THE ACORN GUIDE TO < T H E</td> M I C R O > AND MORE.

HOW TO UNTANGLE THE IN'S AND OUT'S. WHAT TO LOOK FOR. THE FAMILY MICRO. THE BUSINESS MICRO. FINDING YOUR WAY ROUND THE SOFTWARE JUNGLE. GAMES AND BEYOND. HOW THE MICRO CAN GROW. A LOOK AT THE FUTURE.



A recent report by one of this country's leading high street microcomputer suppliers revealed that Britain was leading the World in home computer sales. The report estimated that 1985 would see more than 1.5 million home computers being purchased, yet why should this be, when in countries like the USA the sale of such computers is actually falling?

One of the explanations for this phenomenon is that in this country the "micro revolution" has been based upon a far more steady foundation, thanks to the enthusiasm with which schools and other educational establishments have accepted computers. Whereas in other countries a family's first encounter with a microcomputer has been when the bread-winner has been confronted with one of the machines on his - or her - desk at work and told "to get on with it." In this country the trend has been for the children to encounter them first in the confines of their classroom.

Thanks to schemes like the Government's "Micros In Schools" project, a whole generation of youngsters many still at primary school - are growing up with microcomputers. Not only do they understand how to operate them, but they also recognise both the capabilities and limitations of computers. The result is that they are not frightened by computers, but regard them instead as useful tools which will soon come to play as important a part in all our everyday lives as television and the telephone do today.

SOON me micros will be available that are capable of automatically controlling your home's central heating, lighting and burglar alarm systems - and even opening the catflap at a pre-settime!

Children are now seeing computers as something more than just clever games machines. Not only that, but their enthusiasm is catching on with their parents - at home ... and at work. Slowly but surely we are all growing up with computer technology. Hence the increasing demand for machines, and hence the continuing growth of the home computer market.

One company which has been at the forefront of this revolution from the very beginning in this country is Acorn Computers, the manufacturers of the impressive Electron microcomputer and its famous "big brother" the BBC Micro...

he Electron is the latest home computer to come from Acorn Computers, the manufacturer of the BBC Micro. It makes an ideal choice for a beginner and offers superb value for money. It is also easy to use and, like its stablemate, is capable of expansion into a much more powerful system.

For learning about computing and having a lot of fun at the same time, the Electron is hard to beat. But it is much more than just a toy. For example, owing to significant advances in the design of certain electronic components - known as "uncommitted logic arrays" - the Electron has a great many features normally only found in more expensive business and educational computers - such as high resolution graphics. The Electron also has an impressive "processing speed" - which can possibly be best understood as the time it takes the computer to "think." According to "benchmark tests" recently conducted by an independent computer magazine, the Electron is not only far faster than most of its home computer competitors, but also leaves behind a lot of full-size business computers costing thousands of pounds.

Looking at the Electron in more detail, everything about it indicates that it is a machine with a future. Its tough case holds a full-size keyboard with the professional feel of an electric typewriter. It has ten "user definable" keys (see the keyboard photograph for what these do) and most of its ordinary



In January 1985, the highly successful YTV series "Me and My Micro" will be repeated on Channel 4. Not surprisingly, the Electron was picked by YTV as one of the main stars of the show and the presenter Fred Harris will show you step by step how to program your Electron.

"Me and My Micro" assumes no previous knowledge of micros and is an invaluable aid to help you make the most of your Electron.

Indeed you can buy a YTV Electron Start-up pack developed for beginners, it comes complete with a data recorder, software and a 'Me and My Micro' book.

keys can be used to produce command words with a single keystroke, thereby greatly simplifying programming.

Another advantage of the Electron is that because it uses BBC BASIC. it will enable the novice to develop good programming habits that will last a lifetime.

Looking at what goes on inside the Electron, it is worth noting that it has an extensive Machine Operating System. Apart from controlling the connections with the tape cassette recorder and television screen connected to the machine, this system also incorporates a large number of graphics and sound commands. Thus,

whereas with other machines it is often necessary to work quite hard just to draw a few simple lines and triangles, with the Electron it is very easy to create both sounds and pictures.

So much for what the Electron can do now, but what about the future?

As was remarked in the introduction to this article, the last thing you want to do is to buy a computer which turns out to only be of any use as a video games machine. And once outgrown has to be left on the shelf and replaced by a bigger machine. With the Electron that is one problem you will never have to face.

Thus Electron users will be able to

KNOW WHA **BEFORE YOU** S

When looking to buy a microcomputer for the first time, many people fall into the trap of only considering the "hardware," in otherwords the physical components that make up the machine. Undoubtedly this is very important, but no matter how good the hardware may be, it is of no use if there is no "software" available to go with it.

Similarly, as you become more familiar with your



The "USER DEFIN-ABLE" keys can be used to store 'mini' programs (like selecting colours.)

The "SHIFT" key will give you either "upper" or "lower" case characters - just like on a normal typewriter.



WILL YOUR MICRO WORK ON THE DAY?

There can be no worse feeling than buying your children a micro as a present and then finding with horror that when its eagerly connected up, it doesn't work. A nightmare? Inevitably, some micros are more prone to breakdown and reliability problems than others. And then there's the problem of getting it repaired – waiting sometimes for months before you see it again. As always the best solution is one of "prevention rather than cure." And it must come as a great relief to hear of one manufacturer's outstanding reliability. Dailey Associates, an independent testing house were commissioned by the BBC to do a survey on this quality control problem. And Acorn have come up trumps. Indeed Micro User says the research found that: "The BBC Micro is the most reliable computer on the market."

TO LOOK FOR ART LOOKING.

computer, you may want it to do more ambitious things. It is therefore also essential to opt for a system that is "expandable" so that it can grow with you through the addition of peripherals such as disc drives and printers.

With the Acorn Electron, excellent hardware, a wide software library and an exciting range of peripherals, combine to meet all these essential requirements.

The "RETURN" key is a way of instructing the computer that you have completed an instruction or action. The "DELETE" key is an important editing key and enables you to wipe out any incorrect characters you might have typed. The "BREAK" key enables you to temporarily stop all the action when you are in the middle of running the program.



add on a wide range of expansion options including wordprocessing, telecommunications, disc drives and Acorn's own local area networking system called ECONET. All these features are equally valuable to home computer enthusiasts, schools and small businessmen.

And you can start expanding your Electron now. As mentioned elsewhere, the starting point with the Electron is to record programs for permanent storage and to load existing programs into the computer's memory by means of a cassette recorder. Almost any standard audio cassette recorder will do, or else you can use Acorn Computers' own Data Recorder. But there is no need to stop there.

Already available is the Plus-1 expansion box which provides, amongst other things, a printer connection, an interface to joysticks, and provision for inserting "ROM" cartridges. ROM cartridges incidentally are an alternative to cassettes for loading software programs into the computer, taking seconds rather than minutes to do the job. There is a further major enhancement - the Plus-3 expansion module. This contains a built in 3.5" compact disc drive, along with all the necessary software and interfacing electronics, within an L-shaped box which fits onto the back of the Electron. There is also the facility to add a further disc drive should you require it.

By using the Plus-3, programs can be loaded almost instantaneously, and intermediate results (such as text from a wordprocessor or figures from a spreadsheet program) can be saved or loaded at will. The Plus-3 by the



way has been designed to be fully compatible with the Plus-1 already available and other expansion boxes to be announced. They are a permanent addition to the system so there is no fuddly assembly and reassembly work everytime a different module is used.

Competitively priced. Easy to use. Compatible with normal domestic appliances – such as a television set. Possessing the characteristics of a professional computer. Good for entertainment purposes. Good for



Computers are capable of performing very clever tasks, but before they can do this they have to be given their instructions. However, we have to communicate in a way they understand. To get around this problem computer scientists have over the years developed a number of different "computer languages." Some of these languages are very simple, whereas others are highly technical, but they do all have one thing in common in that they use English-like phrases to make the programming of understandable instructions into the computer more straightforward.

Of all the languages currently available undoubtedly the most easy to learn – and incidentally probably the most popular in this country – is BBC BASIC, the language the Electron uses. The language abounds with simple command phrases such as "RUN," "DRAW" and "PRINT," making it very easy to master. Not only that, but because BBC BASIC is rapidly becoming the standard in British schools, most children will feel athome with an Electron almost as soon as they lay their hands on one.

educational purposes. Good at home and at work. And capable of major upgrading and expansion. Those are just some of the merits the Electron possesses.

Furthermore Acorn are not alone in holding this high opinion. This is what the leading computer magazine "What Micro" had to say about the Electron after it was originally launched: "The Electron is bound to be compared to the BBC Micro. However it would be better compared to other micros in its price range... the Electron wins on all counts – it has better graphics, a better keyboard, faster and more versatile BASIC. We rate the Electron higher than any of its competition. Acorn had better be ready for a rush, there's going to be one."

SHOULD YOU GO STRAIGHT TO DISC DRIVE?

The question of whether or not to go straight to a disc drive system is a subject about which a lot of misunderstanding can arise. A disc drive enables you both to store larger amounts of data and to locate it again a lot more swiftly.

The Electron gives you the best of all possible worlds. You can start with the basic system which just uses a cassette. But, if your computing needs grow, so it can grow with you: with the addition of the Plus-3 disc drive module, which offers up to 320K of program or data storage.



To say that the BBC Micro is "the most respected microcomputer in the world" may sound a little far fetched, but its manufacturers Acorn Computers of Cambridge are confident that their claims are justified. Just look at the evidence...Since its launch in 1981 the machine has proved to be a resounding success within the educational establishment in this country. According to the Educational Computing Survey published in February 1984 over 74% of all schools and colleges were using the BBC Micro. Whilst under the Department of Trade & Industry's "Micros in Primary Schools Scheme" it accounts for 83% of all orders. In the circumstances it is hardly surprising that many of the 80,000 teachers in England and Wales who have been trained in the use of computers as part of the Microelectronics Education Programme have received their formal training on the BBC Micro.

It is not just schools-the BBC Micro was the machine chosen by the BBC to be at the heart of their Computer Literacy Project. Indeed so popular did that prove to be that earlier this year the BBC and Acorn Computers renewed that relationship for a further four years.

And then there is the small business sector of the economy, where, according to another recent survey, the BBC Micro is the market leader computer system for firms and companies employing less than 25 people.

Turning farther afield, at the last count the BBC Micro has sold a massive 400,000 units worldwide – and by worldwide Acorn do not just mean selling into one or two countries, but into a total of 23 different states around the globe.

SOON --- computer systems capable of controlling nearly all aspects of driving a car will be available - all you will have to do is steer it!

As to the future. Well, according to a recent statement issued by the company's Managing Director Mr. Chris Curry, in the months to come Acorn intends to concentrate resources on three main areas: enlarging the range of hardware expansion options; greatly expanding the software range; and developing new markets overseas. With over one-third of staff currently engaged in research and development work (making it in fact the largest such department of any microcomputer company in Europe), Acorn certainly looks in a good position to achieve these goals.

want to learn about microcomputing, the BBC Micro is the machine for you. To begin with it is a remarkably powerful machine, with - in the words of "Which Micro?" magazine - an "enormous potential for expansion." What is more the basic machine costs just £399 to buy.

So why is it so useful in the educational sphere? One reason is that it uses the BBC BASIC computer language. This is a version of the remarkably sophisticated BASIC which incorporates many features normally only found in more advanced – if you will excuse the jargon – "high level" computer languages. Yet at the same time it is straightforward enough that even children at primary school can rapidly get a grasp of it.

Another reason is that the BBC Micro can be used in connection with Acorn Computer's low-cost local area networking facility called ECONET. With this sytem it becomes possible to link up every BBC Micro in a class.

What this means in practice is that instead of having to buy expensive peripherals, like printers and disc drives for each micro, these resources can be shared. So that the teacher can load programs into all the computers through just one disc drive. Similarly, instead of prowling around the classroom the teacher can monitor progress from the master computer terminal on his, or her, desk.

Even once BBC BASIC has been mastered, progress up the learning curve does not have to halt. For instance, the operating system contains a facility which with the addition of a ROM, allows access through a simple instruction to other more complex computer languages, such as PASCAL, FORTH and LISP. Then again by adding the Z-80 additional processor module (see below) to the system, not only does the computer become able to run software programs employing the CP/M operating system, but you also get access to two further computer languages: Professional BASIC and CIS-COBOL, one of the leading computer languages to be used in commerce and industry.

The BBC Micro then, is an excellent educational machine for children of all ages from primary school level up to adulthood. Indeed many parents, wherever they work, are finding that

HOW MUCH DO YOU W

Home users, educational users, business users, scientific and engineering users. All of them want to be able to do different things with their computers. But just where do you draw the line?

Many home users grow out of the hobbyist/entertainment phase and find an application for their computers at work. Whilst on the educational front, having used a micro to master the rudiments of computer science, students soon start using them as tools to help them with research projects.

One thing these users have in common is that they are looking for a micro that not only allows them to expand their activities, but also permits them to develop in any direction they want. Without an exaggeration, probably no other machine can give you such a choice as the BBC Micro.

THE BBC TELETEXT ADAPTER – Allowing you to down-load, run and execute CEEFAX and ORACLE programs.

THE BBC PRESTEL ADAPTER – Enables you to access and store Prestel data including electronic mail.

THE ACORN BITSTIK

- a computer aided design tool enabling you to create colour and complex designs with ease. THE ACORN IEEE INTERFACE – allowing the computer to control up to 14 different industrial and scientific instruments.

THE ACORN JP101 SPARK JET PRINTER – permitting fast, clean and virtually noiseless printing. THE BBC 6502 SECOND PROCESSOR – providing an additional 64K bytes of Random Access Memory and up to 50% faster processing speeds.

The BBC MICRO a compact 64K microcomputer. THE BBC COLOUR MONITOR – providing a high quality screen image.

THE BBC Z-80 SECOND PROCESSOR – providing a further 64K of RAM and a package of CP/M business software. when they go on "computer awareness" courses as part of management training schemes, they are being taught on exactly the same type of machine – the BBC Micro – as their children are using at school or at home!

Acorn Computers have already been very keen to ensure that the BBC Micro has the capability to expand to meet the growing needs of all the people who use it. Hence the extensive range of peripherals that are available.

Possibly one of the best examples to have come to light recently of how the BBC Micro can help the outside world is to be seen in the field of medical general practice. Not long ago two general practitioners got together to work out how they could apply computer technology to make their busy practices easier and more

efficient to run. In doing so however they set themselves two rigid limitations. One was that the computer system to be used should be within the financial reach of any general practice in the country. And the other was that it should be easy to operate.

The two doctors quickly decided that the BBC Micro was the only computer which could meet their needs. Then, with the assistance of a couple of professional computer programmers, they wrote a series of software programs to enable the more repetitive paperwork generated by a general practice to be put onto a computer.

The result was a system that, amongst other things, could print out a patient's entire treatment record in seconds and produce repeat prescriptions on special computer forms available from the DHSS. Yet all the data on the computer – which is totally secure from prying eyes thanks to a special "password" system – can be updated at the touch of a few keys, and the system is so simple to operate that it can be mastered without even looking at an instruction book.

Possibly most significantly of all, Acorn Computers have been able to put together a complete package comprising of a BBC Micro, television monitor, printer, dual disc drive, wordprocessing and GP software for just £1999 all in – including VAT. If this medical breakthrough does not create a noticeable improvement in the National Health Service – nothing will. However, one thing is clear, the BBC Micro is certainly more than just kid's stuff.





In the inky blackness of space a new British satellite hurtles through its polar orbit, transmitting back to Earth exciting extra-terrestial data.

A good setting for a computer game – but also the true story of Surrey University's UOSAT-2 satellite.

With a million pound offer from NASA to launch their satellite free of charge – Surrey University had just five months to take their satellite from drawing board to launchpad.

What helped them achieve this exceptional feat? The BBC Micro – during all the development stages; to set and monitor the orbit – and now to decode UOSAT-2's transmissions for our scientists, universities and schools.

The microcomputer may now be seen as an everyday asset, but it can help achieve some out of this world results.



When the opening episodes of the BBC television series "The Computer Programme" burst onto our screens in 1982, it was the first programme to have seriously tackled the problem of computer education.

However viewers soon realised that this was far from the end of the BBC's commitment. The second series, "Making the Most of the Micro," formed just part of an extensive and well researched "Computer Literacy Project" by the BBC which also includes books, courses and software.

The BBC wanted one microcomputer to act as the focal point for the project. They looked at a number put forward by the British computer industry and then gave one their name. Two years later when reviewing the success of the project they made the same choice again – The BBC Microcomputer from Acom.

NT YOUR MICRO TO DO?

THE BBC DISC STORAGE SYSTEM single or dual units, permitting large amounts of data to be stored and accessed within seconds.

The BBC Micro is the only computer to have been selected for the Design Centre, London.



widest range and highest quality in software. And that is Acornsoft - the software publishing subsidiary of Acorn Computers.

ill you allow your micro computer to become just an expensive games machine? There's no doubt that if "Space Invaders" is all a computer has to offer, then the initial interest will soon wane. That's why Acornsoft have developed one of the widest ranges of software available for a home computer.



And its not just for teenagers and adults. There's a complete range of software specially developed for children aged from 4-5 upwards. All are fun to play and encourage the child to explore all the possibilities their BBC Micro or Electron can offer them. Almost without realising it, they will discover new capabilities and find themselves using rather than playing their machines - each at his or her own pace.

They can even learn elementary programming skills with Logo. Combining the basic concepts of geometry, language and numbers with

exciting and fascinating learning environment in which the child acquires elementary programming skills.

Having mastered the principles, you may well be encouraged to look for more advanced applications for the micro. To this end, Acornsoft also have a catalogue of additional computer languages, which enable you to significantly extend the power of your micro. There is ISO-Pascal, a full implementation of this renowned general

colourful displays, it provides an | purpose programming language. The increasingly popular FORTH, and LISP - a language ideally suitable for artificial intelligence research projects.

Your BBC Micro can be useful for learning other things at home too. You can discover Europe with Acornsoft's new LINKWORD language courses - currently available for French, German, Italian and Spanish.

The dynamic businessman or woman, busy mum or adventurous youngster can all quickly and easily

pick-up a vocabulary of around 350 words plus some basic grammar. To help you cope in restaurants, in an emergency, with travel arrangements, enjoying yourself on the beach-or just impressing your friends at school!



LINKWORD comes complete with program cassette and comprehensive instruction booklet, as well as an audio cassette to help with pronounciation. Overcoming many of the problems normally associated with learning a language in a hurry - LINKWORD is unique; it's fun - and it's effective.

The sheer potential of the BBC Micro has meant that it is now leading the field in the smaller business market. Acornsoft ensures that soft-

SUUN . . . computer-

ised "expert systems" will be available that will actually be able to advise you on problems - and even suggest what medicines you should take when you are ill!

HE MICRO A

A micro in the home has a lot to offer. It doesn't matter if you have never tackled computing before, both the BBC Micro and Electron are easy to use. Get to know it from the beginning - the User Guide will show you how. A "Welcome" cassette will let you have a glimpse of the types of program available. Put your micro to work and you will wonder how you ever did without it.

Control your diet with a 'Watch your Weight' program. First you must share your personal details with the computer, then the computer will help you choose an appropriate weight loss plan. It'll give you a balanced calorie count, suggest menus and it'll also keep a check on your progress.

Perhaps you see the micro as the answer to entertainment at your children's birthday parties? The Paul Daniels's Magic Show will certainly keep them enthralled as the computer reads minds, divines cards or even guesses people's birthdays!

There's a cocktail maker program with over 300 drinks to choose from, all of which are graphically illustrated to show you how to make the most of the ingredients you have.

You can even make your garden grow with Shirley Conran's Magic Garden: what flowers will grow successfuly in the shade of your apple tree? What shrub will survive your soil type and flower in the spring? Simply ask your micro!



ware support in no way lags behind and is continually developing powerful business packages.

There is the View Family for example – a range of programs that can run independently or build into a fully integrated system. VIEW – for professional wordprocessing, and incidentally the winner of this year's British Microcomputing Award for home software; ViewIndex – an automatic index generator; and ViewSheet – a financial spreadsheet program.



be in widespread use which will enable you to do all your shopping at home – from choosing the goods right through to paying for them. All you will have to do is tap the information into your computer!

VIEW will work with any type of printer and a printer driver generator is available which will allow you to use the special features many printers provide.

The prime concern of the smaller business is of course to save all too valuable time. The Acornsoft/Mirle software range has therefore been designed to help keep that paperwork



under control – and those invoices and mailshots going out of the door. Invoicing: Order Processing: Accounts Payable: Stock Control: Purchasing: Selective Mailing System. All purchasother.





Memos, appointment cards, scribbled telephone numbers, computerise them all with Desk Diary – a pack of two programs that will act as your address book and planner. Give yourself reminders about bills to be paid or appointments to be kept – but be warned – you'llnever have an excuse to forget a birthday again!

There is a program too, to help you see where your money goes – and perhaps make it go a bit further. Personal Money Management is designed specifically to help you control your personal finances more effectively.

And when you need to look ahead, Forecast can be used to predict the likely outcome of any intended financial project; and Capital can help you evaluate an investment proposal by calculating its likely returns.

able individually, they are easy-to-use, yet sophisticated tools to tackle specific office routines – fast.

Cropping up regularly throughout this supplement has been Acorn's involvement with education. Acornsoft support this involvement with ranges of educational software available suitable for the tots still at home as well as youngsters in primary and secondary schools.

They have been carefully structured to be both instructive and stimulating – and to make learning a little more entertaining.

Your BBC Micro or Electron and Acornsoft – they were made for each other.

THE SECURITY OF THE HARD-WARE AND SOFTWARE COMING FROM THE SAME COMPANY.

Why does it matter that computer hardware and software comes from the same source? There are a number of reasons.

Firstly, you know that the software you buy will have been specially written to take full advantage of any unique characteristics of the hardware – such as the high resolution graphics. And you also know that your supplier will be committed to the production of a full and regularly up-dated range of programs not dictated by market fads.

Last, but by no means least, you know there is never any likelihood of being caught in a software shortage with insufficient programs to meet demand – a problem which users of some other makes of computer have encountered from time to time.

Acorn Computers is the UK's most successful microcomputer company. They are here to stay – and so is their software arm Acornsoft, with a growing library of new program titles being released every month. If that's not security...

GAMES, GAMES GAMES!

This Christmas hundreds of BBC Micro and Electron computer users are going to be battling it out against alien forces in an attempt to become one of The Elite.

True, Elite is the latest computer game to be launched by Acornsoft, but it is certainly no ordinary game. Instead it transports you into the realms of Outer Space, where you have to show your skills as a

trader who roams the universe trying to make a living from buying and selling the cargo in your spacecraft. When you consider that you can ply your trade at any one of 2000 planets dotted around the eight galaxies. That your cargo can consist of anything from harmless



foodstuffs to contraband. That you have to use your wits to assess each planet's political climate and any other perils that may await when you approach. And that at any time you may be asked to perform "acts of considerable heroism and selfless courage" you get some idea of what playing Elite entails.

Acomsoft are pretty confident that few people will be able to win their way through the nine skill levels that take a player from the beginer's rank of "Harmless" up to become one of The Elite, and are offering a nationwide challenge – along with a chance to win a valuable prize – to all Electron and BBC Micro users.

Acornsoft are of course no newcomers to the world of computer games, and anyone looking for a little additonal entertainment this Christmas could do well to give their games software range some consideration.

There are plenty of arcade games like Meteors and Labyrinth in



which good "hand-to-eye" co-ordination is essential if your starship is not to be holed by meteorites, or the demon-flitterbugs are not to attack you in the maze. Alternatively there are simulation games like Aviator which puts you in the cockpit of a Spitfire fighter-plane and tests your ability as a pilot to the full. For those of you who like

to play games of a more conventional nature, why not challenge the family to play a computerised game of snooker or try your hand at Go, the board game which originated in China over 3000 years ago?

If your idea of entertainment is a brain-teaser that offers rather a different sort of challenge, then one of Acornsoft's adventure games is for you. With these it is not so much the quickness of your hands or eyes that counts, but the quickness of your wits. Take a game like the Kingdom of Hamil: a series of problems and puzzles beset you in your attempts to find the treasure. You must escape your enemies and win your place on the throne as the rightful ruler of the Kingdom of Hamil!

So, if you are brave, this Christmas after you have finished zapping bug-eyed monsters, landed your plane safely back on the runway and recovered your throne – you could play a relaxing game of snooker before turning into bed!





DESIGNED WITH EXPANSION IN MIND.

There is an unfortunate tendency amongst business microcomputer manufacturers to build their systems to far too rigid configurations. Thus the user either finds that after a couple of years he or she has completely outgrown it and needs to replace it with a larger system; or else the only way to expand is by adding on lots of extra space-consuming boxes – and we all know that spare space is one thing that is in very short supply in a busy office.

It is for this reason that the newly announced ABC range of business computers from Acorn is causing so much interest.

Acorn started with the premise that no two businesses ever have the same requirements. And, whatever requirements they do have today are more than likely to alter as the business changes – and hopefully grows. Recognising this, the ABC computer was designed with expansion in mind – but expansion to meet a variety of needs.

Thus the customer chooses the model which best meets his needs today, and when those needs change, the dealer simply upgrades the machines quickly and easily using kits supplied by Acorn. The important distinction to be observed between this machine and almost every other one on the market, is that the ABC is upgraded internally - not by linking up to an expansion unit - with the result that the equipment doesn't take up any more space than it did before. Still on the subject of space, it is worth noting that the ABC is of a very compact design and has a "footprint" - in the sense of the room it takes up on the user's desk - that is smaller than most comparable business computers.

The ABC comprises a range of eight modular office computers and workstations and is designed to provide a single solution to almost all modern business problems.

The models range from the ABC Terminal, designed to provide a low cost intelligent terminal for use with mainframe and minicomputers, through to the ABC 310, a 16 bit IBM – compatible machine. All models can



be connected by Acorn's low-cost, local area network.

The first two models will be launched in the New Year. One of these is the ABC P.A. (Personal Assistant) which will retail for around $f_{1,000}$ and the other is the ABC 100. These two are intended to be the basic workhorses of the range, serving as a low cost solution to word and data processing problems.

The Flagships of the ABC range, the ABC 300 and 310 include an advanced Desk Top Manager which gives a user-friendly interface to tomorrow's software.

Unlike computers such as the Apple Macintosh, the businessman can buy the ABC 300 secure in the knowledge that it will run the wide range of software available now and accommodate the new friendly software of the future.

There is no doubt that the ABC range looks all set to have the same sort of impact upon its business system competitors as the BBC micro has on the home computer market.



YOUR LOCAL ACORN DEALER

British Broadcasting Corporation is abbreviated to BBC through the text. Z-80 is a registered trademark of Zilog. CP/M is a registered trademark of Digital Research Inc. CIS COBOL is a registered trademark of Acorn Computers Ltd. Prestel is a registered trademark of British Telecom.

