Release Notes
for
Multimedia Services for Digital UNIX V1.6

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DIGITAL
Digital Equipment Corporation
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Preface

This document contains the release notes for *Multimedia Services for Digital UNIX V1.6*.

This document is supplied in PostScript (tm), text, and HTML form. Release notes can be found in the following locations:

- /usr/opt/MMERELNOTES160/ascii_docs/release_notes.txt (in ascii text)
- /usr/opt/MMERELNOTES160/ps_docs/release_notes.ps (in Post Script)
- /usr/opt/MMERELNOTES160/html_docs/release_notes.html (in HTML)

How to Read HTML Documents

Using *Mosaic*, an HTML version of this document can be read as follows:

1. Select *File* from the menu

2. Select *Open Local...* from the File menu
3. Enter in the box labeled *Name of local document to open*
   `/usr/opt/MMERELNOTES160/html_docs/release_notes.html`
4. Select *OK* in the dialog

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2. Select *Open File...* from the File menu
3. Enter in the box labeled *Selection*
   `/usr/opt/MMERELNOTES160/html_docs/release_notes.html`
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Associated Documents

- Multimedia Services for Digital UNIX Installation Guide
- Multimedia Services for Digital UNIX Run-Time Environment Guide
- Multimedia Services for Digital UNIX Programmer's Guide
- Software Product Description (SPD)
  - /usr/opt/MMERELNOTES160/ascii_docs/spd.txt (in ascii text)
  - /usr/opt/MMERELNOTES160/ps_docs/spd.ps (in Post Script)
- Cover Letter
  - /usr/opt/MMERELNOTES160/ascii_docs/cover_letter.txt (in ascii text)
  - /usr/opt/MMERELNOTES160/ps_docs/cover_letter.ps (in Post Script)
  - /usr/opt/MMERELNOTES160/html_docs/cover_letter.html (in HTML)

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Product Summary

Multimedia Services for Digital UNIX V1.6 contains support for the following operating systems:

- DEC OSF/1 V2.x
- Digital UNIX V3.x (all releases up to and including V3.2C)

Information about the supported hardware platforms for *Multimedia Services for Digital UNIX V1.6* can be found in the SPDs included with the kit.

About This Document

This document contains information which became available too late to be included in the official product documentation. Please read these release notes thoroughly before attempting to install or use *Multimedia Services for Digital UNIX V1.6*.

About This Release

The *Multimedia Services for Digital UNIX V1.6* product is provided as a runtime kit and a development kit. It provides support for the

- *Baseboard Audio (BBA)* device on TURBOchannel bus machines,
- *Microsoft Sound Board (MSB)* audio device on machines with an EISA or ISA bus,
- *Sound and Motion J300* option on TURBOchannel bus machines,
- *FullVideo Supreme* (AV301) option on AlphaStation workstations.
- *FullVideo Supreme JPEG* (AV321) option with JPEG support on AlphaStation workstations.
- *Software JPEG and Indeo®* compressor/decompressor (codec) devices,
- *Software MPEG decompressor*, and
- *Software IMA ADPCM* codec

The runtime kit provides:

- Runtime support for:
    - Audio Record and Playback services
    - Audio Codec services
    - Video Capture and Playback services
    - Video Codec services
    - Multimedia File I/O services
- Utility client applications (in executable form only)
- Sample audio and video data
- Installation Verification Procedure
- Man pages for runtime components

The development kit includes the runtime kit and also provides:

- Header files needed to develop applications and products
- Sample application programs (in source form)
- Man pages for programming interface

New Features in this Release

This updated version of *Multimedia Services for Digital UNIX* contains the following new features and enhancements:

- Support for the FullVideo Supreme JPEG video card (AV321) with JPEG support on the AlphaStation workstation.
- Support for two FullVideo Supreme and FullVideo Supreme JPEG boards in a single system, including heterogeneous support.
- The Indeo software codec now supports the streaming ICM interfaces.
- Improved throughput for the Sound and Motion J300 and FullVideo Supreme (AV301) devices. This should help overall performance for applications that perform multiple types of concurrent operations, such as teleconferencing applications.
- The Indeo compressor can now compress 24-bit Ximage data.
- The JPEG software codec can now render YUV and YVU9 data to 8-bit Ximage data through the ICDecompress interfaces.
- Expanded the API for videoSetFieldMode and videoGetFieldMode with field mode dominance support.
- Enhanced *audioplay* to play back RIFF AVI files that contain audio data.
- Modified *avirecord* to do software compression in the post processing phase. It captures YUV or YVU9 data up front, and then when the file is being written out in AVI file format, it will compress as well. This allows users to record synchronized audio and compressed video data when using the FullVideo Supreme (AV301) option card.
- Enhanced *DECsound (decsound)* with some new features:
    - Added *-device* command line option to allow audio device selection
    - Expanded wave file support for various sample rates and formats
- *Audio Control* supports variable formats for VU meter.
- Enhanced *AlphaVCR (alphavcr)* with a variety of new features:
    - Play File automatically differentiates an AVI file from an MPEG file
    - Variable video window sizes
    - Record rate selection and record statistics

- Improved performance for playing files, especially with Software JPEG
- Decompression device selection for Play File

Problems Fixed/Changed in this Release

This updated version of *Multimedia Services for Digital UNIX* contains the following changes:

1. Previously, if video streaming was stopped, new buffers added, and then video capture was restarted, buffers would be returned out of sequence. This is now fixed.
2. The Indeo software codec can now play back various sized clips simultaneously without corruption.
3. The base board audio device now properly clips out of range values. Previously, values produces were incorrect and resulted in noise.
4. Several memory leaks in libmme have been plugged.
5. The wave Resets no longer cause the mmeserver to hang.
6. *AlphaVCR* on Digital UNIX V3.2 no longer hangs while playing MPEG files.
7. Frame positioning slider in *AlphaVCR* now works for MPEG files.
8. The man pages for acmDriverOpen, acmDriverClose, admDriverDetails, acmDriverEnum, and acmDriverId have been included in the kit.
9. The ICSetBrightness function works using the software JPEG decompressor.
10. The balance slider for a stereo device in *Audio Control* works properly now.
11. Volume numbers displayed for the BBA device in *Audio Control* are now correct.
12. *Audio Control* no longers exits with an error if the 8khz mulaw format isn't available when the VU meter is being displayed. It will display an error and allow the user to continue.
13. *AlphaVCR* will no longer abnormally terminate if a write-protected file for record is chosen for Record.
14. In *AlphaVCR*, Motion JPEG format is the default record format. This entry does not have to be actually chosen from the menu in order to be the default as in V1.5.
15. Playing JPEG files with the Software JPEG codec performs much better, particularly on lower end systems.
16. Exiting out of *AlphaVCR* while playing an MPEG file by hitting ^C or by using the Motif Close option no longer leaves behind 1 shared memory segment.
17. *DECsound* no longer abnormally terminates when it reaches its maximum time limit for recording.
18. *DECsound* can now play Sun audio files that contain headers which contain an indeterminate length.
19. The port selections in *DECsound* have been removed. Use *Audio Control* to select ports.
20. The shared library objects for the device drivers have been moved to their respective driver subsets.

Applets No Longer Shipped

This section lists the applets that have been removed in this release of *Multimedia Services for Digital UNIX*.

- *dxvolume* - replaced by *Audio Control*

Scheduled Changes for Next Major Release

- The next major release of *Multimedia Services for Digital UNIX* will not be binary compatible with previous releases. The structures used in the APIs will be declared packed so their layout in memory will be different. This change will make source code more portable between Microsoft and Digital platforms.

  Source code for applications will need to be recompiled, but no other changes to source code will be required.

- DEC OSF/1 V2.x will no longer be supported.

Known Problems

This section lists the known problems with this release of *Multimedia Services for Digital UNIX*.

General Problems and Restrictions

- In this release, the *whatis* database is updated correctly. However, in previous releases, the *whatis* database may not correspond correctly to the associated man pages. The user may see an entry in the *whatis* database that was made obsolete in the man pages. To guarantee that the *whatis* database is correct, do the following:

  ```
  /usr/lbin/mkwhatis # This will take a couple of minutes
  ```

- The AVIStreamHeader has an additional field added to the end of the structure:

  ```
            DUMMYRECT             rcFrame;
  ```

  Currently, the functionality this field implies is not supported. It has been added to the structure to remain compatible with fields from files exchanged with PC's.
- The Multimedia Services driver subsets do not remove the directories created at installation during a deinstallation (setld -d). All of the driver installed files have been removed but the directories remain.
- If there is less than 64M of memory in a system with a FullVideo Supreme option, Digital UNIX V3.2C or later must be running. Earlier versions of the operating system may result in system panics at boot time.
- The TGA (ZLX-E*) graphics device X server libraries can experience a segmentation fault under some conditions. One such condition is from using the following piece of sample code and command line arguments:

  ```
  vidstreamin −fullframe −standard pal −fieldmode both
  ```

  For large windows on a TGA devices, Digital UNIX V3.2C and Open3D V3.0 will have a fix.

- The **Stray Callback** error message from libmme can appear if an audio device is closed but the application does not immediately exit, e.g., the audio rate is reset by reopening the device

(DECsound). This error message is not an indication of a problem. It indicates that your application will not receive the close callback message after closing the wave device, but all future operations will succeed. This will be fixed in the next release.

- Calls to free mme memory proceeded by other mme calls may cause the following messages from libmme: **CMMlib: sequence lost** or **CMMlib: unexpected async reply**. This problem can be avoided by not freeing that memory or by ensuring that there will be no callbacks when the mmeFree* call is made. It is the arrival of a callback after or during the mmeFree call that causes the error. For instance, if the code was written to only call mmeFree after all buffers have been returned from all devices, this problem would not occur. This will be fixed in the next release.
- The Multimedia Services library has debugging messages enabled which may be printed to stderr. These messages are intended to help the user diagnose a problem that might have occurred in the library. Please submit a problem report if these messages appear.
- The support for keyframe processing is currently incomplete. This is primarily an issue for generating files to be played back or edited on a system running Microsoft Windows or Windows NT Workstation. Keyframes are frames which can be decompressed without referring to any other frames in the stream. Non-keyframes require information from some of the preceding frames in order to be decompressed.

  There are several areas of the system which need to support keyframes. Below is the status of support in each area:

  Video capture

  The keyframe flag (VIDEOHDR.dwFlags & VHDR_KEYFRAME) is correctly set on buffers returned by the Sound and Motion J300 and FullVideo Supreme boards. These buffers may have been submitted for processing by either videoFrame or videoStreamAddBuffer.

  Video Compression

  The Sound and Motion J300 and FullVideo Supreme JPEG boards both correctly set the AVIIF_KEYFRAME flag in the lpdwFlags parameter to the ICCompress function. This flag is currently never set by the Software JPEG or Indeo ICM drivers. All JPEG compressed frames are independent, so software may process them as if this flag is always set, but there is currently no way to determine whether an Indeo compressed frame is a keyframe or not.

  AVI File Reading and Writing

  AlphaVCR correctly sets the keyframe flag (AVIINDEXENTRY.dwFlags & AVIIF_KEYFRAME) in all files that it writes, but does not do any special processing of keyframes on playback.

  The sample video applications (*avicompress*, *vidrecord* and *viddualrecord*), which are installed in /usr/examples/mme/video, do not currently set the keyframe flag in AVI files that they write. Because these samples do not skip frames to keep up with the desired frame rate, they do not need to worry about keyframes on playback.

Waveform Audio Problems and Restrictions

This section describes problems and restrictions in the waveform audio services along with work-arounds for the problems where known.

- The volume reported through the waveIn/OutGetVolume is slightly less than the volume set through the waveIn/OutSetVolume for the Sound and Motion J300 and MSB.
- When recording audio, ensure that the recording volume is set at an optimal level because if the input volume is high (either due to a setting or due to the input source), the recording might be distorted. Use the VU Meter in *Audio Control* to check if input volumes exceed the amplitude levels that the device is capable of handling without distortion.
- When recording data, if applications do not queue buffers to the mmeserver before the data is available for recording, the audio devices must handle the data in some manner. The different audio devices do not handle this condition in the same way.

  BBA Device

  This device maintains a cache of the last four seconds of data and will insure that no data is lost as long as buffers are received before data is discarded. If data is discarded, the BBA device will return buffers of silence equal in length to the amount of data discarded. To make sure that buffers are always filled with current data, instead of older data, the application may issue a waveInStop, waveInReset, and a waveInStart to cause the BBA to discard old data and begin recording current data again.

  MSB and Sound and Motion J300 Devices

  These devices will discard data if there are no application buffers available for recording, always keeping the data returned current.

Microsoft Sound Board Audio Problems and Restrictions

The Microsoft Sound Board Audio (MSB) support has the following problems and restrictions:

- MSB open is noisy depending on the version of the codec chip on the board. There are 3 different codec chips on the various MSB compatible boards. The click heard on start of play or record has been fixed for AD1848 J-grade and Crystal. It has not been fixed for AD1848 K-grade which is the sound card found on the AlphaStation 200 and AlphaStation 250 systems.

  There are three distinct audio codec chips used on Microsoft Sound Card and Microsoft Sound Card compatible sound boards. These are the Analog Devices 1848 J Grade, the Analog Devices 1848 K Grade, and the Crystal Semiconductor 4248. The particular audio codec chip in use on a particular sound card may usually be identified as follows:

  The audio codec chip is square, approximately 24mm long on each side, with 68 pins.

  An Analog Devices chip usually contains the Analog Devices logo followed by a line reading AD1848JP, AD1848KP, or just AD1848. It is believed (but not yet confirmed) that all J Grade parts contain the AD1848JP identification. All other AD1848's are K Grade chips. Two lines further down on the chip is a date code of the form, YYWW, where YY represents the year, and WW represents the week number (01-52). The K Grade chip went into production during 1993, so they all contain a date code of the form 93xx or higher.

  The Crystal Semiconductor chip contains a line reading CS4248 or CS4231.

The production version of the Digital-manufactured audio card shipped with the AlphaStation 200 uses the Crystal chip, although prototypes of the card used the AD1848.

The Oak Mozart sound card all use the AD1848 K Grade.

- Sometimes a user may experience a problem with noise on MSB and other systems using Microsoft window sound systems, with a microphone plugged in. An MSB card using an Analog devices 1848K that has a microphone plugged in, passes audio from the microphone through to the audio output but the audio is very distorted. This can happen with the machine in any state as long as it is powered up. On the AlphaStation 200 and AlphaStation 250 systems with the internal speaker hooked up, the distorted sound will come out the speaker.

Sound and Motion J300 Audio Problems and Restrictions

This section describes problems and restrictions in the audio services for the Sound and Motion J300 device.

- The Sound and Motion J300 audio crackles when the volume is changed, if the device is already opened by an application.
- Audio files played on the Sound and Motion J300 produce crackles when the play first starts and when it stops.

Baseboard Audio Problems and Restrictions

This section describes problems and restrictions in the audio services for the Baseboard audio device.

- When playing linear PCM encoded data on the BBA, there appear to be dropouts at the beginning or end of each buffer.

ACM Problems and Restrictions

This section describes problems and restrictions in the Audio Compression Manager (ACM) along with work-arounds for the problems where known.

- The implementation of the acmMetrics function is not complete in this release. acmMetrics will only return an error code, such as MMSYSERR_INVALPARAM or MMSYSERR_INVALHANDLE, if an error in the parameters is detected; or it will return MMSYSERR_NOTSUPPORTED, if no errors are detected.

Hardware Video Problems and Restrictions

This section describes problems and restrictions in the video capture services for the Sound and Motion J300, the FullVideo Supreme, and the FullVideo Supreme JPEG devices along with work-arounds for the problems where known.

- Due to on-board memory limitations on the Sound and Motion J300 option and FullVideo Supreme options, decompression of YUV or JPEG images to 8-bit Ximage format *(vidplay)* does not work for very large image sizes. The software has been updated to return an ICERR_BADFORMAT error for calls to ICDecompressQuery in such cases. ICLocate will also appropriately handle this situation.

- Frames captured for the Sound and Motion J300 have a black strip on the right-hand edge.
- Field mode dominance is not supported on the Sound and Motion board and Revision A of the FullVideo Supreme (AV301) board. If the video signal generates a frame with the video fields in reverse dominance of the video capture card, the results may exhibit some framing artifacts in full frame mode. For more information, refer to the Field Mode Dominance for Video In and Video Out section in this document.
- Using two Sound and Motion J300 devices alternately for either video capture or video output, the frame rates of one of the devices may be very slow. In addition, the timestamps returned with buffers may be incorrect.
- The timestamps on buffers returned from video capture in PAL or SECAM mode may become erratic.
- Video capture *(vidstreamin)* on the FullVideo Supreme can become jittery when the simultaneous playing back of JPEG data *(vidplay)* stops. The problem can be resolved by either resizing or restarting the capture window.
- Dual capture or playback of JPEG and 24-bit RGB is not supported on the Sound and Motion J300.
- Sometimes the first 2-3 frames of video captured from these video capture cards are corrupted. The sample code *viddualrecord*, *vidrecord* and *avirecord* have been modified to throw away the first 3 frames. Until this problem is fixed, we recommend applications ignore the first 3 frames captured after opening the video capture device.
- When recording with dual buffers (*(viddualrecord* and *AlphaVCR*) on the Sound and Motion J300 or the FullVideo Supreme JPEG option, tearing may occur on the video output images. Scaling beyond the input image size will most likely result in this condition.

Hardware Video Codec Problems and Restrictions

This section describes problems and restrictions in the video codec services for the Sound and Motion J300 and the FullVideo Supreme JPEG devices along with work-arounds for the problems where known.

- Simultaneously compressing YUV to JPEG *(avicompress)* and capturing video data *(vidstreamin)* will cause random noise to be inserted into the captured data. Note that dual capture *(viddualrecord)*, where the video frame is capture in JPEG/MJPG and Ximage/YUV does not suffer from this problem.
- The FullVideo Supreme JPEG option does not support dual buffer playback *(vidplayout)* of JPEG mono data. It does support playback of single buffer JPEG mono data.
- Compression of 24-bit Ximages is not supported. Convert the data to YUV to compress.

Software JPEG Codec Problems and Restrictions

This section describes problems and restrictions in the video codec services for the Software JPEG codec along with work-arounds for the problems where known.

- Software JPEG decompressor will produce a bad image if the image size is not a multiple of 16 pixel width by 8 pixel height.

- Software JPEG compressor quality setting (dwQuality argument) has no effect in the range 9000 to 10000.

Audio Control Problems and Restrictions

This section describes problems and restrictions in the *Audio Control* applet along with work-arounds for the problems where known. Note that *Audio Control* is the title of the *audiocontrol* utility.

- Balance controls are present for single channel audio formats.

AlphaVCR Problems and Restrictions

This section describes problems and restrictions in the *AlphaVCR* applet along with work-arounds for the problems where known. Note that *AlphaVCR* is the title of the *alphavcr* utility.

- When playing a JPEG file on a TURBOchannel systems, *AlphaVCR* uses the first Sound and Motion J300 option module for audio. On a TURBOchannel system without a Sound and Motion J300 option module, the Baseboard Audio will be used for audio.
- *AlphaVCR* does not support recording without an audio device.
- The audio and video may not be synchronized properly in some cases.
- Sometimes after recording a file with *AlphaVCR*, it says the file is 0MB long.
- The *-mpeg* command line option is obsolete. The *-play* option should be used for both AVI and MPEG files.
- When playing 8-bit Ximage files with *AlphaVCR*, the colors in the image on the screen may be incorrect. When an 8-bit Ximage file is played to video out, the video out image will be correct.
- The brightness, contrast and saturation controls are not enabled for playing MPEG files.
- *AlphaVCR* will only work on X systems where the default visual for the screen is 8 bit psuedocolor.
- After long periods (30 minutes) of using Live Video with the Baseboard Audio Device, the audio output may go silent.
- *AlphaVCR* can play AVI files that contain different image sizes. Files with images greater than 600x800 will be displayed clipped on the bottom and/or right edges. Files with images smaller than 300 pixels wide will be centered in the display.
- If the Record File function is run for several minutes before recording is started, the audio and video in the file may not be synchronized.
- After long periods of continuous operation (varying from 1/2 hour to several hours), *AlphaVCR* may eventually crash with an error such as this:

```
XIO:  fatal IO error 35 (Error 0) on X server ":0.0"
      after 542414 requests (542412 known processed) with 0 events
      remaining.
```

DECsound Problems and Restrictions

This section describes problems and restrictions in the *DECsound* applet along with work-arounds for the problems where known. Note that *DECsound* is the title of the *decsound* utility.

- Some information in the Help menu is out of date.
- Accessing the *DECsound* on-line Bookreader help may print out many **unaligned access** messages. These messages can be ignored.

Video Odyssey Problems and Restrictions

This section describes problems and restrictions in the *Video Odyssey* applet along with work-arounds for the problems where known. Note that *Video Odyssey* is the title of the *videoodyssey* utility.

- Playing an AVI file with an odd image size, a size not on a 4-byte aligned boundary, will cause *Video Odyssey* to display many **unaligned access** messages.

Sample Code Problems and Restrictions

- The sample code incorrectly handles 24-bit RGB for some displays. The Sound and Motion J300, the FullVideo Supreme, and the FullVideo Supreme JPEG video cards return red, green, and blue in different bytes than some displays use (refer to Figure 7-2 24-bit BICOMP_DECXIMAGEDIB in the *Multimedia Services for Digital UNIX Programmer's Guide V1.6*). The red and blue bytes must be swapped to display. Alternatively, applications can work with YUV data and convert to 24-bit when needed. The following equations convert YUV to RGB and RGB to YUV:

```
R = Y + (1.4075 * (V - 128));
G = Y - (0.3455 * (U - 128) - (0.7169 * (V - 128));
B = Y + (1.7790 * (U - 128);
Y = R *  .299 + G *  .587 + B *  .114;
U = R * -.169 + G * -.332 + B *  .500 + 128.;
V = R *  .500 + G * -.419 + B * -.0813 + 128.;
```

- Running *vidscreenout* can cause the display to be jumpy if the width or height is not a multiple of eight.

DECSpin Problems and Restrictions

The *DECSpin* product version 1.0A does not completely work with *Multimedia Services for DEC OSF/1 AXP V1.4* and later. The window which displays the users' own image is not updated properly. Data being sent to other users in the conference, however, is correct.

Programmer's Guide Problems

The following is information that is incorrect or missing from the *Multimedia Services for Digital UNIX Programmer's Guide V1.6* document.

- Expanded the API for videoSetFieldMode and videoGetFieldMode with field mode dominance support.

Field Mode Dominance for Video In and Video Out

Description

Capturing full frame video requires combining two consecutive video fields in one frame. Currently, there are no standards to determine if the odd or the even field is the first in a pair. The first field in the pair is referred to as the dominant field.

The most common result of reversed dominance are framing artifacts in full frame mode. These can best be seen by magnifying an area of motion in a captured frame. Temporal artifacts or jagged edges to images can be seen.

This condition occurs when the source and destination video devices do not agree on the field dominance.

New API Extensions

The video interfaces videoSetFieldMode and videoGetFieldMode have been extended. The previous interfaces accepted only the flag **VIDEO_MODE_FRAME** which indicated the application wanted to deal with full deinterlaced frames consisting of two fields. The interface failed to specify which field would be dominant, though the currently supported video devices used even field dominance.

The flag VIDEO_MODE_FRAME will now indicate the default dominance of the hardware device.

In addition, two new flags are introduced. **VIDEO_MODE_FRAME_EVEN_DOM** and **VIDEO_MODE_FRAME_ODD_DOM** for specifying even and odd dominance respectively.

If the field mode is set to **VIDEO_MODE_FRAME** and then a query of the field mode using videoGetFieldMode. the device will return the field mode dominance it is using (video capture only, a later release will return values for video output devices as well).

Not all devices can be adjusted. Setting the field mode to **VIDEO_MODE_FRAME_EVEN_DOM** or **VIDEO_MODE_FRAME_ODD_DOM** may result in an error if that particular dominance is not currently supported. If the dominance is not important to an application, simply use **VIDEO_MODE_FRAME**.

Applications deinterlacing images on their own should be aware of this condition. Applications may need to be careful about the placement of even and odd fields in the frames they compose (video capture) or decompose (video output).

Device Specific Information

Sound and Motion J300

The Sound and Motion J300 does not permit adjustment of the field dominance. It will always be set to **even**.

FullVideo Supreme

The FullVideo Supreme JPEG and Revision B of the FullVideo Supreme (AV301) allow the adjustment of the capture field dominance. By default, they will use **odd** dominance for capture. Both boards will use **odd** dominance for video playback and the dominance cannot be adjusted.

The FullVideo Supreme modules that support this fix can be determined by examining the yellow-orange module part number stickers on the module itself.

```
Revision A      54-23296-04.A01
Revision B      54-23296-04.B01
```

Sample Code

The sample application *vidstreamin* has been extended. The command line argument *-fieldmode* still accepts the parameter *frame* but now also accepts *frame_even_dominant* and *frame_odd_dominant*.

Stricter Parameter Checking

A change was made to the mmeserver in version V1.4 of *Multimedia Services for DEC OSF/1 AXP* to check certain parameters relating to structure or buffer sizes that are passed in various interface calls. For example, one such routine is videoStreamPrepareHeader. This may cause applications that previously ran successfully to fail. In particular, several of the sample code examples were passing the size of a VIDEOHDR pointer, not the size of a VIDEOHDR structure. The mme server drivers now check the size parameter to make sure it is at least the size of a VIDEOHDR structure.

If an application no longer runs and reports some type of bad parameter, check the size argument of the failing interface call and make sure the size matches the size of the structure.

If an application ran in V1.3 and no longer runs in V1.4 or later and reports a bad parameter or a video error, try running the mmeserver without the parameter checking enabled. It is recommended that someone contacts the supplier of the application to request the correct version. See the *Multimedia Services for Digital UNIX Run-Time Environment Guide* or the man page for mmeserver for details on the *-nocheck2* command line option of the mmeserver.

Further Information

A mailing list has been set up by a customer for discussion of Multimedia Services and the J300 module. This mailing list is not managed by Digital, but we believe it serves as a useful medium for questions and discussion about our product. In addition, if anyone would like to set up mailing lists for other topics of discussion, we would be happy to mention them in our release notes in future releases.

The following is the message posted on the InterNet about the mailing list.

DEC Multimedia Services and J300 Mailing List

The purpose of this mailing list is to discuss all aspects concerning the DEC Multimedia Services and the J300 Multimedia Turbochannel module.

All mail to this list must be in direct relation to the DEC Multimedia Services and/or the J300 Turbochannel module.

The mailing list will be open and un-moderated. We will however keep an eye on it :-) . We hope that the following topics will be discussed:

- *news about PD software using the J300 and/or DEC Multimedia*
- *programming hints*
- *discussion of problems, bugs etc.*

We hope to be able to provide in the future more services such as an anonymous ftp site for software, and, if possible, FAQ's etc.

How to subscribe:

send an email to: `majordomo@foto.chemie.unibas.ch`*, containing the line*
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