

Week 1 – Solder Exhaust Fans

ETR 113 – AC DC Fundamentals I

Draw up a diagram with measurements of how you would like your enclosure to look. Remember that it must be fairly portable, but stay in place when turned on. Maybe it needs to be adjustable? Maybe it should have speed control built in? Maybe an indicator light? RPM meter? This is all up to you!

Minimum requirements:

- Use a DC adapter plug to power the fan
- Stand at soldering height to exhaust fumes
- Contain a charcoal filter that cleans the air passing through

Your sketch may include materials (wood, metal, plastic), dimensions, and a wiring diagram. You may hand draw (take a picture or scan into computer) your idea or put something together on the computer (using documents or graphic design or CAD). This does not have to be technically accurate at this point, but will serve as an entry for a class project build. Everyone will share their idea next class and we will agree on a common design. Please submit a digital copy of your image on Assignments in Blackboard. Once we agree on a design, we will build 6 of these exhaust fans to use throughout the semester.



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