

Features

11 Electronics Goes Boating

The recent Sanctuary Cove (Qld) boat show featured some jaw-dropping craft. But what really stood out was the advanced electronics now included in just about every one of those boats – by Kevin Poulter

18 3DTV: From Stadium To Living Room

Some impressive technology is involved in 3DTV production. Here's a look at what's involved in getting 3DTV live from the sports field to your home – by Nicholas Vinen

26 Programming PIC Microcontrollers: How It's Done

Ever wondered how to program a PIC microcontroller chip if you're not buying a kit or if you want to upgrade the firmware to a later version? Here's a step-by-step guide to doing it yourself – by Mauro Grassi

Projects To Build

30 An Intelligent 12V Fan Controller

Does your PC make more noise than it should? It's probably mostly fan noise! Slowing the fans down will reduce the noise but if you go too far, you could fry the CPU! This intelligent fan controller is the answer – by Geoff Graham

58 PICAXE Project Development System

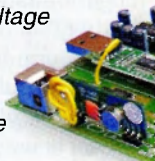
Featuring a USB interface and a ZIF (zero insertion force) socket, this low-cost board will allow hardware/software development & debugging for over 90% of the chips in the PICAXE range – by Jeff Monegal

65 Lab-Standard 16-Bit Digital Potentiometer

Here's a digital programmable voltage divider that's easy to build. You can use it to provide an accurate adjustable output from a precision voltage reference for meter calibration and other tasks – by Jim Rowe

80 Dual-Tracking $\pm 19V$ Power Supply, Pt.2

Final article on our new 0V to $\pm 19V$ dual-tracking supply has all the assembly and check-out details – by Nicholas Vinen



Special Columns

40 Circuit Notebook

(1) Using 12V LED Replacement Lamps In Cars; (2) UHF Link For Remote Control Extender; (3) Modifying The Flexitimer For Short Intervals; (4) Sound-Trigger For A Canon 350D Camera

44 Serviceman's Log

Procrastination is the thief of time – by the Serviceman

94 Vintage Radio

Reflex receivers: why they were necessary – by Rodney Champness