

# THE FREEDOM SERIES INSTRUCTION MANUAL



# **Freedom Series Instruction Manual**

# **Unpacking your shipment**

- 1. Unpack your wall mounted unit and inspect for any items that may have become damaged during the shipping process. If so, immediately notify GrowUp.
- 2. Make sure all dripper lines are securely attached to the emitters.
- 3. Peel off protective covering.
- 4. Stainless steel polisher or baby oil can be used to clean up any finger prints or smudge marks.

# **Warning Statements**

PRIOR TO THE INSTALLATION OF THIS PRODUCT, THE INSTALLATION INSTRUCTIONS MUST BE READ AND COMPLETELY UNDERSTOOD.

PROPER INSTALLATION PROCEDURE BY A QUALIFIED SERVICE TECHNICIAN MUST BE FOLLOWED, AS OUTLINED IN THESE INSTALLATION INSTRUCTIONS. FAILURE TO DO SO COULD RESULT IN PROPERTY DAMAGE, SERIOUS PERSONAL INJURY, OR EVEN DEATH.

SAFETY MEASURES MUST BE PRACTICED AT ALL TIMES DURING THE ASSEMBLY OF THIS PRODUCT. USE PROPER SAFETY EQUIPMENT AND TOOLS FOR THE ASSEMBLY PROCEDURE TO PREVENT PERSONAL INJURY.

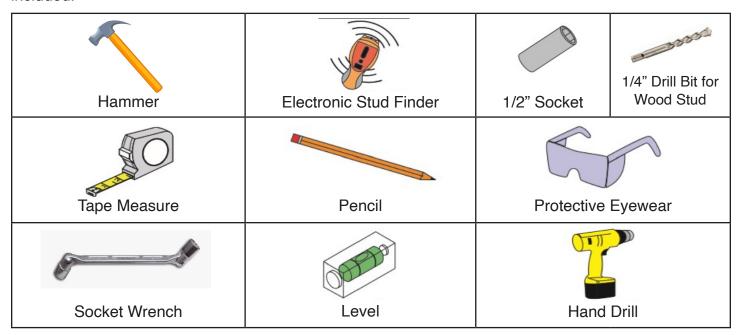
GROWUP DOES NOT WARRANT AGAINST DAMAGE CAUSED BY THE USE OF ANY GROWUP PRODUCT FOR PURPOSES OTHER THAN THOSE FOR WHICH IT WAS DESIGNED OR DAMAGE CAUSED BY UNAUTHORIZED ATTACHMENTS OR MODIFICATIONS, AND IS NOT RESPONSIBLE FOR ANY DAMAGES, CLAIMS, DEMANDS, SUITS, ACTIONS OR CAUSES OF ACTION OF WHATEVER KIND RESULTING FROM, ARISING OUT OF OR IN ANY MANNER RELATING TO ANY SUCH USE, ATTACHMENTS OR MODIFICATIONS.

At least two qualified people should perform the assembly procedure. Personal injury and/or property damage can result from dropping or mishandling the Freedom Series unit4.

Be aware of the mounting environment. If drilling and/or cutting into the mounting surface, always make sure that there are no electrical wires in wall. Cutting or drilling into an electrical line may cause serious personal injury.

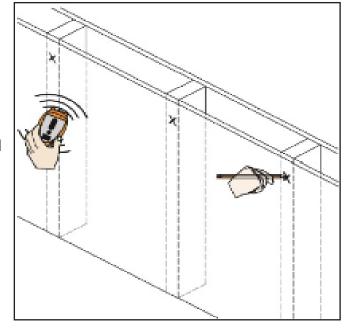
Make sure there are no water or natural gas lines inside the wall where the mount is to be located. Cutting or drilling into a water or gas line may cause severe property damage or personal injury. Installation Tools

The following tools may be required depending upon your particular installation. They are not included.



# Mounting the system – Use the French Cleat built into back of the unit

- Mounting into drywall with wood studs.
  - a. You must screw into two studs when mounting the Freedom Series unit.
  - Once you have picked an ideal location for hanging your planter, use a stud finder to locate two studs in your wall.
  - c. Mark the location of each stud's center with a pencil. Use a nail to confirm a stud has been located.
  - d. Two people are recommended for the next steps.
  - e. Place level under "wall cleat" and with a pencil mark the exact hole locations in relation to the center of the studs.
  - f. Using a ¼" drill bit and power drill. Drill a "pilot hole" in the center of each mark.
  - g. Place the wall cleat against the wall and using socket wrench and lag bolts, screw the wall cleat into the pilot holes. Careful not to overtighten.
  - h. Using two people, lift the wall mounted unit onto the "wall cleat" and ensure that it is seated into the cleat properly and is secure
  - before letting it hang freely.





i. Do one more check to ensure your still level by putting a level on top of the unit.

For mounting on Drywall, Metal Studs, Stucco, Brick or Concrete, please consult a contractor.

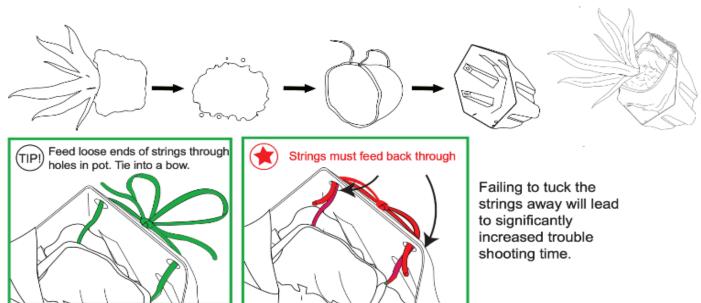
### **Plant selection**

It is important when selecting plants to ensure that they have similar water and light requirements. There are several guides of plants we have successfully used together in the past on the resource page on our website:

https://www.growup.green/resources or click the image to download our guide.



# **Planting of pots**



You want your soil medium to be consistent throughout all the plants. A light well-draining soil is recommended.

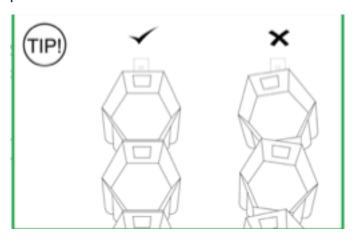
It is important that all plants have similar watering requirements.

Click here to watch the <u>planting instructional video</u> (located on the resource page of our website).



# **Hanging of Pots**

- 1. Starting at the bottom, hang pots into the pre-slotted grooves on the back of the unit.
- 2. Make sure the pots are straight and no leaves are blocking the water intake hole at the top of the pot.



# **Testing Irrigation System**

- 1. Fill water tank reservoir up to at least 1" below the top.
- 2. Connect the pump to the adapter and plug the adapter into a standard 110 outlet.
- 3. Check that drippers are inserted into pots
- 4. Run the irrigation until water is dripping from the bottom pots.



# **Maintenance Instruction Manual**

# **Weekly I Bi-weekly Maintenance Visit Checklist**

- 1. Inspect for bugs or pests
- 2. Do any areas look dry or like the plants are not doing well, if so, investigate until you find the reason and correct.
- 3. Are any specific plants growing too fast and shading other plants, if so, swap them moving the larger plant down and smaller plant above.
- 4. Check the level of the water in the catch tank and add up to the maximum level with fresh water.
- 5. If the wall is all looking good check the moisture in a selection of plants by inserting your finger into the soil. If the moisture is NOT as expected based on when the wall was last watered and when it will be watered next, make appropriate adjustments to the timing system for the next watering cycles
- 6. Turn the watering system on and let it run while you do the balance of your maintenance activities. Check the top of each column to ensure water is dripping and finish with confirming that water is dripping through every column of plants and into the tanks at the bottom. Correct the columns where water is not dripping all the way through.
- 7. Remove any brown leaves and trim/prune plants of any excess growth. Keeping the plants tight and neat leads to healthier plants.
- 8. Replace any plants that have not done well and need remedial action. Plants are growing organisms and a certain amount of attrition is expected.
- 9. Remove any floating leaves or debris from the catch tank.

# **Troubleshooting**

- 1. If there are dry plants or sections of the wall that are not doing as well as others:
  - a. If no drippers are working, there may be a problem with the pump. Check the pump filter and listen to hear if the pump is running.
  - b. If there is no vibration of water after the pump has been turned on, checked for blockages, the pump may be faulty and in need of replacement.
  - c. Run the irrigation and check that water is dripping out of each dripper
  - d. With the pump plugged in, place your hand on the irrigation line to confirm the vibration of water moving up the irrigation line.
- 2. If some drippers are dripping more than others, open the under-performing drippers by screwing them apart and clean them. Replace them and check the performance. You can watch a <u>video</u> <u>here</u>. It is not unusual for small amounts of plant matter or calcium to accumulate in the drippers over time and cleaning them is part of the normal maintenance cycle.
  - a. When all the drippers are working correctly and water is flowing, water should begin dripping from the bottom pot in each column within 30 to 45 minutes depending on the soil.
- 3. Once water is dripping from some of the columns, checkup any column that water is not dripping from and look for:
  - a. Growbag strings that have come loose and are diverting water from any of the pots
  - b. Leaves or plant growth that has grown between the pots and could be diverting water
  - c. Any pots that are out of alignment could lead to water missing the pot below it.





- d. Once the above issues are addressed water should be dripping from the bottom of each column
- e. Once each column is dripping properly out of each bottom plant, leave the water running for at least 20 additional minutes until all the soil in all the bags is saturated
- f. Make a note of the timing as this is how long the water should run for
- 4. Note: A major cause of failed plants is the watering cycle not running long enough to saturate the bottom plants. Be sure that the duration is 20-30 minutes after water begins dripping out of the bottom plant.
- 5. If the watering system is working well and some plants are not, consider if:
  - a. They are getting watered too often
  - b. There is enough light to keep them healthy (take note with outdoor walls of changes to the sun's position from one season to another)
  - c. Check if any plants are being denied of light by plants above them in the wall. This is common and an important design consideration as the plants starved of light may not do well
- 6. Review the wall for any signs of pests or disease. If you note any issues discuss them promptly with an area plant specialist. Any pests or disease can spread quickly through living wall
- 7. If you have your wall outdoor, check the water tanks for any signs of mosquito larvae, if you see them in the water, consult with your local plant specialist or even Home Depot for mosquito tablets

# **Monthly / Quarterly Maintenance Activities**

- 1. Remove the filter from the pump and clean the filter to remove any built-up sediment or plant matter
- 2. Clean the tank of sediment and debris.
- 3. Assess the plants and determine any need for fertilizing or supplementing the plants. Remember that the goal is healthy plants but not plants that grow too quickly as plants growing too fast create maintenance headaches and may lead to early replacements
- 4. We recommend an organic soluble fertilizer is added to the master tank if the wall requires additional nutrients. Dissolve it well and be aware that the emitters may need to be cleaned within a few weeks of fertilizing.

### Disclaimer

GrowUp intends to make this manual accurate and complete. However, GrowUp makes no claim that the information contained herein covers all details, conditions or variations, nor does it provide for every possible contingency in connection with the installation or use of this product. The information contained in this document is subject to change without notice or obligation of any kind. GrowUp makes no representation of warranty, expressed or implied, regarding the information contained herein. GrowUp assumes no responsibility for accuracy, completeness or sufficiency of the information contained in this document.

