

# FEATURES

## 8 Voice Over IP (VoIP) For Beginners

*A computer, an Internet connection and a headset or "netphone" are all you need to make long distance phone calls for free – by Ross Tester*

## 14 WiFry: Cooking Up 2.4GHz Antennas

*Turn a \$10 cooking scoop into a high-performance WiFi antenna for extended signal range – by Stan Swan*

# PROJECTS TO BUILD

## 30 Bed Wetting Alert Sounder For Toddlers

*Keep the tide out with this effective bed wetting alarm. You just add some circuitry to Jaycar's "Secret Farter" and make a sensor – by John Clarke*

## 37 You've Had Your Fun – Now Make A Doorbell

*OK, you've shocked Aunt Martha and embarrassed your granny with your fiendish Secret Farter. Now turn it into a useful doorbell – by John Clarke*

## 40 PICAXE The Red-Nosed Reindeer

*It's based on the new PICAXE-08M chip, flashes its nose and eyes and plays popular Christmas tunes and mobile phone ring tones! – by Clive Seager*

## 64 Build A Programmable Robot

*Here's a great school project! This robot features full manoeuvrability, speed control, bump-and-respond logic and programmable sound and light sensing. Turn it loose and watch it head for the light – by Thomas Scarborough*

## 76 Oh No! Not Another CFL Inverter

*Yep, another one but this one's really simple. It's powered from 12V and is just the shot for running multiple compact fluorescent lights (CFLs) or even a small colour TV set – by Graeme Matthewson*

# SPECIAL COLUMNS

## 24 Circuit Notebook

*(1) USB-Powered PIC Programmer; (2) Economical Desk Lamp For Camping; (3) Quartz Clock Flasher Protects Equipment; (4) Two Switches Share One Pin; (5) Multi-Level Lock System; (6) PICAXE-Controlled Battery Charger*

## 56 Serviceman's Log

*You have to be versatile in this game – by the TV Serviceman*

## 80 Vintage Radio

*This Little Nipper was a dog – by Rodney Champness*

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