



BlueRiver ARC (Adaptive Clock Re-synchronization)

The use of off-the-shelf networking centric components, such as networking FPGAs and optics, for high-quality AV signal distribution presents an inherent challenge. “Synchronous” and artifact-free transmission of video is a requirement for most Pro AV applications. Genlocking is also increasingly becoming a requirement for video-wall and tile applications. Components, designed primarily for networking requirements (which are asynchronous), cannot transmit video without requiring a frame-buffer and re-clocking at the receiving end. The use of frame buffers and re-clocking results in a 1-2 frame latency, frame drops, frame repeats, and lack of genlocking, making such systems unsuitable for many Pro AV and broadcast applications.

Our BlueRiver™ ACR uniquely overcomes this limitation and converts such networking components into synchronous AV transmission devices through a unique clock reconstruction mechanism that ensures clock coherency across the entire system. The resulting benefit is zero-frame latency, no-frame artifacts and built-in genlocking capability; all on off-the-shelf, cost-effective networking components.

