

How to Add Smoke Effects to Your Electric RC Plane

By [a-bit-of-a-menace](#) in [CircuitsRemote Control](#)



Introduction: How to Add Smoke Effects to Your Electric RC Plane



Create dramatic smoke trails with your electric RC plane using a compact smoke grenade and a pyrotrigger. This modification is ideal for experienced hobbyists looking to add some flair to aerobatic displays or FPV flights.

:: Photo credit Sharon Stiles

Supplies



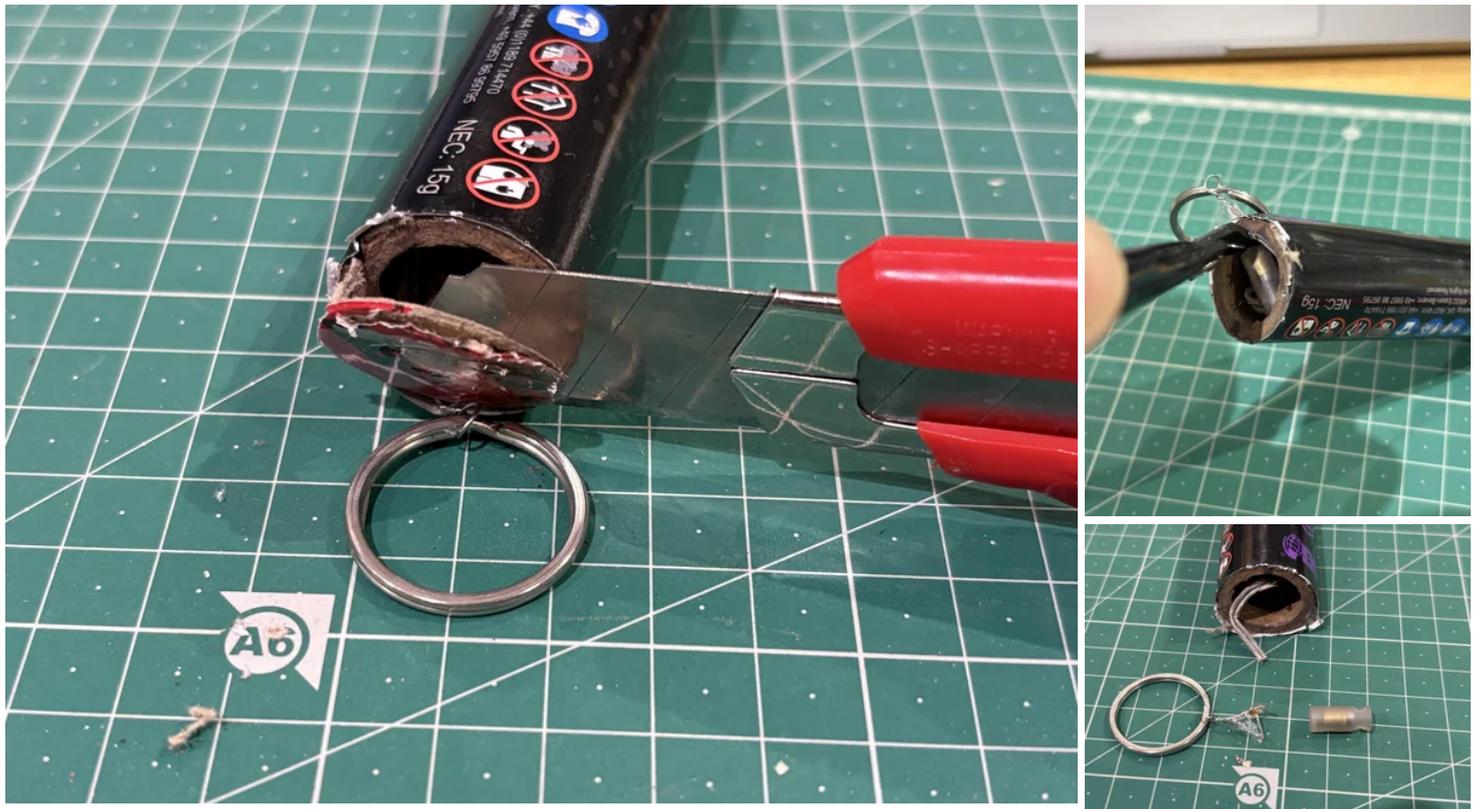
Materials

- 1x Smoke grenade (e.g., Enola Gaye WP40 or similar)
- 1x E-match (electric match)
- 1x Menace RC Pyrotrigger
- Tape
- Optional: 3D-printed smoke mount (e.g., <https://www.thingiverse.com/thing:7140509>)

Tools

- Knife (utility or craft knife)
- Wire snips
- Pliers
- Small screwdriver to make a hole

Step 1: Modify the Smoke Grenade



We'll begin by adapting the smoke grenade so it can be triggered electronically.

1. Use a knife to carefully cut off the end cap of the smoke grenade (where the pull-wire is located).
2. With wire snips, snip the wire and remove the pull-wire mechanism from the grenade.
3. Gently extract the internal smoke-generating compound case, being careful not to damage it.

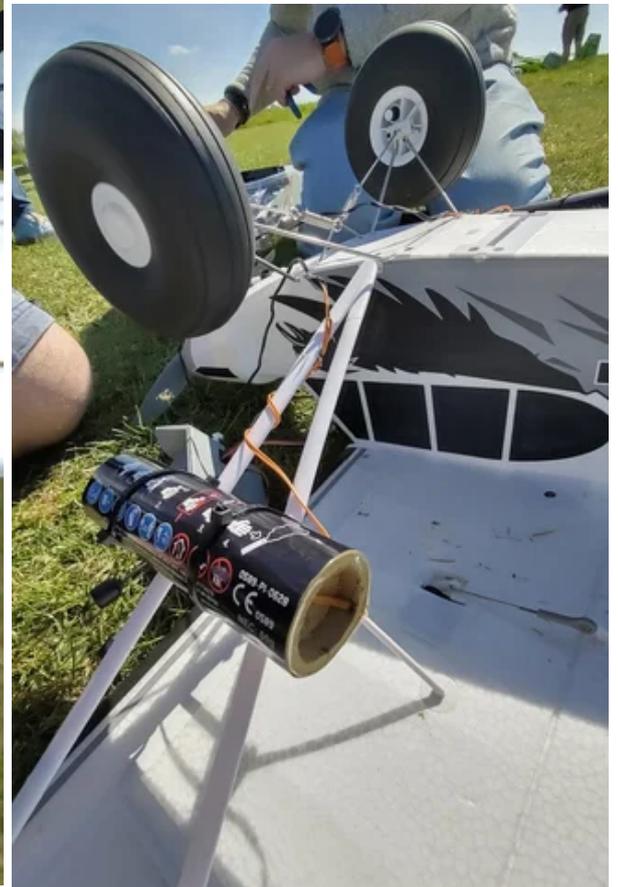
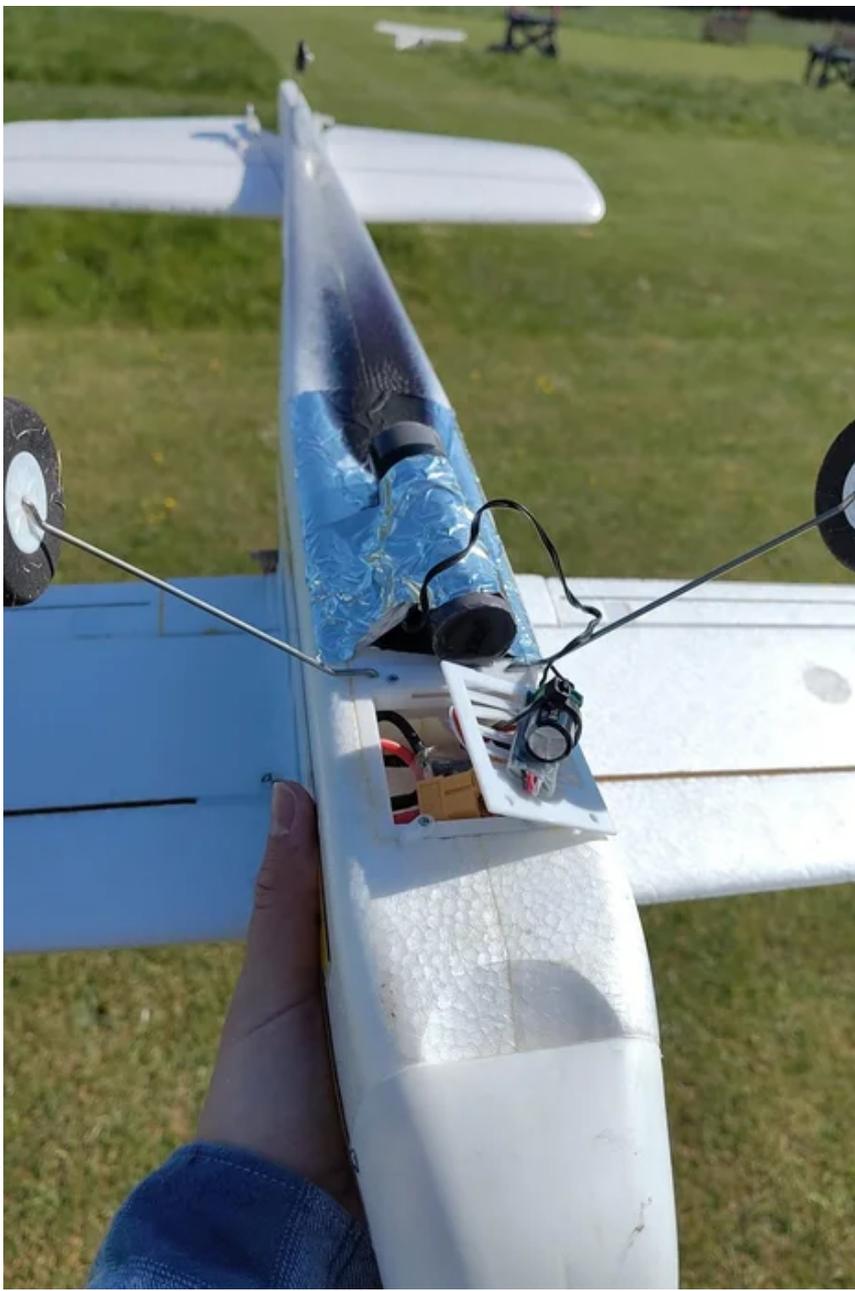
Step 2: Install the E-match



Next, you'll insert the e-match to allow remote ignition.

1. Pierce a small hole in the grenade with the screwdriver from the top (refer to the image for location – typically near the top of the composition).
2. Insert the e-match with the pliers into the hole so it makes firm contact with the smoke compound.
3. Use tape to secure the e-match wires to the grenade body to prevent movement during flight.
4. Tape the cardboard cover back onto the smoke grenade.

Step 3: Mount the Smoke Grenade to the Aircraft

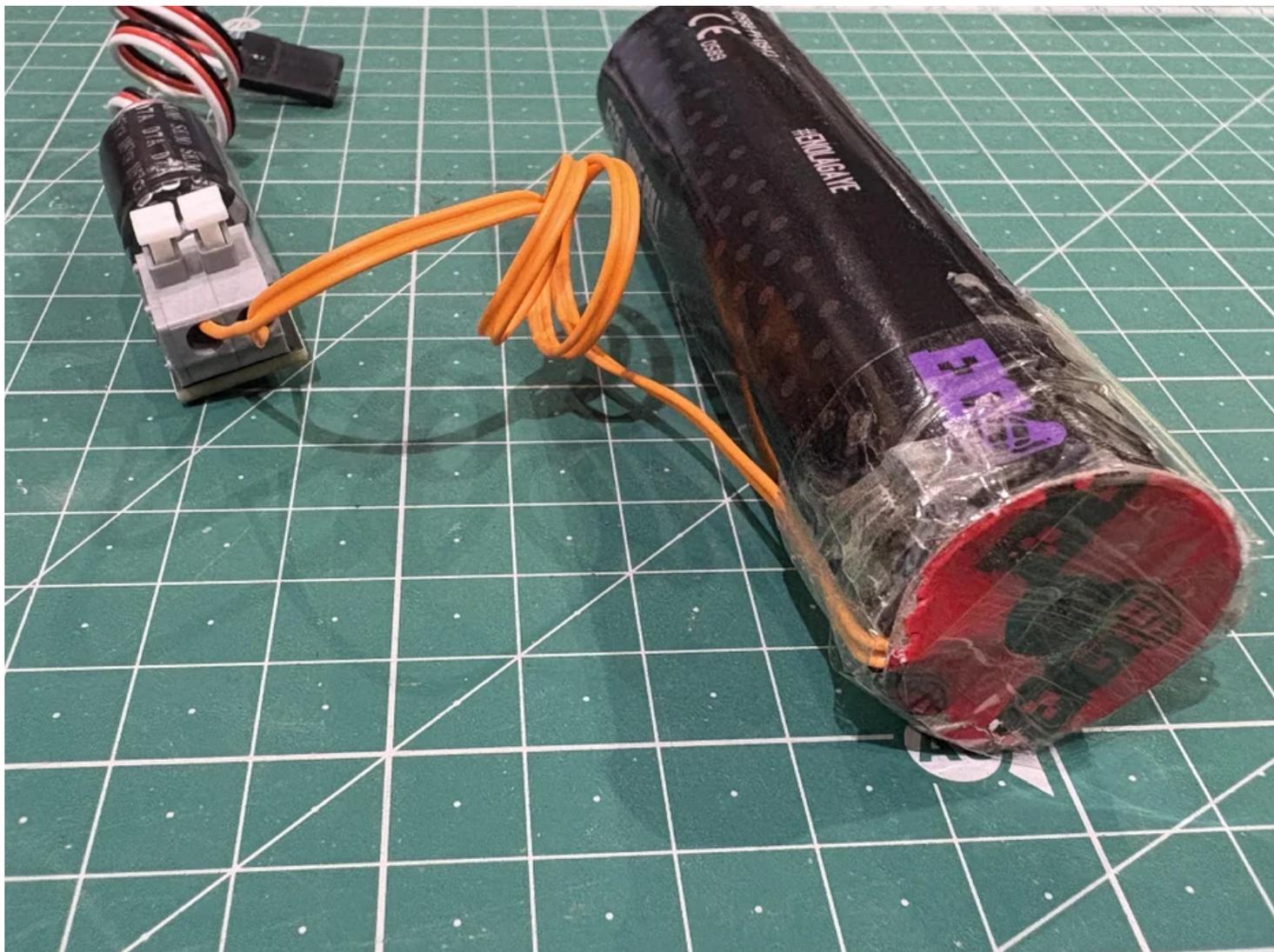


Now that the smoke system is ready, attach it securely to your RC plane.

- Option 1: Use strong tape to affix the grenade to a stable surface (e.g., wing underside or fuselage, or undercarriage).
- Option 2: Use a 3D-printed bracket such as <https://www.thingiverse.com/thing:7140509> for a cleaner, more secure install.

Make sure it is balanced, and the COG is the same and doesn't obstruct control surfaces.

Step 4: Connect to the Pyrotrigger



With everything physically mounted, you can now wire up the system.

1. Connect the wires from the e-match to the spring terminals of the Menace Pyrotrigger.
2. Plug the Pyrotrigger into a spare channel on your RC receiver (gear or aux recommended).
3. Set up a switch on your transmitter to control the pyro output channel.

Step 5: Safety Check and Test

Before flight, double-check:

- All connections are firm.
- The e-match is properly inserted.
- The pyrotrigger channel is set to OFF until in-flight.
- Range test your model to ensure no interference.

Important: Only arm the smoke system once you're on the flight line and ready for takeoff.

Step 6: Fly and Deploy Smoke!

Once airborne and at a safe altitude, flip the switch on your transmitter to activate the pyrotrigger. The e-match will ignite the smoke grenade, and you'll get a beautiful smoke trail behind your RC plane.

Safety Warnings

1. Always use in open, outdoor areas
2. Observe local laws and regulations regarding pyrotechnic devices.
3. Never arm the system while working on the plane.
4. Keep a fire extinguisher nearby during testing.

Conclusion

With a simple modification and a safe setup, you can take your RC flying to the next level with dramatic smoke trails. Whether for an airshow, FPV footage, or just added flair, this mod adds impressive visuals to any flight.

“This RC smoke trail mod uses a smoke grenade, e-match, and Menace Pyrotrigger to create stunning aerial effects. Whether you're flying an FPV wing, aerobatic jet, or custom 3D plane, this DIY tutorial shows you how to add smoke trails to your electric RC plane easily.”