

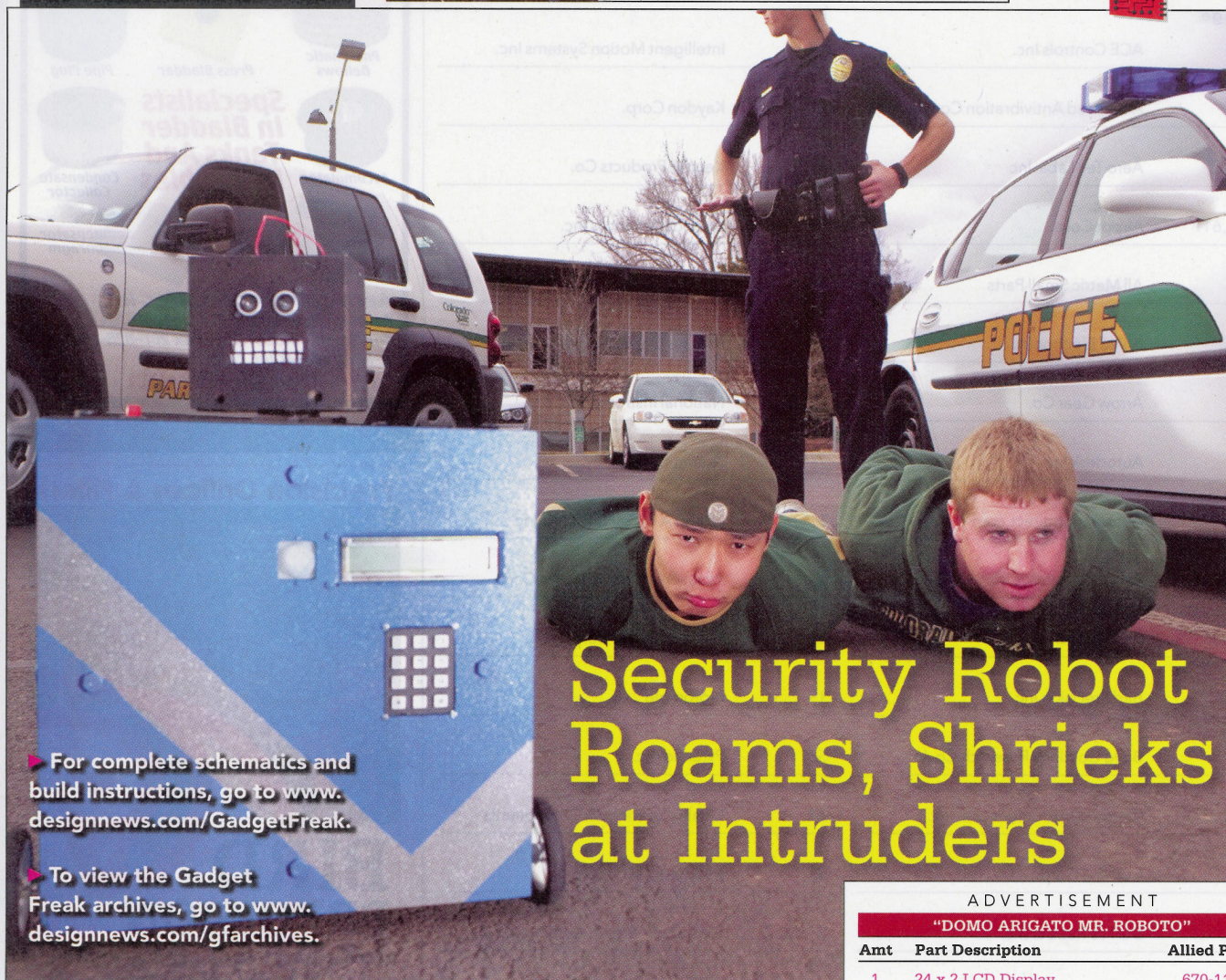
**THE GADGET  
FREAK® FILES  
CASE #140**



**GADGET FREAK ONLINE**

**Check Out Gadget Freak Case #139:  
Autonomous Blimp Has a Mind of Its Own**

Nick Wagner's infraLED Zeppelin charts its own course: <http://designnews.hotims.com/23105-510>.



# Security Robot Roams, Shrieeks at Intruders

► For complete schematics and build instructions, go to [www.designnews.com/GadgetFreak](http://www.designnews.com/GadgetFreak).

► To view the Gadget Freak archives, go to [www.designnews.com/gfarchives](http://www.designnews.com/gfarchives).

**H**ere's a robot that will roam your home or office seeking intruders. The Searching Security Robot was designed by Ian Smith and his fellow students in a mechatronics' course at Colorado State University. It sits on motor-powered wheels and its eyes consist of an ultrasonic range finder to keep it from bumping into walls. Once it's set up, the robot will roam a building seeking moving objects. It has four infrared sensors that detect motion in 360 degrees. When a moving object is detected, the robot sounds its alarm.



Check out the Security Robot in action at [www.designnews.com/GadgetFreak](http://www.designnews.com/GadgetFreak).

## ARE YOU A GADGET FREAK?

Design News and Allied Electronics would like to send you a check for \$500 to spend on Allied's website at [www.alliedelec.com/gadgetfreak](http://www.alliedelec.com/gadgetfreak) or anywhere you please. And don't forget to supply us with a video file of your gadget in action. E-mail Design News your proposed project (must incorporate electronic components and involve sensing, motion, timing and/or networking elements) to [elizabeth.taurasi@reedbusiness.com](mailto:elizabeth.taurasi@reedbusiness.com), along with a description of how it works and a parts' list. If your project is selected, you'll receive a \$500 check from Design News and will be featured in an upcoming issue of the magazine with your invention.

### ADVERTISEMENT

#### "DOMO ARIGATO MR. ROBOTO"

Amt	Part Description	Allied Part #
1	24 x 2 LCD Display	670-1141
1	Geared Stepper Motor	316-0060
4	Relays	788-1033
1	Keypad	948-7874
4	Power Transistors	503-0330
5	PIC16F88 Microcontroller	383-0496
7	0.1 µF Capacitors	507-0820
15	1,000Ω Resistors	296-4741
5	330Ω Resistors	296-4764
4	Breadboards	237-0015

#### Additional parts required:

For a complete list of parts, go to [www.designnews.com/GadgetFreak](http://www.designnews.com/GadgetFreak).

To get Gadget Freak delivered directly to your inbox, along with more Gadget Freaks, sign up here: [www.designnews.com/GadgetFreak](http://www.designnews.com/GadgetFreak).

For parts' information,  
call (800) 433-5700 or go to  
[www.alliedelec.com/gadgetfreak](http://www.alliedelec.com/gadgetfreak)

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