INCREASING YIELDS WITH ELECTRIC FIELDS

ELECTRIC FERTILIZER

Crop Acceleration

Optimal Plant Health

Boosted Yields & Greater Returns

- Installation Guide -

INTRODUCTION

Thank your for your business!

Before we begin, I'd like to personally thank you for your purchase of this electroculture device! We look forward to helping you with experiencing the fantastic gains that are possible from electroculture, or in this case, magnetoculture!

What is Electroculture?

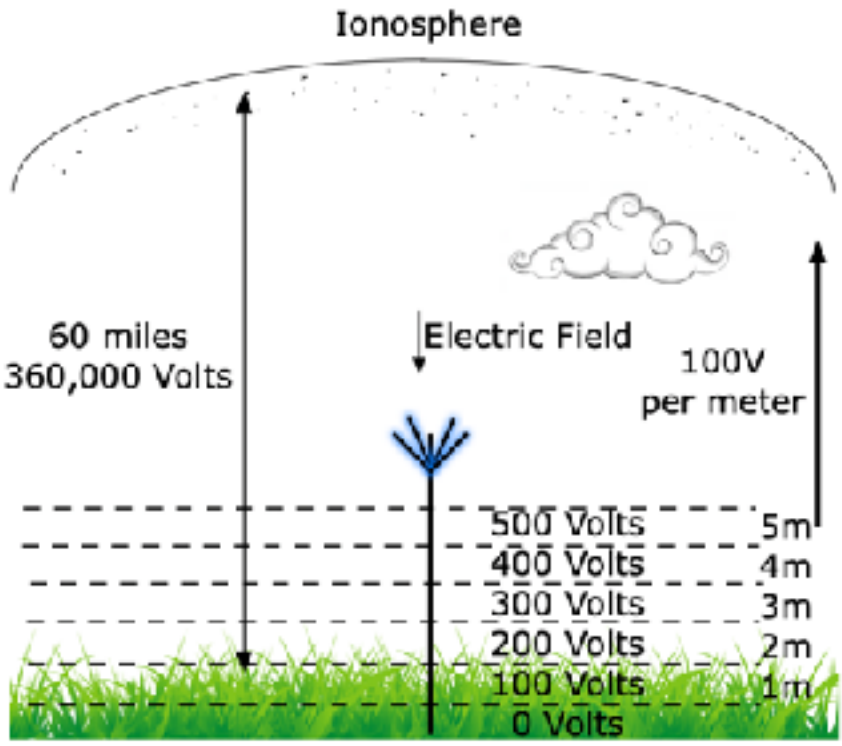
If you haven't heard, electroculture is the science of using the electrical simulation of plants to improve growth, increase yields, have earlier harvests, protect against disease, and more! By subjecting plants & soil biomes to magnetic field energies, a whole variety of amazing electrophysiological changes begin to take place… causing all sorts of beneficial effects: increased growth, imp

BASIC THEORY

Natural Electroculture

Ever notice how your plants and crops look more vibrant and larger after a passing thunderstorm? Using simple technology, you can replicate those effects, using simple charge-collector technology!

Electricity is present all around us, from free floating electrons that surround the air around us. At ground level, the amount of free-floating charge is very small, yet as one moves up in elevation, the amount of free electricity in the air increases.



Tapping Into These Energies

To capture these naturally present electric field energies, all that's needed is the means to collect it. To do so, our HarvestStorm Atmospheric Collector has a number of points on it that attracts free electrons from the atmosphere.

PRELIMINARY **WARNINGS**

Before we get into the good stuff, unpacking the product, assembling it, and installing it for your garden, it's important to understand the risks involved from the use of this product.

1) **Be careful removing the device from the mailing package.** Use heavy gloves as the tips are **sharp.**

2) When installing the system, **make sure all mechanical & in-earth connections are secure** to prevent the device from falling on animals or people if it were to fall or detach during a storm or high-winds.

3) After the system is installed, **refrain from touching any bare wires** coming from the device as the device collects large amounts of static electricity.

4) **At the onset or during stormy weather <u>especially</u>, do not touch or perform maintenance on the device, wiring or any ground connections**, as higher-levels of electrical energy will be present and may cause a painful shock.

5) When maintaining the device, **wear rubber-soled shoes and insulating gloves** to prevent getting shocked, if high voltage levels are collected by the device.

6) **Install at a minimum height of 8 feet above ground level** to prevent accidental injuries from hitting the device. Install it high-enough to ensure the safety of everyone in the vicinity of the area.

Under most circumstances, the levels of electrical current and voltage present in the system will be harmless, as they are based on the collection of low-levels of static electricity. These warnings are present because we assume the buyer doesn't have experience with this form of electricity.

RISKS

In the 100s of years of writings about this form of electroculture, there has never been any reports of these devices ever being struck by lightning. In any case, the risk still exists. As such, take heed to the warnings above.

Furthermore, with higher-levels of electrical energy collection, it's possible to expose your plants and crops to too much electrical currents, which can result in killing some or all of your plants. Research in this area is ongoing as to the best practices for using these types of systems, so while it's exciting to be on the forefront of the modern-day electroculture movement, understand that there are inherent risks involved.

During stormy weather conditions when the energies are high, the potential exists for your plants to become over-stimulated. Therefore, it is best to have either a long ground wire coming from the device, or the use of multiple ground-wires, as this will introduce multiple pathways for the electricity to travel, providing the ability to positively help a larger amount of plants while at the same time protecting your crop by dispersing high currents that may collect in the system.

Not all plants are comfortable with this form of stimulation. Results may vary (and they will - especially between different types and strains of plant-life). Experimentation is your friend. Try multiple types of plants with this system to see what responds best. Trees are more resilient to higher electrical fluctuations, so they are a great crop to use with this type of device.

USE AT YOUR OWN RISK.

ASSEMBLY

Our atmospheric electricity collectors come in 2 variants.

1) 16-point sheet metal based with spikes

2) 84-point spiked disc with optional mounting rod

Additional Tools & Material Needs

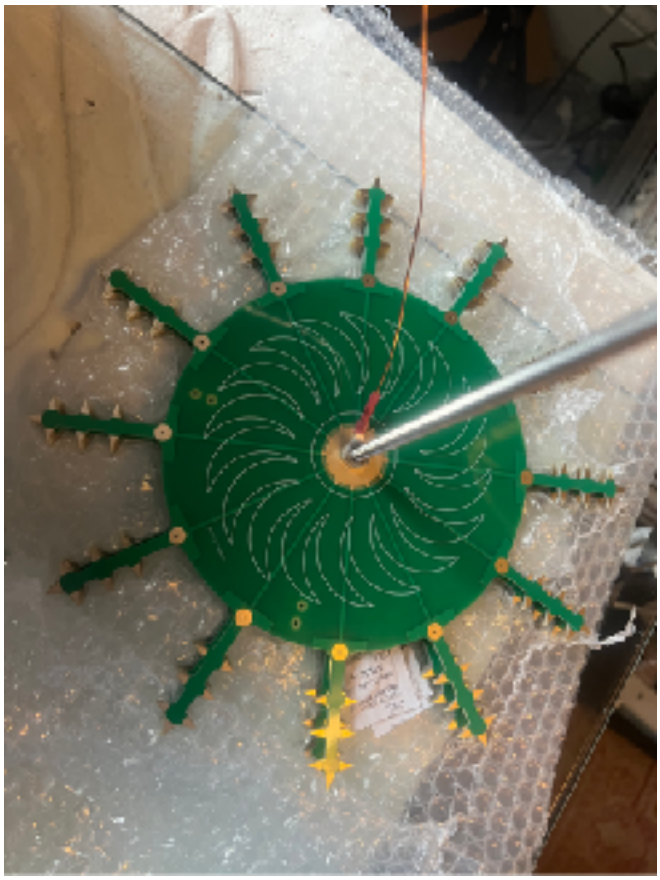
- A long pole or the means to attach the devices to an existing free-standing pole or structure.
- Additional zip-ties, hose-clamps, or other means of attaching the device a pole or structure.
- A spool of wire, 18 to 24 AWG, of any material (e.g. copper or aluminum) to go from the antenna to the ground.
- An optional different spool of wire to go from the ground throughout your grow area.
- Wire cutters / strippers
- Optional: portable soldering iron & silicone sealant

Device Assembly

For Option 1, the 16-point spiked unit comes pre-assembled with electrical connection wire and zip ties for connecting to a thin rod or pole. Feel free to use additional zip ties or other connection hardware if needed.

For Option 2, the 84-point spiked disc, you can use either your own connecting hardware, or if you purchased the optional mounting kit, you can attach the disc to the rod and connecting-wire assembly as follows:

1) Begin by donning a pair of gloves for handling the disc. The spikes are sharp, and we want you to remain safe during the assembly process.



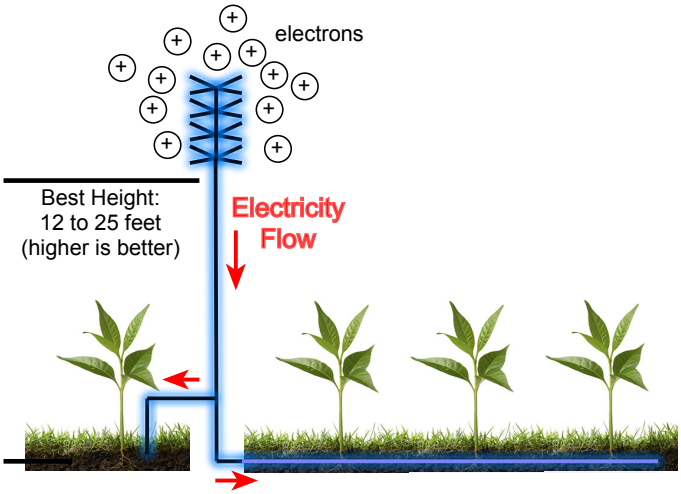
2) Starting at one end of the threaded rod (optionally included), screw on one bolt to the desired height at the far end of the rod. See the image to the right. Based on the distance down of the first nut, the amount of remaining room at the top can be determined.

3) From there, add the pre-wired terminal connector onto the rod as shown in the image on the right, and then carefully place the electroculture antenna disc on top of the connector so they're both resting on the bolt below it. If you have additional hardware, like a spring washer, that can also be added to the assembly to add mechanical strength to the joint. Otherwise, finalize assembly by putting the second nut over the top of the disc and tighten.

INSTALLATION

Collector Installation

To install the device, you'll first need a long pole at least 10-12 feet long. For Option 1, ideally, it would be 18 feet or more, as there are fewer spiked collectors on it, so it may need to go higher



Use the included zip ties to attach the collector to the top-end of the pole.

Next, you'll need to supply your own wire to connect to the antenna. Any lightweight gauge wire will do, from 24 AWG to perhaps 18 AWG. Strip off the end of the wire you have using pliers or wire strippers, twist it around the wire coming from the collector antenna, and then twist the waterproof weren't on top of the connection. Secure the down-wire to the pole with additional zip ties, or by simply wrapping it around the pole in a spiral.

Pole Installation

Erect the pole with the collector on top, making sure to attach it to a secure object, or by waterproofing the bottom side of it, and burying it into the ground at least 2-3 feet down. Securing it with concrete would be better. Another option is to use a flag-pole anchor (not included).

Ground Electrodes Assembly

For the ground connection, you can use the wire itself, or you can attach it to some metal screening, e.g. galvanized square-grid screening or chicken-wire. Ideally, you would use a solder connection, if you're equipped for that. Otherwise, you can clean the area of the grid with some sandpaper, and tightly wrap the pole-wire around it. Secure with silicone to create a waterproof connection.

Run the wire in North-South oriented runs, about 4-12 inches under the area where you will be sowing your seeds or placing your plants. These can be in a North-South grid, or some people have run the wire in the form of a very large spiral.

Design Note:

- For Option 2, the device is capable of collecting a lot more voltage; therefore, you may want to start off with a larger ground layout, or placing the device at a lower height.

Tips

- To support a larger area, raise your collector higher, or tie additional collector elements into the same system.
  - You can also add additional plant-wire runs in parallel to the main run you installed first
- Make sure to waterproof any electrical connections you make with silicone to minimize corrosion that will absorb the electricity you're collecting.
- For proper plant health, make sure to stay on top of your irrigation routine, or increase it, as stimulated plants transpire more, causing the ground to dry out faster.

Troubleshooting

- If your setup isn't working, then either try it out with different plants, or raise / lower your antenna accordingly to being in more or less charge.
- Also, consider your electrical connections… is there corrosion between your connections. That will increase resistance and potentially stop the flow of current.

Thanks Again!

Let us know how your crops work out with the collector antenna! We'd love to see pictures of it in action. Send a note via the contact form on our website, post it to the EnergeticAgriculture Facebook Group, or share it with @ElectroGrow on Twitter!

Happy Growing!
-David

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