

Frequently Asked Questions about

M I S T

Is M I S T new in the industry?

M I S T has been developed for the past 2 years and it's in production for more than 12 months now. About 50 features have been done with it, with Red R3D footage, ARRI D21 RAW, DPX and of course was used as a conform/ingest tool for HD Cam SR and other VTRs. The company exists since 2009 but the team has been in the industry for more than 10 years working for other companies

What is the difference between M I S T and RedCine ?

The purpose of M I S T is to be a virtual telecine. R3D handling and RedRocket support is just one of the features of M I S T. These options turn M I S T into a DI deck for Red and then the uses are multiple: from dailies / QC / reviewing in full 4K to conforming and playout to SDI.

What is the difference with DVS Clipster?

Apart from the price difference, M I S T is hardware independent, meaning that you can choose your own hardware platform to run the solution, or choose a M I S T i/o that is fully upgradable. The DCP mastering features are not available yet in M I S T, like the support of DVS video boards, both to come later in 2011.

Does M I S T work in VTR slave mode?

Yes, M I S T works both in RS422 SLAVE and MASTER mode, and can either control a VTR for capture and record purposes, or be remote controlled by a hero system.

What composition file format does M I S T support?

- Final Cut Pro (xml)
- EDL CMX 3600
- OMF
- AAF (option)

Can I retrieve the comments from FCP?

Yes, M I S T permits to automatically import the comments from an EDL as well as Final Cut Pro XML. It is also possible to add manual comments and notes per event.

Does M I S T supports SGI ?

Yes, M I S T supports SGI file format, frequently used in 3D content creation.

Can M I S T handle both drop-frame TimeCode and non-drop timecode?

YES: M I S T, R A I N and O C E A N handle both drop frame and non-drop frame TimeCodes.

Can M I S T read H264?

Yes, M I S T is able to playback H264 encoded files, coming from Canon 5D or 7D for example

Can M I S T conform projects with Canon 5D material shot at 23.98 fps with non-drop frame time-code?

Yes, M I S T can conform such projects either by importing Avid EDLs or FinalCut Pro XML compositions. The conforming panel in M I S T has advanced tools to cope with such projects.

Can M I S T handle MXF MPEG2 for both SD and HD?

Yes, M I S T can handle these formats encoded into MXF, it is an optional feature. The encoding speed is dependant on the CPU, so for M I S T Prime make sure your system can handle 50Mb/s for SD and 100MB/s for HD resolution.

What LUT file format M I S T supports?

- ARRI

Does M I S T handle Avid DNxHD format?

Yes, DNxHD support is done both for reading and writing through QuickTime (free) or within MXF container (option).

Does M I S T can write in Apple ProRes?

For the moment, only the reading of ProRes files is available with M I S T.

How can I avoid compression problems in Final Cut Pro using files rendered in M I S T?

Final Cut Pro cannot handle the "video component" compression of QuickTime files without re-rendering them. To avoid such time loss, you can render your work in M I S T using a DNxHD codec for QT that is giving good results.

Does M I S T work with Windows7?

M I S T **prime** works with Windows XP 32bit and Windows 7 32bits & 64 bits. The turn-key solutions of M I S T are running under Windows 7 64bits.

What video IO cards M I S T Prime supports?

- BlueFish444 Lust card
- BlueFish444 Epoch card
- AJA Kona3

What is the minimum storage bandwidth requirements in order to use M I S T **prime**?

The minimum throughput depends of the picture format (see table below).

	Channels	Precision	Resolution	25 fps	30 fps
NTSC	3	10 bpp	720 x 480	31 [MBytes/s]	38 [MBytes/s]
PAL	3	10 bpp	720 x 576	38 [MBytes/s]	45 [MBytes/s]
HD720p	3	10 bpp	1280 x 720	83 [MBytes/s]	99 [MBytes/s]
HD1080p	3	10 bpp	1920 x 1080	186 [MBytes/s]	223 [MBytes/s]
2k	3	10 bpp	2048 x 1080	198 [MBytes/s]	238 [MBytes/s]
4k	3	10 bpp	4096 x 2160	792 [MBytes/s]	950 [MBytes/s]

Can I mix Stereo3D and 2D material in the same timeline in M I S T?

Yes, M I S T has a very versatile timeline capable of handling mixed material. Some clips can be Stereo 3D, others simply 2D, all can sit together in the same timeline.

What are the hardware requirements to playback 4K stereoscopic material with M I S Tprime?

For Stereo 3D playback the important things to consider are:

- 1) Disk system
- 2) Video card for output
- 3) Display device (projector, monitor, etc)

Regarding the Disk system, it needs to be able to play back 2 streams of source material but it also needs to have additional bandwidth for the disk overhead. The general rule of thumb is between 2.5 and 3 times the bandwidth of a single stream. If you use SAS drives (expensive), 2.5 times the bandwidth of a single stream is sufficient, but if you use SATA drives (cheaper), then plan on 3 times the bandwidth of a single stream.

For a single stream of 2K (2048x1556) 10bit DPX files, the required bandwidth is about 380MB/second. That means that for Stereo 3D playback of 2K (2048x1556) 10bit DPX files, you would need to have about 1 GB/second. This is the most demanding situation. If you work with QuickTime files then the bandwidth can be lower.

For a single stream of 4K (4096x3112) 10bit DPX files, the required bandwidth is about 1.2 GB/second. Stereo 3D 4K would require 3.6 GB/s

Besides the bandwidth, you have to consider the amount of storage required for the media. For a 2K movie, 3TB of storage is sufficient. But a 4K would require about 24TB. This can be very expensive

Video card for output: Video I/O boards like the Bluefish444 and AJA can only support DCI 2K (2048x1080). Only the Nvidia Quadro 5000/6000 + SDI Out can support the full 2K (2048x1556) playback in real time.

When playing back 2K material that is for film output, you need to use also Lookuptables (LUTs) for displaying the film look. These LUTs are 3D (color cubes). The Bluefish and AJA only support 1D LUTs (video) and only the Nvidia supports 3D LUTs.

The video output is done via 2 HD-SDI 4:2:2 (for left & right eyes). These SDI signals can be connected to a monitor/projector that supports dual HD-SDI and is capable of stereoscopic display (very expensive). The other option is to use monitors or projectors that use a single HDMI input but then you need a converted to go from the dual HD-SDI to single HDMI (this is the most affordable solution)

Display device for stereo display are getting more popular and you can choose from different solutions:

- monitors from Samsung, LG, Mitsubishi, JVC
- projectors from Barco, Christie, ProjectionDesign
- converters from JVC

Where can I find the User Guide?

For all our products we have the User Manual, the Control Panels Guides, the Installation Guides, and lots of other information available from the section DOC on our FTP. You are given the access together with your license or demo license.

For any additional information please contact us: contact@marquise-tech.com or download M I S T brochure from our website www.marquise-tech.com

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