

# Features

## 10 How To Cut Your Greenhouse Emissions; Pt.1

*Cutting electricity use curbs greenhouse gas emissions and saves you money. Here's what's worthwhile doing and what's not – by Peter Seligman*

## 15 New Superbright LED: Will It Replace 50W Halogens?

*Halogen downlights are big energy wasters. A new superbright LED spotlight from Osram could mean their days are numbered*

## 16 Review: Watchguard Pro Video Security System

*Catch thieves in the act with this all-in-one video monitoring solution – by Ross Tester*

## 39 Making Panels For Projects

*It's easy to buy parts but how do you go about making good looking panels for your projects? Here are a few pointers – by Peter Smith*

# Projects To Build

## 24 Build A 6-Digit Nixie Clock, Pt.1

*Here's a fantastic "retro" project to build. It mixes the warm fascinating glow of six Nixie tubes with some cool blue LED uplighting – by David Whitby*

## 32 Tank Water Level Indicator

*Want to quickly check the water level in your rainwater tank? This simple circuit will do the job – design by Allan March*

## 40 PICAXE Plays Music

*Use a PICAXE to play music by interfacing it to the new VMUSIC2 module. We show circuits for the PICAXE-14M & the PICAXE-28X1 – by Clive Seager*

## 58 A PID Temperature Controller

*PID stands for "proportional integral differential". This unit uses PID for accurate temperature control without overshoot – by Leonid Lerner*

## 69 20W Class-A Amplifier Module; Pt.3

*This month we describe the Speaker Protection & Muting Module and show you how to build it – by Peter Smith & Greg Swain*

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## 80 Circuit Notebook

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*The Weston Model 660 Radio Set Analyser – by Rodney Champness*