

TALKING ELECTRONICS®

A NEW MAGAZINE FOR EXPERIMENTERS

\$3.75 [☆]

N.Z. \$5.00

Issue No 6

HANGMAN

an electronic version
of HANG THE BUTCHER



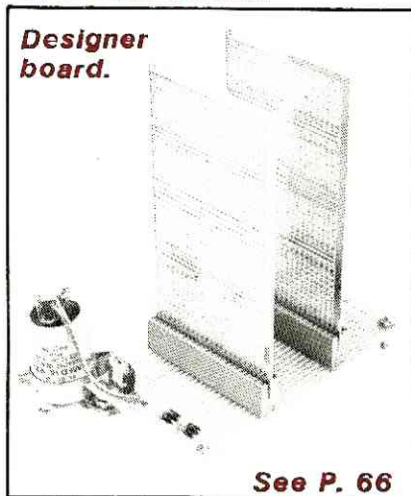
Including . . .

- ☆ CPO
- ☆ EGG TIMER
- ☆ DIGITAL CAPACITANCE METER
- ☆ PROGRAMMABLE COUNTER
- ☆ USING FLASHING LEDS

and many more . . .

We Introduce....

**Designer
board.**



See P. 66

TALKING ELECTRONICS

Editorial...

Vol.1 No.6

This must be our best issue yet. And still we have more, bigger and better things planned. Introducing a circuit board with the magazine has opened up new dimensions for presenting a great range of exciting projects and has been greeted most favourably.

Of the Frequency Counter, one reader wrote: "most underhanded, it forces me to make the project!". If we can get more experimenters to make the project, we will go to any lengths to do so.

Surprisingly enough, one copy of the Mini Frequency Counter appeared in California, USA. It was shown to a University lecturer in Electronics at one of the Universities, who immediately offered to buy it. We later learnt the PC board alone was worth US\$10. No wonder he wanted to buy it! So you see, you are getting very good value with the PC boards attached to the magazine.

The HANGMAN is our first venture. It is a light game (no pun intended). Everyone knows how to play it. After you finish two hours construction and hours of playing, it will make an ideal gift for a youngster. Meanwhile you will have learnt from the 6 building blocks it contains.

Next issue we have planned a couple of test-equipment boards, then a reaction timer which doubles as a shoot game - then a HI-FI VU meter, then ... let's get back down to earth and start with this issue. I'm sure you will agree it's packed with good ideas and basic facts to build upon.

So, now let's down to construction.....

Cheers,

Colin Mitchell.

TYPESETTING

Trisha Dillon

TECHNICAL

Ken Stone

ARTWORK

Steven Babidge

ENQUIRIES

10 Minute queries will be tackled on 550-2386

ADVERTISING

QLD - South Pacific Radio (07) 204 5000

VIC - Margaret Parsons (03) 544 6887

OTHER AREAS - Talking Electronics (03) 584 2386

Publisher

Registered by Australia Post
Publication Number VBP 4256

TALKING ELECTRONICS is designed by Colin Mitchell of CPW Industries at 35 Rosewarne Ave, Cheltenham, 3192. Articles suitable for publication should be sent to this address. You will receive full assistance with final presentation. All material is copyright. Up to 30 photocopies for clubs and schools is allowed.

Printed Web offset by Std News

Distributed in Australia by Gordon & Gotch.

*Maximum recommended retail price only.

- 4 CUMULATIVE INDEX
- 5 HANGMAN
- 15 33 YEARS
- 16 "TO COME"
- 21 DESIGNING YOUR OWN POWER SUPPLIES
- 28 BASIC ELECTRICITY
- 31 PLASTIC MONEY
- 34 EGG TIMER
- 37 PRINTED CIRCUIT BOARDS
- 38 LIST OF KITS FOR ISSUE 1 - 5
- 40 KITS FOR THIS ISSUE
- 41 SUBSCRIPTION FORM
- 42 SPECIAL KITS
- 43 SHOP TALK
- 44 LETTERS
- 46 10 MINUTE DIGITAL COURSE
- 54 DIGITAL CAPACITANCE METER
- 57 CODE PRACTICE OSCILLATOR
- 58 DIODE TESTER
- 60 TRAIN THROTTLE
- 61 TV SERVICING
- 64 MINI MIXER
- 66 DESIGNER BOARD
- 67 FLASHING LED
- 71 PROGRAMMABLE COUNTER
- 75 PCB's
- 76 DATA

On our Cover:

Apart from the PC board, you will notice the cover shows the completed HANGMAN. Inspired by a writer, it was completely re-designed using transistors and IC's. The inset shows our designer board modular building system.

STAFF



HANGMAN

AN OLD GAME - UPDATED.

PROJECT COST..\$9 (since you already have the board)

This is a HYBRID circuit - meaning it is composed of two different species. We have combined transistors with IC's to achieve an update of an old game. The complexity of the circuit comes from the repetition of the transistor stages. Due to the number of biasing resistors required it is strongly suggested that you use a PC board. Not only has the layout of the board been carefully designed to make it look symmetrical when completed but also allows the project to go together so much easier. The boards are printed with an overlay and will fit directly on top of a Zippy box so the whole game looks professional.

**BUILD IT ON THE ATTACHED
PRINTED CIRCUIT BOARD TODAY!
IT USES STANDARD COMPONENTS**

Everybody likes re-discovering something they did years ago. Here's a game we all played at school. Possibly under the name of HANG THE BUTCHER. The game is quite simple. One player thinks of a word and writes down the number of letters in that word in the form of boxes or dashes. The object of the game is for the opponent to suggest letters of the alphabet and if they are correct, are placed on the dashes in the correct order so that the word gradually appears. To make the game more interesting, a side issue is introduced which effectively counts the number of incorrect letters. Each time an incorrect letter is suggested a systematic framework is created made up of straight lines in the form of a gallows. A stick man representing a person being hung completes the diagram. The game is concluded when the correct word is created or the stick man is completed, whichever comes first.

This is an electronic version of the game. The stickman and gallows are made from 15 LEDs and each time the touch plate is touched, one more section of the cartoon is illuminated. The last LEDs to be lit are 14 and 15 which represent the feet of the man. When these LEDs are full brightness, the 8th LED begins to flash, indicating the man is "HANGED". The game can be played two ways. The "normal" way involves the secret word and using the hangman to count the incorrect letter. The other suggestion is to take it in turns illuminating the LEDs until the flashing LED is set into oscillation. The player creating the first sign of continued flashing is the winner. In either game you will have lots of fun, especially in a darkened room where the full effect of the LEDs will be realised.