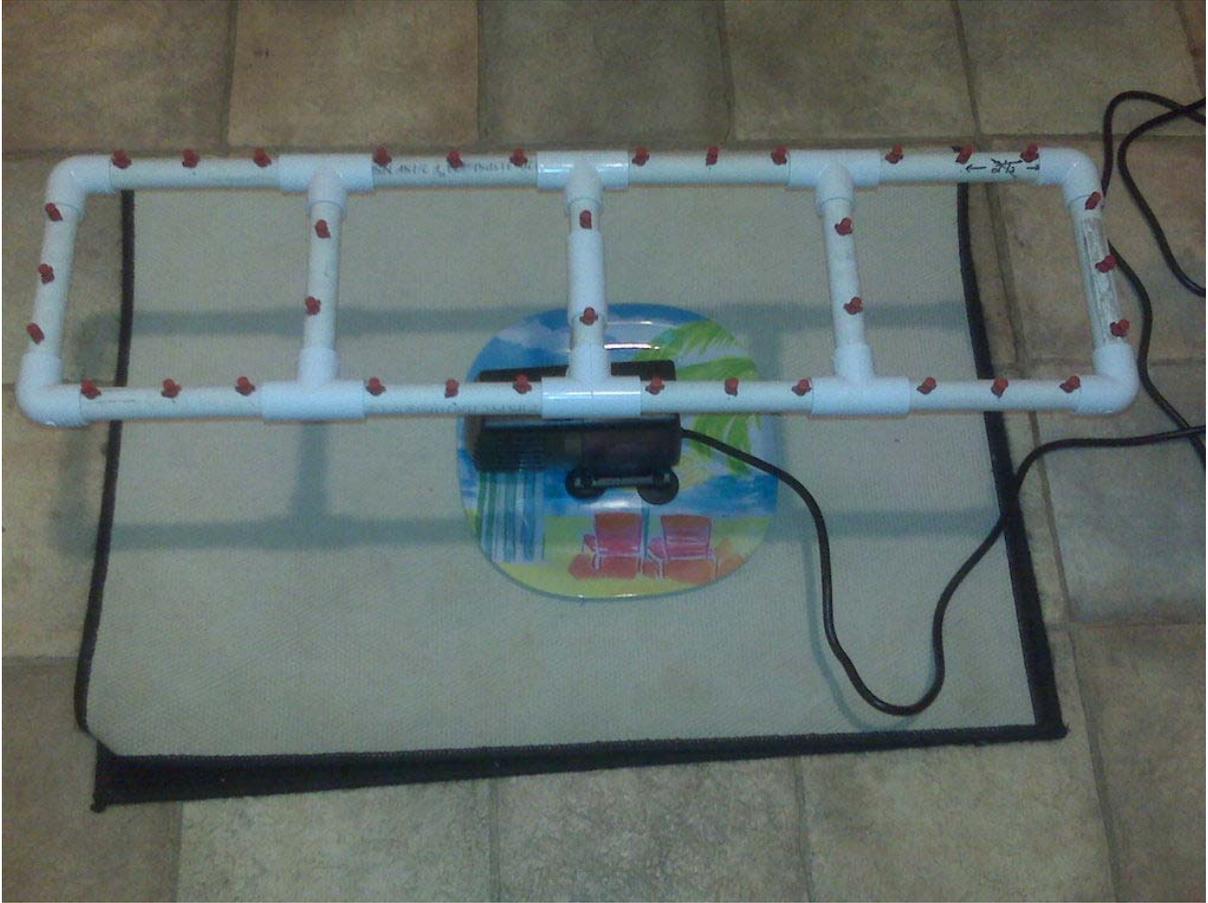


Now connect the pipes using the 3-hole 6" pipes for the outer frame, and the 2-hole 6" pipes with the 2.5" pipes to construct the center. I did not glue mine for various reasons, one being easy cleaning by total disassembly. Also, I want to be able to make slight adjustments if needed.





Once complete, use the remaining 6" pipe to connect the manifold to the pump via the adaptor. Be sure to use an equivalent pump as the Eco Plus 396 GPH pump was too small for this size manifold. I would not go below 600 GPH. Also, I was going to use a 1500 GPH sump pump from Menards for \$50, but those things use huge power; 500W vs 35W.



Set this in the bottom of your tub on the tray. If necessary, you can add additional support to the pump/manifold assembly by stringing a large nylon tie around the pump and under the tray. Or, you can find the rare 1/2" pvc connectors that make a 90 degree elbow plus a downward pointing female end that can be used to connect legs in the corners. That's it. You will need a heater and thermometer, but air infusion is unnecessary. The water is extremely and abundantly oxygenated running its course through the pump, lines and sprayers.

With the proper techniques a grower should produce an average of 1 oz. per plant, and 2 lbs. per harvest.

I hope this helps someone with their production endeavors. Blessings to all and best wishes.