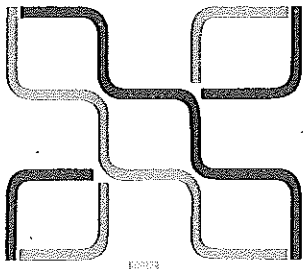
POLYSYS

UTILITIES

MANUAL

V.1



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V.1

POLYCORP

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1. DISK OPERATING SYSTEM COMMANDS

1.1. INTRODUCTION

The disk operating system (DOS) commands are provided on the Programming disks and where there is room on the disks containing other modules. Each of the commands occupy a separate file with a .CMD extension.

Where the utility is small and requires little work space, it is executed in the Poly in a special work area so that any program currently being run is not affected.

Those utilities which use areas other than the special work area are clearly indicated as these may cause corruption of the BASIC program if run from BASIC or TEXT.

Most utilities may be run from TEXT, BASIC or under DOS. To run a utility under BASIC or TEXT, simply put a + ahead of the command.

For example:

```
DOS
CAT 0
will provide a catalogue of the disk on drive 0.

Ready
+CAT 0
will perform the same action from BASIC or TEXT.
```

To enter DOS from BASIC or TEXT, type DOS.
To return to BASIC from DOS or TEXT, type BASIC.

To enter the TEXT editor from DOS or BASIC, type TEXT.

In DOS commands either a space or a , may be used to separate the values.

For example:

```
CAT 0 .BAS
is exactly the same as

CAT,0,.BAS
```

The display on the screen can be printed on the printer using the WTD (Write to Disk) command.

For example:

```
DOS
WTD PRINT CAT 0
creates a printfile called PRINT.PRT containing the
catalogue and prints it.
```

In this manual all examples of commands are given as if executed from DOS. To execute them from BASIC or TEXT, the command must be preceded by a +.

1.2. FILE NAMING CONVENTIONS

File names may be up to 8 characters long. The first character must be alphabetic and the remainder must be alphanumeric. File names are followed by a "." and a three letter extension. Some extensions have been assigned specific meanings.

BASIC source files	.BAS
BASIC compiled files	.BAC
Data files	.DAT
Print files	.PRT
Operating system files	.SYS
Operating system commands	.CMD
Text files	.TXT

If the file is on a particular drive then the drive number may be added to the filename either at the beginning or the end.
For Example:-

0.PROG1.BAS or PROG1.BAS.0

Both associate the file PROG1.BAS with drive 0.

1.3. COMMAND DESCRIPTIONS

In describing the command syntaxes, the following conventions are used:

-Words in capital letters must be entered exactly as written.

-Words in small letters must be replaced by the user with a specific filename or other word as required.

-Words enclosed in square brackets ([ ]) are optional and may be omitted.

-Underlined words must be entered if that part of the option is used.

For Example:

Syntax: CAT [drive] [filenames]

Allows any of the following to be used:-

```
CAT
CAT 1
CAT MYFILES
CAT 0 MYFILES
```

1.3.1. BASIC

BASIC.CMD is the name of the file containing the disk extensions for POLYBASIC.

Syntax: BASIC [,BASICprogram]

BASIC loads the extensions, to BASIC from disk and if no program is given, enters the BASIC program mode. If a program is specified, then following the loading of BASIC, the specified program is loaded and run.

If the program has no extension specified, then .BAC is assumed.

BASIC is normally used to restart BASIC from DOS.

For example:

DOS
BASIC
loads the extensions to BASIC and enters programming mode.

DOS
BASIC, MENU
loads the extensions to BASIC and then loads and executes MENU.BAC.

1.3.2. CAT

The CAT utility displays names of the files on a disk.

CAT may be run from TEXT, BASIC or DOS.

Syntax: CAT [, drive-list] [,match-list]

drive-list may be one or more drive numbers separated by commas. match-list allows 'masked' viewing of the names in the directory.

For example:

CAT 0 PP2.BAS
Lists only those filenames beginning with PP2 and having extensions of .BAS.

CAT
will catalogue all filenames on the disk drive assigned to that Poly. The disk drive assigned is initially 0 but may be changed using the BASIC command DRIVE.

CAT,1,P.T,MA
will CATalogue those files on drive 1 which begin with P and have extensions beginning with T, as well as those files beginning with MA.

CAT,0,1,TYP,.SYS
will CATalogue all files on drives 1 and 0 which either begin with TYP or have extensions of .SYS.

The display shows NAME TYPE R SIZE DATE PRT.

For example:

POLYEX .BAC 27 26-FEB-82 W

The size is specified in Sectors. The PROTECTION CODE is a list of protection attributes associated with the file. (see PROT).

The date is the date on which the file was created.

1.3.3. COPY

The COPY command copies files. If a system has only a single disk drive attached, SDC (Single Disk Copy) should be used to copy files from one disk to another. COPY can only be used in a single drive system to produce a copy of a file on the same disk, and rename it.

Syntax:	COPY	filename1	filename2	
or	COPY	filename	drive	
or	COPY	fromdrive	todrive	filespecs

If the file exists, a request to delete it is displayed. Typing Y causes the file to be overwritten, to be deleted before the COPY takes place.

The disk containing COPY.CMD must be on drive 0.

COPY may be run from TEXT, BASIC or DOS.

During the COPY all other disk accessing is suspended.
All copied files retain the date and protection of the original.

For example:

COPY may be used on a single disk in the first form. If this is done then the filenames must be different.

COPY 0.DEMOPR.TXT 0.DEMOUP
This copies 0.DEMOPR.TXT to 0.DEMOUP.TXT

The extension of the input file must always be specified, but for the output file this is optional as it defaults to the extension of the input file.

COPY may be used to copy between drives. If the drive is not specified, then the current drive for that Poly is used.

For example:

If the current drive is 0, then:

COPY DEMOPR.TXT DEMPOUP
copies 0.DEMOPR.TXT to 0.DEMOUP.TXT

When copying from one drive to another, the file may retain its original name.

For example:

COPY 0.FILE23.BAC 1

This copies FILE23.BAC from drive 0 to drive 1.

Finally COPY can be used to copy all files from one drive to another or only those corresponding to a match list.

For Example:

COPY 0 1
will COPY all files from drive 0 to 1

COPY 1 0 .BAS .TXT
will COPY all files from drive 0 to drive 1 that have extensions of .BAS or .TXT.

COPY 0 1 DATA PROGR.C
will copy all files from drive 0 TO 1 that have names beginning with DATA or as well as those that begin with PROGR and extensions beginning with C.

The names of each of the files copied is displayed on the Poly.

1.3.4. FASTCOPY

FASTCOPY copies a complete disk onto another. Two drives are required. FASTCOPY.CMD must be on the disk in drive 0. FASTCOPY cannot be used to copy onto a disk with any bad sectors (see FORMAT).

FASTCOPY may be run from TEXT, BASIC or DOS.

Syntax: FASTCOPY fromdrive todrive

FASTCOPY copies sector by sector rather than file by file and so a corrupt disk, or one in which files are scattered all over it, will be reproduced exactly as the original. FASTCOPY will erase anything already on the disk being copied onto.

For example:

FASTCOPY 0 1
will duplicate the disk in drive 0 onto the disk in drive 1.

During FASTCOPY all other disk access by any POLY is suspended.

1.3.5. FORMAT

The FORMAT command is used to format a new diskette or reformat an old one. FORMAT must be used on all new disks before they can be used.

FORMAT may be used from TEXT, BASIC or DOS.

Syntax: FORMAT [drive]
where the default for drive is the current drive.

For Example:

```
FORMAT 1 <ENTER>

ARE YOU SURE?                      Y  produces the following
                                   questions and formats the disk
                                   on drive 1
                                   (or N to terminate)
DOUBLE SIDED DISK?                 Y   (or N)
VOLUME NAME?                       POLY (or any name) <ENTER>
VOLUME NUMBER?                     1   (or any number) <ENTER>
IS THE DISK TO BE FORMATTED IN?    DRIVE 0 Y (or N)
```

When the process is complete then a message stating the total number of sectors formatted is displayed. For a single sided disk this should be 1140 sectors, and 2280 for double sided disks.

FORMAT checks for surface defects. If a bad sector is found on a part of the disk required by the POLY operating system, then the FORMAT is aborted. If this occurs remove the disk from the drive, reinsert it and try again. If this proves unsuccessful after another try then assume the disk is unable to be used.

If bad sectors occur on other parts of the disk, then these are reported and formatting continues. These disks may be used but FASTCOPY cannot be used to copy onto the disk.

The disk containing FORMAT.CMD must be in DRIVE 0.

During FORMAT, all other disk access by any POLY is suspended.

FORMAT.CMD and FORMAT.UTE must be in DRIVE 0.

USING FORMAT WITH A SINGLE DISK DRIVE

FORMAT may be used in a single drive, but the disk to be formatted must be placed in the drive before the final question. To stop formatting the disk containing FORMAT.CMD accidently, it is a good idea to Write Protect by removing the Write Protect slot from the disk protect cover.

1.3.6. KILL

KILL is used to delete files from disk. KILL may be run from TEXT, DOS or BASIC.

Syntax: KILL [drive(s)] [filenames]

Before deleting each file in the list a check is made.

DELETE "FILENAME" ?

Any reply other than Y will leave the file intact and proceed to the next file on the list, but if Y is answered then the file is deleted.

For example:

KILL MYFILE.BIN
will delete MYFILE.BIN from the disk on the current drive for that POLY.

KILL 1.FILE.CMD 0.DATES.TXT
will delete FILE.CMD from drive 1, and DATES.TXT from drive 0.

Files may be protected against any attempts to KILL them by Delete or Write protecting them. (see PROT for the control of such protection).

A file on the PRINTQUEUE may not be deleted using KILL but the print may be stopped using PRINT -filename.

If no filenames are given on a KILL command then the files on the disk are presented one by one for deletion. If Y is pressed, then the file is deleted. Pressing any other key leaves the file intact. Make sure that all write and delete protect flags are removed from files to be deleted prior to running KILL in this manner.

For example:

KILL 1
will give the option to select the files for deletion from the disk on drive 1.

KILL 0 PP
will give the option to delete all files starting with PP on the disk or drive 0.

1.3.7. LINK

LINK tells the Poly the name of the file containing the Poly operating system. This file is automatically loaded whenever the disk unit is switched on, or reset. LINKING must be done prior to a disk being used for automatic loading.

Syntax: LINK POPSM03
where POPSM03 is the name of file containing the Poly operating system.

For example:

LINK 1.POPSM03
will LINK POPSM03 on drive 1.

A disk created using FASTCOPY does not need to be relinked if the original disk was already linked.

1.3.8. LIST

LIST lists the contents of TEXT or BASIC files on the screen. Entire files or only selected lines may be listed.

Syntax: LIST filename [,linerange] — disk lines - not basic nos

The drive number may be included in the filename. If the file extension is not specified, the extension defaults to .TXT. The numbers of the first and last lines to be displayed may be specified - otherwise the whole file is LISTED.

LIST may be run from TEXT, BASIC or DOS.

For example:

LIST 1.TESTPR.BAS
will give:

```
10  REM TESTPROGRAM
20  REM TESTPROGRAM
50  REM TESTPROGRAM
70  REM TESTPROGRAM
100 END
```

on the screen.

LIST 1.TESTPR.BAS,1-4
will give

```
10  REM TESTPROGRAM
20  REM TESTPROGRAM
50  REM TESTPROGRAM
70  REM TESTPROGRAM
```

Note that the range indicates the actual line numbers of the lines and not the BASIC line numbers.

For example:

LIST MASTER 100-
lists the file MASTER.TXT from drive 0, from line 100 to the end of the file.

1.3.9. PCOPY

The PCOPY command is a copy utility that is used to selectively copy files. It can only be used on multidrive systems. PCOPY should only be run from DOS and not BASIC or TEXT.

Syntax: PCOPY drive drive [files]

For example:

PCOPY 0 1 GEOG
will display all files whose names begin with GEOG, giving the option of having each one copied (Y) or not (N).

COPY COMPLETE is displayed when PCOPY is complete.

PCOPY runs more slowly than COPY as each file is transmitted to the POLY before being rewritten.

1.3.10. PRINT

The PRINT command is used to print a file on the printer. PRINT may be run from TEXT, DOS or BASIC.

Syntax: PRINT filename [options]

Where the default extension for the filename is .BAS. There are three options available;

D - double vertical spacing on the printout.

NH - no headings. Where this is not specified headings take the form of:

```
**************************
LISTING OF FILENAME.EXT
**************************
```

132 - This gives 132 characters per line. The default is 80.

To delete a file from the print queue (even if it is printing) put a "-" sign in front of the filename.

For example:

PRINT POLYPR DNH 132
will print the file POLYPR.BAS using double spacing with 132 characters per line and with no heading.

For example:

If during the printing it is decided that the printing should be stopped
PRINT -POLYPR
will halt the printing.

1.3.11. PROT

This command is used to change the PROTection of a file. Protection against deleting and writing to a file is set by PROT. Until PROT has been run, it may be rewritten, renamed or deleted.

PROT may be used from TEXT, DOS or BASIC.

Syntax: PROT filename [option-list]

filename is the name of the file to be protected.
option-list may contain any number of the following protection codes.

D - to protect a file so that it cannot be deleted by KILL or from within a program. The file may still be changed.

W - to write protect a file so that it may not be deleted or renamed or have anything written to it. It is automatically delete protected.

C - to catalogue protect a file so that it will not be displayed when CAT is executed. To display these files, KILL with no file names may be used.

X - will remove all protection from the specified file.

For example:

PROT FASTCOPY.CMD WC
will write protect and catalogue protect the file FASTCOPY.CMD.

PROT SECRET.TXT XDC
will remove all previous protection from the file SECRET.TXT and write protect it and prevent it being displayed in CAT.

1.3.12. SDC

The SDC command (Single Disk Copy) is used to copy files from the one disk to another using a single drive. SDC cannot change the name of the file. SDC should only be run under DOS.

Syntax: SDC filename

where filename must include the filename extension.

INSERT SOURCE DISK THEN HIT ANY KEY
is displayed immediately after entering the command. The source disk is the disk that the file is to be copied from. When a key has been hit, the file being copied is read into the memory of the Poly.

When complete,

INSERT DESTINATION DISK THEN HIT ANY KEY
is displayed. Insert the disk that the file is to be copied to. When the file has been copied a message is returned. Although SDC works in a multiple drive system the COPY or PCOPY command are easier to use. The COPY command is much faster.

For example:

SDC TESTPR.BAS
copies the file TESTPR.BAS from one disk to another.

When changing disks, it is advisable to wait 5 seconds before pressing a key to ensure that the new disk has been recognised.

SDC does not delete a file on the destination disk if one of that name already exists.

1.3.13. WTD

The WTD command (Write.To.Disk) takes the text from a specified Poly Utility command that is normally displayed on the screen and directs it to the specified file or to the printer.

Syntax: WTD filename Utilitycommand

where the default extension for filename is .PRT i.e. a printfile.

If the filename is specified as the character +, a file called PR123456.PRT is created and automatically printed. Note that until this file is printed and deleted, this default cannot be used by any other user.

WTD should only be used from DOS and not from BASIC or TEXT.

For example:

WTD PRFILE LIST EXAMPL.BAS 10-30
will work lines 10 to 30 of the file EXAMPL.BAS using file PRFILE.PRT and then automatically print this file before deleting it.

For example:

WTD + CAT 0
will print the catalogue for drive 0 using the file PR123456.PRT as the print spool file.

2. SETTING UP A NEW DISK

Users may purchase and set up disks themselves. The disks may be either single or double sided and be either single or double density. Currently, all disks are recorded as single density and as either single or double sided.

2.1. FORMATTING THE DISK

Each disk must be formatted before it can be used for storage on the Poly system. The format used is identical to that used by the FLEX (copyright trade name) operating system. The DOS Utility FORMAT is used to format the disk. This may be run either from BASIC as + FORMAT, or from DOS as FORMAT.

2.2. LOADING THE OPERATING SYSTEM ONTO THE DISK

All module disks contain the operating system files. These must be copied from one of these disks, using either COPY, SDC or PCOPY.

The operating files that are required for a disk with auto start are:

POLY=OPS.SYS	- operating system (essential)
POPSM03.SYS	- operating system (essential)
MASTER.CMD	- operating system (essential)
STARTUP.TXT	- operating system (essential)
BASIC.CMD	- BASIC language extensions (essential)
ERRORS.SYS	- text file containing error messages
MENU.BAC	- menu program (essential for auto startup)
LINK.CMD	- link program (essential if only single disk drive is available. FASTCOPY automatically copies the link information.)
TEXT.CMD	- TEXT command (essential for Text Editor)
TEXT.BAC	- TEXT command (essential for Text Editor)

When a disk unit is switched on or reset, an automatic startup and load occurs of both BASIC and MENU.BAC. The MENU program can be either a standard supplied MENU or a user compiled MENU written in BASIC.

For example:

> If on startup the BASIC programming mode is required then a simple program such as
> 10 CLS:NEW
> can be created and compiled as MENU.BAC.

If DOS mode is required a simple program such as
10 DOS
can be created and compiled as MENU.BAC. If another program is required the that program can be compiled as MENU.BAC.

2.3. LINKING TO THE INITIAL FILE

The Poly system needs to know the file to initially load when the disk unit is switched on. The DOS Utility LINK must be run to set this up. The command is LINK 0.POPSM03.SYS.

2.4. SETTING UP OF A NEW DISK WITH THE OPERATING SYSTEM FOR A SINGLE DRIVE POLY SYSTEM

1. Enter the DOS mode
   Start the system up in the normal manner using the Programming Disk.
   Type DOS <ENTER>

2. Format the new disk.
   Type FORMAT 0 <ENTER>

   When the question ARE YOU SURE? is asked, change the programming disk for the new disk before proceeding.

   Answer the questions. On conclusion of format, the number of sectors formatted on the disk is displayed. This should be 2280 sectors for double sided disks and 1140 for single sided disks.

3. Load the operating system onto the new disk (if required).
   Put the Programming disk in the drive. It is wise to write protect the Programming disk by removing the tab from the disk protection cover. Use SDC to copy each of the operating system files from the Programming disk onto the new disk. (See SDC for instructions).

   The files required are:

   POLY-OPS.SYS - (essential)
   POPSM03.SYS - (essential)
   MASTER.CMD - (essential)
   STARTUP.TXT - (essential)
   BASICR.CMD - (essential)
   ERROR.SYS - (optional)
   MENU.BAC - (essential)
   LINK.CMD - (essential)
   TEXT.CMD -

TEXT.BAC -

4. Link in the initial file.
   Put in the new disk.

   Type in LINK 0.POPSM03.SYS

2.5. MULTIDRIVE SYSTEMS

On multidrive systems, if the programming disk is placed in Drive 0 and the new disk in Drive 1, there is no need to change disks during the loading of the operating system. It is wise to write protect the Programming disk by removing the Write Protect tag from the disk proctection cover.
The sequence of commands from DOS are:

```
FORMAT 1
COPY 0 1 POPSM03 MASTER STARTUP POLY.OPS BASIC ERRORS MENU TEXT
LINK 1.POPSM03
```

2.6. USE OF FASTCOPY IN MULTIDRIVE SYSTEMS

If a disk is kept with just the operating system on it, then after the new disk has been formatted, it is only necessary to enter DOS and type in

```
FASTCOPY 0 1
```

Put the new disk in Drive 1.
This copies everything across including the file linkage.

3. USING THE MENU PROGRAM

Each disk containing educational modules supplied by Polycorp, contains the MENU program to give easy selection and loading of the individual modules.

3.1. SELECTION

Selection is made by using the up and down arrow keys to move the flashing magenta square into the required box. The ENTER key is pressed to make the selection.

Menu also contains a number of other facilities.

3.2. BASIC PROGRAMMING

To enter the POLY BASIC programming mode, type PB. Ensure that PB is typed and not pb.

3.3. CHANGING DISKS

Each disk has a unique menu which contains only those programs on that disk. If a disk is changed during a module, the correct menu for the new disk loads automatically. However, if a disk is changed while the MENU is being displayed, then CD (not cd) must be typed in order for the new menu to be loaded.

3.4. TEXT EDITING

To enter the Poly Text Editor, type TX (not tx).

3.5. DISK OPERATING SYSTEM

The DOS mode maybe entered by typing DS (not ds).

3.6. LOGOFF

Pressing <EXIT> will log the student off and return the POLY to the magenta log on screen.

3.7. BROADCAST MODE

Broadcast mode is used to log off all the Poly units in the network and load a specified program to them all. To enter Broadcast mode, type in BC (not bc) on the unit next to the disk unit. The word BROADCAST appears in the bottom right hand corner of the screen. A program is then selected from the menu in the normal manner. As soon as the selection has been made, all Poly units are logged off and the magenta log on screen appears with the words BROADCAST PROGRAM LOADING at the top. When the program has loaded, the words BROADCAST PROGRAM LOADED appears. The user then logs on in the usual manner but gets the loaded program, rather than the MENU.

To escape from the Broadcast mode in the Menu, BC may be typed in again. The word BROADCAST then disappears.

If BC is typed on any Poly other than the first on the network, that unit is logged off but none of the others are affected.

3.8. HELP

The <HELP> key may be pressed at any time to get a description of the module. Pressing the <HELP> key again, gives a list of instructions for using the MENU.

3.9. NEXT PAGE

Pressing the <NEXT> key displays the next page of modules for selection.

3.10. PREVIOUS PAGE

Pressing the <BACK> key displays the previous page of modules for selection.

3.11. CREATING YOUR OWN MENU PROGRAM

A special utility is available from POLYCORP which creates MENU programs. This allows users to set up MENU's to their own specification.

4. THE POLY EDITOR

Each Poly has available in the BASIC, a full screen editor which can be used for either BASIC files, or for TEXT files. The commands are the same in both but in some cases act slightly differently.

4.1. THE BASIC EDITOR

This is available immediately POLYBASIC is loaded.

The prompt Ready is always printed in YELLOW while in this editor.

The files are saved, with the associated line numbers, in files with the default extension of .BAS.

4.2. THE TEXT EDITOR

This is entered when the BASIC or DOS command TEXT is executed. The prompt Ready is always printed in CYAN while in the text editor. When files are saved, all the line numbers are deleted and not put on the saved file. When a file is loaded, line numbers are added to the lines starting with 10, with intervals of 10. If not specified, the files have an extension of .TXT.

4.3. USING THE EDITOR

4.3.1. Entering new lines

All new lines are entered with a line number at the start which indicates the position in the file into which the line is to be put. If the line number is omitted, the command is executed immediately.

The cursor may be moved back to an incorrect line and the line corrected. The line is inserted into the file on pressing the <ENTER> key. If <ENTER> is not pressed, the line is only stored on the screen and is not updated in memory.

4.3.2. Using the AUTO command

The AUTO command is used to save time when entering new lines, it automatically sets up the line numbers.

Syntax: AUTO [start-line-no] [, increment]

The start-line-no is the first line number at which the automatic numbering will start. If not specified, 10 is used.

The increment is the amount added to each line number to get the next number. If not specified, 10 is assumed.

For example:

AUTO <ENTER>
starts automatic line numbering at 10 with an increment of 10.
ie. 10 20 30 40 ....

AUTO 100, 200
starts automatic line numbering at 100 with increments of 200.
ie. 100 300 500 ....

In BASIC, the next line number is displayed, as soon as <ENTER> has been pressed for the previous line.

In TEXT, the line numbers are not displayed on the screen but are incremented in memory each time <ENTER> is pressed. In both cases, the text is typed in prior to pressing <ENTER>.

To exit from AUTO mode, a line containing no data is entered.

If the line number created by the AUTO command already exists, then an exit is made from the AUTO command on entering that line.

4.3.3. Looking at lines already entered

The LIST command displays text already entered, on the screen.

Syntax: LIST [startline] [-] [endline]

All line numbers are those actually on the file.

If no line numbers are specified, then the listing starts at the beginning of the file and lists the whole file. The <PAUSE> is used to halt the listing at any time. To restart the listings, hit any key. If the <SPACEBAR> is pressed following <PAUSE>, then the lines are shown one at a time. If the <EXIT> key is hit, then the listing is terminated.

If only the startline number is specified then only that line is displayed.

If only the startline number and the - is specified, then the listing starts at that line number, and continues to the end of the file.

If only the - and the end line number is given, then the file is listed from the beginning up to that line number.

For example:

LIST <ENTER>
Displays the whole file

LIST 100 <ENTER>
Displays only line 100

LIST 100- <ENTER>
Displays all lines from 100 to the end

LIST -100 <ENTER>
Displays all lines up to 100

LIST 100-200 <ENTER>
Displays lines 100 to 200 inclusive.

4.3.4. Altering lines

To alter a line, list it on the screen using LIST, move the cursor up to that line using the arrow keys, make the alterations necessary, and press <ENTER>.

While changing a line, the <CHAR INS> and the <CHAR DEL> keys may be used for insertion and deletion of characters on that line.

<ENTER> may be pressed when cursor is anywhere on the line, it does not necessarily need to be at the end of the line.

The <LINE INS> and <LINE DEL> keys are not implemented.

4.3.5. Deletion of lines

A line may be deleted by either:

(i) Entering the line number with no data following it.

or

(ii) By use of the DEL command.

The DEL command may be used to either delete individual lines or a group of lines in memory but not on disk.

Syntax: DEL startline [-endline]

The startline must be given. If the -endline is missing, only the startline is deleted.

For example:

```
DEL 280
deletes line 280

DEL 280 - 1000
deletes lines 280 to 1000 inclusive
```

NOTE that the following forms are NOT allowed:

```
DEL 280-
```

or `DEL -1000`

4.3.6. Renumbering of lines

At times, all available line numbers in a particular sequence may have been used. Alternatively, due to a large number of insertions and deletions the line numbers may be badly distributed. In both these cases, it is advisable to use the RENUM command to renumber the file.

Syntax: RENUM [start-line-number] [,increment]

Renumbering a BASIC file not only changes the line numbers but also changes all references to them in GOTO, GOSUB and other statements.

Renumbering a TEXT file only changes the line numbers. Renumbering always renumbers the whole file.

The start-line-number is the first line number allocated. If not given, 10 is used.

The increment is the amount added to each succeeding line number If not given, 10 is used.

For example:

```
RENUM <ENTER>
renumbers the file from line 10, in increments of 10.
ie. the new line numbers are 10, 20, 30, 40 ....

RENUM 100 <ENTER>
renumbers the file from 100 in increments of 10.
ie. the new line numbers are 100, 110, 120, 130 ....

RENUM ,100 <ENTER>
renumbers the file from 10 in increments of 100.
the new line numbers are 10, 110, 210, 310 ....

RENUM 1000,100 <ENTER>
renumbers the file from 1000 in increments of 100.
ie. the new line numbers are 1000, 1100, 1200 ....
```

4.3.7. Saving the edited text on disk

When the editing is complete, the file may be saved using the SAVE command. This saves a BASIC file exactly as it is.

A TEXT file is saved with the line numbers cut off.

Syntax: SAVE "filename ["]

The filename may specify the extension and the drive number.

For example:

SAVE "0.MYFILE.TXT" <ENTER>

If the drive number is not given then the file is written to the current drive for that Poly.

If the extension is not given then a BASIC file is given the extension .BAS and a text file the extension .TXT.

Following a SAVE, the file is still in the Poly and further editing may be done.

For example:

SAVE "MYFILE <ENTER>

If the Poly is in TEXT mode with drive 0, then the file being edited, is saved onto the disk on drive 0 as MYFILE.TXT.

4.3.8. Loading in files from disk

A file stored on disk is loaded into a Poly using the LOAD command. This clears any program or file currently in the Poly, and loads the file from disk. (Also see MERGE).

Syntax: LOAD "filename ["]

The filename may specify the drive number and the extension.

For example:

LOAD "1.MYFILE.BAS" <ENTER>
will load in the MYFILE.BAS from the disk in drive 1.

If the drive number is not given, then the file is loaded from the disk on the current drive for that Poly.

If the extension is not specified, then for BASIC, .BAS is assumed and for TEXT, .TXT is used.

When TEXT file is loaded, line numbers are added, starting at 10 and incrementing in steps of 10.

For example:

LOAD "MYFILE <ENTER>
if entered on a Poly with current drive 1 and in BASIC, the file 1.MYFILE.BAS is loaded into the Poly.

4.3.9. Adding files from disk to the file being edited

The MERGE command adds a file from disk onto a file being edited. BASIC files are merged on line number such that where the same line exists in both files, the new line replaces the old line.

In TEXT mode, the disk file is appended onto the end of the file being edited and line numbers above those currently in use allocated.

Syntax: MERGE "filename ["]

The filename may specify the drive number and the extension.

If the drive number is not given, then the file is loaded from the disk on the current drive for that Poly.

If the extension is not specified, then for BASIC .BAS is assumed and for TEXT .TXT is used.

When a TEXT file is loaded, line numbers are added, starting at 10 and incrementing in steps of 10.

For example:

If a Poly, editing in BASIC, contains the following file:

```
10 CLS
20 FOR row = 0 to 10
30 PRINT @(row,0) "11Q"
40 NEXT
```

and the file MYFILE.BAS on disk contains

```
30 PRINT @(row,0) "  R";
50 REM DRAW A CAR
60 etc
```

then if the command
MERGE "MYFILE <ENTER>
is entered, the resulting file in the Poly is:

```
10 CLS
20 FOR ROW = 0 to 10
30 PRINT @(row,0) "  R";
40 NEXT
50 REM DRAW A CAR
60 etc
```

For example:

If a Poly, editing TEXT, contains the following file:

```
100 THIS IS A TEXT FILE
200 CONTAINING ONLY
300 3 LINES
```

and the file MYTEXT.TXT contains:

```
THIS IS MYTEXT
FILE WHICH HAS
ONLY 3 LINES
```

then following the command

```
MERGE "MYTEXT <ENTER>
```

the Poly file becomes:

```
100 THIS IS A TEXT FILE
200 CONTAINING ONLY
300 3 LINES
310 THIS IS MYTEXT
320 FILE WHICH HAS
330 ONLY 3 LINES
```

4.4. Deleting the file being edited

The NEW command deletes the entire file currently in memory. This does not affect any file which may have been saved onto disk.

For example:

```
NEW <ENTER>
```

5. SELECTING THE CURRENT DRIVE FOR A POLY

When switched on, the current drive for each Poly is 0. This means that ALL files and programs are loaded from drive 0. On a single drive system, the selection of a drive is irrelevant.

In a multidrive system, individual Polys may select one of the other drives as the current drive for that Poly. All files used by programs from that Poly are then loaded from the newly selected drive except DOS commands.

The selection of an alternative drive may be done from either TEXT or BASIC.

Syntax: DRIVE drivenumber

For example:

DRIVE 1 <ENTER>
selects drive 1 as the current drive.

6. USING THE PRINTER

The printer in a Poly system is shared by all the Polys. All print requests are queued onto disk before printing. There are several ways of having information printed.

6.1. PRINTING EXISTING FILES FROM DISK

These are printed using the DOS PRINT command in the form

```
PRINT filename <ENTER>
```

They may be removed from the queue, even after printing has started by entering

```
PRINT -filename <ENTER>
```

For further details, see PRINT in this manual.

6.2. PRINTING DOS COMMAND OUTPUT

DOS commands normally print messages on the Poly screen. These can be printed instead of being displayed on the screen, by using the WTD (Write to Disk) command before the DOS command.

For example:

```
WTD + CAT 0
```

will print the catalogue on the printer using the file PR123456.PRT as the intermediate file

or

```
WTD filename.PRT CAT 0
```

where a specific filename is given as the queue file name. Any file that is created with .PRT extension is automatically printed and deleted after printing.
Further details of WTD are given under the description of WTD in this manual.

6.3. PRINTING FROM A PROGRAM

To print from a program, it is necessary to create a disk file with a .PRT extension. When the CLOSE of that file is issued, that file is automatically printed and deleted. If it is necessary to retain the file, it may be created with any other extension, and the DOS PRINT command used to print it out.

It is not possible to print directly to the printer from a Poly.