Frequently Asked Questions about

R A I N

Is R A I N new in the industry?

R A I N has been developed for the past 2 years and it's in production for more than 12 months now. About 40 features have been done with it, with Red R3D footage, ARRI D21 RAW, DPX and from HD Cam SR and other VTRs: short or long motion pictures, commercials, TV series or video clips. 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 R A I N and the other color grading solutions?

R A I N has been designed since its beginning on the real-time all the time paradigm. Unlike other color grading solutions, R A I N is able to process, without previous transcoding, any native RAW data (RED One, RED Epic, Canon 5D, ARRI ALEXA, Phantom, etc), or any video signal. All these formats can be mixed in the same timeline, with different resolutions, frame rates or dimensions (2D files and stereo3D files).

The color grading features are extremely easy to use, thanks to an intuitive user interface, and a lot of toolset permit to save a lot of time when grading: QuickStore, GradeLibrary or StoryBoard or Versionning modes are available for easy save and retrieve of color decisions.

What is unique in R A I N?

R A I N is the only color correction system with real-time image restoration capabilities. Degrain/denoise, image stabilization or dust & scratch concealment are processed using the imageMill2 board from Cintel. R A I N adds to these features the same store/retrieve capabilities than for the other types of color corrections.

R A I N is also unique in terms of user interface: fluid, fast, discrete, beautiful and dynamic, its UI has been designed for productivity.

Does R A I N work in VTR salve mode?

Yes, R A I N works both in RS422 SLAVE and MASTER mode, and can either control a VTR for capture and record purposes, or be remote controlled by another system.

Can R A I N process 4K images?

YES, the color grading solution R A I N can process 4k frames, with the required disk bandwidth and appropriate graphic card.

In R A I N, can I access the grade libraries of other projects from the current one?

YES, the grade library in RAIN gives you access to the global library for all the projects, the library of the current project as well as all the libraries of the projects available.

What is the minimum storage bandwidth requirements in order to use softR A I N, the software version?

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]

What composition file format does R A I N support?

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

Can I retrieve the comments from FCP?

Yes, R A I N 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 R A I N supports SGI ?

Yes, R A I N support SGI file format, frequently used in 3D content creation.

Can R A I N handle both drop-frame TimeCode and non-drop timecode?

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

Can R A I N read H264?

Yes, R A I N is able to playback H264 encoded files, coming from Canon 5D or 7D for example

Can R A I N conform projects with Canon 5D material shot at 23.98 fps with non-drop frame time-code?

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

Can R A I N handle MXF MPEG2 for both SD and HD?

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

What LUT file format R A I N supports?

- ARRI

Does R A I N handle Avid DNxHD format?

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

Does R A I N can write in Apple ProRes?

For the moment, only the reading of ProRes files is available with R A I N.

How can I avoid compression problems in Final Cut Pro using files rendered in R A I N?

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 R A I N using a DNxHD codec for QT that is giving good results.

Does R A I N work with Windows7?

softR A I N works with Windows XP 32bit and Windows 7 32bits & 64 bits. The turn-key solutions of R A I N are running under Windows 7 64bits..

What video IO cards softR A I N supports?

- BlueFish444 SuperNova
- BlueFish444 Lust card
- BlueFish444 Epoch card
- AJA Kona3

Does R A I N support dual link or single link stereoscopic mode?

R A I N can output either two independent streams (one per SDI output) or a single combined stereo stream on a single SDI output using one of the standard modes like side-by-side, interlaced, etc.

Can I mix Stereo3D and 2D material in the same timeline in R A I N?

Yes, R A I N 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 softR A I N?

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 Lookup-tables (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 R A I N brochure from our website www.marquise-tech.com

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