Product Code: DEC-12-SE2D-DN1 Product Name: LAP6-DIAL-MS for the RK8F Date Created: June 1973 Maintainer: Development The software described in this document is furnished to the purchaser under a license for use on a single computer system and can be copied (with inclusion of DIGITAL's copyright notice) only for use in such system, except as may otherwise be provided in writing by DIGITAL.

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This manual is a supplement to the LAP6-DIAL Programmer's Reference Manual, DEC-12-SE2D-D and the DIAL-MS Supplement, DEC-12-SE2D-DN.

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## 1.0 NEW FEATURE

DIAL-MS has been modified to provide support for four RKØ5 disks. This feature makes available to the PDP-12 user more low cost mass random access storage than that previously available from Digital Equipment Corporation.

## 2.0 SYSTEM IMPROVEMENTS

From 1 to 4 RKØ5 disks may be accessed by DIAL-MS. The unit numbers for addressing RK8F devices for DIAL-MS commands are:

Device	Unit Number	<u>Disk Unit</u>
l RKØ5 disk	1Ø - 16	Ø – 6
2 RKØ5 disks	2ø - 26	$7 - 15_{9}$
3 RKØ5 disks	3Ø - 36	$16 - 24_{0}^{8}$
4 RKØ5 disks	4Ø - 46	25 - 33 <sub>8</sub>

The logical unit size has been increased from  $1\emptyset\emptyset\emptyset_8$  blocks to  $16\emptyset\emptyset_8$  blocks. This was necessary to provide the user access to all of the disks. The logical unit size is also compatible with LINC tapes marked for  $16\emptyset\emptyset_8$  blocks. PIP has been modified to treat logical units as  $16\emptyset\emptyset_8$  block devices. DIAL-MS itself, has not been modified to operate on files which reside partially or entirely beyond block  $777_8$ . This means that the DIAL commands AP, SP, AB, SB, LO, AS, LI, QL, and PS will not operate correctly on a file whose last block lies beyond block  $777_8$ . Use PIP to move files in and out of the area beyond block  $777_8$ .

3.0 SUGGESTED MODE OF OPERATION

3.1 Initialization of a Formatted Disk

The following short procedure is used to initialize a formatted disk:

 Insert the cartridge into the disk drive and load it. (Set the RUN/LOAD switch to RUN.)

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- 2. Mount the RK8F DIAL-MS tape on unit  $\emptyset$ , write enabled.
- 3. Set the left switches (LSW), right switches (RWS), and the mode switch as follows:

 $LSW = \emptyset7\emptyset1$ RSW = 731Ø MODE = LMODE

- When the disk is ready, indicated by the ready light on the disk drive, press I/O Preset, DO, and START 2Ø.
- 5. Load PIP from tape unit  $\emptyset$  and copy unit L $\emptyset$  onto the system unit R $\emptyset$ . (The PIP used must be that which is supplied with the RK8F system.)
- Return to DIAL-MS, display the index on unit 1Ø, and delete any files which are not required on the disk, such as the PIP sources and the BOOTSTRAP source. This step frees storage space for commonly used programs.
- Load PIP from unit 1Ø and copy the most commonly used system programs such as MARK12, CREF, FOCAL-12, TED, etc., from other DIAL-MS tapes onto unit 1Ø.
- 8. If a backup of this system now residing on logical unit  $1\emptyset$  is desired, copy it onto a LINC tape marked for  $16\emptyset\emptyset_8$  blocks. To restore this tape onto another cartridge, it is only necessary to mount this tape on unit  $\emptyset$  and perform steps 1 through 5.
- 3.2 Bootstrapping DIAL From the Disk

Assuming that the disk has been initialized as in section 3.1 and that the bootstrap binary is stored in block  $\emptyset$  on the disk, the DIAL-MS system may be restarted using the following procedure:

1. Set Switches

$$LEFT Sw. -- LSW = \emptyset \emptyset 2\emptyset$$

$$C(FH) S^{2} -- RSW = 6743$$

$$MODE = PMODE \left( \{ X, N, d_{L} \} \right)$$

- 2. Press STOP, FILL, FILL STEP
- 3. Set RSW = 5021
- Press FILL STEP, I/O PRESET, and START 2Ø