

# Common System Problems

(c)1994,1995,1996 Terry E. Mercer

There are a number of problems which can, and often do, occur when trying to run programs on a computer, especially some of the more impressive games with high resolution graphics and/or higher quality sound.

If you are running Windows 95 - Please consult a local technician, your Windows 95 manuals, or Microsoft. Unless the individual program specifically mentions that it was designed for Windows 95, we make NO guarantees or representations. We have and will continue to design, develop, and test product for the majority of the market; however, can not test for 100% of the contingencies created by Windows 95 or the hardware available. It is our goal to bring some of the best and most innovative budget titles to the "normal user." Whether you are a beginner or expert, we have something for you!

The following information is GENERAL to help you solve, or at least understand, the majority of the "common problems" caused by software. If there are specific, known, instances where a particular product has a specific problem, we will go into more detail in the "MORE" section found on the opening menu (screen). Please refer to the information below and the MORE information before calling for technical support. In most cases, the answers are simple and already on this CD Rom disc.

Note: Technical support is available between 10am and 4pm Monday through Friday Pacific Standard Time to REGISTERED USERS ONLY! Please mail or fax in your registration card immediately, for technical support access and information about future updates of your product, and future products.

**The most common problems encountered with programs in the IBM world are:**

- 1. Not Enough Memory;**
- 2. System Configured Incorrectly (or not in a standard fashion);**
- 3. Sound not working or locking system - Screen looks ugly or loses colors;**
- 4. Trying to save your data or otherwise write to the CD Rom disc (impossible) but many people still try.**

## Problem #1: Not Enough Memory

The most common reason a DOS based program doesn't start is that there is not enough conventional RAM memory. A DOS based computer (IBM PC or compatible) has inherent limits for DOS applications (programs) regarding memory access.

You may have heard of the "640K barrier," which is what NORMAL DOS is limited to... 640,000 bytes of "conventional memory." With DOS 5 and above, or using a special memory enhancement program (such as QEMM or EMM386), there is another 384K of upper memory if made available... but this is usually difficult for the average user to configure correctly.

No matter how much memory a DOS based computer has, the limits on conventional memory is still 640+384 (max) minus xxK being used by the programs and environment being loaded at start up by the Autoexec.Bat and Config.Sys files. Even with 16 Megabytes or more a person can still get the "Not enough memory to Load" message.

Using memory managers is possible (and usually easy) to do. Some basic changes may be all that is required to enhance your systems ability to recognize more of its memory. DOS v6 shipped with MEMMAKER. This program can be very beneficial if you are NOT on a network and don't have any unique cards in your system. I would NOT recommend using it, except as a last resort and knowing that there is a chance it could make matters worse (although less than 20% likely). Remember to make a copy of your current Autoexec.bat and Config.sys files before trying any system changes on your own (even if you're technical oriented... its better safe than sorry).

## Problem #2 - System Configured Incorrectly (or not in a standard fashion);

If you purchased a computer completely set up, with all the programs and special cards (i.e., sound cards, modems, and scanners, etc.) then you run a slight risk that the person which set up your system didn't do it quite right, and/or had optimized it for the programs they used most often... not for YOUR needs. You may need to have a trained computer technician make such changes & optimize the computer for your specific needs. We do NOT recommend the use of MEMMAKER (supplied with DOS v6 and higher) as a cure. In fact, MEMMAKER does NOT take a few very important factors into account, and can actually HURT or WORSEN the problems. **\*Please make a BACKUP of the following files: Autoexec.Bat and Config.Sys before attempting to change them (whether manually or using a program like MEMMAKER).**

## Problem #3 - Sound not working or locking up the system;

There are dozens of different sound cards and video cards on the market. Some have a lot of features, others are limited. In the Windows world, Microsoft Windows controls the system, the sound, video, mouse, printer, etc. to the best of its ability. This means that if a device works in one Windows program, it will automatically work with all such programs, usually. We have found, however, that this assumption is NOT true, especially in the Windows 95 world and with DOS programs running through Windows. There are certain problems which we have defined in the past few months that make 100% compatibility impossible. We are actively testing and solving as many known compatibility problems as we can, whenever possible.

DOS, isn't "standard" or "automatic." If you have ever tried running some of the fancy new games on the market, you already know this. Each DOS program must use it's own video drivers, sound drivers, mouse drivers, etc. therefore incompatibilities are not only possible, but also probable if your system is slightly out of the "ordinary," or "tweaked" with non-standard and/or high-end components... or hasn't had it's memory usage tweaked.

This is even more true for DOS based programs which have been set up to run under (over, through, and with) one of the many Microsoft Windows versions. In many instances (especially if the program is working correctly) you may never realize a DOS program is being ran (through Windows). Windows 95(r) is often very good at fooling even the experienced end-user. Unless there are problems or incompatibilities the user will only know the program works (or doesn't). We have made best efforts in selecting and setting up programs (whether DOS or Windows based) which have no surprises. We have either solved all known problems (if any) OR documented

them in this file and the MORE file. Most programs, on most systems, ran under normal conditions run perfectly as expected. We hope this is the case with your computer and the program(s) you have purchased from one of our valued distributors.

### **Things you can check (and try) regarding problems with your sound card are:**

- a) Are your speakers plugged in and powered on? This is surprisingly common.
- b) Run the test for 8-bit, 16-bit, and FM sounds from DOS - NOT WINDOWS! Just because you can hear sound in Windows it doesn't mean DOS is configured correctly. Most all Sound cards ship with a Sound Test program, or have a "Test Sound" in their configuration file. If it doesn't work here, NO DOS game (program) can work effectively.
- c) Look in your Autoexec.Bat and Config.Sys files, verify the settings. A220, D1, and I7(or 5) are the most common settings for Sound Blaster and compatibles (A=Address, D=DMA Channel, and I=IRQ or Interrupt).
- d) Verify that the program is set correctly. Some programs have a "Setup" or configure on the main menu, other programs have it accessible through another program, you may have to look and see for EACH program you are having trouble with. Also, remember, if the program was intended to run directly from a CD Rom disc, and the setup program is not on the main menu (i.e., a separate program) you will probably have to INSTALL (or copy) the program to your hard disc drive to make it run, as the new settings can't be saved to the CD Rom disc.
- e) If your system starts the sound, THEN locks up, chances are you are either getting power feed back from amplified speakers, or having a problem with the 16-bit compatibility. Try selecting regular Sound Blaster (not SB 16 or SB Pro). You may set the IRQ to 7 rather than 5. IRQ 5 began with the release of SB 16, and many older 8 bit card and 16 bit compatibles can't access IRQ 5 correctly. If that doesn't work please consult your sound card manual or a local technician.

---

## Some basic hints and tips (NOT FOR WINDOWS 95)

---

(if you are brave enough to try modifying or optimizing  
your system... at your own risk)

The following commands should be in the top three lines of your CONFIG.SYS file (with few exceptions) to optimize most DOS programs:

```
DEVICE=C:\DOS\HIMEM.SYS
DOS=HIGH,UMB
DEVICE=C:\DOS\EMM386.EXE M9 2048 RAM
```

The first two lines tell your computer to use the high memory... the memory BETWEEN the 640K barrier and the 1024K (first megabyte) which normally is un-used and sits idle. The third line loads a memory manager (supplied with your DOS and Windows).

NOTE: On some systems the "M9" switch will need to be removed from the command line, as it CAN lock your system. However, if it doesn't lock your system it should give you an additional 64K block of upper memory (one page frame normally reserved for EGA, for the techies).

The "2048 RAM" section tells the computer to set up 2 Megs of EMS memory (which many DOS programs can access and use). You will see "NOEMS" in here if the computer has been optimized for Windows use. Consider a Multiple Boot set-up. It should solve most all of your problems for your current computer software (if done correctly) however, will require a little more manual effort when installing programs that try to change your start-up files (i.e., Autoexec.Bat & Config.Sys).

If you type MEM /C at the DOS prompt (C:\>) your memory usage will be displayed. Check you memory BEFORE and AFTER you make changes. Pay attention to the lines (toward the bottom) that says, "Largest Executable Program Size." The number in the parens (XXXX) is the answer. Some programs won't run unless that number is as much as 605K! The individual program should tell you what is required.

There are a number of things you can try. But, unless you are comfortable editing system files, have a computer technician set up a Multi-Config (different ways your computer can start up, depending on what you want it to do at that time). This person will also be able to (if they are good) optimize your system for you, both memory & data. Have them check for fragments, and things which would speed up your system. This is generally the least stressful and smartest move. If you want to try this task on your own, use the following resources:

Dan Gookin's DOS for Dummies  
Your DOS manual  
Try typing HELP at the DOS prompt

If all else fails, invest in a good tech to solve your problems for you, and to answer your questions in a "hands on" fashion.

Enjoy these Programs...  
They are some of the best ever created...

-----  
**For the truly brave and curious...**  
**(NOT RUNNING WINDOWS 95! which has different rules)**

Here is an example of a Multi-Config boot which I use on one of my computers. I'm NOT going to explain it. If you don't understand it, then I suggest finding a smart friend locally to help you understand this process or to set it up for you. NOTE: My device drivers and actual programs WILL differ from yours. Make a back up of your Autoexec.bat & Config.sys files, and proceed with caution!!!

-----  
**Now the Config.sys - which works in conjunction with the Autoexec.bat**  
-----

[Menu]

```
menucolor=7,1
menuitem=Mitsumi, Standard DOS & Windows Install w/CD Rom
menuitem=Virtual, Load the Default Virtual R: Drive & DOS
menuitem=CDBurner, Load the Burner... the Money Maker
menuitem=Defrag, Defragment ALL Hard Drives
menuitem=Tape, To connect the External Tape Backup
menudefault=mitsumi,,5
```

[Common]

```
DEVICE=C:\DOS\HIMEM.SYS
DOS=HIGH,UMB
DEVICE=C:\DOS\EMM386.EXE M9 NOEMS
DEVICEhigh=C:\STACKER\CLOAKING\CLOAKING.EXE
LASTDRIVE=Z
FILES=30
BUFFERS=10
STACKS=9,256
SHELL=C:\DOS\COMMAND.COM C:\DOS\ /E:256 /p
DEVICE=C:\STACKER\DPMS.EXE
DEVICEHIGH=C:\STACKER\STACHIGH.SYS
```

[Scanner]

```
rem ** The following command loads the Scanner Driver
DEVICEHIGH=C:\MSCSI.SYS
```

[CDBurner]

```
DEVICEHIGH=C:\CDPRO\ASPI4DOS.SYS /D /I
rem DEVICEHIGH=C:\CDPRO\CDR.SYS /H:0 /T:0 /N:1 /D:MSCD001
DEVICEHIGH=C:\CDPRO\ASPICD.SYS /D:MSCD001
```

[Mitsumi]

```
DEVICEHIGH=C:\SCSI2DRV\BTDOSM.SYS /P130 /D
DEVICE=C:\MAD16\cdsetup.sys /T:X
DEVICEHIGH=C:\MTM\MTMCDAI.SYS /D:MTMIDE01
DEVICEhigh=C:\DOS\SETVER.EXE
DEVICE=C:\STACKER\CLOAKING\MOUSECLK.EXE AHIGH CSLOW
```

[Virtual]

[Defrag]

[Tape]

[Common]

-----  
**Now the Autoexec.bat - which works in conjunction with the Config.sys**  
-----

```
@REM THE CHECK LINE BELOW PROVIDES ADDITIONAL SAFETY FOR STACKER DRIVES.  
@REM PLEASE DO NOT REMOVE IT.  
@C:\STACKER\CHECK /WP
```

```
@ECHO OFF  
PROMPT $p$g  
SET path=C:\BATS;C:\STACKER;C:\WIN31;C:\DOS;C:\STACKER\CLOAKING  
SET TEMP=C:\DOS\TEMP  
SET MAD16=C:\MAD16  
C:\MAD16\sndinit /b  
GOTO %CONFIG%
```

```
:Virtual  
VIRTUAL.BAT  
GOTO CONTINUE
```

```
:MITSUMI  
LH C:\STACKER\CLOAKING\MSCDEX.EXE /D:MTMIDE01 /L:M  
C:\STACKER\CLOAKING\CACHECLK.EXE K=2048 WK=2048 WB=8  
GOTO CONTINUE
```

```
:NEXT  
Echo.  
Echo.  
rem ----- MTM ATAPI CD-ROM -----  
Echo Press M to Load MSCDEX by Microsoft /D:MTMIDE01  
Echo Press S to Load SuperCDX by American Info Sciences  
Echo.  
Choice /cMS /tM,2  
If errorlevel 2 goto SU  
If errorlevel 1 goto MS
```

```
:MS  
LH C:\DOS\MSCDEX /D:MTMIDE01 /L:M /M:20  
goto continue
```

```
:SU  
LH C:\CDPRO\SUPER218 /D:MTMIDE01 /a  
goto end
```

```
:CDBurner  
LH C:\DOS\DOSKEY.COM  
pause  
rem choice /cyn /ty,100  
WIN  
goto end
```

```
:DEFRAG  
CLEANUP
```

```
:TAPE  
BACKUP  
GOTO CONTINUE
```

```
:CONTINUE  
rem LH C:\DOS\SMARTDRV.EXE /L /X  
rem NOTE... Do Not run smartdrv with cloaking turned on!  
LH C:\DOS\SHARE.EXE /L:500 /F:5100  
LH C:\DOS\DOSKEY.COM  
GOTO END
```

```
:END  
SET BLASTER=A220 I5 D1 T4
```

-----  
The END - I added this example ONLY because of requests received from our customers. Remember, you can access HELP on any DOS command by typing HELP from the DOS prompt.

Thanks again, and enjoy our products...

-----  
**The End**  
-----