

# DOS

## QUICK REFERENCE CARD

On this card, DOS commands are grouped into these 5 categories:

### Housekeeping commands:

INIT	LOAD	DELETE	VERIFY	MAXFILES
CATALOG	RUN	LOCK	MON	
SAVE	RENAME	UNLOCK	NOMON	

### Access Commands:

FP	INT	PR#	IN#	CHAIN
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### Sequential Text File Commands:

OPEN	READ	APPEND	EXEC
CLOSE	WRITE	POSITION	

### Random-Access Text File Commands:

OPEN	CLOSE	READ	WRITE
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### Machine-Language File Commands:

BLOAD	BRUN	BSAVE
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## NOTATION AND SYNTAX

A "parameter" is a capital letter, usually followed by a number (shown here by a lower-case letter), which gives additional information for executing a command. Multiple parameters may appear in any order, but must be separated from each other by a comma. A parameter shown in square brackets [like this] is optional.

A file name (shown here by X) must immediately follow its command word. File names must begin with a letter; only the first 30 characters are used. A comma separates a file name from a following parameter.

CTRL-D (type D while holding down CTRL key) is used in PRINT statements to indicate the start of a deferred-execution DOS command.

Integer BASIC example:

```
10 D$ = "" : REM "CTRL-D"
20 PRINT D$; "CATALOG"
```

Applesoft BASIC example:

```
10 D$ = CHR$(4) : REM CTRL-D
20 PRINT D$; "CATALOG"
```

The term "BASIC" alone is used to mean either Integer BASIC or Applesoft BASIC. The term "file" alone means any type of diskette file.

## COMMAND PARAMETERS

An error message is given if a DOS command quantity is too large or too small.

### ALL FILES

Parameter	As shown	Min	Max
Slot	,Ss	S1	S7
Drive	,Dd	D1	D2
Volume	,Vv	V0 *	V254

\* Using V0 is like omitting the Vv parameter: the diskette's volume number is ignored. Smallest volume number INIT will actually assign to a diskette is 1.

### SEQUENTIAL TEXT FILES

Parameter	As shown	Min	Max
Byte	,Bb	B0	B32767
Relative Field *	,Rp	R0	R32767

\* With EXEC, always relative to field 0.

### RANDOM-ACCESS TEXT FILES

Parameter	As shown	Min	Max
Record Length	,Lj	L1	L32767
Record Number	,Rr	R0	R32767

### BINARY FILES

Parameter	As shown	Min	Max
Starting Address	,Aa	A0	A65535
Number of Bytes	,Lj	L1	A32767

### DOS COMMANDS

Command	Quantity	As shown	Min	Max
PR#	slot	PR# s	PR#0	PR#7
IN#	slot	IN# s	IN#0	IN#7
MAXFILES	file buffers	MAXFILES n	n=1	n=16

Commands use Slot or Drive parameters only when changing to a different Slot or Drive.

If a command omits the Volume parameter or uses V0, the diskette's volume number is ignored. A command that uses the Volume parameter Vv will not be executed unless the diskette's volume number is v.

## HOUSEKEEPING COMMANDS

INIT X [,Vv] [,Ss] [,Dd]

Initializes a blank diskette to form a slave diskette. Assigns greeting program name X and volume number v (if specified). SAVES the BASIC program currently in memory, under file name X.

CATALOG [,Ss] [,Dd]

Displays volume number and all files on a diskette, with each file's type and sector length. \* indicates a LOCKed file.

Type	Description	(How created)
I	Integer BASIC program file	(SAVE)
A	Applesoft BASIC program file	(SAVE)
T	Text File	(OPEN, then WRITE)
B	Binary memory-image file	(BSAVE)

SAVE X [,Ss] [,Dd] [,Vv]

Stores current BASIC program onto diskette, under file name X. Overwrites any previous file of same type and name, without warning.

LOAD X [,Ss] [,Dd] [,Vv]

Loads BASIC program file X into memory, after clearing memory and (if necessary) changing to the correct BASIC.

RUN X [,Ss] [,Dd] [,Vv]

LOADs BASIC program file X, then RUNs the program.

RENAME X, Y [,Ss] [,Dd] [,Vv]

Changes a diskette file's name from X to Y

DELETE X [,Ss] [,Dd] [,Vv]

Erases file X from the diskette.

LOCK X [,Ss] [,Dd] [,Vv]

Locks file X against accidental change or deletion. LOCKed file shown in CATALOG by \*

UNLOCK X [,Ss] [,Dd] [,Vv]

Unlocks previously LOCKed file X to allow change or deletion.

VERIFY X [,Ss] [,Dd] [,Vv]  
Checks file X for internal consistency.  
If X was saved without error, no message  
is given.

MON [,C] [,I] [,O]  
Causes display of disk Commands ( C ),  
Input from the disk ( I ), and Output  
to the disk ( O ). With no parameters,  
MON is ignored.

NOMON [,C] [,I] [,O]  
Cancels display of disk Commands ( C ),  
Input from the disk ( I ), and Output  
to the disk ( O ). With no parameters,  
NOMON is ignored.

MAXFILES n  
Reserves n file buffers for disk input and  
output (booting reserves 3 file buffers).  
Use before LOADING or RUNning a program.

## ACCESS COMMANDS

FP [,Ss] [,Dd] [,Vv]  
Puts system into Applesoft BASIC,  
erasing any program in memory.

INT  
Puts system into Integer BASIC,  
erasing any program in memory.

PR# s  
Sends subsequent output to slot s . Boots  
disk if slot s contains disk controller  
card. PR#0 sends output to TV screen again.

IN# s  
Takes subsequent input from slot s . Boots  
disk if slot s contains disk controller  
card. IN#0 takes input from keyboard again.

CHAIN Y [,Ss] [,Dd] [,Vv]  
RUNS Integer BASIC program file Y , but does  
not clear variables developed by previous  
Integer BASIC program.

## SEQUENTIAL TEXT FILE COMMANDS

OPEN X [,Ss] [,Dd] [,Vv]  
Opens or creates sequential text file X ,  
allocates one file buffer and prepares to  
WRITE or READ from beginning of file.

CLOSE [X] [,Ss] [,Dd] [,Vv]  
Completes WRITE X, if necessary, and de-  
allocates file buffer assigned to text file  
X . Without file name, CLOSEs all OPEN files  
(except an EXEC file).

WRITE X [,Bb]  
Subsequent PRINTs send characters to  
sequential text file X . WRITEing begins  
at current file position or (if specified)  
at byte b . Cancelled by any DOS command.

READ X [,Bb]  
Subsequent INPUTs and GETs take response  
characters from sequential text file X .  
READING begins at current file position or  
(if specified) at byte b . INPUT response  
is one field (all characters to next  
RETURN). Cancelled by any DOS command.

APPEND X [,Ss] [,Dd] [,Vv]  
Opens existing sequential text file X ,  
similar to OPEN, but prepares to WRITE  
at the end of the file.

POSITION X, Rp  
In OPEN sequential text file X , subsequent  
READ or WRITE will proceed from p-th field  
following current file position.

EXEC X [,Rp] [,Ss] [,Dd] [,Vv]  
Executes successive fields in sequential  
text file X as if typed at keyboard.  
With Rp parameter, execution begins with  
p-th field. Fields may include numbered  
BASIC program lines and direct-execution  
BASIC or DOS commands to control the Apple.

## RANDOM-ACCESS TEXT FILE COMMANDS

OPEN X, Lj [,Ss] [,Dd] [,Vv]  
Opens or creates random-access text file X ,  
allocates one file buffer, and defines record  
length as j bytes. Prepares to WRITE or READ  
from beginning of Record 0 . Same Length param-  
eter must be used each time file X is OPENed.

CLOSE [X] [,Ss] [,Dd] [,Vv]  
Completes WRITE X, if necessary, and de-  
allocates file buffer assigned to text file  
X . Without file name, CLOSEs all OPEN files.

WRITE X [,Rr] [,Bb]  
Subsequent PRINTs send characters to random-  
access text file X . With no parameters,  
WRITEing begins at current file position.  
With Rr parameter alone, WRITEing starts at  
byte 0 of Record r . With Bb parameter,  
WRITE starts at byte b of current or spec-  
ified Record. Cancelled by any DOS command.

READ X [,Rr] [,Bb]  
Subsequent INPUTs and GETs take response  
characters from random-access text file X .  
With no parameters, READING starts at cur-  
rent file position. With Rr parameter  
alone, READING starts at byte 0 of Record r .  
With Bb parameter, READING starts at byte  
b of current or specified Record. INPUT  
response is one field (all characters to  
next RETURN). Cancelled by any DOS command.

## MACHINE-LANGUAGE FILE COMMANDS

BSAVE X, Aa, Lj [,Ss] [,Dd] [,Vv]  
Stores on diskette, under file name X ,  
the contents of j memory bytes starting  
at address a .

BLOAD X [,Aa] [,Ss] [,Dd] [,Vv]  
Loads binary file X into same memory  
locations from which file was BSAVED or  
(if specified) starting at address a .

BRUN X [,Aa] [,Ss] [,Dd] [,Vv]  
BLOADs binary file X , then jumps (JMP)  
to loaded file's first memory address.