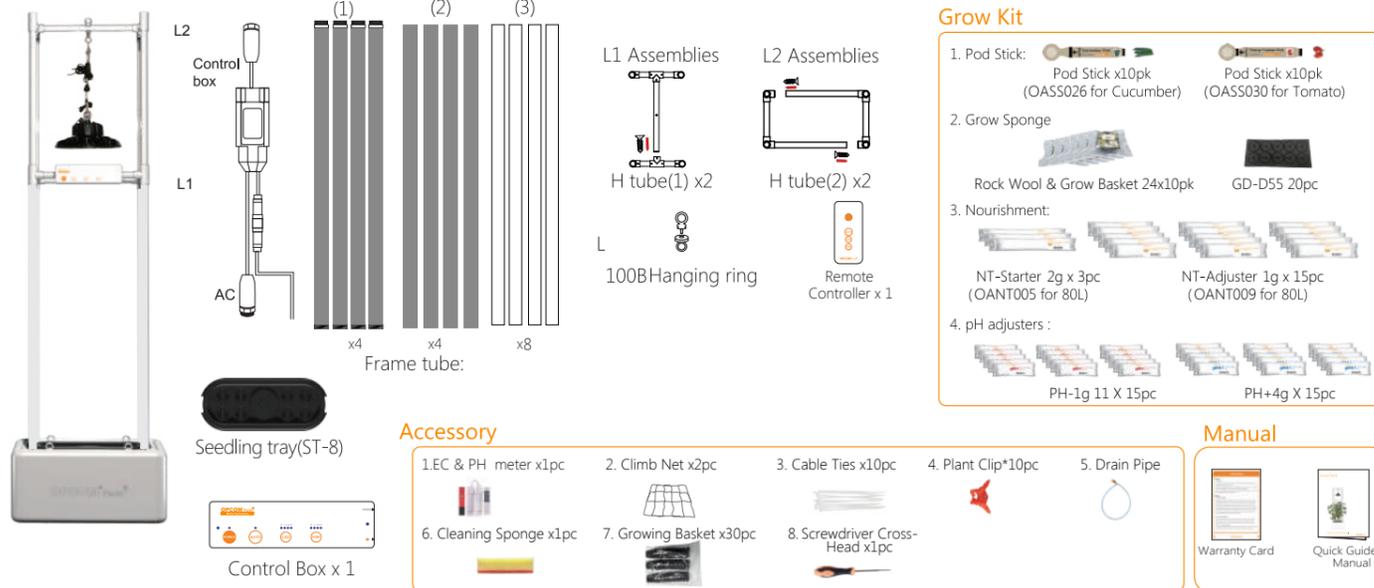


OPCOM Farm[®] GrowTank

Thank you for purchasing OPCOM Farm GrowTank, the indoor hydroponics growing system. It is designed with easy to use and efficient growth by one-touch AUTO mode. It holds up to 48 plants capacity. Read the quick guide carefully before setting it up. For detailed user guide video, please visit our GrowTank page at <http://www.opcomfarm.com/Growtank>

A. Assembly

A1. Remove all parts from box and check all accessories.



A2. Assemble GrowTank

1. Assembly

- Place four Hanging rings on each corner on water tank.
- Insert 4 aluminum Frame tube(1) and secure its position.
- Extend upper 4 aluminum Frame tube(2) by aligning and twisting in the treads on the poles of step 2.
- Use H tube(1) and Frame tube(4) to assemble L1 square frame with extended poles of step 3 together and screw closely.
- Connect another upper 4 plastic Frame tube(3), then assemble L2 Frame with 2 H tube(2) and 1 Frame tube(5), and assemble it on the top of the plastic tubes, screw closely.
- Tighten the metal Hanging Ring with L100B and the long plastic Frame tube(5). Then ensure metal ring chain go through the metal ring in the LED light and set the height by buckling two metal ring together.

2. Electric line setup

- Connect control box to the front tube of the square frame.
- Connect L100B LED light quick release adapter to the cable on the control box. * L100B can adjust 2 kinds of grow light, R:B(5:1)/R:B(9:1), to meet different planting stage requirement.

3. Water line setup

- Connect the black tube to the Y-type filter on the side of pump.
- The other two black tube go through the hole in the tray from bottom and top to around 10 cm.

4. Other Installation

- Add 21 gallons/ 80L (80% full) water to water tank.

Chart I: Control Box Mode

Fuction	Status	Operation	Light	Time(On/Off)	Note	Fuction	Status	Operation	Light	Time(On/Off)	Note
Led	Auto	One Click	●	16H/8H	* 10 mins/cycle	Pump	Auto	One Click	●	12 Cycles	* 10 mins/cycle
	ON	One Click	●	24H/0H			ON	One Click	●	24 Cycles	* 30 mins/cycle
	High	One Click	●	18H/6H			High	One Click	●	12 Cycles	* 30 mins/cycle
	Low	One Click	●	10H/14H			Low	One Click	●	8 Cycles	* 30 mins/cycle
	OFF	One Click	●	0H/24H		OFF	One Click	●	0 Cycles		

Most plant can be grown using the AUTO mode. Remote controller support wireless remote controller.

* Instant timeline override: Daily working mode setting

*a. When Power On, press hold POWER button until 1 beep sound (Less than 2 second) to turn off the power.

b. When Power On, press hold POWER button until 2 beep sound (About 5 second) to reset timeline to auto power on (On/Off 16H/8H).

*a. When Power Off, press hold POWER button until 1 beep sound (Less than 2 second) to turn off the power.

b. When Power Off, press hold POWER button until 2 beep sound (About 5 second) to reset timeline to auto power off (On/Off 8H/16H).

OPCOM Farm[®]

☑ Please read and follow every steps to avoid any malfunction.

B. Seeding

B1. Sprout Stage

- Open rockwool sponge package, wet the sponge(Fig1)
- Open podstick package, put into each planting basket (Fig2)
- Put into the seedling tray.(Fig3). Spray water and keep the sponge wet every day.
- Place the seedling tray with cover in the shade or cover it with black cloth.



Chart II: Plant Stage

Cucumber, Tomato	Time after planting	LED Mode	Pump Mode	Nourishment	T (°F)	RH	EC	PH	Notes
Sprout Stage	Day 3~Day 7	OFF	OFF	--	75.2°	80%	0.5-1.0	5.5-6.5	Keep the sponge wet.
Young plant stage	Day 10	ON(*1)	ON	starter	59° - 86°	45%-70%	1.0-2.0	5.5-6.6	Keep LED distance 500mm above plant.
Growing Stage	Day 20~Day 40	Auto(*1)	Auto	80L	59° - 86°	45%-70%	1.0-2.0	5.5-6.7	Adjust LED lights position. Ensure EC & pH value
Blossom Stage	After Day 20	Auto(*2)	Auto	80L	59° - 86°	45%-70%	2.0-2.5	5.5-6.8	Adjust LED lights position. Ensure EC & pH value
Fruit Stage	After Day 60	Auto(*2)	Auto	80L	59° - 86°	45%-70%	2.5-3.0	5.5-6.9	Adjust LED lights position. Ensure EC & pH value

- Please keep the Pod stick package in refrigerator if you don't use it. Recommended temperature is 41°F - 50°F.
- LED light source: *1:R:B=9:1 is suitable for plant leaf growth stage *2: R:B=9:1 is suitable for plant blossom and fruit stage.

B2. Young Plant Stage

- In each sponge, keep the strongest and thicker ones and remove others.
- Add 21 gallons water to the water tank(Fig4).
- Add NT-Starter into the water tank and ensure EC value between(=1.0-2.0mS/cm)(Fig4)

Status	0.0-0.5	0.5-1.0	1.0-2.0	over 2.0
Nourishment	(Add 2pc)	(Add 1 pc)	Standard range	Add water

- Ensure pH between 5.5-6.5 (adjust by pH +/-). For EC & pH adjustment instruction, please refer to the following chart (Fig4)

Satus	4.0-4.5	4.5-5.0	5.0-5.5	5.5-6.5	6.5-7.0	7.0-7.5
pH+ adjuster	(Add 3pc)	(Add 2pc)	(Add 1pc)	Standard range		
pH- adjuster				Standard range	1pc	2pc

- During young plant stage (around 2 inches), turn on LED and Pump. Please refer to the Chart II.
- You can choose different light hanging methods/positions for various plants per you needs.(Fig5)
- Change or adjust water every 1-2 weeks according to above item 3 & 4. Some flowers/ fruit plants may need higher EC(over 2.0) at flower/fruit stage. Please refer to plants information before you choose and planting.

B3. Growing Stage

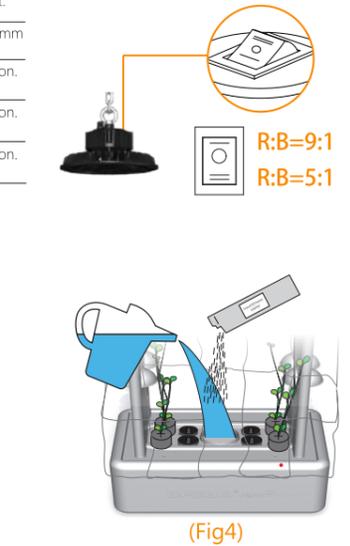
- Set up the climbing net around the 4 tubes in the grow tank.
- Choose 4 plants and move them to suitable holes for better growing.
- Cover the empty plating sites to keep the rock wool wet and stop moss growing up and
- Stable them by using climbing net or clip them on the poles.
- Growtank can accommodate up to 8 plants and you can use ropes go through the 4 metal rings on the water tank and fix them on the ceiling to allow the plants to climb(Fig6).
- When young plants grow to 3-4 inches height, switch control box to growing mode. Please refer to Chart II.
- After 4-6 weeks, harvest the larger plants for consumption and keep smaller plants growing.
- To save time, sow the new seeds in sprout tray one week before you restart the planting process.

B4. Blossom Stage

- After about 6 weeks, add NT-adjuster to raise EC value to 2-2.5 for flower stage of the plants.
- Ensure pH value between 5.5-6.5(adjust by pH +/-). For EC and pH instructions, please refer to Chart II.

B5. Fruit Stage

- Note to add NT-Adjuster and water to raise EC value to 2.5-3 for fruit stage of the plants
- If necessary, set Anti-insect net to prevent insects attack.



C. Optional Accessories

1. Black Cloth Cover



2. OPCOM Link Box



3. Anti Insect Net



4. 500W Water Auto Heater



E1. Add Water

- 1. Measure the PH/EC value every 1-2 weeks and add water to achieve the vlaue balance

E2. Change Water

- 1. After a cycle of planting, you may want to change water or clean the unit (Fig1)
- 2. When change water, clean water gateway on each planting layers, you may also add moss detergent in the water tank to avoid the moss remaining
- 3. On the regular basis of every 1-2 weeks, clean the filtering sponge in the pump

E3. EC/pH meter Use and Calibration

- 1. Keep the electrode of EC/PH meter clean and cover the electrode protective cap when not in use
- 2. Remove batteries when the EC/PH meter is not used for a long period of time.



(Fig1)

F. Troubleshooting

Issue	Checkpoints / Solution
Lamps not lighting up	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Make sure all power cables are connected. <input checked="" type="checkbox"/> Power button is ON. <input checked="" type="checkbox"/> Make sure LED status is ON <input checked="" type="checkbox"/> If it is on HI or LOW mode, there is an off time setting for lamp, during 24-hour cycle.
Pump has a buzzing sound	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Pump may make a buzzing sound in the beginning due to air inside the pump. After a minute with water running through the pump, this could be reduced.
The lamp/ pump stop after hours	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Control Box is designed with Auto, HI and LOW modes, which turn the lamps and the pump on and off periodically. It simulates an outdoor daily cycle to offer the best growing condition
Air tube has no bubble	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Make sure Pump status is working. <input checked="" type="checkbox"/> If it is on HI or LOW mode, there is an off time setting for lamp, during 24-hour cycle. <input checked="" type="checkbox"/> Ensure the air tube connected with the plastic air port.

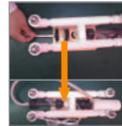
G. Installation steps of water pump



1. As shown in the picture: prepare the backup pump.



2. As shown in the figure, connect the water pump filter pipe and motor. As shown in the figure, insert the air pipe vertically from the outlet water joint of the pump.



3. As shown in the figure, the intermediate position of the spray-on module with the perforated pipe shall be inserted.



4. As shown in the figure, put the spray-on component of the replaced pump into the water tank and insert the pump 4pin power connector from the wire pump connector (arrow pointing at arrow).



5. Pump replacement is completed as shown in the figure.

H. Q&A

Question	Answer
Pump was running without water	Pump will stop under this situation and Low water alarm in water tank will red on to warning need fill in water.
What type of lamps can be used in the GrowTank?	The lamps provided with your GrowTank is standard OPCOM 100W (L100B) LED Growth Bulb. This is suitable for most plants' growth.
How to use climbing net?	Climbing net : you can use our climbing net, or your own climbing net. *Vertical : Assist the growth of plants until the plant grows mature, ready to harvest.



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GrowTank

Tall Plant Hydroponics



Quick Guide Manual

For more information, please visit
www.opcomfarm.com