

Making Computers Simple

The Waite Group

CP/M* BIBLE

**CP/M USER'S
REFERENCE CARD**

Versions 1.3 to 2.2

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FILE REFERENCING

The use of **filenames** means "file specification", and describes the variations in which file names, file types, and disk drive names can be included in a CPM command string. Specific file names and file types (extensions) or wildcards can be specified.

Format: **x:filename.ext**

x: = Disk drive name (A-B, CPM 1.3;
A-B, CPM 1.4; A-F, CP/M 2.0/2.2)

Filename = Name of file (1 to 8 characters)

.ext = Extension or file type (optional or 1 to 3 characters)

BUILT-IN COMMANDS

x: Make drive **x** the logged drive.

DIR List all files on logged disk.

DIR x: List all files on drive **x**.

DIR filename List all files specified by **filename**.

DIR filename.ext = filename.ext filename file globbing.ext to directory.ext

DIR = filename.ext = filename.ext filename.ext is on drive **x**.

ERA filename Delete file(s) specified within **filename**.

TYPE filename Display or console contents of **filename**.

USER x Select disk "user" area **x** (A-D).

(CP/M 2.0/2.2 only.)

SAVE = filename Save **n** memory pages starting from location 0100H into **filename**. **n** = "Memory Page" = 256 bytes.

CONTROL CHARACTER COMMANDS: Control character commands are entered by simultaneously pressing the CTRL key and the indicated key at the console device.

CTRL/B Warm Boot.

CTRL/O Cut long command string overflow on next line.

CTRL/W Backspace.

CTRL/Y Tap cursor right if spaces.

CTRL/U Line Feed.

CTRL/M Carriage Return.

CTRL/C Cancel current command string.

CTRL/B Same as CTRL/U (CP/M 1.4), and erase line

(CP/M 2.0/2.2).

CTRL/B Replace entered command string on next line, and omit all entered characters deleted with **DELETE** or **REMOVE** key.

CTRL/O Stop/Restart scrolling of text on console device.

CTRL/P Echo all console device input and output on the LET printer device.

CTRL/Q End console input (EO and PP commands).

DELETE or **REMOVE** Delete character to left, and echo deleted character.

STAT COMMANDS

STAT Show amount of free space on default drive. (Free space of every drive to which a read operation was made will also be shown.)

STAT x: Show amount of free space on drive **x**.

STAT filename Show size in records, kilobytes, and extents of file(s) in **filename**. In CP/M 2.0/2.2, B/W B/O and B/S/SYS status is also shown.

STAT filename [B/W] Set file(s) to Read-Only.

STAT filename [B/W] Set file(s) to Read-Write.

STAT x: = B/O Temporarily set disk **x** to Read-Only.

STAT filename [B/W] Set file(s) to System Files. (CP/M 2.0/2.2)

STAT filename [B/W] Set file(s) to Directory Files. (CP/M 2.0/2.2)

STAT [DIR] Show current disk number and numbers containing files (CP/M 2.0/2.2)

STAT [DIR] Show characteristics of disk in default drive.

STAT = [DIR] Show characteristics of disk in drive **x**.

STAT [DIR] Show current physical to logical device assignments.

STAT [FILE] Show information on allowed device assignments and other STAT commands.

STAT log = phy: Assign physical device **phy:** to logical device **log:**, where device assignments can be:

Logical	Physical
CON	= TTY, CRT, SAT., or SCL
ADB	= TTY, PRN, SCL., or SPC
PLA	= TTY, PTP, SFL., or SFD
LDF	= TTY, CRT, LFC., or SCL

PPF COMMAND

PP Load PPF to perform individual copy operations. Press the RETURN key to exit when finished.

PP x: = x:filename Copy file(s) from disk drive **x:** to disk drive **x:**.

PP filename.ext = x:old.ext Copy file **old.ext** on disk **x:** into file **new.ext** on disk **x:**.

PP filename.ext = x:old1.ext,old2.ext,... Copy all files on disk **x:** in the order shown, into file **new.ext** on disk **x:**.

PP [DIR] = filename Copy **filename** to device **[DIR]**, which can be any predefined standard logical or physical device (except SAT.). Special PPF logical devices OUT (for output-only device) and PRN (for printer device) can also be used.

PP filename = [DIR] Copy input from device **[DIR]** into **filename** and CTRL/C is entered. Standard console and input-only devices may be used, as well as special PPF [PP] device (input-only device).

PP PRN = [FILE] Send a null leader and/or

PP PRN = [FILE],filename a trailer while copying.

PP PRN = [FILE],filename,FILE: filename to the output-

PP PRN = filename,FILE: only device.

PP FILE = filename, [DIR] Send an end-of-file marker while copying **filename** to the output-only device.

OPTIONAL PPF PARAMETERS

[V] Verify accuracy of copied data.

[E] Echo (display) text on console while being copied.

[Delete+Q] Begin copying after text in **string** is found (terminate **string** with CTRL/Q).

[Delete+Z] End copying after text in **string** is found (terminate **string** with CTRL/Q).

[I] Convert characters to their case during copying.

[R] Convert characters to upper case during copying.

[Sx] Delete all characters on each line of text after column **x** during copying.

[Tx] Convert all ASCII tab characters to **x** number of spaces during copying.

[Y] Delete all form-feed characters during copying.

[Zx] Insert form-feed characters after each **x** number of lines during copying.

- [R] Add sequential line numbers without leading zeros to text during copying.
- [RC] Same as [R] but with leading zeros.
- [R] Copy a System file (CP/M 2.0/2.2).
- [W] Copy with the destination file if it is read-only (CP/M 2.0/2.2).
- [W] Copy from USER number *g* (0 to 15) to the current USER number (CP/M 2.0/2.2).
- [W] Interpret file(s) being copied as containing non-ASCII object machine code.
- [X] Specify "Block Mode" format during copying between input-only and output-only devices.
- [Z] Ignore any Null Records or Intel Hexadecimal format during copying.
- [Z] Set parity bit of all bytes being copied to zero.

ED COMMANDS

- ED file Load ED into memory and open file for creation and/or editing.
- ED subcommand: The appearance of "^" in a command string means the CTRL-^ command is used. "CP" means ED's Character Pointer.
 - aa Append *g* text lines from source file to buffer.
 - BA Append all text lines or until buffer is full.
 - BA Append all text lines or until buffer is full.
 - I Enter insert mode until CTRL-C is entered.
 - Ins Enter insert mode until a CTRL-^ is entered, and insert "^".
 - Ins ^ Enter insert mode, insert xxx, and exit.
 - V Engage character translation to upper case.
 - V Disengage character translation to upper case.
 - ac Move CP *g* characters to right.
 - ac Move CP *g* characters to left.
 - al Move CP *g* lines forward.
 - al Move CP *g* lines back.
 - N Engage displaying of line numbers.
 - N Disengage displaying of line numbers.
 - a: Move CP to line number *g*.
 - B Move the CP to beginning of buffer.
 - B Move the CP to end of buffer.
 - T Display text on current line before CP.
 - BT Display text on current line after CP.
 - BTI Display all text on current line.
 - BT Display *g* lines after CP.
 - BT Display *g* lines before CP.
 - BT Display all lines after the CP.
 - BT Display all lines before the CP.
 - ef Move CP *g* pages forward.
 - ef Move CP *g* pages back.
 - ed Delete *g* characters after CP.
 - ed Delete *g* characters before CP.
 - ek Kill (delete) *g* lines after CP.
 - ek Kill (delete) *g* lines before CP.
 - Find² Find text string in xxx in the buffer.
 - find² F As above except find *g*'th occurrence of xxx.
 - Find² Same as the F command, except perform find²-2 automatic append operations from source file as necessary.
 - Find² replace² Search for text in xxx and replace it with yyy text string.
 - find² replace² Same as Find command except find *g*'th occurrence of xxx text string.

- Find² insert² Find xxx string, insert yyy string after xxx (optionally), and delete all text thereafter until yyy string is found.
- find² insert² Find² As above except find *g*'th occurrence of xxx.
- off² commands Specify "times" repetition of group of commands (optionally), *g* number of times.
 - off Display total buffer usage and free space.
 - off Write current line to the temporary output file.
 - off Write *g* lines to temporary output file.
 - off Write lines until buffer is full empty.
 - off Write all lines until buffer is completely empty.
 - off Write *g* lines to a temporary library file.
 - off Read entire contents of temporary library file (created by "off") into buffer.
 - off² Read library file library LIB into buffer.
 - off Save all editing in final output file without exiting ED.
 - off Exit ED and save all editing in final output file.
 - off Create all editing in buffer and final output file without exiting ED.
 - off Exit ED and erase all editing in buffer and final output file.

SUBMIT AND XSUB COMMANDS

- SUBMIT name a b c ... Load SUBMIT command and "submit" commands stored in library SUB to CP/M, and make optional text substitutions of S1, S2, S3, etc. stored in library with a, b, c, etc., respectively.

XSUB (Extended SUBMIT Program) This program is available only in CP/M 2.0/2.2, and is placed in a SUBMIT file to permit the submitting of entries to other programs loaded by SUBMIT. XSUB may not be entered by itself on the command line.

ASM COMMAND

- ASM name lib Load the CP/M 8080 Assembler and assemble library ASM with optional parameters lib as follows: 1 = 1st parameter position where drive name stored with library ASM can be specified, 2 = 2nd parameter position where drive name to which library HEX is to be output can be specified, 3 = 3rd parameter position where drive name to which library PHB is to be output can be specified. In either the 2nd or 3rd position you can specify "C" for no output, or in the 3rd position, "X" to send output to console device.

LOAD COMMAND

- LOAD name Read library (with extension .HEX) (created with ASM command), and create executable command file library (with extension .COM).

DBT COMMAND

- DBT Load DBT (Dynamic Debugging Tool), and DBT file optionally place file into memory.
- DBT subcommand: ("hex" means hexadecimal (base 16) numbers, and "loc" means a low memory location.)

