

## MEMO\_MINUTES

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### Hardware Specifications 10/04

In general these are all recommendations – better hardware might end up in a better result as long as there is no special hardware support needed. The displayed solution is a high quality and tested by MA solution.

#### **grandMA VPU (“Dongle“-Version)**

IBM compatible PC – Dual Core processor with minimum 3.0 GHz CPU (SSE2)  
Min. 2 GB RAM  
Microsoft Windows XP operating system with Servicepack 3 or  
Microsoft Windows Vista or Microsoft Windows 7 operating system (with Admin-rights)  
Microsoft DirectX version 9 or higher  
Network card 10/100/1000 T/TX  
High-speed 3D graphics card with hardware acceleration, 1024MB graphic-RAM,  
Highly recommended: NVIDIA GTX285 (no ATI)

In terms of Software please also refer to all other documentations on our webpage: [www.malighting.com/support.html](http://www.malighting.com/support.html)

#### **grandMA 3D**

IBM compatible PC – Dual Core processor with 2.4 GHz CPU (SSE2)  
Min. 1 GB RAM  
Microsoft Windows XP operating system with Servicepack 3 or  
Microsoft Windows Vista or Microsoft Windows 7 operating system (with Admin-rights)  
Microsoft DirectX version 9 or higher  
Network card 10/100/1000 T/TX  
High-speed 3D graphics card with hardware acceleration, 512MB graphic-RAM and  
vertex shader version  $\geq 3.0$   
pixel shader version  $\geq 3.0$   
1024x768 pixel resolution or higher  
Highly recommended: NVIDIA GTX285 (no ATI)

tested and recommended Laptop-version: Apple Macbook PRO 15” or 17” with Microsoft Windows 7 via Bootcamp

#### **grandMA onPC**

IBM compatible PC – Dual Core processor with 2 GHz CPU (SSE2)  
Min. 1 GB RAM  
Microsoft Windows XP operating system with Servicepack 3 or  
Microsoft Windows Vista or Microsoft Windows 7 operating system (with Admin-rights)  
Microsoft DirectX version 9 or higher  
Network card 10/100/1000 T/TX  
any graphics card with hardware acceleration and at least 256MB graphic-RAM,  
highly recommended: NVIDIA 9800 GTX or NVIDIA GTX285 (but no ATI)

tested Laptop-version: Apple Macbook PRO 15” or 17” with Microsoft Windows 7 via Bootcamp or Parallels  
Important: Please do not use any shared memory for graphic cards.