1. IDENTIFICATION

- 1.1 Digital-7-13-1
- 1.2 Read-In-Mode Loader
- 1.3 July 21, 1965

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2. ABSTRACT

The RIM Loader is a minimum-sized routine for reading and storing information contained on readin mode tapes via the perforated tape reader.

3. REQUIREMENTS

3.1 Storage

13 Decimal (15 octal) memory locations.

3.3 Equipment

Standard PDP-7.

- 4. USAGE
- 4.1 Loading

The RIM Loader, if not already in core, may be placed in memory by either of two methods.

Since it is a very short program, it may readily be loaded manually by the console switches and control keys. To do this proceed as follows:

4.1.1 Set into the MEMORY ADDRESS switches the address of the first memory location into which information is to be loaded. (07763 or 17763)

4.1.2 Set the intended contents (700101) of this location into the ACCUMULATOR switches and press the DEPOSIT key.

4.1.3 Set the intended contents (617763) of the next memory location into the ACCUMULATOR switches and press the DEPOSIT NEXT key.

4.1.4 Repeat the last step until the whole program has been placed in memory.

Alternately the RIM Loader may be placed in memory by the photo reader if a punched paper tape containing the program is available. This tape must be in a format similar to normal binary format (see below) except that channel 7 is never punched until the last group of three characters occurs. In this last group the first character only appears with channel 7 punched; the remaining two characters do not have channel 7 punched.

Place the tape in the photo reader and set the address at which loading is to commence, 7762 or 17762, in the MEMORY ADDRESS switches. Depressing the READIN key will now load the program.

4.2 Calling Sequence

None. This routine cannot be called as a subroutine.

- 4.3 Startup/Entry
- 4.3.1 Place the RIM format tape in the reader.
- 4.3.2 Set the ADDRESS switches to 17770 (7770 for 4K machine).
- 4.3.3 Press START
- 5. RESTRICTIONS (Not Applicable)

10. PROGRAM

10.4 Program Listing

As previously stated this program may be placed into the PDP-7 memory by using either the DEPOSIT key or the READ-IN key.

Location		Octal Contents			
776 2 O	R 17762	0	R,	0	/SUBROUTINE TO READ
7763	17763	700101		RSF	/an 18-bit binary word
7764	17764	617763		JMP1	/WAIT FOR FLAG
7765	17765	700112		RRB	/READ BUFFER
7766	17766	700144		RSB	/fetch binary word
7767	17767	637762		JMPIR	/exit subroutine
7770	17770	700144	GO,	RSB	/ENTRANCE: SELECT BINARY
7771	17771	117762	G,	JMS R	/FETCH A WORD
7772	17772	057775		DAC OUT	/STORE IT (DAC OR JMP)
7773	17773	417775		XCT OUT	/execute it
7774	17774	11773562		JMS R	/READ NEXT WORD
7775	17775	0	OUT,	0	/EXECUTE FIRST OF PAIR
7776	17776	617771		JMP G	/continue

- 11. DIAGRAMS (Not Applicable)
- 12. REFERENCES

12.1 Other Library Programs See Digital-7-12-1, F.F. Loader and Digital-7-16-1, Block Format Loader.

12.2 Digital Manuals

See PDP-7 Users Handbook, Section 14.