

# Features

## 35 Introducing OLED Displays

*Organic LED technology is now affordable for the hobbyist. Here's a look at some available OLED screens and modules plus a circuit to make a simple oscilloscope – by Mauro Grassi*

## 40 Review: At Last . . . An Affordable Logic Analyser

*The Saleae Logic costs just \$US149 and has eight channels that can record millions of samples at up to 24MHz – by Geoff Graham*

## 64 Pebble: PICAXE Electronic Bread Board Layout Emulator

*Free software allows you to produce a professional-looking diagram that shows how a circuit was laid out on a breadboard – by Wayne Geary*

# Projects To Build

## 12 High-Quality Stereo Digital-To-Analog Converter, Pt.1

*Build this high-quality Stereo DAC for superb hum-free sound from your DVD player. It accepts both optical (TOSLINK) and coaxial inputs and has left & right audio outputs for connection to your hifi system – by Nicholas Vinen*

## 26 Using A Wideband O<sub>2</sub> Sensor In Your Car, Pt.1

*Want to accurately measure air-fuel ratios over a wide range? This "Wideband Controller" mates with a Bosch wideband O<sub>2</sub> sensor and our Wideband Display Unit and can be used for precise engine tuning – by John Clarke*

## 72 Build A Simple Seismograph On A Protoboard

*Build a seismograph on protoboard using a PICAXE-08M, Pebble it and transfer it to a Kiwi Patch Board – by Stan Swan*

## 75 Autodim Add-On For The 6-Digit GPS Clock

*It senses the ambient light so that a modified program running in the display unit's micro can adjust the display LED brightness – by Jim Rowe*

## 82 3-Channel UHF Rolling-Code Remote Control, Pt.2

*Second article describes how to complete the construction and get the transmitter and receiver units talking to each other – by John Clarke*

# Special Columns

## 44 Circuit Notebook

*(1) FireWire-Sensing Mains Power Switch; (2) A Discrete Op Amp For Audio Use; (3) Temperature-Sensing Battery Charger Cut-Out; (4) 6-Digit PICAXE Timer; (5) Relays Can Do It By Themselves; (6) High-Current Voltage Doubler*

## 57 Serviceman's Log

*Why do such things only ever happen to me? – by the Serviceman*

## 88 Vintage Radio

*The Kellogg TRF receiver – by Rodney Champness*