

IDENTIFICATION

Product Code:	DEC-12-ZR9A-D
Product Name:	BUILDING LAP6-DIAL SOURCES Program Description
Date Created:	July 1, 1970
Maintainer:	Software Services

LAP6-DIAL is editor, filing system and assembler for use with the PDP-12 computer. The editor and filing portion are derived from the basic LINC program LAP6¹ by Mary Allen Wilkes of Washington University. The assembly portion is derived from several programs used for the PDP-8 computer including PAL-D².

The Digital Equipment Corporation wishes to express to the author, Mary Allen Wilkes (Clark), and the Computer Research Laboratory of Washington University, St. Louis, Missouri, its appreciation for the development set forth in LAP6 as well as its thanks for permission to use parts of the LAP6 program.

¹M. A. Wilkes, LAP6 Handbook, Computer Research Laboratory Tech. Rep. No. 2, Washington University, St. Louis, May 1, 1967.

²PAL-D Assembler Programmer's Reference Manual DEC-D8-ASAA-D.

The DIAL-MS source includes all the system programs and associated routines that run under DIAL-MS, such as CREF and GENASYS. The system can be assembled if a working DIAL-MS system is available on unit 0. Unit n in the following procedure is the unit that will contain the new system. In all PIP operations, unit 1 is specified for a tape system and unit 11 is used for a disk system.

1. Load DIAL-MS from unit 0.
2. If two DF32 disks are present, turn one off at this time.
3. Type +ZE)
 +AS EDITOR1,m)
 where m is the unit containing the DIAL-MS source.
4. Use PIP to transfer
 10 blocks from block 400 (unit 1 or 11) to block 300 (unit n)
 7 blocks from block 371 (unit 1 or 11) to block 311 (unit n)
 1 block from block 415 (unit 1 or 11) to block 320 (unit n)
 1 block from block 423 (unit 1 or 11) to block 321 (unit n)
5. Type +ZE)
 +AS BUILD,m)
6. Use PIP again to copy
 1 block from block 400 (unit 1 or 11) to block 310 (unit n)
 1 block from block 406 (unit 1 or 11) to block 345 (unit n)
 1 block from block 407 (unit 1 or 11) to block 365 (unit n)
 1 block from block 405 (unit 1 or 11) to block 366 (unit n)
7. Type +ZE)
 +AS ASSEM1,m)
8. Use PIP to move
 11 blocks from block 370 (unit 1 or 11) to block 330 (unit n)
 1 block from block 402 (unit 1 or 11) to block 344 (unit n)
 2 blocks from block 403 (unit 1 or 11) to block 326 (unit n)
 3 blocks from block 405 (unit 1 or 11) to block 341 (unit n)
 1 block from block 422 (unit 1 or 11) to block 324 (unit n)

9. Type →ZE
 →AS FILECOMS,m
10. Request PIP to transfer
 4 blocks from block 400 (unit 1 or 11) to block 350
 (unit n)
11. Type →ZE
 →AS PRINTMS,m
 →AS PXDXSRC,m
12. Use PIP again to copy
 4 blocks from block 400 (unit 1 or 11) to block 361
 (unit n)
13. Type →ZE
 →AS LOADER,m
14. The last PIP operation is to move
 2 blocks from block 420 (unit 1 or 11) to block 354 (unit n)
15. Type →ZE
 →AS PIP1,m
 →SB PIP,n,p

The program SLOWCREF¹, available through DECUS, can be used to obtain cross-reference listings of the system programs. 16K of core and 3000 scratch disk blocks (1 RK08 or 3 RS08 disks) are required. If only two RS06 disks are present, cross-reference listings can be obtained by changing the binary output pointer (unit m) from 7430 to 7630 so that the Assembler output is to tape rather than disk, enabling disk unit 1 to serve as a scratch unit.

¹The program SLOWCREF is a modification of the PDP-12 program CREF and is used to obtain cross-reference listings of long programs.