WHAT IS A DRIP **IRRIGATION SYSTEM?**

Perhaps the easiest system to manage, a drip irrigation system can be installed from lengths of premium flexible hose, poly mainline, and/or PVC pipe. From the mainline, smaller, flexible tubing, commonly referred to as "spaghetti" hoses, are extended to the sites of plants for irrigation. Great for indoor and outdoor gardens, drip irrigation systems are affordable, efficient, and easy to install.



WHY GROW IN A HYDROPONIC SYSTEM?

- Saves water
- Saves liquid nutrients
- Saves time
- Grows plants bigger and faster

Ask a PNW Staff Member for any Additional help

SHOPPING LIST

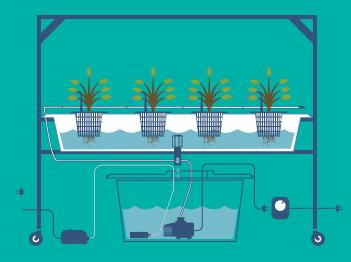
PNW Staff Recommended These Products

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How To Build Your Own Hydroponic **Drip Irrigation System**

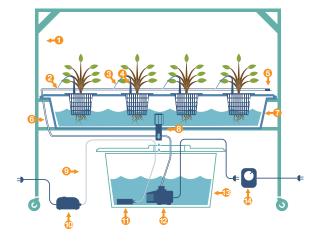


Follow the instructions inside for information on building your own drip irrigation system. Read the steps to learn more about the equipment, tools, and techniques necessary to construct a custom drip system, and enjoy the benefits of growing your own hydroponic crops with ease.

Follow the steps below to create your custom Drip **Irrigation System**

Equipment Needed: (Multiply if Nessesary)

- Flood Table
- Reservoir
- Submersible Pump
- ½" or ¾" Polymainline or Flexible Tubing
- Air Pump
- Airstone
- Airline
- 1/2", 3/4" or 1" Bulkhead Fitting (with overflow screens) x 2
- ¼" Barbed Adapter Fittings
- 1/4" Spaghetti Hose
- Drip Emitters
- Miscellaneous Fittings



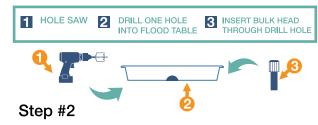
- **TRAY STAND** 2 BARBED ADAPTER FITTINGS (9) AIR LINE SPAGHETTI HOSE
- ORIP EMITTERS
- 6 PLUG FITTING

- 6 FLEXIBLE TUBING FLOOD TABLE
- 8 BULKHEAD FITTING
- (I) AIR PUMP
- **(ii)** AIR STONE
- SUBMERSIBLE PUMP (B) RESERVOIR
- CYCLE TIMER

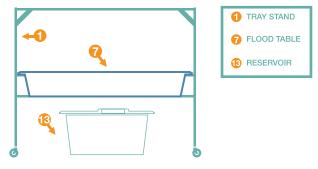
Let's Begin the Build

Step #1

Drill one hole into your flood table with a hole saw that matches the diameter of your bulkhead (thru-hull) fittings. Then, screw your bulkhead fittings into your table. Drill locations will be indicated by dimple marks of the furthest ends of your flood table.

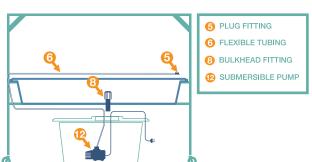


Assemble your flood table above your reservoir. Any size of flood table will work, as long as the reservoir below is proportional to the size of your table. To make sure your plants have adequate access to water, ensure your reservoir is at least 3 times larger than your flood table.



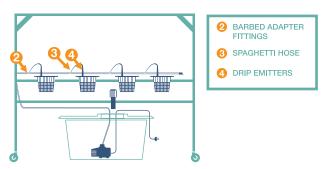
Step #3

Connect your mainline pipe to your submersible pump. Then, lead and connect the opposite end of your pipe to your input bulkhead fitting. Screw on a male insert thread fitting into your input bulkhead fitting and install your poly mainline/hose onto your table. Depending on the layout of your system, your mainline hose may require elbows, tees, or cross fittings to complete its route. Once your line is complete, plug the end of this hose with the appropriate fitting.



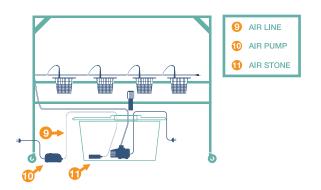
Step #4

Punch small holes into your mainline pipe and insert the 1/4" barbed adapter fittings. From there, connect the lengths of 1/4" spaghetti line to the fittings and extend the hose to the base of your plants. Lastly, install drip emitters to the ends of the spaghetti line. Alligator stakes/clips can be used to stabilize the 1/4" line next to your containers.



Step #5

Connect your airline to both your air pump and stone. Submerge the stone into the reservoir and turn on the pump.



Step #6

Connect your submersible pump to a timer to automate your crops' irrigation cycle.

