

# FEATURES

## 8 Video Formats: Why Bother?

*Composite video, S-video, component video; we explain the differences and tell you how to get the best picture – by Jim Rowe*

## 26 The Escape Robot Kit

*This great design can do the unthinkable . . . bring fun back to the classroom and teach electronics at the same time! – by Dave Kennedy*

# PROJECTS TO BUILD

## 12 VAF's New DC-X Generation IV Loudspeaker System

*Want to assemble your own hifi loudspeakers? Take a look at these new high-performance systems from VAF. – by Philip Vafiadis & Simon Wilde*

## 30 Video Enhancer & Y/C Separator

*Sharpen the pictures from your video tapes with this great project. It's just the shot when transferring your tapes to DVDs and it converts composite video to S-video as well, to ensure a high-quality transfer – by Jim Rowe*

## 42 Balanced Microphone Preamplifier

*Rugged design includes a 3-band equaliser. It also features balanced and unbalanced outputs, and can drive a stereo or guitar amplifier – by John Clarke*

## 66 Appliance Energy Meter, Pt.2

*Second article has all the construction and setting-up details. Build it to help control your energy costs – by John Clarke*

## 84 Build A 3-State Logic Probe

*For less than ten bucks you can build a piece of test gear that you'll find is one of the handiest in your toolkit*

# SPECIAL COLUMNS

## 60 Serviceman's Log

*Pipe locators, models & old crows – by the TV Serviceman*

## 76 Circuit Notebook

*(1) Electronic Conjuring Trick; (2) Adding An "RGB Flag" Output To The Component Video To RGB Converter; (3) Keypad Decimal Encoder; (4) Picaxe-Controlled Solar Fountain*

## 88 Vintage Radio

*Peter Lankshear: vintage radio from the other side of the ditch – by Rodney Champness*

# DEPARTMENTS

2 Publisher's Letter

4 Mailbag

57 Product Showcase

59 Silicon Chip Weblink

93 Order Form

94 Ask Silicon Chip

97 Notes & Errata

102 Market Centre

104 Ad Index