Problems and Fixes
By Courtney Harrington

The following is a small collection of problems and fixes posted by users of the PAS soundcard.
It is possible the answer to your problem may be contained here. Be aware that some of this
information - especially concering drivers - may be dated.

Encarta

Check to see if the install program for Encarta failed to copy and install the wave mapper driver
from the CD-ROM.

Scanners

Check to see if the scanner is set to DMA 1. That is the fixed DMA setting for SB emulation.
Since SB emulation requires no drivers, it may be disabling the scanner.
If you set the scanner on DMA 3, this will dissable Trackblaster Pro, and Stereo Studio FX, as
thay can not work on a 16 bit DMA channel.

The Logitech 256 may also need its i/o address changed to 330h.

Logitech suggested adding "TimeCriticalSection=100" to [386enh], & not only did my scanner
TWAIN driver problem disappear, but the stutter went with it!

Drivers

(3/29) just FYI, we did start shipping a 1.46 DOS and Windows driver diskette with the new PAS
16 D cards...It is the same as 1.45 Windows - supposedly.

Installation of the Pro Audio Spectrum 16 Windows drivers causes the
following changes:
Changes to the SYSTEM.INI file:

```
[386enh]
device=vpasd.386

[mci]
CDAudio=mcicda.drv
Mixer=mcimixer.drv
Sequencer=mciseq.drv
WaveAudio=mciwave.drv

[drivers]
Aux=mvproaud.drv
MIDI=opl3.drv
MIDI1=mvproaud.drv
Midimapper=midimap.drv
Mixer=mvmixer.drv
Timer=timer.drv
Wave=mvproaud.drv

[Multimedia.Setup]
audio=mvproaud.drv,0,0,0
```

```
[mvproaud.drv]
dma=3
irq=7
```

Changes made to the WIN.INI file:

```
[Extensions]
wav=prec.exe ^.wav

[embedding]
PocketRec=Pocket Recorder Wave,Pocket Recorder
  Wave,C:\WINDOWS\PREC.EXE,picture
PocketMix=Pocket Mixer Settings,Pocket Mixer
  Settings,C:\WINDOWS\PMIX.EXE,picture
```

Files copied to the \WINDOWS directory:

```
MIX.EXE
PMIX.EXE
PREC.EXE
PROMIX.EXE
```

Files copied to the \WINDOWS\SYSTEM directory:

```
MCIMIXER.DRV
MIDIMAP.CFG
MMMIXER.DLL
MVFM.DRV
MVMIXER.DRV
MVPROAUD.DRV
OEMSETUP.INF
OPL3.DRV
VPASD.386
```

Looking for ADLIB driver
Make sure the AdLib windows 3.1 driver is not being loaded by your SYSTEM.INI. Look for the line device=vadlibd.386 and delete it.

VDMAD.386 Driver bad:
One person reported that this was caused by PCTOOLS 7.0. It installed a vdmad.386 driver to his system.

Cables

Because so many people are buying a PAS 16 and purchasing the SCSI drive separately, Media Vision makes the following cables available.

The following items are available for Media Vision customers to purchase.
Please call 1-800-356-7886 for more information.

Cable Kits	P/N	Price	
*SCSI CBL/DRV Kit Internal - Sony	830-000201	$15.00 + $7.00	
*SCSI CBL/DRV Kit Internal - Texel	830-000302	$15.00 + $7.00	
*SCSI CBL/DRV Kit Internal - Toshiba	830-000401	$15.00 + $7.00	
*SCSI CBL/DRV Kit Internal - NEC	830-000701	$15.00 + $7.00	

*SCSI CBL/DRV Kit Internal - Mitsumi   830-001101 $15.00 + $7.00
*SCSI CBL/DRV Kit Internal - Hitachi   830-001901 $15.00 + $7.00
*SCSI CBL/DRV Kit - External   670-0003-01 $29.00 + $7.00

Replacement Units	P/N	Price
PAS Manuals	700-0001	$15.00
PAS+ Manuals	700-0073	$10.00
PAS 16 Manuals	700-0081	$10.00
ThunderBoard Manuals	700-0009	$10.00
TB/Windows Manuals	700-0089	$10.00
T & L Manuals	700-0141	$10.00
Audio Port Manuals	700-0103	$10.00
Monolouge Manuals	700-0124	$10.00
Caddies	118-0004	$12.00

Miscellaneous	P/N	Price
Pro Audio Spectrum 16 - Sony	670-001701	$239.00 + $9.95
Pro Audio Spectrum Developer Kit	PASDK03	$25.00 + $2.90
Bass Enhancement	670-002001	$179.00 + $9.95
MidiMate	670-000502	$69.95 + $9.95
MidiMate/Trax	7050016-01	$139.00 + $9.95
Trantor CD-ROM Driver	558-0007	$9.00

Components	P/N	Price
Sony internal audio cable	829-0002	$11.00
NEC internal audio cable	829-0007	$11.00
Texel internal audio cable	829-0003	$11.00
Toshiba internal audio cable	829-0004	$11.00
50/50 SCSI ribbion cable	829-0006	$11.00
SCSI 50-25 pin cable	829-0009	$17.00

Shipping
$9.95 & $7.00 are UPS Ground
$2.90 is Priority Mail
Items with no shipping cost listed are sent U.S. Mail

Prices are subject to change without notice.

CDPC

The CDPC is an integrated CD-ROM, amplified speaker, 16-bit sound device.
It's a high-end multimedia upgrade kit. The original, the CDPC AT as it's
sometimes called had a Sony 535 drive. The new CDPC XL has an NEC 84 drive
and SCSI brackets on the back.

CD-ROM

CDROM can't be located by the program:

Lastdrive=x must be one more than last physical drive.
\mscdex.exe /D:mvcd001 /M:10 /V /L:X (x=number assigned to CDROM)

The problem begins with the Fusion 16 CD Install program. When it modifies the CONFIG.SYS
file, it appears to write a line loading the CD-ROM driver DEVICEHIGH, then a line loading
MVSOUND.SYS DEVICEHIGH. The problem, it turns out, is that

_the_MVSOUND.SYS_driver_line_must_go_first_. If the TSLCDR line (or, since my drive is a Sony, SLCD) goes first, for some reason my bus scanner won't recognize it. Put it after MVSOUND.SYS has loaded, however, and everything works fine.

I had the same problem until I stopped trying to load the CDROM driver buffers into EMS memory (the /E switch on the end of the SONY_PFM.SYS line). Once I got rid of that everything worked fine.

Note that without the /E, the driver will take up 72K of memory. This can be reduced by reducing the size of the buffers. I run with /S:16, which gets the driver resident size down to about 44K. To summarize, I recommend changing your driver line to:
DEVICE=path\SONY_PFM.SYS /D:MVCD001 /I:15 /R /P:3 /S:16

The P3 on the TSLCDR.SYS line makes the Microsoft Media Player work (From Trantor)

Compton's
I have Compton's in a pif under Windows. I first load the Multi-Media driver and check CD-Audio, and set it to tracks and move the slide to just to the right of two. Also load the Mixer with the audio settings.
Be sure Compton's is in the CD <g>, then just play the audio. Of course, all you will be able to do is listen. You can adjust the sound with th Mixer. BUT, then load CFE. Go to Mozart or John Kenndy or Africa and click on the sound indicator and there it is.

Dell Computers

Dell 320
opened machine to reset jumper 11. (Share DMA jumper) See jumpers, but can't see how to reset them. Call Dell tech support for advice. "Can't reset jumpers on 320,like on the 310." Told them the problem.
Dell's fix:
> 1-go into system setup, turn off serial ports
> 2-set hardware D/I to D:1 and I:5-I guess this is the SB part
> 3-set software D/I to D:3 and I:3 to avoid conflicts-through
> control panel.
> 4-move com port from 2 to com 1 as I:3 would conflict.

Drivers / SCSI

Add these parameters to your TSLCDR.SYS line: /R /S:31 /P:3 The 'R' resets the SCSI, the 'S:31" is a track buffer and is REQUIRED, and you know about the /P:3.

all the CD-ROM drivers for the PAS cards are sold ONLY by MediaVision. Trantor sells only hard disk drivers for MediaVision cards.

The **1.44 drivers** do not install a SB driver as such, but for SB support it uses the OPL-3 driver. Try running these programs in standard mode, and see if you are getting the same errors. A share violation is when the computer thinks two or more applications are trying to use the same file at once- that is access it in some way (usually writing to it). This may be caused by multiple drivers trying to write to the file.

The The **WIN145.ZIP** file does not contain different drivers for different cards. The drivers in the file work on _all_ the PAS cards except Thunder Board (which is not actually one of the PAS series).
    The reason that they are included in the zipfile is that you should not be mixing and matching

files. They are designed to work together as a package. The only exception was mvproaud.drv which had a bug and was fixed after release of the WIN144 zipfile. It should now be included in the 145 file. The only difference between 1.44 and 1.45 should be the date on mvproaud.drv. Make sure you're using the most recent mvproaud.drv. (1:45 am time stamp).

ADAPTEC Parity Errors:
To circumvent the problem with the Adaptec, make sure the PAS 16 is using
a 16-bit DMA channel - that's essential.
Also, set your bus on time to five and bus off time to eleven like so:
device=C:\aspi4dos.sys /N3 /F11

CDROM SCSI DRIVERS:
Trantor's FAX number is 510-770-9910.
Main number (510) 770-1400

Hard Disk Drivers
(3/23) The hardware specific hard disk drivers for the PAS card have been discontinued, and SCSIworks! replaces them AT THE SAME PRICE for MediaVision customers!
SCSIworks! is a complete package of software, including CD-ROM, MO. HD, Tape, HP ScanJet support and more.

SCSI-1 and SCSI-2 are identical in interface. You shouldn't have any problems with either type device. If you want to hook up a hard drive to the PAS-16, you will need a HD driver for it. Trantor does have that driver and utilities, and it will support both SCSI-1 and SCSI-2 hard drives. SCSI-2 only differs if you implement optional extensions to it like FAST or WIDE.

SCSI-2
The interface on the PAS16 is SCSI-2, but it does not implement all the features. It is not ASPI compliant at this time, tho drivers are being written. When you say use a Trantor driver for a drive do you mean TSLCDR for a harddrive? If so the answer is no.
You may connect a SCSI-2 hard drive to the PAS16 interface, but you must purchase the harddrive software driver from Trantor. At this time the driver is $59 and is available from Trantor Systems (510)770-1400.

>>Do you know if I can use the SCSI port to daisy chain multiple SCSI devices like disk drives and perhaps a scanner?<<
At this time Harddisks and removable drives are supported, but tape drives and scanners are not. There is a new version of the driver due out from Trantor soon that will support ASPI and tape drives. I'm not sure about scanners.
    Jack is the man to ask here or you can call Trantor (510)770-1400.
    Trantor sells the driver for $59.

If you are refering to the CD-ROM not being found on a warm boot, that is a problem with the SCSI drivers on the faster machines. Trantor is aware of the problem, and promised me they would look into fixing it.

It is possible to run the SCSI devices from the PAS cards, but one thing to remember is that while the PAS cards can run SCSI devices, they do not have any BOOT ROM, so you cannot boot from any devices attached to them.
If you have external devices, then you will additionally need the external bracket adaptor. This is the bracket that converts the internal ribbon, and sound connections to the external cables. If you need this, call 1-800-356-7886.
Trantor is the only place to get the HD Drivers for the PAS cards. You can reach them at 1-800-trantor, or 510-770-1400. Ask for sales.

>Approximately what does MV charge for the EXTERNAL SCSI Kit for the PAS 16.

It costs $79.00. It includes an bracket adaptor for supplying the DB-25 connector. It also has two RCA jacks for connecting an external audio source.

2/18:
Media Vision will soon be including a coupon with the PAS 16 for
SCSIWorks - Trantor's new all-in-one SCSI driver package.
With SCSIWorks, the PAS 16 will support CD-ROMs, Hard disks, HP scanners,
floptical drives, streaming tape drives, and removal cartridge drives! The price for the package is $89.00. But the coupon will give Media Vision
customers a price of $59.00!

3/9 (from Trantor)
You can now purchase the new SCSIworks! package from Trantor for the PAS card. It supports the SyQuest drives, tape drives, HP scanners, and much more. List is $89, but $59 for
MediaVision customers. Trantor Systems is at 510-770-1400

SCSIworks! is an ASPI software package that supports the MediaVision PAS cards. It is available from Trantor at 1-800-TRANTOR 510-770-1400.
Supplied are ASPI Managers, CD-ROM drivers, HD drivers, removable (SyQuest, Bernoulli, Floptical) drivers, Magneto-Optical drivers, HP ScanJet drivers, Tape backup software, Music Box audio control software for CD-ROMs, and more.
Delivery is from stock. List price is $89. MediaVision customers can upgrade for $59.

GATEWAY 2000

You don't need to live w/ the pops and clicks. If you copy the file mvproaud.drv 5/13/92 from the Windows Drivers V.1.2 disk over the top of mvproaud.drv 12/10/92 1.45 , the pops at the end of Windows wavs cease. They did on my GW anyway. Then you must add the following in your autoexec.bat to keep your sound in DOS:
set blaster= a220 D1 I5 T3

A couple of comments as I read your config.sys etc. from recent compilations
across several Forums:
1. I have seen MANY Gateway's have NO END of grief with ST:M in QEMM, last
recommendation I saw was try ST:F if at all possible....
2. Add either J:0 or J:1 [joystick support] to your mvsound.sys - none of
my Gateway's will handle a joystick or disable the joystick without it.
3. Be forewarned the NDW and Trashcan in particular CONSISTENTLY come up as
incompatible with LOTS of stuff. At one time [possibly fixed] was major
crosslinking of files due to Trashcan.
4. If SMARTDRV doesn't completly load high, it will load in pieces using up
various failed stubs.... If it loads completely high though, great!
None of the above are Gospel, just [as you know] Gateway's are a bit
finicky, but like a race horse, once they get movin' WOW!

I also have a PAS 16, and only with some extraordinary help from
MediaVision did we figure out the best configuration on a GW2K
486/66LBV: the SoundBlaster portion is set to DMA 1 and IRQ 2, the
ProAudio and CD are set to DMA 5 and IRQ 10 in both DOS and Windows.
These are different from the defaults. TrackBlaster Pro will not
work, however, because it requires an 8 bit channel.

IRQ7 conflicts with the LPT1 if you're using PrintCache in interrupt mode, so you have to use IRQ5 for the PAS16 (at least on the GW2K 486/33 and 486/66VLB).
The Gateway won't release lower IRQ's and DMA's.

Gateways with Micronics motherboards need a Magic Configuration: DMA=5, SoundB IRQ=2, PAS IRQ=10

I run PAS on DMA3, IRQ10, in DOS and Windows, leaving SoundBlaster emulation on DMA1 IRQ5.

The typical setup is to disable the IRQ for your LPT1, in CMOS, set the SB emmulation to 7, and set the PAS portion to IRQ10,11, or 15, and DMA 5, or 7.

it is reported that sometimes there are problem with the fast machines and GUP and Norton Desktop. And this patch fixes it. The patch is for version 2.0 and is available in the Norton Forum.

Newer machines with the CLK/xx setting set wrong and therefore running at 12.5 or so MHz on the motherboard - this will affect the PAS digital playback/joystick etc.

(3/29) We have been alerted by Diamond (a VESA MB maunfacturer) that they have discovered a flaw in the VESA standard, and they have developed a fix for their own mother boards. The flaw causes sounds when the mouse is moved - If the Video is in High res mode. If you switch to VGA, then the problem goes away.
We are trying to get more info, but for now there is no fix, just the work around of lowering your Windows resolution.

This document describes a successful installation of the a Pro Audio Spectrum 16 in a Gateway 2000 486 DX2 66V. The Media Vision technical support representatives provided the necessary information on DMA / IRQ settings and install procedures. The configuration included an UltraStor 34F SCSI adapter, Seagate 3600N hard disk and a Toshiba 3401B CD-ROM. The 34F does not use a DMA setting and was configured with the default settings of IRQ 14 and 330H I/O port address. There is a file in the MediaVision Forum Library section called PA16QA.TXT that provides common Q&A's and will save you a lot of time and grief. If there is no reference to a setting or entry the default value is assumed.

Port	IRQ	Description
COM1	4	Microsoft mouse
COM2	3	Communications Port 2
LPT1	7	Lpt 1 Printer port

Set Sound Blaster to IRQ 2, jumper 12, Pin 7-8. DMA is 1.
Install the PAS 16 software. When you are requested to assign the DMA and IRQ values enter 3 for DMA and 10 for the IRQ. The install will attempt to test the card. The process will fail. Continue with the installation and the files are copied to the hard disk.

Joystick

the joystick port on the pas is slightly non-standard in order to support the midi-mate adapter. I would recommend disabling the port, and buying a high-speed, adjustable stand-alone card. It will work much better. The current top-of-the-line is the Thrustmaster ACM card for about $40.00

Kodak Photo Capability

 I hope you can add documentation about Kodak's photo CD format to future >>versions of the kit. Finding out whether or not my version of the kit is compatible >>with this exciting new format is proving to be a real struggle.
If you have the PAS 16 Multimedia System, with the NEC 84 drive, then it is SINGLE SESSION compatible when you are using the 1.46f TSLCDR.SYS.

Right now, the PAS, and the 84 can support Single session Photo CD, part of the XA standard. The key was in the SCSI driver for the CD-ROM. We are currently testing a release of a Multiple session driver for those CD-ROMS which support multiple session capability. Unfortunately, the 84 doesn't support multi-session. As for upgrades, I do not forsee any in the future.

First, the Fusion CD 16 _IS_ multisession compatible _AS-IS_. All you need is the KODAK Viewing software to look at Photo CD's.
The only product that has the designation XL, is the CDPC XL, and it is NOT multiple session compatible, but is SINGLE session compatible. (meaning it will read the FIRST roll of film on the DISK.

With the 1.46f CD-ROM driver, most CD-ROM drives will read single session Photo CD discs.
For full multi-session Photo CD capability, you need to get a drive that supports it, and our 3.x CD-ROM drivers.
MediaVision supplies CD-ROM drivers for all their cards. Trantor supplies only other drivers such as hard disk, etc.

>Does anyone know the specs of the NEC 74 and 84 CD-ROMS? I'm specifically
>interested in whether they support the XA standard and the Photo CD standard
>(and whether it's single or multi-session). I've been reading about these, and
>wonder whether I've got them. All info gratefully accepted.
The NEC 74 and 84 are single session Photo CD compatible when used with the
PAS 16 SCSI interface. There is currently no support for XA audio.

MICROSOFT WAV WON'T PLAY:
The files supplied by Microsoft are using a compression system which, when the PAS and its software were developed, was not standard. MV decided to wait until a standard was developed. At this time the PAS or its appletts do not support compression.
3/2/93: Media Vision is working on a new version of Pocket Recorder that
will support multiple compression types, including Microsoft's MSADPCM.
If you buy a copy of one of Microsoft's SoundBits packages, system software
is added that allows playback of compressed files.

MIDI

>Midi plays fine in Windows with my PAS16. However, when I open a DOS window
>the midi cuts out completely. If I close the window it resumes.
Try commenting out the line device=vpasd.386 in system.ini

The MIDI file itself determines the requirements of MIDI Mapper. If the file was written in extended MIDI, then it will not really sound right unless you have an external MIDI device attached. The PAS cards use GENERAL MIDI (channels 13-16) for outputting to the speakers.
The Voyetra driver is the driver for the card, and the Pro Audio Spectrum driver is the choice for output to a MIDI device.
The drivers contain a MIDIMAP.CFG file, which sets up the MIDI Mapper. It is set for all Pro Audio Spectrum, as default.
MIDI Mapper is a WINDOWS supplied driver, and the explination of it should be in the Windows manual.

MIDIMATE

First, make sure you have MIDI Mate version 1.1. The P16QA.DOC file
in the library provides informaiton on how to tell the difference. MIDI
Mate 1.1 is required for proper operation with the PAS 16.
Make sure you're using the 1.45 version of Windows drivers, especially

mvproaud.drv. The time stamp should be 1:45 am. We've tested the
MIDI I/O with Microsoft's driver test tools and have found no errors
with our interface.

Recording

The PAS 16 uses two DMA channels. One is used for the Sound Blaster compatible PCM
circuitry, the other is used for the PAS native mode PCM circuitry. The PCM sections on the PAS
16 are independent of one another and thus it's possible to play two PCM sounds concurrently, or
to record on one, while the other is playing. This feature can be used in Windows today by
installing two wave drivers and running two copies of Media Player.

SoundBlaster

SB DEFAULT SETTINGS:
I wonder why this is since the "default" irq for the soundblaster (1.0/.5) is 7...
Setting a Sound Blaster to IRQ 7 is unreliable. The SB doesn't have an
IRQ status bit and IRQ 7 is the catch-all interrupt for spurious interrupts. (from MV)

>Why can the SB and PAS coexist at IRQ5 when that goes against all conventional
>wisdom? The PAS16 manual is quite specific that they can not share IRQ's and
>in many cases we have seen that was the users problem.
>Is the PAS that different from the 16?
The PAS Plus is a different design. It can't play Sound Blaster and PAS
digital audio simultaneously. That's because they share the same DAC.
PAS Plus owners are familiar with the SB_ON and SB_OFF files that enable
and disable Sound Blaster compatibility.

OPL-3 (FM Synth)

The PAS OPL3 driver takes care of all the FM sounds. It has problems if the Windows AdLib
driver is also loaded.

The 1.44 drivers do not install a SB driver as such, but for SB support it uses the OPL-3 driver.
Try running these programs in standard mode, and see if you are getting the same errors. A
share violation is when the computer thinks two or more applications are trying to use the same
file at once- that is access it in some way (usually writing to it). This may be caused by multiple
drivers trying to write to the file.

OS/2

1/25
Here's an update on the PROMIX2 startup failure that some of you are having: There was a bug.
For those of you that care, it was caused by making DIALOG calls during the WM_INIT message.
We'll release an improved mixer along with a new driver soon.

>1. The MIDI player will not work. Regardless of the device (General MIDI, >M-AUDIO or M-
AUDIO General) all I get is 3-4 scratchy noises and the MID file >jumps to the end.
MIDI is not supported in the current BETA release. Check the readme.txt file.

Here are the reasons why you can't run TBPro in a DOS/OS2 session:
    1) MVSOUND.SYS has a bug in that it doesn't reset the sample
       rate timer mode.
    2) TBPro generates too many interrupts for OS/2 GA to handle.

3) Auto-init (looping) DMA mode was not supported for VDM's in
          the original OS/2.
All of these problems are being corrected for OS/2 2.1. Media Vision is
also working on additional OS/2 multimedia support.

In conducting an OS/2 beta program, I hoped I wouldn't have to help people
install Windows drivers. Anyway, here's how to install the drivers in
WinOS2:
IN SYSTEM.INI:
[drivers]
wave=sbwave.drv
midi=opl3.drv
midi1=mvproaud.drv
mixer=mvmixer.drv
aux=mvproaud.drv
[opl3.drv]
drumchannel=10
Make sure you have all the .drv files in your WINOS2\SYSTEM directory.
Also make sure MMMIXER.DLL is in the same directory.

3/5
Things are going great with OS/2 support of Media Vision hardware:
  Our current MMPM drivers support the SCSI interface, 16-bit record/playback,
  all mixing features, MIDI output and FM synthesis.
  We have worked with IBM to solve all DOS and Windows compatibility issues
  related to our hardware
  Sony is developing a driver for the Sony proprietary bus which is used
  with the Sony 31A drive.
  OS/2 2.1 will have greater multimedia support than has previously been
  announced, surpassing Win 3.1's multimedia capabilities.
We currently have an OS/2 beta kit in the Media Vision forum that only
provides support for SCSI and wave playback. When IBM ships the second
beta OS/2 2.1 CD_ROM, the new drivers will be made available.
Monitor the Media Vision forum to stay current on OS/2 multimedia!

POPPING

Do you have a local bus computer? I only encountered this problem when I upgraded from the
1.2 drivers to the 1.45 drivers. When I re-installed 1.2 the popping problem ended. I think 1.45
has problems with VLB machines, as least it does with my Gateway 486-33VLB. Brett @ MVI
says their engineers are looking into this phenomenon. My board works great on my Gateway w/
the 1.2 drivers that came with the PAS16   12/15/92. The pops only appeared when I upgraded?
to 1.44 & 1.45.

On most systems with OPTI chipsets, the Pro AudioSpectrum 16, Plus and CDPC,
will emit strange sounds. These sounds have been described as crackling,
popping, scraping, noise and hiss.
The OPTI chipset problem that we've mentioned concerns the fact that most
systems with OPTI chipsets have an OSC signal (14.1 MHz oscillator) that
doesn't conform to spec. That crystal is supposed to have a 50% duty cycle
but the OPTI chipset has an 80% duty cycle.
All of the PAS hardware can handle the bad OSC signal except the YAMAHA
OPL-3. The OPL-3 is the Adlib-compatible synthesizer chip that the Pro
AudioSpectrum Plus, Pro AudioSpectrum 16 and new Pro Sound Blaster Two use.
That chip is only available from Yamaha and we have to live with its

incompatibility with the OPTI chipset.
All is not lost, however. Media Vision's hardware engineers had the
foresight to provide a substitute 14.1 MHz signal that is derived from the
Pro AudioSpectrum and not from the motherboard. To enable this feature,
you must add 'T:1' to the config.sys entry "device=mvsound.sys"

MIDIMate

The programs that are ONLY SB compatible will not work correctly with the PAS/MIDI Mate
combination. There is something to do with the interfacing with the computer. The new OPL-3
stereo chip has a lot to do with it.
You will need a program such as MIDI SOFT's Recording Session, Cakewalk for Windows, Trax
Pro, etc.. These programs will work with our card.

NT Support

2/7
>I would like to know what the status is on the NT drivers for the PAS 16??
>Are they going to become available anytime soon??
NT drivers are still in development.
  SCSI support is in Alpha stage.
  Audio support is in pre-Alpha stage.

3/5
Media Vision's drivers are playing back 16-bit digital audio now under NT and we have some
mixing support working as well. MIDI, FM synthesis and configuration details are still to be dealt
with.
Trantor has developed a relatively stable SCSI driver.
We hope to make an Alpha kit available when Microsoft releases the NT final beta which is
expected sometime soon.

Misc Problems

On my 486/33 while in Windows most of my system sounds come thru my PAS16 with Labtec
Speakers connected. However some sounds only come thru my PC Speaker. Ex: While in
Quicken for Windows the confirmation beep (confirms transaction recorded) will only come thru
my PC speaker. ALL sound came thru my PAS16 on a 386sx/16 I was using in the past. Why is
this??
Some motherboards don't support PC-speaker (timer) emulation.

Do the current drivers support OLE (e.g. putting a voice annotation into a Word for Windows file)?
OLE is implemented by applications, not drivers. Media Vision's Pocket Recorder and Pocket
Mixer are OLE aware. You can use these applications to record a file and insert it into the object.
Unfortunately, you can't yet embed an existing wave file.

You were right with pctools. The **Ramboost** feature was a real conflict.

Games

Mother Goose - Do you have a 486-based system? If so, contact Sierra for a copy of the
MGCD486.EXE. My understanding of the problem was that the routines which initialized the
sound card had a delay loop which didn't wait long enough on a 486 system. I had the same
problems under DOS which you've listed; the new driver fixed them.

I also have Diamond SpeedStar 24x video card. I can't install Sierra multimedia games; can't do it with any of my Diamond drivers despite what Sierra. They at first told me it was just a problem using more than 256, but when I tried to install with the 256 driver - it wouldn't. I also found out that Sierra has had a lot of problems doing multimedia games. Looks like they don't know how to program under windows.

XWing must have the SB portion at IRQ7 not 5 to get sound.
I have a GW 486/33 and a the PAS-16. I found that SB IRQ5/DMA1 and PAS IRQ7/DMA3, SET BLASTER=A220 I5 D1 T3, and choice of SBPro works just fine.

The PAS (Original) was an 8-bit board which was not Sound Blaster compatible, and will not give the digital sound effects you would want with your games.
While the PAS-16 is capable of handling files created by the PAS, games do not recognize the 16-bit PAS-16 as a PAS board.
The proper selection for the PAS-16 is Sound Blaster.

Putt Putt fix. I changed my PUTTDEMO.ini to"DigitalSoundDriver=paudio.com MidiSoundDriver=pasopl.adv" as Howard suggested and I get great sound from my PAS + and TEXEL.

Some of the -not quite recent- Sierra games had drivers for the original pas only. The install program won't recognize the pas16, except for its soundblaster and adlib capabilities.

Also, with the -new- games (Space Quest 4 CD, etc) you are better off picking the pas16 for the music but the soundblaster for sound (voice and effects). The sound effects and voices are 8 bit, and 8 bit wav files play better through an 8 bit DAC than a 16 bit DAC.

WCII MEMORY
I had written earlier on the fact that I couldn't get 600K of conventional memory using EMM386. This was when I was trying to get Wing Commander to work. By the way, I agree that it is hardly worth the effort to get the speech working, but I couldn't stop becuase I felt it SHOULD work if it was supposed to. Anyway, In looking in a FALCON 3.0 addendum, I found a way to run EMM386 that gives me a full 612K of conventional! It is this: Device=EMM386.SYS 2048 ram frame=e000 That frame=e000 was the key. I don't know what it does, but it allows everything to be run in upper memory! (actually, I found that line on a sample config.sys in the falcon directory, called config.001 or something like that) I hope I copied it down right, but had I found it earlier, it would have saved me many hours of frustration, and has kept me from having to buy QEMM.

Gunship2000 3/2/93
1. Original Gunship 2000 - Highest patch level is .06 [file GS2V06.zip] over
in GAMBPUB, Microprose section. This may be the version shipping if you
have got a newly shipped version [i.e. it hasn't been sitting on the shelf
for lots of months..]
2. File ASNDGS.ZIP which adds to .06 and is the support for the PAS-16 sound
card [Also available over in GAMBPUB]. This too `might' be shipping in your
retail version depending on the age...

Castle Wolf
You're right, the only game I have that needs the IRQ7 is castle wolfenstein. And even this plays with IRQ5, but I lose some echos and sound effects (I noticed this only playing wolf on another comp with SB and IRQ7)

Pocket Mixer

Every time I open the Pocket Mixer, I get an error message: " The mixer device is inconsistent with the MID." I click on OK and then get: "Cannot find mixer device with PID (using alternate)" Whats happening?

Delete these entries from your WIN.INI file, they have become corrupted.
When Pocket Recorder and Pocket Mixer are run next time, they'll create
new entries in WIN.INI.

[Media Vision Pocket Mixer]
[Media Vision Device Specification]
[Media Vision Pocket Recorder]

Programs

I spoke to Microsoft today since I was using their SoundBits package and they said that SoundBits only works with the DMA set to 7.

Wired for Sound Pro

When I got WFS, the sounds it made were much quieter in volume. If I increased the master volume, then WFS sounds were ok, but everything else is too loud!
The problem? Well maybe not a problem in the eyes of the programmer of WFS! WFS adjusts the PCM volume to 50 (or whatever volume you set it to for that event) when the sound is played! Leave the pocket mixer running and you can see the meter jump down, then back up when WFS plays a sound.
You can set the volume level for each sound in the WFS setup box, but this is a pain to do for all sounds. What I did was to go in and modify my .WFS file. At the end of the file is an [EventVolumes] section. Change all the numbers after the equal signs to 99 (or whatever setting you use for the PCM setting in Pocket mixer). Then the volume for WFS sounds should be the same as other WAV files in Windows. I use a different file than DEFAULT.WFS.

Can't Find MultiMedia Extensions
In your system.ini [386 ENH] secction look for the following driver: device=*vdmad.
If it is not there, search for any driver containing vdmad, and comment it out, and add "device=*vdmad".
if it is there, still search for any other drivers containing vdmad, and comment them out (typical cases are device=vdmadx.386, and so on)
This is usually the problem for that error.

Check to see that you have the following drivers in your Windows\System directory:
MMsound.drv
Sound.drv
MVproaud.drv
MVmixer.drv
OPL-3.drv
MVFM.drv
It may also be that your System.ini has a conflicting driver loading such as VSBD.386, or VADLIBD.386.

CDPC Problems:
I got a call from Bruce at MVI, who finally tracked down the problem in the SYSTEM.INI file. After I changed the line from device=vdmad.386 to device=*vdmad, it worked like a charm. This is, however, after spedning two hours refiguring my hardware to free up DMA 5 and IRQ 10 -- apparently the only combination that works with the Gateway 2000 computer.

PAS Upgrade

(4/5) The Studio version of the PAS 16 include 2 Hardware upgrades over the original PAS 16
a) a Line level output for high quality output (no 4 watt amps to add hiss.)
b) the new "D" rev of the chip which eliminates jumper settings - all settings are controlled by the software. - The PRO Studio also includes: Voice recognition software for Windows, Sound impressions full audio control software, MIDISoft Recording Session, and Software compression for Windows. The product is brand new, and there may not be any literature available yet. Call sales at 1-800-845-5870 and if there is any available, they can get it to you.

Video - Diamond

2/17:
I have been trying to get the PAS-16 to work with the Diamond Stealth 24 VLB card for a month now - two different dealers have had no luck configuring a system for me. Today, the Diamond techs told me that their compatibility department said they have had complaints about noisy sound out of the PAS-16 AND the Sound Blaster with the Local Bus version of the Stealth board. They had no solution unfortunately - didn't know whether it was a shielding problem or "something inherent with Local Bus".

Diamond 24 VLB card troubles:
A former Sr. Tech of Diamond who now works for us suggests that you make sure that your COM 4 port is disabled. The Card uses the same address as COM 4 for some 16 to 8 bit conversions.

Not Filed

Since the T&L is only SB compatible, there is no MVSOUND.SYS, just a switch block.

What happens if you comment out the mvsound.sys Driver? The new windows drivers will then function using the settings in the System.ini file. (of course there will be no sound from DOS apps.)

IBM Value Point systems:
Try adding the /W to your MVSOUND.SYS command line, that has been reported
to fix problems with Quadtel and Phoenix BIOS's.

Media Vision, Inc   Main: (800) 348-7116 or (510) 770-8600
3815 LaurelView Ct.   Sales: (800) 845-5870
Fremont, CA 94539   Tech Support: (800) 638-2807 or (510) 770-9905
                        FAX: (510) 770-8648 or (510) 770-9592

BBS: (510) 770-0968 2400   (8 bits, no parity, 1 stop bit)
     (510) 770-1661 2400(8 bits, no parity, 1 stop bit)
     (510) 770-0527 9600(8 bits, no parity, 1 stop bit)

Developer Assistance Program: (800) 472-6147

there is another way to load MSCDEX high with EMM386.
I picked up this solution from Kevin Martin (71221,761) on MSDOS forum:
"In CONFIG.SYS, DEVICE=C:\WINDOWS\EMM386.EXE NOEMS I=E000-EFFF.
In AUTOEXEC.BAT do all SET commands first, then make LoadHigh MSCDEX your first load --
before SMARTDRV or any other LH's. I had to have 180 KB in free UMBs before MSCDEX

would budge, but once it did, it left LOTS of room for other stuff up high (SMARTDRV, VESA, AMOUSE, DOSKEY, MIRROR, etc). AND 619 KB of conventional memory!"
This worked for me also -- BUT only with the NOEMS parameter. The Include parameter is only to make enough room (for me, 159 KB of UMB was enough) for MSCDEX to go high. Elegant solution, if you don't need expanded memory. I hope this helps.

A PAS 16 will not emit any sort of squeal except in the following circumstances:

    1) Feedback: this occurs when trying to record from the PCM
       channel. This rarely happens, though, and MVSOUND.SYS
       resets the board so that it wouldn't be in a feedback
       configuration. Double check that your Windows settings
       don't have the WAVE channel set to record.

    2) OPTI chipset OPL-3 noise. If you're getting noise from
       the synth channel (percolation, rasping, squeals, etc)
       Add the T:1 switch to MVSOUND.SYS in your CONFIG.SYS
       Make sure you're using the Windows drivers version 1.45
       (the time of mvproaud.drv should say 1:45am.) and
       verify that you have a 12/92 or later MVSOUND.SYS.

    3) Your card could be defective. After verfiying the problem
       can't be caused by possibilities 1 or 2, contact Media Vision's
       toll-free tech support number for an RMA number and we'll fix it.

Thunder Board refers to our SB support only product called the Thunder Board. The PAS 16 combined the PAS original with a Thunder Board (SB support).

This document describes the pinout for the following Media Vision
hardware:
Pro AudioSpectrum
ThunerBoard
Pro AudioSpectrum Plus
Pro AudioSpectrum 16
Connector Type: D-15S

 Pin # 1: +5V DC
 Pin # 2: Joystick #2 button #1
 Pin # 3: Joystick #1 X-axis
 Pin # 4: GND
 Pin # 5: GND
 Pin # 6: Joystick #1 Y-axis
 Pin # 7: Joystick #1 button #2
 Pin # 8: +5V DC
 Pin # 9: +5V DC
 Pin #10: Joystick #2 button #1
 Pin #11: Joystick #2 X-axis
 Pin #12: MIDI OUT (GND on MIDI Breakout Box and ThunderBoard)
 Pin #13: Joystick #2 Y-axis
 Pin #14: Joystick #2 button #2
 Pin #15: MIDI IN (+5V DC on MIDI Breakout Box and ThunderBoard)

 If it says "PAS 2" on the card, it's a Pro AudioSpectrum Plus.
Otherwise, it's a PAS 16. The PAS Plus can't record or play 16-bit files.

Disables 486 cache and slows down some DOS games/sounds:
The file name is "486SLO.ZIP" and I found it in Lib 13 on FSForum.

The PAS 16, and the Fusion 16 cards are different. The Fusion 16 card has all software set options, and includes MPU-401 support. The PAS 16 has jumper blocks, and doesn't support MPU-401.

3/4:
Media Vision will soon release a 16-bit text to speech engine that is pretty awesome. You can actually turn your back on the computer and understand what it's saying! That's a first.
Expect an announcement in April