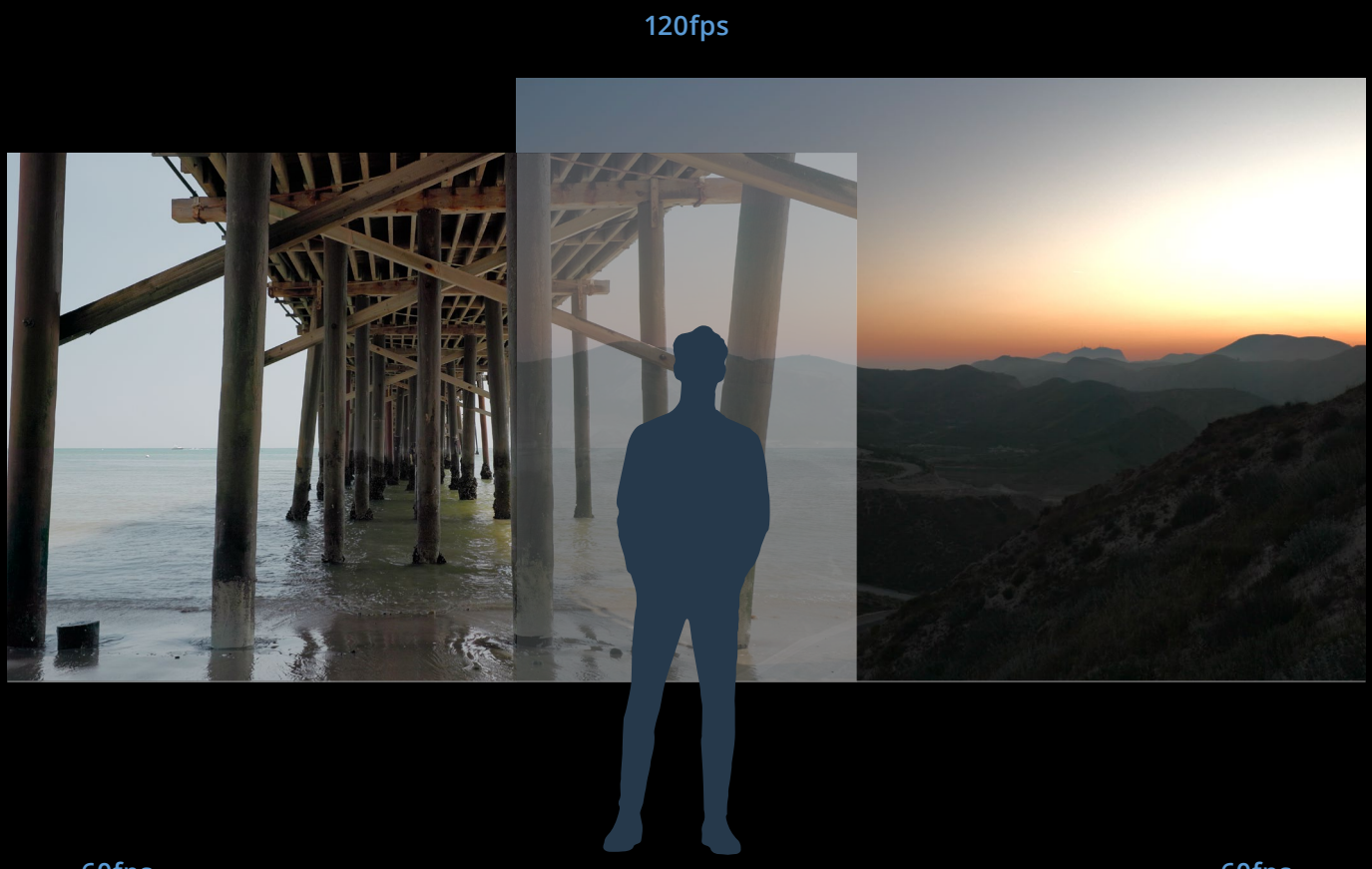
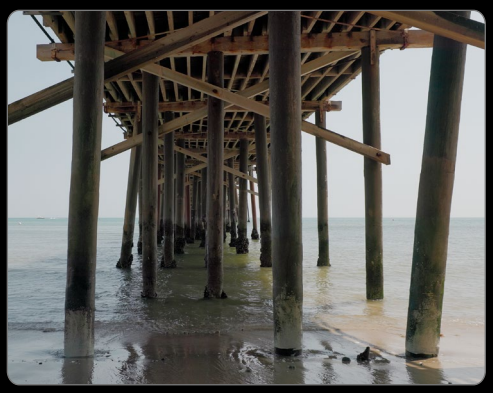
WHAT IS
FRAME REMAPPING?

Frame Remapping is a groundbreaking technology that interleaves frames from multiple content streams and, with the help of Brompton's ShutterSync®, allows different cameras to see unique content on the same LED wall simultaneously by synchronising their camera shutters.

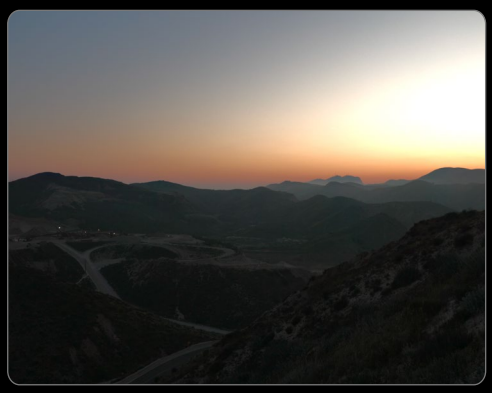


How it Works

1. Brompton's processor receives two video sources – e.g. running at 60fps – and combines (interleaves) their frames to display them together at a higher frame rate – e.g. at 120fps – on the LED wall.

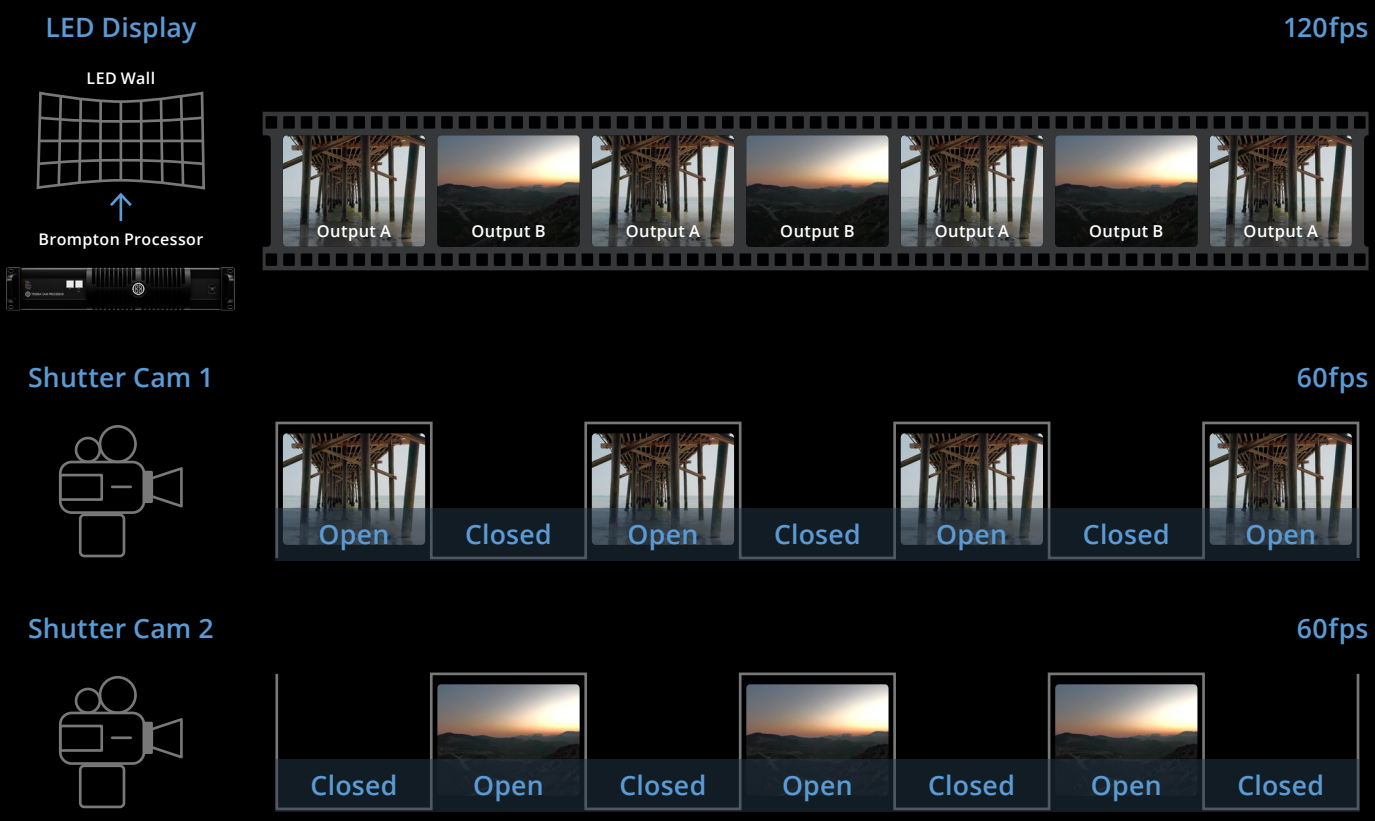


Output A



Output B

2. The cameras are synchronised but phase-offset so that each one captures only its assigned content, preventing any overlap between sources.



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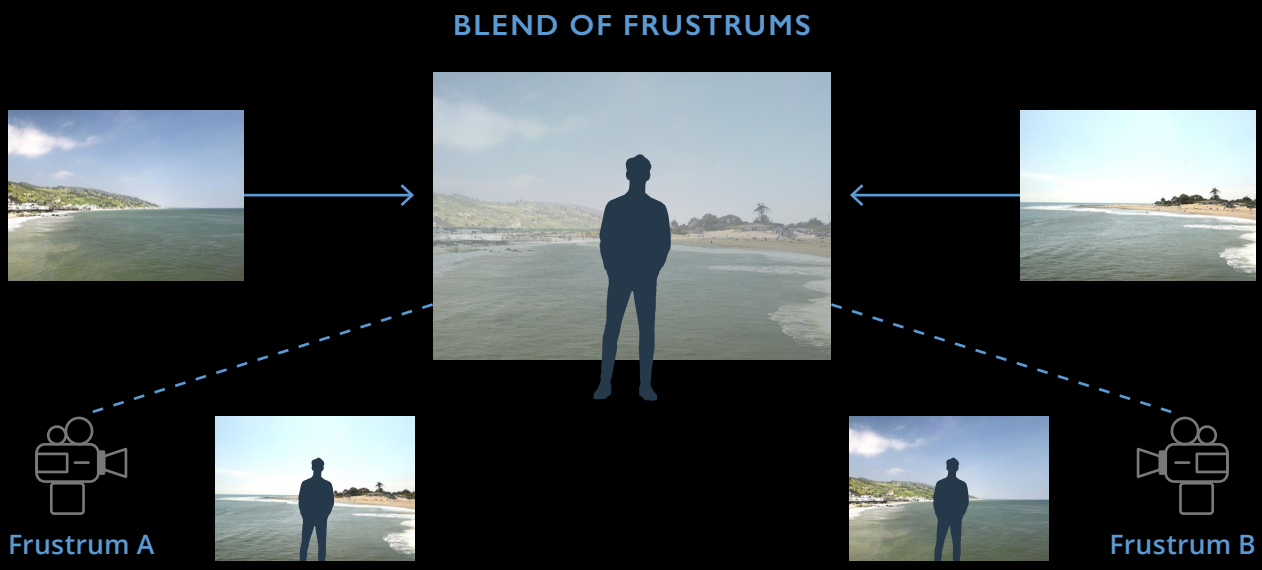
Key Applications

MULTI-CAMERA WORKFLOWS

Display perspective-corrected backgrounds for each camera in virtual production (XR/VP).



This workflow can also be used to tailor broadcast content, such as region-specific advertising or multilingual captions for different audiences.

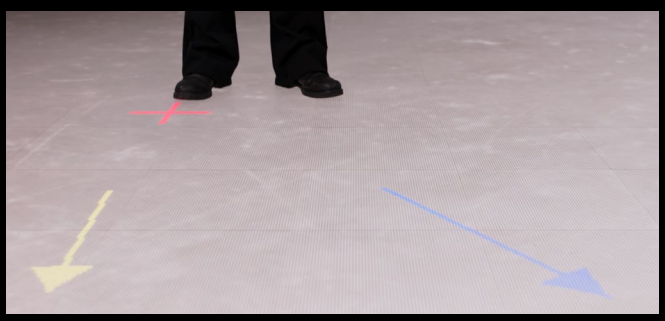
VIRTUAL GREEN/BLUE SCREEN

Capture the same foreground action with a virtual background and a green/blue screen simultaneously.

- Provides a post-production fallback for keying if actors miss marks or shots need fixes.

HIDDEN & DIGITAL MARKERS

Replace physical tracking markers or presenter cues with custom shapes on the LED wall (arrows, text, stars, etc.) visible only to crew but hidden from cameras.



- Integrates with Mo-Sys, stYpe, Ncam and more for real-time tracking and seamless workflows.

THE GOLD STANDARD

UNMATCHED SYNCHRONISATION

- **ShutterSync** is a patented Brompton technology that helps eliminate artefacts like flicker and banding by addressing mismatched timing between the camera shutter and LED refresh.

FLEXIBILITY FOR PRODUCTIONS

- **Multi-Camera** – Run up to **4+ cameras** on a single LED volume (depending on panel refresh rates and camera properties).
- **Virtual Green Screen** – A **post-production safety net** to shoot with LED and green/blue screen simultaneously, preserving post-production flexibility.

HIDDEN MARKERS: SMARTER WORKFLOWS

- **Zero Network Overhead** – Enabled by Brompton's Tessera receiver cards and ShutterSync technology.
  - Doesn't consume additional processor output bandwidth.
  - No extra hardware required.

FUTURE-READY

- **Software-Driven Innovation** – Hidden Markers require no extra hardware, it is included in the Tessera software.

TECHNICAL EDGE

- **Panel Compatibility** – Works with any high-refresh-rate LED panels (depending on project requirements and camera settings).
- **Camera Agnostic** – Supports RED V-Raptor X, Sony Venice, ARRI Alexa, and more.

TRUSTED BY INDUSTRY LEADERS

"It's a very powerful tool. It allows us to render for individual cameras all at the same time, which for broadcast is a big game changer. It allows a director to see everything fully rendered downstream to the switcher before they put it live on air, and that really allows them to get creative and feel very comfortable in a live situation."

Mathew Leland, VP of Special Projects, 4Wall Entertainment

"It's definitely wow-ing a lot of people. It's just the right solution. You have your Unreal Engine baked-in shot, but if you want to go into post and change it, now we have a blue or green screen version of it as well. It just gives you a lot more flexibility than you typically have."

Shawn Herold, President, Form Volumes

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www.bromptontech.com

info@bromptontech.com

+1 (844) 427 6786

@bromptontech