

Making a Static Grass Applicator



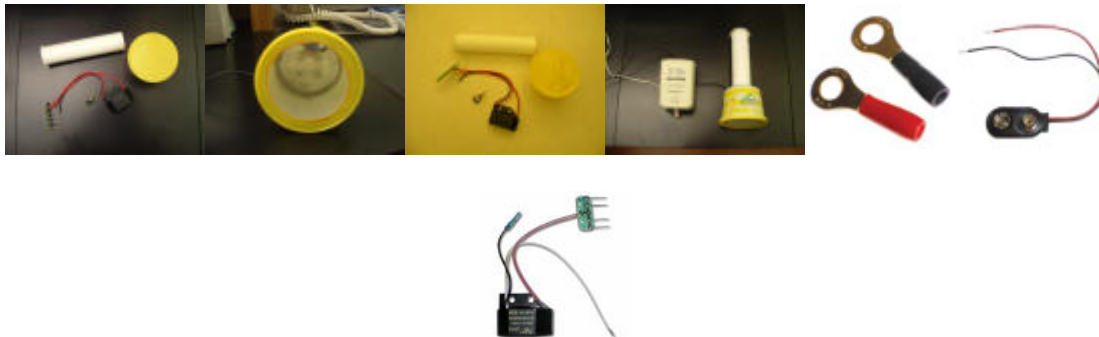
The parts needed are as follows.

1 - 8oz. "I Can't believe It's Not Butter" container 1 - 6" x 1 1/4" PVC Sink Drain Pipe

2 - 1 1/2" PVC Test Caps 1 - piece of aluminum screen 4" x 4" 1 - 1/4" SPST Switch

1 - 1/8" connector 1 - 9-12V DC Ion Generator 1 - 9VDC Battery Snap

OPTIONAL: 1 - 9-12V DC Transformer & 1 - Female 1/4" Jack



I purchased the **Ion Generator** from <http://www.goldmine-elec.com/>

Assembly Instructions

Handle Preparation: Cut off the flange end of the sink drain pipe and then drill the holes in the end cap for the plug and switch. Attach the bottom of the butter bowl to the other test - end cap. Drill a 1/8" hole in the bottom of the butter cup.

Grass Container Prep: Cut out the center of the butter bowl lid, leaving about 1/4" - 3/8". Cut a piece of aluminum screen in a circle to fit inside the butter bowl lid.

Determine Polarity of Ion Generator Leads: As most components will not come with a wiring diagram, you will need to determine the polarity of the leads before you wire the components together permanently.

I twisted the two main leads together of the battery / transformer first. You have to have an additional lead connected to the ground side. The red lead that was connected to the pins of the ion generator is the output to the screen material. When you have power connected to the two main leads of the ion generator and then move the ground wire close to the red lead of the ion generator lead, you should hear a buzzing sound. This sound is the result of the static electricity being grounded.

Once you have determined the polarity of the ion generator device, you are ready to final wire and solder your connections

Using a 12 ga. - 16 ga. red stranded wire about 8" long, connect a terminal ring to the wire and then attach the terminal ring to the edge of the screen with an 1/8" x 1/4" machine screw and nut.

Wire Components: Prepare the ion generator by cutting off the mounting flange flush with the component case. This will allow you to insert the entire assembly into the 1 1/4" pipe handle.

Connect the positive side of the power jack to on of the terminals on the SPST switch. Connect a red wire from the other terminal poles of the switch to the red wire of the ion generator power feed. Cut off the ion circuit board and attach this red wire to the red wire feeding into the butter bowl.

Drill a 1/8" hole in the side of the tub / handle near the end where the butter bowl / cap assembly will be attached. Using a 12 - 16 ga. black stranded wire, thread the wire through the 1/8" hole in the side of the pipe / handle and connect this black wire to the black wire on the ion generator. This pair of wires will connect to the ground side (negative) of the power jack.

OPTION: If you decide to use a 9 volt battery for power, substitute the transformer, and plug for the battery strap.

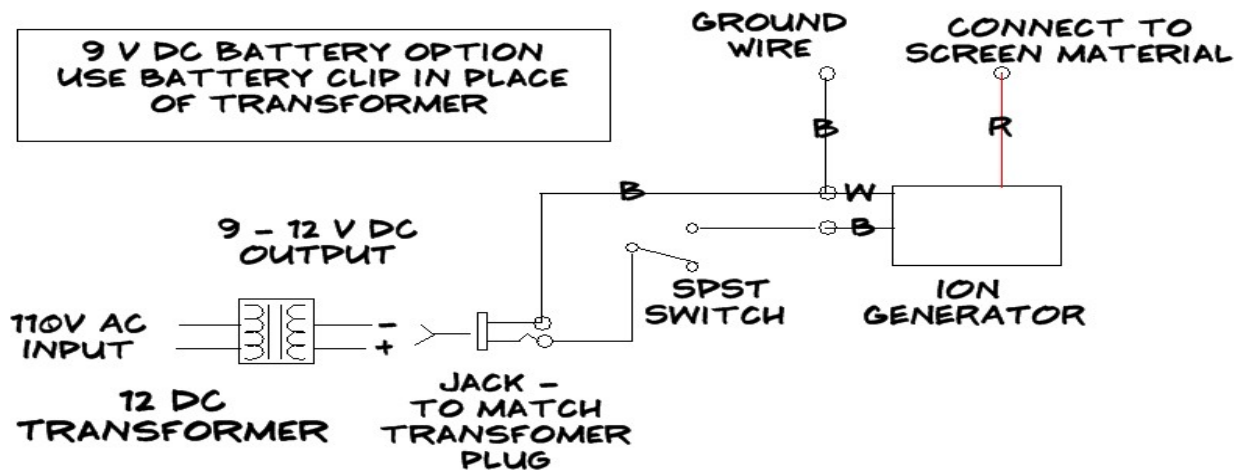
Electrical Warning!!!

When the power supply is on, electrical shock is possible if you touch the screen with one hand and touch the ground lead with the other hand.

Preparing to Apply Static Grass To My Layout

1. I always prepare the applicator by filling the grass bowl first.
2. Next I determine where on my layout I am going to put the ground wire holes.
3. Apply paint or glue to the area where I will be applying the static grass.
4. Connect the ground wire to a nail and put nail in hole where the wet medium has been applied.
5. Turn on Grass applicator, then begin gentle shaking and moving the grass applicator over the area to be covered.
6. When using white glue, I left the area that I covered with static grass dry for 24 hours, before applying more grass material.

WIRING DIAGRAM



WIRING DIAGRAM FOR STATIC GRASS APPLICATOR