

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 that any program will work perfectly on all systems running Windows 95. 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 at this time. It is our goal to bring you - the consumer - some of the best and most innovative budget titles available. Whether you are a beginner or expert, we have something for you!

The following information is very 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 technically oriented... its better safe than sorry).

A couple popular games on the market require 605KB free conventional memory, others require EMS memory, and yet others require that NO "Protected Mode" software (such as disk compression software) is running in order to operate. Unless these programs are just incredibly awesome, we have purposely tried to stay clear of these serious technical challenges. In most cases, if the program was supplied by us, we have either tried to automate the operation, installation, or provided instructions in the MORE section as to what you will need to do in certain instances. Running "MEM /C" (without the quote marks) will tell you your largest excitable DOS program, Conventional memory, EMS, XMS, and all kinds of goodies. We DO NOT recommend novice computer users attempt to make the changes without a back-up, a smart friend, and/or trained technician handy.

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 xx) as a cure. In fact, MEMMAKER does NOT take some very important factors into account and can actually WORSEN the problems, so you need to be very careful. ***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).**

Some things you can check are:

Video settings, are you running in 640x480 resolution with at least 256 colors? Can you raise the number of colors you are displaying? Is your resolution higher than 640x480 (i.e., 800x600, 1024x768, 1280x1024, 1600x1280)? Maybe you need to lower the resolution to have the fonts, pictures, videos, etc. display larger and/or with more colors.

Memory settings, there are too many contingencies to explain or offer a solution for even most systems. However, an easy way to check your memory usage is to type in MEM /C |more (that's MEM space forward slash - on the question mark key - C space pipe - which is the vertical dashes usually on the back slash key - MORE). You type this mess from DOS and it will tell you what, where, and how programs are loading into memory. Adding a greater than (>) symbol PRN in place of the pipe MORE will dump the information to your printer.

Know Your System, Whether you get a hold of MicroMedia, Microsoft, Apple, IBM, Packard Bell, Gateway, or another company in this industry, you need to keep the following things in mind: First, the technician didn't build your computer and will probably ask what type it is... NOT the BRAND, but what the actual guts are. Your invoice, manual, local tech or a smart friend should be able to help you by filling out a piece of paper stating the CPU, RAM, hard drive size, operating system, video card, sound card, modem type, etc. virtually everything inside your computer plays a part in the WHOLE operation of YOUR system, which makes it different from virtually everyone else's. Having this information handy will make the technicians job easier and faster.

Second, you called the technician for help... listen and try to follow that persons lead and instructions. Don't push buttons or try things on your end without their specific direction, and don't get ahead of them. If the tech is going too fast for you, ask them to slow down and/or explain. If they aren't helping you, then ask to speak with their supervisor. You called because you couldn't

figure out a solution to what ever the problem or question was, give them a chance to help you... to teach you... and to solve the problem. No one knows everything, and even the most experienced tech gets stumped once in a while. They have rules and policies their job requires them to follow, and most will try their best to solve your problem, or suggest where or how to best solve the problem. Remember, most of them didn't create the program... they just try to support it.

Third, the communication must be good on both sides. If the tech can't understand you or you can't follow them, there will be an obvious problem. Either the tech will need to picture your computer screen in their head OR they will have to recreate it on their computer. If one of these two things can't happen quickly, then you will need to either try a different approach or a different technician.

Forth, don't bother calling technical support unless you are in front of your computer. Neither you or the technician can be assured the problem is solved until the solution is tried, and both you and the tech often get frustrated... and you will likely have to start all over with another technician when you call back in (which doesn't usually help).

Fifth, and lastly, remember there are usually other people waiting on the technicians time also. It is NOT the job of the telephone tech to solve all your computer problems, or to spend time on problems that are caused by programs (including operating systems) that other companies designed and sold you. If the tech exceeds your expectations, goes beyond the call of duty, and helps solve problems faster, better, or more completely than you expected... you might consider writing a letter or sending e-mail to the company they work for. Praise can go a long way... and could make it better for the person who took the time to exceed there duties. The same holds true for real bad, discourteous, or ignorant technicians... complain in writing... the companies will listen!

In most cases, if the above doesn't work, you can call a good tech out to your house or business for a "general checkup" and maintenance call, which may cost \$20 to \$50 minimum, but can save you a great deal of time and stress. If you aren't sure, remember that the worst case scenario is you lose all of your data, re-format, and re-install all of your programs (assuming you have them on floppy disk or CD Roms). This IS NOT THE GOAL! Be careful, and don't experiment by making changes you aren't positive you can undo.

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 usually work automatically with all other such programs. This is probably the single largest advantage to Windows (besides the Graphical User Interface - GUI).

We have found, however, that this assumption is NOT always 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 configured 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 may or may not have been set up to run under (over, through, and with) one of the many Microsoft Windows versions. In many instances

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) to reduce the surprises for you - the end user. **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, or 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 suprisingly 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 doesn't mean DOS is configured correctly. Most 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 configuration files on the main menu or available through HELP. Other programs have such configuration information accessible through another program. If the program isn't working as expected, you may have to look in the directory the program exists on the disc or your hard disk drive (if you installed the program) for additional information about the program you are having trouble with.
- e) 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 or maybe an internal modem is trying to share that setting. If that doesn't work please consult your sound card manual or a local technician, as the problem is too specific to YOUR system and software to attempt a fix over the telephone.

**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
```

(or if you seldom run DOS programs, try NOEMS instead of 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 unused 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 or cause failure of any of the older programs, 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 your 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 (XXXK) 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
```

In some instances, problems have been quickly solved by NOT running programs that do disk caching or memory management, this is computer specific and has many variables. It doesn't matter if program ABC works perfectly, because program DEF is different and may have slight variations which have different requirements. Usually you can test the difference these programs make by simply REMing the line in your AUTOEXEC.BAT and CONFIG.SYS files out. Please consult your DOS manual, a smart friend, or a local technician for details.

Common Memory Management type products are:

EMM386	SMARTDRV
QEMM 386MAX	
CLOAKING	SoftRAM
MagnaRAM	etc.

Common Disc caching products are:

STACKER	DISK DOUBLER	
DRIVE SPACE	DOUBLE SPACE	
dTIME 10 (for CD Rom Drives)	Fast Cache (for CD Rom Drives)	etc.

Many of the above products are great and really beneficial to "tweaking" a system to it fullest potential. We do use and perform tests on many of our titles with some of the above products with delight and very few problems, if any. **However, we DO NOT RECOMMEND that a novice end user change the settings to or in any way deviate from the default settings of any particular product on the above list without the explicit directions of the company supplying and supporting such product. Such changes should be done ONLY by an experienced technician in front of your computer or on the phone giving you directions. MicroMedia, and the distributor you received this CD ROM disc from will NOT support, or solve, problems which are related to memory or the use of any of the above products.**

This example was added 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
