

- Ensure pH between 5.5-6.5 adjust by Soda (pH+) \ Lemon(pH-).  
For pH adjustment instruction, please refer to following Chart at below.

Grow Kits: B Scoop for Adjust of Nutritio (5g)

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
Soda (pH+)	Add 2.5g	Add 2g	Add 1g	Standard range	no Add	no Add
Lemon(pH-)	no Add	no Add	no Add	Standard range	Add 2.5g	Add 5g

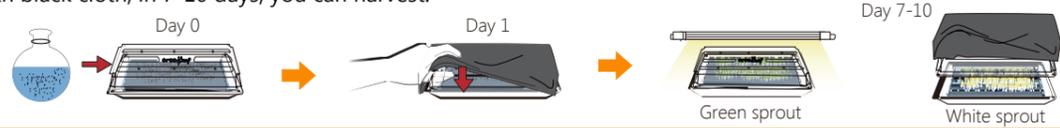
**B3. Growing Stage**

- 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**

- 500W Water Auto Heater



**E. Maintenance**

**E1. Add Water**

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

**E2. Change Water**

- After a cycle of planting, change the water and clean the unit.
- When changing water, clean water gateway on each planting layers, you may also add moss detergent in the water tank to avoid the moss remaining.
- On the regular basis of every 1-2 weeks, clean the filtering sponge in the pump.
- Regularly clean the filter sponge in each planting layer every 1 week.

**E3. EC Meter Use and Calibration**

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

**F. Troubleshooting**

Issue	Checkpoints / Solution
Lamps not lighting up	<input type="checkbox"/> Make sure all power cables are connected.
	<input type="checkbox"/> Power button is ON.
	<input type="checkbox"/> Make sure LED status is ON.
	<input type="checkbox"/> If it is on HI or LOW mode, the lamp has off time, during 24-hour cycle.
Pump has a buzzing sound	<input 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	<input type="checkbox"/> Control Box is designed with Auto, HI and LOW modes, which turn the lamps and the pump on and off periodically.
	<input type="checkbox"/> Rotate the ring at the end of the pump clockwise or counterclockwise to get the most suitable water flow.
Water Over flows	<input type="checkbox"/> Make sure it is not clogged at the water flowing gateway on each planting layer



For more information, please visit  
[www.opcomfarm.com](http://www.opcomfarm.com)

# Grow Wall3C

Hydroponics Grow Wall 3C



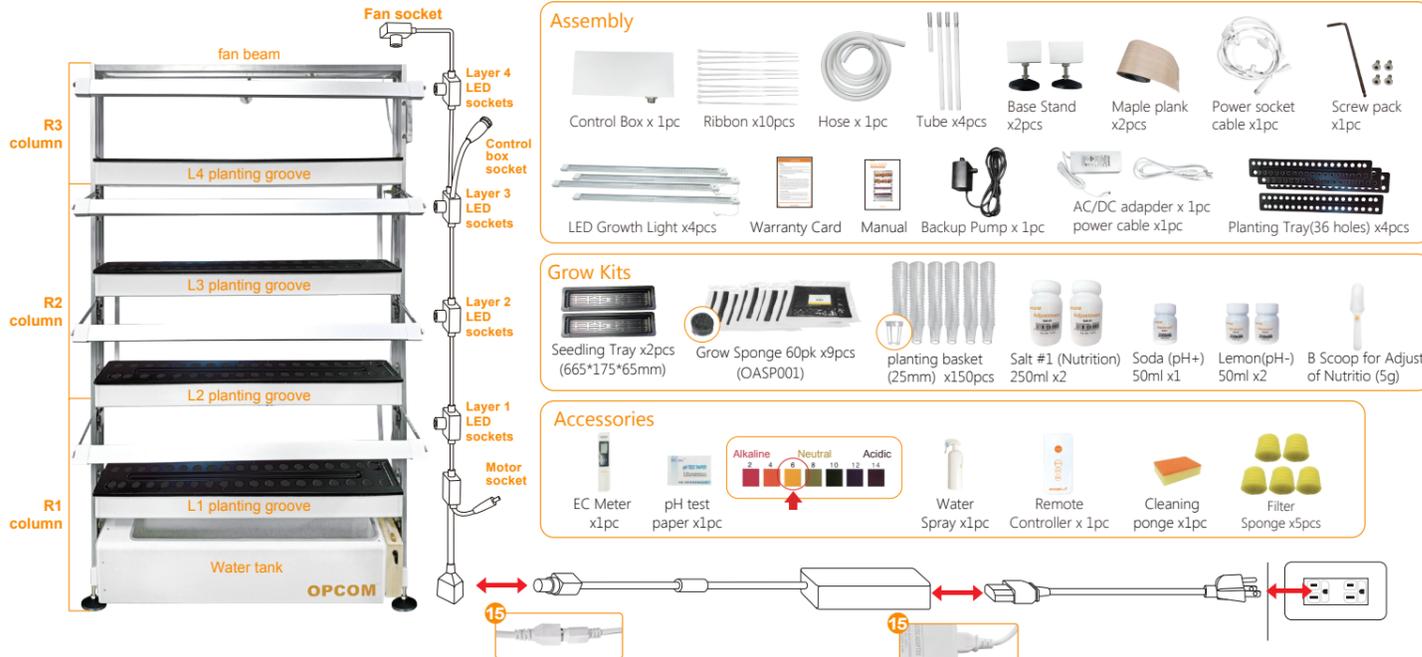
Manual

# OPCOM® Grow Wall3C

Thank you for purchasing OPCOM Farm Grow Wall 3C, the indoor hydroponics growing system. It is designed for easy to use and efficient growth by one-touch AUTO mode. It holds up to 144 plants capacity. Please read the quick guide carefully before setting it up. For detailed user guide video, please visit Grow Wall 3C page at <http://www.opcomfarm.com>

## A. Assembly

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



### A2. Assemble GrowWall3

- Assemble and secure the cross beam of the top fan and R3 column with screws.
- Lift the wooden lid on top the fan's crossbeam. Plug the fan's power into the fan socket, the first slot of the power socket cable, then close the lid.
- Assemble the R3 column and the R2 column.
- Hang the L4 planting groove and L3 planting groove on the columns through the holes on the side planting grooves. Once hanged, set and secure the clip onto the mechanism
- Assemble the R2 column and the R1 column.
- Assemble the L2 planting groove and the L1 planting groove on the column. (see step.4)
- Fix the power socket cable into the line groove in the column.
- Stick the maple planks on the exterior of the assembled columns.
- Set the LED grow light on the rocker arm on each layer of columns. To set up, unscrew the thumb screw on the side of the LED grow lights, remove the two circular spacers. Place one spacer between the tip of the rocker arm and the side of the LED grow light. Place another spacer between the thumb screw and the tip of the rocker arm. Once done, align the holes between each part and secure them with a thumb screw.
- Plug the power cord of the LED growth light into the LED socket of the power socket cable on the column. Organize the cables of the LED grow light and fix them in the line groove on the rocker arm.
- Dissembling the top and the bottom of the tube gives an aluminum and a plastic tube. Face the teeth of the aluminum tube downwards, then, from the interior of the planting groove, work the tube through the holes on the bottom. cover the tip of the aluminum tube in the planting groove with a filter sponge.

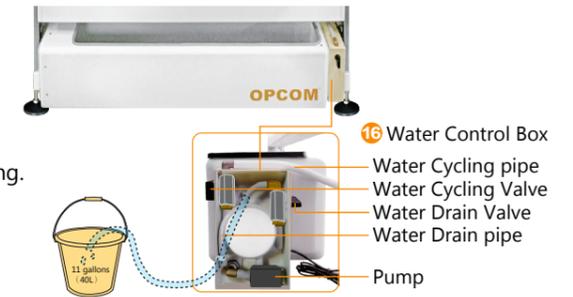


- Set the water tank under the L1 planting groove. Place the planting tray into the planting groove. Make sure to correspond each water inlet of the planting tray to the holes on the bottom of the planting groove.
- Set the plastic tube in the water inlet of the planting tray. Connect the tip of the aluminum tube at the bottom of the planting groove by rotating.
- Fill the water tank with 8 gallons of water.
- Plug the AC/DC adapter into a the power socket cable, then connect the AC/DC adapter with the power cable to power up the machine.

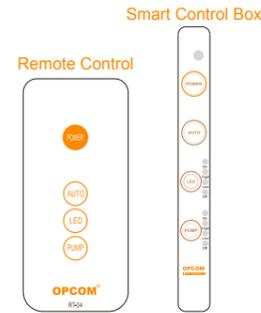
# OPCOM®

### 16 Draining Water Tank:

- Open the water control box on the left side of the water tank by pulling up the side planks. Take out the water drain pipe from the storing disk.
- Prepare a water bucket with a capacity of around 40 L. Place the outlet of the pipe on the bucket. Turn On the pump and switch the water drain valve to Out to start draining.
- Once finished draining, set everything back to default. (turn off the pump and stop the water drain valve.)



### Chart I: Control Box Mode



Fuction	Status	Operation	Sound	Light	Time
Power	On	One Press	BB		On (Follow last mode before turn off)
	Off	One Press	B 1sec		Off
Auto	On	One Press	BB		12Hr/day ON mode of LED and 30mins/ 2Hr ON mode of Pump
	Off	One Press	B 1sec		Follow LED and Pump manual mode setting
LED	ON	One Press	BB	●●●●	always On
	High	One Press	BBB	●●●●	18Hr/day
	Low	One Press	BBBB	●●●●	9Hr/day
	OFF	One Press	B 1sec	●●●●	always Off
Pump	ON	One Press	BB	●●●●	55mins/ 1Hr
	High	One Press	BBB	●●●●	25mins/ 30mins
	Low	One Press	BBBB	●●●●	5mins/ 30mins
	OFF	One Press	B 1sec	●●●●	always Off

Most plants can be grown using the AUTO mode.

Set up the Wake-up (automatically turns on everyday) and Sleeping (automatically turns off everyday) modes through lighting time setting.

A. When Power On, press hold POWER button until 2 beep sound (About 5 second) to reset power on timeline.

B. When Power Off, press hold POWER button until 2 beep sound (About 5 second) to reset power off timeline.

Fan follow LED on / off.

Restore factory settings after power failure.

### 5. LED light planting mode Control

- Select the mode of the LED grow light (you may switch between modes through the button on the left side of the LED lamp holder).
- The light comes with four modes: G (in green), S (in orange), L (in orange), and Off (colorless) (see figure 1).
- Please note that the remote control could only adjust the duration of lighting (On/ Hi /Low /Off), as shown in chart 1. To switch between the mode of the LED grow light, please access the buttons on the light tubes manually.
- Height of the LED grow light: Adjust the height and the angle of lighting manually through the rocker arm (see figure 2).
- This hydroponics system comes with fans that improve the air circulation and accelerate the cooling of the LED tubes, which increases the ventilation and avoids plants from overheating. Please make sure to keep a 5-10 cm distance between the light tube and the plants to further prevent plants from overheating. To boost the light intensity in a power-saving way, direct the light at both the plant and the wall simultaneously, which could add 30% more lighting to the plants.

Please read and follow every steps to avoid any malfunction.

## B. Seedling

### B1. Germination 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 using Watering 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 unspouted sponges after regular germination time.
  - In each sponge, keep strong plants and cut the other weak plants.
- \* Different plant may have different germination time, please check before plant.

### Chart II: Plant Stage

	Basil, Lemon Balm	Planting Time	LED Mode	Pump Mode	Nutrition	T (°F)	RH	EC	pH	Notes
Germination Stage		Day 0~7	-	-	-	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	Need	59°F - 86°F	45%-70%	1.0-2.0	5.5-6.5	
Growing Stage		After Day 14	Auto	Auto	Need	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](http://www.opcomfarm.com) and read "Plant Q&A".

### B2. Young Plant Stage

- 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 Salt #1 (Nutrition) into the water tank and ensure EC value between (=1.0-2.0mS/cm)

Grow Kits: B Scoop for Adjust of Nutritio (5g)

Status	0.0-0.5	0.5-1.0	1.0-1.5	over 2.0
Salt #1 (Nutrition)	Add 2g	Add 1g	Standard range	Add water