# FEATURES

### 8 Silencing A Noisy PC

Don't bleat about a noisy PC. Here's what to do so that you can enjoy the silence of the fans! – by Ross Tester

### 50 Restoring Old Dials, Front Panels & Labels

You can use your PC to create vintage replicas of dials, panel and labels. All you need is the right software and a little know-how – by Kevin Poulter

## 93 Review: The BeeProg Universal Programmer

Looking for an all-in-one professional programmer? This unit can program 12,080 unique devices, with more being added monthly! – by Peter Smith

# PROJECTS TO BUILD

## 22 Versatile Micropower Battery Protector

Protect your expensive batteries from discharge damage with this mini-sized electronic cutout switch. It uses virtually no power and can be built to suit a wide range of battery voltages – by Peter Smith

## 30 Appliance Energy Meter, Pt.1

Want to know how much electricity appliances in your house are using and how much they cost to run. Build this Energy Meter and find out – by John Clarke

#### 46 A Poor Man's Q Meter

Simple circuit mates with an RF signal generator and multimeter for quick-andeasy "Q" and inductance measurements – by Maurie Findlay

# 74 Regulated High-Voltage Supply For Valve Amplifiers How to modify a surplus PC power supply to produce a 700V or 400V high-

voltage rail – by Leonid Lerner

## 84 Remote Control For A Model Train Layout

All you need is a Picaxe, some code and a pair of pre-built UHF modules (plus a few minor parts) – by Greg Hunter

# SPEGIAL GOLUMNS

# 62 Serviceman's Log

Variety is the spice of life - by the TV Serviceman

### 68 Circuit Notebook

(1) Using Dr Video Mk2 To Process NTSC Video; (2) Room Recorder (Simple Microphone Preamp); (3) An Accurate Reaction Timer; (4) Picaxe-Based Cable Tester; (5) How To Connect Two PCs Using Modems; (6) Picaxe Code Stops False Triggering; (7) Stepper Motor Controller

## 96 Vintage Radio

Meet a designer of the legendary WS122 transceiver - by Rodney Champness

# DEPARTMENTS

- 2 Publisher's Letter
- 4 Mailbag
- 61 Order Form
- **87 Product Showcase**
- 89 Silicon Chip Weblink
- 102 Ask Silicon Chip
- 105 Notes & Errata
- 110 Market Centre
  112 Ad Index