All cycles should be programmed to Start or Finish 60-90 minutes prior to turning your light on or off.

EXAMPLE: 18 Hours of Light (6am - 12am)
Two cycles — on at 7am and 3pm
Three cycles — on at 7am, 1pm and 6pm
Four cycles — on at 7am, 11:30am, 3pm and 7:30pm

- Check your reservoir level as often as possible. It generally should be okay for several days before additional nutrient solution is needed.
- To refill the reservoir with pre-mixed nutrient solution (1/2 to 1 teaspoon per gallon) wait until the pump is off and the platform is drained.
- Do not allow the nutrient solution level to drop below 2-1/2" deep. Pump must stay submersed at all times.
- Periodically check your pump and tray irrigation systems to make sure they are filling and draining properly. Check the drain filter frequently.

PROBLEMS AND TROUBLESHOOTING

The most common sources of problems result from over watering, nutrient overdose, insufficient lighting, and extreme temperatures. Re-check your procedures and conditions to make sure you have followed all the directions correctly

- If the plants show signs of tip burning, flush system with fresh water, and cut back the strength of the nutrients.
- If the inflow tube is not flowing freely, check the intake on the pump.
- Inspect carefully for any insects, fungus or mold. If you discover signs of these, consult your indoor garden supply store for pest control methods.
- Any fungicides or insecticides should be used at 10% - 15% the normal rate.
- If you have used any new product that seems to have an adverse affect on your system, flush the system.

If the pump stops working:

1) Check your timer, plug pump directly into an outlet.
2) Make sure pump is underwater. If the pump runs dry, this will result in motor burnout.
3) Make sure tubing has no kinks or debris in it.
4) With the pump unplugged, remove the filter from the pump, take off intake and move the impeller around manually two to three times and reassemble. Submerge and plug pump in again. This should free impeller if stuck. If these troubleshooting procedures don't help, please call the place of purchase for further assistance or find the closest Hydrofarm dealer near you at www.hydrofarm.com .

TEMPERATURE AND AIR CIRCULATION

Most plants prefer temperatures between 65 and 90 degrees Fahrenheit. 70–80 degrees is closer to the optimum. Humidity should not be below 45 percent or above 80 percent. Using an oscillating fan will help keep temperatures down when it's too hot, strengthen the plants, and bring in fresh air if you're growing in an enclosed area. Don't blow them over, but give them a gentle breeze for part of the day to promote air circulation. Monitor the water temperature and avoid excessive heat to build in the root zone as this could damage the plants.

HARVEST

Harvest time is very near when the herbs or vegetables are almost fully ripened and are changing color. Harvest the crop by cutting off the ripened produce.

REUSING YOUR HYDROFARM SYSTEM

After you've finished your crop you need to clean your system with a weak chlorine bleach or peroxide solution (1 tablespoon to a gallon). After cleaning, thoroughly flush the system with clean water to rinse any residual bleach or peroxide from the parts.

GUARANTEE

Your Hydrofarm Megagarden components are guaranteed to work for the original owner for a full year. This includes the pump, reservoir and irrigation parts. Nutrient and Rockwool are not covered. Misuse, abuse or failure to follow instructions are not covered. If you have a problem, please contact the place of purchase for return authorization and replacement. Save your receipt/invoice. A copy is required for all warranty work.

HYDROFARM
— Horticultural Products —®

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Megagarden™

Congratulations on the purchase of a Hydrofarm Megagarden system —
one of the highest performance growing systems available to the home gardener. Please read all instructions carefully before starting your garden.

HYDROPONICS: SIMPLE, QUICK AND EASY

Hydroponics is simply a more efficient way to provide nutrition and water to your plants. In a soil garden nutrients and water are randomly scattered about throughout the medium, and plants have to expend a lot of energy growing roots to find them. In a hydroponic garden the nutrients and water are delivered directly to your plants' roots by pumping solution on timed cycles. Your plants can grow quicker and can be harvested sooner because they are absorbing nutrition at a faster rate.

MEGAGARDEN PARTS LIST:

1 - Megagarden Reservoir
MGRES

1 - Megagarden Insert Tray with holes
MGINTR

15 - Grow Containers
EFGROW

Aggregate Growing Medium - 25 L.bag
GM90025

1 - View Drain Holder Clip
HGSINC

Nutrient Pack

2 - Drain Hole Filters (1/2")
HGFLDH

Standpipe
HGINSP

Standpipe Cap with Holes
HGCPINWH

Grommet
HGGR

1 - View/Drain Tube Assembly
HGELVM

1 - Inflow Assembly
AH30206

1 - Platform Support Column
MGSC

24- Rockwool Starter Cubes

1 - pH Test Kit
HGPROTK

1 - Pump with Inflow Tubing
PU160/MGTBIF

1 - Timer
TM01015

1 - Red Cap with Holes
MGCAP

15- Moisture Mats
EMMAT

Instructions

ASSEMBLY

1) View Tube Installation:

a. Remove grommet from view tube assembly, see Fig. A.

b. Install grommet into lower hole on reservoir as shown in Fig. B.

c. Insert view tube drain elbow into grommet, insert clip into top hole on reservoir, and attach view tube as shown in Fig C.

2) Install support column over boss in bottom center of reservoir, Fig. D.

3) Install insert tray onto bottom reservoir and support column as shown in Fig. E.

4) Install drain hole filters into insert tray at locations shown in Fig. F.

5) To install the overflow fitting remove the threaded nut and (1) rubber washer from the ¾" drain fitting. Insert the fitting from the top of the insert tray and secure the seal by replacing the rubber washer and threaded nut. The insert tray should be securely wedged between the two rubber washes with the threaded nut on the bottom. The 1.25" riser and overflow screen should attach together and snugly fit into the opening of the ¾" drain fitting to create a fully assembled overflow fitting.

NOTE: *The included overflow fitting is set at a fixed height; however the pump is adjustable to determine the fill rate of the tray.*

6) Remove the nut from the inflow assembly and insert the threaded end from the top through the center hole in the red cap. Tighten the nut snugly to secure the red cap between the inflow assembly. Fig. H.

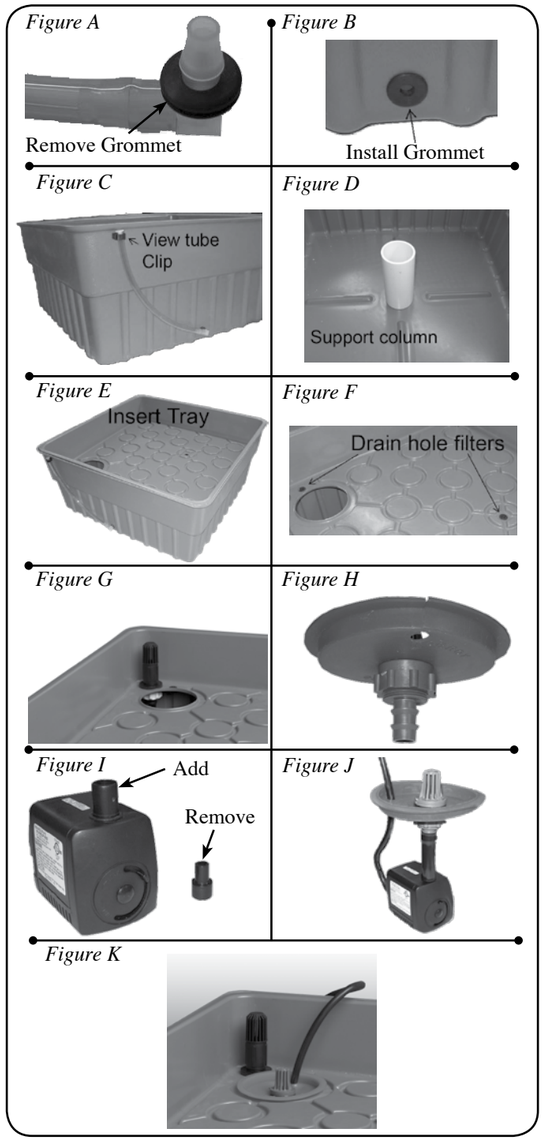
7) Attach the two inch piece of black tubing to the bottom of the inflow/cap assembly.

8) Unpack the pump and replace the small fitting with the larger one contained in the package. There is no specific direction for inserting the larger fitting; however pliers may be necessary to carefully remove the smaller one. The adjustable slider on the pump dictates the flow rate. Fig. I

9) Use the black inflow tubing to connect the pump to the inflow assembly with the red cap. Fig. J.

10) Drop the pump, cap and tube assembly into the hole on the insert tray as shown and secure the red cap into place. Fig. K.

NOTE: *Do not power the pump on until it is completely submersed in the reservoir. Failure to do so could damage the pump and void the Hydrofarm warranty.*



HANDLING ROCKWOOL

NOTE: *Rockwool is a fibrous mineral material and should be handled carefully to minimize breakage. Moisten your rockwool cubes before handling. Wash your hands after handling.*

TO PREPARE ROCKWOOL FOR SEEDS AND CUTTINGS:

- Soak Rockwool starter cubes for 12 to 24 hours in pH balanced water ranging from 5.5 to 6.5
- Drain off the excess solution and the cubes are now ready to receive seeds or cuttings
- Keep the cubes moist in a propagation tray, but avoid over saturation and drought to the cubes.
- For more information on Rockwool, go to www.hydroponics101.com

RINSING THE AGGREGATE IN THE PLANTERS

1) Rinse the expanded clay rock away from household plumbing prior to use.

2) Center the moisture mat strip in the middle of the planter making contact with the bottom.

3) Distribute the aggregate into the planter ¾ full.

4) The rockwool starter cube containing the seedling or cutting should be centered in the planter and make contact with the moisture mat.

5) Take care not to damage the roots and fill the planter the rest of the way up covering the cube with a single layer of aggregate, but leaving a ½" of space between the top of the medium and the top of the planter.

NOTE: *If you want to insert cuttings or seedlings into large rockwool blocks, wait until they have developed white, healthy roots out of the smaller block before transplanting to the large ones. The blocks will rest directly on the insert tray platform.*

MIXING IN THE NUTRIENTS AND THE pH

Filling your reservoir should be done according to the instructions on your nutrients.

pH is a measure of acidity or alkalinity of nutrient solution. In hydroponics, nutrients are more available to your plants when the pH is between 5.0 and 6.5. More nutrient concentration may lower pH, less will not bring it down as much. After thoroughly mixing in any nutrient, check the pH value of the solution prior to filling the reservoir, adjustment may be necessary.

The pH of your solution should be checked weekly and kept between 5.0 and 6.5 for most plants. Normal tap water might range from 7.0 to 8.0. The addition of the nutrients at the prescribed level may lower the pH into the acceptable range.

If your pH varies above or below these levels, you can gradually adjust it with our Hydrofarm Pro pH adjusters. Don't be concerned if your pH is a little off unless your plants are showing signs of nutrient deficiencies. After planting your system as described below, fill your reservoir with premixed nutrient solution by pouring it down through the planted containers. It will drain into the reservoir. Fill to just below the platform. This should be about 7 gallons.

STARTING SEEDS AND CUTTINGS

1) Take the preconditioned rockwool starters and insert seed stock or cuttings into the predrilled holes. (1 seed per cube)

2) An Agrosun fluorescent or T-5 Hydrofarm light system will support the production of foliage and root development for the seedlings or cuttings.

3) When a network of roots (multiple white roots) appears through the sides or bottom of the rockwool they are ready to be transplanted into the Megagarden.

NOTE: *A Hydrofarm Germination Station (part# CK64050) or Hot House (part# CK64060) will aid in the success of this process. Avoid excess water in the propagation tray. If you are transplanting purchased plants from a local nursery, gently wash away any loose dirt from the root mass. Always check nursery plants for signs of insects. If any pests are spotted, the plants should be treated with some type of insecticidal dip or spray and quarantined until the infestation has been controlled.*

CHANGING NUTRIENT SOLUTION

Your nutrient solution should be changed once a month.

1) Unplug unit.

2) Unclip the view/drain tube, unplug and drain solution into another container. This used nutrient solution is great fertilizer for your houseplants, lawn and garden.

3) Clip tube and refill the reservoir with new nutrient solution. Pour the new nutrient solution down through the planters when refilling.

4) Replug the view tube after refilling.

LIGHTING

The more light you give your plants, the faster they will grow considering that other grow room conditions are ideal. If your growing season is short with cold temperatures, it's best to give your plants an early start indoors under our T-5 lighting systems or Agrosun fluorescents.

Line the entire growing area with a white surface or material to reflect the maximum amount of light. Metallized film or white plastic are recommended. Flat white paint also works very well. A heavy duty grounded timer will make the light cycle automatic.

IRRIGATION TIMING

The Megagarden system operates on a number of timed flood and drain cycles per day. This will require a timer to activate your pump. The tray will fill to the top of the standpipe within 30-minutes. It will then drain, when the timer shuts the pump off.

This cycle should be repeated a number of times per day depending on your growing conditions. Young new transplants may only require two cycles per day while larger plants may need more cycles per day. Temperature, lighting and humidity will affect the amount of irrigation cycles your plants require. Do not allow the cubes to completely dry out.

Check your cubes just before the next irrigation cycle. If they are very light and pretty dry, you may want to add another cycle. If they are still dark and soaked, decrease the frequency.

* *For a more precise reading, ask your local Hydrofarm dealer about digital nutrient testers.*