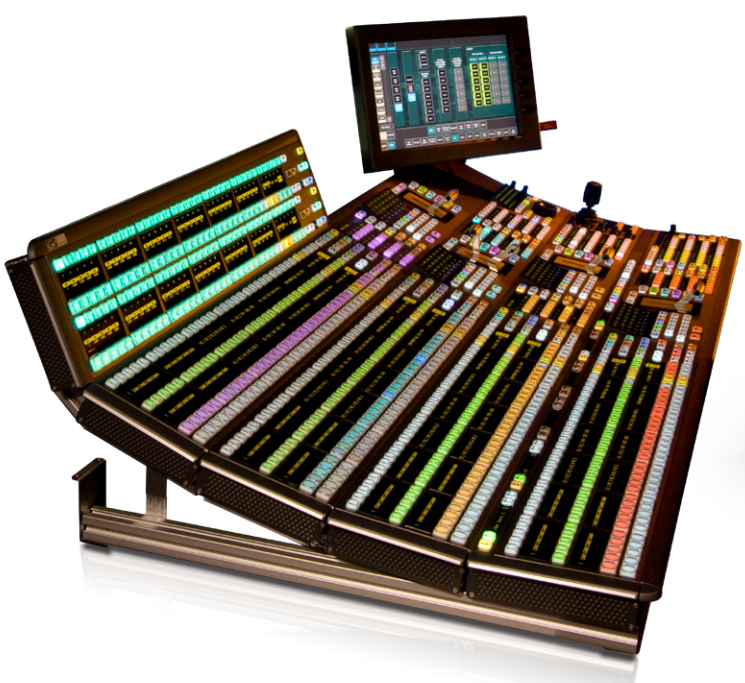
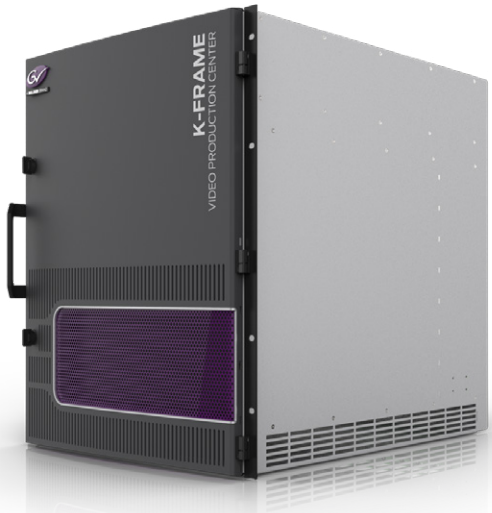
grass valley
A BELDEN BRAND

Kayenne & Karrera Video Production Centers

TOP REASONS TO BUY





Kayenne and Karrera with K-Frame from Grass Valley, a Belden Brand, are streamlined production switcher solutions. They offer superior scalability and processing power to easily handle the most complex live event productions. Even with an enhanced level of powerful functionality the intuitive user interfaces ensure that running these systems is very efficient and feels very familiar. A wide variety of choices for panels and processing frames with both software and hardware options makes it easy to create a configuration to support different budget requirements. Grass Valley production switchers offer flexibility in format agility to support new and future business needs.

1. Kayenne and Karrera can scale for any production requirement while providing maximum resources in every configuration.

- A large selection of panel choices is available to work with any K-Frame video production chassis providing multiple combinations for various needs in fixed control rooms or various sized trucks.
- A very modular design lowers the initial investment while providing a solution that will scale according to future business needs.
- With no hardware upgrades or special software versions, these switchers can operate in UHD/4K using DoubleTake, bus linking and transition chaining. The switchers can accept 4-wire UHD/4K source inputs, or convert single-cable 1080p50/60 Level A and Level B inputs into UHD/4K sources through internal processing.
- The Controller M/E offers six full-function keyers with chromakey and two memory stores, each supporting two video+key sets and 2D DPMs in every M/E bus. Most other switchers offer only simple luminance keyers and no DVEs.
- Full M/E mode also has six full-function keyers with both 2D DPMs and optional 3D DPMs.
- The Standard K-Frame processing unit is capable of up to 192 inputs and 96 outputs, with 32 inputs per input card and 16 output pairs per output card. Additional I/Os are available through smaller 4x4 Smart I/O modules which are capable of format conversion. This large I/O capability supports up to 9 M/Es in Suites Mode. Each suite then can support two control panels, each with their own 1,000 E-MEMs and 999 macros — completely independent of the other suite.
- The Compact K-Frame processing unit is capable of up to 80 inputs and 48 outputs, with 32 inputs per input card and 16 output pairs per output card. Additional I/Os are available through smaller 4x4 Smart I/O modules which are capable of format conversion. This large I/O capability supports up to 5 M/Es — or up to 10 M/Es (half virtual) when using DoubleTake split M/E mode.
- Mixed format production is supported within the video processing frame. Utilizing SetMatch options, SD and HD up/down/crossconversion can be done for some inputs and outputs without using M/E resources.
- The integrated Image Store is capable of storing up to 1,800 stills or 30 seconds of 1080p video to 10 (video/key pairs) output channels.
- Floating iDPMs are pooled and assignable to any full M/E's keyer or as a channel within an eDPM. This flexibility isn't found on any competitor's hardware-based switcher.
- There are 2D DPMs (resizers) on every keyer on every M/E — 6 (video/key pair) per M/E. 2D DPMs are used to do simple double box effects while saving iDPMs for more complex effects.
- Suites Mode adds the ability to use resources in one video processor frame across two different production locations. In this mode, the resources needed for one suite do not impact those needed from the other — all without interrupting the other suite. This mode also can support two control panels in the same suite.

Capture every business opportunity at various budgets with the most powerful production tools available at different price points with multiple panels, frames, and various options that facilitate an initial investment and grow with changing needs.

2. Proven controls and tools in a superior production switcher solution reduce errors and lowers operational risk.

- Operators will be familiar with the interfaces whether in studio, rental or mobile production environments. A large pool of commercial and freelance talent capable of quickly setting up and operating Karrera and/or Kayenne is readily available.
- Source Rules automatically add or drop keys when a source is selected — without using macros or E-MEMs. Source Rules are also active during look-ahead previews for transitions.
- 999 editable macros can be recalled in many different ways from the panel. Fine-tune them with a standalone Macro Editor.
- Delegation of macros, E-MEMs and Aux Bus to the source-select rows ensures that controls are within reach when needed. Background buses can be delegated to keyer rows to expand the number of sources on an M/E. Panel Memory stores up to 99 delegation patterns.
- Define E-MEM exposes 23 sublevels per M/E for partial keyframing and allows assignment of non-M/E sublevels to M/Es for precision control when creating and running effects.
- The Q-MEM Cues Library provides learn and recall of one or more clips on multiple servers/VTRs. Independent of E-MEM, the library eliminates the need to tie up multiple E-MEM registers with the same effect for different clips. Q-MEM is closely integrated with the Kayenne panel's System Bar and optional Device Control Module.

Production and operational risk is reduced with these sophisticated solutions for live production, providing a legendary level of reliability, with systems adopted by a majority of operators and production companies around the world.

3. The finely tuned ergonomically designed control panels offer easy access and makes users more efficient.

- Kayenne control panels are modular and provide easy button access. They can be mounted flat or in a banked curve with selected M/E stripes angled toward the user. Panels can be configured in for 1, 2, 3 or 4 M/Es.
- Karrera panels bring the most used functions front and center without losing the ability to quickly access features in-depth through panel shift levels and the menu. There is a choice of two 2 M/E control panels, or one 3 M/E control panel.
- Bright, crisp OLED displays for source and function names provide ultra-clear text and ultra-wide viewing angles.
- All pushbuttons have RGB LEDs which dynamically change for color-coding functions and source grouping.
- An optional 1 M/E soft-panel GUI (KSP interface) extends usability.

These switchers are an optimal solution for technical directors because they have been created by them and for them through a strong relationship with the operator community. Users can operate them with the highest levels of performance and efficiency to create the best quality productions, bringing the director's and producer's visions into reality.

4. Design elements and various functions contribute to lowering costs through the lifetime of the systems.

- Meeting new requirements is economical through software-only upgrades, or with modular hardware additions.
- Internal structure allows many options for optimizing resources across M/Es and even across two different production suites with two or more separate control panels.
- Despite the concentration of power and capabilities, K-Frame is best-in-class in power consumption, with a savings of 17 to 30% compared with similar switchers.
- K-Frame integrates conversion that are not simple scalers but perform full up/down/crossconversion, including aspect ratio conversion with color space conversion and motion adaptation for simultaneous HD and SD program feeds.
- K-Frame integrates digital video effects with an abundance of optional internal DPMs (iDPM) and an optional eDPM that acts as an external DVE replacement with its own independent E-MEMs.
- K-Frame can integrate on-set monitor graphics without the need for digital signage generators with content from the switcher to in-studio, on-stage monitors including dissolve and wipe transition without consuming M/E resources.
- K-Frame can integrate an internal Image Store for stills or short video clips with instantaneous access.
- K-Frame can integrate a multiviewer to provide flexible display capability exposing external and internal sources to operators.

Cost of ownership is lowered with the ability to build configurations for different price points, and then offer multiple upgrade options, more streamlined workflows, reduce the need for external devices and provides a very low power requirement.

5. Streamlined system management and production workflows reduce operating costs and supports new business opportunities.

- Pre-production time and resources are reduced with fast-access configuration and set up. Changes in user preferences can occur quickly between shows using macros, or the entire configuration can be changed over in just a few minutes by loading show files from a standard portable storage device.
- The high-resolution, 1280x768 computer touchscreen interface has a shallow menu structure, with the History and Favorites features that users love, and context-sensitive pull-down menus that put everything at the user's fingertips.
- Improved workflows with LDX camera control and scene file recall with Ethernet tally.
- Improved workflows with Jupiter/Prelude control of Aux Buses and control of Trinix/Trinix NXT crosspoints.
- Improved workflows with K2 ClipStore for multiple channels of video/key pairs with over 10 hours of clip content and as an extension to live replays with K2 Dyno.
- Improved workflows with content management and editing using GV STRATUS nonlinear production tools and EDIUS multiformat nonlinear editing software that enable automated processes, advanced logging, and multiplatform publishing without increased operational cost.

Enables streamlining workflows and empowering creative personnel to produce a greater quantity of consistent, high-quality programming — without adding complexity to increase operational margins.

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