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LOGOsoft

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There's only one way to tell if a piece of educational software is worth having: try it before you buy it. That's why LOGOsoft (LSL), Britain's premier LOGO publisher, are offering you the chance to trial LOGOsoft LOGO in your school for a month this autumn. This is a unique opportunity for you to evaluate for yourself a powerful and exciting piece of educational software.

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LOGOsoft (LSL) is the fastest and most efficient BBC LOGO. Its **Dynamic Memory Management** makes full use of the BBC workspace and runs recursive procedures in much greater depth. And LOGOsoft is fully compatible with the Acorn Master series.

2

LOGOsoft LOGO comes equipped with a lavishly illustrated 234-page manual, including a full *Technical Specification* with detailed descriptions of each primitive and examples. The manual also includes *The Young Person's Guide to LOGO*, the acclaimed introduction for beginners of all ages.

3

The LOGOsoft package includes two free **Toolkit** Discs and a 40-page Manual for intermediate and advanced LOGO users. The Toolkits contain an exciting range of interfaces, utilities and applications as well as software demonstrating the enormous scope of LOGO as a high level language.

4

LOGOsoft **Technical LOGO** is a control language smart enough to be used in industry, but simple enough to be used in schools. It is compatible with all the control interface boards found in schools and makes full use of LOGOsoft's superior speed and power.

5

LOGOsoft is the only BBC LOGO that can be used in combination with a **Concept Keyboard** to drive a **Valiant Turtle**. This is because the LOGOsoft turtle driver uses the BBC Micro's parallel interface to connect to the keyboard, and the serial interface to drive the turtle. These are two widely used educational devices which deserve to be linked with LOGO.

6

LOGOsoft LOGO comes in a variety of packages to suit every user. Apart from the stand-alone version on 16k ROM there are disc versions for sideways RAM and Acorn Master users, and Network, Site and Area licences available to education authorities. Phone Chris Squire on 01-891 0989 for further details.

And don't forget: when you install LOGOsoft LOGO you're not just buying a product: you'll be linked by the **LOGO Hotline** (0454 313 076) to the Bristol-based software team who designed and wrote LOGOsoft LOGO and who are still developing it and extending it today. LOGO is 'state of the art' computing – get a copy today and start exploring!

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TECHNICAL LOGO

Technical LOGO is the control extension to LOGOsoft LOGO for the Acorn Master and the BBC Micro.

Technical LOGO is very fast: it runs at 50 LOGO primitives a second, which is fast enough to allow control routines to respond to feedback. The 21 new commands operate as LOGO primitives: they follow the rules of LOGO syntax and they give standard LOGO error messages. The 21 Technical LOGO primitives are:

ADVAL	reads the analogue input channel. It is already part of the LOGOsoft LOGO language and is included here for completeness.
COUNTBIT	counts the number of changes in the value of one line, controlled by the changing of another line.
CYTIME HITIME & LOTIME	gives the cycle time for a line and the time for which it was high or low.
?HITIME & ?LOTIME	gives the high or low times corresponding to the last HITIME, LOTIME or CYTIME command.
LASTOUT	gives the last value sent to the output port.
MOTOR	uses pulse width modification to control the speed and direction of DC motors.
PULSE	sends a continuous stream of pulses of a specified type to a specified line.
READPORT	reads the value of the input port.
RESET	resets all the ports to their original setting.
SCREEN & NOSCREEN	turn the screen display on and off.
SELECT	resets different input and output ports.
SENDPORT	sends a whole byte to the output port.
STATE	reads the state of a line of the input port.
TURNON & TURNOFF	control individual lines on the output port by operating either on bit numbers or a list of bit numbers.
WAIT	tells LOGO to wait for the interval given (measured in 100ths of a second).
?C	counts the number of times line b changes from high to low and back again

zeroises the count returned by ?C.

LICATIO **Arithmetic Utilities** Data File Handling Fractional Arithmetic Graph Plotting List Processing List Sorting **Multiple Turtles** Normal Distribution **Property Lists Rank Correlation Coefficient** Set Theory **Statistics Transformational Geometry Turtle Graphics** Vector & Matrix Algebra **Vector Graphics** Wrapped Turtle Graphics All these facilities are **TOOLKIT DISC 2** included on the LOGOsoft

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NETWORK LOGO

LOGOsoft LOGO is available on disc to run on networks using sideways RAM. It requires a minimum of 16k sideways RAM per machine.

The licence fee per network is £40 plus £15 per manual supplied. The minimum package is LOGOsoft LOGO on disc, plus the toolkit discs, plus four manuals. Minimum fee is £100. All prices are subject to VAT.

Examples of total cost:

For an 8-station network ...

Cost of minimum package £100.00

Cost per station £12.50

For a 15-station network ...

Cost of licence plus 6 manuals £160.00 Cost per station £10.67

SIDEWAYS RAM LOGO

LOGOsoft LOGO is available on disc for use on a BBC Micro equipped with 16k of sideways RAM. The disc-based version costs £40.00 (plus VAT).

For £59 (plus VAT) LOGOsoft will supply Sideways RAM LOGO on disc plus a free RAMAMP sideways RAM module.

ICONIC LOGO

LOGOsoft are currently developing the world's first Iconic LOGO for use with the Microvitec Touch Screen. Users will be able to enter LOGO commands by touching the appropriate Icon on the screen, greatly increasing the speed and convenience of LOGO programming.

To be released AUTUMN 1986

an instantly accessible high-level language with , robotics, control and artificial intelligence.



LOGOSOFT

Designing LOGOsoft (LSL) LOGO was a family affair for Kay and Paul Crowe and their daughters Lucy and Elizabeth. Kay and Paul had worked in computers for over fifteen years – time enough to realise that the conventional approach to computer programming, particularly in education, left everything to be desired.

In an interview in LOGO USER (Autumn 1985) Kay Crowe described her reaction when she first read about LOGO:

"One of my colleagues at work saw a review of Mindstorms in Byte and photocopied it for me. We read the review and it looked very interesting. We managed to obtain a copy of Mindstorms as soon as it was published in Britain (1981) and we just sat there reading it in total amazement that someone had managed to get all those ideas down on paper. We kept saying 'Hey, listen to this. Have you read this bit?' It was full of things we had felt for years, about teaching computers and programming. We felt we wanted to give a copy to every teacher in the country."

Kay and Paul are developing extensions to LOGOsoft (LSL) LOGO at their computer consultancy, CATSOFT, based near Bristol. They also operate the LOGO Hotline (0454 313 076), giving advice and support to LOGOsoft users.

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