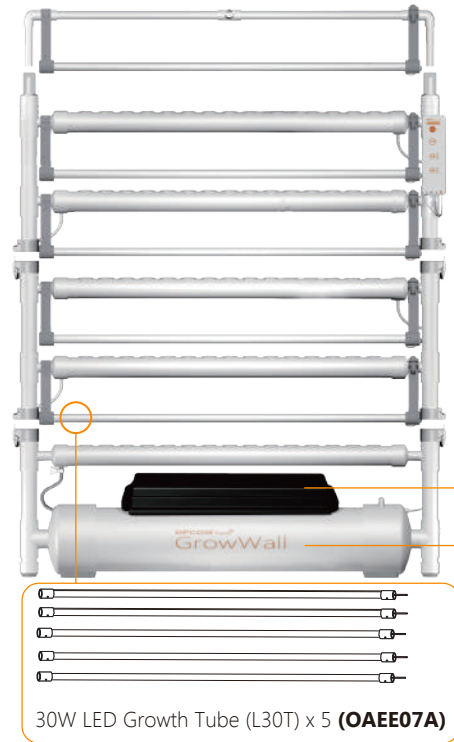


Thank you for purchasing **OPCOM Farm GrowWall**, the indoor hydroponics growth system. It is designed with easy installation and efficient growing system in one-touch AUTO mode, up to 75 plants capacity. Read the quick guide manual carefully before setting up. For detailed **user manual** and assembly video, please visit GrowWall page at www.opcom.com/growwall-support.php

A. Assembly

A1. Remove all parts from box and check all accessories



Grow Kit

1. Seedling Kit: Grow Sponge 2x60pk (OASS001 For Green Lettuce), Grow Sponge 2x60pk (OASS002 For Red Leaf Lettuce), Grow Sponge 2x60pk (OASS006 For Basil), Grow Sponge 4x60pk (OASP001)

2. Nourishment: NT-Starter x3pc (OANT002 for GrowWall), NT-Adjuster x15pc (OANT018 for GrowWall)

3. pH adjusters: pH+ x15pc, pH- x15pc

Accessories

1. Plastic peg x2pc, 2. EC and pH Meter Set, 3. pump x2pc (Backup pump x1pc), 4. Waterproof Tape, 5. Expansion Anchor Bolts x4pc, Wall-Mount Screws x 4pc, 6. Plastic Ties x7pc (Backup Plastic Ties x 2pc), 7. Wall Mount Brackets, 8. Seed Moisturizing Cover x 6pc, 9. Cleaning Sponge x 1pc, 10. Water Spray 100ml x1pc

Planting Accessories

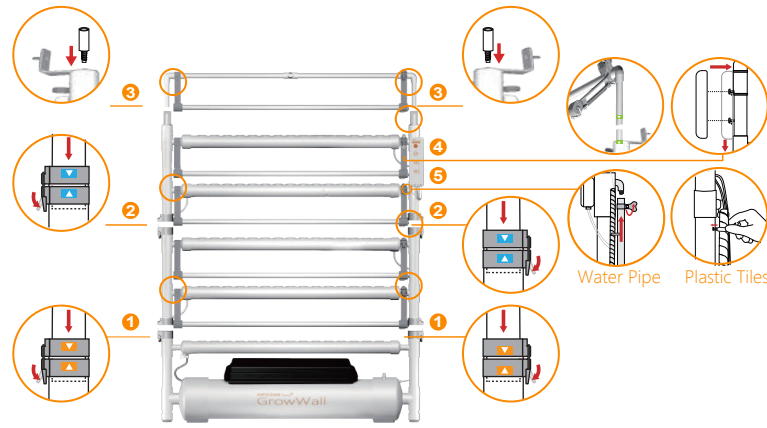
1. Planting Basket x 100pc, 2. Seedling Tray x1pc, 3. Sprouting Sponge x 4pc, 4. Lens Hood x 75pc

Manual

Warranty Card, Quick Guide Manual

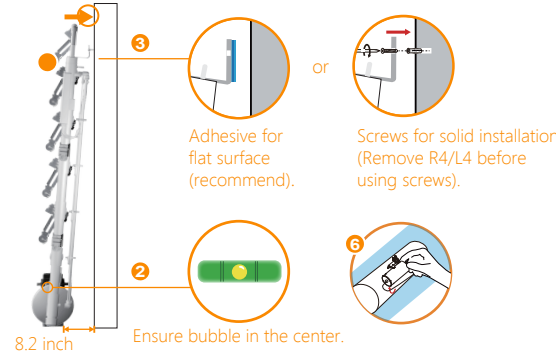
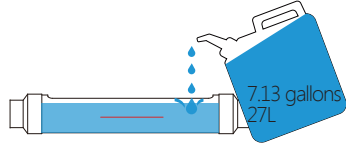
A2. Assemble GrowWall.

- Lock the matching color vertical tubes by integrated fastener.
- Repeat the previous action again.
- Place the plastic peg into the round hole in the bracket; affix the tube and the bracket to the unit. And cover the top level light holder.
- Attach the control box by aligning the holes.
- Assemble water pipe and plastic tiles.



A3. Mount on the wall.

- Place against the wall with 8.2 inches (21cm) distance.
- Ensure air bubble in level scale is centered.
- Mount on the wall by adhesive or screws.
- Add 7.13 gallons (80% full) water to water tank.



- Turn on the pump for 30 minutes and ensure the water flows back to the tank, please refer to **user manual** page 15 for cycle descriptions.
- Water flow control valve: According to different plants, you can adjust the water flow by water flow control valve, but you need to adjust under water.

Fuction	Status	Light	Time(On/Off)	Fuction	Status	Light	Time(On/Off)
LED	Auto	●	12H/12H	Pump	Auto	●	12 cycles/day (10 mins/cycle)
	ON	●	24H/0H		ON	●	48 cycles/day (15 mins/cycle)
LED	High	●	16H/8H	Pump	High	●	4 cycles/day (10 mins/cycle)
	Low	●	8H/16H		Low	●	2 cycle/day (10 mins/cycle)
LED	OFF	●	0H/24H	Pump	OFF	●	0 cycle/day

* Most plants can be 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).

Please read and follow every steps to avoid any malfunction.

B. Planting

B1. Sowing Stage

1 Refer to below table for sponge quantity and planting numbers.

Plant Size	Small	Plant Size	Medium-Large
Sponge Number	105	Sponge Number	60
Planting Number	75	Planting Number	40
How to Set up		How to Set up	

- First time sprout: just open the seedling box and add water. Then go to step 5. (Fig1)
- Add water to the seedling tray, up to the water level. (red)(Fig1)
- Second time sprout: Open Grow Sponge package, put the sponges into water of seedling tray, press the sponges into water 5 seconds and ensure the sponges absorb water completely. (Fig2)
- Place the seedling tray with cover in the shade or cover it with black cloth (to block light). (Fig3)
- Spray water and keep the sponges wet every day. (Fig4)
- During 0-7 days (leaf plant), find the sprouted ones in the tray; pick them out, and move them into growing hole and keep the remaining seedlings.
- Discard unsprouted sponges after regular germination time.
- Different plant may have different germination time, please check before plant.

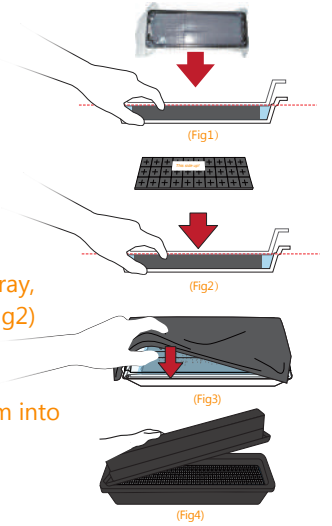


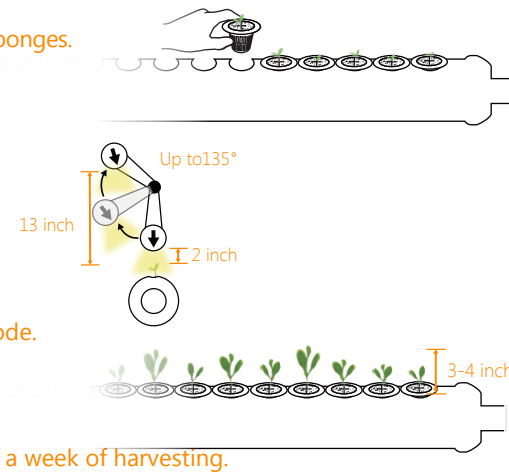
Chart II: Plant Stage

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	Ensure 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°F.
 * For your expected plant amount, you can refer to the sprout rate of 1st planting cycle.
 * If you need more planting information, please visit www.opcomfarm.com and read "Plant Q&A".

B2. Seedling Stage

- When the germination rate exceeds 70%, move to the seedling stage, discard excess sponges.
- Move all sponge to the grow tube and set up in balance depending on plant size.
- In each sponge, keep strong plants and cut the other weak plants.
- Add 1 starter nutrient to the water tank and ensure EC between 1000-2000µS/cm (=1.0-2.0 ms/cm).
- Ensure pH between 5.5-6.5 (adjust by pH capsule).
- Adjust LED lights and keep around 2 inches distance to cover all the plants.
 * For EC & pH adjustment instructions, please refer to **user manual** pages 28-29.



B3. Growing Stage

- When young plants grow to over 2 inches height, change control box to AUTO mode.

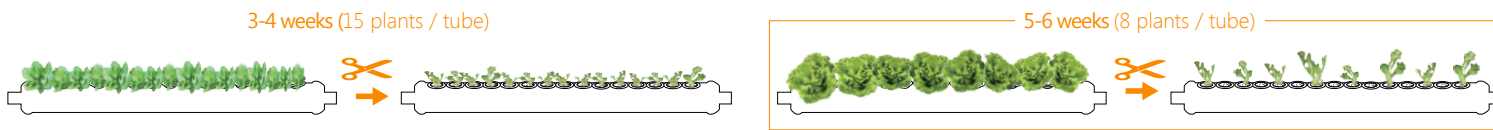
B4. Grow to Harvest

- After 4-6 weeks, harvest larger plants for consumption.
- Reserve smaller plants to grow.
 * To save time, sow the new seeds in sprout box for the next planting cycle before a week of harvesting.

C. Optional

C1. Regrowing

OPCOM Farm is designed with a special re-grow process to maximize harvest capacity for family consumption. First harvest cycle takes 3-4 weeks after seeding young plant is planted. During harvesting, cut out the larger leaves and allow the smaller ones to continue to grow in the machine. After the first harvest, you can continue the harvesting method weekly for the next 3-4 weeks without the need to re-seed.



C2. Sprout Process

GrowWall is not only a hydroponics system but also a Sprout Machine with our free gift, sprout box. Within one Hydroponics cycle time, you can have 3-4 sprout harvests and each harvest cycle is 7-10 days. Enjoy your maximum planting capacity. Refer to **user manual** pages 24-25 for details.



Please visit OPCOM farm website at www.opcom.com/growwall-support.php for complete information, including user manual, Planting Q&A, videos and updates.

Troubleshooting

Issue	Checkpoints / Solution
Lamps are not lighting up	<ul style="list-style-type: none"> ☑ Make sure all power cables are connected. ☑ Power button is turned ON. ☑ Make sure LED status is not OFF. ☑ If on AUTO, HI or LOW there will be periods of time during a 24-hour cycle when lamps are off. (See the user manual page 15 for cycle descriptions.) ☑ If a lamp has burned out or does not work, replace with a new OPCOM LED tube (OAEE07A).
Pump is not working	<ul style="list-style-type: none"> ☑ Make sure the pump's cable is correctly plugged into the control box. ☑ Make sure Pump status is not OFF. ☑ If on AUTO, HI or LOW there will be periods of time during a 24-hour cycle when lamps are off. (See the user manual page 15 for cycle descriptions.) ☑ If the pump still does not work, replace with a new OPCOM pump (OAEE06A). Refer to pump box for installation.
Pump has a buzzing sound	<ul style="list-style-type: none"> ☑ Pump may give off a buzzing sound in the beginning due to air inside the pump. After a minute with water running through the pump, this should be reduced. ☑ Too low of a water level in your GrowWall may have resulted in air entering pump. Over time this may shorten the life of the pump. Please maintain correct water level at all times. ☑ If pump is failed, replace with a new OPCOM pump (OAEE06A). Refer to pump box for installation.
The lamp or the pump stopped working after a few hours	<ul style="list-style-type: none"> ☑ Opcom Farm's control box is designed with Auto, HI and LOW cycles, which will turn the lamps and the pump on and off at certain intervals. This is to mimic an outside daily cycle, offering the best growing condition for your plants, and to save you energy. ☑ Check the user manual page 15 for cycle descriptions.

GrowWall Q&A

Question	Answer
Pump was running without water.	This can shorten the life of the pump. Maintain proper water level. Always keep water above the red line.
What type of lamps can be used in the GrowWall?	The lamps provided with your GrowWall is standard OPCOM 30W (L30T) LED Growth Tube. This is suitable for most plants' growth. You may also use OPCOM Professional LED Growth Tube 65W (L65T) to accommodate special growth needs.
Product leakage When it works.	During the delivery in vessels, aircraft, or other vehicles, it may lead to damages in GrowWall(OFG003)/ GrowWall2(OFG003-2) and create leaking problem. OPCOM FARM provides waterproof tape for you fix it in case damage happened.

Maintenance

Change Water

After a cycle of planting, you may want to change water, or clean the unit. (Fig1)

EC / pH Meter Use and Calibration

- ① Everytime you use the EC/pH Meter, please wash electrode by regular water and keep it dry.
- ② Cover the electrode protective cap when not in use.
- ③ Turn off the meter when not in use for an extended amount of time.



(Fig1)

G. Installation steps of water pump



1. As shown in the picture: spare pump ready for replacement.



2. As shown in the figure, put the pump into the water tank and fix it, then cut the pump wire out of the hole position of the water tank, and then connect the motor's 3pin male head to the mother head of a four-wire pump and turn it clockwise.



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

Planting Q&A

Q1 : Sprouts are stuck in the sponge and cant come out.

A1 : Pull the sprouts gently out from the sponge with tweezers, make sure the seed capsule's top half is not stopping the growth of a sprout.

Q2 : Leaves are smaller or color changed to yellow.

A2 :

- ① Make sure the sponge or plant's root is soaking in water. If not, add more water to reach standard level.
- ② Check EC and pH according the manual.
- ③ Press Pump button to HI to increase water and air flow to the plants.
- ④ Press the LED button to ON to give more light per cycle to plants.

Q3 : Slender leaves and long stem.

A3 : The plant may need more light. Lower the LED lamps and ensure all plants are covered. Press LED button to ON to make it brighter. To see more information of planting, please refer to GrowWall planting Q&A.

For more information, please visit
www.opcomfarm.com

GrowWall



Quick Guide Manual

OPCOM Farm