

MEMO_MINUTES

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Transition from grandMA video to MA VPU

We would like to inform you about the next steps for the MA VPU and the transition from grandMA video to the MA VPU Software.

As a user of a grandMA video dongle version (either on MA mediaPC or self designed media server) you will encounter most likely the following situation: grandMA video software is installed on a computer (self designed or mediaPC) with some content likely the MA original content plus additional custom-made content. Mainly this will be any QuickTime coded content. The grandMA video software might be also installed on additional computers like laptops to use it as pre-visualization or control suite stations without any dongles in use.

Now, you can choose from one of the following options:

1. Leave everything as it is
You can stay with the grandMA video software and your known content. Please be aware that the grandMA video software as known today will not be further developed nor be implemented in future grandMA software releases. The grandMA video software will only work with grandMA 'series 1' software 6.121 or lower.
2. Update your MA mediaPC or media server to MA VPU software and benefit from the features of MA VPU plus
 - Performance increased tremendously – at least 4+ layer of 1080p are possible with 60fps.
 - The VPU is more integrated into the network than grandMA video ever was
 - Effects are added per layer and per output – each of them can handle 4 effects at the same time.
 - Colorkeying is built in now – even with a tolerance value for smooth transitions.
 - 3D keystone is possible by adding a 3D model on the output layer (real warping to come in one of the next releases)
 - Much easier Fixture handling by only 3 fixture types – the output fixture includes keystone, master, softedge and so on...
 - Prepared for Pixelmapping "in the console" – but still all other ways are available.
 - The VPU is able to run either with grandMA 'series 1' or grandMA2 – safe investment.

The VPU software comes with a new decoder to ensure best content results. That means – however – that new content is needed and the new one is based on MPEG-2!

Attention: All custom-made content needs to be rendered into MPEG-2. All old show-files are obsolete due to the fact that the new fixture types are not equal to the grandMA video fixture types!

3. Trade in your grandMA video dongle for a MA VPU
If you wish to benefit from the MA VPU's hardware improvement and all future possibilities of the MA VPU as well as preinstalled content, you can trade in one grandMA video dongle per MA VPU basic, plus or pro. Please contact your local dealer for details.

Launching the MA Video Processing Units (VPU) there is no more split between software and hardware. The dongles are discontinued – only the full package including dedicated hardware is available, the dongle is "built-in". For sure, everybody who invested into dongles will benefit of the new VPU functionality by installing the latest VPU release software.



With the MA VPUs there is no "open" operating system with any kind of default driver – they are all improved to serve the best result for the VPU. Also the decoder has changed for best performance results. That means – however – that new content is needed and the new one is based on MPEG-2. With any MA VPU there is some Gigabyte of content pre-installed.

However, we also offer an exclusive MA-Content-Package from showfootage.com – which offers you over 500 free selectable clips. To be precise: from a huge content library of renown designers you can download 320 SD clips, 120 HD720 clips and 100 HD1080 clips. This makes the MA-Content-Package the ideal way to individually extend the pre-installed content of the MA VPU.

Please check <http://www.malighting.com/showfootage.html> for further details.

From grandMA video to VPU. How to update your system:

After downloading the software from our webpage you just need to install it. The look & feel will be like the grandMA2 software. Then you need to download a new MPEG-2 decoder from Main Concept (link: www.mainconcept.com/site/prosumer-products-4/mpeg-2-22078/information-22089.html?L=0) and actually pay for it.

Should not be more than 49€. **Attention: Keep the key number!!**

From now on the software is fully functional. Please be aware of the fact that old shows from grandMA video can not be loaded anymore. Therefore the new showfile is absolutely compatible to grandMA2. All custom-made content might need to be re-rendered into MPEG-2.

As a former user of grandMA video you will easily discover the new functionality of the MA VPU software. Some functionality has changed as well as some naming. Please refer to the documentation like the online manual to learn about it. If you use the VPU software with an external dongle (old grandMA video) you will have the same performance like a MA VPU plus – in other words: there are no restrictions!

Major changes in a rough overview:

- Decoder and codec has changed! From QuickTime to MPEG-2! You need to buy it (with the VPU it is included)
- Old shows are obsolete
- Old content needs to be re-rendered
- New fixture types for VPU

What else to expect for the future?

- We are working on an integrated Pixelmapping – means the Pixelmapper of the VPU and the Bitmap-effects-engine will be "married" at a certain point. We divide Pixelmapping into two parts: PM by Art-Net (like it was before) and PM by MA-Net (the new style of PM).
- At a certain time 3D will be able to display the result of a VPU output for better preprogramming.
- 3D Keystone will get a real warping functionality

We hope that this document provides what you need to know about the transition from grandMA video to the VPU software. The grandMA video software ends with the first release of the MA VPU Software. For any further information please get in contact with us – we are glad to assist you!

About MPEG-2:

MPEG is the name of the "Moving Pictures Expert Group" who created a couple of international standards. One important one is the MPEG-1/2 (ISO/IEC 13818-part x) standard which will be used for the MA VPU. As MA uses Microsoft's DirectShow to render the textures (pictures) it will need a Codec¹ to be able to read in these pictures. This codec is the MPEG2 one from MainConcept. There are several formats that can contain MPEG2 videos, below are some well known ones:

- .mpg (MPEG-1 or MPEG-4 possible)
- .mpeg (MPEG-1 or MPEG-4 possible)
- .m2v (MPEG-2 Elementary Video Stream)
- .m2a (MPEG-2 Elementary Audio Stream)
- .m2s (MPEG-2 Elementary Data Stream)
- .vob (DVD Video Object)

The MPEG2 standard allows a couple of variation which are not so important to know but which will influence the quality of the picture. They are defined to be able to run several resolutions like full HD for example. That influences also the bitrate which can vary from approx. 3 to over 80 Mbit/s. As higher the bitrate as more workload for the CPU, RAM & so on.

¹Codec is short for 'compressor-decompressor', a piece of software that is able to decode and encode a certain format. By this definition, a DirectShow filter is not a codec.