ATARI SOFTWARE PRODUCTS

Kyan Software Inc.
1850 Union Street, #183
San Francisco, CA 94123
Dear Friend:

This catalog describes Kyan Software's complete line of programming tools and utilities for the ATARI 8-bit family of computers. These Kyan products run under Atari DOS and provide you with the tools necessary to develop the latest state-of-the-art software. These products are now available from Kyan Software.

There are many good reasons for you to buy Kyan Software products. Following are just a few:

**Kyan software is not copy-protected.** You can make backup copies and copy the software into RAMdisk or onto hard drives without limitation.

**Kyan software is royalty free.** You can use the Pascal Runtime Library and routines in the programming Toolkits without paying royalties. (Note: Copyright notices must be observed).

**Source code compatibility and portability.** Since Kyan Pascal is ISO standard Pascal, the software you write on your Atari is portable to most mainframe computers. Also, since Kyan has similar compilers for the Apple // and Commodore family of 8-bit computers, the source code for your Atari programs can be recompiled to run on these other popular computers.

**Finally, Kyan Software guarantees your satisfaction.** All software ordered directly from Kyan comes with a 30 day money-back guarantee. If you are not completely satisfied, return the product for a full refund of the purchase price.

Join the Kyan Software family today!
Kyan Pascal
(Version 2.0)

Kyan Pascal is the perfect package for learning Pascal and developing Pascal programs. It is a full implementation of ISO Pascal and will run on any Atari 800/XL/XE with at least 48K RAM and a single disk drive. It is widely used by both students and advanced programmers because of its economical price, user-friendly environment, and extensive list of features.

Kyan Pascal is an extremely powerful programming tool, yet it keeps the beginner in mind. It features command menus, help screens and several libraries of error messages. It comes with a comprehensive, 300 page manual which includes a complete Pascal tutorial. It is perfect for students who are taking a Pascal programming course and want to do their assignments at home.

But, Kyan Pascal is more than just a learning tool. It's also a powerful software development system. It provides experienced programmers with features and capabilities not found in other Pascal products. And, when teamed with Kyan's new programming toolkits, Kyan Pascal gives you the tools needed to develop the most sophisticated, professional-quality software.

Other Kyan Pascal features include:

- DOS 2.5 (with RAMdisk support) included on the disk.
- 6502 machine code compiler and assembler, which generate code that runs more than 30 times faster than BASIC.
- Full-screen text editor with cut & paste, search & replace, etc.
- Pascal extensions such as include, chain, string handling, random access files, random numbers, sound, and graphics.
- Built-in macro assembler which allows you to add in-line or included assembly source code.
- Non-copy protected disk that allows you to make backup copies and/or load files into a RAMdisk.
- Royalty-free license to use the Pascal Runtime Library with software you develop.

Try Kyan Pascal. Find out why it has become the standard for Pascal programming in the Atari.

Hardware Requirements: Any Atari 800/XL/XE with 48K
Suggested Retail Price: $69.95
The System Utilities Toolkit contains Pascal and Assembly language routines which are designed to be used in your Pascal application programs. The Toolkit contains 94 routines plus sample programs and complete instructions for using each routine in your own programs. The Toolkit routines are organized into four libraries.

I. Input/Output Utilities Library

This library contains routines which let you access the functionality of various DOS functions and procedures from within your Pascal program. The library contains 23 routines including procedures for: copying, renaming, deleting, locking/unlocking, and appending files; loading character sets, loading/saving binary files, and more.

II. System Functions Library

This library contains 34 functions and procedures which allow you to access hardware functions from within your application program. Included are commands which allow you to: enable or disable the keyboard, break key, screen, key click, and more; set the speed of key repeat and debounce; set border colors, background colors, and character luminance; and more. (Some routines require an XL or XE.)

III. Screen Management Library

This library contains 25 routines which you can use in your Pascal programs to control screen functions. The library includes routines for: GotoXY and other cursor control functions; insertion/deletion of characters and lines; clear screen; tab controls; and more.

IV. Other System Utilities

This library includes several random number routines, conversion routines which allow you to convert strings to integers or real numbers and vice versa, sort and merge routines which allow you to sort records and files alphabetically or numerically, and a line parsing routine which enables you to interpret command line inputs to your Pascal programs.

Hardware Requirements: Any Atari 800/XL/XE with 48K
Software Requirements: Kyan Pascal (Version 2.0)
Suggested Retail Price: $39.95
The Advanced Graphics Toolkit is a family of routines which provide the experienced programmer with an easy means of adding sophisticated graphics to Atari programs. With Kyan Pascal and the Advanced Graphics Toolkit, you can create programs with hi-res displays, 3-Dimensional graphics, perspective drawings, player/missile graphics, and much more.

The Advanced Graphics Toolkit consists of three modules -- player/missile graphics, advanced (3-Dimensional) graphics, and Atari 1020 plotter routines.

The player/missile graphics module provides the programmer with a set of basic procedures for creating graphics displays using smooth, fast-moving objects. The player/missile graphics routines are grouped into the following categories:

- **Initialization:** Commands which set-up the operating environment;
- **Movement:** Commands to set up, activate, or modify sprite locations;
- **Clearing:** Commands to erase sprites from the screen.

The advanced graphics module provides the Pascal programmer with tools for creating and manipulating 3-Dimensional images. The procedures support:

- **Geometry and Line Generation:** Location and display of simple points and line segments;
- **Transformations:** Uniform alteration of images through scaling (changing the image size), translation (moving the image), and rotation (rotating the image about a fixed point);
- **Windowing and Clipping:** Selection and enlargement of portions of a drawing, and clipping (deletion) of undesired portions;
- **3 Dimensional Images:** Extension of graphics to 3 dimensions; and,
- **Curves:** Generation of curves using interpolation and B-spline methods.

The Atari 1020 plotter routines provide the programmer with the tools needed to print color graphics output to Atari's low-cost plotter.

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**Hardware Requirements:** Any Atari 800/XL/XE with 48K
**Software Requirements:** Kyan Pascal (Version 2.0)
**Suggested Retail Price:** $39.95
COMPUTER GRAPHICS: A Programming Approach

This 445 page textbook is quickly becoming the standard introduction to
interactive computer graphics. It is the perfect accompaniment to Kyan's
Advanced Graphics Toolkit. It provides the hands-on experience and basic
information needed to implement, modify, and use a computer graphics system.
The book is built around detailed language independent algorithms for a graphics
system and follows the standards proposed in the Graphics Standards Planning
Committee's CORE system. By using this standard of basic graphics
capabilities, the book provides a solid foundation for more advanced techniques.
It includes coverage of raster graphics and discusses interactive techniques,
enabling the reader to learn methods of graphical input as well as output. In
addition, general 3D viewing is treated to familiarize the reader with the CORE
system approach to viewing three-dimensional objects. Numerous problems and
experiential exercises are included to enhance comprehension of the material.

COMPUTER GRAPHICS .................. $36.95
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