

CONTENTS

APPLICATION

LIGHT REVOLVER Laser discs are now within the budget of the micro owner

201

HARDWARE

MAKING MOVES The Sharp PC-5000 is an innovatory portable micro

210

SOFTWARE

ORDERLY PROCESSION We learn how to create our own sequential files

204

FINAL REPORT Concluding our series on business software for home micros

212

COMPUTER SCIENCE

YOUR NUMBER'S UP We design a binary to digital display converter

206

JARGON

FROM BREAK TO BUS A weekly glossary of computing terms

208

PROGRAMMING PROJECTS

GO SUB GO! We begin a new series on graphics for all the popular micros

214

MACHINE CODE

COUNTER INSTRUCTIONS Learning how to implement labels and loops is fundamental to efficient programming

216

PROFILE

BREAKING AWAY Zilog is the company responsible for the Z80 CPU

220

WORKSHOP

WORKOUT Our suggested answers to the problems set on page 194

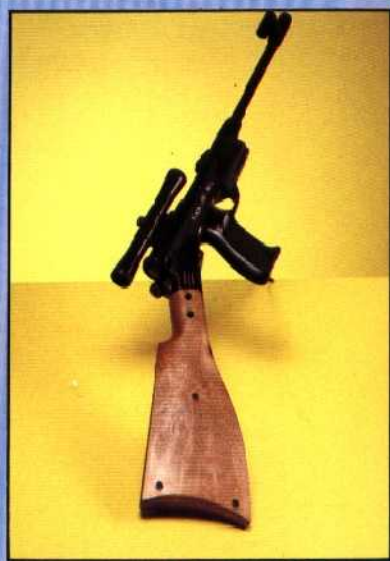
209

Next Week

● The Stack Light Rifle provides a shot of excitement for Spectrum and Commodore users. We take a close look at this unusual peripheral.

● Any micro can be linked to other electronic equipment to give you total control. We explore the possibilities of this exciting application.

● Digital Research owes its success to the CP/M operating system. We look at how this top software company plans to stay ahead of the competition.



QUIZ

In this section we will be featuring a regular quiz based on the articles in the current issue.

- 1) Using 6502 Assembly language, add two numbers stored at memory locations ADR1 and ADR2 and store the result in location ADR3.
- 2) Perform exactly the same calculation, but this time in Z80 Assembly language.
- 3) How would you change the screen colour on a Commodore 64 to white with a black border?
- 4) How many different sprites are available on the Commodore 64
- 5) What are the three main buses connected to a typical microprocessor?
- 6) What do the letters CP/M stand for?

Answers in next week's issue.

QUIZ

COVER PHOTOGRAPHY BY IAN McKINSELL

Editor Max Phillips; Art Director David Whelan; Technical Editor Brian Morris; Production Editor Catherine Cartwell; Picture Editor Claudia Zeff; Sub Editor Robert Pickering; Designer Julian Dorr; Art Assistant Liz Dixon; Editorial Assistant Stephen Maiore; Contributors Lisa Kelly, Steven Colwill, Geoff Bains, Tony Harrington, Richard Pawson, Mike Wesley; Group Art Director Perry Neville; Managing Director Stephen England; Published by Orbis Publishing Ltd; Editorial Director Brian Innes; Project Development Peter Brookesmith; Executive Editor Chris Cooper; Production Co-ordinator Ian Paton; Circulation Director David Bred; Marketing Director Michael Joyce; Designed and produced by Bunck Partners Ltd; Editorial Office 85 Charlotte Street, London W1P 1LB; © APSIF Copenhagen 1984; © Orbis Publishing Ltd 1984; Typeset by Universe; Reproduction by Mullis Morgan Ltd; Printed in Great Britain by Artisan Press Ltd, Leicester

HOME COMPUTER ADVANCED COURSE - Price UK 80p IR £1.00 AUS \$1.95 NZ \$2.25 SA R1.95 SINGAPORE \$4.50 USA and CANADA \$1.95

How to obtain your copies of HOME COMPUTER ADVANCED COURSE - Copies are obtainable by placing a regular order at your newsagent, or by taking out a subscription. Subscription rates: for six months (25 issues) £23.80; for one year (52 issues) £47.60. Send your order and remittance to Punch Subscription Services, Watling Street, Bletchley, Milton Keynes, Bucks MK2 2BW, being sure to state the number of the first issue required.

Back Numbers UK and Eire - Back numbers are obtainable from your newsagent or from HOME COMPUTER ADVANCED COURSE. Back numbers, Orbis Publishing Limited, 20/22 Bedfordbury, LONDON WC2N 4ET at cover price. AUSTRALIA: Back numbers are obtainable from HOME COMPUTER ADVANCED COURSE. Back numbers, Gordon & Gotch (Aus) Ltd, 114 William Street, PO Box 767G Melbourne, Vic 3001. SOUTH AFRICA, NEW ZEALAND, EUROPE & MALTA: Back numbers are available at cover price from your newsagent. In case of difficulty write to the address in your country given for binders. South African readers should add sales tax.

How to obtain binders for HOME COMPUTER ADVANCED COURSE - UK and Eire: Please send £3.95 per binder if you do not wish to take advantage of our special offer detailed in Issues 5, 6 and 7. EUROPE: Write with remittance of £5.00 per binder (incl. p&P) payable to Orbis Publishing Limited, 20/22 Bedfordbury, LONDON WC2N 4BT. MALTA: Binders are obtainable through your local newsagent price £3.95. In case of difficulty write to HOME COMPUTER ADVANCED COURSE BINDERS, Miller (Malta) Ltd, M.A. Vassalli Street, Valletta, Malta. AUSTRALIA: For details of how to obtain your binders see inserts in early issues or write to HOME COMPUTER ADVANCED COURSE BINDERS, First Post Pty Ltd, 23 Chandos Street, St Leonards, NSW 2065. The binders supplied are those illustrated in the magazine. NEW ZEALAND: Binders are available through your local newsagent or from HOME COMPUTER ADVANCED COURSE BINDERS, Gordon & Gotch (NZ) Ltd, PO Box 1595, Wellington. SOUTH AFRICA: Binders are available through any branch of Central Newsagency. In case of difficulty write to HOME COMPUTER ADVANCED COURSE BINDERS, Intermag, PO Box 57394, Springfield 2137.

Note - Binders and back numbers are obtainable subject to availability of stocks. Whilst every attempt is made to keep the price of the issues and binders constant, the publishers reserve the right to increase the stated prices at any time when circumstances dictate. Binders depicted in this publication are those produced for the UK market only and may not necessarily be identical to binders produced for sale outside the UK. Binders and issues may be subject to import duty and/or local taxes, which are not included in the above prices unless stated.