



# Outline Processing and More for CP/M!

## **KAMAS**™ ... The Next Wave

As an idea craftsman, you use your mind like a skilled pair of hands. You take hold of your concepts, then develop and refine them to convey dynamic new thoughts. Now, the tool that can strengthen your creative grasp is well within your reach.

The KAMAS Knowledge And Mind Amplification System combines the revolutionary features of outline processing with information retrieval, word processing, and an extensible, programming environment. KAMAS supports your thinking process and keeps you in touch with your ideas, with power to spare.

KAMAS—leading you to the next wave of the software revolution.

## **KAMAS**™ ... A Personal Tool for Idea Craftsmen

KAMAS works the way you do—naturally. Start out by brainstorming. KAMAS lets you jot down your ideas quickly as you think of them. If you want to elaborate, you can add text with full screen editing.

Then, arrange your ideas into a familiar outline format. Outline processing does for ideas what spreadsheets do for numbers. You can deal with the structure of your ideas, independently of the textual content. Outline processing helps you employ a logical, scientific approach to thinking.

And KAMAS puts full control at your fingertips. Change the structure as easily as you change your mind. Combine or split your ideas into new categories. Insert and delete items. Move an item and all the attached text moves with it. Change the level of importance by promoting or demoting an item.

Keeping track of how your text is structured is easy using the electronic outline. You can follow your main line of thought by collapsing the details from view. Then, expand the outline to develop the specifics. By collapsing and expanding portions of the outline, you can maintain an overview and literally see how your ideas fit together.

KAMAS brings your ideas to life as you cast their shape.

## **KAMAS**™ ... Access Ideas in Many Ways

And KAMAS is fast. Your ideas remain at your fingertips with the powerful Information Retrieval commands. With KAMAS, you can locate and retrieve by keyword—even a misspelled one—in less than a second per topic file. You can also search for any string in the detailed text using a rapid partial match retrieval technique.

Display the local neighborhood of ideas. Or focus back through the tree-like structure to view the ancestry of a specific idea. Or show all the items on a given branch of the outline tree.

Access your ideas item by item following the structure up a level, down a level, or previous and next on the same level. Or ignore the structure altogether and move sequentially from item to item.

You can also access your ideas as if they formed a progression of menus.

With all these retrieval features, KAMAS can manage your large text-based applications with ease.

## **KAMAS**™ ... Step Beyond Word Processing

The outline processing in KAMAS takes you a step beyond most word processors by putting you in touch with the forms your ideas take on. But you can also fill out the structure at any level of the outline, using the screen-oriented text editor.

Produce hardcopy output on your printer with many of the features of a full-function word processor including justification, left and right margin settings, paging, and line spacing.

You can also convert your outlined text to a standard CP/M text file for further processing by many CP/M utilities.

KAMAS truly adds a new dimension to text processing.

## **KAMAS**™ ... Achieve a Commanding Vantage Point

And KAMAS doesn't stop there. To be truly productive, software must be more than user-friendly. It must be user-driven. Powerful, yet responsive. So comfortable, so familiar that it becomes an extension of the person using it.

Besides the unique blend of outline processing, information retrieval, and word processing, KAMAS integrates a fully-extensible, structured-programming environment under its hood. We call it a Knowledge Processor because it includes the extra horsepower that you may need to get the job done. The KAMAS programming language lets you tailor outline processing applications to meet your own needs.

With features like built-in data types, dynamic type checking, streamlined control structures, recursion, top down design with bottom up coding, and compact threaded code, the KAMAS language can help you get a grip on the most demanding—and fascinating—tasks.

With the KAMAS programming language, you're in the driver's seat.

## **KAMAS**™ ... Fits Like a Glove

But you needn't do any programming to use the outline processing, information retrieval, or word processing features of KAMAS. All these features are accessible through a simple-to-learn and easy-to-use set of menus complete with context sensitive help.

In fact, you can even benefit from the built-in programmability in KAMAS without doing any programming yourself. Just take advantage of the contributions made by others in the active KAMAS user community. The KAMAS Report newsletter will keep you up to date on the latest applications.

## **KAMAS**™ ... Full Documentation

The KAMAS system includes clear directions to steer you straight. Online help messages guide you while you're using the system.

And the three volume User's Guide includes plenty of examples, tutorials, and a reference section. The KAMAS Report newsletter will also help get you up to speed fast and answer your questions to keep you going.

**KAMASOFT**™

## Hands-On Tools For Idea Craftsmen!

KAMASOFT, Inc.  
2525 S.W. 224th Avenue  
P.O. Box 5549  
Aloha, Oregon 97007  
(503) 649-3765

Order now: Send \$147.00 plus \$4.00 for shipping and handling. For faster service, call—VISA and MasterCard accepted.

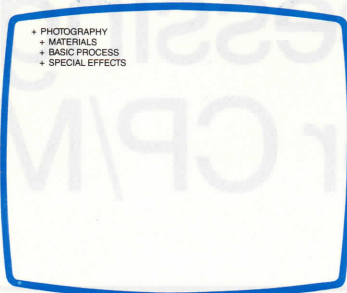
### Requirements:

- CP/M 2.2 or above running on a Z80 with 64K RAM.
- At least 200K of total disk storage.
- One floppy drive with at least 126K.

Most disk formats are supported. KAMAS is configurable for most systems.

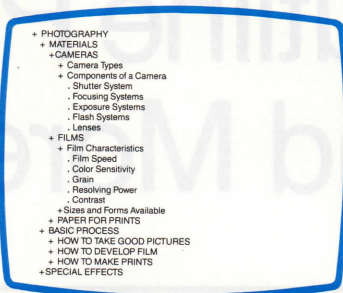
KAMAS and KAMASOFT are trademarks of KAMASOFT, Inc.  
Z80 is a registered trademark of Zilog, Inc.; CP/M is a registered trademark of Digital Research, Inc.; Wordstar is a registered trademark of MicroPro, Inc.

# Here's How KAMAS Works



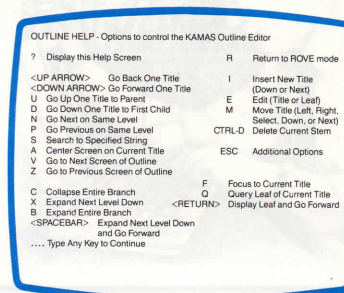
## 2. Collapse the Outline; See the "Big Picture"

From the ROVE menu, you can select a topic outline to edit. The Outline Editor is a full screen editor for brainstorming and organizing your ideas. The indented items are logically grouped below the main parent. When you first enter the Outline Editor, one level of the current outline is expanded while further details are collapsed so you aren't distracted from grasping the big picture. The "+" preceding each title of the outline indicates that there are more levels of detail beneath that title.



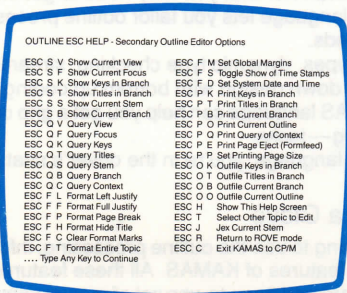
## 3. Expand the Details While You're Working

Expand parts of the outline or the entire outline to show more levels of detail as you need them. Then, collapse the detailed parts to show only an overview at any level. If you move any title, all the titles and text below are moved with it.



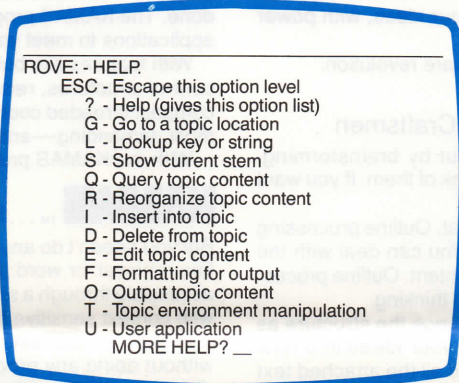
## 4. Outline Editor Options

The Outline Editor offers many functions for moving the cursor around the screen, adding titles to the outline, and reorganizing. KAMAS understands the logic of outlines. Shown here is the main help screen for the Outline Editor.



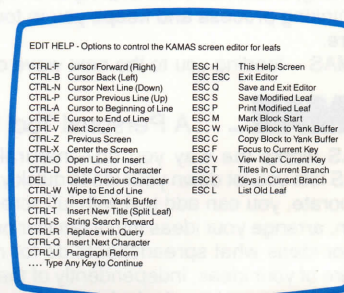
## 5. Additional Outline Editor Options

Without leaving the outline editor, you can show, query, format, and print the outline. You can also switch to other outlines and convert outlines to word processing files. The additional options are shown on this screen.



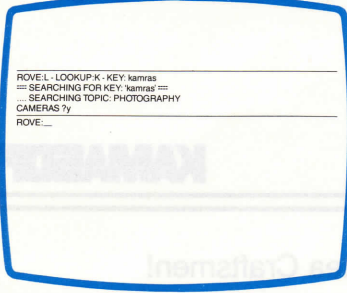
## 1. Easy to Learn, Easy to Use

In the ROVE mode of KAMAS, you can display help for each menu level; it's easy to learn. You can also display a full screen of context sensitive help that describes all the options on a given level. Experienced users can enter ROVE commands without the menu display by typing single keys; it's easy to use. The ROVE mode is the central menu system for exercising the Outline Processing and Information Retrieval features of KAMAS.



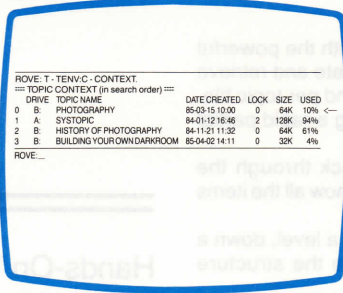
## 6. Versatile Text Editing

Each title of the outline can have an optional page of text associated with it. You edit this text (called a text leaf) using a full screen text editor (called the leaf editor). The leaf editor has its own help screen shown here. Besides being able to edit the text, you can also display parts of the outline while in the leaf editor. The commands can be configured so that they mimic a variety of popular text editors.



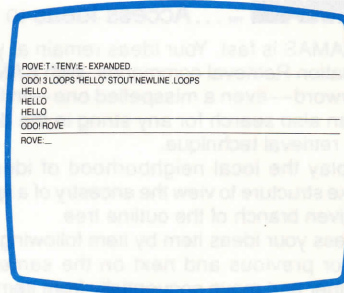
## 7. Access Ideas Fast

Each title in an outline contains a keyword or keyphrase that serves as its name. In ROVE mode, you can rapidly search for any key in an outline. It takes less than one second per mounted topic to find an item using its key. The Lookup option shown here does not require that you spell the key exactly. KAMAS shows you any candidate that "sounds-like" the specified key. You can select the item by typing Y or continue the search by typing N.



## 8. Keep Outlines in Topic Files

Outlines in KAMAS are stored in Topic Files which are not standard CP/M text files. However, you can read your existing CP/M text files or WordStar document files into KAMAS topics. KAMAS can also convert its topic files to standard CP/M text files or WordStar document files. Up to sixteen Topic Files can be mounted into the current topic context and will be searched during any information retrieval commands. In this case, four topics are shown with their creation dates, lock levels (for security), sizes, and the percent used in each topic.



## 9. A Commanding Vantage Point

You can expand the working environment to include access to all the KAMAS programming language commands. With these commands, you can write simple programs interactively and customize the outline processing to the specific task at hand. You can also define new commands and add them to the basic KAMAS command set.



Brings Your Ideas To Life!

# KAMAS™ TECHNICAL SPECIFICATIONS

## Outline Processing Specifications

- Full Screen Outline Editor
- Topic files contain text in outline form.
  - Maximum Topic File Size: 8 MB
  - Maximum Number of Topics Accessible at One Time: 16
  - Total Maximum Accessible Text: 128 MB
  - Maximum Number of Items/File: No limit other than disk space
  - Maximum Number of Items/Level: No limit other than disk space
  - Maximum Number of Levels/File: No limit other than disk space
  - Expansion Buffer Size: About 20K or 250 titles
- Each item in a topic file consists of a key, a subtitle, and a text leaf.
  - Maximum Number of Characters/Key: 31
  - Maximum Number of Characters/Subtitle: 63
  - Maximum Number of Characters/Leaf: 2420

## Word Processing Specifications

- Full Screen Text Editor with Paragraph Reform
- Configurable editing commands mimic Perfect Writer or Wordstar
- Left, Full, and No Justification
- Spacing: Single, Multiple Settings
- Left and Right Margin Settings
- Optional Automatic Paging
- Formatted output to printer or screen
- Conversion of topic files to standard CP/M, ASCII text files compatible with most word processors

## Information Retrieval Specifications

- Access Time: About 1 second per topic for any keyed item
- Retrieval Capabilities:
  - From item to item following the outline structure
  - From item to item ignoring the outline structure
  - Directly to a specified keyed item
  - Directly to any keyed item that sounds like the specified item (Soundex Algorithm)
  - Directly to any item that contains the specified string in the subtitle or leaf (using a Partial Match Retrieval Algorithm)
  - Level-by-Level as if the items formed a progression of menus

## Programming Language Specifications

- Threaded Code, Extensible Language (similar to FORTH)
- Control Structures: If-then-else, 2 kinds of case structures, 6 definite loop structures, 1 indefinite loop structure, general loop exit command, recursion
- Data Types: Word ordinal, double integer, string, character, flag, 2 array types
- Language Structures: Command dictionary with hierarchical vocabulary (over 500 predefined commands supplied), parameter stack, return stack, translate buffer, vocabulary stack, topic stack, loop stack, macro stack, job execution (Jex) stack
- Size of Dictionary Free Space: About 20K
- Maximum Number of Accessible Vocabularies: 16 at any one time
- Maximum levels of Jex nesting: 8
- Benchmark Program: Sieve of Eratosthenes — Execution speed for 10 iterations on a 4 MHz Z80 is 164 seconds. Code size is 130 bytes.

## Telecommunications Specifications

- The KAMAS programming language contains telecommunications commands. These commands require an RS-232, serial port using a Z80 SIO chip, a Z80 DART chip, an 8251 UART chip, or a compatible UART. The serial port must be I/O mapped; it cannot be memory mapped.

## Documentation

- 3-volume user guide with tutorial, functional descriptions, and reference
- KAMAS Report newsletter for registered users
- Reference card
- On-line help screens for menus and for errors

## System Requirements

- CP/M 2.2 or above, running on a Z80 with 64K RAM (minimum 56K TPA)
- 80 col x 24 line ASCII terminal with direct cursor addressing
- At least 200K of total disk storage
- One floppy drive with at least 126K capacity
- Most CP/M disk formats are available; see order form for details

## UTILITY DISK SPECIFICATIONS

Utility Disks (UD) are collections of public domain programs written in the KAMAS programming language and contributed by KAMAS users. UD1 contains the first version of UTILITIES.TOP. UD2 contains online documentation on the KAMAS programming language for programmers. UD3 contains the latest version of UTILITIES.TOP (with AUX ROVE) including programs to read CP/M text files into KAMAS topics, to write Wordstar document files, and to print outlines with section numbers.