MPC UPGRADE KIT'S
MOST COMMONLY-ASKED
QUESTIONS AND ANSWERS
                         January 25, 1992

THE MEDIA VISION MULTIMEDIA PC UPGRADE KIT CONTAINS:
    Media Vision Pro AudioSpectrum Audio Adapter Board
    Internal SONY CDU-541 CD-ROM Drive (SCSI, 380ms, 150KB, 64K buffer)
        (one caddy, one terminator, one SONY manual)
    All necessary cables to connect the SONY drive to the PAS
        (one audio cable, one 50-pin flat ribbon SCSI cable)
    Multimedia Upgrade Kit Hardware Installation Disk v1.02
        (MVSOUND.SYS, TSLCDR.SYS, MSCDEX) in both 3 1/2" and 5 1/4"
    Microsoft Windows 3.0 with Multimedia Extensions 1.0 on CD
    Compton's Multimedia Encyclopedia by Brittanica Software on CD
    Jones in the Fast Lane by Sierra On-Line on CD
    Introducing Windows with Multimedia v1.0 Manual (blue covers)
    Three Steps to a Multimedia PC Manual (blue covers)
    Installation Guide, Read Me First! (8-page pamphlet)

ABBREVIATIONS:
    MPC   = Multimedia PC
    PAS   = Media Vision Pro AudioSpectrum
    TB   = Media Vision Thunder Board
    MWINDOWS   = Windows 3.00a with Multimedia Extensions v1.0
    CD-ROM Drive = SONY CDU-541 SCSI CD-ROM Drive
    RMA   = Return Material Authorization number

Generic CONFIG.SYS:
    DEVICE = C:\MWINDOWS\HIMEM.SYS
    FILES = 30
    BUFFERS = 10
    LASTDRIVE = X   (Refer to Question 12 below)
    DEVICE = C:\DOS\SETVER.EXE   (Refer to Question 10 below)
    DEVICE = C:\PROAUDIO\TSLCDR.SYS /D:MVCD001 /R
    DEVICE = C:\PROAUDIO\MVSOUND.SYS D:X Q:X V:X (Refer to Question 2
                                    below)
    DEVICE = C:\MWINDOWS\SMARTDRV.SYS 2048 512

Generic AUTOEXEC.BAT:
    @ECHO OFF
    PATH = C:\;C:\DOS;C:\MWINDOWS;C:\PROAUDIO
    PROMPT PG
    C:\PROAUDIO\MSCDEX.EXE /D:MVCD001 /M:12 /L:X /V
        (X is the drive letter assigned to the CD-ROM drive)

The current version for TSLCDR.SYS is v1.31e and for MSCDEX.EXE is v2.2.
If you have an older version, please contact Media Vision Technical Support
for updated drivers. When calling, please provide us with the version
number which you currently have.

SOUND TYPES:
    Digital Audio   = Recorded sounds, usually speech and sound effects.
                       These sounds are played back by the Digital-To-
                       Analog Converter (DAC) on the PAS. Called

"WaveAudio" and designated by the ".WAV" extension
in MWINDOWS.
Synthesized Audio = FM sounds, usually music but can also be used to
produce speech and sound effects. These sounds
are played back by the FM Synthesizers on the PAS.
Called "Sequencer" and designated by the ".MID"
extension in MWINDOWS.

CD Audio   = Sounds produced by the CD-ROM drive which can be
heard when connecting the headphones directly to
the CD-ROM drive. Also known as Red Book Audio.
PC Speaker   = Crude music tones, speech and sound effects
produced by the System Timer Chip on the
motherboard. These sounds are played back by the
internal PC Speaker.

INTERNAL CD-ROM DRIVES SUPPORTED BY PAS:

Chinon   CDS-431. Please contact Chinon at 310-533-0274 to get
the 40-pin to 50-pin converter.
Hitachi   CDR-3650
NEC   CDR-80, CDR-82, CDR-83
Sony   CDU-541
Texel   DM-3020, DM-3021
Toshiba   XM-3201B

EXTERNAL CD-ROM DRIVES SUPPORTED BY PAS:

Apple   CD-SC (Sony CDU-8001)
CD Technologies   Porta-Drive
Chinon   CDX-431
Denon   DRD-253
Hitachi   CDR-1553S, CDR-1650, CDR-1750S
IBM   3510
Laser Magnetics   CM212, CM214, CM231
NEC   CDR-35, CDR-36, CDR-72, CDR-73, CDR-77
Panasonic   CR-501-S
Pioneer   DRM-600 6-disc changer
Sony   CDU-6211
Texel   DM-3010, DM-3120, DM-5020, DM-5021, DM-5120, DM-7120A,
DM-7120B
Toshiba   XM-3201A, XM-3301, XM-5100A

If your CD-ROM drive is not on this list, it will NOT work with the PAS.
If it is on this list and you would like to use the Pro AudioSpectrum's
SCSI interface to control the CD-ROM drive, please contact Media Vision
Sales at 1-800-845-5870 to order an Internal SCSI Cable/Driver Kit for
$39.00 or an External SCSI Cable/Driver Kit for $79.00.

PRO AUDIOSPECTRUM USES THE FOLLOWING:

DMA 1 at default. Selectable between 1, 2 and 3.
IRQ 7 at default. Selectable between 3, 5, 6 and 7.
And all of the following I/O port addresses which are fixed:

```
    Speaker          042h     Speaker Timer Count*
                     043h     Speaker Timer Control*
                     061h     Speaker Control*
    Joystick*        201h     Joystick Status
    FM Synthesizer   388h     Left FM Synthesizer Address
                     389h     Left FM Synthesizer Data
                     38Ah     Right FM Synthesizer Address
                     38Bh     Right FM Synthesizer Data
    Interrupt Ports  B89h     Interrupt Control
                     B8Ah     Audio Filter Control
                     B8Bh     Interrupt Control Register
    PCM Circuitry    F88h     PCM Data
                     F89h     Reserved
                     F8Ah     Cross Channel Control
                     1388h    Sample Rate Timer
                     1389h    Sample Buffer Count
                     138Ah    Local Speaker Timer Count
                     138Bh    Local Speaker Timer Control
    SCSI Interface   1F88-1F8B SCSI Register
                     3F88-3F8B SCSI Register
                     5F88-5F8B SCSI Data Register
*Located on PC system board
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NOTE:
Windows 3.00a with Multimedia Extensions v1.0 is a Microsoft product which is distributed by Media Vision. Many problems and questions can be answered by referring to your Windows 3.0 User's Guide. For questions that do not pertain to the Multimedia Extensions v1.0, please contact Microsoft Product Support for Windows at (206) 637-7098 for assistance. For questions that pertain to the specific software applications that support Windows 3.0 with Multimedia Extensions v1.0, please contact the software manufacturers for assistance.

QUESTIONS & ANSWERS:

*****************************PAS INSTALLATION*****************************
1. Q: Do I have to change any switches or jumpers before I install the
         PAS?
    A: The default settings will work in most computers. Only try with
         different DMA and IRQ settings if you experience any problems.
         Whenever changing the settings on the PAS, make sure you make the
         same changes in the MVSOUND.SYS statement, in CONFIG.SYS.

2. Q: What is the MVSOUND.SYS driver for?
    A: You must have "DEVICE = C:\PROAUDIO\MVSOUND.SYS D:X Q:X V:X" in
         the CONFIG.SYS file. The first two X's correspond to the DMA
         channel and IRQ settings. The third X in "V:X" represents the
         initial volume level, a value between 0 and 40, where 40 is the
         maximum volume level. This driver resets the mixers and the
         volume settings on the PAS. Without this driver, none of your
         Adlib games will play sounds.

3. Q: I have tried with all settings and PASTEST.EXE still fails.
    A: First, PASTEST.EXE may need to be run twice in a row. Second,
         reduce the system to a generic CONFIG.SYS and AUTOEXEC.BAT to

eliminate possible software conflicts. Third, remove all unnecessary peripheral boards (scanner, tape controller, network cards, etc.) in the system to eliminate possible hardware conflicts. Fourth, in most computers, it will accurately report if there are conflicts; however, in some 486/33 computers, it may not be accurate. If you have already tried everything and PASTEST still fails, go on and install the CD-ROM drive and then MWINDOWS.

*****************************SCSI INTERFACE*******************************
4. Q: Which CD-ROM drives can I use with the PAS?
    A: See CD-ROM Drives Support List above. The PAS has a SCSI interface which only allows it to control SCSI devices. Please contact Media Vision Sales for the SCSI Cable/Driver Kit (Internal/External).

5. Q: Do I have to use the PAS SCSI interface to control my CD-ROM drive which has its own controller?
    A: If your CD-ROM drive is SCSI, you can use its own controller or the PAS SCSI interface.

6. Q: Can I use the PAS to control other SCSI devices?
    A: Yes. Trantor Systems is currently selling SCSI drivers for the PAS for a variety of SCSI devices (hard disks, removable media, optical, etc.). Please contact Trantor Systems for the PAS driver set at (510) 770-1400. The price for the driver set is $59.00.
**********************CD-ROM DRIVE INSTALLATION*************************
7. Q: I get the error "No SCSI host adapter found".
    A: First, the SCSI CD-ROM driver is board dependent. If you would like to use the PAS to control the CD-ROM drive, you need to use our TSLCDR.SYS driver; otherwise, if you would like to use another SCSI controller (such as Adaptec or Future Domain) to control the CD-ROM drive, you need to use its driver (contact the SCSI controller manufacturer for the driver). Second, check the internal, flat ribbon SCSI cable to make sure it is properly connected to the PAS. Third, make sure the red painted edge of the cable is closest to the 4-pin connector on the PAS at J6. Fourth, make sure the terminator is connected securely to the back of the CD-ROM drive. Try both with and without the terminator. Fifth, reduce the system to a generic CONFIG.SYS and AUTOEXEC.BAT. Sixth, reduce the computer's bus (I/O CLK) speed to 10MHz or less. Seventh, if there is a co-resident Thunder Board, make sure Switch 4 (FM synthesizer switch) on the TB is set of OFF.

8. Q: I get the error "No devices respond on this SCSI host adapter".
    A: First, check the internal, flat ribbon SCSI cable to make sure it is properly connected to the back of the CD-ROM drive. Second, make sure the terminator is connected securely to the back of the CD-ROM drive. Try both with and without the terminator. Third, make sure you have inserted the computer's power plug into the CD-ROM drive connector and pushed it firmly into place.

9. Q: I get the error "Device driver not found: MVCD001. No valid CD-

ROM selected".
A: First, if you are using DR DOS 6.0, it is necessary to change the device name for both the TSLCDR.SYS and MSCDEX.EXE statements from "MVCD001" to "TSLCD". Second, make sure that the device names in both of these statements match.

10. Q: MSCDEX.EXE issues the error "Incorrect DOS version".
A: If you are using MS DOS 5.0, MSCDEX.EXE v2.2 requires that CONFIG.SYS has the statement "DEVICE = C:\DOS\SETVER.EXE". We will make an announcement in the BBS Newsletter when the new version of MSCDEX.EXE is available, which will not require SETVER.EXE when using MS DOS 5.0.

11. Q: I cannot use the CD-ROM drive.
A: First, make sure that you have connected the power supply's power cable to the CD-ROM drive. Second, refer to all questions listed above. Second, make sure the MSCDEX.EXE statement precedes any menu, DOS Shell, PCTOOLs, or any desktop manager statements in AUTOEXEC.BAT to ensure that the driver has been properly loaded.

12. Q: I get the error "Invalid drive specification" when I type the drive letter assigned to the CD-ROM drive.
A: First, make sure you have "LASTDRIVE = X" in the CONFIG.SYS, where X is the next logical drive letter after the letter assigned to the CD-ROM drive in the MSCDEX.EXE statement. Second, make sure that the TSLCDR.SYS driver statement precedes any driver statement that creates a RAM drive such as RAMDRIVE.SYS. Third, check if the TSLCDR.SYS and MSCDEX.EXE drivers have been loaded up properly. If not, refer to the questions above.

13. Q: I get the error "CDR 101: Drive not ready".
A: First, check the internal, flat ribbon SCSI cable to make sure it is properly connected. Second, make sure the terminator is connected securely to the back of the CD-ROM drive. Try both with and without the terminator.

14. Q: a. I get the error "CDR 103: CD-ROM not High Sierra or ISO-9660 format reading drive X. Abort, Retry or Ignore?"
b. My CD-ROM drive fails at random.
A: First, check if the LASTDRIVE statement and TSLCDR.SYS driver are loaded before a hard disk driver and/or a memory manager. If so, load the hard disk driver and/or memory manager first. Second, refer to the question above.

15. Q: a. How do I connect the internal audio cable?
b. I do not hear any CD-Audio at all.
c. I only hear through one channel (speaker).
A: The audio connector on the back of the CD-ROM drive has been keyed to connect only one way. Make sure it is properly connected. One end of the cable plugs into the back of the CD-ROM drive and the other into the 5-pin connector on the PAS at J7.

*******************************MWINDOWS*******************************

16. Q: I have Windows 3.0 already installed. Can I install MWINDOWS on
       top of my Windows 3.0?
    A: We DO NOT recommend installing over Windows 3.0. Either delete
       Windows 3.0 completely or install MWINDOWS into a new directory
       and call it \MWINDOWS.

17. Q: I have problems during MWINDOWS installation.
    A: First, use generic CONFIG.SYS and AUTOEXEC.BAT. Second, select
       the default VGA 640x480 16-color palletized driver. After a
       successful installation, you can install the high-resolution
       driver for your graphics card.

18. Q: While using DOS Shell, when I try to run MWINDOWS, I get an
       execution error and the computer locks up.
    A: First, exit DOS shell before running MWINDOWS. Second, make sure
       that MWINDOWS is in your path statement. Third, you must have
       "SET TEMP = C:\MWINDOWS\TEMP" in AUTOEXEC.BAT and also a TEMP
       directory under MWINDOWS.

19. Q: MWINDOWS does not load with QEMM installed. It loads fine after
       I removed QEMM.
    A: First, make sure that you have QEMM 6.0 (or better). Second, re-
       install QEMM 6.0 after you have successfully installed MWINDOWS.

20. Q: The blue manual titled Introducing Windows with Multimedia, page
       3-5, states under the "Are There any Multimedia Samples?" that
       there are .MMM movie files located in the \MWINDOWS\MMDATA sub-
       directory and to use the Media Player to display the movie files.
       However, I have not located any .MMM files.
    A: The next version of the MWINDOWS CD-ROM disk will contain the
       movie player and .MMM movie files. We will make an announcement
       in the BBS Newsletter when the next version of the MWINDOWS CD-
       ROM disk is available.

21. Q: I do not hear any digital audio and/or synthesized audio in
       MWINDOWS.
    A: First, this may be caused by an IRQ or DMA conflict. Try with
       different IRQs and DMAs. IRQ 7 may conflict with LPT1. DMA 2 is
       used by the floppy disk controller. Second, make sure that the
       IRQ and DMA settings on the PAS board, in the MVSOUND.SYS
       statement, and in SYSTEM.INI (at end of file) all match up.

22. Q: I can hear sound inside of MWINDOWS but the computer locks up
       upon exiting.
    A: We do not know what causes this problem. A few customers have
       been able to prevent the computer from locking up by going into
       the Sound section of the Control Panel to disable the sounds for
       SYSTEM_START and SYSTEM_EXIT. This is done by assigning <None>
       to SYSTEM_START and SYSTEM_EXIT).

23. Q: I am having trouble using Sound Recorder.
    A: First, Sound Recorder only allows 22Khz sampling rate, mono, and
       up to 1 minute of recording. Second, you must go into ProMixer
       to enable recording from the input source (change "play" to
       "rec"). Third, we will make an announcement when a new version

of Sound Recorder is available which will provide additional
features.

24. Q: There is a lot of noise in the microphone recordings.
     A: First, make sure that the microphone has 600-ohm impedance (or
          higher). Second, mount the microphone on a stand instead of
          holding in your hand. Third, use headphones instead of external
          speakers/amplifiers to eliminate the possibility of feedback
          which can cause distortion or noise.

*********************COMPTON'S MULTIMEDIA ENCYCLOPEDIA********************
25. Q: After running Compton's Multimedia Encyclopedia, I only hear
          sounds out of one channel (one speaker).
     A: When Compton's plays digital audio (represented by .WAV file
          extension), it puts the CD-ROM drive into mono mode and also
          shuts down one channel. You need to re-boot to reset the CD-ROM
          drive. Please contact Brittanica Software at (415) 597-5555 to
          add your name to a waiting list for an update.

********************MPU-401 AND SOUND BLASTER EMULATION*******************
26. Q: a.   Does the PAS support MPU-401?
          b.   Does the PAS support SB?
     A: a.   No. The MIDI Interface chip on the PAS is the Yamaha 3802
               MIDI controller and not the Roland MPU-401 MIDI Interface
               chip.
          b.   No. The method used on the PAS to record and play back is
               different on the existing SB card.

     Note: Media Vision has developed an emulation program which
               enables the PAS to emulate the MPU-401 in "DUMB mode" and
               the SB to work with most SB games. Please note that this
               program requires a 386SX or better and will work in DOS and
               Windows 3.0. This emulation program is called SB2MV.ZIP and
               is located in the ZIP files area of this BBS.

*******************************GAMES************************************
27. Q: My PAS is set to DMA 3 and IRQ 5. I hear music but I don't hear
          any sounds when running Sierra games that support the PAS.
     A: The PAS driver in your Sierra games require that the PAS is set
          for DMA 1. Some Sierra games also require IRQ 7. Sierra is
          working on updating the PAS driver to allow DMA 1/2/3 and IRQ
          3/5/6/7 to be selected. Please contact Sierra for the update.

28. Q: I have games/software that provide drivers for the SB and AdLib.
          Which driver should I select?
     A: The PAS is 100 percent AdLib compatible and will work with any
          package that provides driver for AdLib. If the package does not
          support digital audio, then the AdLib driver or SB driver can be
          selected. Otherwise, if the package does support digital audio
          with the SB driver, please refer to the "MPU-401 and Sound
          Blaster Emulation" section above.

29. Q: Does the PAS make my game sound better than my AdLib board?
     A: PAS.EXE is a utility that allows you to adjust the mixer, volume
          settings, bass, treble, loudness, enhanced stereo (will make a

mono signal simulate stereo), and realsound (to improve PC
speaker sounds).

30. Q: Sometimes when I play a game that supports AdLib, I only hear
          sound out of one speaker.
     A: There are two ways to run PAS.EXE. The first way is to run "PAS
          RESET" to reset the mixer. The second way is "PAS *" to bring up
          the Mixer Control Panel on screen. Press F1 to get help, then F4
          to reset the mixer.

31. Q: Until I run MWINDOWS, none of my games produce any sound.
     A: You must have "DEVICE = C:\PROAUDIO\MVSOUND.SYS D:X Q:X V:X" in
          the CONFIG.SYS file. Please refer to the "PAS Installation"
          section above.

32. Q: The joystick does not work at all or does not work properly when
          using the PAS's joystick port.
     A: First, some computers have a built-in joystick port on the
          motherboard. Other computers have a multi-I/O board that has a
          joystick port. Make sure that only one joystick port is enabled
          and the other one is disabled. Second, if the computer is too
          fast that may also cause a problem. Reduce the computer's BUS
          (I/O CLK) speed and try again. Refer to your computer user's
          guide for instructions on how to adjust the BUS (I/O CLK) speed.
          Third, contact the game manufacturer to ask for a joystick driver
          that works on fast machines.

*****************************MISCELLANEOUS*****************************
33. Q: Do you have a software development toolkit for the PAS?
     A: Please contact Media Vision Sales at 1-800-845-5870 to order the
          Pro AudioSpectrum Developer's Toolkit for $79.95. This toolkit
          contains a 3 1/2" disk which contains drivers, utilities, source
          codes for both DOS and MWINDOWS and a manual which contains a
          software reference and a hardware reference.

34. Q: Are there additional documentation and software available for the
          MPC upgrade kit?
     A: You can order the Pro AudioSpectrum User's Guide and Software Kit
          from Media Vision Sales for $15.00. The software in this kit is
          only for DOS and contains the following:
               Installation Software and Diagnostic
               AudioMate & Utilities
               SP Spectrum MIDI Sequencer
          If you have is kit and have questions/problems, please refer to
          the Pro AudioSpectrum's Most Commonly-Asked Questions and
          Answers.

Before returning a defective product for repair, please call to request an
RMA number first. Please contact Media Vision Technical Support at 1-800-
638-2807 if you have any questions or would like an update to this list.
Media Vision Sales can be reached at 1-800-845-5870.

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