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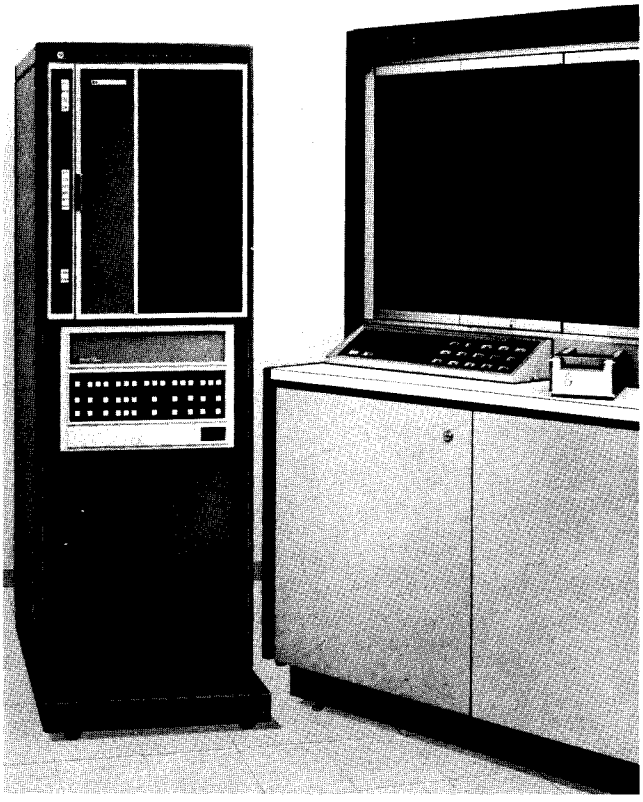
MAGNETIC TAPE REFORMATTING SYSTEM

MODEL 2022A-OPTION 101

The Hewlett-Packard 2022A Option 101 Magnetic Tape Reformatting System (MTRS) is specifically designed to interface to Kodak KOM-80 and KOM-90 Microfilmers.



SYSTEM HARDWARE

The HP 2022A Option 101 Magnetic Tape Reformatting System consists of a magnetic tape drive, a central processor, and a card reader. The tape drive accepts 7- or 9-track tapes recorded in standard NRZI or Phase-Encoded formats. The central processor has a 4-thousand 16-bit word memory and dual direct memory access. It reformats the data and outputs through a KOM-80/90 Microfilmer Interface. Control of the system is via a marked sense card that specifies the input and output parameters. The card reader is a hand-fed single-card reader that reads punched or marked cards.

SOFTWARE SUPPLIED

The following classes of input formats can be handled:

Kodak Native Mode Emulation

Tape generated for a KOM-80 Microfilmer may be run on KOM-80 **or** KOM-90 Microfilmers.

Tape generated for a KOM-90 Microfilmer may be run on KOM-80 **or** KOM-90 Microfilmers.

KOM-80 Microfilmers may have the channel skip features of the job setup card for the KOM-90 Microfilmer.

IBM Line Printer Emulation, for ASA or IBM System 360 machine code using fixed or variable block lengths.

The output to the Kodak KOM-80 or KOM-90 Microfilmers is in one of the following forms:

Roll film, with fixed leader and trailer. A checkerboard pattern is generated to mark the beginning and the end of the job. Routines are included to generate "Eyeball" character frames to identify film segments.

Fiche output is available in all of the standard KODAK VERSAFORM Camera outputs. Titles are available via the card reader for 42x fiche with an 11" by 14" page format.

ADDITIONAL SOFTWARE

Special format routines may be programmed in HP Assembler language. These programs may be submitted to the Magnetic Tape Reformatting System User's Group and will be available to any MTRS user.

OPERATOR CONVENIENCE

Operation is remarkably easy. First, the operator mounts the system tape on the tape drive and selects 9-track NRZI operation on the tape drive. Next, the marked (or punched) card outlining the input and output parameters of the reformatting job is fed into the card reader. Then, the appropriate program modules are pulled from the system tape. After the tape has rewound, the operator merely removes the system tape and places the job tape on the tape drive. The operator then selects the appropriate tape format (7- or 9-track and NRZI or Phase-Encoded) on the tape drive and he is ready to operate the system by using the microfilmer controls. It is not necessary to use the system tape again unless the format requirements change.

Operation of the system may be enhanced by the addition of a teletype as a system console. System directives and operator messages can then be entered and read directly from the teletype instead of from the octal switch register on the front panel of the computer. The card reader is retained as the means of specifying reformatting jobs, thereby reducing the chance for operator error in defining the job.

Another time saving option is the addition of a second multiformat tape drive. On multivolume jobs this allows a second tape to be started while the first is rewinding or for single volume jobs the system tape can remain mounted on the second drive.

SUPPORT AND SERVICE

The HP 2022A Option 101 Magnetic Tape Reformatting System is fully supported by HP systems analysts and service engineers in the 48 U.S. sales offices. This support is also available in selected International offices.

PURCHASE, LEASE, OR RENT

The equipment may be purchased, leased on a full payout lease, or rented on a minimum one-year rental basis. Contact your local Hewlett-Packard Sales Engineer for detailed information on system performance of financial terms available.

BASIC SYSTEM AND OPTIONS

2022A Magnetic Tape Reformatting System

Option 101: Interface, Interconnect hardware to Kodak KOM 80/90 Microfilmer

Elective Options:

001 4K Added Memory for total of 8K

002 8K Added Memory for total of 12K

003 12K Added Memory for total of 16K*

010 Delete Cabinet**

011 Teletype and Interface (2752A and 12531C)

012 Multiformat Slave

015 Operation at 230 volt, 50 hz

* Further memory expansion may be ordered as line items.

**Proper replacement cabinet must be added as a line item.

MTRS THROUGHPUT

(In pages per minute)

TAPE FORMAT		CHARACTERS PER PAGE				
TRACKS	CPI	1600	3200	4800	6400	8000
Seven-Track	200	300	150	100	75	60
	556	500	360	240	180	140
	800	500	420	330	260	200
Nine-Track	800	500	420	330	260	200
	1600	500	420	360	330	300

NOTES:

1. Throughput rates assume a minimum 4K system and a nominal format routine.
2. The addition of 4K memory would increase NRZI throughput rates for pages with a large number of characters by allowing larger data blocks and eliminating interblock gap times.
3. If the data block exceeds the buffer size, the tape drive must back-space to the interblock gap and read again, ignoring the previously read data. Throughput will decrease by a factor of at least two or more if the tape must back-space.
4. If throughput is of paramount importance, empirical measurements should be made on specific jobs to determine throughput.

SPECIFICATIONS

Input Tape

Densities: 7-track: 200, 556, and 800 cpi NRZI.
9-track: 800 cpi NRZI.
9-track: 1600 cpi Phase-Encoded.

Speed: 45 ips

Rewind: 160 ips

Reformatting Routines

KOM 80 Microfilmer to KOM 90 Microfilmer.

KOM 90 Microfilmer to KOM 80 Microfilmer.

Line Printer Tapes using

ASA Control Codes in seven or nine track for fixed, variable, or undefined blocks

IBM 360 Machine code controls nine track only for fixed or variable blocked data

1401 D-modifier codes Type B in seven or nine track

1401 D-modifier codes Type C in seven or nine track

Output Formats

Roll – with leader and trailer, checkerboards, and eyeball targets.

Fiche – Standard KODAK VERSAFORM Camera, titles for 42x fiche with 11" by 14" page format.

Rate – 90K bytes (instantaneous).

Dimensions and Weight

Height: 56" panel space (61-1/4" overall).
Width: 21"
Depth: 30" (37-3/4" including pedestal).
Weight: 425 pounds

Power Requirements

115 or 230V ±10%, 50 to 66 Hz, 1200 VA.

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For more information, call your local HP Sales Office or East (201) 265-5000 Midwest (312) 677-0400 South (404) 436-6181 West (213) 877-1282. Or, write: Hewlett-Packard, 1501 Page Mill Road, Palo Alto, California 94304. In Europe, Post Office Box 85, CH-1217 Meyrin 2, Geneva, Switzerland. In Japan, YHP, 1-59-1, Yoyogi, Shibuya-Ku, Tokyo, 151.

Printed in U.S.A. 9/72

5952-5452