EDUCATIONAL SOFTWARE AND BOOKS FROM ACORNSOFT

WINTER 1984/85

This catalogue is a compilation of those Acornsoft products which are suitable for use in education, from infant to further and higher education levels. Acornsoft has established a wide range of products developed by different specialised departments within the Company. The increasingly diverse applications of the BBC Microcomputer in educational establishments have led to a demand for software for use in several departments.

For example, word processors, spreadsheets, programming languages and authoring languages are used in commercial courses, economics, computer science, computer awareness and across the primary school curriculum.

It is hoped that all teachers will find something in this catalogue to assist them in their teaching and, as new products become available, they will benefit from Acornsoft's experience in supporting the BBC Microcomputer and Acorn Electron.

Details are also included in this catalogue of software ROMs which are offered in bulk to educational establishments at substantial discounts.

By looking at our special symbols, you can tell in what form the programs are available:

on cassette
on 40 track disc
on dual format 40/80 track disc
via plug-in Read Only Memory (ROM) which can be specially fitted by your dealer*
requires 6502 Second Processor

* To use ROM software your computer should be fitted with the 1.0 machine operating system, or later versions. This will be supplied free of charge if required.
† All software is suitable for use with the BBC Microcomputer Model B unless otherwise stated.

Acornsoft Education publish a range of programs for pupils of primary and secondary age. The department is staffed by fully qualified and experienced teachers who are concerned with the evaluation and publication of educational software for use across the curriculum and by children of all ages and ability.

Much of the software has been developed by specialist practising teachers and Acornsoft Education are always willing to evaluate educational software with a view to possible publication.

Chemical Analysis *Age range 15-18 years*

These three programs are designed to provide practice in identifying chemical elements, inorganic compounds, and organic groups. The programs come complete with a booklet containing instructions, and explanatory notes for each program.

ELEMENTS presents a series of mystery elements which the student can identify by performing tests selected from a menu of standard tests.

ORGANIC deals with organic compounds. By selecting standard tests from a menu the student can discover which functional group is present.

Chemical Simulations *Age range 15-18 years*

These three programs present simulations of standard experiments in A-level chemistry. The programs come complete with a booklet containing instructions and explanatory notes for each program.

IR provides an introduction to infra-red spectroscopy by presenting the spectra of some very simple organic compounds. The student works out the number of atoms of each element contained in one molecule of compound.

PH is a four-part simulation of the titration of acids against bases. Part 1 gives a basic review together with a graph plotting facility. Part 2 is a test on elementary theory and Part 3 is a test on the mathematical theory of pH curves. Part 4 sets graded random problems with model answers.

ORGANICAL is a simulation of an organic functional group analysis. By doing tests with selected reagents, the student can identify the compound. Functional group reactions are summarised in the Basic Review.
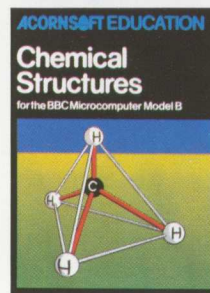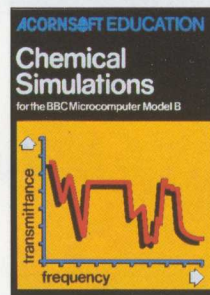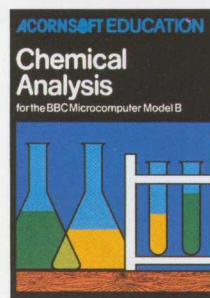
Chemical Structures *Age range 15-18 years*

These two programs encourage the student to learn about the formation of chemical compounds. A representation of bonding type or 3-D structures of molecules are drawn on the screen in response to the student's choice of elements. The programs come complete with a booklet containing instructions, and explanatory notes for each program.

In BONDING the student chooses two elements from the first 18 elements in the periodic table, one of which must be a non-metal. The computer decides whether the simplest compound formed by the two chosen elements is ionic or covalent and then proceeds to draw the structure showing the outer shells of electrons.

SHAPE explores the three-dimensional structures of molecules. As with BONDING, the computer draws the molecular structure of the compound formed by the two elements chosen by the student.

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EDUCATION

ACORNSOFT EDUCATION
Chemical Analysis
for the BBC Microcomputer Model B

ACORNSOFT EDUCATION
Chemical Simulations
for the BBC Microcomputer Model B

ACORNSOFT EDUCATION
Chemical Structures
for the BBC Microcomputer Model B

The Examiner *A content-free program for teachers*

Examiner allows the teacher, who has no prior knowledge of computers, to set up examination questions in the form of multiple choices. The date and the title of the set of questions are stored for future reference. You can have up to 40 questions in each exam sitting, and there is an optional time limit which you can set per question. The scores are automatically stored for future recall and you can choose to have the scores printed on the printer.

The teacher sets up the exam by specifying the number of questions in that particular sitting, the time limit, whether or not the questions are picked at random and whether to reveal the solutions.

There is also the facility for the teacher to create his or her own password and the students' personal numbers. The escape facility is disabled during the exam so that the student has to attempt all the questions set.

In addition to the data file of sample questions, the teacher can easily create his or her own sets of questions and save them onto a cassette. There is also the easy facility to add more or delete questions from the file and to display every question in the file.

Jars *Age range 7–13 years*

It is widely recognised by educationalists that practice with estimation gives a child a feel for mathematical principles, and Jars aims to present what are usually thought of as purely numerical problems in a visual way.

The program is in two parts, the first of which gives practice in estimating the volumes of liquids in jars. The child is asked to estimate the volume as a simple fraction, and is then asked to estimate the volume in absolute terms and also to work out how much more liquid is needed to fill the jar.

The second part of the program is an exercise in simple arithmetic. Using the computer keys, two jars can be filled or emptied and liquid poured from one to the other until one of the jars contains an amount specified by the computer. Problems are divided into two levels of difficulty.

Exercises can be arranged by the teacher to give a progression of problems in order of difficulty. Success, partial success or failure is noted by a scoring system and suitable comments. Sound effects can be switched off if not required.

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EDUCATION

ACORNSOFT EDUCATION

The Examiner
for the BBC Microcomputer Model B

ACORNSOFT EDUCATION

Jars
for the BBC Microcomputer Model B

Sentence Sequencing *Age range 7-9 years* 🔲 🔲

This pack consists of two programs designed to test the child's ability to order material in a logical sequence.

Each program presents a series of jumbled sentences which must be re-arranged to form a nursery rhyme or a logical sequence. Sentences to be moved are first located and selected using the cursor up and cursor down keys, and are then moved to the correct position.

Sentence Sequencing is also available for the Acorn Electron.

German Version - Satzsalat
A version of Sentence Sequencing is available, wholly translated into German, which would be suitable for use in teaching the German language. The documentation and commands are written in German but the use of the cursor is as outlined above.

Temperature Control Simulation *Age range 14-18 years* 🔲 🔲
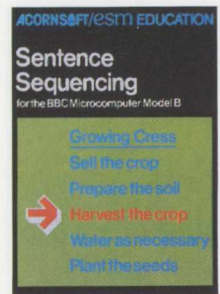
This program provides graphical representations showing how an imaginary cyclist's temperature is controlled under varying conditions.

The student can investigate the effect of varying three parameters: air temperature, exercise rate and sweating efficiency. In response to the prevailing conditions the program shows, graphically or numerically, how the cyclist is regulating body temperature in terms of the following criteria: skin temperature, heat loss, radiation loss, sweat loss, vasodilation and shivering rate.

The necessary biological background is fully explained in the accompanying 22 page booklet. A function key strip is also included in the package.

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ACORNSOFT/esm EDUCATION

Word Hunt
for the BBC Microcomputer Models A and B

TEAPOT
APE
POET
TAP

ACORNSOFT/esm EDUCATION

Word Sequencing
for the BBC Microcomputer Models A and B

COBRAS
DEADLY
→ ARE
SNAKES

Word Hunt *For all age groups*

Word Hunt will provide teachers with an endless source of instructive-but-fun teaching material. Each Word Hunt program contains a list of nine words. Select one word from each group, and then to try to create as many smaller words as possible from the selected word.

WORD HUNT 1 – words included are Abroad, Arctic, Earth, Europe, Foreign, Ocean, Orbit, Travel, Water.
WORD HUNT 2 – words included are Flower, Forest, Great, Hexagon, Island, Plough, Primary, Think, Weight.
WORD HUNT 3 – words included are Delight, Direct, Gifted, Heather, Holiday, Insect, Machine, Magnify, Teapot.
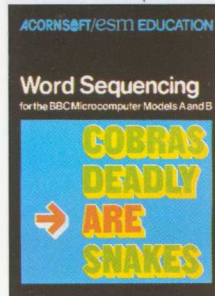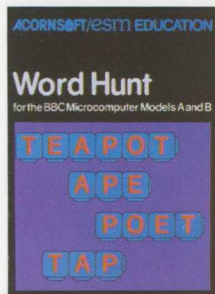WORD HUNT 4 – words included are Careful, Castle, Fertile, Foreman, Fragile, General, Glacier, Harvest, Orange.

The documentation provides detail of the procedure to enable changes to be made in the list of 'allowed words'.

Word Hunt is also available for the Acorn Electron.

German Version – Wort-Schatzsuche
A version of Word Hunt is available, wholly translated into German, which would be suitable for use in teaching the German language. The documentation and commands are written in German but the use of the cursor is as outlined above.

Word Sequencing *Age range 5–8 years*

This series of programs presents exercises which help children develop an awareness of sentence structure. In each program the child is asked to put words in the correct order to make up whole sentences or phrases.

In each program a series of jumbled words must be arranged to form either a proverb, nursery rhyme title or a sensible sentence. Words are first located and selected using the cursor keys and can then be moved to the correct position.

Word Sequencing is also available for the Acorn Electron.

German Version – Wortsalat
A version of Word Sequencing is available, wholly translated into German, which would be suitable for use in teaching the German language. The documentation and commands are written in German but the use of the cursor is as outlined above.

Microtext *For all ages*

Developed by the National Physical Laboratory
Microtext can be used to create almost any interactive application which presents text or diagrams to individuals or groups and prompts for a reply. It can be used both to obtain information from the user in a 'form-filling' or interviewing situation, and to give information to the user in an instructional context.

Obtaining information
Microtext can be used for writing interactive questionnaires in interviewing and form-filling applications. The answers can take the form of multiple-choice responses, numeric data, or plain text from the whole keyboard. The results of the interview can be shown in the form of a neat summary of each user.

Giving information
There are four main applications:
1 Education Microtext enables teachers to write their own computer-based teaching material, and exchange lessons with other teachers who may be using different computers. Microtext lessons can assess the student's ability, and adapt the level of presentation to his requirements. It is particularly appropriate for remedial teaching since it can be used to hold the student's attention and thoroughly explore his or her understanding of a topic. Microtext is also ideal for educational demonstrations for use in public displays. Information is presented to the user, and responses can be recorded for later analysis.
2 Training Microtext allows the expert in a field to design and write his or her own training material. This may be purely descriptive, or it can contain simulations, or if appropriate instruct the pupil in the use of external equipment. The summaries and management facilities will assist in the evaluation of training packages, and material can easily be amended as requirements change.
3 Information retrieval Microtext incorporates the capabilities of a Viewdata information system, but can considerably reduce search times by branching on keywords rather than relying on numeric menus.
4 Expert advice Microtext can guide a user through a complex external task, prompting for information when necessary, and giving expert advice. This technique can be used both for training with simulated problems, and as an expert assistant in real applications.
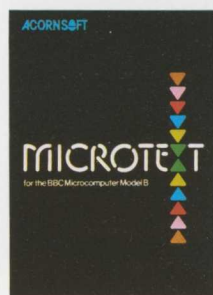
Using Microtext
The user can build up any number of 'frames', each containing text and/or graphics. A series of frames builds up to a complete module, whose maximum size depends upon the available memory. Each Microtext program can consist of more than one module and its size is therefore limited only by the capacity of the cassette or disc.

The pack contains the Microtext authoring system plus a comprehensive user guide. Also included are a set of demonstration programs, a summary card and a function key strip.

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Microtext Publishing System

Having written an application program in Microtext, an author may wish to supply the program to a number of users, or even publish the program commercially. In order that the program may be run on a computer, independently of Microtext, the author may copy the publishing system on to each user's disc or cassette so that the publishing system creates a run-time interpreter for the applications program. The publishing system has no Edit, Command, or Text modes and is therefore smaller than the full Microtext authoring system, freeing up to 4K of memory space for the program.

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The Microtext Publishing System is only available on licence from Acornsoft Education and the licence charge is dependent upon the use to which the applications programs will be put. Further details are available from Acornsoft Education, Betjeman House, 104 Hills Road, Cambridge, CB2 1LQ.

Computer Education in Schools (CES) was set up in 1968 to provide materials and training courses for the development of computer education in schools and colleges. Since then the group has established itself as one of the major curriculum development projects in the field. The team consists of qualified teachers with experience of computer education. Between 1969 and 1983 the project was a department within International Computers Limited. In October 1983 CES was taken over by Acorn Computers and is now a part of Acornsoft.

ACORN

CES

Living with Computers

*Living with Computers is an information technology awareness course
which introduces information technology and the impact of computers on
people's lives. This is achieved through a number of short stories, each
illustrating a particular aspect of the subject. No technical knowledge or
programming ability is assumed so that teachers of all disciplines will feel
competent to teach the course. Two pupils' books are available; each
supported by software, activity sheets and teachers' notes. The first book
offers a balanced short course; the second develops and adds to the
topics already covered. In this way the course is flexible enough to fit
different timetable constraints.*

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Computers, Information and You *Age range 11-13 years*

Computers, Information and You is set in a fictional town and examines
the possibilities opened up by new technology for the people living in the
town. An interesting series of real-life situations is used for illustration.
The book opens with an ambulance rushing to an emergency: the
compilation of the pop charts is examined; the difficulties of three-
dimensional design as experienced by a town planner are described; and
an amusing account is given of a clothes shop manager's approach to
forecasting sales. Each of these, and many more, applications is
described in story form which highlights where the human decisions
involved can be aided by computer technology.

A problem-solving approach is adopted throughout this first book –
the fictitious firm of Ramley, Romley and Promley (the 'problem solvers')
being brought in to assess whether a computer could help in a number of
situations. Chapters on the power and the versatility of the computer are
interspersed with others warning about the social implications of, for
example, computerised files and robots. Further sections deal with the
nature of information, the importance of selecting the necessary
information for a particular task and how data is processed.

Software
A package of six programs has been written to accompany Computers,
Information and You.
EMERG: Program EMERG shows how quickly computers work and how
memory is used in the solution of complex problems.
DAIRY: Program DAIRY deals with the processing of data. Pupils see how
the data relating to customers on a particular daily milk round can be
processed to provide information in a variety of forms.
CARGO: Program CARGO introduces pupils to the idea of a stored
program of instructions. Programming is not addressed in a formal
manner in the course.
VEHICLE: Program VEHICLE illustrates the principles of information
retrieval. The program contains a 'file' of over 170 vehicle records which
may be searched selectively by means of simple enquiries.

FASHION: A simple but engrossing business game which shows the computer's ability to display information in both graphical and tabular form.

HOUSES: Program HOUSES demonstrates how the computer can display images as well as text. The program relates to a chapter describing the application of computer-aided design.

Teachers' notes and activity sheets

The teachers' pack for Computers, Information and You contains software activity sheets (for duplication) to guide the pupils through the use of the programs, and a bound book of notes which provides the non-specialist teacher with extra information and solutions to exercises in the pupils' book and activity sheets.

The Information Age *Age range 11-13 years*

The Information Age takes a more global look at information technology and its wider social aspects, expanding on some of the applications in Computers, Information and You. It opens by considering the home as an information centre with information passing in and out via viewdata, cable TV and electronic mail. The use of money is examined from barter, through the banking system and electronic funds transfer, to the cashless society. Communication is dealt with in a similar manner with reference to networks, fibre optics and satellites. Further sections examine the working lives of people such as doctors, farm workers, and office workers, and look at the enhanced leisure facilities provided by the information age both now and in the future.

   Examples here include the opportunities afforded by the microcomputer for creative work in the fields of music, art and literature and the development of interactive video. Three items of software accompany The Information Age.

Software

A package of three programs has been written to accompany The Information Age.

TELETEXT: Pupils are guided through the process of designing and creating their own teletext pages. These will be edited and updated throughout the course.

EDITEXT: A simple-to-use word processing program to illustrate the common features of commercial word processors.

MOVIE: A user-friendly program to enable pupils to create animated picture sequences.

ACORN

CES

Teachers' notes and activity sheets

The teachers' pack for The Information Age contains software activity sheets (for duplication) to guide the pupils through the use of the programs, and a bound book of notes which provides the non-specialist teacher with extra information and solutions to exercises in the pupils' book and activity sheets.

Licensing of Acorn CES software

The software packages to accompany Computers, Information and You, and The Information Age are available on licence direct from CES. The software will run on cassette and disc based systems as well as Econet levels 1 and 2.

There are two forms of licence:
(1) The LEA licence which is supplied to advisers in Local Education Authorities to enable copies to be made of the software for distribution to schools, colleges, etc within the LEA.
(2) The institutional licence which enables the software to be used within a named educational establishment.
Details of licence charges and availability may be obtained from Acorn CES, Betjeman House, 104 Hills Road, Cambridge CB2 1LQ.

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VIEW is a word processing package produced by Acornsoft for professional use. Schools and colleges are incorporating the use of word processors in a range of subjects and disciplines including English, commercial courses, economics and office practice. The View family provides a ready made set of commercial software which includes ViewSheet, a powerful spreadsheet and ViewIndex which creates an index for documents produced with VIEW.

Details are contained in this catalogue of discounts available for bulk purchases of ROMs by educational establishments.

VIEW

VIEW offers all the facilities of a professional word processor. Important features include the choice between 40 and 80 column modes, insert or overtype editing modes, the flexible search and replace commands, automatic page numbering, macros and global or selective formatting. VIEW supports bold and underlined type, microspacing and has a facility for editing files larger than the text area would normally allow.

VIEW has been designed for the convenience of businesses and individuals alike. For the less experienced user, VIEW is straightforward and easy to use; no prior knowledge of word processing is necessary, and the accompanying manuals assume only that the user is familiar with the operation of a typewriter.

The VIEW package consists of a 16K ROM, the teaching manual Into VIEW, the reference manual VIEW Guide and a function key card.
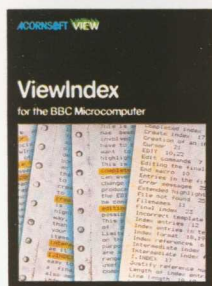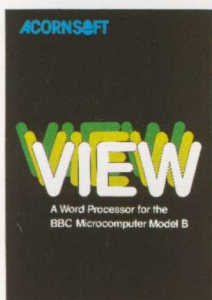
VIEW is also available for the Acorn Electron.

Printer
You can use any printer that is compatible with the BBC Microcomputer to print out from VIEW and you can print the text in memory or from cassette or disc.

Some printers offer special facilities such as bold or underline; to use these facilities you will need a 'printer driver' program. See the VIEW Printer Driver Generator package.

Installation
We recommend that your local dealer should install the VIEW ROM in your computer. However, ROM-fitting instructions are included in the pack.

VIEW FAMILY

AND DATABASE

Hi-VIEW

6502 40/80

This is a special version of the VIEW word processor, designed for use on the BBC Microcomputer with the 6502 Second Processor. Available on disc, it offers 47K of text memory, a useful addition for those users of the 6502 Second Processor who need more text space than is normally available with the VIEW ROM.

ViewIndex

40/80

A comprehensive and accurate index adds the professional touch to your documents. This program automatically creates the index for you, sorts it into alphabetical order and notes each page or section number where the reference occurs. While you are using VIEW, you simply mark the words or phrases within the text which are to appear in the index or you can do this after you have written the file. Optional facilities allow you to edit the index and format it as you wish. A user guide provides clear instructions on how to use the system.

ViewSheet

ViewSheet is an electronic worksheet, the numerical equivalent to a word processor on your BBC Microcomputer. The ViewSheet is 255 columns wide and 255 rows deep/long, the display showing small sections of the sheet at a time.

ViewSheet works in any screen mode. Figures and formulae can be typed on to the sheet, and in whatever format you please. You can redefine row and column headings and insert and delete rows and columns. Values can be formatted in pounds and pence, ranged right or left, and with up to nine decimal places.

ViewSheet distinguishes between values, labels (usually headings), and formulae. A formula can relate to any other sheet position such that if you change any value, all other values depending on it will also change.

Sections of the sheet, described as 'windows', can be printed out or arranged as required on the screen.

ViewSheet can be used with any printer that works with the BBC Microcomputer, and can also be used with any of the printer drivers in the VIEW Printer Driver Generator package to give bold and underlined printing.

ViewSheet files can also be converted into VIEW files, and data may be transferred between BASIC (and other languages) and ViewSheet, and between worksheets.

Operations supported by ViewSheet are: addition, subtraction, multiplication, division, exponentiation and bracketed operations.

Functions supported are: ABS, ACS, ASN, SIN, SGN, RAD, ATN, COS, DEG, EXP, INT, LN, LOG, PI, SQR, TAN, MIN, AVERAGE, MAX, CHOOSE, LOOKUP, IF, ROW, COL.

ViewSheet is also available for the Acorn Electron.
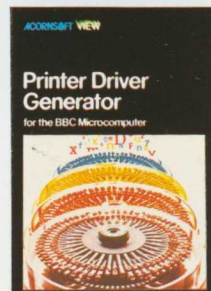
Printer Driver Generator

This program enables you to generate a standard interface between VIEW and the special facilities of any printer. Using a simple question and answer procedure, the Generator creates the appropriate driver, enabling you to take advantage of the special effects of your printer. Typically, these include superscripts, subscripts, bold, underline, italics and extended character sets. The Screen Driver program allows you to simulate a print-out on the screen. MPRINT enables you to print several files at once and to include the contents of memory among them.

The Printer Driver Generator can be used with ViewSheet to produce bold and underline effects. The accompanying manual provides a step-by-step guide to creating your own drivers, and gives some useful examples to show you how it's done.

The Printer Driver Generator package is sold complete with ready-made printer drivers for the following printers: Epson FX80, Olivetti JP101, Ricoh Flowriter 1600, Juki 6100 and Facit 8105.

VIEW FAMILY

AND DATABASE

Database

Acornsoft Database enables you to use your BBC Microcomputer to store, retrieve and analyse large quantities of information quickly and easily. On disc, Database has a capacity limited by that of the disc and on cassette by the amount of memory remaining. This allows 32 fields per record and up to 240 characters per field.

A flexible search facility enables you to look for information either numerically or by pattern matching, and this can then be sorted into alphabetical or numerical order. The search facility can be used on complete files or subsets of files.

The program also caters for statistical analysis: you can obtain the sum, mean and standard deviation of any numerical fields in the complete file or subset.

Also included is a facility to allow you to convert Acornsoft Database files to VIEW files, and you can use records from the Database as parameters for VIEW macros.

Database is also available for the Acorn Electron.

VIEW FAMILY

AND DATABASE

Acornsoft now has available a complete set of the principal languages which are used in primary schools, secondary schools and in further and higher education. Logo, COMAL, ISO-Pascal, FORTH and BCPL are all available as ROM versions for which bulk purchasing facilities are available.

All the packages are accompanied by comprehensive documentation and, in some cases, function key strips and reference cards are also included.

Turtle Graphics and S-Pascal offer subsets of Logo and ISO-Pascal respectively to provide an introduction to these powerful languages.

ACORNSOFT

A full implementation in
two language ROMs
for the BBC Microcomputer Model B

ACORNSOFT

COMAL

A structured language
for the
BBC Microcomputer Model B

ACORNSOFT

ISO-Pascal

A full implementation in two language
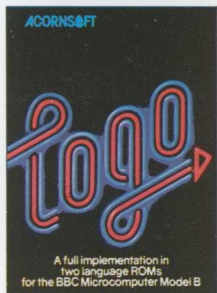ROMs for the BBC Microcomputer Model B

Logo

Logo is designed to introduce children and students to elementary programming techniques. Acornsoft Logo is a full implementation of Logo, containing all the standard turtle graphics and list processing functions. Additional features include changeable screen mode allowing multi-colour graphics, sounds commands for four-part harmonies, multiple screen turtles which can be independently controlled, split and variable sized graphics and text windows, and a 'NIB' feature to plot solid or dotted lines. These facilities can be used in a wide range of applications, and fully exploit the power of the graphics of the BBC Microcomputer.

The Acornsoft Logo package consists of the Logo interpreter on two 16K ROMs, a disc/cassette containing the floor turtle drivers and other utilities, two easy-to-follow manuals and a reference card.

Logo is also available for the Acorn Electron.

COMAL

Acornsoft COMAL is a block-structured language, similar to Pascal and BASIC, selecting the better features of both. It includes a number of features which encourage well-structured programming and facilitate debugging and maintenance of software. Reals, integers, Booleans and strings are all supported, as well as multi-dimensional arrays, and file I/O is simplified by extensive file handling facilities. This general-purpose language has been chosen as the educational standard in many European countries.
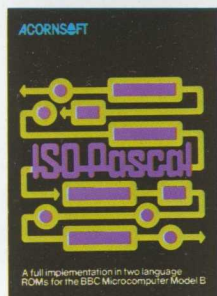
COMAL is supplied on ROM and comes with a comprehensive user guide, which contains a tutorial section for beginners and a reference section for more experienced BASIC or Pascal users.

ISO-Pascal

This is a full implementation of Pascal to the ISO standard, with extensions to take advantage of the BBC Microcomputer's special facilities (sound, graphics, etc) approved by ISO. It is the natural language for large-scale programming, compiling to a compact intermediate code, which is then interpreted, to give a performance superior to interpreted BASIC, without the complexities of machine code.

It is ideal for teaching at all levels, and is the natural successor to S-Pascal for advanced students. The pack comes with a comprehensive user guide, and an introduction to Pascal (both available separately).

FORTH

Acornsoft FORTH is a complete implementation of the FORTH language to the 1979 standard specification for the BBC Microcomputer. FORTH is a compiled language, so programs run very fast (typically five times faster than BASIC).

The cassette or disc includes a FORTH dictionary and compiler, a tape interface/screen editor, a macro-assembler, and a high-resolution graphics demonstration.

In addition to a comprehensive set of arithmetic and stack operators, control transfer words and defining words, Acornsoft FORTH includes full graphics commands and the more advanced features for defining the actions of defining words themselves. This opens the door to 'meta-FORTH' and user-defined FORTH-based languages.

FORTH is also available for the Acorn Electron.

PROGRAMMING

LANGUAGES

BCPL

BCPL is one of the most flexible of modern structured languages and is easy to learn. BCPL is particularly good at handling input and output, and is thus often used to write utility programs. It is also used to develop games programs and commercial packages, to develop system software such as screen editors, to write control systems, and to produce programs which would otherwise need to be written in assembler.

The Acornsoft BCPL system consists of the BCPL language ROM, a 40/80 track disc containing the BCPL compiler, a screen editor, a 6502 assembler, other utilities and program development aids, and some examples of BCPL code. A comprehensive 450-page user guide is included in the package.

The BCPL language ROM can be used with either a disc or an Econet filing system, and automatically takes advantage of the 6502 Second Processor if fitted, claiming all available memory.

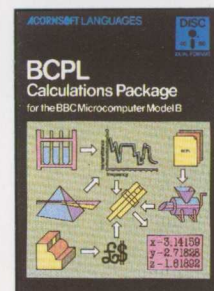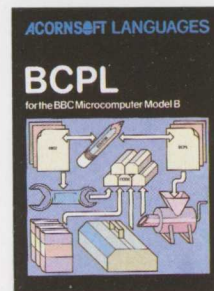### BCPL Calculations Package

This package is designed for use with the Acornsoft BCPL system and familiarity with this system is assumed. The package supports floating point, fixed point and fast integer calculations, which meet the requirements of a wide range of applications.

The calculations package is provided on disc, containing the BCPL calculation files and some example files. A comprehensive user guide is included.

BCPL Stand Alone Generator [40/80]

This package greatly increases the usefulness of the BCPL system by permitting easy distribution of BCPL programs. It converts developed programs into stand alone programs which can be run on any BBC Microcomputer, even without the BCPL language ROM. It can also be used to develop stand alone programs for other 6502-based computers.

Stand alone programs can be produced either as files, stored on any suitable medium, or as language ROMs. Conversion of programs to run in a stand alone environment is very straightforward and very few, if any, modifications are required.

The package comprises a disc containing the utility programs, a comprehensive user guide, and a licence allowing distribution of up to 100 copies of a program developed using this system. A separate licence permitting unlimited distribution is available.
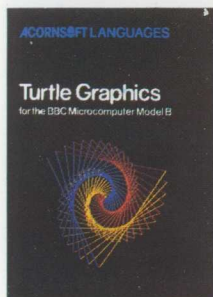
Turtle Graphics [oo] [40/80]

Turtle Graphics is designed as an introductory package for teaching geometry, mathematics and graphics at an elementary level.

The interpreter supports a subset of the full Logo implementation featuring only the simpler turtle graphics facilities. The facilities provided are powerful enough to allow development of fairly complex programs, and include multiple parameter procedures, looping primitives, elementary and transcendental functions and keyword abbreviation. A user manual is included in the pack.

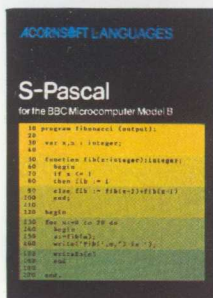Turtle Graphics is also available for the Acorn Electron.

S-Pascal [oo] [40/80]

A compiler for a subset of Pascal – one of the most popular computer languages in use today.

The Acornsoft implementation supports integer, character and Boolean types, as well as multi-dimensional arrays. Like the full Pascal implementation it is block-structured and completely recursive. Error messages are comprehensive, aiding in teaching and debugging. It is aimed at the educational user, particularly as an introduction to structured programming languages, where the power of the full Pascal implementation is not required. Since S-Pascal compiles to 6502 machine code it is also eminently suitable for writing small fast utilities. A comprehensive user guide is included in the pack. (The user guide is also available separately.)

S-Pascal is also available for the Acorn Electron.

The Home Education range has been designed to help people of all ages to enjoy and control their learning. The fascinating activities, facilities and simulations in the range stimulate interest and concentration. The success of many of these programs has been well established, while those which are more recent include the very latest developments in educational software.

Spooky Manor *Age range 7 and upwards*

For over 100 years the old manor house has been empty. It is said to be haunted and to contain hidden treasure. One day you set out with some friends to explore the house and solve the mystery. While you are looking around the house you hear the front door slam and find that you are shut inside the manor with night approaching!

Spooky Manor is an adventure game for up to four players that encourages planning and logical thinking. The game provides stimulus for discussion and decision making and, although it can be played competitively, the advantages of co-operation quickly become apparent.

Spooky Manor is designed for use with the BBC Microcomputer. Up to four Microwriter Quinkey keyboards can be used with OS 1.2.

ABC *Age range 7 and upwards*

ABC is a writing tool designed to meet the needs of young writers. It is easily operated and quickly understood. For example, blocks of text can be moved using the 'tug', which actually tows words from one place to another. Users can begin writing immediately and then move on to ABC's more sophisticated features whenever they wish.

ABC offers three types of screen displays: 'write', 'read and write' and the 'slate'. Switching between the displays is a simple matter of pressing the red function keys. Text can be printed, displayed, edited and stored. Experienced word processors will appreciate the facilities for word wrap-around, right-justification, centering and formatting.
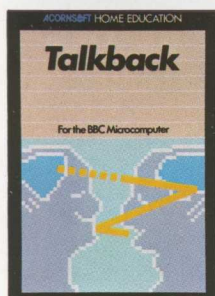
Talkback *Age range 10 and upwards*

Talkback is an educational game inspired by a famous computer program called ELIZA in which users held 'conversations' with the computer by typing sentences, and the program responded by displaying sentences that were apparently replies.

Talkback is not just another version of ELIZA. It has two major facilities which add to its educational potential. Firstly, it allows users to create their own computer 'characters' capable of holding simple conversations on the screen. Secondly, it enables users to make any one of the characters they have created 'talk' with any other one, so that users may observe the conversation, print it out or even join in!

The process of creating 'computer characters' with Talkback is both entertaining and demanding, providing, in an amusing context, valuable lessons in both English and computer literacy.

Talkback is also available for the Acorn Electron.

Workshop *Age range 3 and upwards* [oo] [40/80]

Workshop is an invitation to play with thinking. It provides an unusual environment in which the user discovers by experiment what each of the program's amazing 'machines' can do with simple geometrical shapes.

In exploring the functions of these strange machines, creative thinking can be as effective as a logical approach, though users who wish to review their strategies will enjoy the lively replay sequences. The program uses a minimal number of words, the function keys have picture-labels and each machine generates its own peculiar sounds, so Workshop will serve as an amusing and imaginative introduction to the computer.
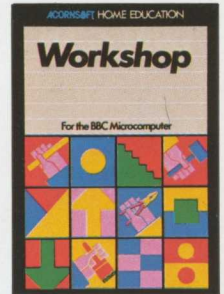
Workshop is also available for the Acorn Electron.

Tree of Knowledge *Age range 8 and upwards* [oo] [40/80]

Tree of Knowledge is an interactive program which illustrates some of the more imaginative aspects of computing. The user first educates the computer, building up a branching data structure by answering and asking questions, and the resulting database is then used for information retrieval by deduction and logic. Databases can be saved and loaded from within the program, and two sample databases are supplied with the pack.
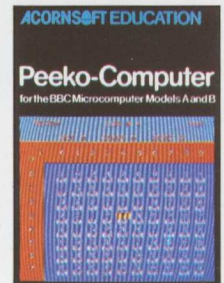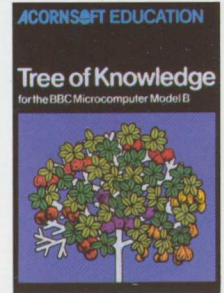
Tree of Knowledge is also available for the Acorn Electron.

Peeko-Computer *Age range 12 and upwards* [oo] [40/80]

Peeko-Computer simulates the operation of a simplified microcomputer in order to demonstrate the fundamentals of machine-code programming. The Peeko-Computer has 20 easily-learned instructions, and the display gives a visual analogy of the operation of a real microcomputer. Programs can be entered, single-stepped or run, with the memory and register contents being displayed at every step. To aid comprehension each instruction mnemonic is displayed as it is encountered.

Peeko-Computer comes complete with a 16-page instruction manual including exercises and examples, and includes five demonstration programs.

Peeko-Computer is also suitable for use with the BBC Microcomputer Model A and is available for the Acorn Electron.

ACORNSOFT

HOME EDUCATION

ACORNSOFT HOME EDUCATION
Workshop
For the BBC Microcomputer

ACORNSOFT EDUCATION
Tree of Knowledge
for the BBC Microcomputer Model B

ACORNSOFT EDUCATION
Peeko-Computer
for the BBC Microcomputer Models A and B

Business Games *Age range 12 and upwards* [oo] [40/80]

Two educational games designed for economics, business, general studies and general interest.

In STOKMARK one to eight players compete in buying and selling shares. The first to turn his or her initial capital of £1200 into £5000 is the winner. The screen displays information about shares such as you would find in the City pages of newspapers: prices, dividends, yields and price/earnings ratio.
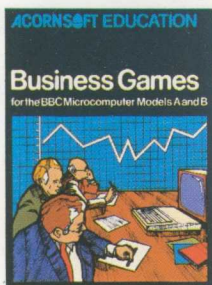
TELEMARK is a business game based upon making and selling televisions, the objective being to make the largest total profit or to win more than half the total market for televisions.

By playing STOKMARK and TELEMARK the participants learn the significance of financial terms such as purchase or sale of shares, dividends, yield, price to earnings ratio, overheads and depreciation.

Business Games is also suitable for use with the BBC Microcomputer Model A and is available for the Acorn Electron.

ACORNSOFT EDUCATION

Business Games
for the BBC Microcomputer Models A and B