

REAL-TIME STEREOSCOPIC BRANDING AND CONTROL

pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power

Introducing stereoscopic graphics

The advent of 3D broadcasting brings with it many challenges across the whole production and playout chain. Pixel Power is at the forefront in developing systems to address the needs of graphic designers to create high quality, stereoscopically branded content.

If the 3D stereoscopic effect is to be enhanced rather than diminished, graphics such as Promos, Bumpers, and Station Idents must be created to be consistent with the depth profile of the 3D content being aired. Additionally, live events such as news or sports require real-time adjustment of graphics placement prior to transmission for correct position and depth.

Clarity, LogoVision™ and BrandMaster™ systems fully support the emerging need for 3D stereoscopic graphics whilst maintaining a familiar workflow, and allow the re-use of pre-existing graphics templates, reducing the time and cost of launching a 3D channel.

Uniform workflow

With 3D stereoscopic graphics representing an additional burden for creative departments, it is of paramount importance any impact is minimised. The template creation software GUI allows users to configure the stereo separation and convergence, ensuring that any graphics are positioned appropriately for any 3D stereoscopic background video.

The template creation process is identical to that for standard 3D

Enables broadcasters to fully realise their stereoscopic 3D needs, without excessive cost or complexity.



Pixel Power's stereoscopic 3D capability can be used to enhance a wide variety of broadcast applications

graphics, and any existing 3D content may be immediately rendered as 3D stereoscopic, reducing storage requirements and saving the time and cost of creating new graphics.

Display agnostic preview

In order to check the stereoscopic composition of graphics and background content, best practice dictates that the result is viewed on a monitor whose dimensions correspond as closely as possible to that of the viewer's.

Using a Clarity system, designers can edit and preview the graphics stereoscopically on the system's output channel exactly as they will be played out.

Clarity's widely supported frame compatible stereoscopic output format may be fed directly into one of the increasing range of active or passive stereoscopic displays for viewing at the appropriate dimensions.

Technical Highlights

- Stereoscopic capability is available as a software option for Clarity, LogoVision and BrandMaster systems
- Allows existing hardware to be upgraded to support 3D stereoscopic output
- Employs an identical workflow enabling the re-use of existing graphic templates
- True stereo preview during template editing
- Single channel frame compatible or dual channel L/R outputs
- Real-time adjustment of depth and position
- Automation control is possible using the remote XML interface

pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power pixel power

Multi-standard playback

There is currently no agreed standard for the transmission of stereoscopic broadcasts. Options range from formats that are compatible with existing infrastructures but reduce resolution, to independent left and right channels which need additional bandwidth but preserve fidelity. LogoVision and BrandMaster systems support both frame compatible output, or independent left and right channels. This allows an appropriate playback system to be created taking account of the current and future needs of the business and the value of the branded content.

Simple configuration

LogoVision and BrandMaster systems

provide intuitive configuration options that allow the selection of standard stereoscopic output. Additionally, BrandMaster and LogoVision systems can be configured as frame synchronised channel pairs to provide independent left and right stereoscopic output, or as a single channel for frame compatible output. Switching between configurations is easily accomplished using the software configuration GUI.

Real-time control

For Master Control operators, BrandMaster provides the ability to adjust the stereo separation, depth, and position of any stereoscopic graphics to ensure they are correctly positioned with respect to any background video. This can be achieved using BrandMaster's

hardware or soft control panels, and previewed before being taken to air. Where depth metadata is available, BrandMaster remote XML protocol allows control of those parameters via automation.

Comprehensive feature set

The 3D stereoscopic enhancements to Pixel Power's systems build on an already rich feature set including sophisticated 2D and 3D graphics, audio processing, DVEs, and clip playback, without the need for additional hardware or new workflow processes. This enables broadcasters to fully realise their stereoscopic 3D needs, without excessive cost or complexity.

3D Stereoscopic creation, playback and control

