DiamondBlade™
3D Conversion Suite

VEFXi's DiamondBlade 3D Conversion Suite dramatically increases productivity and efficiency of 3D post-production and conversion workflow through instant rendering, facilitating compositing of video material, keyframe editing of depth scale and editing the amount of the depth field in front or behind the display screen (scene-cut depth continuity grading, 3D focus, and pop-out).

Applications:

Post-production: Human-guided 3D conversion
Broadcast: Live control of 2D to 3D live-streaming broadcast conversion
Advertising: Rapidly create autostereoscopic (glasses-free) content using 2D artwork

Features:

3D artist control over accelerated 2D conversion to 3D stereo, or 3D autostereoscopic (glasses-free) 3D content:
- Easy path to create glasses-free 3D advertising of your stereo converted content

Realtime playback and capture of 3D edits with no render time

Depth manipulation:
- Rapid editing keyframe-based 3D depth scale magnitude adjustment and 'z' position adjustment of the display screen in the depth field (scene 3D focus & popout), continuity across scene cuts, compression & expansion of the depth range.

Easy workflow integration via popular file formats:
- File compatibility with most popular post-production editors
- Assemble a wide range of source file types into a single output video
- Wide and popular range of output file types

Ability to watch realtime rendered results through the attached VEFXi render box and 3D screen

Supports smooth graduated adjustments of frames between keyframes

Supports popular EDL formats

Intuitive interface

Deep color support (8b/10b/12b color channels)

Artist control via tactile controller boards as well as mouse based control

Conversion window control supports mixed 3D and 2D content across scenes:
- Allows 3D event content and 2D text, ad banners, sports stats, etc.

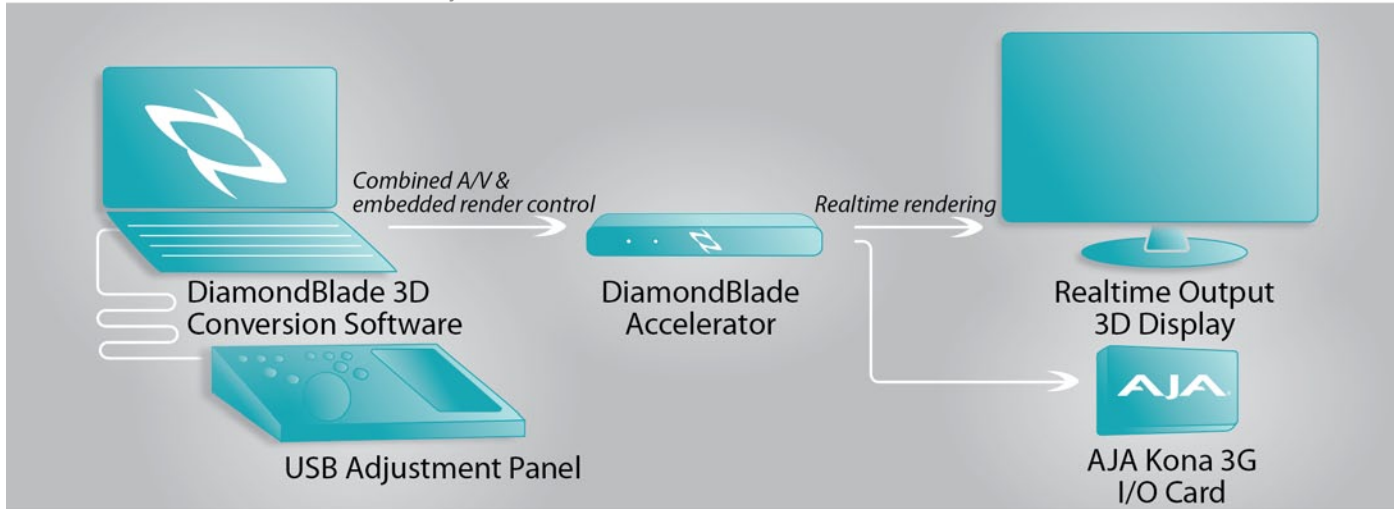3D depth segmentation facilitating 3D popout advertising

Specifications:

VEFXi™ DiamondBlade™ 3D Conversion Suite includes the VEFXi DiamondBlade 3D Conversion Software and one selected DiamondBlade Accelerator. The DiamondBlade Accelerator choices include, 1080p SBS Accelerator, Dual-channel 1080p Accelerator Kit, Dual-channel 2K Cinema Accelerator Kit, 1080p Auto-stereocopic Accelerator.

DiamondBlade Accelerator Specs

1080p SBS Accelerator:	(HD) 8 bit 720p, 1080i, 1080p Side-by-side half
Dual-channel 1080p Accelerator Kit:	Includes one 1080p SBS Accelerator for monitoring 3D design Includes one Dual-channel 1080p Accelerator (HD) 8 bit 720p, 1080i, 1080p
Dual-channel 2K Cinema Accelerator Kit:	Includes one 1080p SBS Accelerator for monitoring 3D design Includes one Dual-channel 2K Accelerator 2048 x 1080, (HD) 8/10 bit 720p, 1080i, 1080p
1080p Auto-stereocopic Accelerator:	Pre-configured for specific ASD display manufacturers 1080p only

DiamondBlade Functionality

Combined A/V & embedded render control — DiamondBlade 3D Conversion Software — USB Adjustment Panel — DiamondBlade Accelerator — Realtime rendering — Realtime Output 3D Display — AJA Kona 3G I/O Card

Specifications cont'd:

DiamondBlade 3D Conversion Software Specs

Video file format:	Supports MOV, AVI, YUV, TIFF, TGA, DPX, MPEG, AVCHD, MXF, MP4, DVHD, ProRes (play only), 3D, Raw Camera (LMP, Arri, Weisscam) in SD and HD formats up to 4K and complete range of color space
Signal Display:	On screen VGA/DVI Monitor • 3D VGA viewing modes (eyes, over/under, left/right, etc) • Vectorscope • Waveform Monitor YCbCr • Waveform Monitor RGB Parade • Histogram • Full audio metering to 16 channels with maximum level indicator
Clip Management:	Record, add, play, trim, remove/delete, seamless loop play, 3D-output control
Timeline:	Sequenced editable signal and file output
EDL:	automatic creation, fully editable, save as various EDL types
Project Files:	Maintain settings and custom media pools
Timecode:	RS-422, RP-215, RP-188, LTC (SD/HD), VITC, D-VITC
Control External VTRs:	Sony serial RS-422 (VTR)
Status:	Audio/Video, system, metadata, status and error reporting/display
Video I/O:	Single Link SD/HD (1.5) Dual Link RGB (1.5 x 2) File and Key (1.5 x 2) 3G 1080p50/59/60 3D stereo input Raw Arri T-Link In Raw Weisscam Bayer In Raw LMP Bayer In
Audio:	Up to 16 embedded audio channels (SD/HD) Up to 16 AES/EBU audio channels (XLR or BNC) Stereo RCA monitor pair