

OPCOM® Grow Wall3

Thank you for purchasing OPCOM Farm GrowWall3, the indoor hydroponics growing system. It is designed for easy to use and efficient growth by one-touch AUTO mode. It holds up to 80 plants capacity. Read the quick guide carefully before setting it up. For detailed user guide video, please visit GrowWall3 page at <http://www.opcomfarm.com/Growwall3>

A. Assembly

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



A2. Assemble GrowWall3

1. Assembly

- The side column parts are assemble fixed to the L1 water tank.(Fig1.2)
- L2 fixed with L3 water tank, follow this step until finish L5 assembly.(Fig3)
- Fixed L5 side column parts with beam.(Fig4)
- The beam parts is fixed in the lifting rod head and the lamp head lifting assembly, then can move the tape and the lifting rod fixing piece is stuck in the lifting rod fixing piece. (Fig5 .6 .7)
- Assembly cable from side column, and DC connector fixed with screw cap.(Fig8.9)

2. Water Line Set up

- Connect the hose to the pump, move through the hole on the left side of the tank to the slot on the right, and move upward from the lower layer to layer L5.(Fig10.11)

3. Electric Line Set Up

- Insert three pieces of maple plank from the side column in turn. Clip the lifting rod into the fixing piece, and then tighten the lifting trigger of the third column on the right with the screw.(Fig12.13)
- LED lamp head stuck in each layer of lifting corresponding hole.(Fig14.15)

4. Other Installations

- Insert the L1, L3, L5 rigid water pipe on the right into the slot on the right, insert the rigid water pipe into the L2 and L4 layer on the left according to the same steps, and then put the water pipe into the water tank.(Fig16.17)
- Amounting the wall mount holder in screw hole at the top of the cross member. (Fig18.19)
- Add 8 gallons (90% full) of water to the tank.(Fig20)
- Attach the control box to the marked position and insert the pump power supply.(Fig21.22)
- Connect the main power supply and start the switch.(Fig23.24)

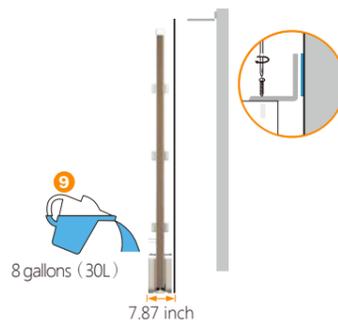
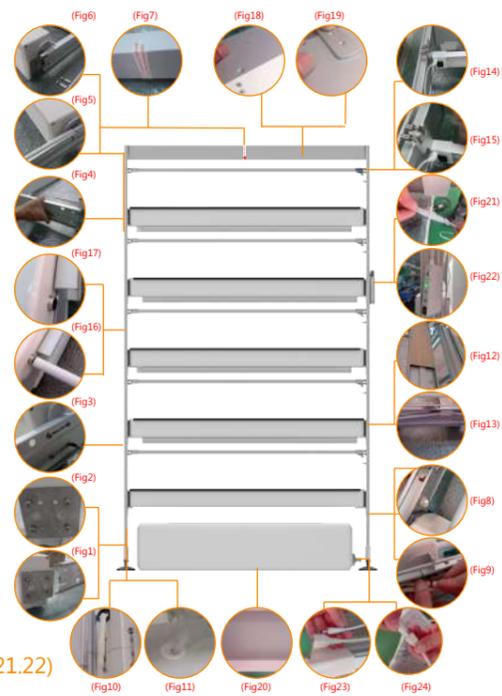
Chart I: Control Box Mode

Fuction	Status	Light	Time(On/Off)	Fuction	Status	Light	Time(On/Off)
LED	Auto	●	12H/12H	Pump	Auto	●	12 cycles/day (30 mins/cycle)
	ON	●	24H/0H		ON	●	24 cycles/day (30 mins/cycle)
	High	●●	18H/6H		High	●●	4 cycles/day (30 mins/cycle)
Pump	Low	●●	6H/18H	Low	●●	2 cycle/day (30 mins/cycle)	
	OFF	●●	0H/24H	OFF	●●	0 cycle/day	

* Most plants can de grown using the AUTO mode.

* 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).



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

B. Seedling

B1. Sprout Stage

- Add water to the seedling tray, up to the water (red) level.(Fig1)
- First time sprout: just open the seedling box and add water. Then go to step 4. (Fig 1)
- Second time sprout: Open Grow Sponge package, put each sponge piece into water of seedling tray (make sure the front side with the seed label is side up), press the sponges into water 5 seconds and ensure the sponges absorb water completely. Put seed moisturizing cover on the sponges.(Fig2)
- Place the seedling tray with cover in the shade.(Fig3)
- Suggest use watering can spray water to sponges and keep them wet everyday.
- During 0 ~ 7 days, find the sprouted ones in the tray; pick them out, and move them into product (make sure the sponges lineup with the black dot on the partition)(Fig4) and to next stage: B2. Young Plant Stage.
- Discard unsprouted sponges after regular germination time.

* Different plant may have different germination time, please check before plant.

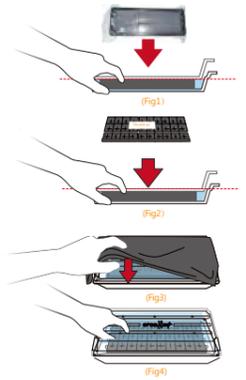


Chart II: Plant Stage

	Basil, Lemon Balm	Planting Time	LED Mode	Pump Mode	Nourishment	T (°F)	RH	EC	pH	Notes
Sprout Stage	Day 0~7	N/A	N/A	N/A	68°F - 77°F	80%	0.5-1.0	5.5-6.5	Be sure each sponge is fully wet in seedling tray.	
Young Plant Stage	Day 3~14	ON	ON	NT-Starter	59°F - 86°F	45%-70%	1.0-2.0	5.5-6.5		
Growing Stage	After Day 14	Auto	Auto	NT-Adjuster	59°F - 86°F	45%-70%	1.0-2.0	5.5-6.5		

* Please keep the seeds in refrigerator if you don't use it, recommended temperature is 41°F - 50.

* For your expected plant amount, you can refer to the sprout rate of 1st planting cycle.

* If you need more planting information, please visit to www.opcomfarm.com and read "Plant Q&A".

B2. Young Plant Stage

- In each sponge, keep the strongest and thicker ones and remove others.
- Add 10.5 gallons water to the water tank.
- During Young Plant Stage, turn on LED and Pump. Please refer to the Chart II.
- Add NT-Starter into the water tank and ensure EC value between(=1.0-2.0mS/cm)

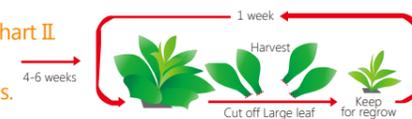
Status	0.0-0.5	0.5-1.0	1.0-1.5	over 2.0
NT-Adjuster	(Add 2pc)	(Add 1pc)	Standard range	Add water

- Ensure pH between 5.5-6.5 (adjust by pH+/-). For EC& pH adjustment instruction, please refer to following Chart at below.

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+	Add 3pc	Add 2pc	Add 1pc	Standard range		
pH-				Standard range	Add 1pc	Add 2pc

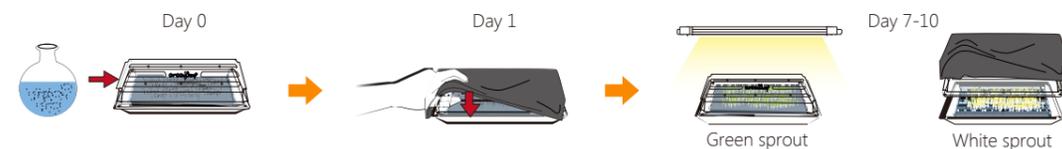
B3. Growing Stage

- When plants grow to over 2 inches height, switch control box to auto mode. Please refer to Chart II.
- After 4-6 weeks, harvest the larger plants for consumption and keep smaller plants growing.
- For time saving, sow the new seeds in sprout tray one week before you start next planting process.



C. Sprouts and Microgreens.

- Before you start next seedling, take advantage of the seedling tray for sprouts and microgreens it takes 7-10 days to harvest.
- Put seeds in warm water(recommended temperature is 95°F, not over 104°F) for 24 hours.
- Cover the sponges with wet paper towels.
- Place the seedling tray with cover in the shade or cover it with black cloth.
- After germination, during the growing stage, keep green sprout under the light and white sprout in the shade or cover it with black cloth; in 7-10 days, you can harvest.



D. Optional Accessories

1. OPCOM Link Box



2. Black Cloth Cover



E. Maintenance

F1. Add Water

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

F2. Change Water

- 1. After a cycle of planting, change the water and clean the unit. (fig 1)
- 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



(Fig1)

F3. EC / pH Meter Use and Calibration

- 1. Keep the electrode clean of EC/pH meter and cover the electrode protective cap when not in use.
- 2. Turn off the meter when not in use for an extended amount of time.

F. Troubleshooting

Issue	Checkpoints / Solution
Lamps not lighting up	<ul style="list-style-type: none"> Make sure all power cables are connected. Power button is ON. Make sure LED status is ON If it is on HI or LOW mode, the lamp has off time, during 24-hour cycle.
Pump has a buzzing sound	<ul style="list-style-type: none"> 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 Safter hours	<ul style="list-style-type: none"> 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 Rotate the ring at the end of the pump clockwise or counterclockwise to get the most suitable water flow
Water Over flows	<ul style="list-style-type: none"> Make sure it is not clogged at the water flowing gateway on each planting layer

G. Installation steps of water pump



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



2. Insert the upper water pipe into the water tank inlet



3. Connecting control valve



4. Plug in DC jack



5. Pump replacement is completed as shown in the

H. Q&A

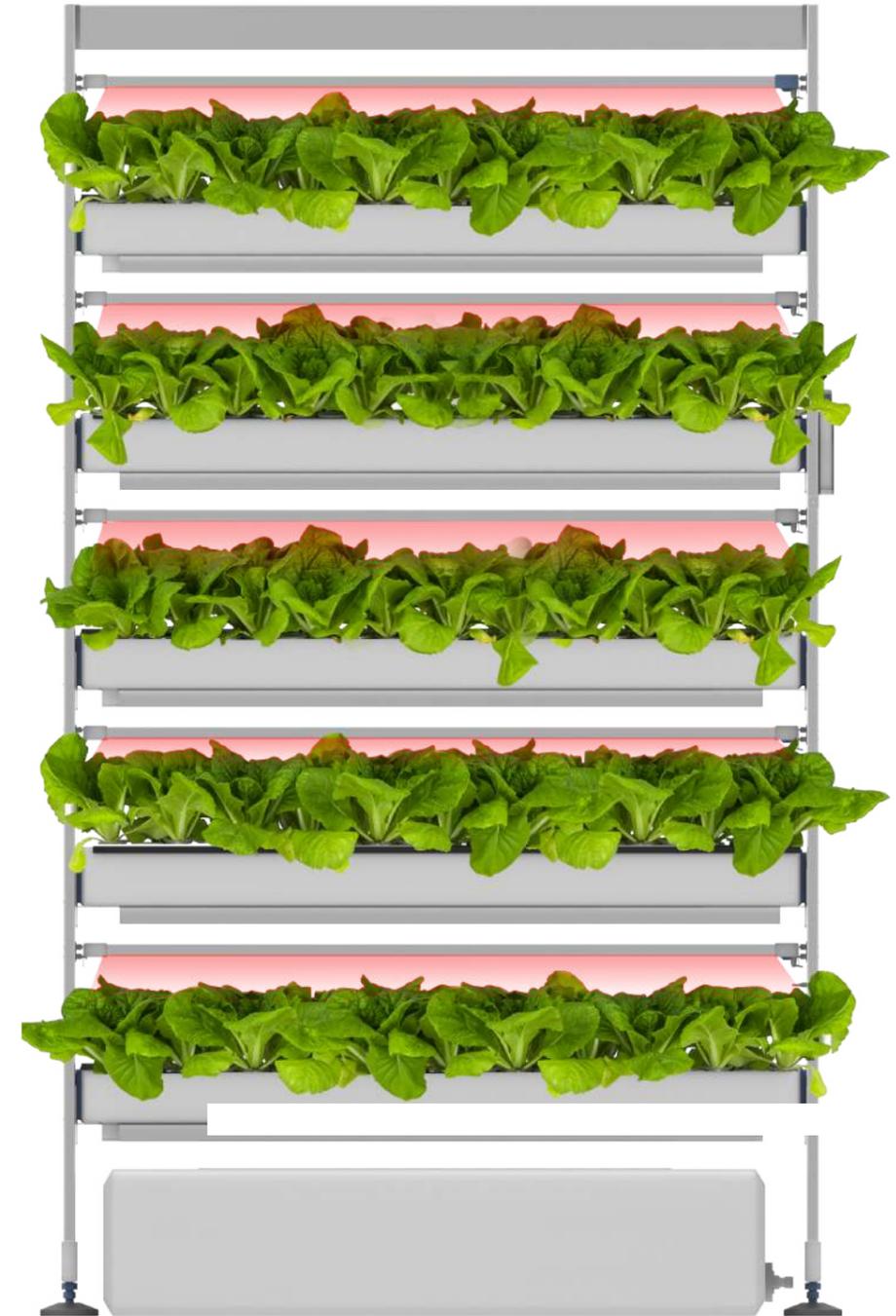
Question	Answer
Product leakage When it works.	During the abnormal delivery in vessels, aircraft, or other vehicles, it may lead to damages in GrowWall3(OFG003L5-3) and create leaking problem. OPCOM FARM provides waterproof tape for you to fix it in case damage happen.
How to use planting partition?	You can move the partition to change the size of the pot for your planting.



For more information, please visit
www.opcomfarm.com

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Hydroponics Grow Wall 3



Quick Guide Manual