4 The Introductory Cassette

The Introductory Cassette contains lots of interesting demonstration programs which are recorded on both sides of the cassette. If you start at the beginning of side A and follow the directions in this chapter, the computer will take you through each of these programs in turn. When you get to the last program on side A, you will be asked to turn the cassette over and continue on side B.

You will notice that the programs on side B start about a third of the way along the tape. The reason for this is that there are four extra programs at the beginning of side B and at the very end of side A which relate to the book *Start Programming with the Electron*. When you have got more familiar with your Electron and start using this book, then rewind the tape to the beginning of side B and follow the directions given in the book.

This chapter deals with the demonstration programs only, so insert the cassette into your cassette recorder − side A uppermost.

Adjusting the volume control and loading the first program

On some cassette recorders, the volume control setting must be adjusted first before the Electron can 'hear' the programs being played. If this is the case for your machine, set the cassette recorder volume control to about two-thirds maximum, and the tone control (if fitted) to maximum. See if the yellow light on the left of the keyboard is on, and if it isn't press the **SHIFT** key and the **CAPS LK** key down together − this will make the yellow light come on. Press **BREAK** to ensure that the computer is completely reset. Now type the following *exactly* as it is printed below.

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CHAIN "INTRO"
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To type each quotation mark, hold your finger on the **SHIFT** key and press the key with the number 2 on it (immediately above the 2 is the " character). Make sure you type an 'O' and not a zero.

Then press **RETURN**. If you make a mess of it, don't worry − just press **ESCAPE** and try again.

Press PLAY on the cassette recorder, and the tape should start moving. The message

Searching

should appear on the screen. This means that the computer is looking for the program called "INTRO" on the cassette. As soon as it has found it, you should see this message displayed on the screen:

Loading
INTRO   00

This means that the program called INTRO has been found, and the computer is loading it (copying it) into its memory. The program is recorded in 'blocks' on the cassette, and the numbers on the screen next to **INTRO** tell you which block is being loaded at the moment.

If the message above doesn't appear on the screen after about 30 seconds from pressing PLAY, then turn the volume control up a bit more, and wait for about ten seconds. If there's still no message, turn it up more and keep on until you get a message similar to the one above.

The two numbers to the right of INTRO will be higher than 00 by this time, so completely rewind the tape and start again. Press **BREAK** and retype

CHAIN "INTRO" RETURN

Now that you have found the right setting for the volume control, there is no need to adjust it again.

Once INTRO has been loaded successfully, four numbers appear to the right of the two numbers already there. When this happens, it means that the program has finished loading, so unless the Electron has done it for you already, stop the tape. If you don't, then you'll have to rewind the tape back to the end of the INTRO program before the Electron can load the next program. If for any reason the program did not successfully, a message will appear telling you to rewind the tape and start again.

After a short pause, the INTRO program starts running.

The INTRO program uses some of the colour graphics and sound capabilities of the Electron, and also includes an index of the programs you are about to see on side A of the Introductory Cassette.

Here is a quick guide to the other demonstration programs:

KEYBOARD
This program will help you to get to know the Electron's keyboard. You will be asked to type different characters from the keyboard. So that you can judge your performance and see how you improve, the computer times you!

SKETCH
Feeling creative? Here's a chance to put your artistic talents to use. In the centre of the screen there is a cross which you can move wherever you like. As the cross moves, it draws a line in the colour of your choice. You can also move the cross without drawing a line – rather like lifting your pen off the paper – and then carry on. The keys you can use and what they do are listed at the bottom of the screen.

PIANO
The Electron turns itself into a musical instrument. At the bottom of the screen there's a picture of a piano keyboard with the corresponding keys on the Electron keyboard shown. At the top of the screen, the musical score appears as you play.

DODGEMS
You are in control of a car driving through a maze of roads which each contain a row of dots. You must drive along every road and clear the dots on them to score the maximum number of points. Unfortunately, there's a computer car coming the other way whose sole purpose in life is to crash into you!

You control the car with five keys which are described at the beginning of the game, and these allow your car to:

- Go left
- Go right
- Go up
- Go down
- Go faster

If you are going too fast, you have to turn at every junction unless you slow down in time.

You score one point per dot and one more when they're all gone. Once there are no dots left, a new maze appears and you carry on as before –

only this time the computer car travels faster!

BIORHYTHMS

This ingenious program plots your 'biorhythms' which is the supposed balance between your emotional, physical and intellectual states. Some people believe that these are regular cycles which show when you are at your best and worst physically, emotionally and intellectually. They also believe that the rhythms started at birth can be predicted mathematically.

All you need to do is enter your date of birth and the date you would like the biorhythm chart for – perhaps today, or maybe you have an important event coming soon, and you want to find out how you'll feel on that day.

The program calculates these cycles from your birth and then displays a chart which indicates your state of well-being on the chosen day. Biorhythms or no biorhythms, this program demonstrates the computer's calculation speed (for example, the number of days from your birth) and how the computer can be used to display graphical information.

CLOCK

This program shows that the computer has more of a memory than you think. Remember the computer asked you the time in the INTRO program? If you typed in the correct time then, you can check it now – either as a digital or analogue read-out. You can even reset it if you want. As well as demonstrating the Electron's high resolution graphics, this program also shows that the computer is an excellent time-keeper.

GOMOKU

Gomoku is a very old board game where two opponents (you and the Electron) try to produce a row, column or diagonal with five counters. It is really a sophisticated version of noughts and crosses where you must plan your moves carefully – there is a very large number of possible moves.

The game starts with a blank screen and the message

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SHALL I START?
Press Y or N
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After you've pressed Y or N, the board appears on the screen, and if you let the computer have first go it will have placed its counter somewhere

on the board.

A small cross shows where your counter will be placed. Once you are happy with the position for your counter, press **RETURN** and a counter appears in place of the cross.

The computer has another go and play continues until one of you manages to get an unbroken line of five counters on the board. The winning line flashes for a few seconds, and if you want another game, press the space bar.

MESSAGE
This program tells you to stop the tape (if you haven't got motor control), and continue on side B of the cassette where you will find the programs described below.

PATTERNS
This program generates kaleidoscopic patterns in colour, and no two patterns are ever quite the same. To start a new pattern, press the keys marked 1 and 2 in sequence. The pattern itself and its colours are randomly selected each time the keys are pressed and serve to demonstrate the Electron's high resolution colour graphics. If you want to sit back and watch, press one of the keys for a second or two; the computer will continue to generate the patterns until the repeat action of the key you pressed runs out.

MARSLANDER
You are in command of a spacecraft which you must try to land on a flat section of the Martian terrain as gently as possible. Key X rotates the craft clockwise, and key Y anticlockwise. The space bar fires the rocket motor and makes the spacecraft move in whatever direction it is pointing. To land the spacecraft safely, it must be pointing upwards, at a speed of less than 50 m/s and you must touch down on a flat section of Mars. The score depends on your speed when you land, with a possible 5,000 points for landing at 0 m/s. After a successful landing, the computer will tell you what sort of landing you made, your touch-down speed, how much fuel you have left, and ask you to take off for another landing site which is more than a specified distance away. On each successful landing, you get 30 extra fuel units and your old score is added to your new one.