

Pixel mapping

(under construction)

Pixel mapping is the use of software to map video imagery to an array of individual lighting fixtures.

the setup is:

1. in: A source of video.
2. in between: The [software](#) to map the video to the fixtures. (Resolume, Touchdesigner a.o.)
3. out: An array of RGB LED fixtures.

Exploring further, think of the software as a piece of paper that you have cut a geometric series of small holes in. When you hold that paper up to your computer screen, you only see what is let through by the holes. If you send what you see in each hole to a dedicated fixture, or pixel, you have pixel mapping.

Pixel Mapping is often used to create dynamic and creative lighting effects. You can programme intricate patterns, colour changes, and animations that respond in real-time to the mood or theme of the performance.

This short tutorial looks at the concept of pixel mapping as part of lighting and visuals for live performance such as concerts, clubs and theatre. Pixel mapping is the application of still or moving images to a lighting system, often an array of RGB LEDs and shouldn't be confused with projection mapping. The tutorial doesn't explain HOW to set up pixel mapping as part of a lighting control system but uses the example of the ChamSys MagicQ to explain the fundamental principle.

<https://www.youtube.com/embed/sjt3u4AKfyk>

Revision #1

Created 17 February 2025 15:16:03 by Astrid

Updated 17 February 2025 15:25:07 by Astrid