Simple T5 Fluorescent Deep Water Culture Starter System



www.epicgardening.com/simple-t5-fluorescent-deep-water-culture-starter-system/

I can't tell you how many emails I get asking about how to get started in hydroponics. I've been answering these individually for so long until it hit me:

"Why don't you just put these system guides on the site?"

Duh! To kick things off, this is a deep water culture system designed for indoor growers who want to grow with T5 grow lights. It's a great beginner system that isn't too expensive, coming in under \$500.

Before you read on, see if this system fits your specific needs:

This System is For You If...

- You want to grow 1-2 plants indoors
- You want an easy system w/o moving parts
- You don't want to invest a lot of money

This System is Not For You If...

- You want to grow more than 2 plants
- You want to achieve maximum yields
- You want top of the line gear and results

Shopping List

All of these parts can be found locally at hardware, aquarium, and hydroponics stores. I have also listed links to purchase these parts online as well, which is what I do to save time.

I have split the shopping list into three parts:

- Growing Environment
- Lighting
- Nutrients and pH

Growing Environment

If the Gorilla Grow Tent is too expensive for your tastes, you can swap it out with something like the Quictent 2' x 2' x 4' tent. It's cheaper, but it won't last as long as a Gorilla tent, which in my opinion are the top grow tents on the market.

You can get the 5 gallon bucket, air pump, air stone, and airline tubing from a hardware store and an aquarium store, respectively. You'll save a bit of money compared to ordering on Amazon, but you'll have to go out and get it yourself.

Part List		Details	Link
	Grow Tent	Gorilla Grow Tent, 2' x 2.5' x 5'7"	BUY
	5 Gallon Bucket	Used as nutrient reservoir	BUY
	3" Net Pots	To hold plant and growing media	BUY
	3" Hole Saw Bit	To drill hole for net pot	BUY
	Growing Media	Use Hydroton or choose from list	BUY
	Airline Tubing	Black to avoid algae growth	BUY
	Air Pump	1 outlet is all you need	BUY
	Air Stone	4" circular air stone w/ suction cups	BUY
	Oscillating Fan	16" wall-mounted fan	BUY

Lighting

You have the option of not using a T5 fluorescent light fixture and instead rigging up your own system with CFLs. The time and effort it takes to build a rig like this isn't worth the minimal cost savings though, in my opinion.

Parts List		Details	Link
	T5 Fluorescent Fixture	2' fixture w/ 4 T5 bulbs, Agrobrite	BUY
	2700K T5 Bulbs	Necessary for flowering phase	BUY
	Digital Timer	To automate light schedule	BUY

Nutrients & pH

This section is the only one that you'll need to purchase more than once over the life of your hydroponic system. Even so, you won't need to purchase nutrients and another pH control kit until you've completed a few grows, so it's not a huge ongoing expense.

Parts List		Details	Cost
	Nutrients	General Hydroponics Flora	BUY

Parts List		Details	Cost
	Cal-Mag	Essential micronutrients	BUY
	pH Control Kit	To measure and control pH	BUY
	PPM Meter	To track nutrient concentration	BUY

^{*} To check the price of all parts at once, click here.

Total Costs

Setup Cost: \$380 - \$445

Electricity Cost: \$15* per month

*18 hours/day x 31 days x 216 watts x \$0.12/kWhr = \$15

Total Costs for a 4 Month Growing Cycle: \$465 - \$505

With this build, you've spent just under \$500 on a complete deep water culture system that will have you growing 1-2 plants and spending a minimal amount of money every month on electricity.

With proper care, this system can last you for a very long time.