Command
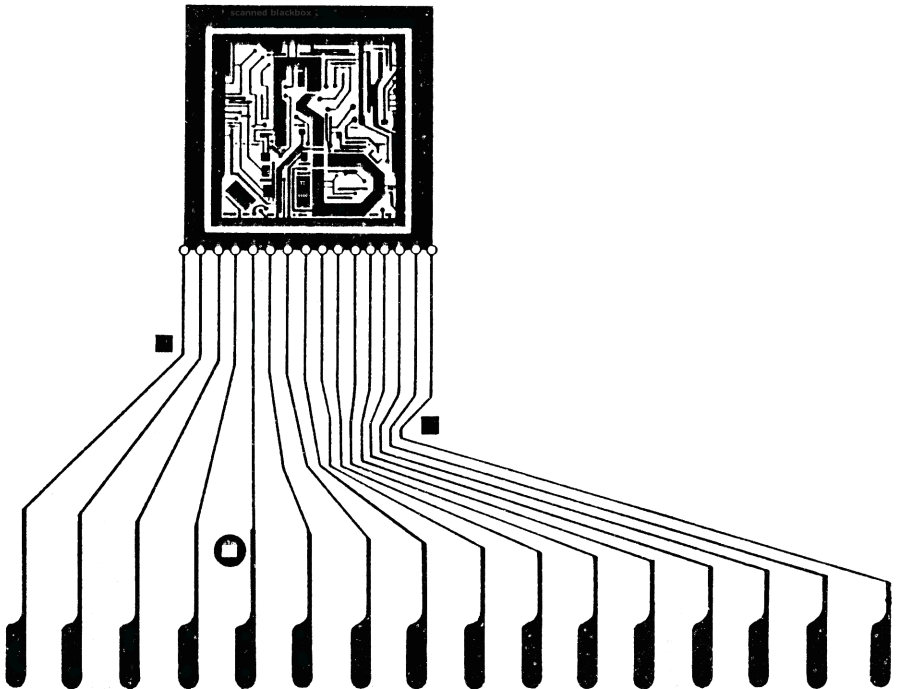# DOS

For TI-99/4A
requires ram at >6000

Program Manual

Command DOS

© 1986 by MONTY SCHMIDT

for TI-99/4A

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COMMAND DOS

Command DOS is a unique program in the TI 99/4A environment. It is a utility, a "shell" and an extension to the TI operating system. Command DOS gives you more power and control of your system. Rather than using several programs to accomplish your tasks, Command DOS will give you several capabilities that used to require four others!

You will find that, just like any other powerful program, it takes some study to become fully aware of the potential that this software holds. Look at the file "AUTO-BAT" found on the Program Disk enclosed in this package. You can see how a batch file works. If you have two disk drives, you can run the program 'as is'. Those of you with one drive will want to change the file so that all DSK2 become DSK1. Take the time to learn how to use Command DOS through the examples provided and then into the more powerful features.

Command DOS is designed to load into a RAM device at address >6000 — >7FFF the 'cartridge port'. A GRAMKRACKER, GRAM CARD, MAXIMEM, SUPER CART, CACHE CARD or SUPERSPACE type device is required. You must load the software into your hardware device as a PROGRAM image file.

This will give you "4A DOS" on the main title screen. Choosing "4A DOS" will cause the computer to search the system disk for a file called AUTO-BAT which will then execute as a batch file.

To exit from Command DOS, type Q. Now type X EDIT40 at the prompt. This provides a built-in editor for Command DOS which is the familiar TI Writer editor. After you see the screen, press FCTN 9, then Q and E to exit. Command DOS was designed to be re-entrant under certain conditions.

The DOS is also expandable. Add on programs that take advantage of Command DOS and assembly language functions can be included under Command DOS.

The reason that Command DOS loads into a RAM device at memory address >6000 - >7FFF is so that other programs can be integrated into the Command DOS environment. This allows you to deal with programs and functions from Command DOS.

Those of you who use MS-DOS will recognize the commands used in Command DOS. The logical application of these follows from normal use in the MS-DOS environment.

LOADING PROCEDURES:

COMMAND DOS loads into the following devices:
     GRAM   KRACKER using the file DOS/GK.   The
GRAMKRACKER should be set up as a Superspace.

     GRAM CARD using the file **DOS/MECH** via the LOADER menu of the GRAM CARD.

     DOS/SS will load into the 8k E/A module, Cache Card, Super Space etc. Using the loader **LOAD/SS** from the E/A #3 option will place the PROGRAM image file in the correct RAM addresses.

     The files: CHKDSK, CMPDSK, DISKCOPY, EDIT40, and FORMAT are all support files for Command DOS. These are all accessed from the main prompt **DSK1.>** by typing **X** (filename) [ie.X CMPDSK]

     The files: CHARA1, EDITA1, and EDITA2 are support files for Command DOS and the TI editor program.   It is necessary for CHARA1 to be on DSK1 with DOS.

     With this first release, we have provided a basic framework with which to work. This initial documentation will be followed by more in-depth information.

BATCH (File name)

The BATCH command executes a batch file.
Batch files must be DIS/VAR 80 format.
Batch files work the same as regular input
to DOS but in this case they can execute a
number of commands in a row making it easy
to make your own files to boot up programs,
print instructions, and complete large
tasks. The BATCH command can contain the
command BATCH inside of it but it should be
the last command in the file. Any commands
after a BATCH command in a batch file will
be ignored. If the file AUTO-BAT resides on
the BOOTDISK this file will automatically be
executed by the DOS. When making batch
files make sure if you are using TI-Writer
that no control characters are buried in the
file and that you use the Print file option
not Save file.

SEE MORE,REM,WAIT

EXAMPLE:

DSK1.>BATCH BACKUP-BAT <Executes the batch
file BACKUP-BAT on drive 1.

BEEP

BEEP generates a tone usually associated
with a correct response.

CLS

CLS clears the screen and homes the cursor.

COPY (Source file) (Destination file)

The COPY command allows copying one file to
another. Both source and destination files
must be specified. If the volume name DSKx.
is not specified the filename is copied to
or from the default volume. If the same
source and destination file are specified
for single drive use DOS will prompt for
master and copy to be inserted alternately.

EXAMPLE: DSK1.>COPY DSK1.TESTA DSK2.TESTB
<Copies the file TESTA from drive 1 to the
file TESTB on drive 2>

DSK1.>COPY TESTA TESTB <Copies the file
TESTA from drive 1 to the file TESTB on
drive 1>

DSK1.>copy testa testa <Copies the file
TESTA from the disk in drive 1 to a second
disk placed in drive 1.

DEL (File name)

DEL deletes the specified file name from a
volume. If the volume name is not
specified, the default volume name is
assumed. The command ERASE can be used in
place of DEL.

EXAMPLE: DSK1.>DEL DSK2.TEST <Erases TEST
from drive 2>

DSK1.>DEL TEST <Deletes TEST from drive 1>

DIR <Volume name>

This command will catalogue the device
specified in the Volume name parameter. If
no parameter is specified then the default
volume is catalogued. Care must be taken in
using this command on multiple command
4

lines. In this case the volume name must be
specified otherwise DOS will interpret the
next command as the volume name to be
catalogued.

EXAMPLE: DSK1.>DIR DSK2. <Catalogues drive
2>

DSK1.>DIR <Catalogues drive 1>

DISKNAME (Volume title)

DISKNAME will rename the disk found in the
volume specified. If not volume is
specified then the default volume is
assumed.

EXAMPLE:

DSK1.>diskname testdisk <Renames the disk in
drive 1 to TESTDISK

DSK1.>diskname dsk2.tdisk <Renames the disk
in drive 2 to TDISK

ECHO (ON/OFF)

ECHO is used in batch commands to turn on
and off the display of commands in a batch
file to the screen.

ERASE (File name)

ERASE deletes the specified file name from a
volume. If a volume name is not specified
then the default volume is assumed. The
command DEL can be used in place of ERASE.

EXAMPLE: DSK1.>ERASE DSK2.TEST <Erases TEST
from drive 2>

DSK1.>ERASE TEST <Erases TEST from drive 1>

FIX80 (File name)

FIX80 will load a DIS/FIX 80 assembly
language file. The file will execute if it
is an auto executable file. If it is not
then the start name will be stored in the
REF/DEF table. Care must be taken not to
load over DOS memory usage in low memory.
See LOAD for more info.

EXAMPLE: DSK1.>fix80 dbug < Loads the
DIS/FIX 80 assembly file named DBUG into
memory

SEE INIT,LINK,REF

HELP

HELP lists out all the current commands
supported by DOS. The command ? can also be
used in place of HELP.

HONK

HONK generates a tone usually associated
with a bad responce.

INIT

INIT loads the file LOWMEM from the default
drive. This sets up the low memory for
running DIS/FIX 80 files. INIT is always
executed upon power up.

LINK (Start name)

LINK will look up the name specified in the
REF/DEF table and if found begin executing
at the corresponding address.

EXAMPLE: DSK1.>link start

< Looks up the name START in the REF/DEF

table and if found begins execution of the
program

LOAD (File name)

LOAD will load a PROGRAM image assembly
language file. The file will execute and
can not return to DOS. Care must be taken
not to LOAD files which load into the area
from >2000->4000. Since this area is used
by DOS the computer will lock up. If a file
loads into this area then a custom loader
should be written which executes in high
memory and loads the file into the >2000
area.

MORE (ON/OFF)

The MORE command can be used when viewing
text or files. It is extremely useful in
batch files. When MORE ON is executed the
screen display will be suspended every 24
lines until a key is pressed. MORE OFF will
turn off suspension of the display.

ONKEY (0....9,A...Z,)

ONKEY is used within batch files to
facilitate menuing. ONKEY will accept up to
10 alpha-numeric characters after it
seperated by commas. When ONKEY is
encountered in a batch file DOS waits for a
key to be pressed. When a key is pressed
DOS checks the valid characters in the
parameter list. If the key is not found
there then DOS keeps checking until a valid
one is pressed. When a valid key stroke is
accepted DOS then skips the corresponding
number of lines following the command in the
batch file. For the numbers 0-9, the
corresponding number of lines are skipped.
For the letters A-Z the number of lines is
10-35.

EXAMPLE: <within a batch file> ONKEY 0,1,2 <
Waits for the keys 0,1, or 2 to be pressed
and skips the corresponding number of lines
in the batch file.

OUTPUT (ON/OFF)

The OUTPUT command allows you to echo all
screen output of DOS to a print device. By
issuing the command OUTPUT ON all screen
output is echoed. To disable the printer
use OUTPUT OFF.

P?

The P? command displays the current printer
device name.

PRINT (file name)

PRINT prints a DIS/VAR or DIS/FIX file to
the current printer device name and the
screen. Like the TYPE command the record
length is immaterial.

PROTECT (file name)

PROTECT sets a files status to PROTECTED.

Q

Q exits the user from DOS.

REF

REF lists out the current contents of the
REF/DEF table.

REM <Text>

When the REM command is executed all text on
the current line is ignored. This is
especially useful in batch commands where
instructions are to be displayed.

RENAME (old file name) (new file name)

RENAME will change the name of a file from
the current file name to a new file name.

SETPRINT (printer device name)

SETPRINT allows changing the name to be used
by the PRINT command.

SEE P?,PRINT

TYPE (file name)

TYPE will list a DIS/VAR or DIS/FIX file to
the screen. The record length of the file
is immaterial to the TYPE command.

UNPROTECT (file name)

UNPROTECT sets a files status to
unprotected.

VER

VER returns the version number of the DOS.

VOL (volume name)

VOL allows the user to change the current
volume name. Volume names must always end
in with a period.

EXAMPLE DSK1.>VOL DSK2. <Changed the
default volume name to DSK2.>

WAIT

When WAIT is executed it causes the prompt "Press any key to continue", to be displayed. The screen display will be suspended until a key is pressed.

WIDTH (40/80)

The WIDTH command allows switching between 40 and 80 column mode. The default mode is 40 column but if a Mechatronic 80 column device is attached the screen can be switched to 80 columns by the command WIDTH 80.

X (file name)

The X command is used to execute an external DOS file located on a disk. The following list of external commands are currently supported by DOS.

CHKDSK (volume name)

This command will check the sectors on a disk for errors. DOS will ask if you want these sectors flagged in the bit map. If the sectors are unused they will then be flagged as in use. Thus the system will not attempt to use them in saving files. If the sectors are already in use DOS will not be able to recover them.

CMPDSK (volume name volume name)

This command will compare to disks sector for sector and report any sectors that do not match.

DISKCOPY (volume name volume name)

This command will do a sector by sector back up of a disk.

EDIT40

This command loads in the TI/WRITER editor. After using the editor use Q to exit the editor and you will be returned to DOS. You can not use the SD (Show directory) while in the TI/WRITER editor.

FORMAT (diskname sides/density tracks <N>)

This command is used to format a disk. The default use of FORMAT is to issue a command FORMAT diskname. This will format a disk with the name diskname, single sided, single density, 40 tracks, and do a verification of the sectors. The parameters for FORMAT are all optional other than the diskname. The valid side density parameters are SS,DS,SD,DD, meaning Single sided-Single density, Double sided-Single density, Single sided-double density, and Double sided- Double density respectively. Tracks can be a number up to 80 for quad-density drives. Adding N at the end of the parameter list will turn off the verification of sectors for a quicker format.

Examples:

DSK1.>format testdisk

Formats a SS 40 track disk in drive 1 named TESTDISK and performs a verification of sectors.

DSK1.>format dsk2.testdisk DS

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Formats a DS 40 track disk in drive 2
named TESTDISK and performs a
verification of sectors.

DSK1.>format adisk SS 35

Formats a SS 35 track disk in drive 1
named ADISK and performs a verification
of sectors.

DSK2.>format dsk1.adisk SD 40 N

Formats a SD 40 track disk in drive 1
named ADISK and does not verify the
sectors.

Ryte
Data

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