Installation Procedures: Refer to "LDOS 5.3 installation instructions" provided with the LDOS 5.3.0 Update; however, there is no need to DATECONV 5.3.0 diskettes.

Added/Modified Features: The following list documents the changes introduced since the 5.3.0 release:

The LDOS system disk no longer contains an imbedded serial number; the serial number integrity check has been deleted.

ATTRIB: The parameters "Lock", "Unlock", "Mpw", and "Name" may all be abbreviated to a single character, "L", "U", "M", or "N".

BACKUP: Parameters "Old" and "New" may now be abbreviated to "O" and "N". Backup has also been improved to perform a mirror-image backup of a Model I LDOS 5.3.1 dual-density diskette when the destination has been properly formatted with the SYSTEM parameter on a Model I.

CONV: A Dir parameter has been added which allows you to display a directory of files on a Model III TRSDOS 1.3 diskette. Also, a notspec has been added to the ambiguous file specification.

CREATE: The **SHRINK** parameter has been added to CREATE; when specified, the created file will be established to deallocate unused space.

DATE: The DATE command and the *"Date?"* prompt on boot now support a date range of 32 years; from January 1, 1980 through December 31, 2011. Years from 2000 to 2011 are entered as 00-11.

FORMAT: The parameters "Name", "Mpw", "Cyl", "Dir", "Abs", and "Wait" may all be abbreviated to a single character: "N", "M", "C", "D", "A", and "W". Note that the DIR=cyl is a new feature and allows you to specify the cylinder for the directory. This may be useful for creating diskettes to back up Memdisks which typically use cylinder :1 for the directory. FORMAT will also establish the old *user password* field for DIR/SYS with a value indicating a blank password so pre-x.3 systems can access the directory.

HELP: The DOS/HLP file has been changed to conform to the changes introduced by version 5.3.1. The (P) parameter has been added to the HELP utility which allows you to direct the help screens to the printer.

KI/DVR: When installed into memory, the keyboard driver will now detect whether the host is a Model III or 4 computer; an enhanced driver supporting CAPS, CTRL, and the three function keys will be installed if a Model 4 is detected.

MEMORY: The Go parameter may be abbreviated to "G".

PATCH: Parameters "Remove", "Yank", and "Option" may be abbreviated to "R", "Y", and "O".

PR/FLT: The printer driver portion also supports a ten-second timeout enabled or disabled with the **SYSTEM (PRTIME)** command.

PURGE: Parameter "MPW" may be abbreviated to "M".

REPAIR: The useless "ALIEN" parameter has been dropped; it is no longer needed to repair a diskette with a structure alien to LDOS.

RESET: The RESET command has been improved with the addition of two parameters. **RESET filespec (LRL=n)** alters the logical record length of the file to the value n; appropriate values of n are in the range 0-255, with 0 implying a record length of 256.

A DATE parameter has been added to allow the file's directory date to be altered somewhat. Specifying **RESET filespec (DATE=OFF)** restores the file's directory entry to the old-style dating of pre-5.3 release. The old "**user**" password field will be set to blanks. This may be useful for files which must be transferred to an older DOS release, such as by the TRSDOS 1.3 CONVERT utility. Specifying **RESET filespec (DATE=ON)** will establish the file's directory date as that of current system date and time. Note that when this option is specified, the MOD flag will be set to indicate a file change.

SPOOL: Three parameters have been added: **Pause** allows you to temporarily suspend despooling; **Resume** allows you to continue despooling after a pause; and **Clear** empties the spooling buffers without printing. The command syntax for these added parameters is:

SPOOL (Pause|Resume|Clear)

The spooler has also been improved to free up the memory it uses when turned off, provided the spooler was the most recent module installed. If the memory it used was trapped by a subsequent module's installation, the spooler will re-use its previous memory allocation and inhibit alteration of its previous memory and disk parameters.

SYSTEM (SYSGEN): SYSGEN will no longer abort if within a JCL file; JCL, if active, will be temporarily suspended during the configuration generation. SYSGEN will abort with an appropriate error if the drive specified to receive the configuration file is write protected.

SYSTEM: An option to enable or disable the printer time-out and error generation when line printer output is requested and the printer is unavailable has been added. This option is specified by the **SYSTEM (PRTIME=ON|OFF)** facility and is configurable with the SYSGEN command. This option is applicable only when the PR/FLT is installed as it uses the printer driver resident within the filter. Specifying **SYSTEM (PRTIME=ON)** establishes an approximate 10 second time-out on printer unavailable. Specifying **SYSTEM (PRTIME=OFF)** disables any time-out; if the printer is unavailable, the DOS will hang!

TED: The TED text editor has been enhanced with the addition of print and directory query commands. **[CTRL-P]** will print the entire text buffer; **[CTRL-B]** followed by **[P]** will print the contents of the first block encountered. **[CTRL-Q]** will now prompt for *Drive?* Entering **[:d]** will display an abbreviated directory of visible files in drive "d". You may restrict the display to files matching a. particular extension by entering **[/ext:d];** a "$" character matches any character in the position entered. It is necessary to depress **[ENTER]** at the completion of the directory display to restore the text screen. The message display of TED has been improved slightly to display *Load Filespec?* for **[CTRL-L]** versus *Filespec?* for **[CTRL-F]** to differentiate the two visually.

TIME: When entering a clock time, you may omit a seconds entry, or both a seconds and minutes entry. The required syntax is "hh:mm:ss", "hh:mm", or "hh". Note that the separator character can be a period.

Technical Changes: @DATE now returns a string of the form "MM/DD/YY", where the "YY" field can be 80-99 or 00-11; 00-11 are indicative of 2000-2011. All software programs supplied as part of LDOS will generate the directory file date using 80-99 or 00-11 as the year, or 1980-2011 where 4-digit years are generated.

In order to work around the Model III ROM @DATE function, the binary storage for the year is excess 1900 for years 1980-1999 and excess 2000 for years 2000-2011.