

**COMMANDS,  
DOS ERRORS,  
and  
ERROR  
MESSAGES**

for users of

**COMMODORE  
COMPUTERS**

Series 2001  
Series 3000  
Series 4000  
Series 8000



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*Quick Reference Guide*

## REQUESTING ERROR MESSAGES: COMMODORE DISK DRIVES

Requesting the error requires execution of a program if using BASIC 3.0 or a direct command if using BASIC 4.0. Either method causes the error to be displayed on the computer screen and resets the device error indicator.

CBM Series 2001  
CBM Series 3000  
with  
BASIC 3.0

CBM Series 8000  
CBM Series 4000  
with  
BASIC 4.0

40 column display:

80 column display:

```
10 OPEN 1,8,15
20 INPUT #1,A,B$,C,D
30 PRINT A,B$,C,D
```

```
PRINT DS$
```

where     A = error message number  
           C = track

B\$ = error message  
D = sector

## DESCRIPTION of DISK OPERATING SYSTEM (DOS) ERROR MESSAGES

### 20: READ ERROR (block header not found)

The disk controller is unable to locate the header of the requested data block. Caused by an illegal sector number, or the header has been destroyed.

### 21: READ ERROR (no synch character)

The disk controller is unable to detect a synch mark on the desired track. Caused by misalignment of the read/write head, no diskette is present, or unformatted disk. Can also indicate a hardware failure.

### 22: READ ERROR (data block not present)

The disk controller has been requested to read or verify a data block that was not properly written. This error message occurs in conjunction with the BLOCK commands and indicates an illegal track and/or sector request.

**23: READ ERROR (checksum error in data block)**

This error message indicates that there is an error in one or more of the data bytes. The data has been read into the DOS memory, but the checksum over the data is in error. This message may also indicate grounding problems.

**24: READ ERROR (byte decoding error)**

The data or header has been read into the DOS memory, but a hardware error has been created due to an invalid bit pattern in the data byte. This message may also indicate grounding problems.

**25: WRITE ERROR (write-verify error)**

This message is generated if the controller detects a mismatch between the written data and the data in the DOS memory.

**26: WRITE PROTECT ON**

This message is generated when the controller has been requested to write a data block while the write protect switch is depressed. Typically, this is caused by using a diskette with a write protect tab over the notch.

**27: READ ERROR (checksum error in header)**

The controller has detected an error in the header of the requested data block. The block has not been read into the DOS memory. This message may also indicate grounding problems.

**28: WRITE ERROR (long data block)**

The controller attempts to detect the synch mark of the next header after writing a data block. If the synch mark does not appear within a pre-determined time, the error message is generated. The error is caused by a bad diskette format (the data extends into the next block), or by hardware failure.

**29: DISK ID MISMATCH**

This message is generated when the controller has been requested to access a diskette which has not been initialized. The message can also occur if a diskette has a bad header.

**30: SYNTAX ERROR (general syntax)**

The DOS cannot interpret the command sent to the command channel. Typically, this is caused by an illegal number of file names, or patterns are illegally used. For example, two file names may appear on the left side of the COPY command.



- 31: SYNTAX ERROR (invalid command)  
The DOS does not recognize the command. The command must start in the first position.
- 32: SYNTAX ERROR (long line)  
The command sent is longer than 58 characters.
- 33: SYNTAX ERROR (invalid file name)  
Pattern matching is invalidly used in the OPEN or SAVE command.
- 34: SYNTAX ERROR (no file given)  
The file name was left out of a command or the DOS does not recognize it as such. Typically, a colon (:) has been left out of the command.
- 50: RECORD NOT PRESENT  
Result of disk reading past the last record through INPUT # , or GET # commands.
- 51: OVERFLOW IN RECORD  
PRINT # statement exceeds record boundary. Information is truncated.
- 52: FILE TOO LARGE  
Record position within a relative indicates that disk overflow will result.
- 60: WRITE FILE OPEN  
This message is generated when a write file that has not been closed is being opened for reading.
- 61: FILE NOT OPEN  
This message is generated when a file is being accessed that has not been opened in the DOS. Sometimes, in this case, a message is not generated; the request is simply ignored.
- 62: FILE NOT FOUND  
The requested file does not exist on the indicated drive.
- 63: FILE EXISTS  
The file name of the file being created already exists on the diskette.
- 64: FILE TYPE MISMATCH  
The file type does not match the file type in the directory entry for the requested file.

**65: NO BLOCK**

This message occurs in conjunction with the B-A command. It indicates that the block to be allocated has been previously allocated. The parameters indicate the next higher in number available track and sector. If the parameters are zero (0), then all blocks higher in number are in use.

**70: NO CHANNEL (available)**

The requested channel is not available, or all channels are in use. A maximum of five sequential files may be opened at one time to the DOS. Direct access channels may have six opened files.

**71: DIR(ectory) ERROR**

The BAM does not match the internal count. There is a problem in the BAM allocation or the BAM has been over-written in DOS memory. To correct this problem, reinitialize the diskette to restore the BAM in memory. Some active files may be terminated by the corrective action. NOTE: BAM = Block Availability Map.

**72: DISK FULL**

Either the blocks on the diskette are used or the directory is at its limit (152 entries).

**73: DOS MISMATCH (73, CBM DOS 2.5 8050)**

DOS 1 and 2 are read compatible but not write compatible. Disks may be interchangeably read with either DOS, but a disk formatted on one version cannot be written upon with the other version because the format is different. This error is displayed whenever an attempt is made to write upon a disk which has been formatted in a noncompatible format. (A utility routine is available to assist in converting from one format to another.) This message may also appear after power up.

**74: DRIVE NOT READY**

An attempt has been made to access the 8050 Dual Drive Floppy Disk without any diskettes present in either drive.

## USER'S QUICK REFERENCE: COMMANDS

### DISK COMMANDS

#### 40column display

BASIC 3.0

SAVE"dr:fn",8  
LOAD"dr:fn",8  
LOAD"\*",8  
VERIFY"dr:fn",8  
VERIFY"\*",8

#### directory:

LOAD"\$dr",8  
LIST

#### formatting:

OPEN 1,8,15  
PRINT #1,"Nx:fn,xx"

#### initialize:

OPEN 1,8,15  
PRINT #1,"Ix"

#### error messages:

10 OPEN 1,8,15  
20 INPUT #1,A,B\$,C,D  
30 PRINT A,B\$,C,D

#### 80column display

BASIC 4.0

DSAVE"fn",Dx  
DLOAD"fn",Dx  
DLOAD"\*",Dx  
VERIFY"dr:fn",8  
VERIFY"\*",8

#### directory:

DI(shifted)R Dx  
DIRECTORY Dx

#### formatting:

HEADER"fn",Dx,Ixx

#### initialize:

(not necessary with the 8050)

OPEN 1,8,15  
PRINT #1,"Ix"

#### error messages:

PRINT DS\$

### TAPE COMMANDS

#### 1st cassette:

SAVE"fn"  
LOAD"fn"  
VERIFY"fn"

#### 2nd cassette:

SAVE"fn",2  
LOAD"fn",2  
VERIFY"fn",2

#### 1st cassette:

(same as BASIC 3.0)

SAVE"fn"  
LOAD"fn"  
VERIFY"fn"

#### 2nd cassette:

(same as BASIC 3.0)

SAVE"fn",2  
LOAD"fn",2  
VERIFY"fn",2

**NOTE:** All BASIC 3.0 commands are upward compatible with BASIC 4.0.

fn=file name supplied by user

x=dr=disk drive number (1 or 0): both Dx and dr default to 0

8=device number (8 for disk, 2 for second cassette, 4 for printer)

xx=two character, numeric id supplied by user

A=error message number B\$=error message C=track D=sector

All upper-case characters shown in format are essential for proper execution of command. These must be entered from the keyboard as unshifted characters. On a Business Model they will appear in lower case. The only exception is the short form of the DIRECTORY command which uses a shifted "R".

## USER'S QUICK REFERENCE: ERROR MESSAGES

Errors encountered while trying to:	Disk Media	Tape Media
<b>LOAD a program—</b>	<b>DEVICE NOT PRESENT:</b> <ul style="list-style-type: none"> <li>Appropriate device not attached to computer or not turned on.</li> </ul> <b>NOTE:</b> Before turning the disk drive on or off take care to ensure that any diskettes are first removed. <ul style="list-style-type: none"> <li>Addressed device doesn't correspond to accepted device number protocol.</li> </ul>	
	<b>*READ ERROR:</b> Disk controller unable to read requested data.  <b>*FILE NOT FOUND:</b> Requested file not on indicated drive.  <b>*DISK ID MISMATCH:</b> This error occurs upon failure to initialize the disk.  <b>*DEVICE NOT READY:</b> An attempt has been made to access the 8050 Dual Drive Floppy Disk without any diskettes present in either drive.	<b>LOAD ERROR:</b> <ul style="list-style-type: none"> <li>More than 31 errors exist in first tape block.</li> <li>Errors in exactly the same corresponding positions of both blocks.</li> </ul> <b>STATUS ERROR</b> Non-fatal load errors of various types. Note: Obtain after LOAD is complete by typing PRINT ST followed by RETURN.
<b>RUN a program—</b>	<b>REDO FROM START:</b> <ul style="list-style-type: none"> <li>Computer asked for a number and you gave it an alphabetic character.</li> <li>Computer will continue to print an error message until correct data is entered.</li> </ul> <b>SYNTAX ERROR:</b> <ul style="list-style-type: none"> <li>Computer cannot recognize command.</li> <li>Incorrect spelling or punctuation.</li> </ul>	
	<b>*DEVICE NOT READY:</b> An attempt has been made to access the 8050 Dual Drive Floppy Disk without any diskettes present in either drive.	<b>DEVICE NOT PRESENT:</b> Device not connected to computer or not turned on.
<b>SAVE a program—</b>	<b>VERIFY ERROR:</b> Stored file does not correspond with information in computer memory.	
	<b>*FILE EXISTS:</b> File name of newly created file already exists on diskette.  <b>*WRITE PROTECT:</b> Write protect tab over notch on diskette prevents any data being written to disk.  <b>*DEVICE NOT READY:</b> An attempt has been made to access the 8050 Dual Drive Floppy Disk without any diskettes present in either drive.	<b>*DISK ID MISMATCH:</b> This error occurs upon failure to initialize the disk.  <b>*DOS MISMATCH:</b> This error occurs whenever a disk with wrong format is written upon.  <b>DEVICE NOT PRESENT:</b> Device not connected to computer or not turned on.

**\*NOTE:** Disk errors are first indicated by red light in center of disk drive.

If using BASIC 4.0, you may obtain error messages by typing PRINT D\$\$ followed by RETURN. The screen will then display the appropriate error message.





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