

Application Note



Using Encore's Key Cut & Fill Feature to Manipulate "Shaped" PIPs

Rectangular vs. Shaped

In a typical performance or concert environment, the Encore Presentation System generates rectangular PIPs that can be filled with any video source, sized and positioned on screen, and moved from point to point using keyframe "moves." In this standard mode, the PIPs are always rectangular, and only one mixer layer is required to create the PIP.

However, using Encore's special "Key Cut & Fill" feature, the system can also manipulate non-rectangular or shaped PIPs — with the same freedom as their rectangular counterparts. The only caveat is that two mixer layers are required for each shaped PIP. One layer cuts the key hole with a shape, and the other layer fills the hole with the desired input video.

Creativity with Shaped PIPs

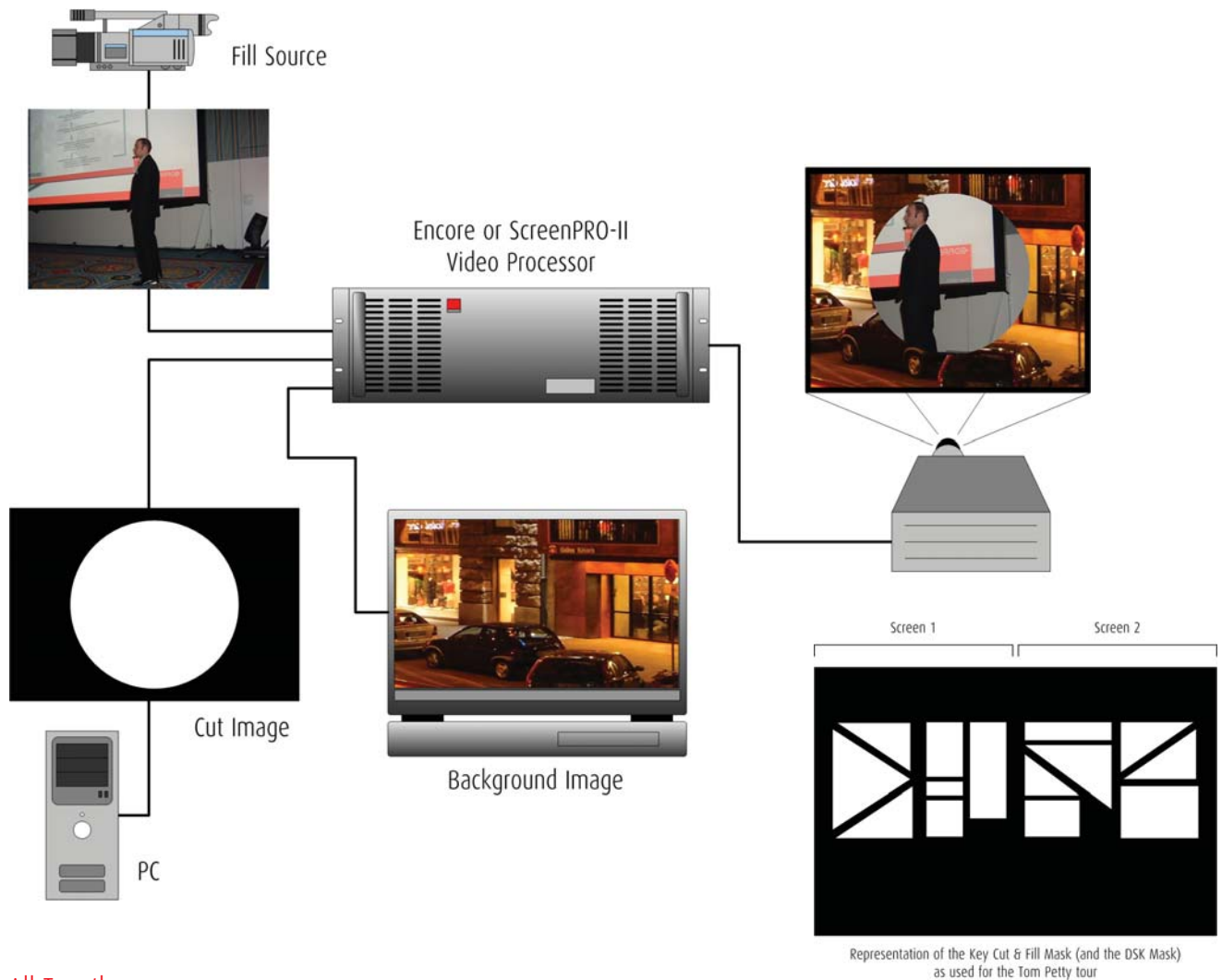
The shape of the PIP itself (the portion that cuts the hole), can be static or in full motion, depending on your creative requirement. For example, you could fill a triangle, circle or multi-sided polygon with a close-up of your speaker, and then size and position the image anywhere on screen. Or, you could fill an animated or morphing shape with video, and then manipulate it on screen. The only limitation is your imagination.

Where Do The Shapes Come From?

The non-rectangular shapes themselves are standard graphic files — stored on single or multi-head computer(s) that are connected to Encore as scaled inputs. File "types" such as bitmaps, JPEGs, AVIs, WMVs, Flash (and even PowerPoint slides) can all be used. Typically, the shape is a "hi-con" — a high-contrast white graphic on a black background, which in turn enables Encore to cut a clean key hole. The files themselves can be created using standard graphics and animation programs, as desired.

BARCO

Visibly yours



Putting It All Together

Once you have your sources prepared, it's easy to make it work. First, select a mixer on Encore. On Layer B, choose your "fill" video (such as a camera source). On Layer A, choose the "cut" video (the shape that is stored on your external graphics computer). Next, choose "Cut & Fill" as the key type, position the fill inside the hole as desired, and then lock the two layers together using Encore's "Join" mode. The two layers now move together as one. Repeat the entire process on another mixer, to manipulate additional shaped PIPs.

Shaped PIPs in Concert

The "shaped PIPs" feature was put to excellent use on Tom Petty's 2005 tour, in which the stage's entire backdrop was comprised of geometric shapes, with LED strips acting as borders between the shapes. Here's the set designer's goal was to fill each shape with a different video feed.

By using multiple Encore Video Processors in the "stacking" mode, 12 layers (mixers) of video were available. Encore's output was routed to two rear-screen projectors backstage. A shaped graphic (precisely matching the backdrop's dimensions) was stored on a dual-head computer, and patched to every Encore mixer via router connections. On each of the 12 mixers, the Key Cut & Fill feature was used to isolate a portion of the overall graphic, fill it with a unique camera source, and visually position the shape in its respective cutout in the backdrop.

Finally, the very same shaped graphic (stored on a second dual-head computer), was patched to Encore's Down Stream Key (DSK), and used to mask the entire output with video black — thus preventing any light spillage in between shapes. This method also enabled all of Encore's color and strobe effects to be used on any layer, without restriction.

The result — one of the most visually dynamic concerts ever presented — all as a direct result of the creative use of Key Cut & Fill.

Barco Media & Entertainment
11101 Trade Center Drive, Rancho Cordova, CA 95670
tel 916 859 2500 fax 916 859 2515

BARCO

Visibly yours