

Features

12 Slash Your Factory/Office Lighting Bill

Want to save up to 50% on your shop/factory/office lighting power bill and get even more light into the bargain? Here's how – by Leo Simpson

20 A Look At The TDA7377 Quad 12V Amplifier IC

This versatile amplifier IC can provide four single-ended channels, two bridged channels or two single-ended channels and one bridged channel. Here's a look at how it works – by Nicholas Vinen

79 Review: Tektronix DMM4050 6½-Digit Multimeter

Full-featured instrument boasts 6½-digit readings, a graphic LCD readout plus trend plot, histogram, logging and dual measurement mode. Its short-term and 1-year accuracy figures are outstanding – by Nicholas Vinen

Projects To Build

26 A Solar-Powered Lighting System

Easy-to-build system combines a 5W solar panel, a 12V SLA battery and a smart controller with 3-stage charging. It runs the solar panel at maximum efficiency and is ideal for use in garden sheds, at a camp site or to power garden lights – by John Clarke

54 Build A Compact 12V 20W Stereo Amplifier

Amplifiers that run from 12V DC generally don't put out too much power. Not so with this unit. With a 14.4V supply, it delivers up to 20W per channel into 4-ohm loads at very low distortion – by Nicholas Vinen

66 Low-Power Car/Bike USB Charger

It charges USB devices from a 12V battery and consumes just 160µA on standby, so it won't flatten the battery if left connected – by Nicholas Vinen

74 Digital Audio Signal Generator, Pt.3

Final article on this versatile new test instrument has the driving instructions plus other useful information – by Nicholas Vinen

Special Columns

35 Circuit Notebook

(1) Momentary Switch Teamed With Latching Relay; (2) Digitally-Controlled Tone Filter; (3) People Counter Uses Light Beam Sensors; (4) Level Translator For A PIC Programmer; (5) Switching Balanced Microphones Using A Foot Switch; (6) PICAXE Traffic Light Controller

40 Serviceman's Log

The perils of salvaged computer parts – by the Serviceman

84 Vintage Radio

How AGC works and why it's necessary – by Rodney Champness