

Thank you for purchasing OPCOM Farm GrowWall2, the indoor hydroponics growing system. It is designed with 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 scan the QR code or visit GrowWall2 page at <http://www.opcomfarm.com/Growwall2>



A. Assembly

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



A2. Assemble GrowWall2 main body.

- 1. Assembly**
 - Follow the number of corresponding layers to the picture above, from bottom to top. Insert the base stands (both sides) onto L1 and lock it. Stack L2 on top of L1 and secure with quick locks on both side. Repeat the same step until L5 is locked and in place.
 - Install 2 Anchor Bolt with Wall Mount Brackets on the both side of L5 and place 2 Light Bar Holder on the Anchor Bolt. Insert two ends of light bar(L32T) to the L shaped light bar holders. Make sure power cable of the light bar is on the right.
- 2. Water Line setup**
 - Link water hose from L5 water tray to water pump then tie it up on both ends with hose clamps.
- 3. Electric Line setup**
 - Attach the control box with clip buckles.
 - Connect all the LED, control box, and water motor cables according to the marks on every splitter box. Organize all the lines, cables and splitter boxes inside the C cuff per layer.
- 4. Other Installations**
 - Lean and tilt the fully assembled product against the wall. Keep the base stands 8.2 inch(21cm) away from the wall. Use the levels on the bottom of each base stands to even out the whole unit. Please find the bubble level tool on L1 water tray for this task.
 - Add 10.5 gallons (80% full) water to the water tank.
 - Water flow is adjustable per water requirements of the plants. Rotate the valvetap in the pump clockwise to increase water flow and counter-clockwise to decrease water flow.
 - Please use included insect net to create better growing environment and cleaner produce.

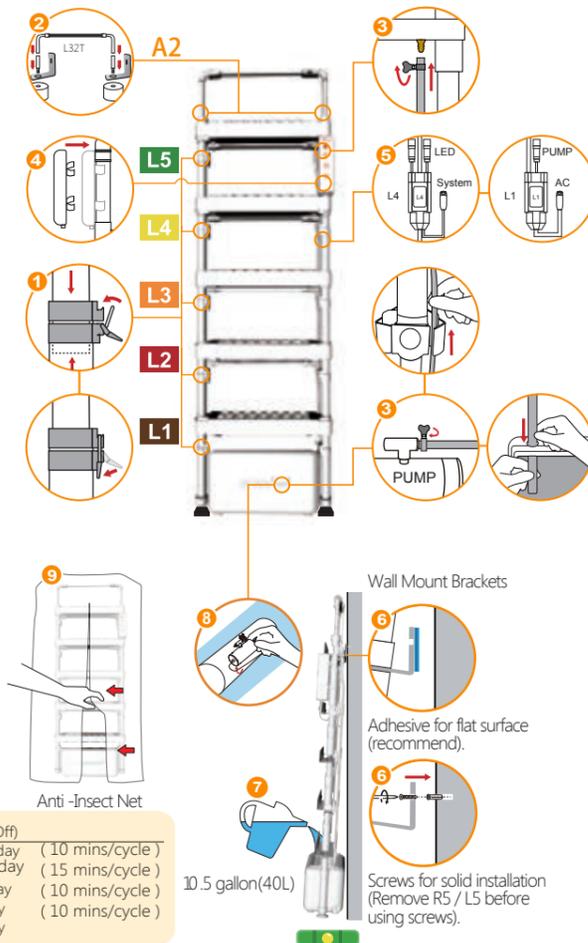


Chart I: Control Box Mode

Fuction	Status	Light	Time(On/Off)	Fuction	Status	Light	Time(On/Off)
LED	Auto	●	16H/8H	Pump	Auto	●	48 cycles/day (10 mins/cycle)
	ON	●	24H/0H		ON	●	48 cycles/day (15 mins/cycle)
LED	High	●	18H/6H	Pump	High	●	4 cycles/day (10 mins/cycle)
	Low	●	10H/14H		Low	●	2 cycle/day (10 mins/cycle)
	OFF	●	0H/24H		OFF	●	0 cycle/day

* Most plants can be grown using the AUTO mode.
* You can reset the product timeline by pushing the LED button for 2 sec.

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

B. Seedling

B1. Sprout stage

- Add water into the seedling tray, up to the water (red) line.(Fig1)
 - Open Grow Sponge package, put the sponge into water of seedling tray(make sure the front side with the seed label is up), press the sponge into water 5 seconds and let the sponge absorb water completely.(Fig1)
 - Place the seedling tray with cover in the shade or cover it with black cloth(to block light).(Fig2)
 - Spray water to Sponges and keep them wet everyday.(Fig3)
 - During 7 days(leaf plant), find the sprouted one in the tray; pick it out, and move it into product (make sure the sponges line up with the black dot on the partition) and to next stage: B2. Young Plant Stage.
 - Discard unsprouted sponge after regular germination time.
- * Different plant may have different germination time, please check it before plant.

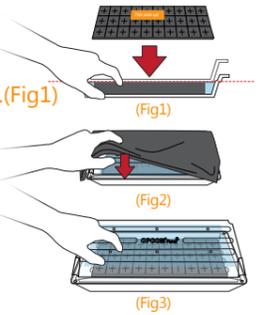


Chart II: Plant Stage

Basil, Lemon Balm	Planting Time	LED Mode	Pump Mode	Nourishment	T (°C)	RH	EC	pH	Notes
Sprout Stage	Day 0~7	N/A	N/A	N/A	20°C - 25°C	80%	0.5-1.0	5.5-6.5	The sponge is fully wet in seedling tray.
Young plant stage	Day 3~14	ON	ON	NT-Starter	15°C - 30°C	45%-70%	1.0-2.0	5.5-6.5	
Growing Stage	After Day 14	Auto	Auto	NT-Adjuster	15°C - 30°C	45%-70%	1.0-2.0	5.5-6.5	

* Please keep the seedling sponge package in refrigerator if you don't use it. * If you need more planting information, please visit to www.opcomfarm.com to read "Plant Q&A".
* For your expected plant amount, you can refer to the sprout rate of 1st planting cycle.

B2. Young plant stage

- In each sponge, keep the strongest and thicker one and remove others.
- Add 10.5 gallons water to the water tank.
- During young plant stage (around 2 inches), 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)
- Ensure pH between 5.5-6.5 (adjust by pH+/-). For EC& pH adjustment instruction, please refer to following Chart at below.

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

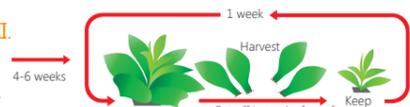
Satus	4.0-4.5	4.5-5.0	5.0-5.5	5.5-6.5	6.5-7.0	7.0-7.5
pH+	(Add 3pcs)	(Add 2pcs)	(Add 1pcs)	Standard range		
pH-				Standard range	1pcs	2pcs

Plant Size	Small
Sponge Number	120
Planting number	80 (70%)
How to Set up	x 3 Layer

Plant Size	Medium-Large
Sponge Number	60
Planting number	40 (70%)
How to Set up	x 3 Layer

B3. Growing Stage

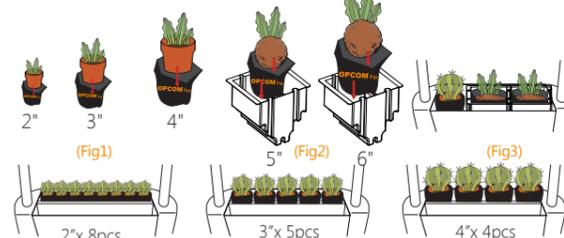
- When plants grow to 3-4 inches height, switch control box to auto mode. Please refer to Chart II.
- After 4-6 weeks, harvest the larger plants for consumption and keep smaller plants growing.
- For time saving, sow the new seeds in sprout tray one week before you start next planting process.



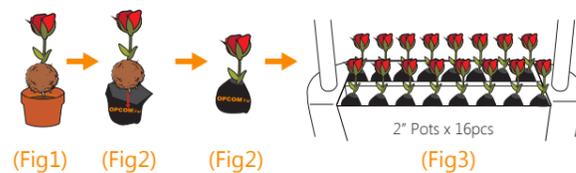
C. Planting

C1. Planting Process: Buy plants from local stores

- Choose a suitable filter bag size for 2", 3", 4" pot, put it into the filter bag and tie the strings(Fig1), For 5", 6" pot, remove the pot and put it into 4" filter bag, tie the strings and put into transfer pot(optional)(Fig2); Then put the plants into tank(Fig3)



- Soil Free: Remove pot(Fig1) and put into filter bag(Fig2) and then move to the product(Fig3).



- Combination: You can mix different size of pots and sponges in the growing hole of GrowWall2.



C2. Flower Selection



D. Sprouts and Microgreens.

- 1. Before you start next seedling, take advantage of the seedling tray for sprouts and microgreens it takes 7-10 days to harvest.
- 2. Put seeds in warm water(recommended temperature is 35°C , not over 40°C) for 24 hours.
- 3. Cover the sponges with wet paper towels.
- 4. Place the seedling tray with cover in the shade or cover it with black cloth.
- 5. After germination, during the growing stage, keep green sprout under the light and white sprout in the shade or cover it with black cloth; Around 7-10 days, you can harvest.



E. Optional Accessories

- 1. OPCOM Link Box
- 2. OPCOM Wave Clip
- 3. Pod Stick : 3x30PK
- 4. Black Cloth Cover
- 5. 500W Water Auto Heater



F. Maintenance

- F1. Add Water**
- 1. Measure the pH/EC value every 1-2 weeks and add water to maintain the value balance
- F2. Change Water**
- 1. After a cycle of planting, change the water and clean the unit
 - 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
- 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.

G. 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, the lamp has off time, 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 <input checked="" type="checkbox"/> 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"> <input checked="" type="checkbox"/> Make sure it is not clogged at the water flowing gateway on each planting layer

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 GrowWall (OFG003)/GrowWall2(OFG003-2) and creates leaking problem. OPCOM FARM provides waterproof tape for you fix it in case damage happened.
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

GrowWall2

Hydroponics Green Wall



Quick Guide Manual