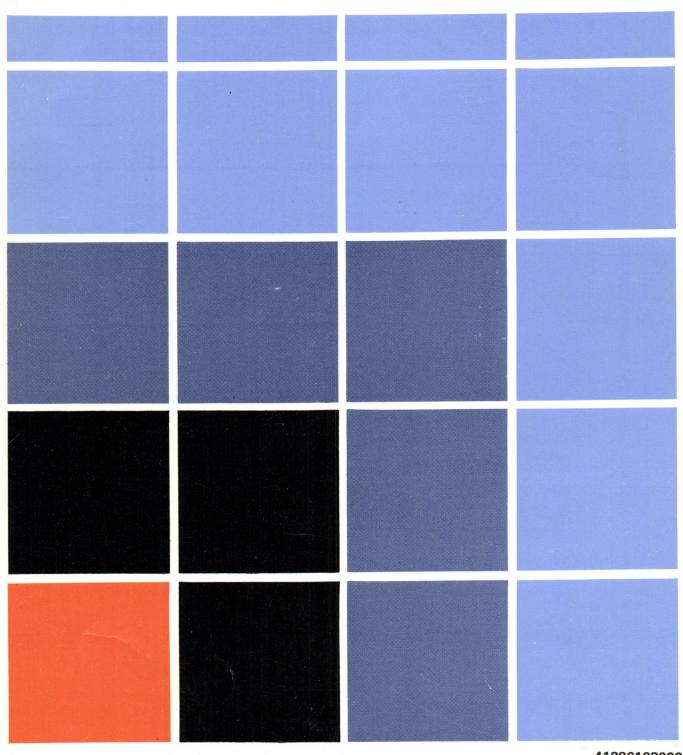
Software Manual

# Honeywell

Series 16 Text Editor



# SERIES 16 TEXT EDITOR

Honeywell

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#### 1. INTRODUCTION

## 1.1 <u>Description</u>

The Text Editor system is a set of programs designed to provide general editing facilities on the DDP-516 and H316 computers. The user is provided with a comprehensive set of commands which allow the modification of DAP-16 source programs and other ISO text. These commands may be input conversationally from ASR teletypewriter or continuously from a device such as a paper tape reader. They direct the Editor which lines from the old master (Text to be modified) are to be processed i.e. copied to the New Master (Updated Text), or input to the Temporary File, in which lines may be modified before outputting to the New Master. The Old and New Master can be selected to be on any of the following medium:- Paper tape, Cards, or Magnetic Tape, the data lines being arranged in files consisting of one or more lines followed by a \$END line (End-of-file record).

## 1.2 System Configurations

The editor system may be configured to run in two modes. The Off-line system is a stand alone version which can be used on both the DDP-516 and H316 computers with at least 4K of core storage. The Editor will make use of all free core above the last location of the program for use of the Temporary File storage system. The Off-line system configuration uses the following program modules.

TEXT Text Editor Main Program

Drawing Number 41285922-001

This is the Editor and Control section of the system and performs all the line and content editing functions.

TEXT-IOS Text Editor Off-line I/O Supervisor Drawing Number 41285923-001

The Off-line I/O Supervisor performs all the interfacing between the Main Program and the standard I/O drivers used with the system.

TEXT-MM Text Editor Off-line Memory Management
Drawing Number 41285924-001

The Memory Management module provides the functions of the Temporary File storage system in core.

G\$DR Standard Generic Dummy Routine

Drawing Number 41285543-001

G\$DR provides a trap for calls upon any standard I/O drivers which have not been loaded with the system.

The On-line system runs under the control of the OLERT Executive and this can only be used on a DDP-516 computer with more than 16K of core storage. The following program modules are used:-

TEXT Text Editor Main Program

Drawing Number 41285922-001

This is the same program module as used in the Off-line system

TEXT-OIO Text Editor On-line I/O Supervisor

Drawing Number 41285925-006

The On-line I/O Supervisor provides the necessary interface between the OLERT Input/Output system and that used by the Text Editor.

TEXT-OMM Text Editor On-line Memory Management
Drawing Number 41285926-006

The On-line Memory Management provides the functions of the Temporary File storage system using the disc-table management facilities of the OLERT Executive. (For OLERT details see European Option Manual Sect. C.2.2).

## 1.3 Associated Documents

TABLE 1 - 1
ASSOCIATED DOCUMENTS

Title	Document No.
DDP-516 Operators Manual	42400343402
DDP-516 Programmers Reference Manual	42400343401
OLERT Operators Manual	41286103003
OLERT Programmers Reference Manual	41286103002

#### FUNCTIONAL DESCRIPTION

## 2.1 Modes of Operation

The Editor has two basic modes of operation, 'command' and 'text input'. In the 'command' mode line records are input from the 'command input' device and are interpreted by the program to direct the basic functions of the system, viz, opening and closing of master files, input and output of lines to and from the work area, and processing of data within the work area.

The 'Text Input' mode is automatically entered when data is to be input from the 'Updating Text' device, and added to the work area or output to the 'New Master' device. The Editor reverts to the Command Mode on encountering an End of File record (\$END) in the data being input from the Updating Text device.

## 2.2 Data Formats

All lines input or output by the Text Editor system (Commands, Old Master, Updating Text or New Master) are all of the same format. The lines consist of not more than 120 ISO characters followed by a carriage return. A file of record lines consists of one or more lines followed by a line starting with \$END this being taken as an End-of-File record.

## 2.3 Facilities

The following describes the basic outline of the Text Editor system with reference to block diagram Fig. 2-1.

- 2.3.1 Commands are input to the Text Editor from the 'COMMAND INPUT' device.

  This may be the ASR keyboard for conversational mode of working, or some other input device for continuous operation.
- 2.3.2 The source data lines are input from the OLD MASTER device and, depending upon the 'Command' being executed, may be processed as follows:
  - Outputted directly to the NEW MASTER
  - Brought into the TEMPORARY FILE area
  - Skipped over and ignored
- 2.3.3 Once in the TEMPORARY FILE the data lines are given line numbers and may be processed as follows:
  - Outputted to the NEW MASTER

- Context edited, the data within a line being modified under the control of the 'context editing' command
- A file of data from the UPDATING TEXT device may be inserted in the TEMPORARY FILE at any record position, or used to replace certain of the records therein. The file of data being input consists of one or more lines of data followed by an End-of-Line record (\$END) which serves to switch the Editor back to the Command Input Mode.
- TEMPORARY FILE lines may also be deleted, the remaining lines being packed down and re-numbered.
- 2.3.4 The Text Editor maintains two pointers giving the current position in the OLD MASTER file and the current position in the TEMPORARY FILE. In the OLD MASTER file, only records from the current position onwards may be accessed. Record lines in the TEMPORARY file may be re-processed as many times as required.

## 2.4 Command Structure

Commands are input as record lines from the COMMAND INPUT device and consist of a single letter followed by none, one or two arguments, terminated by a carriage return. Blanks and leading zeroes are ignored. The arguments can be of two forms.

#### 2.4.1 Numeric

The argument gives the decimal number of the line to be processed. A numeric expression is allowed, the following special signs being available +, -, \*, and /. The + and - signs are interpreted as plus and minus. The \* (asterisk) refers to the number of the current record in the current Old Master file or the Temporary File. The / sign refers to the last record of the Temporary File and this can only be used with commands affecting the Temporary File.

The command R\*, \*+3 has effect from the current record through three more records.

## 2.4.2 Search on Line Content

For the commands C, I, K, L, M, R, U and W a character string is allowed instead of the \* or 1 characters in an argument. This character string consists of three or more characters the first and last being delimiter characters to denote the bounds of the string. This string is used in a search for a line containing the characters specified. If the character following the delimiter is

equal to the delimiter, the search is satisfied on any line containing the specified character string anywhere within its length. Otherwise the search will only be satisfied on a line starting with the string specified. This form works on only the current record onwards and thus on the Temporary File, which can be re-cycled (in the Temporary File the current line number can be stepped both forwards and backwards and thus the data can be re-cycled) but does not scan the whole of the file.

A numeric displacement is allowed with the character string. This must be greater than -1 for the first argument and greater than -2 for the second.

Thus the command R!ABC!, 'ZERO'+32 will take effect from the first record after the current record, that starts with ABC, through to a record starting with ZERO and then three further records.

The command R" "DAC"+1, ;; ER;-1 takes effect from the record after the one containing DAC anywhere in the line and finishes one record before one containing ER.

The character 0 to 9, \*, /, +, -, must not be used as delimiters. Space and backslash ( $\setminus$ ) are ignored in the comparison of the two character strings.

## 2.4.3 Defaults in Arguments

Defaults for arguments are inserted when required according to the scheme below. In the description, C refers to a command, Al and A2 refer to the arguments and D1 and D2 refer to the default arguments which are command dependant. Defaults are not allowed for certain arguments in certain commands and these are listed in the individual section on each command.

C or C, is interpreted as CD1, D2
CA1 is interpreted as CA1, A1
CA1, is interpreted as CA1, D2
C, A2 is interpreted as CD1, A2

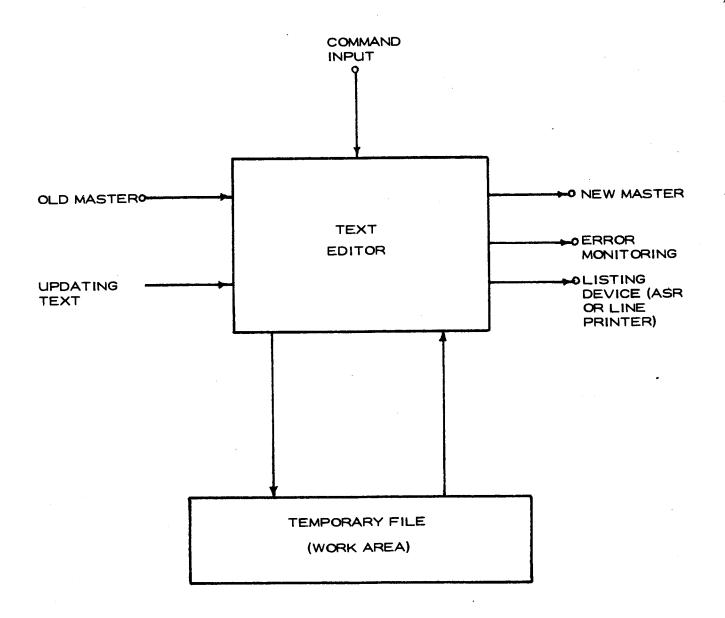


FIG. 2-1 BLOCK DIAGRAM OF TEXT EDITOR SYSTEM

## 3.1 A - Append

No Argument (A)

On receipt of the command, data records will be input from the UPDATING TEXT device and 'appended' to the TEMPORARY FILE. On inputting an End-of-File record (\$END) the Editor will revert to the command mode and input the next command. The E.O.F. record is discarded.

## 3.2 B - Backspace

One Argument (Bx)

The pointer to the current record of the TEMPORARY FILE is backspaced 'x' places and the new current record is output to the LISTING device.

#### Argument Default

4.2.2.1. x is defaulted to one.

## 3.3 <u>C - Copy</u>

Two Arguments (Cx, y)

Records x through y of the OLD MASTER are copied across to the NEW MASTER. If y is greater than the number of records in the OLD MASTER file an error message will be given. If x is greater than the current record number in the OLD MASTER file, records up to but including number x will be skipped over and discarded.

#### Argument Default

- x is defaulted to the current OLD MASTER record number.
- y is defaulted to the last record in the current OLD MASTER file. In this case all records from x up to the E.O.F. record will be copied across. The E.O.F. record will be inputted and discarded and the OLD MASTER left ready to input the first record of the next file if any.

## 3.4 D - Duplicate

Two Arguments (Dx, y)

Files x through y of the OLD MASTER are copied across to the NEW MASTER, End-of-File records also being copied. If x is the current file the remainder of it is copied across. If x is greater than the current file the intervening files are skipped and discarded.

#### Argument Default

- x is defaulted to the current OLD MASTER file.
- y is not defaultable and an error message will be given if it is omitted.

3.5 E - End

No Arguments (E)

An End-of-Record (\$END) is written to the NEW MASTER by this command.

This and the 'D' command are the only method of causing an End-of-Record to be written to the NEW MASTER.

3.6 F - Forward

One Argument (Fx)

The pointer to the current record within the TEMPORARY FILE is moved forward 'x' records. The new 'current' record is then displayed on the LISTING device.

Argument Default

- x is defaulted to one.

3.7 G - Not assigned

3.8 H - Not assigned

3.9 I - Insert

One Argument (Ix)

A file of UPDATING TEXT is read in and inserted before record 'x' of the TEMPORARY FILE. The End-of-File record from the inserted file is discarded and serves only to switch the Text Editor back to 'COMMAND' mode.

Argument Default

- x is defaulted to the current record within the TEMPORARY FILE.

3.10 J - End-of-Job

No Arguments (J)

This command causes the Text Editor to go to an 'End-of-Job' condition.

Reference should be made to the operating procedures of the ON and OFF LINE systems (sections 5 and 6) for further details.

3.11 K - Kill

Two Arguments (Kx, y)

TEMPORARY FILE records x through y are deleted, the remaining records being packed down and re-numbered.

Argument Default

- x is defaulted to the first record of the TEMPORARY FILE, i.e. one.

- y is defaulted to the last record of the TEMPORARY FILE.

## Example

Command	Temp. file before Rec. No./Data	Temp.file after Rec. No./Data
K2,4	1 /LDA/ABUF	1 /LDA/AOUF
	2 /STA/BUFA	2 /JMP/OUT
	3 / CMA	etc
	4 /STA/BUFA+1	,
	5 /JMP/ØUT	
	etc	

## 3.12 $\underline{L - List}$

Two Arguments(Lx, y)

Records x through y of the TEMPORARY FILE are displayed on the LISTING device. Record y becomes the new current record in the file.

## Argument Defaults

- x is defaulted to the first record of the TEMPORARY FILE.
- y is defaulted to the last record of the TEMPORARY FILE.

## 3. 13 M - Modify

Two Arguments (Mx, y)

Records x through y of the TEMPORARY FILE are replaced by one file of UPDATING TEXT. Where the number of records replaced is not equal to the length of the UPDATING TEXT file, records after y will be re-numbered within the TEMPORARY FILE.

## Argument Defaults

- x is defaulted to the first record of the TEMPORARY FILE.
- y is defaulted to the last record of the TEMPORARY FILE.

#### Example

Command	Updating Test	Temp. File before Rec. No./Data	Temp. File after Rec. No./Data
M2.3	/ERA/B,1	1 /LDA/ABUF	1 /LDA/ABUF
	/STA/INS	2 /STA/XRN	2 /ERA/B,1
	/LDX/INPN	3 /JST/SLIC	3 /STA/INS
	\$END (End-of- File)	4 /JMP/ERR	4 /LDX/INPN
		5 /HLT	5 /JMP/ERR
		etc	etc

3.14 N - Next No Arguments

4.14.1. The next file of UPDATING TEXT (not including the record) is copied across to the NEW MASTER.

3.15 O - Not assigned

No Arguments

3.16 P - Print

No Arguments

The current TEMPORARY FILE record is displayed on the LISTING device.

3.17 Q - Context Edit

Two Arguments(Qx, y)

Records x through y of the TEMPORARY FILE are edited one at a time using UPDATING TEXT records to control the editing process. If the command Qx, y is given then for each r from x to y, record r of the TEMPORARY FILE is brought to the editing buffer and displayed, an editing record is then input from the UPDATING TEXT device. If the record is on End-of-File Record (SEND) the Text Editor reverts to Command mode and inputs the next command. If the records consists of a single carriage return then the contents of the editing buffer replaces record r of the TEMPORARY FILE and the R + 1 th. record is brought, except when r = y, in which case the Editor reverts to Command mode, otherwise this UPDATING TEXT record is treated as an editing record. After the editing has been performed the new record is displayed and the process is repeated.

There are two types of editing line, positional and context. Context editing lines are specified by beginning with the special character %, which is the only special character in a context editing record.

% STRING 1 % STRING 2 % means replace the first occurrence of STRING 1 by STRING 2.

%% STRING 1 % STRING 2 means replace all occurences of STRING 1 by STRING 2.

The character 'space' and 'backslash' (\) are ignored in the comparison of data streams.

Positional editing is implemented by means of the four special characters! # " &. A positional editing record is processed character by a character from left to right, using the concept of a current position in the old line and a current position in the new line. Non-special characters are implemented by placing them in the current position in the new line and advancing the positions one character.

## Special characters are processed as follows:-

- # move the character position in the old record forward. This has the effect of omitting the current old record character from the new record.
- move the character position in both records forward, putting the current character of the old record into the new record.
- insert the character string up to but excluding the next " or carriage return into the new record.
- & copy the remaining characters of the old record and add all the remaining characters of the editing record to the new record.

#### Argument Defaults

- x is defaulted to the first record of the TEMPORARY FILE
- y is defaulted to the last record of the TEMPORARY FILE

## Example

## Context Editing

Updating Text	Old Record	New Record .
% X % D %	/LDA/ABUF/BUFFER/AXDRESS	/LDA/ABUF/BUFFER/ADDRES

## Positional

Old Record - ABCDDEHI

Editing Record - !! #!! " F G " & J K

New Record - ABCDEFGHIJK

## 3.18 R - Read

Two Arguments(Rx, y)

Records x through y of the OLD MASTER are read in and <u>appended</u> to the TEMPORARY FILE. If x is greater than the current record number of the OLD MASTER the intervening records are skipped and ignored. If y is greater than the number of records in the file an error message will occur on encountering it's associated End-of-File record.

#### Argument Defaults

- x is defaulted to the next record of the current OLD MASTER file.
- y is defaulted to the last record of the current OLD MASTER file.

## 3.19 S - Not assigned

## 3.20 T - Not assigned

## 3.21 <u>U - Update</u>

Two Arguments(Ux, y)

Records x through y of the TEMPORARY FILE are displayed on the LISTING device and are then replaced by one file of UPDATING TEXT (not including the End-of-File record).

## Argument Defaults

- x is defaulted to the first record of the TEMPORARY FILE
- y is defaulted to the last record of the TEMPORARY FILE

The command Ux, y is directly equivalent to Lx, y followed by Mx, y (Section 3.12 and 3.13).

## 3.22 <u>V - Value</u>

No Arguments(V)

This command causes the current OLD MASTER record and file numbers to be displayed on the ASR.

The format of the message is as follows:-

RECORD o NNNNN, o FILE o MMMMM

Where NNNNN is the decimal record number and MMMMM is the decimal file number.

## 3.23 W - Write

Two Arguments (Wx, y)

Records x through y of the TEMPORARY FILE are outputted to the NEW MASTER. The TEMPORARY FILE is left unchanged by this command.

## Argument Defaults

- x is defaulted to the first record of the TEMPORARY FILE
- y is defaulted to the last record of the TEMPORARY FILE

## 3.24 <u>X</u> -

One Argument(Xx)

The absolute number of the selected TEMPORARY FILE record is displayed on the ASR.

## Argument Default

- x is defaulted to the current record of the TEMPORARY FILE

The format of the message is as follows:-

Where NNNNN is the decimal record number.

## 3.25 Y - Not assigned

## 3.26 Z - Initialise

No Arguments Z

The current OLD MASTER record and file numbers are initialised i.e. are set to one.

#### 4 ERROP CONDITIONS

There are two different types of error conditions that can be encountered in using the Text Editor and these are set out below:

## 4.1 Syntax Errors

Syntax Errors, caused by invalid characters within the command, result in the command being retyped on the ASR., the command being ignored.

## 4.2 Limit Errors

Limit Errors, brought about by the arguments being out of range for the particular command, are of three types, as follows:-

## (1) Old Master Limit Errors

Any attempt to read an OLD MASTER record which has either been passed or is outside the limits of the current file will result in an OLD MASTER LIMIT ERROR being indicated on the ASR. The following information will be given on the ASR.

Q, M. LIMIT	(Error Type)
С ж, у	(Command)
RECORD o NNNNN, o FILE o MMMMM	(Current Record/File No.)
/LDA/A4C	(Last Record Input)

## (2) Temporary File Limit Error

If a command specifies a TEMPORARY FILE record which is outside the limits of the file, a TEMPORARY FILE LIMIT ERROR will be indicated, by the following message on the ASR.

T.F. LIMIT	(Error Type)
Lx,y	(Command)
CRN o NNNNN, o LRN c MMMMM,	(Current Last Record No.)
/SUB/INCR	(Current Record)

#### (3) Storage Limits

If an attempt is made to add a record to the TEMPORARY FILE that would exceed its available storage area the following message is given.

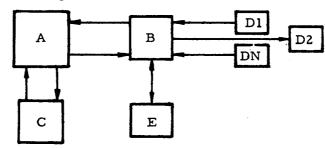
T.F. STORAGE LIMIT	(Error Type)
R,4	(Command)
CRN o NNNNN, o LRN o MMMMM,	(Current/Last Record No.)
ADD/ = 1	

## 4.3 General Error Procedure

If the Text Editor is not being used in conversational mode, with the ASR as the COMMAND INPUT device, the system will proceed to complete a restart point after any of the above errors. In conversational mode the user has the option of terminating the run by typing in the 'J' command or trying to recover from the error.

#### 5.1 Module Configuration

The module configuration that is used in the Off-line version of the Text Editor is shown in Fig. 5-1.



- A TEXT EDITOR Main Program

  0062-001-H001 (TEXT) DRAWING NO. 41285922-001
- B OFF LINE INPUT/OUTPUT SUPERVISOR

  0062-001-H003-(TEXT)-IOS) DRAWING NO. 41285923-001
- C OFF LINE MEMORY MANAGEMENT 0062-001-H003 (TEXT-MM) DRAWING NO. 41285924-001
- D1 to DN Standard Device Drivers as required by individual system.
- E Standard Generic Dummy Routine (G\$DR) to satisfy calls on Non-loaded device drivers.

0078-001-H911 (G\$DR) DRAWING NO. 41285543-001

MODULE CONFIGURATION OFF-LINE

FIG. 5-1

## 5.2 Production of Self Loading Systems Tape

To produce a SLST for a particular device configuration the following procedure should be applied. Using LDR-APM loaded into a cleared store the following modules are inputted.

- (1) Text Editor Main Program
- (2) Off-Line Memory Management
- (3) Off-Line Input/Output Supervisor
- (4) Device drivers from the Standard Input/Output Library Routines. Only the drivers for devices that will be used should be loaded, as to maximise the amount of free store available for use by the TEMPORARY FILE. Reference should be made to the listing of the I/O Supervisor for more explicit details on the selection of the device drivers.
- (5) G\$DR the Standard Generic Dummy Routine to satisfy any calls on non-loaded Standard Device Drivers.

After the above have been loaded there will be no further unsatisfied calls and the loader should indicate load-completed (LC). The area of store from '100 to one less than 'HIGH' should now be punched out using PAL-AP.

## 5.3 Loading Procedure

To load the Text Editor SLST into the machine the following procedure is used.

- (1) Depress the MASTER CLEAR pushbutton
- (2) Load '000001' into Register P
- (3) Insert the SLST into the appropriate input device (ASR or High-Speed Paper-Tape Reader).
- (4) Depress the START pushbutton. The tape will be read in and loaded into core.

## 5.4 Running Procedure

## 5.4.1 Device Selection

The device to data stream assignments are controlled by bit settings in the word G\$KW which appears on the memory map. This is preset to Octal 01120, but can be changed before producing the SLST, or at the start of a run. The layout of this word is as follows:

Bit	1	Listing Device, 0 = ASR, 1 = I	LP
Bits	2-4	Command Device Type 0 to 7	
Bits	5-7	Updating Text Input	) )
Bits	8-10	Old Master Input	see section 5.4.2
Bits	11-13	New Master Output	) )
Bits	14-16	Duplicate New Master	, )

## 5.4.2 Device Type

Input	Output
Use 'Old Master Device'	No Output
ASR	ASR
HSR (Even Parity Check)	High Speed PTP
Card Reader	Card Punch
HSR (No Parity Check)	Line Printer
	MT Logical Unit 0
	MT Logical Unit 1
_	MT Logical Unit 2
•	ASR HSR (Even Parity Check)

The preset value of the KeyWord (G\$KW) will set the Text Editor into the conversational mode, the commands and/or Updating Text being input from the ASR with the Old Master coming from the paper tape reader and the New Master being output on the paper tape punch.

#### 5.4.3 Entering the Text Editor

To start the Text Editor, the 'A' register should be set to the required device selection (or set to zero if the current value of the KeyWord is to be retained) and the 'P' register set to '1005 and the START BUTTON depressed. If the Conversational Mode has been selected, with the ASR as the Command Device, the characters 'bell' and 'colon' will be typed out ready for a Command to be typed in.

## 5.4.4 Non-Conversational Mode

Command and/or Updating Text records may be input continuously from any of the input devices given in the device selection table. However, it is often desirable to input them from the Old Master device at the start of the run, storing them for use as required. To achieve this the relevant device selection bits are set to zero in the initial 'A' register setting. The data to be stored should be terminated by two End-of-file records (SEND). The Text Editor will halt the 'A' register ALL ONES ready for the Command and/or Updating Text records to be placed in the Old Master device. On depression of the START button these will be read in and stored. When the second of the two consectutive \$END records is detected the program will halt with the 'A' register ZERO. The Old Master should then be placed in its respective device and the START button depressed to enter the run.

## 5.4.5 Summary

Step No.	User	Program Action
1	Select respective devices as zero	
2	Depress START	HALT with 'A' register ALL ONES
3	Place Command/Updating Text in Old Master device	
4	Depress START	Read in and store data. HALT with 'A' register ZERO
5	Place Old Master data in its device	
6	Depress START	Enter run, fetching stored Editing data as required

If the Text Editor runs out of stored Commands/Updating Text it will enter the above procedure at point 2.

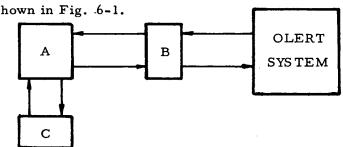
## 5.5 End of Job

On processing the Command 'J' the system will halt with the 'A' register displaying the current device selections. This may be changed if desired, depression of the START button restarting the system.

## 6 ON-LINE (OLERT) SYSTEM

## 6.1 Module Configuration

The module configuration required in the OLERT vision of the Text Editor system is shown in Fig. 6-1.



Arrows indicate data movement.

- A TEXT EDITOR Main Program
  0062-001-H001 (TEXT) DRAWING No. 41285922-001
- B ON-LINE INPUT/OUTPUT SUPERVISOR
  G062-001-H001 (TEXT-010) DRAWING No. 41285925-006
- C ON-LINE MEMORY MANAGEMENT
  G062-001-H002 (TEXT-0mm) DRAWING No. 41285926-006

MODULE CONFIGURATION OLERT

FIG. 6-1

## 6.2 <u>Loading into OLERT System</u>

The modules shown above are loaded onto the OLERT system disc or into core using the Linking Program. Reference should be made to the OLERT Operators Instruction Manual DOC. No. 41286103003 for detailed information on the method of using the OLERT Loader.

## 6.3 Running of Text Editor

When loaded into core and entered, the Text Editor will enter its set up procedure and will request information from the operator on the ASR.

## 6.3.1 Device Selection

The following questions will be given so as to assign data streams to their respective devices.

OM = (Old Master Input Device)

NM = (Master Output Device)

DM = (Duplicate New Master Device)

CI = (Command Input Device)

TI = (Text Input Device)

DØ = (Display Output Device)

The inswer can be of only three forms:-

- (1) Decimal number
- (2) Carriage return
- (3) End-of-File (\$END)

The decimal number will replace the current generic OLERT device number assigned to the particular data stream. This number is formed as follows;  $N = (SX256) + G \text{ where N is the required, S is the specific device number if one of a group i.e. Magnetic Tape deck (zero if the only one of this type) and G is the Generic device type selected from the following table.$ 

Description	Generic Device Code
ASR Keyboard Printer	1
ASR Paper Tape Recorder Punch	2
Paper Tape Punch	3
Paper Tape Reader	4
Card Punch	5
Card Reader	6
Line Printer	9
Magnetic Tape	10

Entering the value zero for an OUTPUT stream has the effect of inhibiting any output on that stream. The use of value zero for an INPUT stream implies the use of the OLD MASTER device, reference should be made to Section 6.3.3 for more details of this usage. Inputting of a Carriage Return only will cause the current value assigned to the current data stream to be left as it is and the next assignment requested.

If an End-of-File record is input (any line starting with the character E), current and any further device to data stream assignments are left as they were and the Text Editor continues.

The present device/data stream assignments are as follows:

ØM (Old Master)		4	Paper Tape Reader
NM (New Master)	=	3	Paper Tape Punch
DM (Duplicate Master)	=	0	None
CI (Command Input)	=	1	ASR
TI (Text Input)	=	1	ASR
DØ (Display Output)	=	1	ASR

#### 6.3.2 Disc Tables

As soon as the above assignments are completed the Text Editor will request the name of an OLERT table on the disc for use as the TEMPORARY FILE storage. The Text Editor will type out 'TEMPORARY FILE' = ; the answer to which must be six ISO characters. If a table of that name already exists, the current and last record numbers are displayed on the ASR:-

#### CRN NNNNN, LRN MMMMM

#### 6.3.3 Common Use of Old Master Device

If the Command and/or Updating Text records are to be input from the same device as the OLD MASTER, the device assigned to Command and/or Updating Text streams must be set to zero at device selection time. The following events will then occur.

- (1) After the Temporary File table name has been given, the system will ask-COMMAND/TEXT TABLE = requiring the six character name of a table for storage of Commands and/or Updating Text. The data to be stored, terminated by two \$END records shall be placed in the Old Master device and the table name typed in. They will then be read in and stored, the last \$END record being discarded.
- (2) The message TYPE IN WHEN O.M. READY will be given on the ASR, at which time the Old Master should be placed in its device. When ready a single carriage return should be typed, thus indicating to the system to start processing.

#### Summary

Step No.	User	Program Action
1	Select representative devices as zero	QUESTION: COMMAND/TEXT TABLE = ?
2	Type in table name	Read in an <b>d</b> store COMMAND/ UPDATING TEXT
		QUESTION: TYPE IN WHEN O.M. READY
3	Place Old Master data in its device	·
4	Type in carriage return	Enters run, fetching stored Commands/Text as required

## 6.4 End of Job

On processing the Command 'J', the Text Editor will DETACH all devices and terminate its TREE in the OLERT system.

## APPENDIX A

## SUMMARY OF COMMANDS

Α	Append file of UPDATING TEXT to TEMPORARY FILE
Bx	Backspace x records in TEMPORARY FILE
Cx, y	Copy records x through y of OLD MASTER onto NEW MASTER
Dx, y	Duplicate files x through y of OLD MASTER on NEW MASTER
E	Write End-of-File record on NEW MASTER
Fx	Forward x records in TEMPORARY FILE
G	-
Н	
Ix	Insert one file of UPDATING TEXT before record x of TEMPORARY FILE
J	End of Job
Kж, у	Kill records x through y of TEMPORARY FILE
Lx, y	Display records x through y of the TEMPORARY FILE on the LISTING device
Mx, y	Modify records x through y of the TEMPORARY FILE with one file of UPDATING TEXT. This is equivalent to Kx, y followed by Ix
N	Copy one file of UPDATING TEXT to NEW MASTER
0	-
P	Print current TEMPORARY FILE record on the LISTING device
Q	Context Edit records x through y of the TEMPORARY FILE using one file of UPDATING TEXT to control the editing process
Rx, y	Read records x through y of the OLD MASTER and append them to the TEMPORARY FILE
s	-
T	-
Ux,y	Update records x through y of the TEMPORARY FILE with one file of UPDATING TEXT. This is equivalent to Lx, y followed by Mx, y
v	Display on ASR the current OLD MASTER record and file number
Wx, y	Write records x through y of the TEMPORARY FILE onto the NEW MASTER
Xx	Display on ASR the absolute number of the selected TEMPORARY FILE record
Y	-
Z	Initialise OLD MASTER record and file numbers

## APPENDIX B

## SUMMARY OF ARGUMENT DEFAULTS

Command		Defaults
A	_	
Bx	x:	One
Cx, y	x:	Current OLD MASTER
	y:	Last OLD MASTER record in current file
Dx, y	x:	Current OLD MASTER file
	y:	NOT DEFAULTABLE
E	-	
Fx	x:	One
G (Not Assigned)		
H (Not Assigned)		
Ix ·	x:	First TEMPORARY FILE record
J	-	
Kx, y	x:	First TEMPORARY FILE record
	y:	Last TEMPORARY FILE record
Lx, y	x:	First TEMPORARY FILE record
	y:	Last TEMPORARY FILE record
Mx, y	x:	First TEMPORARY FILE record
	y:	Last TEMPORARY FILE record
N	-	
O (Not Assigned)		
P	-	
Qx, y	x:	First TEMPORARY FILE record
	y:	Last TEMPORARY FILE record
Rx, y	x:	Current OLD MASTER record
	y:	Last record in current OLD MASTER file
S (Not Assigned)		
T (Not Assigned)		
Ux, y	x:	First TEMPORARY FILE record
	<b>y</b> :	Last TEMPORARY FILE record
V	-	
Wx, y		First TEMPORARY FILE record
		Last TEMPORARY FILE record
Xx	x:	Current TEMPORARY FILE record
Y (Not Assigned)		

Z