

# RANDOM ACCESS IN A PRINTING BUFFER?

## YES!

### Random Access Printing—Lets Your Programs Print Together

Random Access Printing—a revolutionary new concept in buffering which enables all your favorite software to work together to give you a finished printout. First the PipeLine captures the information—then, you select the order in which you want it printed. In RAP Mode, PipeLine can:

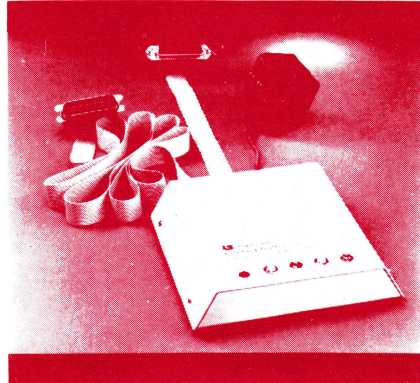
- easily combine text, spreadsheet output, and printer graphics without shuffling diskettes or “cutting and pasting”.
- automatically generate “personalized” form letters, memos, reports, or anything that demands selective printing and duplicating.

In RAP Mode, you can label the information that you're sending. You can think of this as placing the information in a “bucket”, which has a unique name.

You can fill a bucket with anything you want to—words, paragraphs, graphics, whole volumes, as well as PipeLine commands.

Then you send commands to the PipeLine to select which buckets to print and what order to print them in.

You can print the buckets in any order. You can print multiple copies



of the same bucket. You can even put a command in one bucket that prints another bucket!

### PipeLine's FIFO Mode—Conventional Buffering

FIFO—(First-in, First-out) is primitive buffering which lets you use a slow printer without tying up your computer. The PipeLine performs data compression, storing all redundant data in a concise form, and this significantly increasing the effective memory capacity.

### PipeLine's Bypass Mode—Straight To The Printer

BYPASS—This mode routes printed data directly from computer to printer as though the PipeLine isn't there. It can be used to momentarily interrupt a long PipeLine operation in progress (without disturbing memory contents or losing its place.) print a quick catalog or listing, then resume where it left off.

### What The PipeLine Includes

The IS PipeLine comes complete with cables, power supply, and comprehensive manual. A complete set of examples, tips on usage, and an explanation of the commands are provided. The IS PipeLine includes a 1 year warranty. And of course, full support by an experienced engineering and technical staff, in the IS tradition.

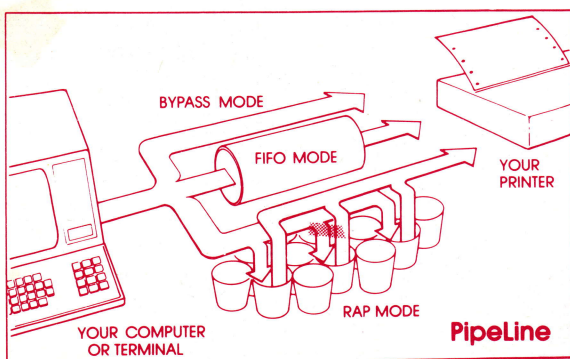
## PipeLine

### Random Access Printing Buffer

- Random Access printing—stores paragraphs or pictures for printing in any order—any number of times.
- FIFO Printing—conventional first-in, first-out “dumb buffer” operation.
- Bypass Printing—Lets you interrupt a long print to do a short, urgent print.
- Compression of data for efficient utilization of memory space.
- Simple erase feature to clear buffer.
- Automatic duplication capability. Prints copies without using your computer.
- Easily expandable by you, from 8K Bytes to 128K Bytes.
- Stand-alone unit—does not use up your computer's power or expansion slot space.

The PipeLine is an intelligent buffering device which connects between a computer or terminal and a printer. It is designed to add a world of new capabilities to your computer system. The PipeLine frees your computer from the tedious task of printing with a low speed printer by buffering from 8096 to 131,072 characters of data. It also brings new organizational capability to your system. PipeLine's Random Access Printing feature lets you combine printed output from all your favorite programs, and print reports or letters in a single pass.

The PipeLine is Universal—it works with any parallel (Centronics style) computer/printer combination. A special version is available for direct connection to our PKASO interface for Apple Computer.



INTERACTIVE STRUCTURES INC.

## IS PIPELINE PRODUCT DESCRIPTION

**MODELS:** UNIVERSAL PIPELINE for use with any computer or terminal featuring a "Centronics Standard" parallel printer output port. (36 pin "ribbon" connector.)

PKASO PIPELINE for use with the output connector of the IS PKASO interface board for the Apple computer.

**Output Compatibility:** Any Printer with "Centronics Standard" parallel interface provisions.

**Cabling:** Uses existing printer cable—all other necessary cabling supplied.

**Documentation:** Comprehensive manual including numerous examples, quick reference sheet, theory of operation, full index.

**Physical Description:** Sturdy metal cabinet with rubber feet. 1.5" x 8.5" x 6.3". Connectors in rear for data & power. Controls & indicator light on top.

**Power Requirements:** 110 vac. Wall-plug-in adaptor with 6' cable included. (Adapter provides 9Vdc at 750 mA max.)

**Controls:** 2 mode switches: BYPASS/NORMAL and RAP/FIFO  
2 pushbuttons: INTERRUPT and ERASE  
1 indicator light.

**Operating Modes:** BYPASS: Direct Data transfer without processing or storage.  
FIFO: "Dumb" buffering using memory as a data reservoir which the computer can fill quickly, freeing computer and operator for their next task. The reservoir then empties as slowly as necessary to the printer.  
RAP: RANDOM ACCESS PRINTING. Buffer memory can be filled, then rearranged and expanded before printing! Simple commands imbedded in the text can request selective printing, copying, inserting, and collating of data from buffer memory or "live" data sent directly from the computer.

**Hardware:** Dedicated microprocessor with control firmware and up to 128K Bytes of Random Access Memory.

**Memory Technology:** Industry standard 64K x 1 IC's user installable with instructions included. Memory is sized automatically—no switches or jumpers to change.

**Standard Memory Configurations:** 8K, 16K, 32K, 64K, 128K. (User can configure any multiple of 8K up to 128K).

*ALSO FROM INTERACTIVE STRUCTURES,*

**THE EP12 PRINTER INTERFACE FOR EPSON, IS NOW AVAILABLE FOR APPLE DOT MATRIX PRINTERS (AP12), OKI (OK12) AND PAPER TIGER (ID12)!**



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