

## Features

### 12 Tech Support: Terror Tales From The Front Line

*You wouldn't believe some of the idiotic calls that computer tech support people get; but then again you just might – by Barrie Smith*

### 16 HID Lamps: Out Of The Car & Over Your Shoulder

*It's taken a while but high-intensity discharge (HID) lamps are now available in hand-held spotlights. Here's a look at Jaycar's ST-3369 – by Ross Tester*

### 70 Why Calibrate Your Test Equipment?

*If you work in industry, it's vital that your test equipment is correctly calibrated. Here's why – by Tony Tong*

### 72 How To Draw Circuit Schematics In Protel Autotrax

*Here's an easy way to make your circuit diagrams look good – by Rick Walters*

## Projects To Build

### 20 Dead-Accurate 6-Digit GPS-Locked Clock, Pt.1

*Looking for a digital clock that's always dead accurate? This one is locked to GPS time signals, so it never needs setting or adjusting – by Jim Rowe*

### 36 230VAC 10A Full-Wave Motor Speed Controller

*It gives smooth control from near zero to full speed on electric drills, routers, circular saws & other appliances with universal motors – by John Clarke*

### 62 Precision 10V DC Reference For Checking DMMs

*Check your DMM's accuracy with this simple device. It provides a precision 10V DC reference that's accurate to within  $\pm 3mV$  – by Jim Rowe*

### 80 UHF Remote 2-Channel 230VAC Power Switch

*Long range (80-metres) unit uses pre-built UHF transmitter & receiver modules to make it easy to build – by Branco Justic & Ross Tester*

### 88 Input Attenuator For The Digital Audio Millivoltmeter

*Extend the range of the SILICON CHIP Digital Audio Millivoltmeter with this easy-to-build switched input attenuator – by Jim Rowe*

## Special Columns

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### 92 Vintage Radio

*The Astor Football GR/GRP 3-Valve TRF Receiver – by Rodney Champness*