

X-3D

Advanced 3D graphics processor

Miranda's X-3D system offers the highest quality, 3D graphics authoring and playout for the most demanding HD/SD news graphics. The processor uses the latest GPU technology to achieve unsurpassed performance and quality with real-time rendering and advanced animation effects.



KEY FEATURES AND BENEFITS

Unprecedented performance and quality

- › The X-3D graphics processor offers unsurpassed performance and quality in both HD and SD, using the latest GPU technology
- › System has been developed to create high quality graphics without operators having to produce a single line of code
- › The template-oriented structure simplifies authoring, control and graphics re-use

Real-time rendering

- › Full 3D real-time environment
- › Any changes to the graphics content driven by data or control system will take effect immediately

Advanced animation effects

- › Sophisticated animation effects using 3D primitives and imported objects
- › Texture and material mappings, shading and 3D lighting effects
- › Dynamic motions using motion manipulators, like motion damping, to add physical accuracy to animations
- › Conventional linear animation editing mode and comprehensive non-linear state based animation model

Multi-level character generation

- › A powerful, HD/SD character generator delivers virtually unlimited layers of animated text and dynamically updated text

Clip and graphics storage

- › Up to 400 hours of video/audio clips
- › Simultaneous playout of multiple clips and an almost unlimited number of layers of animated and still graphics

Video and audio inputs/outputs

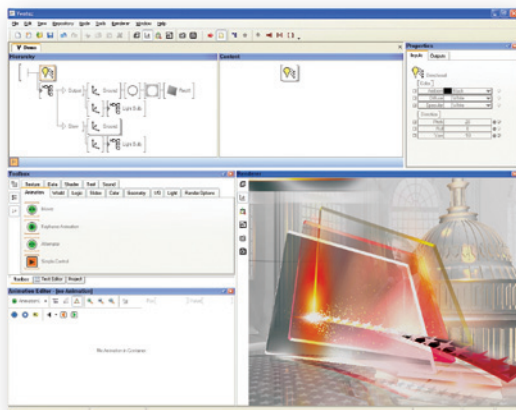
- › HD/SD fill + key outputs
- › SD output as NTSC or PAL
- › HD output as 1080i, 720p or 480p
- › Four group audio support (16 embedded channels)
- › Up to 8 AES inputs
- › Audio supported at 16, 20 and 24-bit depths at 48 kHz

Effective automated & manual control

- › Full automation control is performed by serial, Ethernet and GPI automation commands.
- › Manual control is offered by the Vertigo Xpanel GUI

Robust performance

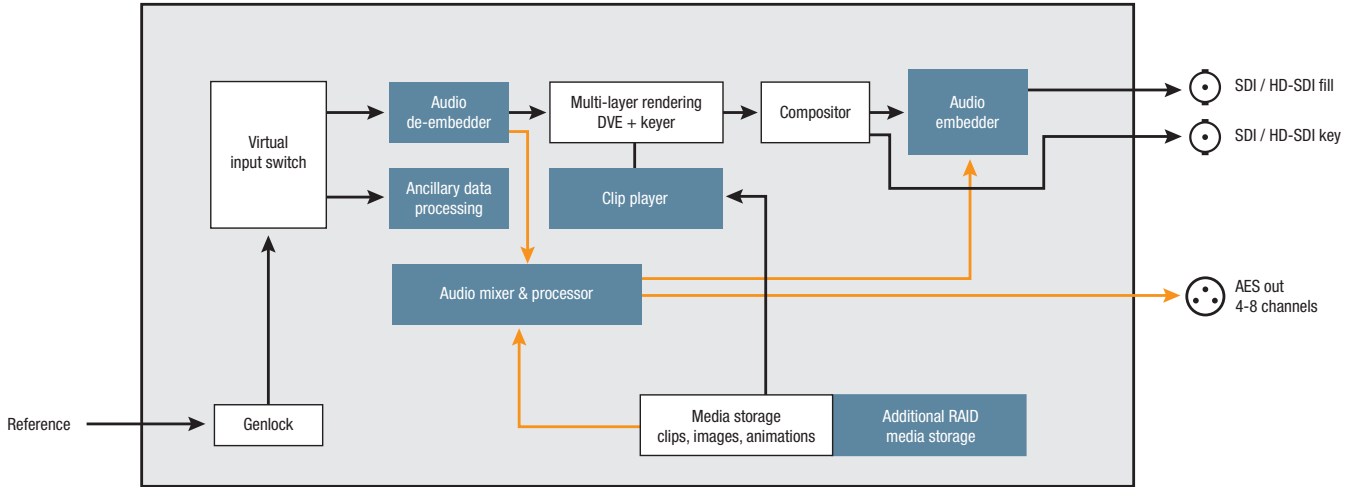
- › Robust broadcast architecture with video bypass, redundant power, RAID storage, hot swappable fans and drives



3D design is performed with XVentuz



Complex 3D graphics effects are simplified with X-3D



X-3D Functional block diagram

ORDERING INFORMATION

VX-X3D-SD11	X-3D SD real-time rendering engine
VX-X3D-HD11	X-3D HD real-time rendering engine
VX-XVENTUZ-BD	Xventuz professional designer 3D authoring application with SDI output capabilities
VX-XVENTUZ-PD	Xventuz professional designer 3D authoring application

Creative and project services

Creative team

Miranda's in-house television graphics creative team has wide experience of channel branding and promotional graphics design. The team is also highly experienced in production graphics, including the most complex data-driven graphics projects, such as major elections and large sporting events.

The team has wide knowledge of both Miranda graphics processors and all the other leading 2D and 3D graphics systems.

Miranda's creative team can offer complete broadcast graphics packages, and can also provide consulting services concerning graphics implementation.



Projects team

Miranda's projects team can offer extensive remote and on-site technical support for graphics and master control installations.

The services include:

- > Installation and integration
- > Training for operators and maintenance engineers
- > Custom development of applications:
 - Plug-in installation
 - Data parsers installation
- > Project management
- > Template creation
- > On-site support

