

## Features

### 10 Solar Power When The Sun Doesn't Shine

*Here's how the Spanish get solar power around the clock using advances in thermal storage – by Richard Keech & Matthew Wright*

### 16 Flat-Panel TV 42 Years Ago

*If you thought flat-screen TV was a recent innovation, check out this article from "Electronics Australia" 42 years ago!*

### 20 Quad HiFi Gear: How It Stacks Up 30 Years On

*Quad gear was revered by hifi enthusiasts from the 1950s to the 1980s. So how well does it stack up against modern hifi gear? – by Nicholas Vinen*

### 72 Review: Hameg HMF2550 Arbitrary Function Generator

*This unit can deliver a 14-bit arbitrary waveform at 250MS/s, a sine or square wave up to 50MHz or a triangle wave up to 10MHz. It also does PWM, FSK and more – by Nicholas Vinen*

## Projects To Build

### 26 High-Power Reversible DC Motor Speed Controller

*It's available in reversible and non-reversible versions and features soft start, relay switching of motor direction and PWM speed control – by Branko Justic*

### 34 Remote-Controlled Digital Up/Down Timer

*This versatile timer can count up or down from one second to 100 hours and is programmed using a universal infrared remote control. It can also be automatically controlled by external trigger inputs – by Nicholas Vinen*

### 58 Build A Large Ultrasonic Cleaner

*Looking for a large ultrasonic cleaner at low cost? This unit is ideal for cleaning automotive and other large mechanical parts – by John Clarke*

### 80 Electrolytic Capacitor Reformer & Tester

*Got a bunch of old electrolytic capacitors you'd like to use . . . but don't know if they are any good? Or do you need to re-form the electrolytics in an old valve amplifier or vintage radio set? This unit will do the job – by Jim Rowe*

## Special Columns

### 44 Serviceman's Log

*Consumer gear that's faulty out of the box – by the Serviceman*

### 67 Circuit Notebook

*(1) Check Inductors With This Simple Q-Meter; (2) Adding Protection Diodes To Positive/Negative Regulator Circuits; (3) DC Motor Speed Sensing Circuit; (4) SCR Circuits Based On Discrete Transistors; (5) Playing Dice Games With A PICAXE08M; (6) Random Playback Trigger For The Voice Recorder*

### 88 Vintage Radio

*The Airzone 612 6-valve battery-powered console – by Rodney Champness*