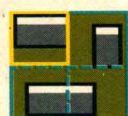


Windows & PCs

A complete introduction



Paintbrush



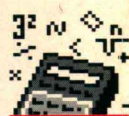
Bigdesk



Terminal



Notepad



Mathcad



Sound
Recorder



Back Menu



Paradox for
Windows



CorelDRAW!



Windows
Setup



1-2-3



PageMaker
4.0



Notes



Organizer



Word



hDC Power
Launcher



Compuserve



DynaComm



Solitaire



Zip View



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Windows and PCs

A Complete Introduction

Glyn Moody



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To Liliana

Acknowledgments

Although only one name appears on the cover, many people have helped to make this book possible. My publisher kindly agreed to the idea in the first place, and aided me throughout its realisation. Manufacturers have spent hours patiently answering my questions and explaining the finer points of their products and the associated technologies. From fellow computer journalists, especially on Windows User magazine, I have learned much about both Windows and PCs. And family and friends have generously read early drafts, offering many valuable suggestions. I am grateful to them all for making this book better than it was. Its faults and errors remain, of course, mine alone.

Glyn Moody
London

How to Use This Book

This book is designed to provide a complete introduction to all aspects of using a PC with Microsoft Windows. It is not a simple re-write of the manuals, but rather an alternative path through them, concentrating on the essentials. Ideas are presented several times, in different ways and with different levels of detail. This book is also designed to be a compact reference manual to aid you in your further exploration of the world of PCs and Windows.

The chapters are arranged in rough order of increasing detail and technicality. On the first reading, you need only proceed as far as you feel useful at that time: it is not necessary to read the whole book at this stage. Then, after using a PC and Windows for a while and gaining some insights into the reality of computers, you might want to read on in the book to the later chapters. They should provide a broader context for the expertise you have developed and more advanced techniques for you to try out.

The first chapter of the book provides a complete, non-technical introduction to the world of PCs and Windows, and assumes no previous knowledge. It looks at their component parts, what they can do, and how your working routine is likely to be affected. It is intended to provide an overall introduction to the more detailed chapters which follow.

The second chapter takes you through all the elements and techniques used in Windows. It is best read at a PC so that you can try out the descriptions for yourself as you go through it. The same is true of the third chapter, which looks at some of the free programs that come with Windows, and uses them to introduce more important concepts that you will be using everywhere with other Windows products.

The fourth chapter is more directly concerned with the daily practicalities of using your PC, and contains many helpful tips on how to avoid common problems and to make your use of the PC altogether more efficient and enjoyable.

The fifth chapter provides a detailed look at the main kinds of Windows programs available today – how they work and what they can do for you. There are also some comments about the leading commercial packages in each area together with numerous illustrations of them. The sixth chapter complements this by looking in more depth at the PC: what its internal components are and how they function.

The seventh chapter offers more detailed information about Windows' various elements, and gives some specific hints and tips for customising and optimising your Windows setup. It draws on the previous chapters and is designed to help you get the most from your system. The last chapter is slightly different. It provides a condensed survey of the world of computers, starting with the earliest machines of fifty years ago, and then moving on to the PC scene. In particular, it tells you where today's leading companies came from, and how the industry standards you will be using arose.

There follow four appendices: the first on installing Windows for those whose PCs do not come with Windows pre-installed; the second on keyboard shortcuts for Windows; the third on the basics of MS-DOS, which works with Windows to keep your PC running; and the last gives some basic advice on how to buy PC products, and includes a handy Quotation Form that can be used when obtaining information and prices from suppliers prior to ordering. These are followed by an extensive glossary and index.

Each of the first eight chapters is organised in the same way. There is a brief introduction which tells you what that particular chapter deals with. This is designed to explain where the current chapter fits into the book as a whole, and at what stage it can be read. Each chapter then consists of various sub-sections. At the end of each chapter there is a summary of the main points found there; this is to re-inforce the central issues and also to act as a quick guide for future reference.

If you come across terms that you do not know – either in the book or in using your PC – look first in the glossary at the back which also contains many words not used in this book but found elsewhere in the world of computers. If that does not give you sufficient information, then use the index to find the parts of the text dealing with the issue. Start at the earliest reference, and work forward.

'Windows' will be used throughout this book to mean Microsoft Windows 3.1. Readers with earlier versions of Windows will find most of what follows relevant, but are strongly advised to move to the latest version to get the benefit of the many improvements it offers.

Chapter One

Introducing Your PC and Windows

This first chapter is intended as a painless introduction to the main concepts involved with using a PC with Microsoft Windows. No previous knowledge is assumed. Those with a smattering of computer expertise should find it a useful refresher course, while those who are more experienced can skim through it more quickly. It is principally intended to introduce the main ideas and provide an overall framework for the more detailed chapters which follow.

Introducing Your PC

As you will soon find out – from this book and your own experience – a micro, also called a Personal Computer or PC, can be almost anything, from a calculator to a typewriter, and from a diary to a filing system. But before getting to know what PCs are and what they can do for you, it is important to realise there is one thing which they are not: they are not easy to damage. And despite appearances, they are not very intelligent either. Bearing these principles in mind, you should find that getting to know your PC is relatively easy. You can experiment secure in the knowledge that the worst that is likely to happen is the odd beep from the machine by way of indicating that you should try something else. And if the computer fails to respond as expected, it is almost certainly due to some

trivial omission on your part, rather than anything more serious: simply try again, making sure that you follow the appropriate instructions exactly.

The Elements of a PC

Physically there are three main elements to a typical PC; two are probably familiar, and the third may not be. The vast majority of micros follow this basic three part design, though some – portable machines, for instance – may combine two of the elements together. Starting from the familiar, you will have something which looks like a small television set. This is called by a number of names: screen, monitor, display or VDU – for visual display unit. Its job is to show what the computer is doing, to ask you what you want done next, and to display the results where appropriate. What you see might take the form of text – letters and numbers – or graphics – pictures – either in black and white or colour. You really need a colour monitor to get the most out of your system if you are using Microsoft Windows.

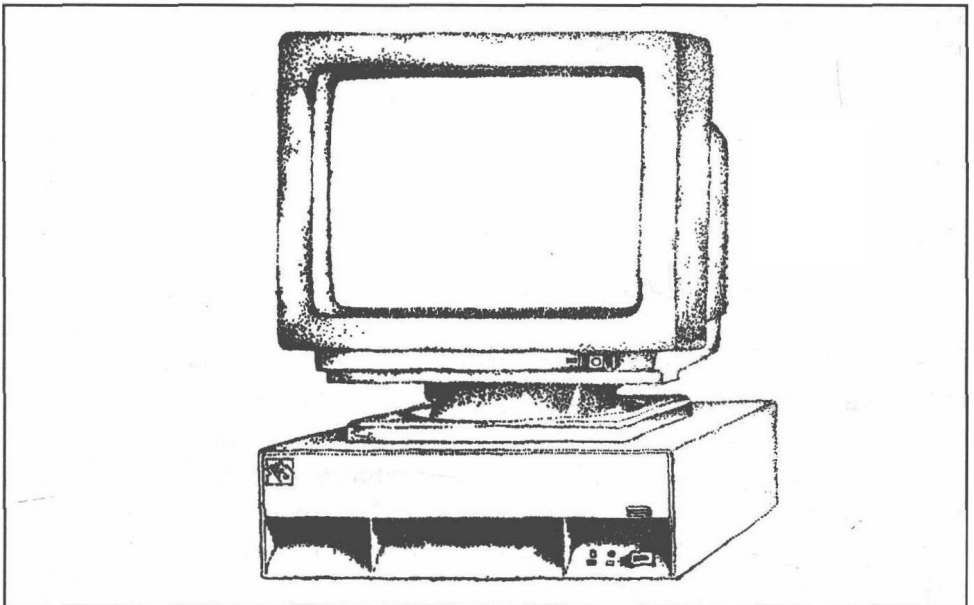


Figure 1.1 *The usual three elements of a PC: screen, keyboard and system box*

The other part that should be familiar is the keyboard. This looks like half a typewriter, with all the heavy engineering removed. The keyboard is used by you to tell the PC what you want it to do: you might enter words, or numbers, or simply type the letters 'Y' or 'N' for yes or no. However, this does not mean that you need to be any kind of typist: one finger at a time will do. PCs have the significant advantage that you can always correct your mistakes and change your mind.

You will notice quite a few extra keys not found on the typewriter: the most important are keys marked CTRL (short for Control), ALT (Alternative) and ESC (Escape). The carriage return key found on a typewriter should be there in its usual place, but may just have a left-pointing arrow on it, or the word ENTER, which is the name used in this book. Keys like CTRL and ALT are unusual in that they do not normally produce any letter or symbol when you press them. Instead they are used in conjunction with other keys: you might, for example, hold down the ALT key, and then press the letter 'K', say, keeping the ALT key held down as you do so. This is a very common technique in Windows. The example just given will be represented in this book as ALT+K, and the technique is explained in greater detail in the next chapter.

In fact, the keyboard may not be the only way you will be talking to your PC: if you are using Windows you will probably have a device the size of a big box of matches that connects to your PC through a cable. This is called

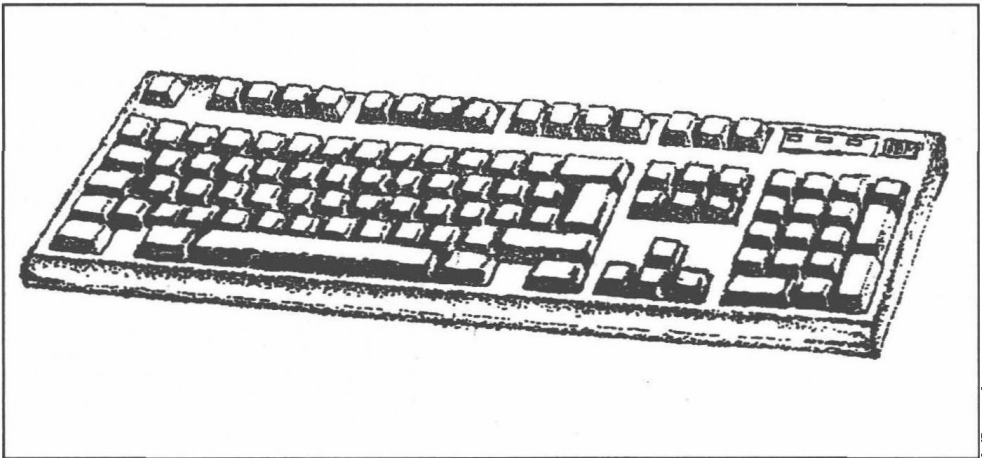


Figure 1.2 *The PC's keyboard has a number of extra keys*

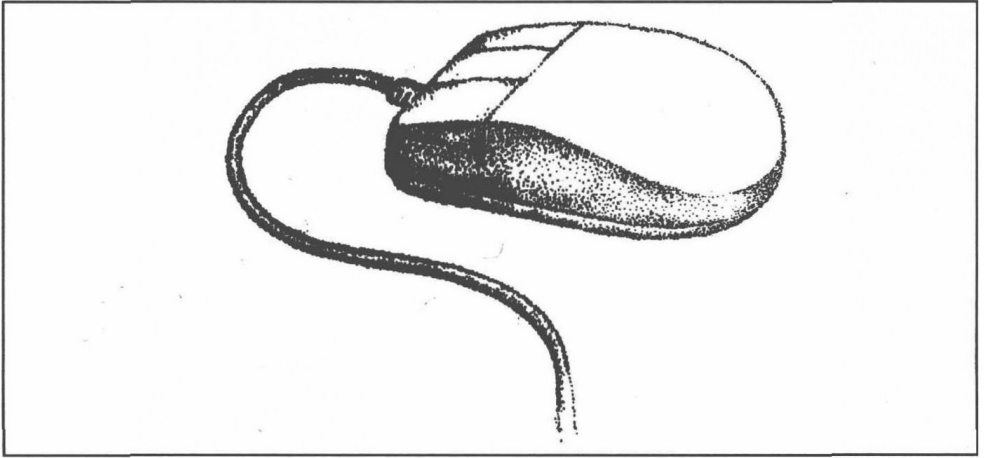


Figure 1.3 *You can use a hand-held mouse device to control a PC*

a mouse, and you operate it by sliding it across the desk using the metal ball inside it as a bearing. Essentially it allows you to select options by pointing at things on the screen. Full details on how and why you use a mouse are given later.

The third part which goes to make up a computer is slightly harder to describe. From the outside it looks like a box; for want of any better term it will generally be referred to in this book as the system box or system unit. Within it are the most important electronic components which go to make up a computer. Getting inside is usually a matter of removing a few screws and lifting the system unit's lid off. Although as a user you are not likely to need to know any of the technical details, some knowledge of how a PC works can help you get even more from your machine and from Windows; a comprehensive account of this subject is given later in Chapter Six for those who are interested.

The mouse, keyboard and monitor usually plug into the back of the main system box: there are various sockets of different shapes and sizes, called ports, sometimes labelled, sometimes not. One of the larger sockets is used to connect the PC to the mains supply.

Not all PCs need mains power: some are powered by internal batteries which allow them to be used on the move. These are called portable computers, notebooks, laptops or even palmtops, since the size and

weight of some means that they can be used quite comfortably while perched in the hand. But the majority of PCs get their power from an ordinary wall socket. This must always be switched off before you start plugging and unplugging keyboards and monitors, or opening the machine up. This is to protect the PC rather than you: apart from the power supply unit inside the main system box, which should in any case be well shielded, the voltages that are used by micros are only a few volts, and completely harmless. It should be noted, though, that monitors use high voltages, and should never be opened by users.

Floppy Discs

There is one other visible feature of your PC which is common to all machines. At the front of the system box there will be one, possibly two, slots, usually horizontal, with accompanying buttons or latches. These are the PC's disc drives. They serve the vital function of allowing you to input and output information which is held in a permanent form. Disc drives are one of the elements that distinguish powerful and flexible computers from the more limited calculators. In many other respects they are remarkably similar: if you know how to use a calculator, you are half way to running a PC.

For example, when the power is turned off on a pocket calculator, you normally lose all the information which you have entered and the results of your calculations. It is the same with a PC: once the power is switched off, it reverts to an inert box of plastic and metal. However, the disc drives provide a means of saving information which is held on the PC, before it is lost. They also work the other way: you can feed information into the PC via the disc drives, and so modify how your machine will function according to the intended end use.

To input and output information, special computer discs which slot into these drives are used. These are thin flexible discs which are coated with a magnetisable film. To protect this surface, they are held permanently in a protective square outer sleeve. Unlike the PC, they do not need a supply of electricity to retain their data. In this respect they are very similar to ordinary audio cassettes: information is stored in the form of a varying magnetic field which can be read or written by an electromagnet. In other respects, magnetic discs are more like compact discs: as they spin, a

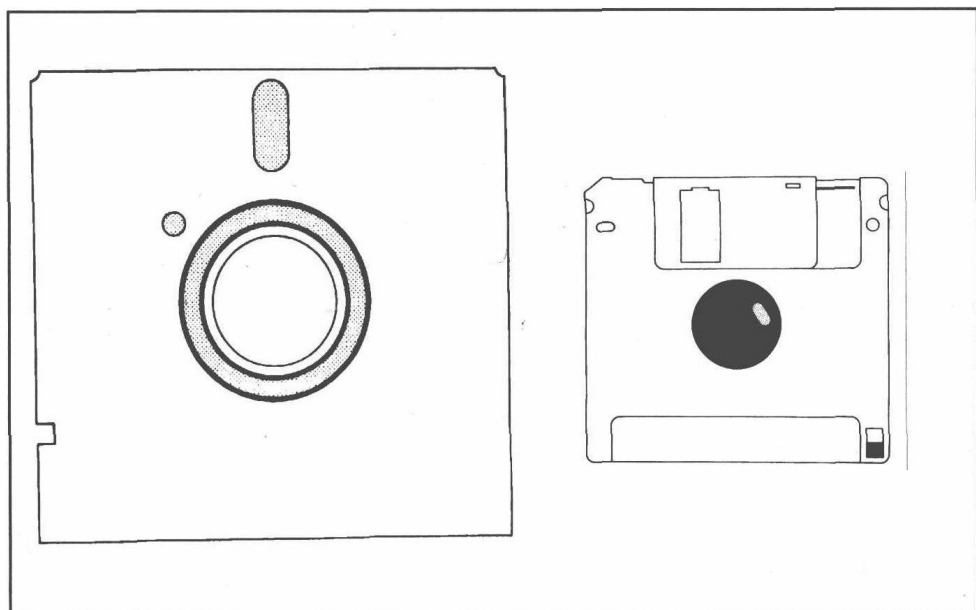


Figure 1.4 *Floppy discs are used for storing information in a permanent and portable form*

reading device inside the disc drive moves over their surface, allowing you to access any part of the disc, just as CDs can jump to any track. However, unlike cassettes and CDs, blank discs must be prepared before they can be used. This process is called formatting, and is rather like numbering the pages in a book before writing in it.

The magnetic discs which you will normally encounter are called floppy discs or just floppies. There are two basic types: the older variety is a 5.25 in. disc enclosed in a flexible sleeve; the other, more modern, variety is a 3.5 in. disc which comes in a rigid plastic case, though it is still called a floppy. The 5.25 in. floppies have small openings in the sleeve which show the vulnerable disc surface, whereas the 3.5 in. design has a spring-loaded shutter mechanism which protects these exposed areas. It is one of the ironies of microcomputing that floppy is the last thing these discs are. Bending them causes creases to form on the magnetic surface, which can lead to loss of data. Happily the earlier 5.25 in. floppies are being phased out, and it is unlikely that you will ever have to use them. Some PCs have disc drives for both types, but many take only the smaller 3.5 in. discs.