Setting a New Standard for Live Production

The Kalypso™ video production center puts everything you need for live video production right at your fingertips. Kalypso builds on the legendary Grass Valley™ switcher technology with an advanced Mix/Effects architecture that gives you unprecedented levels of keying and compositing with two powerful new features. With DoubleTake™ Split M/E technology you can divide the 4 keyers in each M/E between two separate background transitions. FlexiKey™ programmable clean-feed technology lets you create multi-client live programs using any combination of backgrounds and keys.

Kalypso gives you the run-time control you need without having to divert your attention from the switcher panel during production. Dynamic router source selection can be performed intuitively right from the panel. Groups of router destinations can be changed using Kalypso's R-MEM™ technology. Profile and VTR rolls can be done on a machine-by-machine basis or via a clip stack. Source memory allows assigned key sources to appear automatically based on what type of background source is selected.

Kalypso further integrates the production process with three or six channels of built-in digital effects and up to four channels of external effects control. In addition, a 100-frame still store with animation capability makes playout of animated logos quick and easy.
The classic layout and quality craftsmanship of Grass Valley switchers has been advanced with a new level of control and integration. You can switch with confidence with the reliable switches and lever arms, and the intuitive, familiar panel layout. A rich set of new features add a significant level of control for building complex, multi-client productions.

User-programmable Source Name Displays make it easy to identify sources on the fly. Build your own 32x32 bit-map source name icons and recall them in the display. The all new M/E Status Displays tell you at a glance what sources, keys and transitions are occurring in each M/E. Add to this an intuitive touch-screen menu system, and you have a production center built for the demands of live production.

Enhanced Effects and Transitions

With up to six channels of built-in digital effects, you can perform 2D transforms in 3D space along with traditional 2D effects such as blurs and mosaics. The expanded effects send system can feed all six internal effects engines plus up to four external effects devices simultaneously, for a total of 10 effects channels of video and key. Any M/E bus can use the effects send system including all keyers, both background buses and both utility buses.

Built-In Device Control

Kalypso features an elegant user interface for changing SMS-7000 router destinations. You also have run-time control for Profile clips, VTRs, character generators, external digital effects and many other source devices. The control you need in the fast-paced production environment is available right from the Kalypso control panel.

Powerful M/E Architecture

With four keyers per M/E, Kalypso offers outstanding capabilities for compositing keys such as logos and graphics. In addition, each keyer in every M/E can perform chroma keys using Grass Valley’s Chromatte™ Advanced Dual Chroma Keyer. Borderline® Generators are included on every keyer for drop shadows, outlines and extrudes on keyed sources. All of these powerful features can be used in two new M/E modes – Secondary Compositing and Programmable Clean Feed, truly advancing the state of live production.

**DoubleTake™ Secondary Compositing**

**Enhanced Effects and Transitions**

**Built-In Device Control**

**Powerful M/E Architecture**

In addition, the secondary output can composite specific keys over a transparent background and provides a separate key output for downstream compositing. This is helpful for expanding the keying power in certain applications. Thus the secondary output is like layering mode on the Model 4000, but the primary output is still a full Mix/Effects bank! Again, this is like getting the power of 8 M/E’s in a 4 M/E Kalypso!

**FlexiKey™ Programmable Clean Feed**

**Programmable Clean Feed**. In the example above, which uses a single M/E, Key 1 is programmed to appear on both the Primary and Secondary output. Key 3 replaces Key 2 on the secondary output and Key 4 is programmed to appear only on the Primary output. By utilizing additional M/E’s even more complex and customized outputs can be built.

Kalypso features the most flexible clean feed system in the industry. The programmable clean feed mode makes it possible to create two completely independent, simultaneous teleproductions with the ultimate in flexibility. FlexiKey is invaluable for productions where there are two clients for the same program or in productions where an event is broadcast live while a slightly different version is simultaneously
recorded on videotape. With FlexiKey, any set of keys can be removed from the clean feed output (so only the primary client sees logos and identification, for example). In addition, you can automatically substitute keys so that a graphic for the primary client can automatically be replaced with a different graphic for the secondary client.

Kalypso has absolutely the most flexible downstream key (DSK) system – period! The program/preset bank in Kalypso offers up to four completely separate program outputs each of which can have any subset of the four DSKs. Now you can customize which DSKs go to which program output for up to four different feeds.

**SuperStill™ Animation Capable Still Store**

Kalypso's still store system has up to eight simultaneous outputs which may be video, key or mask in any combination. The still store system has a memory buffer for storing 100 stills of video and key. An internal hard drive provides additional storage for thousands of frames. Video or graphics frames may be grabbed from any input or may be downloaded from a 10/100Base-T Ethernet connection. Up to two simultaneous outputs may be animated for short graphics or video animations. You can also use the still store for drawing "garbage" masks to remove unwanted elements from video keys.

**Emmy-award winning E-MEM® Technology**

**Now with the SuperShot™ Advanced Shotbox**

Recall E-MEMs fast with the new SuperShot advanced shot box panel. This option gives you instant access to five pages, each with twenty effects, at the touch of a button. You can retrieve your regular setups and store them in SuperShot for instant recall. Each setup is named and E-MEM levels are identified so you can tell at a glance which M/Es and other resources will be used.

**Designed for the Demands of Live Production in the Studio or On the Road**

With up to 80 inputs, Kalypso is an excellent platform for productions requiring a large number of video sources (such as car races or golf tournaments). You have direct access to all 80 inputs (each input may be video or key) without the need for external routing or sub-switching. Our robust output system has up to 46 outputs on the 4 M/E model and 38 outputs on the 2 M/E model that can easily be reconfigured from their default mapping. This provides the ultimate flexibility in matching the number of M/E and auxiliary bus outputs needed for a particular installation.

The modular control panel design makes it easy to integrate a Kalypso Video Production Center into mobile trucks and vans. Best of all, you only need 15 RUs of rack space for a fully-configured Kalypso, regardless of the number of options selected. To keep those mission-critical productions on-air, Kalypso's electronics frame features hot-swappable modules and power supplies for quick serviceability during live productions.

**Kalypso – A Networkable, Shared Resource**

Kalypso is designed for today's integrated production facility. The smooth, on-board interface to Routers, Profiles, VTRs and external DVEs simplifies building an integrated production suite. Kalypso goes beyond merely controlling devices, however. You can have multiple Kalypso control panels simultaneously interfacing to a single frame, or to multiple frames. The built-in dual 10/100Base-T Ethernet interface makes it easy to acquire content from computer based systems and to manage your Kalypso resources. Furthermore, Kalypso's chroma keyers, still-store outputs and internal effects are floating resources which are available on demand to be used by any M/E on the system. This means you no longer need to purchase extra options just to avoid an "on-air trap." Kalypso truly provides one of the most cost-effective production solutions on the market today.

**RESOURCE SHARING**

Multiple Kalypso panels can simultaneously use the same frame. The Dual 10/100Base-T Ethernet is used for real-time panel control and for facility management and acquiring content.
SPECIFICATIONS

Video Inputs – Up to 80 CCIR-601 non-looping, component serial digital video or key in groups of 16.

Video Outputs – Up to 48 (40 on 2 M/E model) CCIR-601 serial digital video in groups of eight dual-BNCs outputs for reduced Distribution Amplifier requirements. Two outputs are dedicated for test signal and digital black. All other outputs are user-configurable for program video, preview video, clean feed or auxiliary bus.

Kalypso 4 M/E Control Panel

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Kalypso 4 M/E Auxiliary Panel

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Kalypso 2 M/E Control Panel

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Kalypso Menu Control Panel

800x600 24-bit color touch screen display Adjustable brackets included for tilt control

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Kalypso 4 M/E Control Panel Power (includes menu and auxiliary panels)

- Power: 800 Watts (max)
- Voltage: 100-240 VAC
- Frequency: 50-60 Hz

Kalypso Frame

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Kalypso Frame Power Supply

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Kalypso 2 M/E Control Panel Power

- Power: 600 Watts (max)
- Voltage: 100-240 VAC
- Frequency: 50-60 Hz

Kalypso Frame Power

- Power: 1200 Watts (max)
- Voltage: 100-240 VAC
- Frequency: 50-60 Hz

Kalypso 4 M/E

- Control Panel Depth 61.7 Width 141.0 Height 19.3
- Auxiliary Panel Depth 9.9 Width 66.8 Height 18.3
- Control Panel Power Depth 45.7 Width 125.2 Height 19.1
- Menu Control Panel Depth 9.9 Width 43.4 Height 25.6
- Control Panel Power (includes menu and auxiliary panels) Depth 45.7 Width 125.2 Height 19.1
- Frame Height 13RU 57.8 Width 48.3 Depth 56.2
- Frame Power Supply Height 2RU 8.9 Width 48.3 Depth 40.6
- Control Panel Power (includes menu panel) Depth 45.7 Width 125.2 Height 19.1
- Frame Power Depth 13RU 57.8 Width 48.3 Depth 56.2
- Frame Power Supply Depth 2RU 8.9 Width 48.3 Depth 40.6

CUSTOMER SERVICES

Warranty

Products offered by Grass Valley Group are manufactured to provide the highest level of reliability and performance. Grass Valley Group warrants these products against defects in materials and workmanship in accordance with the warranty statement applicable with each product.

Standard product warranty is 12 months from the date of installation or 15 months from the date of shipment; whichever is earlier. Warranty coverage includes:

- Hardware support with advance exchange of parts shipped next business day
- Software support includes automatic shipment of software maintenance releases

Complimentary Services

Technical phone support via our 1-800-547-8949 number, after hours emergency phone support and technical e-mail support. In addition to our call center, we offer on-line technical resources and parts ordering via our new web site at www.grassvalleygroup.com/support

Value Added Services

- SmoothStart and On-Site Installation Support Services – Critical startup services to get you going. These services include pre-installation planning, on-site checkout, on-site overview training as well as customized networking and system support services
- Comprehensive Service Contracts – Up to 5 years of advanced exchange of parts shipped next business day, proactive software subscription support and discounts on our training classes and field support operations
- On-Site or Factory Training – Operations, advanced operations and technical/maintenance training
- Spares Kits – For mission-critical applications, our parts kits ensure maximum on-air time

1) Some value-added services are available for specific products only. Please contact your sales representative for details by product.

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