

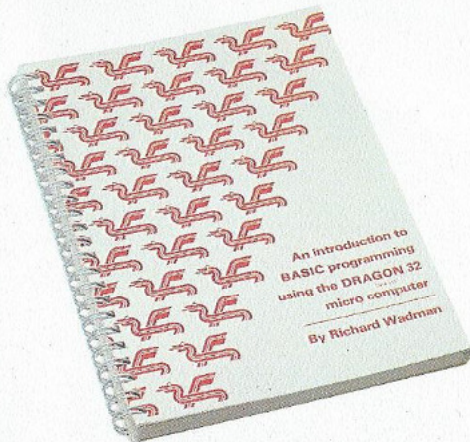
 **DRAGON** Data Ltd. **32**

THE FAMILY COMPUTER to fire your imagination



## IT'S EASY TO LEARN

The Dragon 32 is living proof that you don't have to be an expert in 'Computer Speak' to be an expert in computers. It comes with, we believe, the easiest to understand course in BASIC programming ever written for a home computer. Every step – every explanation is made clear even for beginners. In minutes it will show you how to write a simple program. Within hours, you'll be fascinated. Included in the course are 60 programs which have been designed to open up the new world which the Dragon's power and versatility bring to you.



## IT'S EASY TO USE

You do not have to program the unit yourself as a broad range of programs is already available on standard audio cassettes and cartridges. If you do write a program then it can be stored on cassette. Just plug your cassette recorder into DRAGON and with one simple instruction you will be ready to realise the full value of FAMILY COMPUTING!



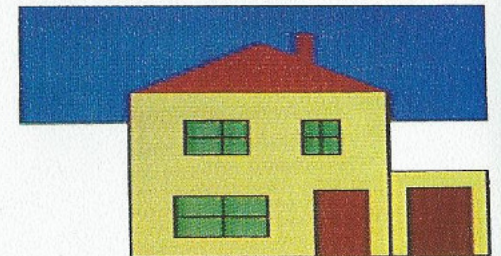
## IT'S COLOURFUL

DRAGON 32 uses 9 colours to bring the programs to life on your screen. The powerful Microsoft Extended Colour Basic language provides simple instructions to set foreground and background colours, to colour an individual point on the screen or to paint a solid area with a splash of colour.



## IT'S GRAPHIC

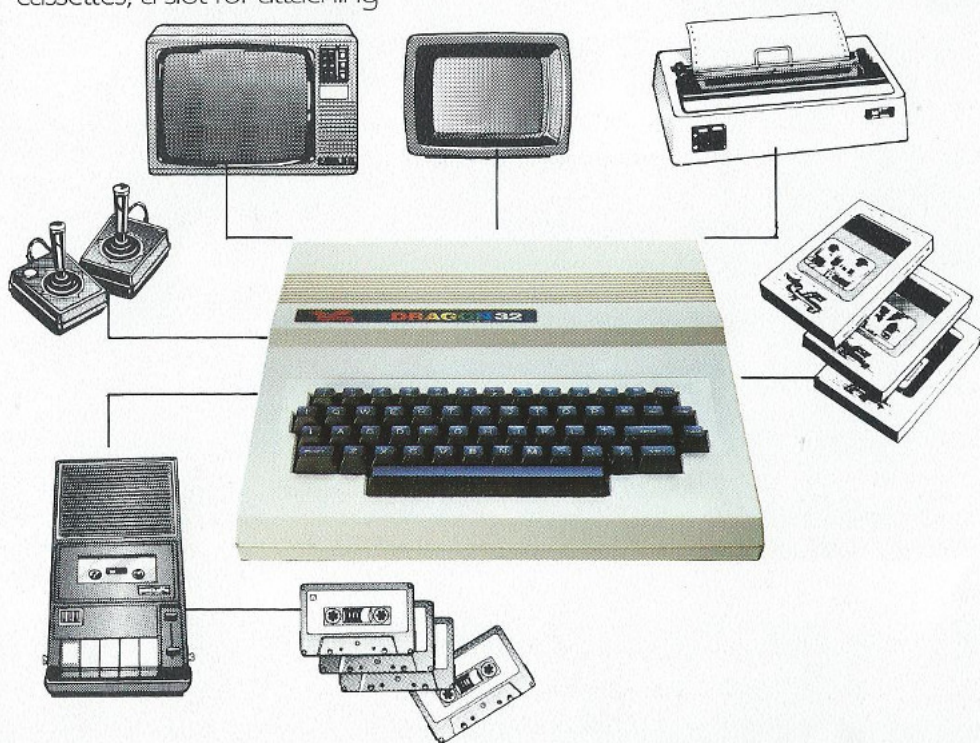
The DRAGON 32 offers graphics capabilities that will astonish and delight you. Eight graphics pages with 5 different resolutions from 512 text points to 49,152 points. (16 x 32 to 256 x 192). Using simple graphics commands you can draw lines, rectangles, squares, arcs, ellipses or circles or you may sketch a shape and then scale it from 1/4 size to 15 times magnification. The sketch can then be rotated through four right angled positions.



## IT'S DESIGNED TO GROW

DRAGON 32 as standard provides for many add-on units to extend its power:- two joystick ports to allow more control of objects with games; an audio cassette connector to allow you to save and load programs from standard audio cassettes; a slot for attaching

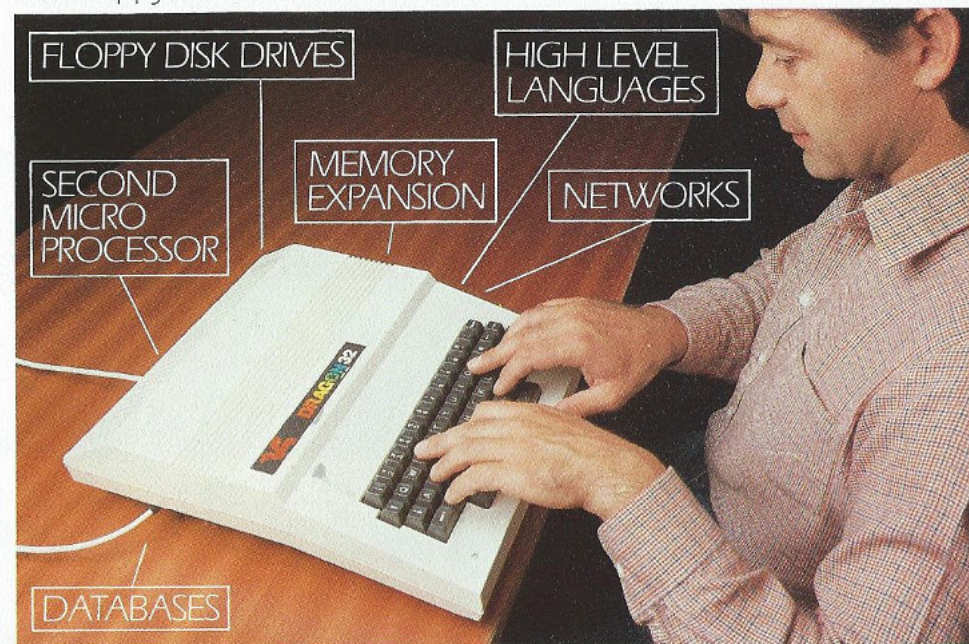
ROM or solid state cartridges that permits instant loading of programs; a Centronics printer interface to provide for a printer to give hard copies of your program or its output; a colour monitor output and a standard colour television output that allows you the choice of using your home TV set or a monitor or if you prefer, both at the same time.



## IT GROWS WITH YOU

★ You may extend the power of your DRAGON 32 to 64K RAM by returning it to the DRAGON plant in Swansea, where it will be upgraded to 64K, fully tested and returned to you within 14 days.  
 ★ Coming shortly is the DRAGON Floppy Disk Drive pack which includes a Disk controller cartridge and up to two Floppy Disk Drives.

★ In 1983 an expander system will be launched which will enhance your DRAGON 32 by the choice of all the following enhancements:  
 ★ Disk Operating System (Instead of the cartridge).  
 ★ A powerful 16 bit Microprocessor.  
 ★ Up to 256K of RAM.  
 ★ RS232 port for networking.  
 ★ An additional 8 bit Microprocessor to enable a wide range of business programs to become available.



 **DRAGON** Data Ltd. **32**

THE FAMILY COMPUTER

STRONG ENOUGH  
TO BEAR YOUR  
T.V. SET OR MONITOR

PROFESSIONAL  
TYPEWRITER  
STYLE  
KEYBOARD

CARTRIDGE (ROM)  
AND EXPANSION  
CONNECTOR

EACH KEY  
GUARANTEED FOR  
20 MILLION KEY  
DEPRESSIONS





**DRAGON** Data Ltd **32**

TO FIRE YOUR IMAGINATION

SLEEK DESIGN

RESET BUTTON

JOYSTICK CONNECTORS

CENTRONICS PRINTER  
OUTPUT

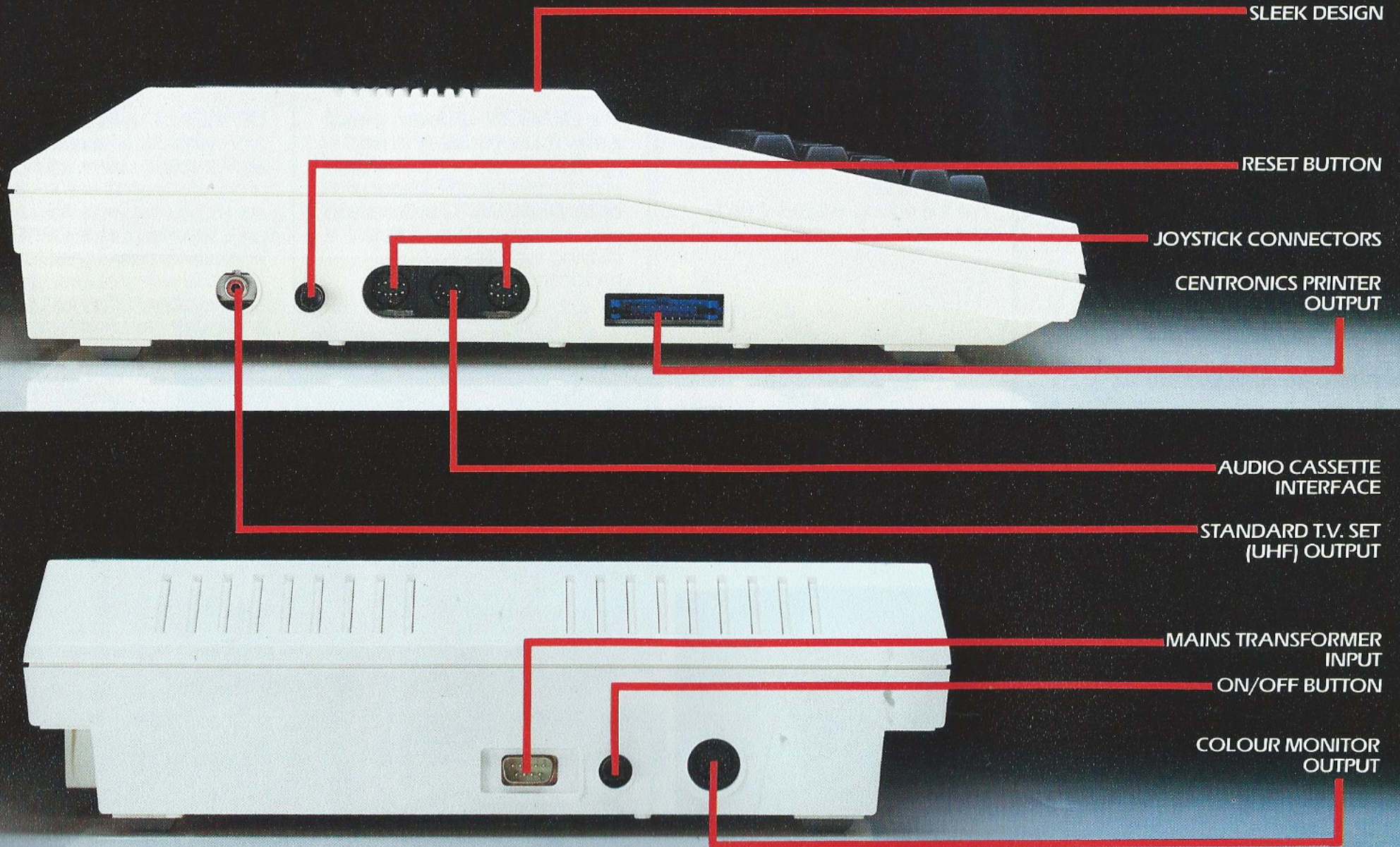
AUDIO CASSETTE  
INTERFACE

STANDARD T.V. SET  
(UHF) OUTPUT

MAINS TRANSFORMER  
INPUT

ON/OFF BUTTON

COLOUR MONITOR  
OUTPUT



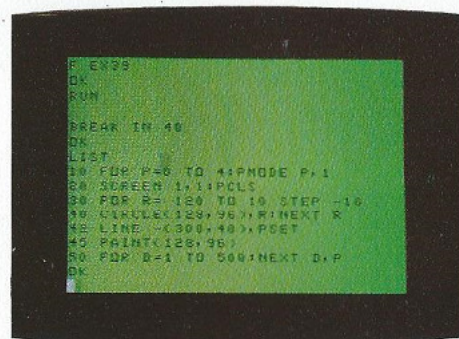
## IT'S MUSICAL

A full five octave range allows DRAGON 32 to be used to produce both music and speech synthesis. Its variety of sounds and tones are used to punctuate the action within programs.



## IT'S FLEXIBLE

The Microsoft Extended Colour Basic provides a broad range of features for the home programmer. Full line editing enables speedy correction of programs.



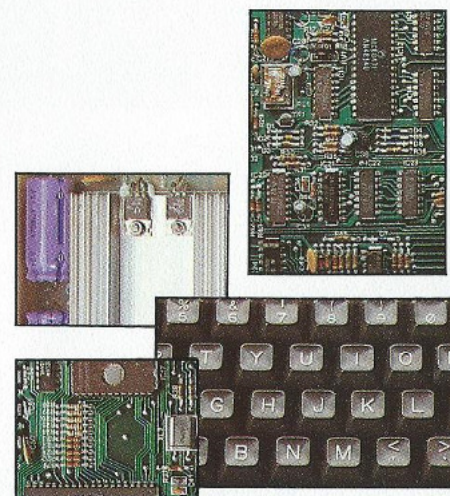
## IT'S SMART

The DRAGON 32 design means it may fit unobtrusively in any room and its powerful features earn it a place in the school or office. DRAGON 32 ensures you stay in touch with the fast moving world of microcomputing.



## IT'S WELL MADE

DRAGON 32 uses a real typewriter-like keyboard that allows you to create your own programs and games. Keyboards are usually the weak link of low-price systems but the DRAGON keyboard is guaranteed for 20 million key-depressions. The keyboard offers full upper and lower case entries plus numbers and symbols, the DRAGON software allows full line-editing to make program writing speedy and simple.



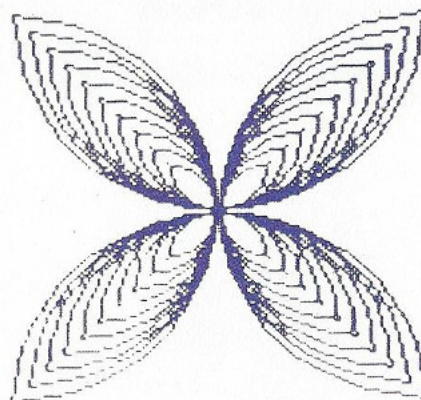
# THE SOFTWARE

The DRAGON offers some of the most popular computer games in the world. From cosmic invaders to mind boggling adventures in dungeons and caves. The whole family will learn through playing with the compendium of games, which

comes with fully detailed programs to assist their understanding of this fantastic new world. The Graphic Animator will allow you to draw simple animated cartoons.



Ask your dealer for an up to date list of the programs available on ROM cartridge and cassette.



# IT'S MADE IN GREAT BRITAIN

Produced in Swansea the DRAGON 32 has been engineered and developed by an outstanding British team. DRAGON data is one of the companies in the Mettoy Group whose experience in high-quality scale engineering for their world famous Corgi range has ensured that DRAGON is a well produced and supported new British Computer.



## HARDWARE SPECIFICATION

- \* 6809E Microprocessor, a great advance on the original 6502 – still used by PET, Apple, Atom, Atari 400, BBC Micro, VIC 20.
- \* 32K RAM memory as standard – At least twice as powerful as other computers at the same price, expandable to 64K.
  - 26K user available after 4 pages of high resolution graphics.
- \* DRAGON 32, unlike most units, gives EXTENDED MICROSOFT COLOUR BASIC as standard.
  - Microsoft basic has become the industry standard (e.g. IBM, Apple, Commodore, Tandy, Atari).

THIS HAS:-

  - Advanced graphics features – set, line, draw, circle, paint, print @, print using.
  - Advanced sound feature.
  - Automatic control of cassette recorder.
  - Full editing features – insert, delete, change.
- \* DISPLAY:
  - 9 Colours.
  - 5 Different resolutions from 512 points of text (16 x 32) to 49152 points (256 x 192) at high resolution.
  - Home UHF TV set and /or colour monitor.
- \* KEYBOARD:
  - Professional quality keyboard to the standard used on data entry terminals.
  - Typewriter layout and feel.
  - Guaranteed for 20 million key depressions.
- \* SIMPLE PLUG-IN CONNECTION FOR:-
  - Joystick controllers.
  - Audio cassette recorder (inc. Stop/Start).
  - Printer (Centronics parallel).
  - Games cartridges.

YOUR DEALER

- \* 160 page "BASIC" training manual – FREE

## PROGRAMMING STATEMENTS AND COMMANDS

### MATHEMATICAL AND LOGICAL OPERATORS

Symbol	Operation
↑	Exponentiation
–	Unary minus
*	Multiplication
/	Division
+	Addition
–	Subtraction
>	Greater than
<	Less than
=	Equal to
<>	Not equal to
>=	Greater than or equal to
<=	Less than or equal to
NOT	logical NOT
AND	logical AND
OR	logical OR

### BASIC LANGUAGE STATEMENTS

CLEAR	LINE INPUT
CLS	ON...GOSUB
DATA	ON...GOTO
DEF FN	POKE
DEFUSR	PRINT
DIM	PRINT TAB
END	PRINT USING
EXEC	PRINT @
FOR TO STEP NEXT	READ
GOSUB	REM
GOTO	RESTORE
IF	RETURN
INPUT	STOP
LET	

### SOUND GENERATION STATEMENTS

PLAY	SOUND		
CASSETTE RECORDER CONTROL STATEMENTS			
AUDIO	CLOSE	EOF (-1)	OPEN
CLOAD	CSAVE	INPUT	PRINT
CLOADM	CSAVEM	MOTOR	SKIPF

### PRINTER CONTROL STATEMENTS

LLIST	OPEN	PRINT
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### SYSTEM COMMANDS

CONT	LIST	RUN
DEL	NEW	TROFF
EDIT	RENUM	TRON

### GRAPHICS STATEMENTS

CIRCLE (x,y)	LINE	PCOPY	PUT
COLOUR	PAINT	PMODE	RESET
DRAW	PCLEAR	PRESENT	SCREEN
GET	PCLS	PSET	SET

### STRING FUNCTIONS

ASC	INKEY\$	LEN	STRING\$
CHR\$	INSTR	MID\$	STR\$
HEX\$	LEFT\$	RIGHT\$	VAL

### NUMERIC FUNCTIONS

ABS	INT	POINT	SQR
ATN	JOYSTK	POS	TAN
COS	LOG	PPOINT	TIMER
EXP	MEM	RND	USR
FIX	PEEK	SGN	VAPTR