CONTENTS

APPLICATION

WIRED FOR SOUND We look at some of the hardware and software packages that enable the home computer owner to use the MIDI interface

553

541

550

543

549

556

558

560

546

INSIDE BACK

COVER

HARDWARE

JAPANESE TAKEAWAY Casio is the leading manufacturer of pocket-sized computers. We review the current range

SOFTWARE

TOPPING THE CHARTS We follow the fortunes of two programming whizz-kids

COMPUTER SCIENCE

PLAYING TURTLE Our teaching course on the LOGO language continues as we learn how to create and store a string of commands known as a 'procedure'

JARGON

EXPONENT TO FEEDBACK A weekly glossary of computing terms

CHOICE OPTIONS We evaluate the two options available to the user to help create and edit programs: the menu- or commanddriven systems

MACHINE CODE

FIELD WORK We continue our machine code course for Dragon and Tandy owners by looking in detail at the various fields that make up an Assembly language statement

PROFILE

SMALL UNDERTAKINGS Although a small company, Casio has a world-wide reputation

WORKSHOP

ALL BOXED UP We put the finishing touches to the buffer box that we will use in our project to design a control network

REFERENCE MANUAL A valuable reference card that complements the machine code course

ortai pyra i Hun utert cries be an acom acom acom	Lisz and the Macintonh, much the fits — a lo and somewhat out version of the Apple on hex, nor workshop moves as to building trunk poeter supply and for unit flust panies it.
hmra 10 Ge	a sauer-defined ther generator utility for minoskare BL, Spectrum P Micro Record Recor
	 How is the UNIX operating system manual unusual? What is the disadvantage of MIDI's serial input/ output transmission mode?
	unusual? 2) What is the disadvantage of MIDI's serial input/

Editor Jim Lennox; Managing Editor Mike Wesley; Art Director David Whelan; Tochnical Editor Brian Morris; Production Editor Catherina Cardwell; Art Editor Claudia Zeff; Chief Sub Editor Robert Pickering; Designer Julian Dorr; Art Assistant Ex Dixon; Editorial Assistant Stephen Malone; Sub Editor Steve Mann; Rossancher Melanie Davis; Contributors Geoff Bains; Harvey Mellor, Mike Curtis, Steve Colwill, Steve Malone, Rory Forsty, Jim Lennox, Geoff Main, Graham Storrs; Software Consultants Piol Software City: Group Art Director Perry Neville; Managing Director Stephen England; Published by Orbis Publishing Ltd: Editorial Director Brian Innes; Project Development Peter Brokesmith; Executive Editor Chris Cooper; Production Controllar Peter Taylor-Mechurst; Circulation Director David Breed; Marketing Director Michael Joyce; Designed and produced by Bunch Partworks Ltd; Editorial Office 14 Rathbone Place, London W1P IDE; © APSIF Copenhagen 1984; © Orbis Publishing Ltd 1984; Piposet by Universe; Reproduction by Mullis Morgan Ltd; Printed in Greet Britain by Artisan Press Ltd, Laicester

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 (26 issues) £23.80; tor one year (52 issues) £47.60. Send your order and remittance to Punch Subscription Services, Wating Street, Bletchley, Miton 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 4BT at cover price. AUSTRALLA: Back numbers are obtainable from HOME COMPUTER ADVANCED COURSE. Back numbers, Gordon & Gotch (Aus) Ltd, 114 William Street, P0 Box 7676 Melbourne, Vic 3001, SOUTH AFIICA, 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. Hwa to exist binders for MOME COMPUTER ADVANCED COURSE – UK and Eire: Please send 53.95 per binder if you

Verite to the address in your country given for binders. South African reading your hewsagent. Incase of dimiculty write to the address in your country given for binders. South African reading your hewsagent. Incase of dimiculty do not wrish to take advantage of our special offer detailed in Issues 5, 6 and 7. EUROPE: Write writh remittance of £5.00 per binder (incl. p&p) payable to Orbis Publishing Limited. 20/22 Bedfordbury, LONDON WC2N 48T. MALTA. Binders are obtainable through your local newsagent price £3.95. In case of difficulty write to HOME COMPUTER ADVANCED COURSE BINDERS, Miller (Mata) Ltd, M.A. Vassalii Street, Valletta, Malta. AUSTRALLA: For details of how to obtain your binders see inserts in early issues or write to HOME COMPUTER ADVANCED COURSE BINDERS, Sorte Standers Structure, St. Leonark, ISW 2065. The binders supplied are those illustrated in the magazine. NEW ZEALAND: Binders are available through your local newsagent or form HOME COMPUTER ADVANCED COURSE BINDERS, Groid & Goth (NZ) Ltd, PD 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 any time when circumstances dictate. Binders geniced 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. *Over DutYTCRADANDERS* (Intermag) 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 stat

COVER PHOTOGRAPHY BY IAN MCKINNELL