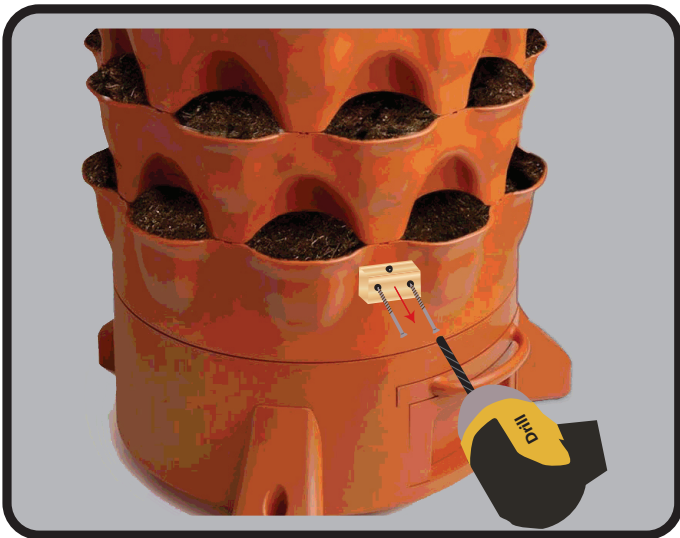


Installing the Intelligent Moisture Sensing Irrigation Controller:

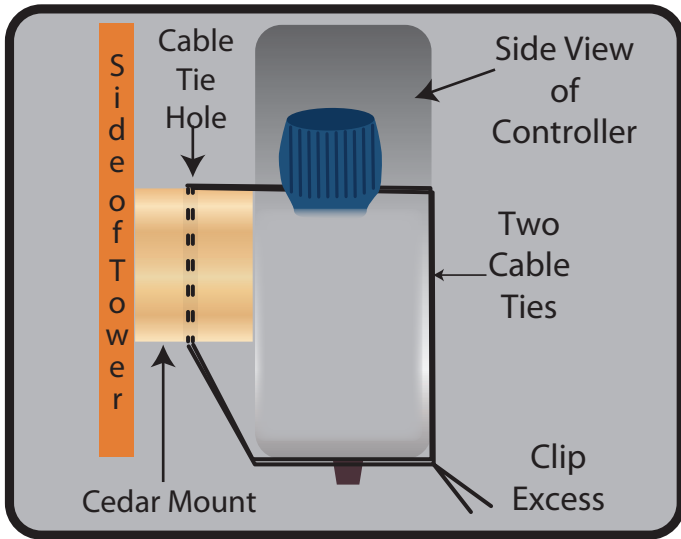
Tools Required

Phillips (#2) Screwdriver
Electric Drill with #2 Phillips bit
Scissors

The controller can be mounted anywhere, but it **MUST BE VERTICAL and ORIENTED TOP UP** to prevent possible moisture damage.

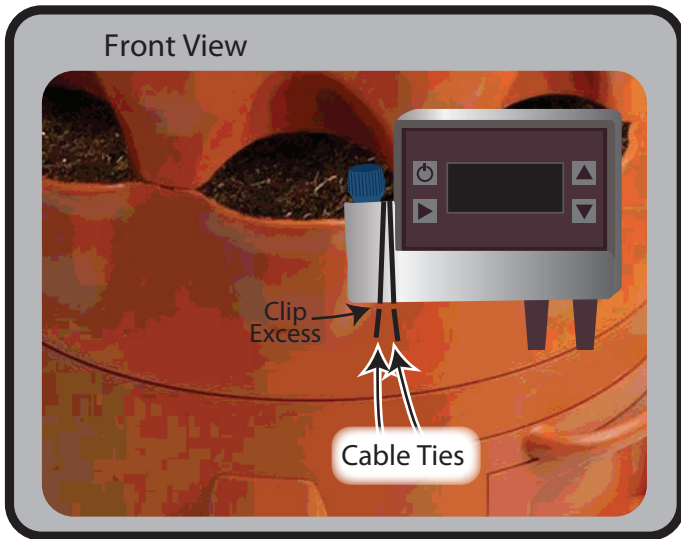


1. Select the location you would like to install the controller. If you've installed the watering assembly in a full Tower, we suggest positioning the sensor in the bottom ring, beneath the brass coupler that extends from the watering assembly. If you've installed the watering assembly in an empty Tower and the brass coupler extends from the lower ring of the Tower, select a location 3 - 4 pockets away on the bottom ring.
2. The cedar mount (piece of wood with holes in it) will sit approximately 1" below the top rim of the pockets and will be centered between them.
3. Hold the cedar mount in place, positioning it with the single hole on the top and bottom and the 2 holes facing out. Making sure it is level, put a wood screw (pointed tip) into one of the 2 holes facing you. With an electric drill/driver, screw the wood screw into the Tower while holding the cedar block firmly in place.
4. Then put the other wood screw in and screw that into the Tower.
5. Remove the cedar mount and wood screws by pulling the cedar mount away from the Tower. Remove the wood screws from the cedar mount.
6. Reinstall the cedar mount using machine screws (flat tip) and nuts. Put the machine screws into the cedar mount and place on the Tower so that the screws extend through the wall of the Tower.
7. Place the nut on the machine screw inside of the Tower and hand tighten. Holding the nut from the back, use a Phillips screwdriver to tighten the screw. **DO NOT USE A POWER DRILL HERE.** Repeat for the other side. Washers are not used; this increases friction to hold the nut as the screws are tightened.



8. Place the controller unit on the mount and use 2 cable ties to secure the unit in place. Thread the cable ties through the top hole on the cedar mount.

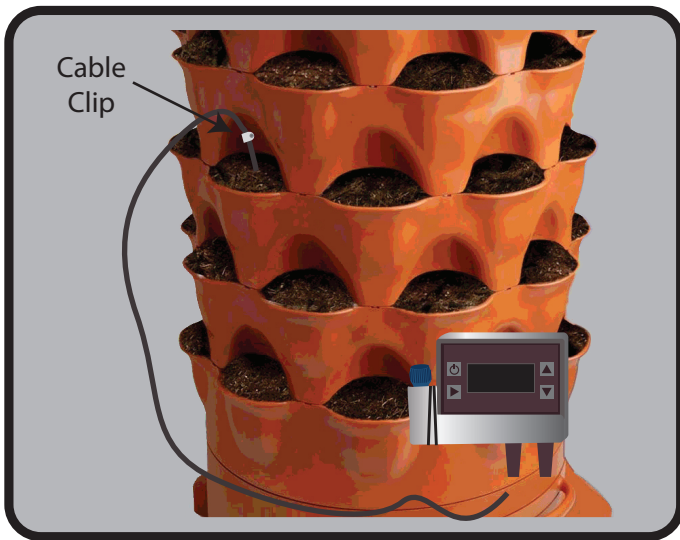
9. Secure the cable ties as snugly as possible, one at a time, so that they are positioned in the gap between the sensor screen and the hose connection.



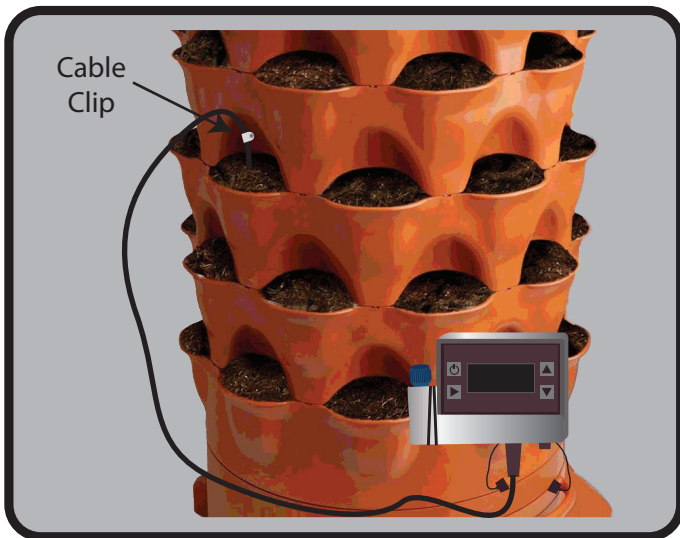
10. Once both of the cable ties have been tightened and the controller unit is securely fastened, clip the ends of the zip ties.



11. Put the moisture probe into the third row of the Tower above the controller unit. Press it straight into the soil on a downward angle, until the entire unit is covered. Once positioned, do **NOT** wiggle the probe as this will move soil away from the conductors.



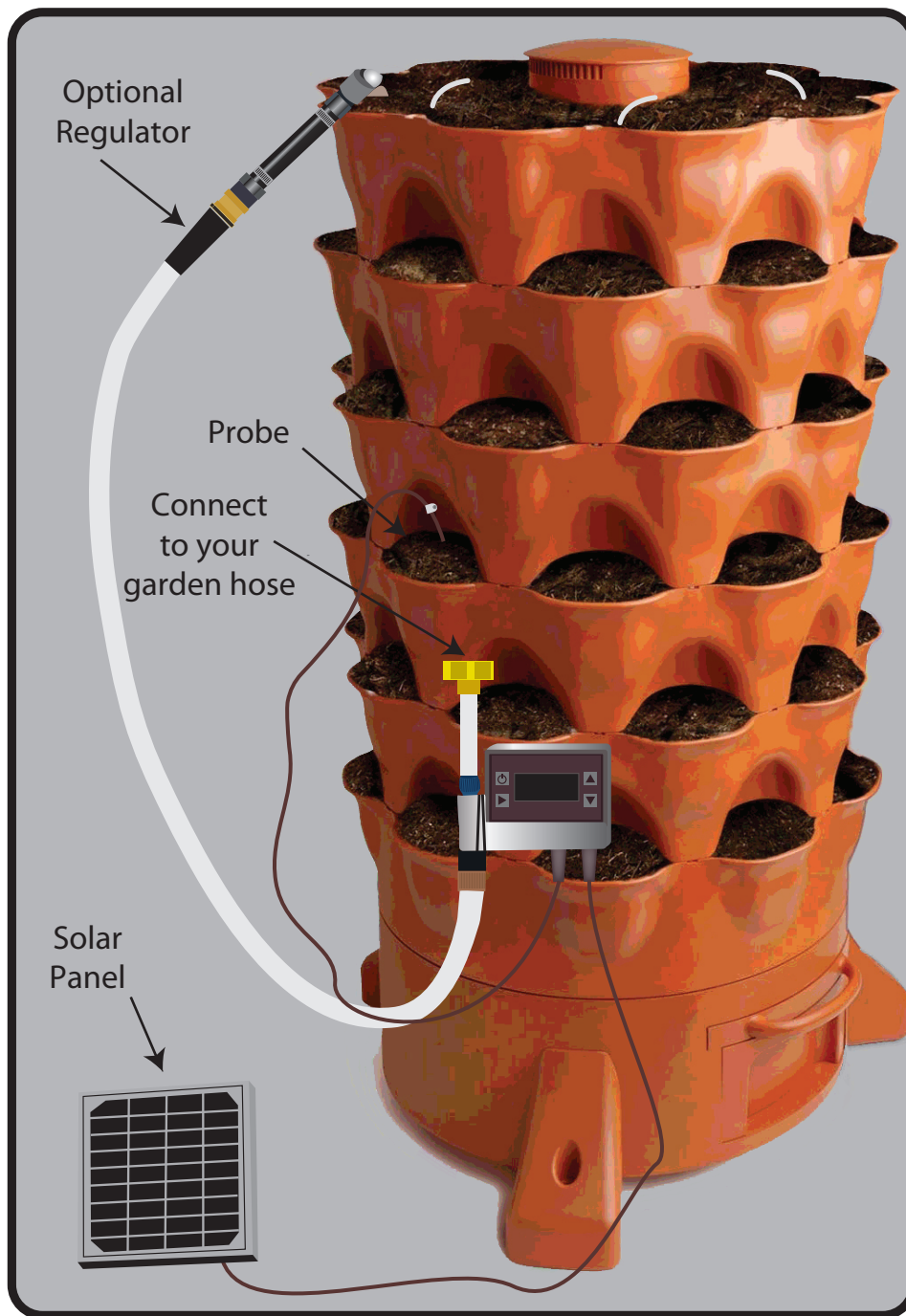
12. Attach the cable clip mount to the sensor cord with enough slack to secure the mount above on the face of the Tower at the top of the pocket indentation. Carefully use the electric driver to screw the mount into place, however hand tighten to finish. Press the soil around the moisture sensor, making sure it is tightly packed around the probe for accurate measurement.



13. Remove the caps from the bottom of the Irrigation Controller and attach the probe connector to the bottom left coupler and screw into place. Coil any extra cord and secure with a zip tie and trim the end. Tuck behind the back of the irrigation controller.



14. Attach the solar panel in the same way to the bottom right coupler on the Irrigation Controller for automatic charging. Position the solar panel so it gets the most DIRECT sun per day as possible. The solar panel will automatically charge the 4 NIMH AA batteries (included.) These batteries are replaceable and will last for approximately 3 years of continuous use.



15. The optional 25 PSI water pressure regulator adjusts the water flow to provide 0.5 gallons per minute. Attach the regulator to the end of the brass coupler on the watering system assembly. The pressure regulator has a vacuum weep hole. This weep hole can drip water during normal operation and therefore should NOT be under continuous water pressure. It should therefore only be installed coming out of the irrigation controller or going into the watering system assembly.

You can apply plumber's tape before attaching the regulator.

The Intelligent Moisture Sensing Irrigation Controller compensates for water flow so the pressure regulator is of optional use. The purpose of the regulator is to slow the water flow so that the soil can absorb it more fully.

16. Attach a short length of hose from the brass coupler or regulator to the bottom left coupler on the irrigation controller. We suggest cutting your own short hoses to fit your specific needs. See our web store for high quality hose end fittings. www.gardentowerproject.com. Check that all hose connections have gasket washers installed and hand tighten all connections.

17. Place the hose connector (yellow top) on the top left coupler on the irrigation controller.

18. Attach your garden hose to the top of the connector using the yellow ring to tighten the connection. Turn on the hose.

- Let the system run for 48 hours before making any adjustments to the digital settings.
- There should be 2 – 3 gallons of “tea” ending up in the drawer per week of operation.
- The only setting you will need to adjust is to the “Wet Ctrl”. All other settings should not be changed. If the Tower is staying too wet, turn down the wet threshold level “Wet Ctrl” no more than 3% at a time.
- Run for 48 hours and check levels again. If no “tea” is ending up in the drawer after a full week, increase the wet threshold level “Wet Ctrl” no more than 3% at a time. Run for 48 hours and check levels again. The “Dry Ctrl” or dry threshold level which activates the water flow should typically NOT be adjusted.
- We also recommend avoiding use of the calibration mode on the controller. We use the factory calibration for all of our operations.
- Most leaks can easily be remedied with hand-tightening connections. If using the option 25 PSI pressure regulator, some leakage during operation is normal.
- The 4 top watering tubes provide a visual indication that the system is actively watering.
- **IMPORTANT:** Be sure to **REMOVE YOUR IRRIGATION CONTROLLER BEFORE THE FIRST WINTER FREEZE** and store it inside. Freezing water **WILL** destroy the valve in the controller. Prior to installation, the controller may beep until a button is pushed. This is because the controller has a preset fail-safe which limits the maximum watering duration to 1 hour in the case of a hose leak. You can use white plumbers thread tape to seal a stubborn leak.