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NetMech DOS Technical Help

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Please note that [customer support](#)for *NetMech DOS* will be available via our online services only.

Introduction

Welcome to *NetMech DOS!*

This troubleshooting guide contains tips and tricks we learned during the months we play-tested *NetMech DOS*. We hope it will help you solve any problems that come up when you are installing or using *NetMech DOS*.

If the problem you are having isn't covered in this guide, try downloading a more recent version; we will continue to update it as we learn more. If you already have the latest version, and still can't find a solution for your problem, try posting a question in one of our online forums, or sending us electronic mail. (See the "Customer Support" section.)

This troubleshooting guide can be read as a text file (NETINFO.TXT) or as a Microsoft Help file (NETINFO.HLP).

For the User's Guide that describes how to use *NetMech DOS* after installation, read the companion file NETMECH.TXT (in Help, you can do this by clicking on the **Guide** button above).

Please feel free to send comments or feedback to us via the online forums or e-mail; it will help us improve this guide and our products.

Quick Solutions: Top Questions Answered

I get funny lines on my display in game play when running from a Windows 95 DOS box.

The black lines that run through *NetMech DOS* when running in 640x480 or higher in a Windows 95 box can be resolved by running in a window instead of full screen.   One way to do this is to make a shortcut to C:\MECH2\NETMECH.EXE, then right mouse click on it and choose **Properties**. Choose the **Screen** tab. Click on the box that has **Windowed** next to it rather than Full Screen.

In the list of serial ports, I only see two serial ports listed, COM2 and COM4. Why don't I see COM1 and COM3?

If the mouse is on COM1 you can't use COM3; if it's on COM2, you can't use COM4.   This is because COM1 and COM3 share the same IRQ line.

I have *MechWarrior 2 DOS* v.1.0.   When I install *NetMech, all my function-keys stop working. What do I do*?

This means you need to upgrade to MechWarrior 2 DOS v1.1 before installing NetMech.   The patch to do the upgrade is called MECH2V11.EXE, and can be found on the CD-ROM and on our web site. See the section titled "Upgrading to MechWarrior 2 DOS V1.1" for instructions.

I have *MechWarrior 2 DOS* v.1.0 plus the v1.1 patch. Is it okay to install the patch after installing *NetMech*?

No. You should install *MechWarrior 2 DOS* first, then the patch (if needed), then *NetMech DOS*. Installing in a different order may cause some function keys to stop working and may cause other problems.

Problems loading the game:

Several of the answers below will mention **VESA drivers**. These are usually TSR programs which are loaded in AUTOEXEC.BAT or from the DOS prompt. Many video cards come with a VESA driver that you can load. For example, ATI Mach 32 video cards include VVESA.COM. Consult your video card manual for more information. See also the section titled "Video" below.
If your card didn't come with a VESA driver, you can try one from a third party. The VESA driver we recommend is called UniVBE, the Universal Video BIOS Extension. It is a common shareware program, made by SciTech software, which can be downloaded from our BBS, SciTech Software's web page (http://www.scitechsoft.com), or commercial online services. You can contact SciTech Software directly for more information at (916) 894-8400.

After typing MECH2 at the DOS prompt, the screen goes blank for a second and then returns to the DOS prompt.

This usually either means you need a VESA driver (see above), or that *NetMech DOS* can't find your mouse driver. This commonly occurs with Logitech mice. You may want to get a Microsoft compatible mouse driver which is often readily available from commercial online services and many Bulletin Board Systems.

I get an Error #14 message when launching into a mission.

You may have run out of disk space! If this happens, make sure you have four or so megabytes of free disk space when starting *NetMech*. (This only matters if you are running low on memory in Windows 95, and the operating system tries to use hard disk space to substitute for RAM.)

I get an Error #29 message when loading the game or when entering missions.

This problem is most commonly caused by a video card that can't adjust to the necessary video modes for *NetMech DOS*. This can usually be solved by loading a VESA driver before loading the game (see above).

If you are sure that this message is not caused by your video card, you can try making a boot disk using the menu option in NETSETUP.EXE located in the directory where you installed the game. The boot disk program will copy your startup files to a floppy disk and attempt to make necessary changes to the CONFIG.SYS and AUTOEXEC.BAT files. If you have problems with your boot disk and need help, it is best to contact us by fax or e-mail. Include information about any error messages caused by the boot disk and your CONFIG.SYS and AUTOEXEC.BAT files.

I am trying to load *NetMech DOS*, but it takes a long time to load. Is there something I can do to speed up this process?

NetMech usually takes anywhere from 10-30 seconds to load. If *NetMech* is taking an exceedingly long time to load, try disabling any virus scan programs.

> **To disable a virus scan program from DOS:**
> You must edit your AUTOEXEC.BAT file. Type **REM** in front of the line in the AUTOEXEC.BAT that contains the virus program. For further instructions consult the manual that came with your virus scan program.

> **To disable a virus scan program from Windows 95:**
> Right-click on the **Virus Scan** icon on your taskbar. Choose **Disable**.

I have a Hewlett Packard Pavilion 7070 with a Crystal 16 bit sound card and Trio 64V+ video card and the computer locks up when I start *NetMech*. What can I do to run the game?

This computer configuration only supports the game when in DOS 7.0 or DOS 6.22. When using the DOS box the game will probably not run.

I get a Divide Overflow error when launching into missions.

This problem can occasionally be caused by a video card or joystick port problem.

If the error is occurring because of your video card, it can usually be solved by loading a VESA driver (see above).

This problem can also be caused by multiple joystick ports. Most sound cards include a game port where you can connect a joystick to your computer. In addition, many systems also have a dedicated game port or a game port on an I/O card. If you have more than one game port, only one should be enabled. Many ports can be deactivated with a utility program included in the software. Consult your user's manuals or contact your system manufacturer on how to disable an active port.

We have also found this message can be caused by the digital mode driver for the Microsoft Sidewinder 3D Pro. This can be solved by using the analog mode of the joystick.

NetMech doesn't allow me to join a game. Why?

Continue to click on the **Join** button, or back out of the Game Selection screen and then go back in. If you still can't join, perhaps that game is full; only eight players are allowed in a game.

If there are less than seven players in the game, it could be a network problem, and you should check your network cards and drivers for problems. In particular, parallel port Ethernet adapters seem to have trouble in real mode DOS 7.0 or DOS 6.22, and are not supported with _NetMech DOS_. (They seem to work in a Windows 95 DOS box.)

Sometimes I see more than one pilot's lounge. Why?

There are several possibilities:

1. Only 20 or so players can fit in a pilot's lounge. When a lounge fills up, another one is created to accommodate new players.

2. A rogue pilot's lounge has been accidentally created by a net-lagged player. In this case there are simply two pilot's lounges and you can join whichever one you want by clicking on and joining it. The rogue pilot's lounge will most likely merge into the normal pilot's lounge once there is only one player left in the rogue pilot's lounge.

I want to delete _NetMech DOS_, but keep _MechWarrior 2 DOS_.

If you installed _NetMech DOS_ in the same directory as _MechWarrior 2 DOS_, you must delete the entire directory and reinstall _MechWarrior 2 DOS_. Remember to save the MEK subdirectory if you want to save your custom 'Mechs, and the GIDDI subdirectory to maintain your custom joystick configurations.

Minimum System Requirements

* 100% IBM PC-compatible computer
* 486DX2/66MHz processor
* 8 MB RAM (7 MB of free extended memory)
* Double-speed CD-ROM drive (300K/second sustained transfer rate)
* 30 MB of uncompressed hard disk space
* VESA local bus or PCI video card
* 256 color SVGA (640 x 480)
* Microsoft MS-DOS® 6.22 operating system
* 100% Microsoft-compatible mouse and driver
* 100% Sound Blaster-compatible sound card (for digital and general MIDI audio)
* Dedicated game card highly recommended for joystick
* One of the following:
    * Novell Network
    * Novell-compatible IPX network (e.g., Windows 95)
    * 100 % Hayes/MS-DOS-compatible modem (9,600 bps for head-to-head play; 14,400 bps is recommended.)
    * Null-modem cable and serial port with 16550 UART

NOTE: An original MechWarrior 2 (DOS or Windows 95) disc is required to host a game.

Supported Input Devices: Analog joystick, CH Flightstick, Thrustmaster FCS, Microsoft SideWinder (CH Flightstick mode). If *NetMech DOS* is loaded into an existing MechWarrior 2 DOS directory, *NetMech* can use all configured and customized input devices that *MechWarrior 2 DOS* supports.

Pre-Installation Information

Here is some important information that you should know before you install and start your *NetMech* experience:

Installing Over MechWarrior 2 DOS

If you have version 1.0 of MechWarrior 2 DOS, you must upgrade to version 1.1 before installing NetMech DOS.   You can tell if need to upgrade by looking at the CD-ROM label; if it doesn't say "Version 1.1" or "SideWinder", you need to upgrade.   See the section titled "Upgrading to MechWarrior 2 DOS v1.1" for instructions.

Hard Disk

The game requires 30 MB of UN-compressed free disk space. *NetMech* will not work properly using compressed hard disk space (such as Stacker and DoubleSpace).

Memory

In order to run *NetMech* you need 8 MB of RAM and over 6.8 MB of extended memory. If you have between 6.5 MB and 6.8 MB of extended memory, the game will play, but some missions will run slower. For optimal performance it is best to configure your memory so you have over 6.9 MB of extended memory. To help you free up more memory, we included a boot disk-making utility that you will be prompted to use from the Installer.

Other Operating Systems and Windows® 95

NetMech requires MS-DOS 6.0 or later. Other operating systems (e.g., OS/2 Warp and Windows NT) are not supported. Although *NetMech* might work just fine with them, we have not tested thoroughly with them. If you have a problem using unsupported operating systems it is best to contact the operating system company to try and work out compatibility issues. Please check Activision's online forums on a regular basis for future updates on *NetMech* compatibility issues.

A special note for Windows 95 users: *NetMech* is a DOS program, but has been tested successfully under Windows 95. In your NetMech directory, we've provided a Windows 95 shortcut that you can double-click to start *NetMech*.

VESA Video Drivers

NetMech requires that your system have a standard VESA video driver to run your video. Please verify that you have one loaded before launching *NetMech*.

If the VESA driver supplied by your video card does not function properly with NetMech, try using the UniVBE VESA driver. This is available for downloading from our Activision BBS or any of our online locations, or from the SciTech Software Web page (http://www.scitechsoft.com). It might also be located on your local BBS or other online services.

Installing *NetMech DOS*

First, make sure you have 30 megabytes of free uncompressed hard disk space.

Second, if you are running Windows, close all running programs. You can close a program by clicking on the close button (X) located in the top right-hand corner of each of its windows. Also close programs listed on the taskbar. Do this by right-clicking on a program's button and selecting **Close**.

Third, if you downloaded the self-extracting executable, unpack and run the installer. (For these instructions, we will assume that you have downloaded it to the C:\TEMP folder.)

Under Windows 95:

1. Click on the **Start** button on your Windows 95 taskbar.

2. Select **Run**, then type **C:\TEMP\NM10** and click the **OK** button. This will take some time.

3. Click on the **Start** button on your Windows 95 taskbar.

4. Select **Run**, then type **C:\MECH2\INSTALL.BAT** and click the **OK** button.

Under DOS:

1. At the DOS prompt, type **CD \TEMP** and press **Enter**.

2. At the DOS prompt, type **NM10** and press **Enter**. This will take some time.

3. At the DOS prompt, type **CD \MECH2** and press **Enter**.

4. At the DOS prompt, type **INSTALL** and press **Enter**.

Or, if you purchased a NetMech DOS CD-ROM, insert it into your CD-ROM drive (for these instructions, we will assume that your CD drive is drive D:) and **run the installer**.

Under Windows 95:

1. Click on the **Start** button on your Windows 95 taskbar.

2. Select **Run**, then type **D:\INSTALL** and click the **OK** button.

Under DOS:

1. At the DOS prompt, type **D:** and press **Enter**.

2. At the D:\> prompt, type **INSTALL** and press **Enter**.

Follow the on-screen instructions carefully. (For instance, if you don't have the CD-ROM, the Installer will prompt you to press **F**.) On a 486/66, the Installer can take up to 25 seconds to load, so be patient. (To abort the installation process, type **Ctrl+X**. Make sure you first delete the NetMech DOS directory and its subdirectories, if created, before reinstalling.

NOTE: If you want to save any customized 'Mechs, be sure to copy the MEK folder onto a floppy disk before deleting the NetMech DOS directory.)

The Installer will first check to make sure you have enough memory. You need about 400K of free DOS memory to run it. If you don't have enough, try commenting out a TSR (e.g., MSCDEX) in AUTOEXEC.BAT temporarily. You need about 6,900K of free XMS memory to run *NetMech DOS*. (If you still don't have enough, try commenting out the SMARTDRV line in AUTOEXEC.BAT.)

NOTE: If you get a warning message that you are below the required amount, you will probably be able to install anyway. At the end of the installation process, you will be given the opportunity to create a boot disk to help in freeing up more main memory (RAM).

The Installer then asks you to tell it what sound card you have. It will attempt to detect your sound configuration automatically and select the appropriate drivers. However, on some systems you may need to choose your sound card manually from the list provided. The Installer will then try to verify the presence of that sound card in your system. If your sound card is not shown and is 100% Sound Blaster-compatible, you should be able to select the **Creative Labs Sound Blaster or 100% compatible** driver to hear sound and music in the game. When you are finished selecting the proper sound devices, select **Accept Settings** and press **Enter**.

If you're installing from CD-ROM, the Installer then copies NetMech files to your hard drive. The Installer will automatically install all the files necessary for IPX, modem and null-modem play.

After the game is installed, you will be presented with the option to register your copy of *NetMech* via our online registration system. If you live in North America, and have a modem connected to your computer, registering your purchase of *NetMech* is very easy, quick and toll-free. By registering, you might win some cool stuff as well. All you have to do is fill in the requested information (basically your address plus a couple of other questions). Once you have finished, select **SEND** and your registration information will be sent to us via our toll-free 800 number. Of course, if you want to register later, just select **BYPASS**. Please only register once. If you successfully use the online registration method, there is no need to mail in the enclosed registration card.

Finally, you will be asked if you wish to make a boot disk. This procedure requires that you insert a disk into your A: drive. Please verify that you have created a backup of the contents of this disk, since this process will erase all data on it. Also, use a high-density disk. When the formatting process is complete and you have typed in a volume label for the boot disk, you will be asked if you want to format another; type **N** for "no" and press **Enter**.

NOTE: The game's boot disk maker utility was designed for systems using DOS as their operating system, and is usually not needed with Windows 95.

If installing from Windows, close the installer window by clicking on the close button (X) located in the top right-hand corner of the DOS box window.

If installing from DOS, you will be returned to the directory in which *NetMech* was installed. To begin your *NetMech* experience, type **NETMECH** and press **Enter**.

Post-Installation Notes

After installing *NetMech*, it is easy to change your sound device configurations, view the README file, make a boot disk or register *NetMech* electronically (if you bypassed this step while installing).

The program NETSETUP does of all these things. To launch NETSETUP, just go to the NetMech directory on your hard drive, type **NETSETUP** and press **Enter**. This will launch a program that will allow you to do all of these things.

   Under Windows 95:

1. Click on the **Start** button on your Windows 95 taskbar.

2. Select **Run**, then type **C:\MECH2\NETSETUP** and click the **OK** button.

Under DOS:

1. At the DOS prompt, type **CD \MECH2** and press **Enter**.

2. At the DOS prompt, type **NETSETUP** and press **Enter**.

What if I run into trouble running *NetMech* under Windows 95?

If the above process does not work for you, click on the **Start** icon, choose **Shutdown** and restart the computer in MS-DOS mode. At the MS-DOS prompt, go to the directory where you installed *NetMech* (default is MECH2) and from the NetMech directory type **NETMECH** and press **Enter** to start the game.

I don't have an Internet account. Can I still go online?

You may be able to get an internet account from a local Internet Service Provider or BBS.   If you live in North America, see the section "Online Components" for information on two North American service providers.

Playing *NetMech DOS*

Can I use Ghost Bear 'Mechs in this version of *NetMech*?

Ghost Bear 'Mechs are not available in *NetMech DOS*, but will be available in the upcoming *MechWarrior 2 Mercenaries*.

The actual distance a weapon fires is not the same as the stated distance in the game.

The actual range for weaponry varies from 'Mech to 'Mech. This is due to variations in temperature, weather, 'Mech manufacturer and place of origin.

Playing *NetMech DOS* in Windows 95

Other applications can continue running in the background while you use *NetMech DOS*, if you have enough memory. However, *NetMech DOS* does require the whole screen, so you won't be able to see the other applications until you quit *NetMech*.

I get palette corruption when going from the DOS prompt to the Windows 95 Desktop and back to the DOS prompt.

NetMech DOS is a DOS version of the game. While the game can be played from a Windows 95 DOS box, Windows has trouble restoring the NetMech screen if you switch away from it. Using **Alt+Tab** to switch between *NetMech DOS* and the Windows 95 desktop is not recommended.

When I insert a CD-ROM, the NetMech screen goes away, the program on the CD-ROM starts running, and I can't get back to *NetMech*. What is going on?

Windows 95 has detected a new program, and thinks you want to run it. You can keep this from happening by holding down the **Shift** key for twenty seconds after you insert the CD-ROM. Another way to prevent this is to turn off AutoPlay by following these steps:

1. In **Control Panel**, click on **System**, then click on **Device Manager**.

2. Click on your CD-ROM device, and click on **Properties**, then **Settings**.

3. Make sure the box labeled "Auto Insert Notification" is not checked.

I can't get Alt+Tab to work. Why?

If you use the shortcut that the game provides, it will disable the **Alt+Tab** feature for the duration of the game. Using **Alt+Tab** while playing *NetMech DOS* is not recommended since Windows 95 has trouble switching back to *NetMech* from the WIndows 95 desktop.

Can I use 'Mechs created in *MechWarrior 2 Windows 95* while playing *NetMech DOS*?

Yes! All you need to do is copy the MEK folder from *MechWarrior 2 Windows 95*'s installation directory into NetMech DOS's installation directory. We have provided a batch file to make this easier.

Under DOS:

1. At the DOS prompt, type **CD \MECH2**

2. At the DOS prompt, type **GET95MEK**

This will copy all your custom 'Mech files. This only works if both programs are installed in their default directories.

Can I use custom cockpit control settings created in *MechWarrior 2 DOS* while playing *NetMech DOS*?

Yes, if you have installed *NetMech DOS* into the same directory as *MechWarrior 2 DOS*.

Can I use custom cockpit control settings created in *MechWarrior 2 Windows 95* while playing *NetMech DOS*?

No. The input device / cockpit control editors for *MechWarrior 2 Windows 95* and *MechWarrior 2 DOS* are incompatible.

Can I install *NetMech DOS* into the same folder as *NetMech Windows 95*?

No. This is because the input device settings files for *MechWarrior 2 Windows 95* and *MechWarrior 2 DOS* are incompatible.

Can I play against somebody who has *NetMech Windows 95*?

Not directly. He or she must load *NetMech DOS*. Since *NetMech DOS* works well under Windows 95 and is a free download, get your opponent to install *NetMech DOS*, and you'll be able to play just fine.

Finding Other MechWarriors for Modem Games

If you have e-mail and access to the World Wide Web, you can access several sites that maintain lists of people with *NetMech* who are looking for sparring partners. There are even tournaments organized by enthusiasts. You can get a list of these sites at the NetMech web page, **http://www.activision.com/netmech**

If you have Usenet news access, try the MechWarrior 2 news group, **alt.games.mechwarrior2**. It's a lively place!

If you have AOL access, you might try asking people in the NetMech discussion group in Activision's forum; go to keyword **ACTIVISION**, then select **General Discussion Areas**, and finally click on **NetMech**.

If you have Microsoft Network access, inside MSN, pull down the **Edit** menu and select **Go To** and then **Other Location**. At the prompt, type **ACTIVISION** and click **OK**.

If you have CompuServe, try **GO GAMBPUB**.

You can also try the Activision BBS, at (310) 479-1335.

If you're an IRC (Internet Relay Chat) enthusiast, you might try dialing up the **#Mech2** channel.

In North America, if you'd rather dial in to a BBS dedicated to online gaming, you might try DWANGO. DWANGO's client software is available at their web site, **http://www.dwango.com**, and is included on the NetMech DOS CD-ROM in the \DWANGO or \DWANGO95 directories. This is the only supported method of playing against more than two players via modem at this time. DWANGO presently uses 14.4 modems, and can support up to four players in a single game.

Other methods of online gaming may become available in the future.

If you live in North America, see also the section titled "Online Components."

Performance

NetMech has features that were designed to support a wide range of computers. When you initially configure *NetMech* for play, *NetMech* will make several default settings regarding which features should be used and which should be turned OFF.

The trade-offs are different for each user, so we allow any machine to run any options, but please keep in mind that the higher the level of detail, the more demanding the machine requirements.

NetMech's default resolution is 320x200. We recommend this resolution unless you have a P-90 or above. On Pentium 90 computers, *NetMech* should run well at 640x480, while 1024x768 is recommended for P-120s or higher. Video cards also vary dramatically; many cards are optimized for extremely high performance in Windows, but can actually be very slow for use in DOS. The best way to determine this is by running *NetMech*. Start with a resolution of 320x200, and select whatever options best match your machine's capabilities and your desire for realism. Move up to a higher resolution, and adjust graphic options until you reach a satisfactory balance.

Try making the following changes to increase the game's performance:

Terrain Textures:	Try turning these OFF.
Object Textures:	Try turning these OFF.
Display Detail:	Try switching to LOW.
Chunk Explosions:	Try turning these OFF.
Resolution:	Reduce to the next lower resolution if you're running above 320x200.

These changes should be sufficient to get the game running reasonably on any machine. Other options can be left ON, as their performance cost is low.

Network

I start the game, select IPX, and the screen says "Network driver not available". What should I do?

If you're running Windows 95, you might have left another copy of *NetMech DOS* running in the background! You can only run one copy at a time. If this isn't the case, you probably need to load an IPX driver.

To load an IPX driver in Windows 95, go to **Start**, then **Settings**, then click on **Control Panel**, click on **Networking**, and make sure that you have an IPX or IPX-compatible driver listed. If you don't, try the following: double-click on **Add**, then double-click on **Protocol**, then click on **Microsoft**, and finally double-click on **IPX/SPX-compatible Protocol**.

To load an IPX driver in MS-DOS 6.22, check the floppy that came with your Ethernet card; most cards come with a setup program that installs an IPX driver for you. If the card's setup program asks you what network operating system, choose the one that looks closest to "Novell Netware 3.x for MS-DOS". Often, there are two different types of drivers: NETX and VLM. NETX is the elder and probably safer, but either should work.

Technically inclined people who want to connect an IPX driver to a modem instead of to an Ethernet card may be able to do so in the **Protocol** control panel under Windows 95, or under DOS by loading a PPP dialer program that presents a Packet Driver interface, then loading a Packet Driver version of IPX.COM. This is treading in uncharted territory, though, since these procedures have not been tested. One good place to research network driver issues is "The PC and Mac TCP/IP and NFS FAQ", http://www.rtd.com/pcnfsfaq/faq.html.

When in DOS 6.22 or real mode DOS 7/Windows 95, *NetMech* doesn't seem to work with my parallel port Ethernet adapter. Why?

Parallel port Ethernet adapters seem to have trouble in real mode DOS 7.0 or DOS 6.22, and are not supported with *NetMech DOS*. (They seem to work in a Windows 95 DOS box.) Real mode drivers don't seem to work well with 32-bit programs like *NetMech DOS*.

When using DOS 6.22, I type NETMECH from the directory where I installed *NetMech*. The computer hangs and I can't get into the game or see any hosts or players in the Pilot's Lounge. What is going on?

Make sure you have the latest network driver for the Ethernet card.

I am using Netmech at my company, and our LAN has multiple segments, so some of my friends can't see my game when I host.   What do I do?

Run the program IPXADR.EXE.   It will create the batch file JOINGAME.BAT.   Send JOINGAME.BAT to your friends.   Have them run it instead of NETMECH when they want to join your games.   It will start NETMECH using a special parameter that tells it your computer's IPX address. Note: you might experience varying amounts of network lag while playing this way, since your packets have to be forwarded by your LAN's routers, and can't travel directly between players' machines.

Modems

In the list of serial ports, I only see two serial ports listed, COM2 and COM4.   Why don't I see COM1 and COM3?

If the mouse is on COM1 you can't use COM3; if it's on COM2, you can't use COM4.   This is because COM1 and COM3 share the same IRQ line.

My internal modem is set to COM3, IRQ5.   How do I use it with NetMech?

At the DOS prompt, type NETMECH -Kirq=5 and press Enter. Then run it as usual, and select COM3 in the modem configuration screen.

When I try to dial or answer, the modem lights flash, but I still get the error "Can't init communications".   How can I find out what's going on?

Every time NetMech dials or answers the modem, it creates a log file MODEM.LOG.   When you contact Activision for help with a modem problem,you might want to include MODEM.LOG in your message.

I don't have touch tone.   How can I dial?

At the DOS prompt, type NETMECH -Kpulse and press Enter.

The game cannot detect my modem when I am in DOS. Is this a problem with my modem?

You may have an internal U.S. Robotics WinModem. This modem is not compatible with DOS programs. Also, it does not emulate the regular serial chips so it cannot be detected by DOS.

I am trying to play the game in DOS 6.22 using the modem on my Aptiva/M-Wave system, but I can't get it to work. How come this is happening?

The M-Wave modem supports *NetMech DOS* in a Window 95 DOS box and DOS 7.0. However, the M-Wave modem cannot be used in DOS 6.X.

The person I was playing with got disconnected and now I want to play again. What do I do?

You must return to the Transport Selection screen and repeat the process you used to connect in the first place.

My modem does not respond when I call the modem of another player who has just disconnected from a previous game.

If it is an external modem, switch it off and then on and try to connect. If it is an internal modem, go back to the MECH2 directory and then return to *NetMech* and try connecting gain.

When using DWANGO, I am unable to dial an opponent in the same area code.

When playing an opponent in the same area code you must deactivate the area code option.

There seems to be a lag in gameplay and the other 'Mechs keep disappearing when using modems and slower machines.

Your machine probably has an old 8250 serial chip. You need to upgrade to a serial port with a 16550 serial chip. You can tell what kind of serial chip you have by running MSD.

My modem isn't listed in the modem list in the modem configuration string and the init string for the other modems doesn't work with mine.

Usually, the "Hayes Compatible" init string works for all modems, so make sure nothing's wrong with your modem setup. If you're sure you need to change your init string, then use a text editor to edit the file MODEM.LST; add a line with modem name and init string like so:

    modem name=init string

Make sure you pick an init string you know works, such as one included in the installation manual for your modem.

How do I disable call waiting?

If your phone line has the Disable Call Waiting feature, you can disable call waiting by including the appropriate command in front of the phone number you are calling. This will prevent anyone from interrupting the call. For example:

    Name: Gumby
    Number: *70,,,1-818-555-1212

Where "*70" is the code to disable call waiting, and the commas (,) are simply used to provide a delay so you can hear the special dial tone that acknowledges your code. Check with your local phone company regarding how to disable call waiting for your particular area; you might need to use some other code instead of *70, for instance, #70.

Only the person placing the call can disable call waiting!

In the list of serial ports, I only see two serial ports listed, COM2 and COM4.   Why don't I see COM1 and COM3?

If the mouse is on COM1 you can't use COM3; if it's on COM2, you can't use COM4.   This is because COM1 and COM3 share the same IRQ line.

Null Modems

If you have two computers in the same room, but they don't have Ethernet cards, you can use a direct serial connection to play a two player game of NetMech.   To do this, get a null modem cable (also known as a Laplink™ cable), and plug each end into a serial port on one of the computers.

In the list of serial ports, I only see two serial ports listed, COM2 and COM4. Why don't I see COM1 and COM3?

If the mouse is on COM1 you can't use COM3; if it's on COM2, you can't use COM4.   This is because COM1 and COM3 share the same IRQ line.

When using null modem, I can't see anybody else in the Pilot's Lounge.

You might have a cabling problem, or be using the wrong comm port.   Some computers have two serial ports and an internal modem, but the second comm port is on COM4 instead of COM2.   We often use a terminal program to help debug null modem connections.   For instance, if you have Windows 3.1, run TERMINAL.EXE on both machines, choose 9600 baud and no flow control, and experiment with the port setting until you can see each other type.

Online Components

NOTE: DWANGO and Earthlink are available for North American users only.

DWANGO

DWANGO is a BBS system dedicated to online gaming.   It uses direct dialup connections, so you don't need an account with anyone else to use DWANGO.There are DWANGO servers in many North American cities, so for many people,it's a local call.

To install **DWANGO for DOS**, follow these steps:

1. Insert the *NetMech* disc into your CD-ROM drive.

2. Go to the DWANGO directory on your CD (e.g., D:\>CD\DWANGO) and press **Enter**.
3. From the DWANGO directory, type **INSTALL** and press **Enter**.

4. DWANGO is now installed on your hard drive. Go to the DWANGO directory on your hard drive (e.g., C:\>CD\DWANGO) and press **Enter**.

5. Select baud rate and COM port, then press **F1** to select modem. Press **F10** when done.

6. Select server, local or long distance and/or Call Waiting Disabled.

7. Create an account (make handle and password).

8. Go to billing by pressing **F5** to enter authorization number and receive four free hours.

NOTE: You must comment out EMM386 from your CONFIG.SYS file to run the DOS version of DWANGO!

To install **DWANGO for Windows 95**, follow these steps:

1. Insert the NetMech disc into your CD-ROM drive.

2. Click on Start, then click on Run, then type **D:\DWANGO95\SETUP.EXE**   and press **Enter**. (Use your CD-ROM's driver letter is not D:, use it instead of D:.)

3. DWANGO is now installed on your hard drive.   Click on Start, then click on Programs, then click on "Dwango for Windows 95".

4. Servers are listed by city name; choose the one closest to you.   If the server has the same area code as you, turn off the check box named "Use Area Code".   If you have Call Waiting, you probably want to turn on the check box named "Disable Call Waiting" so people don't interrupt your game with voice calls.   Click on OK.

5. Select baud rate, COM port, and modem type.   Click on OK

6. Create an account (make handle and password)

7. Go to the Billing menu, click on "Acquire more time", then enter the authorization number from the DWANGO "Four Free Hours" certificate included with your CD-ROM.   Your account will be credited with four free hours.

EarthLink Network Total Access

Included in your TotalAccess package is:

> EarthLink's Network's Internet Dialer Configuration, connecting you to the Internet at up to 28,800 bps
>
> Netscape Navigator(TM), the world's most popular browser
>
> Eudora Light(TM), the ultimate electronic e-mail for the Internet
>
> Technical support, 24 hours a day, 7 days a week at (800) 395-8410

Signing up with Earthlink Network through this special NetMech offer entitles you to the following exclusive deal:

> 15 days of unlimited Internet access for FREE ($9.97 value)
>
> Netscape Navigator ($39.95 value)
>
> No setup charge ($25.00 value)
>
> After your free 15 days, unlimited Internet and World Wide Web access for only $19.95 per month.

TotalAccess will set up your Internet account in less than five minutes. To do so, follow the instructions below:

1. Double-click on the **My Computer** icon.

2. Right-click on the **NetMech CD** icon and select **Explore**.

3. Open the **EarthLink** folder.

4. Double-click on **SETUP.EXE**.

5. Follow the instructions to register your new EarthLink Network TotalAccess account. If at any time you need additional help, click the **Help** button.

NOTE: EarthLink Network TotalAccess requires Windows 95.

Input Devices

NetMech requires a Microsoft-compatible mouse to run. Most mice today are Microsoft-compatible. In order for the mouse to work properly in *NetMech,* a mouse driver must be loaded before running the game. The mouse driver must also be fairly current and VESA-compatible. Contact the manufacturer of your mouse or the dealer who sold the mouse to you to see if your driver is the most current available.

Why do I get an "Error: Mouse Not Found" message?

This message is usually the result of one of two problems:

1. The most likely problem is that a mouse driver has not been loaded. *NetMech DOS* needs a DOS mouse driver to run in MS-DOS mode. You can try playing in a Windows 95 DOS box or load your DOS mouse driver to play in MS-DOS mode. To load your DOS mouse driver exit to MS-DOS mode. To exit Windows 95 to MS-DOS mode follow these instructions:

    a. Click on the **START** button.

    b. Choose **Shut Down**.

    c. Choose the **Restart the computer in MS-DOS mode** option.

    d. Now click on the **YES** button.

    e. Find the mouse driver executable, then execute it by typing its name (e.g. **C:\MOUSE.EXE**).

        If you are unaware of where it is, follow these instructions:

        (1.) Type **CD ** and press **Enter**.

        (2.) Type **DIR MOUSE.* /S** and press **Enter**. This will show you what directory your mouse resides in (e.g. C:\MOUSE).

        (3.) Then type **CD MOUSE** (or **CD xxx**, where xxx is your mouse's directory). This will put you in the mouse directory where you can then type its name.

            The name may be LMOUSE, MOUSE, MSMOUSE. Those names will be displayed when you follow the steps stated above on how to find your mouse.

            If your mouse driver is not found you will want to contact your system or mouse manufacturer for an updated DOS mouse driver.

2. Another reason you could get this error is if the mouse driver is being correctly loaded, but it is an older version that is not supported. In this case you should contact your system or mouse manufacturer for the updated DOS mouse driver as well.

How can I calibrate and configure my joystick in *NetMech DOS*?

If you are installing *NetMech DOS* for the first time:
The Install program will ask you to run INSTALL.BAT. At the C: prompt, run INSTALL.BAT and follow the directions. At the Input Device(s) screen, choose your input device (NOTE: If you do not see your joystick's manufacturer then select the **analog 2 button** option). Continue to follow the directions until

you are back at C:\MECH2

If you have already installed *NetMech DOS*:
Go to the MECH2 directory and type **NETSETUP** at the C: prompt. At the NetMech Setup Utility screen, select **Configure Input Devices** and follow the instructions. Your last step will be exiting to DOS and then typing **NETMECH**.

Calibrating and configuring before you enter the game:
If you are using a new input device for the first time, as you enter the game you will see a black calibration screen. The other players will see "Waiting for remote players" until you finish calibrating.

Calibrating and configuring during the game:
You can calibrate your joystick while in the game by pressing **Esc**. Follow the instructions. However, remember that you are already in the game and therefore a target during the calibration process.

I am having problems calibrating my joystick to work with *NetMech*. What should I do?

MechWarrior 2 and *NetMech* are designed to be very sensitive to joystick controls to allow for more precision. The trade-off is that you must be delicate in configuring your joystick. Please follow the screen directions very closely and slowly. The most common problem encountered by *MechWarrior 2* players is caused by rushing through the joystick configuration screens. Please take your time to configure properly. Wait until the dot appears to move with your joystick and follow the stick movement and button click sequence precisely. (If you have *MechWarrior 2 DOS*, you might also want to read the section "Cockpit Controls".)

Which Thrustmaster products are supported by *NetMech*?

NetMech supports default configurations of the following Thrustmaster input devices:

Flight Control Systems Mark I and II
Weapons Control Systems Mark II vrs. 5.08
Rudder Control Systems
F-16 Flight Control Systems

My computer freezes when calibrating or does not calibrate the CH Flightstick Pro properly.

We believe the problem results from conflicts in some sound card game-ports. The best alternative is to install and use a dedicated game port on a separate I/O card and disable the game port on your sound card.

How come my Thrustmaster Mark I Weapons Control System (WCS) will not work with *NetMech* DOS?

NetMech is designed to be fully functional with Thrustmaster's Mark II Weapons Control Systems. The Mark I WCS should function with *NetMech*, but it will not be programmable. However, compatibility is ensured for Mark II users, and an .ADV file has been provided for your use.

To use the .ADV file that will set up your WCS Mark 2 to run with *NetMech*, you must perform the following steps:

NOTE: In the examples, we will assume that your CD-ROM drive is D: and your WCS directory is MARK2.

1. Type **CD \MARK2** to enter the WCS Mark 2 directory.

2. Type **M2** and press **Enter** to load the WCS Mark 2 Command and Control Center.

3. Press **Enter** and choose option **B** (Download file).

4. At the Directory prompt, type **D:\CFGS** (where D is your CD-ROM drive letter) and then press **Enter**.

5. Select **MW2.ADV**, press **Enter** and follow the on-screen instructions.

When I am setting the torso twist for the Sidewinder joystick, the calibration screen shows the opposite of what I am told to do. Is this correct?

Torso twisting with the Sidewinder joystick works correctly. The calibration tool asks you to turn the "torso twist" to the left while on the screen the line shows you turning to the right.

I have a Honeywell mouse and it does not work with *NetMech*. Why?

The Honeywell Mouse is not compatible with Microsoft standards and therefore does not work with *NetMech*.

Memory

NetMech requires a minimum of 8 MB of main memory (RAM) and 6.8 MB of free extended memory. On some machines, even if you have the required 8 MB, *NetMech* may report that you do not have enough free extended or conventional memory. If this is the case, your best alternative is to create a boot disk. See the "Boot Disks" section below for more information on creating a boot disk.

Memory Managers

We highly recommend that you load the MS-DOS 6.x memory managers (HIMEM.SYS and EMM386.EXE) while running *NetMech DOS*. (Note that DWANGO's current DOS client software does not allow this; their Windows 95 client doesn't suffer from this problem.)

When using MS-DOS 6.x and loading EMM386.EXE, you will need to have the EMS size set to NOEMS. See your DOS manual for information on how to do this.

If you are running QEMM in Stealth mode, *NetMech DOS* may fail to recognize your VESA driver built into the video card BIOS. In order to correct this problem you will need to run in Frame mode as opposed to Page mode. To do this, change the "ST:M" parameter in your QEMM statement to "ST:F". See your QEMM manual for more information on how to do this. We recommend that you not run QEMM in Stealth mode while playing *NetMech DOS*.

Do I need Expanded memory for *NetMech DOS*?

No. *NetMech DOS* uses Extended memory.

When trying to run NETSETUP or the Installer I get a "Not enough memory" message. Why?

The NetMech installation and setup programs require about 410K of conventional memory to run. (You can check how much you have by using the **MEM** command. **MEM /c/p** will even show you what TSRs are using it up.) If you're running out of conventional memory, try loading fewer drivers in CONFIG.SYS and fewer TSR (Terminate and Stay Resident) programs in AUTOEXEC.BAT.

If you're running MS-DOS, you'll probably always need a mouse driver (MOUSE.COM) and a CD-ROM driver (MSCDEX), but you might be able to remove a few others. (You may be able to use the MEMMAKER utility that comes with DOS 6.22 to help you save conventional memory, but be careful because it can be tricky to use.)

If you're running Windows 95, you can often replace real-mode drivers with Windows 95 drivers that do not require DOS memory. For instance, the lines in the AUTOEXEC.BAT that load the CD-ROM driver and mouse driver can often be commented out (by typing **REM** in front of the lines that have MSCDEX or MOUSE in them) to save DOS memory, since Windows 95 will automatically replace it with its own protected mode drivers.

I get an out-of-memory error when I attempt to launch into a game.

This problem occurs most often in computers with 8 MB of RAM. *NetMech* will run properly on these machines. However, this RAM must be configured to allow *NetMech* enough room. In most cases, the conflict is with SMARTDRV. SMARTDRV, by default, will occupy 2 MB of RAM in machines with more than 6 MB of extended memory. By typing **REM** in front of your SMARTDRV statement in your AUTOEXEC.BAT and rebooting, you should be able to solve the problem. However, if this does not work, you must remove drivers or other TSRs that are occupying memory. A better solution is to create of a boot

disk that you can use to run the program under optimum memory conditions.

My computer has 8 MB of RAM, but I cannot free enough memory to run the game.

In order to run *NetMech*, you need over 6.8 MB of free extended memory. You can free up more memory in the following ways:

1. We first recommend making a boot disk. Please read the "Boot Disks" section below for instructions on how to create and optimize your boot disk.

2. Type **REM** in front of the line containing SMARTDRV and any other caching utilities. This will free a minimum of one megabyte.

3. When using MS-DOS 6.x and loading EMM386.EXE, you will need to have EMS size set to NOEMS. See your DOS manual for information on how to do this.

4. Disable any cache on your CD-ROM driver by removing the switch. Consult your CD-ROM drive documentation or contact your CD-ROM manufacturer.

Why are parts of my 'Mech and other objects on the screen disappearing and reappearing?

You are running low on memory. Try some of the steps listed above to increase your available RAM.

Boot Disks

If you experience problems playing *NetMech* or receive messages that you do not have enough memory to play, you will probably need to create a boot disk. A boot disk lets your machine boot from a floppy disk and will not load memory-eating programs, freeing more memory up for *NetMech*.

We have included an option that will automatically create a boot disk for you in this package. To create a boot disk, first go to the \MECH2 directory. For example if you installed *NetMech* to C:\MECH2, you would type **CD \MECH2** and press **Enter**. Then type **NETSETUP** and press **Enter**. Select **Make a Boot Disk**. Follow the on-screen prompts, and the program will create a boot disk for you.

How do I create a boot disk with Stacker or DoubleSpace?

Before we explain the solution to this issue, we would like to point out that *NetMech* DOES NOT support the use of disk compression software. If you must run *NetMech* on a compressed drive, you will most likely experience performance problems, and there are no solutions other than using a non-compressed drive.

Stacker version 3.0 and earlier require certain drivers to be loaded in the CONFIG.SYS file in order to mount the compressed hard drive. When creating a boot disk with Stacker 3.0 and earlier you must include two lines in the CONFIG.SYS file. The exact path is dependent upon where you installed Stacker on your hard disk, but here we will provide the path for the default installation of Stacker. The two lines needed in your CONFIG.SYS file are:

    DEVICE=C:\STACKER\STACKER.COM C:\STACVOL.DSK
    DEVICE=C:\STACKER\SSWAP.COM C:\STACVOL.DSK

These lines will load Stacker and mount your compressed drive when booting from the boot disk.

DoubleSpace/DriveSpace and Stacker 3.1 or later do not require that lines be added in the CONFIG.SYS file as they copy hidden files to the boot disk. Make a boot disk according to the normal instructions for creating a boot disk as discussed above. If you do not feel comfortable creating a boot disk under Stacker or DoubleSpace, contact STAC Electronics or Microsoft for technical support.

Optimum Setup

Sometimes even a boot disk creator can't get you past the memory limit required to run a program. In the event you find our automatic boot disk creator doesn't do the job, we have provided the following sample CONFIG.SYS and AUTOEXEC.BAT files to assist you in getting NetMech up and running quickly. These examples will only work with modem, null modem, or DWANGO play; it is beyond the scope of this example to show how to set up your Ethernet card.

If you are creating a boot disk from scratch, start at step 1. If you have already used the automatic boot disk creation utility in the NetMech installer, start at step 3.

1. Place a diskette in your A: drive. The next step will erase any data on the disk, so a brand new blank floppy disk should be used. Make sure that the disk is the same density as the drive (use a 1.44 MB disk in a high-density 3.5" drive, etc.).

2. At the C: prompt, type **FORMAT A: /S** and press **Enter**. The DOS Format utility will format the disk and add the necessary DOS files required to boot from the floppy disk.

3. Change to drive A by typing **A:** and pressing **Enter**. Then type **EDIT CONFIG.SYS** and press **Enter**. The DOS Edit program will appear.

    If you used our boot disk maker then just make sure these lines, or similar lines, in the *[CONFIG.SYS]* example below, are in your CONFIG.SYS file and type **REM** and press the **Spacebar** in front of all other lines not listed.

    If you are making your own boot disk manually, then type in the lines following *[CONFIG.SYS]* in the example below. When you are finished typing the lines, press **Alt+F** to bring up the File menu, and then type **X** to exit the DOS Edit program. When it asks you if you want to save your file, choose **Yes**.

    [CONFIG.SYS]
    DEVICE=C:\DOS\HIMEM.SYS
    DEVICE=C:\DOS\EMM386.EXE NOEMS
    DOS=UMB, HIGH
    FILES=40
    BUFFERS=15,0
    STACKS=9,256
    Insert your CD-ROM driver here.

    In the CONFIG.SYS file shown above, replace the last line in the example with the line from your current CONFIG.SYS file on drive C: that runs your CD-ROM drivers. It is important that you use *your* CD-ROM line and not our example, otherwise your CD-ROM drive will not function properly.

    You may also have special lines in your CONFIG.SYS file that help your sound card function properly. It is very important that you copy those lines into this new file on A: so your sound card can work. Place the appropriate lines from your CONFIG.SYS file at the end of the example shown above.

Additionally, if your graphics card requires a VESA driver, it should go here as well. (Check out our NETINFO.TXT file for more details.)

4. Type **EDIT AUTOEXEC.BAT** and press **Enter**. The DOS Edit program will appear.

   If you used our boot disk maker then just make sure these lines, or similar lines, in the *[AUTOEXEC.BAT]* example below, are in your AUTOEXEC.BAT file and type **REM** and press the **Spacebar** in front of all other lines not listed.

   If you are making your own boot disk manually, then type in the lines following *[AUTOEXEC.BAT]* in the example below. When you are finished typing the lines, press **Alt+F** to bring up the File menu, and then type **X** to exit the DOS Edit program. When it asks you if you want to save your file, choose **Yes**.

   ```
   [AUTOEXEC.BAT]
   @ECHO OFF
   PROMPT $P$G
   SET PATH=C:\DOS;C:\VIDCARD;C:\SNDCARD
   LH C:\DOS\MSCDEX.EXE /D:MSCD000
   SET SOUND=C:\SBPRO
   SET BLASTER=A220 I7 D1 T4
   C:\MOUSE\MOUSE.EXE
   C:
   CD\MECH2
   NETMECH
   ```

   In the AUTOEXEC.BAT file shown above, you would replace line 4 with the line from your current AUTOEXEC.BAT file on drive C: that loads MSCDEX.EXE. It is important that you use your CD-ROM line and not our example, otherwise your CD-ROM drive will not function properly.

   You may also have special lines in your AUTOEXEC.BAT file that help your sound card to function properly. It is very important that you copy those lines into this new file on A: so your sound card can work. Replace the examples on lines 5 and 6 with the appropriate lines from your AUTOEXEC.BAT file.

   The SET PATH command on line 3 is an example; replace it with the one similar to it in your AUTOEXEC.BAT file on the C: drive.

5. Leave the disk in the drive and reboot your system.

NOTE: Once this boot disk is finished and functioning properly, use it to boot up your system and then run the DOS MEMMAKER utility with the boot disk in the drive. MEMMAKER will ensure that you have squeezed every little bit of RAM out of the boot disk.

Video

NetMech was designed to take advantage of some of the higher-resolution video modes on your computer. The pre-mission launch portion of the program (i.e., the "shell") runs in 640x480x256 SVGA mode, and the simulation portion of the program runs by default in 320x200x256 standard VGA mode. The simulation can also run in 640x480x256 and 1024x768x256 mode using an SVGA video card. In some cases *NetMech* will detect and work with your video card just fine. However, some video cards may require that a VESA video driver be loaded in order for the video card to work properly with *NetMech*.

If your video card needs VESA support, you can download the UniVBE driver off the Internet at http://www.scitechsoft.com. This is a universal VESA driver that works with most video cards. Once downloaded, follow the instructions that come with the UniVBE driver.

What Is a VESA driver?

VESA stands for Video Electronics Standards Association. It is a standard that allows software companies to write programs that work on many video cards without having to know how each card works. The VESA driver is the program that handles this. Almost every video card available today has VESA drivers available for it.

These drivers may be stored in a chip on the video card, or they may be programs that the user has to load manually (or with a batch file). Some cards (such as the Diamond Viper) have the driver on the video card, but need the user to run a special program to activate the driver. If the VESA driver is an external program, it will probably be found on the disks that accompanied your video card.

If you don't have a VESA driver, you should contact your video card manufacturer. We have included a list of Customer Service and BBS numbers for major manufacturers at the end of the README file.

Using most external VESA drivers is as easy as typing the name of the driver at the DOS prompt. For instance, if the driver was called VVESA.COM, you would type **VVESA.COM** and then press **Enter**. If you have any difficulty running *NetMech* at a higher resolution, contact the maker of your video card for the latest VESA driver for your card.

ATI Video Cards

Usually located within the MACH32 or ATI directory on your hard drive (or the directory into which all of your video drivers were installed) should be a file called VVESA.COM. (If it is not there, it should be on your ATI driver diskettes which came with the card.) This file must be run prior to launching *NetMech DOS*.

There are two options. Performing one of them should allow you to run the shell without any video problems.

1. Type **VVESA** prior to running *NetMech DOS*, each time.

2. Include the following statement in your AUTOEXEC.BAT:

    C:\MACH32\VVESA.COM

I have a Diamond video card and my screen goes blank after I have started the game.

If you have a Diamond Stealth 64 video card, the problem is probably with the Diamond Power

management system that was installed with your video card. In some machines, the activity of the *NetMech DOS* game does not register as activity with this power management system. To solve this, type the following command before running *NetMech DOS*: **C:\>S64DDPMS U**.

If DOS gives you a bad command error, the Stealth 64 driver directory must not be located in your path. Change to that directory (for Stealth 64 DRAM users, that directory is typically S64D), and retype the command.

Diamond Viper Cards

The Diamond Viper has its VESA driver on the card, but you need to run an external program to activate it. This program is called VPRMODE.EXE. To use VPRMODE to activate the VESA driver, type: **VPRMODE VESA** and press **Enter**.

The VPRMODE program should have been installed by the software that came with the Diamond Viper card.

I have a Diamond Stealth/Viper and I get funny lines on my display. Why?

This is a problem with *NetMech DOS* and some early versions of the Diamond drivers. There are software patches available for both the Stealth and Viper to alleviate this problem. The Stealth patch is available as a software program called STLBIOS.EXE or as a hardware upgrade. For the Diamond Viper, a software upgrade called VPRM202.EXE will contain a patch. All of these are available directly from Diamond.

MATROX Video Cards

Located within the MGA or MATROX directory on your hard drive (or the directory into which all of your video drivers were installed) should be a file called MGAVESA.COM. (If it is not there, it should be on your video card driver diskettes.) This file must be run prior to launching *NetMech DOS*.

There are two options. Performing one of them should allow you to run *NetMech DOS* without any problems with video.

1. Type **MGAVESA** prior to running *NetMech DOS*, each time.

2. Include the following statement in your AUTOEXEC.BAT:

   C:\MGA\MGAVESA.COM

Other Video Cards

If you do not have one of the cards listed above, try to locate the VESA driver for your video card in your video card's directory on your hard drive, or on the disks supplied by the card's manufacturer. Run the VESA driver as shown above each time before you start *NetMech DOS* or put it in your AUTOEXEC.BAT file.

When I try to run missions in 1024x768 mode, I get a Divide Overflow error and I drop back to the debriefing screen. Why can't I run the missions?

We believe this is a problem with certain VESA video drivers. It occurred most frequently on ATI Mach32 video cards. Also, some video cards don't support this resolution, or they may require a video memory

upgrade in order to display this mode. Consult your video card manufacturer for newer VESA drivers. They may correct this problem.

I get funny lines on my display in game play when running from a Windows 95 DOS box.

The black lines that run through *NetMech DOS* when running in 640x480 or higher in a Windows 95 box can be resolved by making a shortcut to the executable. Then right mouse click on the **NetMech** icon and choose **Properties**. Choose the **Screen** tab. Click on the box that has **Windowed** next to it rather than Full Screen.

What display modes does *NetMech DOS* use?

The NetMech shell always uses 640x480x256 color mode. The sim uses 320x200, 640x480 or 1024x768 x256 color mode.

Audio

The NetMech DOS installer will automatically attempt to detect what kind of sound card you have in your machine and select the proper driver. However, on some machines you may need to select sound card manually out of the lists provided. The Installer will then try to verify the presence of that sound card in your machine. If your sound card is not shown and is 100% Sound Blaster-compatible, you should be able to install your card as a "Creative Labs Sound Blaster or 100% compatible" and hear sound and music within the game.

Miles Design Sound Drivers

NetMech DOS sound support is accomplished through the use of the John Miles Design AIL audio driver libraries. Like VESA drivers, these help software companies support many different sound cards without having to know how each card works. The Miles Design Drivers are automatically installed when you select which sound card you wish to use for digital audio and MIDI in *NetMech DOS*.

Will *NetMech DOS* work with my Pro Audio Spectrum 16 Sound Board?

Yes, but Pro Audio Spectrum 16 sound cards must have the following settings to work with *NetMech DOS*:

Pro Audio Spectrum Side:	Sound Blaster Side:
Port = None	Port = 220
Interrupt (IRQ) = 3	Interrupt (IRQ) = 5
DMA Channel = 3	DMA Channel = 1 (must be 1)

The PAS 16 consists of two sections, and the Sound Blaster section should use the settings shown above. You may be able to use a different IRQ, but the DMA channel must be 1. Problems with the PAS 16 card are usually due to the two sides of the card sharing a port, IRQ or DMA Channel. The two sides of the card must have different settings, or the card will cause the system to lock up. Look at the setting in the SETUP utility for this sound card for more information.

I have an AdLib/AdLib Gold card, and I can't get any digital sound effects to play. How come?

An AdLib card does not have a DAC (digital audio converter) to play digital effects; therefore you will only hear synthesized musical effects.

I have an IBM Mwave card and have no sound.

If the game has no volume or it is too low, you will want to use the mixer utility provided by IBM. Please follow the instructions listed below for volume control settings:

1. From the DOS prompt, type **CD \MWD\MANAGER** and press **Enter**.

2. Type **MWVOLUME** and press **Enter**.

These will be your options:

1. Press **Ctrl+Alt+U**. Hold all three of these buttons down at the same time for about five seconds. This will turn up your sound.

2. Press **Ctrl+Alt+D**. Hold all three of these buttons down at the same time for about five seconds. This will turn down your sound.

3. Press **Ctrl+Alt+F**. Hold all three of these buttons down at the same and it will turn on FM mode.

4. Press **Ctrl+Alt+W**. Hold all three of these buttons down at the same and it will turn on WAVE mode.

Once you are finished choosing your settings in the volume control area, do the following:

1. Type **CD\MECH2** and press **Enter**.

2. Type **MECH2** and press **Enter**.

I have a Packard Bell computer and have no sound.

If the game has no volume or it is to low you will want to use the mixer utility provided by Packard Bell. Please follow the instructions listed below for volume control settings.

1. From the DOS prompt, type **CD \SOUND144\MANAGER** and press **Enter**. SOUND144 can be replaced with FORTE16 or SOUND16A depending on the sound card you have.

2. Type **MIXTSR** and press **Enter**.

3. Press **Alt+/** (slash). This will activate a menu.

These will be your options:

Tab	Moves your selection choice to the next device to manage.
Right Arrow	Turns the volumes up.
Left Arrow	Turns the volumes down.
S	Save
E	Exit

Once you are finished choosing your settings in the volume control area, do the following:

1. Type **CD\MECH2** and press **Enter**.

2. Type **NETMECH** and press **Enter**.

How come the music volume control does not affect the volume of the music I hear while playing the game?

Some CD-ROM drivers do not have the ability to raise or lower the volume. For these drivers the sound is either on or off. In these instances, the volume slider for music will be non-functional except to turn it on and off.

The volume levels of my music, sound effects and/or game voices are too low for me to hear. What can I do?

Check your speakers to see if the volume can be turned up. However, if this does not solve your problems, try adjusting the volume sliders in the Escape menus of the game. Also, your sound card may have a volume or mixer utility that can adjust the sound level. Finally, there are sometimes volume knobs on the back of some sound cards. Consult your sound card manual for more information.

NOTE: Some CD-ROM drives may have the volume level for Redbook Audio (CD music) set too low or off in their CONFIG.SYS or AUTOEXEC.BAT files. If you are not hearing music in the game, consult your CD-ROM driver manual or the manufacturer of your CD-ROM drive for assistance. You may simply need to make a small change to a command in your startup files to fix the problem.

I am playing the game, but can't hear any audio during missions. How come I can't hear anything?

There are a number of things that may cause this problem. First, ensure that your speakers are properly plugged into your sound card and are turned on. Second, type **NETSETUP** in the C:\MECH2 directory and choose the appropriate sound card in "Configure Sound Devices". Make sure that you have the appropriate settings. If the problem persists, the problem may be with your sound card. Consult your sound card user manual and run any diagnostic utilities that the manufacturer supplies.

   To run NETSETUP from DOS:

   1. Go to the DOS prompt and select the directory where *NetMech* is located. The default directory is MECH2.

   2. From this directory, type **NETSETUP**.

   To run NETSETUP from Windows:

   1. Close any applications that are running.

   2. From your Desktop, double-click on the icon for your computer.

   3. Open the directory C:\MECH2\ or the directory in which you installed *NetMech*.

   4. Double-click on the NETSETUP program file.

I do not get sound when playing the game.

It is important to make sure that you have the correct sound card and settings selected for the game. The sound effects while in combat, like the firing of your weapons, are digital audio sounds.

If you are not sure what kind of sound card you have or the settings, you may be able to find out by doing the following:

   1. At the MS-DOS prompt, type **SET** and press **Enter**.

   2. Look for a line that says **BLASTER=Axxx Ix Dx**, where x represents a number. The line may also include additional information. A common example is **BLASTER= A220 I5 D1 T4**. The A220 means the sound card is using I/O address 220. The I5 means that the IRQ is 5. The D1 means that the 8-bit DMA channel is 1. Some systems will also have the "T" followed by a number in the blaster line. This number designates compatibility with a Creative Labs sound card. A T1 or T3 is a Creative Labs Sound Blaster or compatible card, a T4 is a Creative Labs Sound Blaster Pro or compatible card, and a T6 is a Creative Labs Sound Blaster 16 or AWE 32 or compatible card. Write all these settings down.

3. Now that you know the settings for your sound card, change to the MechWarrior 2 directory by typing **CD\MECH2** (assuming you installed the game to the default directory) and pressing **Enter**.

4. Load the sound configuration program by typing **SETSOUND** and pressing **Enter**.

5. First, configure the MIDI music driver to the correct sound card. Next, configure the digital audio driver. You should be able to use the auto-detection to determine the sound card settings but, if you continue to have sound problems, try skipping the auto-detection and manually entering the sound card settings that you wrote down earlier.

Another possible reason for the lack of sound is that the volume levels of your sound card are turned down. This is controlled by the DOS mixer. This is software that should have been installed with your sound card. There are usually a number of different volume levels that must be adjusted within the mixer. Make sure all the volume levels are turned up before loading *NetMech DOS*. If you are not sure how to get into the mixer controls for DOS, consult your manual or contact the manufacturer of your sound card.

There is no music in any of the missions.

In order to hear music you need a MechWarrior 2 Windows 95 or DOS, Ghost Bear, or NetMech CD in your drive. The downloadable version of *NetMech DOS* does not contain audio tracks.

I don't hear any music in the shell. Is this a problem?

No, this is not a problem. There is no soundtrack for the shell of *NetMech DOS*.

Cockpit Controls

My joystick works, but I don't like the default settings. How can I customize my joystick to do what I want?

You can customize the joystick configuration if you own a copy of *MechWarrior 2 DOS*. Here's how:

1. Exit *NetMech DOS* and open *MechWarrrior 2 DOS*. You must customize your input devices in *MechWarrior 2*.

2. From inside *MechWarrior 2 DOS*, press **Esc** or click the right mouse button in the Clan Hall or the opening screen, and then choose **Cockpit Controls**.

   From the list of INPUT DEVICES, select the devices that you wish to use by clicking on them until they turn red. You may select any combination of Keyboard, Mouse, and Virtual I/O i-glasses, plus any one other device.

3. Once the devices that you wish to use are displayed in red, click on **Custom Configuration**. Three new columns will appear as well as several commands used to load and save your custom configurations.

   You may notice that most of the writing appears either in red, white or gray lettering. White lettering indicates an option is available; red lettering indicates an option has been selected. (If you did not select a given device before clicking on **Custom Configuration**, that device will appear in gray lettering and you will not be able to select it. To configure a gray device, click **Abort** and return to the beginning of these instructions.)

4. To assign or reassign a command for a button, key or joystick, select a device from the Input Devices column by clicking on the device until it turns red.

5. Once you have selected (in red) the device you wish to change, look at the Game Controls list.

   a. On the left, in gray, you will see a list of all the controls that the player may customize.

   b. On the right of the first seven of these, you will also notice two white characters separated by a white slash. These white characters define the orientation of controls with opposed settings: positive/negative, right/left, up/down, or inside/outside.

   c. Clicking on the white characters will reverse the controls; if **<+>** previously accelerated the 'Mech and **<->** slowed it, **<+>** would now slow the 'Mech while **<->** would accelerate it.

6. The next column to the right consists of either two white dashes or Ctrl, Shft, or Alt.

   In the right-hand Game Controls column, you will see either four white dashes or a device name (key, mouse, msjstick, sidewndr, depending on which device has been selected) and an appropriate button, key or movement.

   These combinations of devices and keys create your custom controls. For example "Nearest Enemy Ctrl mouse MiddleBtn" means that pressing **Ctrl** and the middle mouse button will target the nearest enemy 'Mech.

   You may wonder about the Primary Controls visible in white just to the right of the Game Controls heading. Because we know you may want to assign a control to more than one key, button or movement, we have provided four control screens, which are all active and all programmable. Feel free to use any of the four screens. Click on Primary Controls to cycle through the four

control screens.

To reassign commands on these screens:

1. Find the game control you wish to assign and click on the white lettering to the right under Primary Control.

2. To the farthest right, you will notice a list of functions that correspond to the red Input Device that you have selected. This list is often completely gray (not available), but notice that the moment you select a Primary Control, some of the options turn white and the Primary Control turns red.

3. If you now click on one of the new white options of your input device, the red lettering in your Game Control columns transforms into the option that you selected. Repeating this, you can quickly configure your 'Mech to do exactly what you want.

4. When you are satisfied, click on **Save Custom 1**. Now, if you exit and return to this screen, you will be able to recall your custom job by pressing **Load Custom 1**. If you do not save, when you return, your controls will have returned to the default settings and you will have no way to recall your custom settings without reconfiguring everything again.

5. Click **Accept Config and Exit** and then **OK** to return to the game.

To name your custom configurations:

1. On the left side of the screen, go to **Current Config:** (gray lettering).

2. Below Current Config: is the title of your current configuration.

3. Click on this title and press **Bksp** to remove the current title.

4. Enter the new title for your configuration.

5. Click **Save** twice to get a Configuration Saved box.

6. Click **Accept Config and Exit** to save your title. NOTE: You can have up to four configuration pages.

NOTE: A major source of controller problems may arise from the four control screens since commands can conflict with each other. Commonly, the Turret L/R is configured by the user for the Thrustmaster L/R on the Flightstick, while the original settings are still active on the third and fourth pages of the default configuration. This causes a conflict in the controls where the turret and chassis are controlled by both the L/R of the stick and the L/R of the rudder pedals.

Upgrading To MechWarrior 2 DOS V1.1

The latest version of MechWarrior 2 DOS is version 1.1. Installing NetMech DOS over version 1.0 of MechWarrior 2 DOS can cause problems; upgrading to version 1.1 first avoids these problems.

We have a patch that will update the files for those who have version 1.0. This patch is not to be used on any other version of MechWarrior, including the Windows 95 version or any foreign language version of MechWarrior 2. If Version 1.1 is not printed on your MechWarrior 2 CD (it is located just below IBM CD-ROM) and you have not installed the update, we recommend doing so.

INSTRUCTIONS FOR INSTALLING THE 1.1 UPDATE FROM CD-ROM

1. If your system does not have Windows 95, skip to step 5.

2. Using your mouse open up the Windows 95 Start menu.

3. Click on Programs.

4. Click on MS-DOS Prompt.

5. Insert the NetMech DOS disc in your CD-ROM drive.   In the following instructions, we will assume your CD-ROM drive is drive D: and the game is installed on hard drive C:. (If you are not using drive D: and drive C:, you will replace any occurrence of D: and C: with the drive letter you are using.)

6. Type COPY D:\MECH2V11\MECH2V11.EXE   C:\MECH2 and press **Enter**.

7. Type CD \MECH2 and press **Enter.**

8. Type MECH2V11 and press **Enter.**

9. Read the information on the screen.

10. Now type PATCH C:\MECH2 and press **Enter.**

11. Your will be prompted through installing the update.   Follow the instructions on the screen.

Customer Support

NetMech DOS technical support is available through our online services only. Due to the complex nature of network games, please provide the following information when requesting technical support for *NetMech DOS*.

> NOTE: Except where noted, the following requested information can usually be found:

> **In Windows 95:** Click on the **Start** button, selecting **Settings***,* opening the **Control Panel** and double-clicking on the **System** icon. From there, click on the **Device Manager** tab.

> **In DOS:** Run the MSD.exe program supplied with MS-DOS.

1. What kind of processor does each machine have?

2. What kind of video and sound cards do the machines have? Are they configured correctly for your DOS operating system?

3. Are you using a joystick? If so, what brand and model? What is it using as a game port (e.g. sound card, dedicated game port)?

4. What size Install did you use?

5. How much free disk space do you have? (This can be found by typing **CHKDSK** at the DOS prompt or by opening the **Explorer** and looking at the bottom of the window.)

6. How much RAM is in each machine? (This information can be found by typing **MEM** at the DOS prompt or by clicking on the **Performance** tab adjacent to the **Device Manager** tab in Windows 95.)

7. Is your virtual memory configured manually or was it set by Windows 95? If manually, what are the specifications? (This information can be found by going to the **Performance** tab adjacent to the **Device Manager** tab.)

In addition, please note whether you are using a modem or LAN to play *NetMech DOS* and have the following information available.

> **If you are using a modem:**

> NOTE: In Windows, your modem settings can be found by opening the **Control Panel**, double-clicking on **Modems**, and examining the **Properties**. In DOS, use MSD.EXE.

1. What kind of serial chip (16550 or 8250) ? You can find out by running MSD.EXE in DOS and pressing C; if you try to run MSD.EXE in Windows, it will warn you that it isn't telling you the real story. If your serial chip is an 8250, stop right there   NetMech DOS doesn't support it, nor do most other games! You'll need to get a serial port or modem with a 16550 serial chip. (The 16550 has special FIFO memory that makes it much less likely to lose data than the old 8250.)

2. What kind of modem is on each end (brand, model, speed, internal or external)?

3. On which port is your modem configured?

4. Is each modem configured correctly for your operating system?

5. Does Hyperterminal (or any other terminal program) work with your modem? This is an easy way to test whether or not your modem is configured correctly.

6. At what speed are you connecting?

7. Are you using any data compression? (We do not recommend data compression.)

If you using an external modem:

1. What kind of serial card is being used?

2. Do you have a seven-wire serial cable?

If you are on a LAN:

1. Can you see other computers on the network?

2. What is your network configuration?

3. What brand of network card do you have?

4. What network software are you running? What version number?

Activision Online Services

Services with Activision Forums, e-mail and File Library Support

Microsoft Network: From any MSN window, pull down the Edit menu and select **Go To** and then **Other Location**. At the prompt, type **ACTIVISION** and click **OK**.

America Online: Use keyword "Activision" to locate the Activision forum.

CompuServe: 76004,2122 or [GO GAMBPUB]

Activision BBS: (310) 479-1335 Up to 28,800 Baud; Settings: 8 Bits, No Parity, 1 Stop Bit (8, N, 1)

Services with e-mail Support
Prodigy: ACTI10B
GEnie: ACTIVISION

Internet
support@activision.com or http://www.activision.com

For information on how to use our list server, please send e-mail to CSbulletins@listserv.activision.com with the word "help" in the subject line. If you're already familiar with list servers, send e-mail to the same address with the word "index" in the subject of your message for a list of files available from this service.

In North America
Activision Customer Support
P.O. Box 67713
Los Angeles, CA 90067

Fax
(310) 479-7355, 24 hours a day

FaxBack
(310) 473-6453, 24 hours a day

In Australia and the Pacific Rim
ACTIVISION AUSTRALIA AND PACIFIC RIM
P.O. Box 873
Epping, NSW 2121
Australia

In Europe
Activision
Long Island House, 3A
1/4 Warple Way
London, W3 ORQ
United Kingdom

Vendor List

We have tried to include the most up-to-date contact information for major manufacturers of software, computers, video cards, sound cards and other peripheral devices. We include this information to assist you in quickly diagnosing any compatibility problems with hardware or software in your system. In each vendor's section, we also try to include tips and troubleshooting information on issues we are aware of with their products and the fastest solution to those issues.

Activision has made every effort to ensure that this information is correct. However, you may want to consult the documentation included with your computer, software, video card, sound card, CD-ROM drive, or other peripheral devices for more up-to-date information from each company.

For Customers Outside the U.S.: Where possible, we have included international contact information. If there is no contact in your country, please refer to the documentation included with your hardware or contact your local vendor. You may also call the U.S. or other international phone numbers. U.S. numbers beginning with "800" can only be reached from within the U.S.

Specific Lists

System Manufacturers List
Sound Card Manufacturers List
Video Card Manufacturers List
CD-ROM Drive Manufacturers List

Manufacturers and Products

Acer America	Computers
AdLib Multimedia, Inc.	Sound cards
Advanced Gravis	Joysticks, sound cards
Advanced Integration Research	Video cards
AST Computers	Computers
ATI Technologies Inc.	Video cards, sound cards
Aztech Labs	Sound cards
Boca Research Inc.	Video cards, sound cards, modems
Cardinal Technologies	Video cards, sound cards, modems
Cirrus Logic	Video cards, modems
Colorgraphic Communication	Video cards
Compaq Computer Corporation	Computers
Creative Labs	Video cards, sound cards, modems
CSS Laboratories, Inc.	Video cards
Dell Computers	Computers
Diamond Multimedia Systems Inc.	Video cards, sound cards
Epson America	Computers
Gateway 2000	Computers
Genoa Systems	Video cards
Hercules Computer Technology Inc.	Video cards
Hitachi	Computers
IBM	Computers
Intel	Video cards, sound cards, modems
Liberty Electronics USA	Video cards
Logitech	Sound cards, input devices
Matrox Graphics, Inc.	Video cards
Media Vision	Sound cards

Metheus Corporation	Video cards
Microsoft	Operating systems, input devices, drivers
Mitsubishi	CD-ROM drives
Mitsumi	CD-ROM drives
NEC	Computers
Number Nine Visual Technology	Video cards
Oak Technology	Video cards, sound cards
Orchid Technology Inc.	Video cards
Packard Bell	Computers
Panasonic	CD-ROM drives
Paradise	Video cards
Reveal	Video cards, sound cards
Sigma Designs	Video cards
Sony	CD-ROM drives
STB Systems	Video cards
Swan Technologies, Inc.	Computers
Tandy Computer	Computers
Teac	CD-ROM drives
Toshiba	Computers
Trident Microsystems Inc.	Video chips
Tseng Labs	Video cards
Turtle Beach	Sound cards
Western Digital	Video cards
Willow Peripherals	Video cards
Zenith Data Systems	Computers, CD-ROM drives

CD-ROM Drive Manufacturers List

[Mitsubishi](#)   CD-ROM drives
[Mitsumi](#)   CD-ROM drives
[NEC](#)   Computers, CD-ROM drives
[Panasonic](#)   CD-ROM drives
[Sony](#)   CD-ROM drives
[Teac](#)   CD-ROM drives
[Zenith Data Systems](#)   Computers, CD-ROM drives

Sound Card Manufacturers List

AdLib Multimedia, Inc.	Sound cards
Advanced Gravis	Joysticks, sound cards
ATI Technologies Inc.	Video cards, sound cards
Aztech Labs	Sound cards
Boca Research Inc.	Video cards, sound cards, modems
Cardinal Technologies	Video cards, sound cards, modems
Creative Labs	Video cards, sound cards, modems
Diamond Multimedia Systems Inc.	Video cards, sound cards
Intel	Video cards, sound cards, modems
Logitech	Sound cards. input devices
Media Vision	Sound cards
Microsoft	Operating systems, sound cards
Oak Technology	Video cards, sound cards
Reveal	Video cards, sound cards
Turtle Beach	Sound cards

System Manufacturers List

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AST Computers	Computers
Compaq Computer Corporation	Computers
Dell Computers	Computers
Epson America	Computers
Gateway 2000	Computers
Hitachi	Computers
IBM	Computers
NEC	Computers
Packard Bell	Computers
Swan Technologies, Inc.	Computers
Tandy Computer	Computers
Toshiba	Computers
Zenith Data Systems	Computers, CD-ROM drives

Video Card Manufacturers List

Advanced Integration Research	Video cards
ATI Technologies Inc.	Video cards, sound cards
Boca Research Inc.	Video cards, sound cards, modems
Cardinal Technologies	Video cards, sound cards, modems
Cirrus Logic	Video cards, modems
Colorgraphic Communication	Video cards
Creative Labs	Video cards, sound cards, modems
CSS Laboratories, Inc.	Video cards
Diamond Multimedia Systems Inc.	Video cards, sound cards
Genoa Systems	Video cards
Hercules Computer Technology Inc.	Video cards
Intel	Video cards, sound cards, modems
Liberty Electronics USA	Video cards
Matrox Graphics, Inc.	Video cards
Metheus Corporation	Video cards
Number Nine Visual Technology	Video cards
Oak Technology	Video cards, sound cards
Orchid Technology Inc.	Video cards
Paradise	Video cards
Reveal	Video cards, sound cards
Sigma Designs	Video cards
STB Systems	Video cards
Trident Microsystems Inc.	Video chips
Tseng Labs	Video cards
Western Digital	Video cards
Willow Peripherals	Video cards

Credits

Activision presents
NetMech
Based upon the Battletech universe created by FASA Corporation

Brought to you by the *MechWarrior 2* crew, plus:

PRODUCTION
Tim Morten
John Spinale

PROGRAMMING
Dan Kegel
Tim Morten
Marshall Robin
Kurt Arnlund
Dan Kamins
Dave Zobel
Chris Thomas

ART
John Lafleur

DOCUMENTATION
Mike Rivera
Lorraine Suzuki

QUALITY ASSURANCE
DIRECTOR, CS & QA
Jon Doellstedt

QA MANAGER
Dave Arnspiger

SENIOR LEAD TESTER
Tim Vanlaw

LEAD TESTERS
Christopher Crowder
Edward J. Tretter

LEAD IN TRAINING
Dave Osper

QA TESTERS
Judith Chlipala
Brian Diggs
David Ghys
Jimmie Hudson
Scot Kramarich
Jay Sosnicki
Rawson Stovall
Nadine Theuzillot
Tom Wallick

EXTERNAL BETA TESTERS
Nicholas Anderson
Justin Cooney
Andrew Helmer
Kenneth Holland
Greg Hollaway
Steve Naylor
Frank Pappas
Eli Selig
Matt Turner
Jon VanBragt
Gus Zader
Mike Zemina

ADDITIONAL TESTING
Giovanni Castello
Alvin Geter
Jerry Suner
Walter Urteaga

TECH HELP
Dan Kegel
Ronnie Lane
Edward J. Tretter
Jason Wong

CUSTOMER SUPPORT MANAGER
Jameson Wang

C.S. OF THE WEEK AWARDS
Chacko Sonny

AST Computers

Contact Information:

Online Services:

World Wide Web: http://www.ast.com

Phone Contacts in the U.S.:

Telephone: 800-876-4278
Technical Support: 800-727-1278
817-232-9824
BBS: 714-852-1872

Available Phone Contacts Outside the U.S.:

None available. Please contact your local retailer.

ATI Technologies Inc.

Known Problems:

COM4: Conflict

There is also a known problem in trying to get Mach 32 cards to run if you are using COM4: since the Mach 32 uses the memory address at 2E0-2EF.

Mach 32 Series DOS VESA Support

To enable VESA support run VVESA.COM. You may need to include X=C000-C7FF on the EMM386 line of CONFIG.SYS or you may experience problems.

Mach 64 Series DOS VESA Support

M64DIAG.EXE will run a series of diagnostics and provide information about your card. M64VBE.COM will enable VESA support. You may need to include X=C000-C7FF on the EMM386 line of your CONFIG.SYS file to run properly.

Contact Information:

Online Services:
Internet E-mail:	74740.667@compuserve.com
FTP Site:	ftp://ftp.atitech.ca/pub/support
World Wide Web:	http://www.atitech.ca

Phone Contacts in the U.S.:
Customer Support:	905-882-2626
Fax:	905-882-0546
BBS:	905-764-9404

Available Phone Contacts Outside the U.S.:
Germany Customer Support:	89-460907-77
Germany Fax:	89-460907-76

Acer America

Contact Information:

Online Services:

America Online: Keyword Acer
Prodigy: Jump Acer
CompuServe: Go Acer
FTP Site: ftp://ftp.acer.com/
World Wide Web: http://www.aci.acer.com

Phone Contacts in the U.S.:

Technical Support: 800-445-6495
Acer BBS: 408-428-0140 (28.8K bps, 8-N-1)

Available Phone Contacts Outside the U.S.:
None available. Please contact your local retailer.

AdLib Multimedia, Inc.

Contact Information:

Online Services:
None Available

Phone Contacts in the U.S.:
Telephone: 418-529-1159
Fax: 418-529-9676

Available Phone Contacts Outside the U.S.:
None available. Please contact your local retailer.

Advanced Gravis

Known Problems:

Windows 95 Drivers

Advanced Gravis has released Beta drivers for the Gravis UltraSound card. These drivers are fully compatible with Windows 95. Please refer to the extensive README file included with the drivers for installation information. These drivers are available through the online methods listed below.

Contact Information:

Online Services:
Internet E-mail: tech@gravis.com or support@gravis.com
World Wide Web: http://www.gravis.com

Phone Contacts in the U.S.:
Technical Support: 206-881-6945
Telephone: 604-431-1807
                        604-431-5020
Fax: 604-431-5155
BBS: 604-431-5927
                        206-883-3211

Available Contacts Outside the U.S.:
Switzerland Telephone: 36-5364443
Switzerland Fax: 36-5366011
Switzerland BBS: 36-5360379

For other countries, please contact your local retailer.

Advanced Integration Research

Contact Information:

Online Services:
None Available

Phone Contacts in the U.S.:
Telephone:	408-428-0800
Technical Support:	408-428-1547
BBS:	408-428-1735

Available Contacts Outside the U.S.:
None available. Please contact your local retailer.

Aztech Labs

Contact Information:

Aztech Systems, Ltd. (Main Office-Singapore)
Telephone:	741-7211
Fax:	741-8678~9
Telex:	RS 36560 AZTECH
BBS:	748-6879
World Wide Web:	http://www.aztech.com.sg
FTP Site:	ftp://ftp.aztech.com.sg
E-mail:	support@aztech.com.sg

Aztech Labs, Inc. (U.S. Office)
Telephone:	510-623-8988
Technical Support:	800-886-8879
Fax:	510-623-8989
BBS:	510-623-8933
World Wide Web:	www.aztechca.com
FTP Site:	ftp.aimnet.com /pub/users/aztech
E-mail:	support@aztechca.com

Available Contacts Outside the U.S.:

Aztech Systems, GMBH. (Germany Office)
Telephone:	421-162-560
Fax:	421-162-5633
BBS:	421-169-0843

Aztech UK, Ltd. (UK Office)
Telephone:	1734-814-121
Fax:	1734-819-951

Az-Technology SDN BHD (Malaysia Office)
Telephone:	704-8450
Fax:	704-8457
BBS:	756-3412

Aztech Systems Beijing, Ltd. (China Office)
Telephone:	10-253-6659
Fax:	10-253-4544

Boca Research Inc.

Contact Information:

Online Services:

Standard Support Service:	407-241-8088
Priority Support Service:	900-555-4900
Internet:	support@boca.org
CompuServe:	GO BOCA

Phone Contacts in the U.S.:

Phone:	407-997-6227
Fax Server:	407-994-5848
"QuickFax" Fax Retrieval Service:	407-995-9456
Fax Server:	407-997-0918
BBS:	407-241-1601

Available Phone Contacts Outside the U.S.:

Western Europe (Netherlands)

Internet:	rienboca@ib.com
Phone:	31-1803-21606
Fax:	31-1803-12690
BBS:	31-1803-21382

Asia Pacific (Singapore)

Internet:	samhs@singnet.com.sg
Phone:	65-584-6703
Fax:	65-584-6704

CSS Laboratories, Inc.

Contact Information:

Online Services:
None Available

Phone Contacts in the U.S.:
Technical Support: 800-966-2771

714-852-8161

BBS: 714-852-9231

Available Phone Contacts Outside the U.S.:
None available. Please contact your local retailer.

Cardinal Technologies

Contact Information:

Online Services:

Internet E-mail: techs@cardtech.com
World Wide Web: http://www.cardtech.com

Phone Contacts in the U.S.:

Telephone: 717-293-3000
Fax: 717-293-3055
Technical Support: 717-293-3124
BBS: 717-293-3074

Available Phone Contacts Outside the U.S.:

None available. Please contact your local retailer.

Cirrus Logic

Contact Information:

Online Services:

E-mail (graphics):	ui-support@corp.cirrus.com
E-mail (modems):	dcom-support@corp.cirrus.com
World Wide Web:	http://www.cirrus.com

Phone Contacts in the U.S.:

Technical Support:	510-623-8300 (West Coast)
	508-470-3380 (East Coast)
Fax:	510-252-6020
BBS:	510-440-9080

Technical Support Phone Contacts Outside the U.S.:

France:	1-48-12-2812
Germany:	15-24-008-4
Italy:	92-61-34-836

For other countries, please contact your local retailer.

Colorgraphic Communication

Contact Information:

Online Services:

E-mail: tech@colorgfx.com
FTP Site: ftp://ftp.colorgfx.com/colorgfx
World Wide Web: http://www.colorgfx.com

Phone Contacts in the U.S.:

Technical Support: 770-455-3921
BBS: 770-452-8238

Available Phone Contacts Outside the U.S.:

None Available. Please contact your local retailer.

Compaq Computer Corporation

Contact Information:

Online Services:

BBS:	713-378-1418
E-mail:	Support@Compaq.Com
World Wide Web:	http://www-es.compaq.com

Phone Contacts in the U.S.:

Technical Support:	800-652-6672 (desktop and portable hardware)
	800-386-2172 (server hardware)
	713-378-2000

Available Phone Contacts Outside the U.S.:

None available. Please contact your local retailer.

Creative Labs

Known Problems:

> *NetMech DOS* may have trouble working with some 1993 or earlier Matsushita CD-ROM drives. These CD-ROM drives have trouble reading beyond 63 minutes on CDs, and *NetMech DOS* uses the full CD. These drives were sold under the names of Panasonic, JVC, Reveal, Creative Labs and Plextor. Gameplay may occasionally slow down and the CD-ROM drive will be accessed constantly. We highly recommend that you upgrade to a newer CD-ROM drive to avoid problems with other programs in the future.

Contact Information:

> **Online Services:**
> CompuServe: GO BLASTER
> World Wide Web: http://www.creaf.com
>
> **Phone Contacts in the U.S.:**
> Technical Support: 405-742-6622
> Fax: 405-742-6633
> BBS: 405-428-6660
>
> **Technical Support Phone Contacts Outside the U.S.:**
> France: 1-39-20-0421
> Germany: 31-10-283-8
>
> For other countries, please contact your local retailer.

Dell Computers

Contact Information:

Online Services:

World Wide Web: http://www.us.dell.com
Anonymous FTP: ftp://ftp.us.dell.com/dellbbs
CompuServe: GO DELL
America Online: keyword DELL
Dell Online Support Mailbox: e-mail to support@dell.com
Prodigy: In manufacturers' corner
Electronic Information Service: e-mail to info@dell.com

Phone Contacts in the U.S.:

Technical Support 800-624-9896
TechFax: 800-950-1329
AutoTech: 800-624-9896
Dell TechConnect BBS: 512-728-8528

Technical Support Phone Contacts Outside the U.S.:

Australia: 2-930-3355
Austria: 2243-34100-0
Belgium/Luxembourg: 2-466-91-99
Canada: 416-758-2100
Czechoslovakia: 2-879250
Finland: 0-692-3122
France: 1-30-60-6900
Germany: 61-03-971-0
Ireland: 61-304091
Japan: 3-5420-5353
Mexico: 5-228-7800
Netherlands: 20-6812666
Norway: 67-125711
Poland: 644-2525
Singapore: 32-08370
Spain: 1-32-91080
Sweden: 8-590-05-100
Switzerland: 22-979-0101
United Kingdom: 344-860-456

For other countries, please contact your local retailer.

spam

Dwango

NOTE: DWANGO is available for North American users only.

Contact Information:

Online Services:

World Wide Web: http://www.dwango.com

Phone Contacts in the U.S.:

Technical Support: 713-467-0405
DWANGO Support BBS: 713-467-9272

Available Phone Contacts Outside the U.S.:

None available.

Diamond Multimedia Systems Inc.

Known Issues:

DOS VESA Support

For Stealth 64 VRAM, Stealth 64 DRAM, Video VRAM and Speedstar Alpine, S64DIAG.EXE will run a series of diagnostics. S64DBIOS.COM will enable the VESA BIOS on the VLB versions of these cards *only*. You may need to include the command X=A000-C7FF on the EMM386 line of your CONFIG.SYS file. In addition, do not use Stealth mode in QEMM, or else add XST=C000 to the QEMM386.EXE line of your CONFIG.SYS file.

Contact Information:

Online Services:
E-mail: diamondts@aol.com
E-mail: 75300.3673@compuserve.com
Online services are available 24 hours/7 days.

Phone Contacts In the U.S.:
Telephone: 408-325-7100
Fax: 408-325-7171
BBS: 408-325-7080 (2,400-14,400 baud)
                                        408-325-7175 (9,600-28,800 baud)

Voice support is available from 5am to 7pm M-F (Pacific Time), 8am to 4pm Saturday (Pacific Time), and closed Sunday.

Available Contacts Outside the U.S.:

France
Telephone: 1-34-154240
Fax: 1-34-154672
BBS: 89-5960093 (14,400-28,800 baud)
French Tech Support: 1753-501430

Voice support is available from 8:30am to 6:30pm M-F GMT, and closed Saturday and Sunday. All other services are available 24 hours/7 days.

Germany
Telephone: 89-546540
Fax: 89-5805133
BBS: 89-5460093 (14,400-28,800 baud)
German Tech Support: 1753-501420

Voice support is available from 8:30am to 6:30pm M-F GMT, and closed Saturday, and Sunday. All other services are available 24 hours/7 days.

United Kingdom
Telephone: 1753-501400
Fax: 1753-501411
BBS: 1753-501415 (14,400-28,800 baud)
UK Tech Support: 1753-501410

Voice support is available from 8:30am to 6:30pm M-F GMT, and closed Saturday, and Sunday. All other services are available 24 hours/7 days.

Japan

Telephone:	3-5695-8405
Fax:	3-5695-8403
NIFTY-Serve:	KYB02015

Voice support is available from 10am to 12pm, 1pm to 4pm M-F GMT+9, and closed Saturday, and Sunday. All other services are available 24 hours/7 days.

For other countries, please contact your local retailer.

spam

Earthlink Network TotalAccess

NOTE: Earthlink is available for North American users only.

Contact Information:

Online Services:

Internet E-mail:	support@earthlink.net
Automated Info via E-mail	info@earthlink.net

Phone Contacts in the U.S.:

Technical Support:	800-395-8410

Available Phone Contacts Outside the U.S.:

None available.

Epson America

Contact Information:

Online Services:

World Wide Web: http://www.epson.com

Phone Contacts in the U.S.:

Telephone: 800-922-8911

310-782-0770

Fax: 310-782-5220

Fax-On-Demand: 310-782-4214

BBS 310-782-4531

Available Phone Contacts Outside the U.S.:

None available. Please contact your local retailer.

Gateway 2000

Contact Information:

Online Services:

America Online:	Keyword: Gateway OR Moo
CompuServe:	GO GATEWAY
Delphi:	GATEWAY2000@Delphi.COM
E-mail:	
Technical Support:	tech@gw2kbbs.com
Customer Service:	custserv@gw2kbbs.com
Mailing List Subscriptions:	gateway2000-request@sei.cmu.edu
Mailing List Postings:	gateway2000@sei.cmu.edu
Fidonet:	1:288/17.0: 800-846-1786
GEnie:	Keyword: GATEWAY2000
Prodigy:	JUMP: Computer Support
Usenet Newsgroup:	alt.sys.pc-clone.gateway2000
World Wide Web:	http://www.gw2k.com

Phone Contacts in the U.S.:

Main Number:	800-846-2000
Fax:	605-232-2023
Technical Support:	800-846-2301
Technical Support Fax:	605-232-2182
Notebook/Laptop Support:	800-846-2302
Notebook/Laptop Fax:	800-846-4526
Sales and Customer Service:	800-846-2042
TDD Hearing Impaired:	800-846-1776
BBS drivers only:	800-846-7562
BBS complete access:	605-232-2224

Available Contacts Outside the U.S.:

Ireland

Customer Service:	800-45-2000
Technical Support:	800-46-2000
Fax:	848-2022
BBS:	867-0433

UK

Customer Service:	0800-80-2000
Technical Support:	0800-80-2000
Fax:	848-2022
BBS:	867-0433

For other countries, please consult your local retailer.

Genoa Systems

Contact Information:

Online Services:

Internet E-mail:	support@gentech.com
World Wide Web:	http://www.gentech.com

Phone Contacts in the U.S.:

Technical Support:	408-362-2990
	805-531-9030
Fax:	805-531-9045
BBS:	408-943-1231

Available Contacts Outside the U.S.:

Genoa Systems
Schimmelbuschstraße 9
D-40699 ERKRATH, GERMANY

Telephone:	02104-39877
Fax:	02104-39770
BBS:	02104-35370

For other countries, please contact your local retailer.

Hercules Computer Technology Inc.

Known Problems:

Dynamite Video Card Using MS-DOS

When using EMM386.EXE or QEMM386.EXE in DOS, adding one of the three following exclusions to the EMM386.EXE or QEMM386.EXE line in CONFIG.SYS should solve any display problems. X=A000-A7FF or X=B800-BDFF or X=BFF0-C7FF.

Users of Qualitas 386MAX should try the parameters RAM=A000-B000 or RAM=B800-C800.

Contact Information:

Online Services:
E-mail:	support@hercules.com
World Wide Web:	http://www.hercules.com/
CompuServe:	GO HERCULES (Address e-mail to 71333,2532)
Anonymous FTP:	ftp.hercules.com

Phone Contacts in the U.S.:
Technical Support:	800-323-0601 (M-F, 6am to 6pm Pacific Time)
	510-623-6050 (M-F, 6am to 6pm Pacific Time)
Technical Support Fax:	510-490-6745
Toll-free faxback service:	800-711-4372
Technical Support	510-623-6050
BBS:	510-623-7449 (V.32 bis)
	510-623-7034 (9,600 baud)
	510-623-7142 (2,400 baud)

Available Contacts Outside the U.S.:

Japan
Telephone:	08142-49105
Fax:	08142-49799

Germany
Technical Support:	089-8989-0573 (M-F, 10am-4pm)
Technical Support Fax:	089-8989-0584
BBS:	089-8989-0576

For other countries, please contact your local retailer.

Hitachi

Contact Information:

Online Services:
World Wide Web: http://www.hitachi.co.jp

Phone Contacts in the U.S.:
Technical Support: 800-241-6558

Technical Support Phone Contacts Outside the U.S.:
France: 1-48-21-6015
Spain: 3-33-08652

For other countries, please contact your local retailer.

IBM

Contact Information:

Online Services:
World Wide Web: http://vm.cfsan.fda.gov/ibmlist.html

Phone Contacts in the U.S.:
Technical Support: 404-238-1234
Technical Support Multimedia: 908-329-7131
Technical Support PS/1 PRO: 800-765-4747
Technical Support Valuepoint: 800-772-2227
                                         213-621-5576
BBS: 919-517-0001

Available Phone Contacts Outside the U.S.:
None available. Please contact your local retailer.

Intel

Contact Information:

Online Services:
World Wide Web: http://www.intel.com

Phone Contacts in the U.S.:
Technical Support: 800-538-3373
                                   503-264-7000
BBS: 503-264-7999
                                   503-645-6275

Available Phone Contacts Outside the U.S.:
None available. Please contact your local retailer.

Liberty Electronics USA

Contact Information:

Online Services:
None available.

Phone Contacts in the U.S.:
Technical Support: 800-497-8324
                                 510-623-6000

Available Phone Contacts Outside the U.S.:
None available. Please contact your local retailer.

Logitech

Contact Information:

Online Services:

CompuServe:	76702,1367 or GO LOGITECH for forum
Internet E-mail:	support@logitech.com

Phone Contacts in the U.S.:

Technical Support:	510-795-8100
BBS:	510-795-0408

Technical Support Phone Contacts Outside the U.S.:

France:	34-48-9050
Switzerland:	21-869-9851

For other countries, please contact your local retailer.

Matrox Graphics, Inc.

Known Problems:

MGA Impression

The program to load for standard VESA support is MGAVESA.COM.

Contact Information:

Online Services:
CompuServe:	GO MATROX
Internet E-mail:	graphics.techsupport@matrox.com
FTP Site:	ftp://ftp.matrox.com/pub/mga/
World Wide Web:	http://www.matrox.com

Phone Contacts in the U.S.:
Telephone:	514-685-0270
Fax:	514-969-6363
MATFax (fax-back system):	514-685-0174
BBS:	514-685-6008

Available Contacts Outside the U.S.:

Germany
Phone:	89-614-474-33
Fax:	89-614-97-43
BBS:	89-614-00-91

UK
Phone:	1-793-441-144
Fax:	1-793-614-336
BBS:	1-793-489-906
CompuServe e-mail:	100634.2033@compuserve.com

France
Phone:	1-45-60-62-00
Fax:	1-45-60-62-05
BBS:	1-45-60-62-08
CompuServe:	MATFR (Matrox France's Forum)
CompuServe e-mail:	100631.2376@compuserve.com
	(Matrox France Tech. Support)
Minitel:	3615 MATROX (1.39 ff/mn)

For other countries, please contact your local retailer.

Media Vision

Contact Information:

Online Services:

America Online:	Keyword: MEDIA VISION
CompuServe:	Type **GO MEDIAVISION**
World Wide Web:	http://www.mediavis.com
FTP Site:	FTP.MEDIAVIS.COM

Phone Contacts In the U.S.:

Technical Support:	503-882-1177 8am to 8pm Pacific Time, M-F
Fax:	503-884-1517
BBS:	510-770-0527 (N,8,1) Z-Modem recommended

Available Phone Contacts Outside the U.S.:
None available. Please contact your local retailer.

Metheus Corporation

Contact Information:

Online Services:
World Wide Web: http://www.ibmpcug.co.uk/~metheus/

Phone Contacts in the U.S.:
Technical Support: 503-690-1550
BBS: 503-690-1559

Technical Support Phone Contacts Outside the U.S.:
United Kingdom: 734-312-112

For other countries, please contact your local retailer.

Microsoft

Contact Information:

Online Services:
World Wide Web: http://www.microsoft.com

Phone Contacts in the U.S.:

Technical Support:	206-637-7096
BBS:	206-936-4082
	206-936-6735

Technical Support Contacts Outside the U.S.:

France:	1-69-86-1020
Germany:	08-93-176-0
Italy:	39-22-69-121
Spain:	1-80-40000
Belgium BBS:	2-735-00-45

For other countries, please contact your local retailer.

Mitsubishi

Contact Information:

Online Services:
World Wide Web: http://www.mitsubishi.com

Phone Contacts in the U.S.:
Technical Support: 800-344-6352
BBS: 714-236-6286

Available Phone Contacts Outside the U.S.:
None available. Please contact your local retailer.

Mitsumi

Contact Information:

Online Services:
None Available

Phone Contacts in the U.S.:

Technical Support:	408-970-9699
	408-970-9730
BBS:	415-691-4469

Available Phone Contacts Outside the U.S.:
None available. Please contact your local retailer.

NEC

Contact Information:

Online Services:

America Online:	Keyword NECTECH
AT&T Interchange:	ZDNet Companies Online section
CompuServe:	GO NECTECH
Microsoft Network:	go word: NECTECH
Internet E-mail Technical Support:	tech-support@nectech.com
Internet FTP Site:	ftp.nectech.com
World Wide Web:	http://www.nec.com

Phone Contacts in the U.S.:

Technical Support:	800-388-8888
NEC Technical Support Fax:	508-635-4666
NEC BBS:	508-635-4706 (300-28.8K bps, 8 data bits, 1 top bit, no parity bits)

Available Phone Contacts Outside the U.S.:
None available. Please contact your local retailer.

Number Nine Visual Technology

Known Problems:

GXE64 or FX Vision 330

When using EMM386.EXE in DOS, add the X=C000-C7FF parameter to the EMM386.EXE line in CONFIG.SYS.

Contact Information:

Online Services:
World Wide Web: http://www.nine.com/

Phone Contacts in the U.S.:
Technical Support: 617-674-0009
BBS: 617-862-7502

Technical Support Contacts Outside the U.S.:
Germany Technical Support: 96-14-491-0
Germany BBS: 96-12-139-0

For other countries, please contact your local retailer.

Oak Technology

Contact Information:

Online Services:

Internet E-mail:	tech@oaktech.com .
World Wide Web:	http://www.oaktech.com

Phone Contacts in the U.S.:

Technical Support:	408-523-6666 (M-F, 8am to 5pm Pacific Time)
BBS:	408-774-5307

Available Phone Contacts Outside the U.S.:

None available. Please contact your local retailer.

Orchid Technology Inc.

Known Problems:

Kelvin 64, Fahrenheit 64, Fahrenheit Pro 64

When using EMM386.EXE in DOS, add the X=A000-C7FF parameter to the EMM386.EXE line in CONFIG.SYS.

Contact Information:

Online Services:
World Wide Web: http://www.orchid.com

Phone Contacts in the U.S.:
Technical Support: 510-683-0323
BBS: 510-683-0327

Technical Support Contacts Outside the U.S.:
France: 1-47-80-7050
Germany: 13-28-007-1
UK: 256-479-898
UK BBS: 256-463-373

For other countries, please contact your local retailer.

Packard Bell

Contact Information:

Online Services:
World Wide Web: http://www.packardbell.com

Phone Contacts in the U.S.:
Hardware Support: 800-733-4411
Software Support: 801-579-0161
BBS: 801-250-1600
                         818-773-7207

Technical Support Phone Contacts Outside the U.S.:
France: 1-40-64-1000
Germany: 89-83-703-1
Italy: 2-29-52-7444
Spain: 1-45-80055

For other countries, please contact your local retailer.

Panasonic

Contact Information:

Online Services:

World Wide Web: http://www.mitl.research.panasonic.com

Phone Contacts in the U.S.:

Technical Support: 408-653-1898
BBS: 201-863-7845

Technical Support Phone Contacts Outside the U.S.:

France: 1-49-46-4300
Germany: 32-18-702-0
Spain: 7-24-81100

For other countries, please contact your local retailer.

Paradise*

*Western Digital sold the Paradise line to Phillips Electronics in 1995.

Known Problems:

Bali 32 Video Card under MS-DOS

When using EMM386.EXE in DOS, add the X=A000-C7FF parameter to the EMM386.EXE line in CONFIG.SYS.

Contact Information:

Online Services:
World Wide Web: http://www.paradisemmp.com

Phone Contacts in the U.S.:
Literature/Driver Distribution: 800-978-3079
BBS: 415-335-2744

Technical Support Contacts Outside the U.S.:
Austria: 0660-8142
Belgium: 0800-15532
Denmark: 80017941
Finland: 08001-13170
France: 05-917909
Germany: 0130-823983
Greece: 00800311207
Ireland: 1-800-553178
Italy: 1678-79499
Holland: 068406
Norway: 800-11365
Luxembourg: 0800-2974
Portugal: 0505313338
Spain: 900-983181
Sweden: 020-795344
Switzerland: 155-3497
UK: 0800-966185
Helpdesk Fax: 20 6002589
Internet E-mail: pcaddon.u4ia.philips@pi.net
BBS: 40 2731112

Helpdesk hours are Monday-Friday, 10am-10pm, Saturday-Sunday, 10am-6pm.

For other countries, please contact your local retailer.

Reveal

Known Problems:

NetMech DOS may have trouble working with some 1993 or earlier Matsushita CD-ROM drives. These CD-ROM drives have trouble reading beyond 63 minutes on CDs, and *NetMech DOS* uses the full CD. These drives were sold under the names of Panasonic, JVC, Reveal, Creative Labs and Plextor. Gameplay may occasionally slow down and the CD-ROM drive will be accessed constantly. We highly recommend that you upgrade to a newer CD-ROM drive to avoid problems with other programs in the future.

Contact Information:

Online Services:
World Wide Web: http://support.reveal.com

Phone Contacts in the U.S.:
Technical Support: 800-473-8325
BBS: 818-713-8188

Available Phone Contacts Outside the U.S.:
None available. Please contact your local retailer.

STB Systems

Contact Information:

Online Services:

CompuServe:	75300,1664 or GO STBSYS for forum
Internet E-mail:	support@stb.com
FTP Site:	ftp.stb.com
World Wide Web:	http://www.stb.com

Phone Contacts in the U.S.:

Technical Support:	800-234-4334 (8am to 6pm Central Time, M-F)
	214-234-8750
Technical Support Fax:	214-669-1326
BBS:	214-437-9615 (N81) up to 28.8K bps

Available Contacts Outside the U.S.:

UK Telephone Support:	44-897-0662 (9am to 6pm GMT)
UK BBS:	44-181-897-1008

For other countries, please contact your local retailer.

Sigma Designs

Contact Information:

Online Services:
None Available

Phone Contacts in the U.S.:
Technical Support: 510-770-0100
BBS: 510-770-0111

Technical Support Phone Contacts Outside the U.S.:
Germany: 89-33-644-3

For other countries, please contact your local retailer.

Sony

Contact Information:

Online Services:
World Wide Web: http://www.sel.sony.com

Phone Contacts in the U.S.:
Technical Support: 408-894-0555
BBS: 408-955-5107

Available Contacts Outside the U.S.:
None available. Please contact your local retailer.

Swan Technologies, Inc.

Contact Information:

    Online Services:
    World Wide Web: http://swantech.com

    Phone Contacts in the U.S.:
    Technical Support: 800-468-7926
                                        814-238-1820
    BBS: 814-237-6145
                                        814-237-6143

    Available Phone Contacts Outside the U.S.:
    None available. Please contact your local retailer.

Tandy Computer

Contact Information:

Online Services:
World Wide Web: http://www.tandy.com

Phone Contacts in the U.S.:
Technical Support: 817-878-6875

Technical Support Phone Contacts Outside the U.S.:
UK: 922-434-000

For other countries, please contact your local retailer.

Teac

Contact Information:

Online Services:
World Wide Web: http://www.lookup.com/homepages/44913/home.html

Phone Contacts in the U.S.:
Technical Support: 213-726-0303
BBS: 213-727-7660

Available Phone Contacts Outside the US:
None available. Please contact your local retailer.

Toshiba

Contact Information:

Online Services:

World Wide Web: http://www.toshiba.com

Phone Contacts in the U.S.:

Technical Support:	800-999-4273
	714-859-4273
BBS:	714-837-4408
	415-656-5159

Available Phone Contacts Outside the U.S.:

None available. Please contact your local retailer.

Trident Microsystems Inc.

Note: Trident makes video card chipsets, but not complete cards. You probably want to contact the card vendor, not the chipset vendor.

Contact Information:

Online Services:
World Wide Web: http://www.trident.net/comp/video.htm

Phone Contacts in the U.S.:
None available.

Available Phone Contacts Outside the U.S.:
None available. Please contact your local retailer.

Tseng Labs

Contact Information:

Online Services:
None Available

Phone Contacts in the U.S.:

Technical Support:	215-968-0502
Fax:	215-860-7713
BBS:	215-579-7536

Technical Support Phone Contacts Outside the U.S.:

Germany:	49-00-004-9
Belgium:	2-716-50-00

For other countries, please contact your local retailer.

Turtle Beach

Contact Information:

Online Services:

Internet E-mail:	support@tbeach.com
FTP Site:	ftp.tbeach.com
World Wide Web:	http://www.tbeach.com

Phone Contacts in the U.S.:

Technical Support:	717-767-0300
Support Fax:	717-767-0303
Faxback:	717-767-0309
BBS:	717-767-0250
	(up to 21.6K bps, 8 data bits, no parity, 1 stop bit)

Technical Support Phone Contacts Outside the U.S.:

Switzerland:	22-347-1181

For other countries, please contact your local retailer.

Willow Peripherals

Contact Information:

Online Services:

Internet E-mail:	peripherals@willow.com
World Wide Web:	http://willow.com/peripherals

Phone Contacts in the U.S.:

Technical Support:	800-444-1585
Phone:	718-402-0203
Fax:	718-402-9603
BBS:	718-993-2066

Available Phone Contacts Outside the U.S.:

None available. Please contact your local retailer.

Zenith Data Systems

Contact Information:

Online Services:

E-Mail:	zed@zds.com
CompuServe:	GO ZDSFORUM
The Microsoft Network:	GO ZDS
World Wide Web:	http://www.zds.com
Mail:	Zenith Data Systems
	2150 East Lake Cook Road
	Buffalo Grove, IL 60089

Phone Contacts in the U.S.:

Telephone:	800-416-7591
Telephone (TDD):	800-316-3207 (M-F, 8:00am to 4:30pm Central Time)
Fax:	800-582-8194
BBS:	708-808-2264 (14,400 bps)

Available Phone Contacts Outside the U.S.:

None available. Please contact your local retailer.