

Advantage Electrical Control Tower with G.R.O.W. System (Gradual Recycling Of Water)



Installation and setup manual



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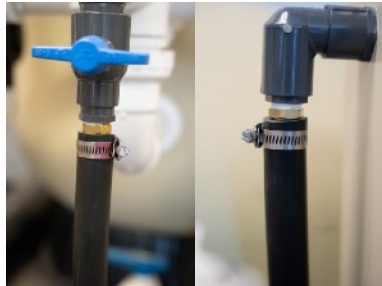
Installing Tower

- 1) Place the GROW Tower on the black plastic block attached to the equipment pad.



- 2) Install the 4 screws to secure the Tower to the block.

- 3) Using the heavy-duty rubber hose, connect the GROW Tower to the Advantage Bead Filter's multiport head. The hose will slide over the brass barb fittings with just a little bit of pressure and or wiggling back and forth. No need to add any lubricant or sealant.



- 4) Align the ring clamps 1/2 inch from the edge of the rubber hose and tighten with a screwdriver.

- 5) Attach the water discharge line to the orange-handled ball valve on the bottom right of the GROW Tower. This line can either go to waste or can be used to water plants. If you choose to water plants with your pond water, it is recommended to still plumb a line to waste in case you ever treat your pond with medication or salt that could be harmful to your plants.



- 6) Plug the GROW Tower into an electrical outlet that has power.
- 7) Open the blue-handled ball valve on the multiport head.
- 8) Open the orange-handled ball valve on the bottom of the Tower

Calculating Your Flow

- 1) Follow the included directions on setting the timer's date and time.
- 2) Ensure all of the water that will be discharged from the GROW Tower will be going to waste.
- 3) Press the “select function” button on the timer until the word “ON” appears on the right side. Water will begin running through the Tower and out the waste line. Once you see that all the air has been purged from the waste line and water is coming out of the end of your line, press the “select function” button on the timer until you see the word “OFF” appear on the right side.



- 4) Lift the lid of the flow meter located on the right side of the Tower and record the current reading



- 5) Set a timer for 1 minute and then press the “select function” button on the timer until you see the word “ON” appear on the right side. Once you hear the actuators in the Tower open and see the flow meter dial begin to spin, start the timer.
- 6) After 1 minute has passed, press the “select function” button on the timer until you see the word “OFF” appear on the right side.
- 7) Look at the flow meter and record the new reading.
- 8) Subtract the first reading from the second reading. This is your flow of water through the GROW Tower in gallons per minute (GPM). Record this number on the label just under the meter where it says “Waste GPM”.
- 9) If you have connected the GROW Tower discharge to both waste and landscaping, repeat steps 2- 8 again but with the water going to just the landscape line. Record the gallons per minute for the landscaping line on the label just under the flow meter where it says “Landscaping GPM”.
- 10) Calculate how much of a water change you would like to perform each week on your pond. This can be between 10-50% depending on the size of the pond.
- 11) Multiply your pond volume by the percent of water change per week.
- 12) Divide that number by the number of days a week you would like the GROW Tower to discharge water from your pond.
- 13) Divide this new number by the GPM of the line you are discharging the water through. This is the amount of time each day that you need to have the time come on for.
-Example: A 7,000-gallon pond with a 20% water change, with water being discharged 6 days a week.
 - $7,000 \times 20\% = 1,400$ gallons
 - $1,400 \div 7$ days a week = 200 gallons per day
 - $200 \div 10$ GPM to Landscaping = 20 minutes

Programming the Timer

- 1) Press the “Set ON/OFF Events” button.
- 2) Press DATE/TIME/NEXT to set ON event.
- 3) Press + or - to scroll to the days of the week to run the event.
- 4) Press DATE/TIME/NEXT.
- 5) Press + or - to scroll to the desired hour to run the event (note the AM or PM of your set time).
- 6) Press DATE/TIME/NEXT.
- 7) Press + or - to scroll to the desired minute to run the event.
- 8) Press DATE/TIME/NEXT to set the OFF event.
- This event should be the ON time plus the amount of time you calculated that the GROW Tower should run each day it turns on. (Example: Start time is 9:00 am and needs to run for 20 mins. The end time will be 9:20 am)
- 9) Press + or - to scroll to the desired hour to run the event (note the AM or PM of your set time).
- 10) Press DATE/TIME/NEXT.
- 11) Press + or - to scroll to the desired minute to run the event.
- 12) Press and hold SET ON/OFF EVENT to end programming.
- 13) Once on the home screen, press the SET ON/OFF EVENT until OFF AUTO is displayed on the right side of the display.

