



THF OnMaking

Build Your Own Droid Instructions

MATERIALS NEEDED

To determine the material, it is best to decide what you want your droid to do. Will it be a static display to sit in the corner or a full-blown, all-aluminum gadget machine with all the bells and whistles, ready to take on the galaxy? Most builders fall within these two extremes.

If you are a talented builder, droids can be built entirely from scratch. My C1-10P (Chopper) and my BB-8, for example, were built entirely from scratch, since they were some of the first ones built. It all depends on how much fabricating you are capable of doing.

BUILD ORDER

The build order is another area where everyone can take a different approach. The popular thought is to start with the dome; then if you quit, you still have a cool droid dome to look at. I chose to start with the feet. I had already decided to splurge and purchase a laser-cut aluminum dome, since that was the one part everyone sees first.

- I used the club blueprints and built feet out of 1/2" plywood, glued and nailed together.
- The legs on my R2D2 are also plywood, cut out and glued together to the correct thickness.
- My frame is also 1/2" plywood, wrapped in a styrene plastic skin.
- Most of my body components, like vents, grilles and slot openings, are made from resin plastic, poured into a mold.

Please see the next page of this document for a few variations you can incorporate.

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PIECES FROM THE LOCAL HARDWARE STORE

Many items can be fabricated from common hardware store items and still be 100% accurate.

- The ankle cylinders on my droid are made of 1" PVC pipe.
- The battery cables on the feet are made from stainless steel faucet connectors.
- Various aluminum strips are cut from aluminum stock.
- The shoulders are wrapped in aluminum roof flashing to give them an authentic look.

To drive my R2D2, I used many off-the-shelf parts, so they would be dependable.

- My feet motors are from electric Razor scooters.
- My batteries are from a Power Wheels car, as are the motor and gearbox that turn the dome.
- Some makers use 12v motors from automobile windshield wipers or electric windows for their droids.
- The dome on my C1-10P (Chopper) rides on four inline skate wheels set around the perimeter of the body.

The variety of possibilities is only limited by your imagination. Some areas of the build can seem intimidating, but a positive attitude can help you learn anything.



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Blueprints & Build Logs

Members of the worldwide R2D2 Builders Club have done extensive research to enable them to build accurate reproductions of the *Star Wars* robots. They've written hundreds of different build logs that carefully detail all of the builders' ideas and techniques used to construct their droids. Reading these build logs is the first step every maker should take to help them decide which direction they want their build to go.

Joining the R2D2 Builders Club is free, and signing up gives you access to all the other makers' build logs that are found on our website, www.astromech.net. You can sign on to the site with your own name or a made-up screen name, whichever you are comfortable using. There is no age limit, and we have members of all ages. They will ask you who referred you to the site, and you are welcome to list me as a referral, if you wish. I go by my real name on astromech.net, as most of the longtime members do.

The most important thing to remember about droid building is to keep it FUN! The droids we have built are labors of love, and it takes many months to build one. It works best if you concentrate on one small project at a time, keeping in mind that the entire project is simply a collection of hundreds of smaller projects, all working together.

Happy building!

By Kurt Zimmerman, R2D2 Builders Club