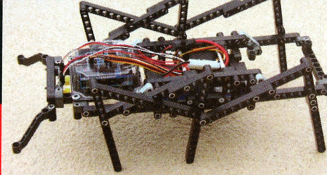


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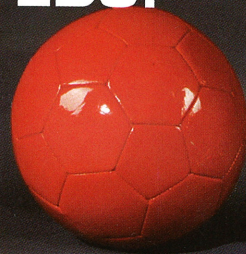
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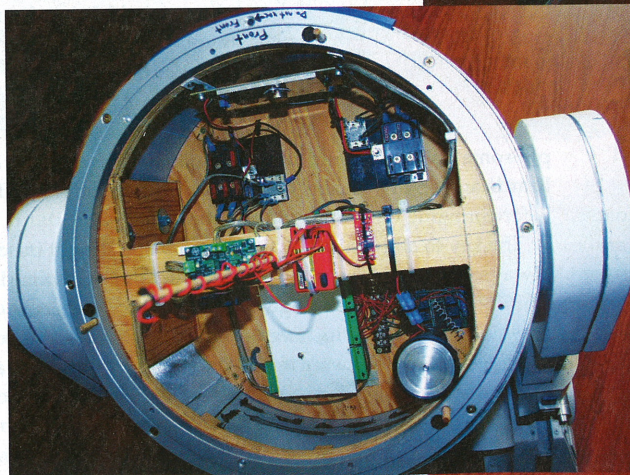
by Gene Beley

FROM A BIRD FEEDER SQUIRREL PROTECTOR TO A WORKING R2-D2

HOMEBUILT ROBOT PROVIDES A GALAXY OF JOY

Edwin Wamser was only 11 years old when he saw the first Star Wars movie in 1977, but the small, mechanical droid movie star R2-D2 reached out into the audience and embraced him for life. First Ed began building models of R2-D2 with cardboard toilet paper tubes and PVC pipes. Wamser graduated from Terra Nova High School in Pacifica, CA, and got an AA degree in communications from College of San Mateo in 1987. Wamser later took some classes in computer science to become a qualified nerd and IT consultant today. He's one of those lucky guys who gets to work out of his home with computers in his den alongside his wife, Annette, who is a photographer. And guess who is literally in the middle? Yep, R2-D2.

In 2004 he decided to build this full size R2-D2. Then he found there were other Star Wars enthusiasts like him who were also building R2-D2s and that's when Wamser joined the online R2 Builders Club, which provides a forum to interact with others who have his same interests.



Internals in Edwin's R2-D2 illustrates the inspired engineering this hobbyist brought to his R2-D2 astromech project.

Ed Wamser working in his home office.

PHOTOS BY GENE BELEY AND ANNETTE WAMSER

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"I started learning, collecting notes and blue prints," Wamser began. "From there I started this crazy project of actually building some of the stuff myself. I had taken metal shop in high school so I had some familiarity with working with metal. I bought a lathe and milling machine and used blueprints to machine out my own parts and assemble them into a fully working droid. The frame is actually wood but a lot of the detailed pieces are all aluminum. It is kind of a mix of wood, aluminum, and resin parts. The dome is plastic but a lot of guys are now building them out of aluminum. In fact, a lot of enthusiasts are building the entire droid out of aluminum these days." Wamser said it took him four years to finish the R2-D2 project with a year off after his son was born. "I finished in August 2008," he said.

The R2-D2 dome was a squirrel protector for a bird feeder. "I opted for a plastic one," Wamser said. "I drew a pattern on the dome and spray painted it." Wamser took off the dome to reveal the receivers, a standard robot controller available from Robot Power Products (Scorpion XL) and sound box—a compact flash soundboard wired to remote control relays so that he can trigger hundreds of different digital sounds remotely. Wamser can control the sounds via the buttons on piggy backed remotes affixed to his Laser six channel ground radio remote control box, which cost him only about \$120. The most common sounds he uses, he said, "are a whistle to get attention, a scolding sound if kids are yanking on parts and other cute little sounds." The power system runs off 24 volts with a power reducer circuit for some of the features that run off 12 volts. Four 12-volt batteries in the bottom are in series and parallel wired together to provide the 24 volts when needed. The motors are from Pittman.

Wamser said that he's enjoyed taking the droid to children's hospitals, a Star Wars theme retail promotion, and a 2012 comic book convention in Stockton, CA. Through his R2-D2 hobby, Wamser said



Editor Mike Klocke interviews Edwin Wamser. Photo by Annette Wamser.



Edwin holds the bird feeder squirrel protector that became the R2-D2 head.



R2-D2 in the company of other Star Wars robots at StocktonCon 2012. Photo by Annette Wamser.

he has met such celebrities as Chewbacca actor, Peter Mayhew; C. Andrew Nelson, who played Darth Vader in the additional scenes for the Star Wars digital mastered original trilogy; and musician-comedian, "Weird Al" Yankovic.

Has Wamser ever been invited to the Luke Skywalker Ranch or the Lucasfilm, Industrial Light and Magic and Lucas Arts at the Letterman Digital Arts Center in the Presidio of San Francisco?

No, but if George Lucas is reading this article, how about you or one of your key people calling Wamser at his Elk Grove, CA home and inviting him and his wife to tour the facilities? You would really make their day, month and year. Or carpe diem and make him an offer he can't refuse to work for you. ©

Links

Pittman, www.pittman-motors.com, (267) 933-2105

Robot Power, www.robotpower.com, (253) 843-2504

For more information, please see our source guide on page 80.

SNAPSHOT



Robots Hit 2012 Comic Con NYC!

The 2012 New York City Comic Convention was a showcase for all things science fiction, fantasy and all things in between and beyond. Robot enthusiasts were on hand to display their love of mechanical beings and talents. An enthusiast took his love of the Transformer's Bumblebee to new heights with this elaborate, eight-foot representation of the movie character.

—Thomas Marsh ©