Meet Dr. Logo

r. Logo for the IBM® PC is an advanced version of the popular Logo programming language. This is a language you can

use in business, education, and home environments on your IBM PC. The true beauty of Dr. Logo is its simplicity. Beginners can sit down and start programming during their initial session. Dr. Logo includes "turtle graphics". A computer controlled turtle" appears on the screen and responds to commands that make it move forward and rotate left and right. As the turtle moves, it leaves a trail of color in one of four colors. Using the IBM PC as an electronic sketchpad, you can type simple commands to create an endless array of images. Dr. Logo takes advantage of the IBM PC's 16 bit 8088 microprocessor by supporting up to 256K bytes of RAM. Digital Research has included features in Dr. Logo which make it suitable for sophisticated programming projects. Dr. Logo allows the user to include comments and

indentation procedures—crucial to structured programming. An advanced twowindow debugger and two different trace modes are useful for tracking down errors in complex programs. Workspace management primitives help to manage the expanded memory supported by Dr. Logo. These include the ability to change the order

of procedures in the workspace, cross reference procedures, and remove comments. Dr. Logo supports double precision floating point mathematics including a full set of transcendental functions, logarithms, and their inverses making Dr. Logo ideal for scientists, engineers, and students. **FEATURES** ■ Turtle Graphics Primitives ■ Uses IBM Function and Arrow Keys Informative Error Messages ■ Game Primitives Self Contained Operating System List Processing Primitives Recursion Supported. ADVANCED **FEATURES** ■ Large Workspace ■ Sophisticated Debugging Facilities ■ Help Facility Workspace Management Primitives Comments and Indentation Supported in Procedures ■ Property List Manipulation Primitives ■ Double Precision Floating Point Mathematics Capability. SYSTEM REQUIREMENTS ■ IBM PC with 192K-256K RAM ■ Monochrome or color graphics display ■ Minimum one floppy disk drive ■ IBM Color Graphics Display Adapter ■ (Optional) IBM

Monochrome Display Adapter and IBM Mono-



chrome Display.

Post Office Box 579 ■ 160 Central Avenue ■ Pacific Grove, California 93950 ■ (408) 649-3896 ■ TWX 910 360 5001

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DIGITAL RESEARCH



The Language for Learning—DR Logo

Whether you are a first time user or an experienced programmer, DR Logo is an invaluable tool for learning, programming, and game playing.

Although it's simple to learn, you'll find that DR Logo is a powerful language that grows with your computing needs at school, in business, or at home.

If you have never worked with a computer DR Logo can help you visualize the logic of programming. While you are having fun creating graphic displays, DR Logo will be teaching you the basics of programming. Because you can view the graphics output and commands simultaneously on a split screen, errors are easily detected. A full screen editor makes changing your programs a simple operation.

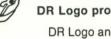
DR Logo employs turtle graphics to make learning about computer science enjoyable. The turtle is a graphic representation of a location on the screen. The turtle leaves a path of color to show you where it has been. DR Logo contains many commands that allow you to instruct the turtle and control its movements. This approach to programming helps you to discover mathematical concepts painlessly by letting you draw geometric shapes on a computer display. Because it is easy to manipulate, the turtle will have you programming in no time. A cartoon-illustrated tutorial for children and an adult oriented tutorial let you easily learn how to tell the turtle what you want it to do. If you need help remembering commands you can ask for a simple explanation and an example of how each command is used will be displayed on the screen. DR Logo commands, called "primitives," help you create procedures for graphics, games, and business. Once you have created a set of DR Logo procedures you can save it and use it again. Your personal library of procedures can be changed, discarded or combined with other procedures to form more complex programs. A Reference Manual provides the complete encyclopedia of all available primitives.

If you already know how to program, you'll enjoy this new approach to writing software. Powerful list processing abilities make DR Logo suitable for a wide variety of applications, from simple symbolic mathematics to natural language translation, artificial intelligence, knowledge-based systems and robotics. And if you ever used Apple Logo you'll find DR Logo provides all the features of Apple Logo plus the advanced features you want for writing application software:

- Large Workspace
- Advanced Debugging Aids
 Workspace Cross Reference Commands
 Split Screen and Text Windowing
- Upper and Lower Case Characters
- **Expanded String Processing Primitives**
- Additional Game Playing Primitives
- Compatible with Digital Research Graphics

Availability

Look for DR Logo in retail computer stores early this summer. If you have wanted to program but thought it was too hard or if you are a programmer and wonder why it has to be so hard, ask your dealer for a demonstration of DR Logo.



DR Logo provides the challenge of programming without the frustration.

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