

dec

PERMANENT  
MEMORANDUM

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DATE

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SUBJECT Read In Mode Simulator  
TO PDP Distribution List

ABSTRACT

A utility routine generated primarily for maintenance and checkout purposes. The routine provides a means of entering programs into PDP-1 without activating the "read-in" switch.

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Introduction

The first three lines of a binary\*tape are interpreted as "read-in" mode instructions. The next three lines of data are stored as determined by the address portion of the read in mode instruction.

There are two "read-in" mode instructions ("deposit in-out" (dio) or jump (jmp)). When a dio instruction appears, the next three lines on tape will be stored in memory. A jmp instruction (last three lines on tape) terminates the "read-in" mode and a jump is executed to the address of the jump instruction.

Operating instructions:

- #1 Load program into memory via test word switches or other input device.
- #2 Load "read-in" mode tape into reader and turn reader on.
- #3 Start routine at start indicated below.

,Read-in mode routine  
,14<sub>8</sub> registers

address			Reg.
0	start	rpb	730002
1		dio temp	320013
2		lac temp	200013
3		dap stop	260007
4		dap stop & 2	260011
5		and stop	020007
6		sad stop	500007
7	stop	jmp	600000
10		rpb	730002
11		dio	320000
12		jmp	600000
13	temp	0	000000

\*A binary tape has the following format:

<u>holes</u>			
<u>87654x321</u>			
0	00x 0	-----	Read-in mode instruction
0	x )	-----	Address of following data
0	x )		

<u>holes</u>	
<u>87654x321</u>	
0 00x 0 )	
0 000x 0 )	-----Data
0 000x )	
x	
x	
x	

Note: hole seven is not used in binary tapes when using the "rpb" instruction.

A better routine for general purpose use is:

<u>Address</u>			<u>Contents</u>
0	start	rpb	730002
1		dio do	320003
2		rpb	730002
3	do	----	(dio) or (jmp)
4		jmp start	600000