

# FEATURES

## 8 What You Need To Receive Weather Satellite Images

*Interested in receiving weather satellite pictures? It's now easier than ever, provided you have a receiver and a PC fitted with a sound card – by Jim Rowe*

## 14 A Self-Diagnostics Plug For Your Car

*Many cars can tell you what's wrong with them. All you have to do is ask but first, you need a plug – by Julian Edgar*

## 60 PC Board Design Tutorial, Pt.3

*Final article looks at multi-layer boards and describes how to lay out a board that can be manufactured – by David L. Jones*

## 68 SPLat Controls microPLCs

*Looking for an embedded control module for your product? Take a look at the range of "microPLCs" from Splat Controls – by Peter Smith*

# PROJECTS TO BUILD

## 18 VHF Receiver For Weather Satellites

*Build this compact 2-channel VHF FM receiver and pull in your own weather satellite pictures – by Jim Rowe*

## 34 Linear Supply For Luxeon 1W Star LEDs

*Simple circuit lets you run one or more Luxeon 1W Star LEDs from a 12V DC supply. It uses low-cost parts and allows for dimming as well – by Peter Smith*

## 70 MiniCal 5V Meter Calibration Standard

*Check your DMMs accuracy and then calibrate it using this low-cost, easy-to-build voltage reference – by Barry Hubble*

## 74 PIC-Based Car Battery Monitor

*Don't get caught with a flat battery. This simple circuit allows you to monitor battery condition and will warn you when it's about to die – by Alan Bonnard*

## 76 The PICAXE, Pt.9: Keyboards 101

*Build a PS2 to RS-232 converter and send data from a keyboard to a remote terminal or LCD display via a 2-wire interface – by Stan Swan*

# SPECIAL COLUMNS

## 40 Serviceman's Log

*Turn it upside down to fix it – by the TV Serviceman*

## 56 Circuit Notebook

*(1) Simple 6-Input Alarm Circuit; (2) Courtesy Light Extender; (3) Battery Replacement Power Supply; (4) Automatic Headlight Reminder; (5) Speed Alarm For Cars*

## 80 Vintage Radio

*The AWA PF car radio & the Ferris Tranimate – by Rodney Champness*