

TECHNICAL REFERENCE

Ordering Guide

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KALYPSO™
VIDEO PRODUCTION CENTER

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KALYPSO™ VIDEO PRODUCTION CENTER

Not just a production switcher, Kalypso is a video production center and provides all the controls needed during a live production within arms reach. The classic layout and quality craftsmanship of Grass Valley production switchers has been preserved in Kalypso. Technical Directors know they can switch with confidence because of the reliability of the switches and lever arms and the intuitive, familiar panel layout. In addition, a rich set of new features, source name displays, M/E status reporting and an intuitive touch-screen based menu system build upon the already popular Grass Valley control panel system.

The production switcher has evolved from being a primary tool in a video production process that switched sources and applied transition effects, to the focal point for program creation and control of peripheral devices. Kalypso takes this to a new level with unmatched machine control, router interface, and integration of traditionally discrete functions such as digital effects, still store and animation. Kalypso's optional 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 greatly diminishes the need to purchase extra options just to avoid an "on-air trap."

Configuring Kalypso Using This Guide

Kalypso configurations are straightforward. When ordering a Kalypso video production center system, first you order a base system frame without control panel using a KALYPSO-4 or KALYPSO-2 model number. Next order the appropriate control panel, or panels. Then, the appropriate options can be ordered individually, or in two incremental option packages. There's a standard, or "value" configuration, and then a more fully optioned "super" package. Additional individual options may be added to these. Look for information in each model description in this guide to help determine maximum quantities allowed, and additional option slots available when an option package is ordered.

Product Overview (some features are optional)

- Powerful New Mix/Effects Architecture
- 4 Keyers per M/E for even more flexible layering
- 2 Utility Buses per M/E for a separate PGM mix, video in borders, or masking
- Advanced M/E Technology - 2 M/Es in One
- Programmable Clean Feed for Multi-Client Productions
- Built-In Run-time Device Control for Profile®, VTRs, DDRs and more
- Built-In DVE with 6 video/key (12 video/video) channels of effects plus external DVE support
- The Grass Valley Interface that set the Industry Standard
- Advanced Source Name Displays, M/E Status Displays and Touch Screen Control
- Up to 80 Inputs and 48 Outputs (40 for Kalypso-2)
- 46 outputs assignable to any combination of program, preview, clean-feed, stillstore or auxiliary bus outputs (38 on Kalypso-2)
- 100 Frame Still Store with Animation Capability
- Multi-Panel and Multi-Frame Networking Capability
- Kalypso operates automatically in either 525 line/59.97 Hz or 625 line/50 Hz, depending on the field rate of the analog, color-black timing signal on its reference input.
- User selectable 4:3 or 16:9 aspect ratios

Standard Features

Designed for the Demands of Live Production

–In the Studio or On the Road

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 frame space for Kalypso, including power supplies, internal still store and transform engines.

Scalable I/O Architecture

The base Kalypso-4 and Kalypso-2 systems include 16 component serial digital inputs and 8 component serial digital outputs. The inputs can be assigned to any control panel crosspoints as video and/or as associated key signals. The outputs included with the base system allow effects send of up to 4 video key pairs, or can be assigned to any of the M/E outputs or input matrix sources.

With up to 80 serial digital component inputs Kalypso is an excellent platform for productions requiring a large number of video sources (such as car races or golf tournaments). Yet it is very scalable with increments of 16 inputs and 8 outputs for fitting Kalypso to each facility or application. You have direct access to all 80 inputs (each input may be video or key) without the need for external routing or sub-switching. Automatic input timing of ± 10 microseconds is provided for each input.

The robust output bus has up to 48 (40 in Kalypso-2) serial digital component outputs, 46 (38 in Kalypso-2) of which can easily be reconfigured from their default mapping. A physical output can be assigned as an auxiliary bus or to any of the internal M/E or PGM/PST outputs such as to an internal stillstore output, program, preview, or clean feed. This provides the ultimate flexibility in determining the number of M/E and auxiliary buses needed for a particular installation.

Powerful M/E and Keying Architecture

Each Mix/Effects bank has four keyers and four background buses. Kalypso's video crosspoint matrix architecture allows unlimited re-entry of any M/E on any other bus. Two of the background buses are the standard A/B backgrounds. The other two background buses are utility buses that can be used for mask sources or for filling borders with video. The utility buses are also used in Kalypso's Advanced M/E modes available with the FlexiKey™ and DoubleTake™ options. Each background and key bus has video processing with controls for Luminance and Chroma gain plus other effects like posterization and mosaics.

With four keyers per M/E, Kalypso offers outstanding capabilities for compositing keys such as logos and graphics. Each full function keyer is capable of linear, luminance and chroma keys (optional). The keyers use any of the Kalypso

video inputs for a video fill or an external key source. Chroma key sources are CCIR 601 serial digital. Each fill video can have an external key source associated with it or act as a self-key.

Six wipe pattern generators are available in each M/E. Two complex wipe generators are for transitions and keyer functions with extensive pattern selection and pattern mix. Four (one dedicated to each of the four keyers), with basic patterns, are used for matte washed key fill and key borders, masks, and preset patterns.

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. You can customize which DSKs go to which program output for up to four different feeds.

Borderline™ generators are included on every keyer for drop shadows, outlines and extrudes on keyed sources. This allows every Keyer to have a 1 to 3 line border, shadow with 1 to 6 line offset, a 1 to 6 line extrude, or a 1 to 3 line outline. Edges can have any luminance level or can be colorized with a flat or color wash. Shadow and extrude may be positioned down-left to down-right.

Hot Swappable Modules and Power Supplies

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. Each Mix/Effect bank and its keyers are on a separate module simplifying troubleshooting and on air replacement.

Effects Send

Every Kalypso M/E video or key path can be sent to an internal effects engine or an external effects device. Any or all of the four keyer sources (video and key) plus any or all of the four background buses (A, B, U1 and U2) can have effects applied or can be used for DPM wipe transitions of backgrounds, keys, or both at once. Effects send paths feed all six optional internal effects engines plus four bus pairs of video and key for external effects sends. A total of 10 effects sends can be done at one time.

Kalypso—A Networkable, Shared Resource

Kalypso is designed for today's integrated production facility. The smooth, on board interface to Routers, Profiles®, VTRs (optional hardware and/or software may be required on controlled devices), Krystal™, GVeous™ or Dveous™ simplifies building an integrated production suite. Kalypso goes beyond merely controlling devices, however. You can have two Kalypso control panels simultaneously interfacing to a single frame or two frames. The built-in dual 10/100-Base-T Ethernet interface makes it easy to acquire content from computer-based systems and to manage your Kalypso resources.

Tally Relay Closures

Tally relay closures for 64 crosspoints are standard. These can be split into two different tally levels, such as for “red/green tally” for on-air and preset tallies. One optional tally module can be added to the KALYPSO-4 or the KALYPSO-2 frame.

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 (optional hardware and/or software may be required on controlled devices). The controls are conveniently located between M/E 4 (PGM/PST) and M/E 3 on the 4 M/E panel, and between the two M/E banks (labeled “M/E” and “PGM/PST”) on the 2 M/E panel. These include standard machine control functions and a clip name display. Machine control functions include play, cue, mark, jog, rewind, fast forward and stop. Additionally a clip can be set to play as soon as that source is taken to air, automatically.

Emmy-Award Winning E-MEM™ Effects Memory

To accommodate the expanded functionality that comes with more keyers, more full function M/Es, and expanded control requirements of a video production center, Kalypso takes the Grass Valley innovation of production switcher effects memory to the next level. There are 100 E-MEM registers available per M/E, plus 100 for each secondary program if either Advanced M/E option (FlexiKey™ or DoubleTake™) is enabled. Memory registers no longer have just a number assigned, but now you can name the registers, plus you can combine the registers into logical groups such as the set of all effects for the evening news show, and give the group a name like “Evening News.”

Learns and recalls of effects can be initiated on a combination of levels including M/Es, Still Store, DPM, and seven definable Miscellaneous levels. Every level is keyframe based and consolidates switching, effects, and device control in to cohesive video production events and processes.

Non-volatile storage of E-MEM and system configurations is possible with the internal system hard drive and the external Zip 250Mb drive.

Optional Features

Enhanced Effects and Transitions (KAL-XFORM)

With up to six video/key (12 video/video) channels of built-in digital effects, you can perform 2D transforms in 3D space along with traditional 2D effects such as blur. Kalypso's feature-rich transition system augments the standard cuts, mixes and wipes with DPM transitions which use internal and/or external effects channels as transitional effects. Any keyer, background or utility bus can be a part of a DPM transition. Remember, the standard 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.

DoubleTake™ Secondary Compositing (KAL-DOUBLETAKE)

You can divide the 4 keyers between 2 separate background transitions in DoubleTake mode. For example, 2 keyers can be placed over the primary background transition at the same time that the other 2 keyers are placed over a second background transition (using the 2 utility buses). This effectively creates 2 complete M/E outputs from a single Mix/Effects bank! These two outputs are available at the same time and can have their own preview output as well. Thus a 4 M/E Kalypso effectively becomes an 8 M/E production system.

In addition, the secondary output can be put into Split Layered Mode which composites 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, or 4 M/E's in a 2 M/E Kalypso.

FlexiKey™ Programmable Clean Feed (KAL-FLEXIKEY)

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 sports 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 video-tape. 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 for a secondary client to bring up localized graphics automatically on the clean feed output when the corresponding graphic appears on the primary program output, which is useful for secondary language or regional feeds.

SuperStill™ Animation Capable Still Store (KAL-STILL)

Kalypso's still store system has up to 8 simultaneous outputs that may be video, key or mask in any combination. The still store system has a memory buffer capable of storing 100 or more video frames. 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 10/100-Base-T Ethernet connection. Up to eight simultaneous outputs may be animated for short graphics or video animations.

SuperShot™ Advanced Shotbox (KAL-SHOTBOX)

Recalling switcher setups is quicker and easier with the new SuperShot advanced shot box panel. This option gives you instant access to twenty 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 can be named and E-MEM levels can be enabled to save any combination of levels desired.

Chromatte™ Chroma Keying (KAL-CHROMA)

In addition, each keyer in every M/E can perform chroma keys using Grass Valley's Chromatte™ Advanced Dual Chroma Keyer. Kalypso's chroma keyers, still-store outputs and internal effects are floating resources that 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." You only need to order the total number of dual chroma keyers you'd ever need at one time for your applications.

Input and Output Expansion (KAL-IN and KAL-OUT)

With up to 80 serial digital component inputs, Kalypso is an excellent platform for productions requiring a large number of video sources (such as car races or golf tournaments). Yet it is very scalable with increments of 16 inputs and 8 outputs for fitting Kalypso to each facility or application. You have direct access to all 80 inputs (each input may be video or key) without the need for external routing or sub-switching. Automatic input timing of ± 10 microseconds is provided for each input. The robust output system has up to 48 serial digital component outputs in the 4 M/E frame (40 in the 2 M/E frame), 46 (38) of which can easily be reconfigured from their default mapping. A physical output can be assigned as an aux bus, or to any of the internal M/E or PGM/PST outputs such as program, preview, or clean feed. This provides the ultimate flexibility in determining the number of M/E and auxiliary bus outputs needed for a particular installation. Two outputs are available with color black and test signal outputs. These signals are back-timed to the analog reference input for use in troubleshooting.

Redundant Power Supplies (KAL-FRAMEPS, KAL-PANELPS, and KAL-PANELPS2)

The Kalypso power supply frame has slots for three power supplies. Two are standard and are required to power a normally optioned system. A third power supply is available as an option for redundant frame power (KAL-FRAMEPS). With the optional redundant supply installed, a failed supply can be removed and replaced without shutting down the system. The Kalypso 4 M/E control panel (KAL-4PNL or KAL-4PNLSRC) has one standard power supply. A second supply is available as an option for redundancy (KAL-PANELPS). The Kalypso 2 M/E control panel (KAL-2PNL) also has one standard power supply with an optional redundant supply available. The 2 M/E panel supply is different than the 4 M/E, and therefore requires a different model number, KAL-PANELPS2.

Additional Tally Relay Closures (KAL-TALLY)

One tally board with 64 closures comes standard with every Kalypso electronics frame. These closures can be configured as a single 64 closure tally or can be split into two different tally levels, such as for “red/green tally” for on-air and preset tallies. One optional tally module (with 64 additional closures) can be added to the KALYPSO-4 or the KALYPSO-2 frames. This module has the same multi-level capability as the standard module.

KALYPSO SERVICE OPTIONS

Service options described in this Ordering Guide may not apply to all customers worldwide. The information below is intended to provide an overview of available support services for your Kalypso Switcher. For specific items and pricing for your region, contact your account manager or Grass Valley Group representative.

Ensure your product gets off on the right foot by adding one of our new service bundles ~ a perfect mix of services needed to jumpstart your new network.

ProStart

ProStart provides an additional year of product coverage after the 1-year warranty period expires. Plus it provides a 4-hour on-site commissioning & a 4-hour on-site technical overview. (KAL-PSB)

- Advance parts exchange only-shipped same day for next business day arrival (must be ordered before 2pm PST); FRU at the module level (not whole unit replacement); No charge Toll-free hotline access to diagnosis problems 6am to 5pm Monday-Friday PST
- 4-hour commissioning -brief product installation checkout to ensure customer has installed product correctly
- 4-hour technical overview -brief product overview describing setup, configuration, and troubleshooting procedures

4-Day On-Site SmoothStart

4-Day On-Site SmoothStart is a complete solution to installation. Includes: 1-day commissioning, 1-day technical overview & a 2-day operational overview all at your location. (KAL-SS)

- Comprehensive on-site commissioning, verification and product overview includes configuration setup, panel testing, major function testing, E-MEM testing, disk system testing and card testing, as well as a complete network testing to assure compatibility with Profile.
- Technical overview training will familiarize the end user with signal and functions of Kalypso, troubleshooting procedures, manual and service review and training on setup and configuration.
- Operational overview includes introduction to mainframe tour, system architecture, panel tour transition panel keyers & key modifiers, touch screen menu operations. As well as M/E status display identification exercise, E-MEM operations, keyframe exercises, disk operations, external interfaces & advanced course preview.

IMPAK Training

IMPAK Training brings a concentrated training program to you. Pull your team together for this super 2-day comprehensive training course. Includes: 1-Day Technical and Maintenance Training & 1-Day Operational Training. (KAL-IMPK)

- Technical overview training will familiarize the end user with system installation, configuration, signal flow, troubleshooting, interfacing to external video effect devices, & control panel operations

- Operational overview training includes system, panel and architecture overview, external interfacing, transition, keyer and E-MEM operations, disk operations, & still store operations.

3-Day On-Site SureStep

3-Day On-Site SureStep spreads out your technical support visits. Use your initial 2-days of on-site professional services for set-up assistance and use your additional follow-up visit down the road. And receive a free seat at factory training designed specifically for your Kalypso. (KAL-STP)

- On-Site Professional Services includes assisting you, as you need it, with installation of your Kalypso
- Follow-up visit can be used as a question and answer session, resolution session or as an additional day of setup.
- 1-Seat at Factory Training allows the end-user to go to one of our Training Center for product specific operational or technical training.

NextStep

Take the NextStep because some times you need extra support. When you buy NextStep you're buying a bank of 36 hours of over-the-phone technical training. Now you can get that extra training you need. (SVC-NSTP)

Preventative Maintenance Contract

Preventative Maintenance Contract are available to provide quarterly scheduled maintenance visits by our on-site field professionals (SVC-PM-CS)

Comprehensive or Advanced Exchange Service Contracts

Comprehensive or Advanced Exchange Service Contracts are available up to 5 years beyond initial warranty. Contracts provide that extra level of product protection & locks-in your maintenance fees for the contract period. (KAL-2-CS, KAL-4-CS, KAL-2-AE, KAL-4-AE)

- Comprehensive service contracts are a step above an Advanced Exchange Contract, it provides an additional proactive software update service, waives minimum parts fees and same day shipping fees and gives you automatic spares kit replenishment if you purchase a critical spares kit. Plus it gives you an additional 10% discount on any additional services purchased.
- Advanced exchange service contract provides advanced module exchange within 24 hours, FRU at the module level (note whole unit replacement), Toll-Free Hotline support, covers all parts and shipping.

Software Subscription

Software Subscription keeps your system running on the latest software version and provides automatic software updates pertaining to license base software applications. Contracts also available for KAL-SERIAL and KAL-IF-VTR software, and additional unit discounts. (KAL-SU, KAL-VTR-SU & KAL-VTR-SUAD)

Product Training

Product Training gives users the ultimate tool by guaranteeing the most out of your product. Understanding the product features and operations is easy with our Kalypso training options:

- 3-Day Factory Basic Operations Training for Kalypso (KAL-OPS) - Overview of system, panel and architecture, configurations, external interfacing, transition and keyer operations, E-MEM operations, disk operations, still store operations & secondary M/E fundamental and operations.
- 5-Day Factory Advanced Operations Training for Kalypso (KAL-OPSADV) - Overview of system, panel and architecture, advanced configurations, advanced user preferences, multiple M/E outputs and programming, secondary M/E control and re-entry, dynamic keying, transform engine operations, advanced external interfaces, Aux bus operations, keyframing and still store/animation operations.
- 4-Day Factory Technical Training for Kalypso (KAL-MNT) - System installation, configuration, video and control signal flow, troubleshooting, digital video concepts, interfacing to external digital video effect devices, control panel operations for all versions.

Critical Spares Kit

Critical Spares Kit keeping crucial parts on-site alleviates any unnecessary downtime. (KAL-KIT)

- Reference Input/Output, Communications Input/Output, Sync Generator, Crosspoint - 1 Module, Control Panel Real-Time Processor, Electronics Frame Control Processor, Fan Slide Assembly & Panel Hard Drive

4 M/E SYSTEMS PRODUCT ORDERING

Kalypso 4 M/E Systems

Kalypso 4 M/E System (w/o panel)

KALYPSO-4

This model is ordered as the base system for all 4 M/E Kalypso systems. To order the exact configuration required, additional options may be added such as additional input and output modules, or one of the Option Packages.

Includes:

- 4 M/E (3 M/E + PGM/PST) Electronics Frame
- 1 KAL-IN 16 Non-looping Inputs
- 8 Outputs with Effects Send Capability (up to 4 Pairs). The standard output module is not the same as the option output module.
- 4 Keyers per M/E
- 4 Borderline™ Generators per M/E
- 6 Wipe Generators per M/E (2 Complex/4 Basic)
- Look-ahead Preview on each M/E and PGM/PST
- 1 KAL-TALLY On-air Tally (64 relay closures)
- Interface Software for Krystal, GVeous, SMS-7000 and Profile (Software option KAL-IF-PROFILE is required for Profiles)
- 2 KAL-FRAMEPS Frame Power Supply Modules (3 required for redundancy)
- 1 Year Standard Warranty (See Grass Valley Group Warranty Policy)

Control Panel Options for 4 M/E Systems

Note: When ordering a Kalypso control panel, you must specify either the KAL-BRKT for recessed mounting or KAL-BRKT-FS for freestanding mounting of the Local Aux Bus Panel and the Touch Screen Display.

Kalypso 4 M/E Panel (3 M/E + PGM/PST) without Source Name Displays in M/Es 1, 2 and 3

This control panel has four full-function mix effect banks and the 4th M/E can function as a traditional program/preset bank. Many exclusive and innovative features are included standard such as M/E status displays on each M/E and three-color, 32x32 dot matrix source displays for every crosspoint button on the Local Aux Bus Panel and on M/E 4, optional on M/E 1-3. Includes:

- Main Panel
- Separate Local Aux Panel
- Touch Screen Menu Display
- External Zip drive and CD-ROM drive
- Current software and manuals

KAL-4PNL

NOTE: Specify either the KAL-BRKT for recessed mounting or KAL-BRKT-FS for freestanding mounting of the Local Aux Bus Panel and the Touch Screen Display. If unspecified, the Kalypso 4 M/E panel will be shipped with recessed mount brackets.

Kalypso 4 M/E Panel, including Source Name Displays in M/Es 1, 2, and 3

Order with Kalypso system when Source Name Displays are required in every M/E bank. Includes all of KAL-4PNL, plus KAL-SOURCE4 (pre-installed).

KAL-4PNLSRC

NOTE: Specify either the KAL-BRKT for recessed mounting or KAL-BRKT-FS for freestanding mounting of the Local Aux Bus Panel and the Touch Screen Display. If unspecified, the Kalypso 4 M/E panel will be shipped with recessed mount brackets.

Kalypso Tri-Color Source Name Displays for M/E 1-3

KAL-SOURCE4

Tri-color source name displays are included in the local aux panel and on M/E 4 (PGM/PST) in the KAL-4PNL control panel. This option includes the 32x32 bit-mapped, 3 color LED, source name displays for M/Es 1, 2 and 3. Allows various font sizes, split-levels and icons to represent assigned sources for every crosspoint. Order this option to add source name displays for a KAL-4PNL panel that has been previously delivered. Order KAL-4PNLSRC to have all source name displays preinstalled. Maximum 1 option per control panel. [included in KAL-4PNLSRC]

2nd Touch Screen Display

KAL-TOUCHDIS

Adds a 2nd touch screen menu display to a Kalypso panel. The 2nd touch screen display needs a separate PC and power supply to drive it. The power supply for the 2nd touch screen is provided with this option kit. The separate PC is not included in this option and is not sold by Grass Valley Group. This PC must meet a minimum set of requirements, as follows:

- Pentium II class processor 350 MHz or faster
- Windows NT 4.0 Operating System with SP4
- 128 MB RAM
- Hard Drive with 100 MB available space
- Two serial communication ports (e.g. COM1 and COM2)
- 10/100 Base T Network Interface Card (NIC)

NOTE: Specify either the KAL-BRKT-MEN for recessed mounting or KAL-BRKT-MEN-FS for freestanding mounting of the Touch Screen Display. If unspecified, the 2nd touch screen display will be shipped with recessed mount brackets.

Kalypso Satellite Shot Box Panel

KAL-SHOTBOX

Provides recall for 20 pages of 20 E-MEMs with LED display of effect names. Includes Auto-run and the ability to save specific E-MEM Levels. Maximum 12 per Kalypso control panel.

Option Packages for 4 M/E Systems

Note: These packages cannot be unbundled. Build up from these to get desired configuration.

Kalypso 4 M/E Value Package

KAL-VALUEPAK4

This option package is ordered in addition to the basic system model. The system configuration may include this model or the KAL-SUPERPAK4, but not both. The Value Package adds the following options to the Basic KALYPSO-4:

- 2 KAL-IN 32 non-looping inputs (totaling 48)
- 3 KAL-OUT 24 outputs (totaling 32)
- 1 KAL-STILL Still Store System
- 1 KAL-DOUBLETAKE Split M/E Modes
- 1 KAL-FLEXIKEY Programmable Clean Feed
- 1 KAL-CHROMA Dual Chroma Keyer (2 Floating Chroma Keys)
- 1 KAL-PANELPS Redundant Control Panel Power Supply
- 1 KAL-FRAMEPS Redundant Frame Power Supply
- 1 KAL-IF-PROFILE Interface Software for Profile(s) connected to Kalypso

Kalypso 4 M/E Super Package

KAL-SUPERPAK4

This Option Package is ordered in addition to the basic system model. The system configuration may include this model or the KAL-VALUEPAK4, but not both. The Super Package adds the following options to the Basic KALYPSO-4:

- 4 KAL-IN 64 non-looping inputs (totaling 80)
- 5 KAL-OUT 40 outputs (totaling 48)
- 1 KAL-STILL Still Store System
- 1 KAL-DOUBLETAKE Split M/E Modes
- 1 KAL-FLEXIKEY Programmable Clean Feed
- 2 KAL-CHROMA Dual Chroma Keyer (4 Floating Chroma Keys)
- 1 KAL-PANELPS Redundant Control Panel Power Supply
- 1 KAL-FRAMEPS Redundant Frame Power Supply
- 1 KAL-IF-PROFILE Interface Software for Profile(s) connected to Kalypso

I/O Options for 4 M/E Systems

Kalypso Input Module

KAL-IN

Each module provides 16, non-looping, CCIR-601 serial digital, BNC inputs. Maximum of 5 modules are allowed.

[1 (16 inputs) included in KALYPSO-4]

[2 (32 inputs) added when KAL-VALUEPAK4 is added to KALYPSO-4]

[4 (64 inputs) added when KAL-SUPERPAK4 is added to KALYPSO-4]

Kalypso Output Module

KAL-OUT

The KALYPSO-4 Base Kalypso system has 8 CCIR-601 outputs with effects send capability, and does not include the fixed black and test signals. This standard effects send capable output module is not the same as the KAL-OUT optional output module. Each KAL-OUT module provides 8 dual BNC outputs. A total of 40 outputs can be added to a 4 M/E system (totaling 48). The two, fixed color black and test signal outputs are accessed in slot B12. Maximum of 5 can be ordered for KALYPSO-4, including those in KAL-VALUEPAK4 and KAL-SUPERPAK4 Option Packages. Each of up to 46 outputs can be assigned to any M/E or aux bus output in any combination, for example, Program, Preview, plus 44 aux buses.

[8 effects send capable outputs (not KAL-OUT module) included in KALYPSO-4]

[3 (24 outputs) added when KAL-VALUEPAK4 is added to KALYPSO-4]

[5 (40 outputs) added when KAL-SUPERPAK4 is added to KALYPSO-4]

Redundant Power Options for 4 M/E Systems

Kalypso Frame Power Supply

KAL-FRAMEPS

Each Kalypso frame includes two power supplies, standard. One power supply can be added for redundancy. Each supply is accessible and hot swappable. Any two must operate to power the system. Maximum of 1 per KALYPSO-4 frame for redundancy.

[included in KAL-VALUEPAK4 and KAL-SUPERPAK4]

Kalypso-4 Control Panel Power Supply

KAL-PANELPS

A Kalypso control panel includes one standard power supply. Maximum of 1 per control panel for redundancy.

[Included in KAL-VALUEPAK4 and KAL-SUPERPAK4]

Frame Options for 4 M/E Systems

Kalypso SuperStill Advanced Still Store Module

KAL-STILL

Stores 100 still frames of video, key or mask for instant access on 8 outputs. User can configure one or more outputs as preview outputs. Two inputs feed the still store. A dedicated hard drive is included for storing thousands of stills.

Continuous, frame-rate, access is allowed on any or all outputs at once for animations. Maximum of 1 option per KALYPSO-4 frame.

[included in KAL-VALUEPAK4 and KAL-SUPERPAK4]

Kalypso Chromatte Advanced Dual Chroma Keyer

KAL-CHROMA

Two chroma keyers that can be used in any keyer in any M/E in the system. Chroma keyers are software enabled. Uses CCIR-601 inputs. Maximum of 8 options (16 chroma keyers) per KALYPSO-4 frame.

[1 (2 chroma keyers) included in KAL-VALUEPAK4]

[2 (4 chroma keyers) included in KAL-SUPERPAK4]

***NOTE: Use
KAL-CHROMA-S
nomenclature for
options ordered for
existing systems.***

Kalypso Transform Engine Module

KAL-XFORM

Internal effects for three channels of video and key or six channels of video. Effects are 2D with 3D perspective effects. Maximum of 2 per KALYPSO-4 frame for a total of 6 channels of video and key or 12 channels of video, all accessible with effects send.

[1 (3 channels) included in KAL-VALUEPAK4]

[2 (6 channels) included in KAL-SUPERPAK4]

Kurl effects for XFORM Option

KAL-KURL

Page turn, page roll, splits and mirrors, and V/V depth combining for Kalypso frame Transform Engines. Software enabled option for one or both T.E. modules. At least one KAL-XFORM option required. Maximum one per Kalypso frame.

Kalypso Internal Tally Module

KAL-TALLY

Provides tally relay closures for up to 64 crosspoints. Can be split into two levels, such as PGM tally and PST tally. Maximum 2 per KALYPSO-4 frame.

[1 included in KALYPSO-4 Base System]

Kalypso FlexiKey Programmable Clean Feed System

KAL-FLEXIKEY

A software option that allows every M/E to have from two to four program outputs with automated keying based on association with the primary program's key

***NOTE: Use
KAL-FLEXIKEY-S nomenclature
for options ordered for
existing systems.***

sources. For example, a foreign language graphic on the secondary program can be associated with a local language graphic on the primary program. This option, or the KAL-DOUBLETAKE option will enable the secondary program output. Maximum 1 per KALYPSO-4 frame.

[included in KAL-VALUEPAK4 and KAL-SUPERPAK4]

Kalypso DoubleTake Split M/E Modes

A software option that allows the secondary output of every M/E to act as a completely independent program output with independent backgrounds, keys and wipes. This option or the KAL-FLEXIKEY option will enable the secondary program output. Maximum 1 per KALYPSO-4 frame.

[included in KAL-VALUEPAK4 and KAL-SUPERPAK4]

KAL-DOUBLETAKE

***NOTE: Use
KAL-DOUBLETAKE-S
nomenclature for
options ordered for
existing systems.***

Other Options for 4 M/E Systems

Kalypso Emergency Bypass System

Kalypso Emergency Bypass System with special 8900 Series modular frame, emergency bypass keyer module, passive relay module and single power supply. An optional 8900 redundant power supply can be added (8900PSX). Special “Y” cable connection from the Local Aux Bus Panel allows activation of emergency bypass and control of keyer module. The Keyer Module allows you to mix on/off up to two keyers at a preset transition rate. The passive relay module switches from the Kalypso output to the bypass router output, including both Program and Preview.

Redundant power for the Kalypso local aux panel can be provided by ordering the KAL-AUXMENPS option described below

KAL-EMERG

Kalypso 2 M/E to 4 M/E Frame Upgrade

Kalypso 2 M/E to 4 M/E Electronics Frame upgrade kit includes one crosspoint module and two M/E modules. Simply install the modules in the existing Kalypso 2 frame. A Kalypso 2 M/E control panel can control all four mix effects. If a 4 M/E control panel is required, the KAL-4PNL or KAL-4PNLSRC option must be ordered separately.

KAL-UPG-2ME-4ME

Kalypso Local Aux or Menu Power Supply

One “brick” power supply for Kalypso Touch Screen Display or Local Aux Bus Panel. One can be ordered as a spare or a replacement for the Touch Screen Display. The Local Aux Bus Panel is normally powered through a cable to the main panel tub. One KAL-AUXMENPS can be added for redundancy, or two can be added for full independence and redundancy. Maximum 2 for Local Aux Bus Panel for independent and/or redundant supply.

[1 included with KAL-TOUCHDIS]

KAL-AUXMENPS

Profile Interface Software (VDRCS)**KAL-IF-PROFILE**

Enables one or more Profile chassis to be controlled from a specific Kalypso system. This is a software option called VDRCS that may be installed on one or more Profile systems connected to a single Kalypso frame.

[1 included with KAL-VALUEPAK4 and KAL-SUPERPAK4]

Serial Engine for Kalypso**KAL-IF-SERIAL**

Provides six RS-422 ports in a 1 RU chassis. Connects to one or more Kalypso frames via the Ethernet LAN connection. May be used to connect up to six VTRs or similar devices to one or more Kalypso systems.

VTR Interface Software (VSVC)**KAL-IF-VTR**

Enables one or more VTRs to be controlled from Kalypso. Supports BVW and many other standard VTR protocols. This option requires one KAL-IF-SERIAL option for every six VTRs. This software may be installed on one or more KAL-IF-SERIAL Serial Engines that are connected to one Kalypso frame.

Net Central II Agent**KAL-NETCEN**

Net Central II Agent for Kalypso. Enables remote monitoring and error reporting for Kalypso systems via Ethernet. Order one for each Kalypso frame where remote monitoring is desired. Software enabled option. Maximum one per Kalypso frame.

24 Button Kalypso Single Destination Aux Bus Remote Control Panel, 1RU**KAL-24AUX1**

Remote aux bus panel with 24 small crosspoint buttons for a single bus or bus pair. Joystick override standard for 8 sources. Maximum 32 per Kalypso frame.

24 Button Kalypso Single Destination Aux Bus Remote Control Panel, 2RU**KAL-24AUX2**

Remote aux bus panel with 24 large crosspoint buttons for a single bus or bus pair. Joystick override standard for eight sources. Maximum 32 per Kalypso frame.

24 Button Kalypso Delegated Destination Aux Bus Remote Control Panel, 3RU**KAL-24AUX3**

Remote aux bus panel with 24 large crosspoint buttons with delegation for up to 18 aux buses or bus pairs. Joystick override standard for eight sources. Maximum 32 per Kalypso frame..

32 Button Kalypso Single Destination**Aux Bus Remote Control Panel, 1 RU****KAL-32AUX1**

Remote aux bus panel with 32 crosspoint buttons for control of a single bus or bus pair. Joystick override standard for 14 sources. Maximum 40 per Kalypso main control panel, including KAL-32AUX2 panels.

32 Button Kalypso Delegated Destination**Aux Bus Remote Control Panel, 2 RU****KAL-32AUX2**

Remote aux bus panel with 32 crosspoint buttons for control of 16 aux busses of a possible 46. Joystick override standard for 14 sources. Maximum 40 per Kalypso main control panel, including KAL-32AUX1 panels.

4000 to Kalypso Remote Aux Panel Upgrade**KAL-4000AUXUPG**

Upgrade kit to convert any Model 2200/3000/4000 remote aux panel to a Kalypso 24 Button Remote Aux Panel. One required per panel to be converted.

Component Analog to Digital 601**8950ADC**

The 8950ADC module from Grass Valley Group's 8900 modular product line has a special 0:4:4 mode that takes the RGB analog input from a camera or other chroma key source and converts it to a special signal format for Kalypso. One 8950ADC module is used for each full bandwidth chroma key source.

Any pair of Kalypso inputs may be used for a 4:2:2 / 0:4:4 chroma key fill/source pair, so the total number of full bandwidth chroma key inputs is limited only by the total number of Kalypso inputs available.

Component analog formats supported are RGB, EBU N10, Beta (US), Beta (Japan), MII (US), and MII (Japan).

SERVICE OPTIONS FOR 4 M/E SYSTEMS**ProStart****KAL-PSB**

ProStart provides an additional year of product coverage after the 1-year warranty period expires. Plus it provides a 4-hour on-site commissioning & a 4-hour on-site technical overview.

4-Day On-Site SmoothStart**KAL-SS**

4-Day On-Site SmoothStart is a complete solution to installation. Includes: 1-day commissioning, 1-day technical overview & a 2-day operational overview all at your location.

IMPAK Training

IMPAK Training brings a concentrated training program to you. Pull your team together for this super 2-day comprehensive training course. Includes: 1-Day Technical and Maintenance Training & 1-Day Operational Training.

KAL-IMPK**3-Day On-Site SureStep**

3-Day On-Site SureStep spreads out your technical support visits. Use your initial 2-days of on-site professional services for set-up assistance and use your additional follow-up visit down the road. And receive a free seat at factory training designed specifically for your Kalypso.

KAL-STP**NextStep**

NextStep because some times you need extra support. When you buy NextStep you're buying a bank of 36 hours of over-the-phone technical training. Now you can get that extra training you need.

SVC-NSTP**Preventative Maintenance Contracts**

Preventative Maintenance Contracts are available to provide quarterly scheduled maintenance visits by our on-site field professionals.

SVC-PM-CS**Comprehensive service contracts**

Comprehensive service contracts are a step above an Advanced Exchange Contract, it provides an additional proactive software update service, waives minimum parts fees and same day shipping fees and gives you automatic spares kit replenishment if you purchase a critical spares kit. Plus it gives you an additional 10% discount on any additional services purchased. Up-to 5 years of coverage available.

KAL-4-CS**Advanced exchange service contract**

Advanced exchange service contract provides advanced module exchange within 24 hours, FRU at the module level (note whole unit replacement), Toll-Free Hotline support, covers all parts and shipping. Up-to 5 years of coverage available.

KAL-4-AE**Software Subscription**

Software Subscription keeps your system running on the latest software version and provides automatic software updates pertaining to license base software applications.

KAL-SU

***For additional
units use
KAL-VTR-SUAD***

KAL-SERIAL and KAL-VTR Software Subscription

KAL-SERIAL and KAL-VTR Software Subscription keeps your system running on the latest software version contract covers KAL-SERIAL and KAL-IF-VTR Software.

KAL-VTR-SU**3-Day Factory Basic Operations Training for Kalypso**

3-Day Factory Basic Operations Training for Kalypso - Overview of system, panel and architecture, configurations, external interfacing, transition and keyer operations, E-MEM operations, disk operations, still store operations & secondary M/E fundamental and operations.

KAL-OPS**5-Day Factory Advanced Operations Training for Kalypso**

5-Day Factory Advanced Operations Training for Kalypso - Overview of system, panel and architecture, advanced configurations, advanced user preferences, multiple M/E outputs and programming, secondary M/E control and re-entry, dynamic keying, transform engine operations, advanced external interfaces, Aux bus operations, keyframing and still store/animation operations.

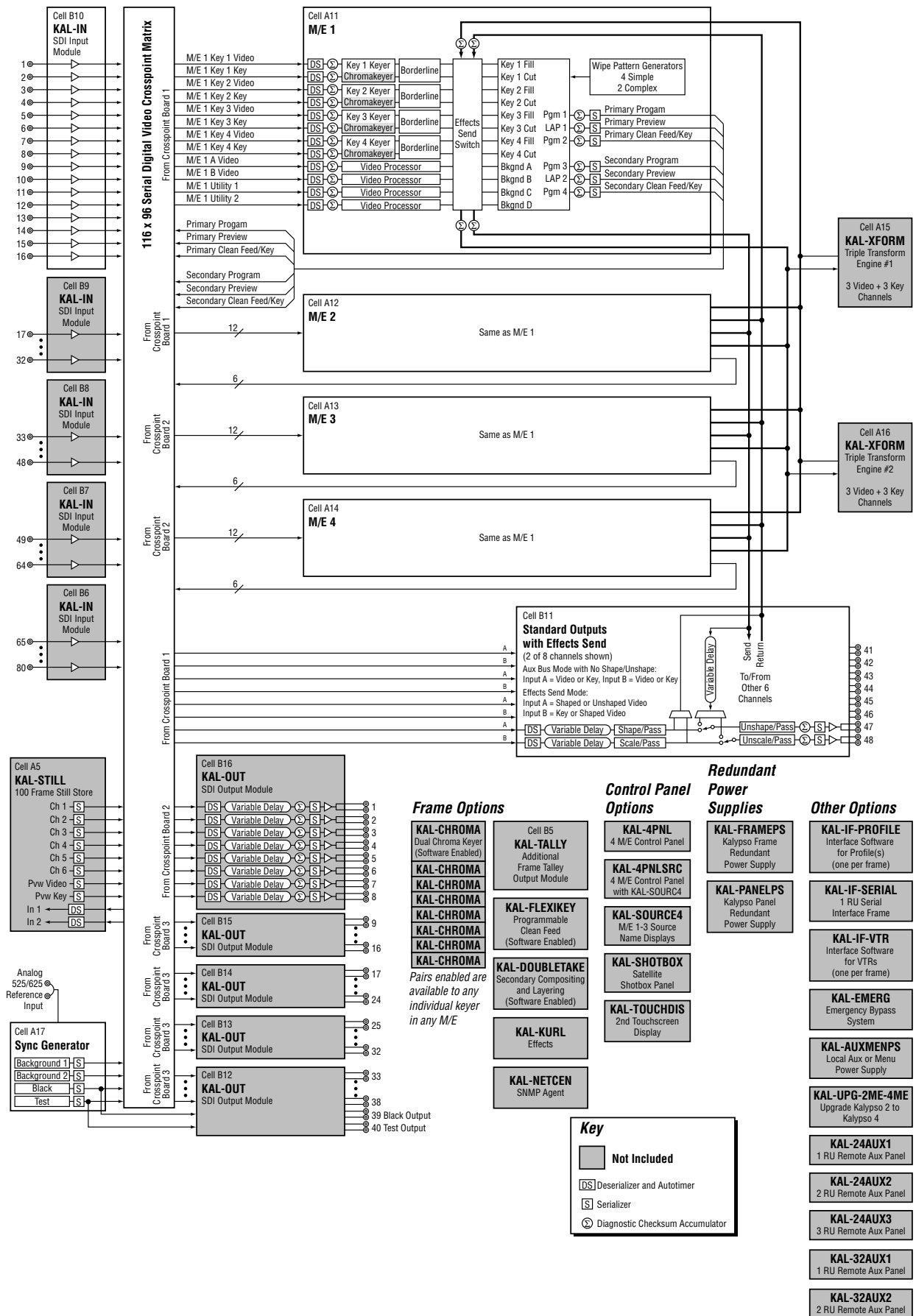
KAL-OPSADV**4-Day Factory Technical Training for Kalypso**

4-Day Factory Technical Training for Kalypso - System installation, configuration, video and control signal flow, troubleshooting, digital video concepts, interfacing to external digital video effect devices, control panel operations for all versions.

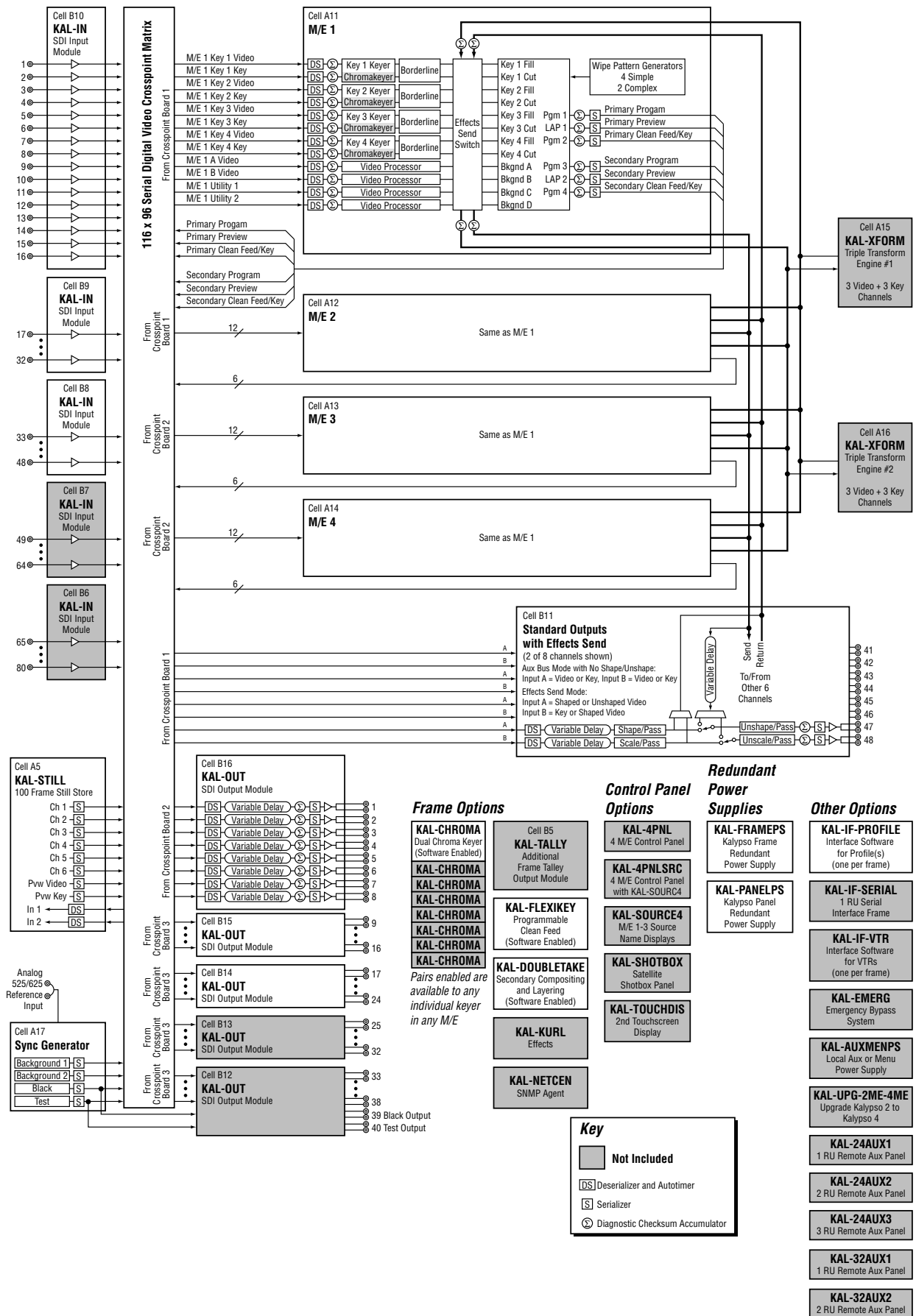
KAL-MNT**Kalypso Critical Spares Kit**

Kalypso Critical Spares Kit keeping crucial parts on-site alleviates any unnecessary downtime.

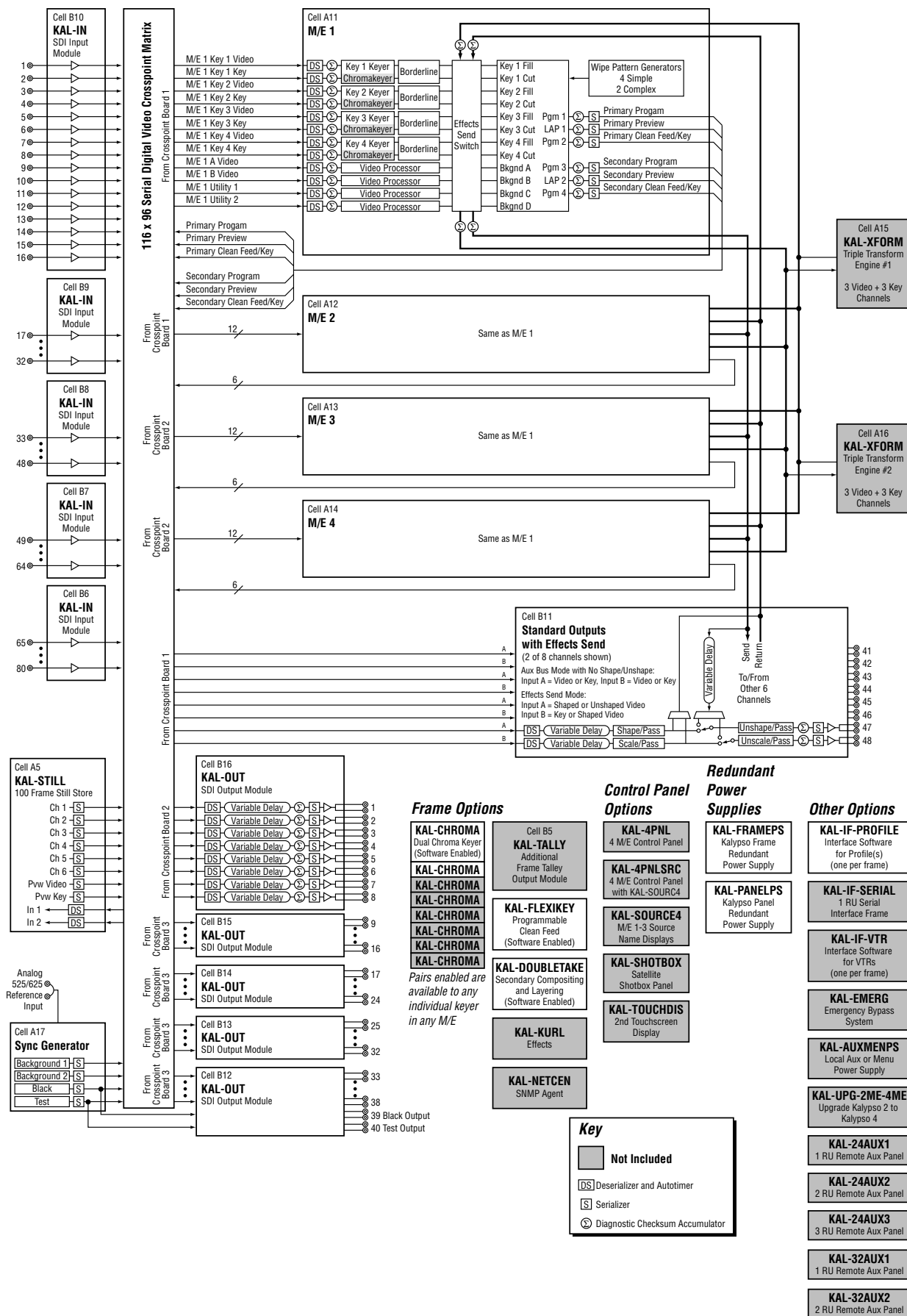
KAL-KIT



KALYPSO-4 (BASIC KALYPSO 4 M/E PACKAGE)



KALYPSO-4 AND KAL-VALUEPAK4 (KALYPSO 4 M/E VALUE PACKAGE)



KALYPSO-4 AND KAL-SUPERPAK4 (KALYPSO 4 M/E SUPER PACKAGE)

2 M/E SYSTEMS PRODUCT ORDERING

Kalypso 2 M/E Systems

Kalypso 2 M/E System (w/o panel)

KALYPSO-2

This model is ordered as the base system for all 2 M/E Kalypso systems. To order the exact configuration required, additional options may be added such as additional input and output modules, or one of the Option Packages. Includes:

- 2 M/E (1 M/E + PGM/PST) Electronics Frame
- 1 KAL-IN 16 Non-looping Inputs
- 8 Outputs with Effects Send Capability (up to 4 Pairs). The standard output module is not the same as the option output module.
- 4 Keyers per M/E
- 4 Borderline™ Generators per M/E
- 6 Wipe Generators per M/E (2 Complex/4 Basic)
- Look-ahead Preview on each M/E and PGM/PST
- 1 KAL-TALLY On-air Tally (64 relay closures)
- Interface Software for Krystal, GVeous, SMS-7000 and Profile (Software option KAL-IF-PROFILE is required for Profiles)
- Tri-color source Name Displays in the local aux panel, M/E 1 and PGM/PST
- 2 KAL-FRAMEPS Frame Power Supply Modules (3 required for redundancy)
- 1 Year Standard Warranty (See Grass Valley Group Warranty Policy)

Control Panel Options for 2 M/E Systems

Note: When ordering a Kalypso control panel, you must specify either the **KAL-BRKT-MEN** for recessed mounting or **KAL-BRKT-MEN-FS** for freestanding mounting of the Local Aux Bus Panel and the Touch Screen Display.

Kalypso 2 M/E Panel (1 M/E + PGM/PST)

This control panel has two full-function mix effect banks and the 2nd M/E can function as a traditional program/preset bank. All four M/Es of a 4 M/E Kalypso frame can be controlled from a 2 M/E panel. Many exclusive and innovative features are included standard such as M/E status displays on each M/E and three-color, 32x32 dot matrix source displays for every crosspoint button on the integrated aux bus control area and both M/E banks. Includes:

- Main Panel with integrated Aux Bus Control
- Touch Screen Menu Display
- External Zip drive and CD-ROM Drive
- Current Software and Manuals

2nd Touch Screen Display

Adds a 2nd touch screen menu display to a Kalypso panel. The 2nd touch screen display needs a separate PC and power supply to drive it. The power supply for the 2nd touch screen is provided with this option kit. The separate PC is not included in this option and is not sold by Grass Valley Group. This PC must meet a minimum set of requirements, as follows:

- Pentium II class processor 350 MHz or faster
- Windows NT 4.0 Operating System with SP4
- 128 MB RAM
- Hard Drive with 100 MB available space
- Two serial communication ports (e.g. COM1 and COM2)
- 10/100 Base T Network Interface Card (NIC)

Kalypso Satellite Shot Box Panel

Provides recall for 20 pages of 20 E-MEMs with LED display of effect names. Includes Auto-run and the ability to save specific E-MEM Levels. Maximum 12 per Kalypso control panel

KAL-2PNL

NOTE: Specify either the **KAL-BRKT-MEN** for recessed mounting or **KAL-BRKT-MEN-FS** for freestanding mounting of the Local Aux Bus Panel and the Touch Screen Display. If unspecified, the Kalypso 2 M/E panel will be shipped with recessed mount brackets.

KAL-TOUCHDIS

NOTE: Specify either the **KAL-BRKT-MEN** for recessed mounting or **KAL-BRKT-MEN-FS** for freestanding mounting of the Touch Screen Display. If unspecified, the 2nd touch screen display will be shipped with recessed mount brackets.

KAL-SHOTBOX

Option Packages for 2 M/E Systems

Note: These packages cannot be unbundled. Build up from these to get desired configuration.

Kalypso 2 M/E Value Package

This Option Package is ordered in addition to the basic system model. The system configuration may include this model or the KAL-SUPERPAK2, but not both. The Value Package adds the following options to the Basic KALYPSO-2:

- 1 KAL-IN 16 non-looping inputs (totaling 32)
- 1 KAL-OUT 8 outputs (totaling 16)
- 1 KAL-STILL Still Store System
- 1 KAL-DOUBLETAKE Split M/E Modes
- 1 KAL-FLEXIKEY Programmable Clean Feed
- 1 KAL-CHROMA Dual Chroma Keyer (2 Floating Chroma Keys)
- 1 KAL-PANELPS2 Redundant Control Panel Power Supply
- 1 KAL-FRAMEPS Redundant Frame Power Supply
- 1 KAL-IF-PROFILE Interface Software for Profile(s) connected to Kalypso

KAL-VALUEPAK2

Kalypso 2 M/E Super Package

This Option Package is ordered in addition to the basic system model. The system configuration may include this model or the KAL-VALUEPAK2, but not both. The Super Package adds the following options to the Basic KALYPSO-2:

- 4 KAL-IN 64 non-looping inputs (totaling 80)
- 4 KAL-OUT 32 outputs (totaling 40)
- 1 KAL-STILL Still Store System
- 1 KAL-DOUBLETAKE Split M/E Modes
- 1 KAL-FLEXIKEY Programmable Clean Feed
- 2 KAL-CHROMA Dual Chroma Keyer (4 Floating Chroma Keys)
- 1 KAL-PANELPS2 Redundant Control Panel Power Supply
- 1 KAL-FRAMEPS Redundant Frame Power Supply
- 1 KAL-IF-PROFILE Interface Software for Profile(s) connected to Kalypso

KAL-SUPERPAK2

I/O Options for 2 M/E Systems

Kalypso Input Module

KAL-IN

Each module provides 16, non-looping, CCIR-601 serial digital, BNC inputs. Maximum of 5 modules are allowed.

[1 (16 inputs) included in KALYPSO-2]

[1 (16 inputs) added when KAL-VALUEPAK2 is added to KALYPSO-2]

[4 (64 inputs) added when KAL-SUPERPAK2 is added to KALYPSO-2]

Kalypso Output Module

KAL-OUT

The KALYPSO-2 Base Kalypso system has 8 CCIR-601 outputs with effects send capability, and does not include the fixed black and test signals. This standard effects send capable output module is not the same as the KAL-OUT output module. Each KAL-OUT module provides 8 dual BNC outputs. A total of 32 outputs can be added to a 2 M/E system (totaling 40). The two, fixed color black and test signal outputs are accessed in slot B12. Maximum of 4 can be ordered for KALYPSO-2, including those in KAL-VALUEPAK2 and KAL-SUPERPAK2 Option Packages. Each of up to 38 outputs can be assigned to any M/E or aux bus output in any combination, for example, Program, Preview, plus 36 aux buses.

[8 effects send capable outputs (not KAL-OUT module) included in KALYPSO-4]

[2 (16 outputs) added when KAL-VALUEPAK2 is added to KALYPSO-2]

[5 (40 outputs) added when KAL-SUPERPAK2 is added to KALYPSO-2]

Redundant Power Options for 2 M/E Systems

Kalypso Frame Power Supply

KAL-FRAMEPS

Each Kalypso frame includes two power supplies, standard. One power supply can be added for redundancy. Each supply is accessible and hot swappable. Any two must operate to power the system. Maximum of 1 per KALYPSO-2 frame for redundancy.

[included in KAL-VALUEPAK2 and KAL-SUPERPAK2]

Kalypso-2 Control Panel Power Supply

KAL-PANELPS2

A Kalypso control panel includes one standard power supply. Maximum of 1 per control panel for redundancy.

[included in KAL-VALUEPAK2 and KAL-SUPERPAK2]

Frame Options for 2 M/E Systems

Kalypso SuperStill Advanced Still Store Module

Stores 100 still frames of video, key or mask for instant access on 8 outputs. User can configure one or more outputs as preview outputs. Two inputs feed the still store. A dedicated hard drive is included for storing thousands of stills. Continuous, frame-rate, access is allowed on any or all outputs at once for animations. Maximum of 1 option per KALYPSO-2 frame.

[included in KAL-VALUEPAK2 and KAL-SUPERPAK2]

KAL-STILL

Kalypso Chromatte Advanced Dual Chroma Keyer

Two chroma keyers that can be used in any keyer in any M/E in the system. Chroma keyers are software enabled. Uses CCIR-601 inputs. Maximum of 8 options (16 chroma keyers) per KALYPSO-2 frame.

[1 (2 chroma keyers) included in KAL-VALUEPAK2]

[2 (4 chroma keyers) included in KAL-SUPERPAK2]

KAL-CHROMA

***NOTE: Use
KAL-CHROMA-S
nomenclature for
options ordered for
existing systems.***

Kalypso Transform Engine Module

Internal effects for three channels of video and key or six channels of video. Effects are 2D with 3D perspective effects. Maximum of 2 per KALYPSO-2 frame for a total of 6 channels of video and key or 12 channels of video, all accessible with effects send.

[1 (3 channels) included in KAL-VALUEPAK2]

[2 (6 channels) included in KAL-SUPERPAK2]

KAL-XFORM

Kurl Effects for XFORM Option

Page turn, page roll, splits and mirrors and V/V depth combining for Kalypso frame Transform Engines. Software enabled option for one or both T.E. modules. At least one KAL-XFORM option required. Maximum one per Kalypso frame.

KAL-KURL

Kalypso Internal Tally Module

Provides tally relay closures for up to 64 crosspoints. Can be split into two levels, such as PGM tally and PST tally. Maximum 2 per KALYPSO-2 frame.

[1 included in KALYPSO-2 Base System]

KAL-TALLY

Kalypso FlexiKey Programmable Clean Feed System

A software option that allows every M/E to have from two to four program outputs with automated keying based on association with the primary program's key sources. For example, a foreign language graphic on the secondary program can be associated with a local language graphic on the primary program. This option, or the KAL-DOUBLETAKE option will enable the secondary program output. Maximum of 1 per KALYPSO-2 frame.

[included in KAL-VALUEPAK2 and KAL-SUPERPAK2]

KAL-FLEXIKEY

**NOTE: Use
KAL-FLEXIKEY-S
nomenclature for
options ordered for
existing systems.**

Kalypso DoubleTake Split M/E Modes

A software option that allows the secondary output of every M/E to act as a completely independent program output with independent backgrounds, keys and wipes. This option or the KAL-FLEXIKEY option will enable the secondary program output. Maximum 1 per KALYPSO-2 frame.

[included in KAL-VALUEPAK2 and KAL-SUPERPAK2]

KAL-DOUBLETAKE

**NOTE: Use
KAL-DOUBLETAKE-S
nomenclature for
options ordered for
existing systems.**

Other Options for 2 M/E Systems

Kalypso Emergency Bypass System

Kalypso Emergency Bypass System with special 8900 Series modular frame, emergency bypass keyer module, passive relay module and single power supply. An optional 8900 redundant power supply can be added (8900PSX). Special "Y" cable connection from the Local Aux Bus Panel in the Kalypso 2 M/E main panel allows activation of emergency bypass and control of keyer module. The Keyer Module allows you to mix on/off up to two keyers at a preset transition rate. The passive relay module switches from the Kalypso output to the bypass router output, including both Program and Preview.

Redundant power for the Kalypso local aux panel can be provided by ordering the KAL-AUXMENPS option described below

KAL-EMERG

Kalypso 2 M/E to 4 M/E Frame Upgrade

Kalypso 2 M/E to 4 M/E Electronics Frame upgrade kit includes one crosspoint module and two M/E modules. Simply install the modules in the existing Kalypso 2 frame. A Kalypso 2 M/E control panel can control all four mix effects. If a 4 M/E control panel is required, the KAL-4PNL or KAL-4PNLSRC option must be ordered separately.

KAL-UPG-2ME-4ME

Kalypso Local Aux or Menu Power Supply

One "brick" power supply for Kalypso Touch Screen Display or Local Aux Bus Panel. One can be ordered as a spare or a replacement for the Touch Screen Display. The Local Aux Bus Panel, internal to the Kalypso 2 M/E main panel, is normally powered by the main panel tub power supply. One KAL-AUXMENPS can be added for redundancy.

[1 included with KAL-TOUCHDIS]

KAL-AUXMENPS

Profile Interface Software (VDRCS)**KAL-IF-PROFILE**

Enables one or more Profile chassis to be controlled from a specific Kalypso system. This is a software option called VDRCS that may be installed on one or more Profile systems connected to a single Kalypso frame.

[1 included with KAL-VALUEPAK2 and KAL-SUPERPAK2]

Serial Engine for Kalypso**KAL-IF-SERIAL**

Provides six RS-422 ports in a 1 RU chassis. Connects to one or more Kalypso frames via the Ethernet facility LAN connection. May be used to connect up to six VTRs or similar devices to one or more Kalypso systems.

VTR Interface Software (VSVC)**KAL-IF-VTR**

Enables one or more VTRs to be controlled from Kalypso. Supports BVW and many other standard VTR protocols. This option requires one KAL-IF-SERIAL option for every six VTRs. This software may be installed on one or more KAL-IF-SERIAL Serial Engines that are connected to one Kalypso frame.

Net Central II Agent**KAL-NETCEN**

Net Central II Agent for Kalypso. Enables remote monitoring and error reporting for Kalypso systems via Ethernet. Order one for each Kalypso frame where remote monitoring is desired. Software enabled option. Maximum one per Kalypso frame.

24 Button Kalypso Single Destination Aux Bus Remote Control Panel, 1RU**KAL-24AUX1**

Remote aux bus panel with 24 small crosspoint buttons for a single bus or bus pairs. Joystick override standard for 8 sources. Maximum 32 per Kalypso frame.

24 Button Kalypso Single Destination Aux Bus Remote Control Panel, 2RU**KAL-24AUX2**

Remote aux bus panel with 24 large crosspoint buttons for a single bus or bus pairs. Joystick override standard for 8 sources. Maximum 32 per Kalypso frame.

24 Button Kalypso Delegated Destination Aux Bus Remote Control Panel, 3RU**KAL-24AUX3**

Remote aux bus panel with 24 large crosspoint buttons with delegation for up to 18 aux buses or bus pairs. Joystick override standard for 8 sources. Maximum 32 per Kalypso frame.

32 Button Kalypso Single Destination**Aux Bus Remote Control Panel, 1 RU****KAL-32AUX1**

Remote aux bus panel with 32 crosspoint buttons for control of a single bus or bus pair. Joystick override standard for 14 sources. Maximum 40 per Kalypso main control panel, including KAL-32AUX2 panels.

32 Button Kalypso Delegated Destination**Aux Bus Remote Control Panel, 2 RU****KAL-32AUX2**

Remote aux bus panel with 32 crosspoint buttons for control of 16 of a possible 46 aux busses. Joystick override standard for 14 sources. Maximum 40 per Kalypso main control panel, including KAL-32AUX1 panels.

4000 to Kalypso Remote Aux Panel Upgrade**KAL-4000AUXUPG**

Upgrade kit to convert any Model 2200/3000/4000 remote aux panel to a Kalypso 24 Button Remote Aux Panel. One required per panel to be converted.

Component Analog to Digital 601**8950ADC**

The 8950ADC module from Grass Valley Group's 8900 modular product line has a special 0:4:4 mode that takes the RGB analog input from a camera or other chroma key source and converts it to a special signal format for Kalypso. One 8950ADC module is used for each full bandwidth chroma key source.

Any pair of Kalypso inputs may be used for a 4:2:2 / 0:4:4 chroma key fill/source pair, so the total number of full bandwidth chroma key inputs is limited only by the total number of Kalypso inputs available.

Component analog formats supported are RGB, EBU N10, Beta (US), Beta (Japan), MII (US), and MII (Japan).

SERVICE OPTIONS FOR 2 M/E SYSTEMS**ProStart****KAL-PSB**

ProStart provides an additional year of product coverage after the 1-year warranty period expires. Plus it provides a 4-hour on-site commissioning & a 4-hour on-site technical overview.

4-Day On-Site SmoothStart**KAL-SS**

4-Day On-Site SmoothStart is a complete solution to installation. Includes: 1-day commissioning, 1-day technical overview & a 2-day operational overview all at your location.

IMPAK Training

IMPAK Training brings a concentrated training program to you. Pull your team together for this super 2-day comprehensive training course. Includes: 1-Day Technical and Maintenance Training & 1-Day Operational Training.

KAL-IMPK**3-Day On-Site SureStep**

3-Day On-Site SureStep spreads out your technical support visits. Use your initial 2-days of on-site professional services for set-up assistance and use your additional follow-up visit down the road. And receive a free seat at factory training designed specifically for your Kalypso.

KAL-STP**NextStep**

NextStep because some times you need extra support. When you buy NextStep you're buying a bank of 36 hours of over-the-phone technical training. Now you can get that extra training you need.

SVC-NSTP**Preventative Maintenance Contracts**

Preventative Maintenance Contracts are available to provide quarterly scheduled maintenance visits by our on-site field professionals.

SVC-PM-CS**Comprehensive service contracts**

Comprehensive service contracts are a step above an Advanced Exchange Contract, it provides an additional proactive software update service, waives minimum parts fees and same day shipping fees and gives you automatic spares kit replenishment if you purchase a critical spares kit. Plus it gives you an additional 10% discount on any additional services purchased. Up-to 5 years of coverage available.

KAL-2-CS**Advanced exchange service contract**

Advanced exchange service contract provides advanced module exchange within 24 hours, FRU at the module level (note whole unit replacement), Toll-Free Hotline support, covers all parts and shipping. Up-to 5 years of coverage available.

KAL-2-AE**Software Subscription**

Software Subscription keeps your system running on the latest software version and provides automatic software updates pertaining to license base software applications.

KAL-SU**KAL-SERIAL and KAL-VTR Software Subscription**

KAL-SERIAL and KAL-VTR Software Subscription keeps your system running on the latest software version, contract covers KAL-SERIAL and KAL-IF-VTR Software.

KAL-VTR-SU

3-Day Factory Basic Operations Training for Kalypso

Overview of system, panel and architecture, configurations, external interfacing, transition and keyer operations, E-MEM operations, disk operations, still store operations & secondary M/E fundamental and operations.

KAL-OPS
***For additional
units use
KAL-VTR-SUAD***

5-Day Factory Advanced Operations Training for Kalypso

Overview of system, panel and architecture, advanced configurations, advanced user preferences, multiple M/E outputs and programming, secondary M/E control and re-entry, dynamic keying, transform engine operations, advanced external interfaces, Aux bus operations, keyframing and still store/animation operations.

KAL-OPSADV

4-Day Factory Technical Training for Kalypso

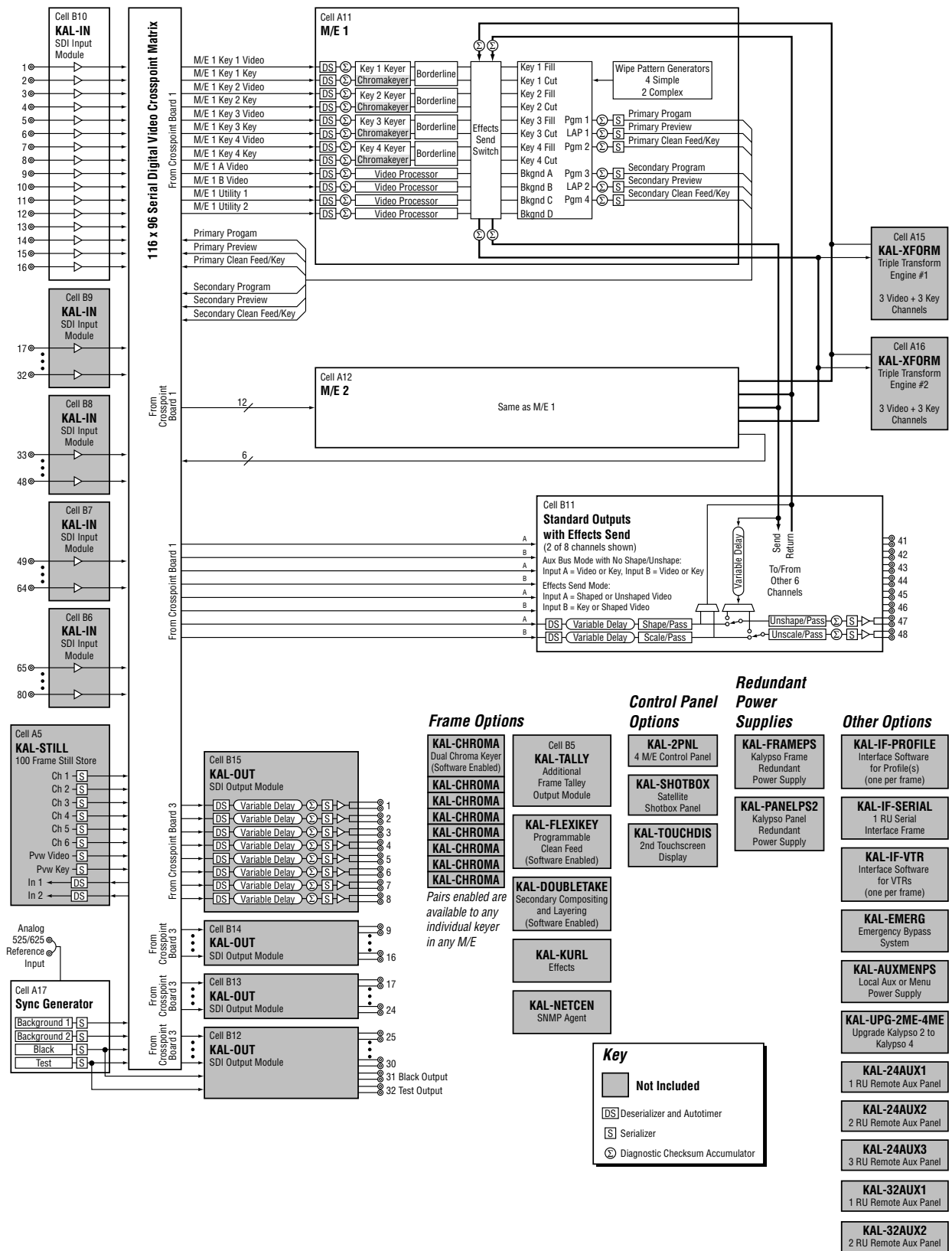
System installation, configuration, video and control signal flow, troubleshooting, digital video concepts, interfacing to external digital video effect devices, control panel operations for all versions.

KAL-MNT

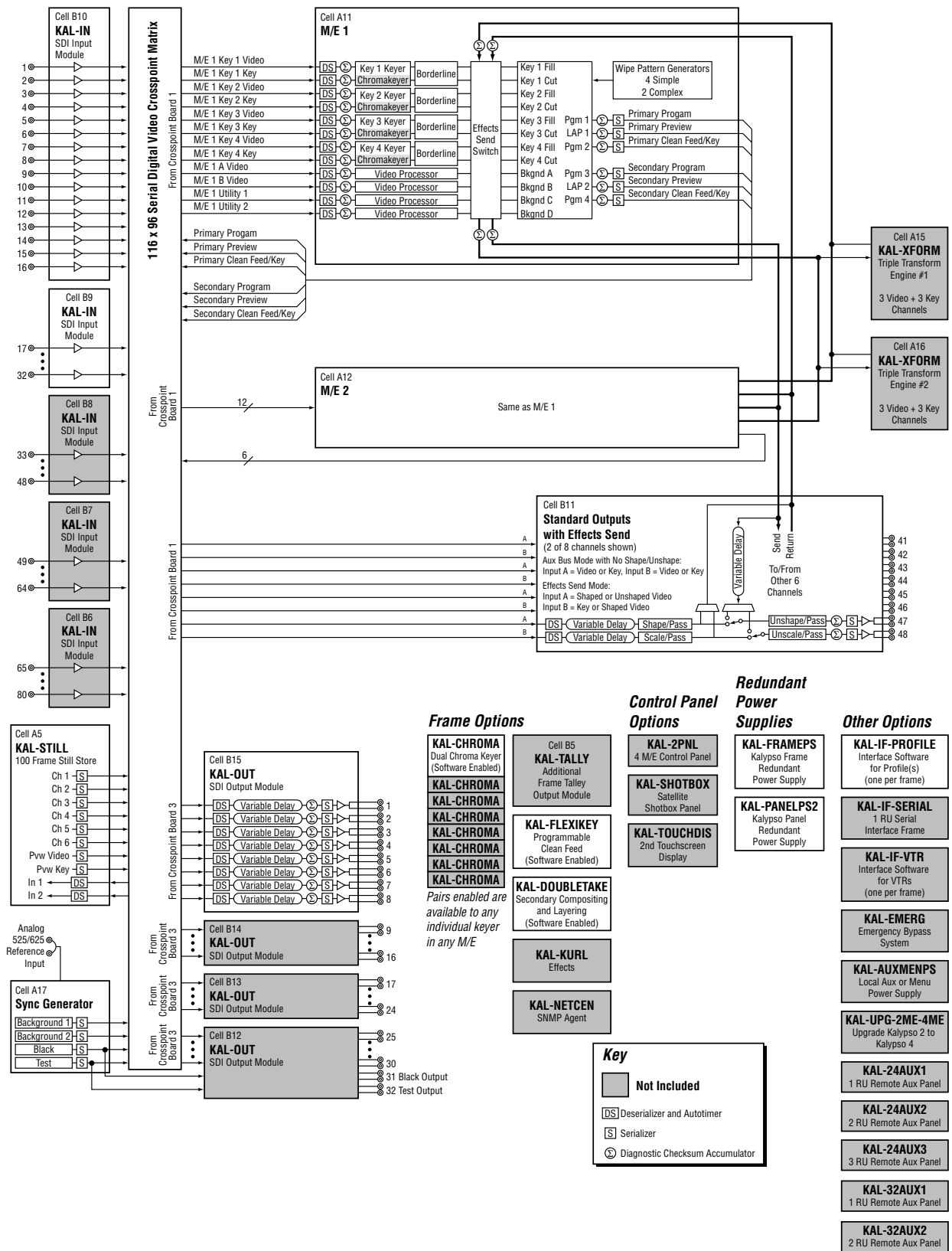
Kalypso Critical Spares Kit

Keeping crucial parts on-site alleviates any unnecessary downtime headaches.

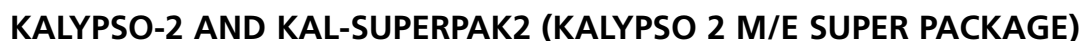
KAL-KIT



KALYPSO-2 (BASIC KALYPSO 2 M/E PACKAGE)



KALYPSO-2 AND KAL-VALUEPAK2 (KALYPSO 2 M/E VALUE PACKAGE)





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