sierravideosystems

A KRAMER ELECTRONICS COMPANY

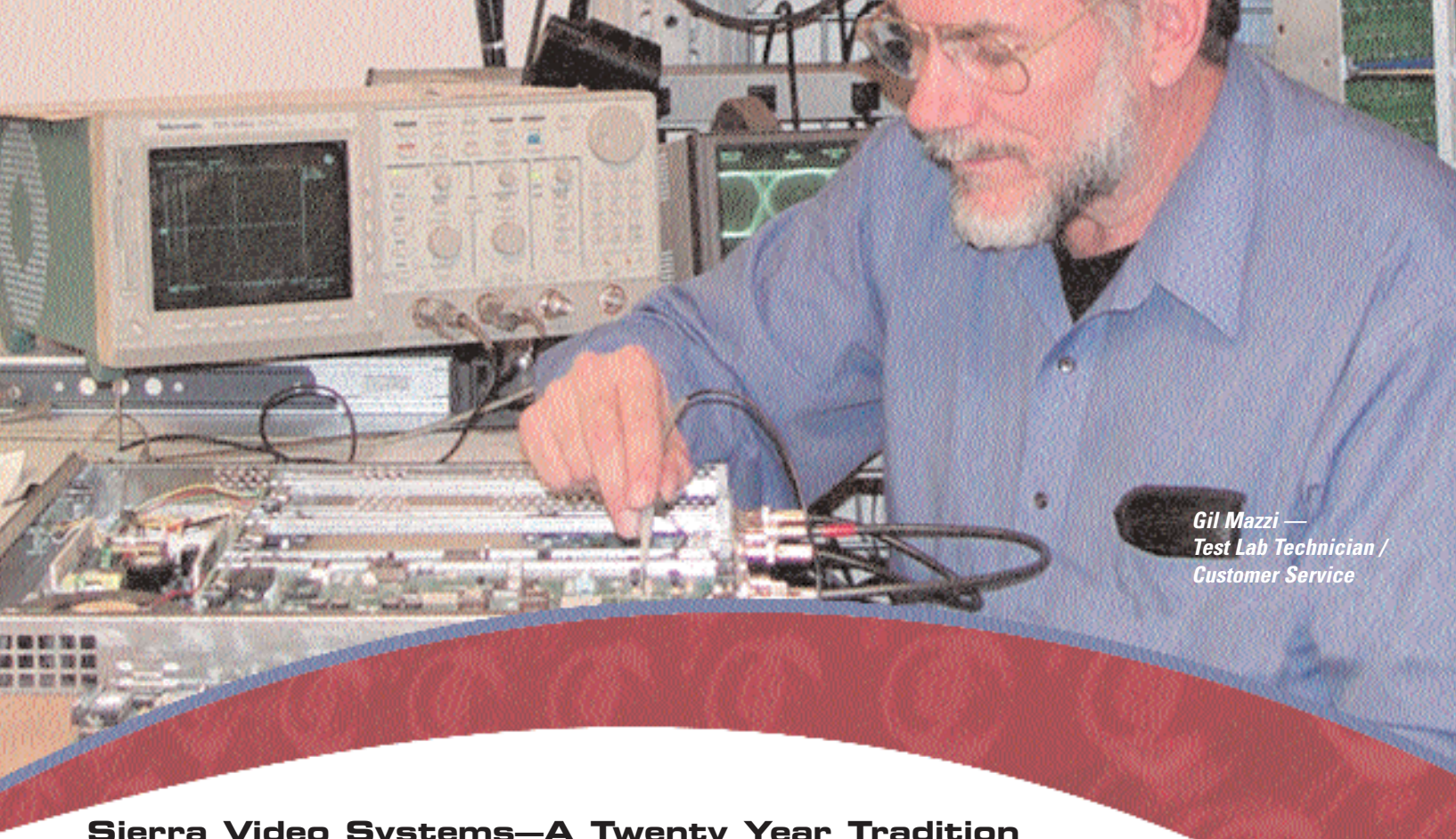
Broadcast

Government

Staging

Pro AV

Video & Audio Equipment



Gil Mazzi —
Test Lab Technician /
Customer Service

Sierra Video Systems—A Twenty Year Tradition

Building quality products that don't come back, for customers who do. This was our philosophy in 1984 when we began manufacturing routing switchers from our Grass Valley headquarters. 20 years later, that philosophy is still serving Sierra Video Systems and our customers. You've shown that you agree with that philosophy by giving us record sales in 2003 – our biggest year ever! Just as we've come a long way, so has our line of high-quality audio and video products. That line now includes digital and HD routers, distribution amplifiers, terminal equipment, programmable control panels and software.

Despite the expansion of our product lines and markets, we've never lost sight of what got us here: a deep commitment to building custom products for our customers at a price that works. Sierra Video Systems has been known as a manufacturer of affordable, quality products for the broadcast and professional video markets. Over the past two decades, we've also reached out to meet the specific needs of government, military, presentation and staging professionals.

A Kramer Electronics Company

2003 saw a significant change for Sierra Video Systems: our purchase by Kramer Electronics. Kramer is a leading manufacturer of audio, video and computer signal distribution, switching, conversion and processing equipment for both analog and digital applications. The acquisition provides a great opportunity for Sierra Video Systems to take our innovative products to the world stage with the help of Kramer's outstanding worldwide marketing capabilities. Our expertise in large matrix routing products and our multi-market appeal make this the ideal match for our friends at Kramer.

The combined strength of these two companies means substantial benefits for you, our valued customers. You now have access to more products than ever before. The combined Sierra and Kramer lines cover virtually every need in audio, video and computer signal distribution, switching, conversion and processing. This combination of resources means we have a much greater capacity to develop new products, improve existing ones and create cost-saving efficiencies.

Quality Products, Quality Support

Sierra Video Systems guarantees product quality in every system we manufacture. We understand that changes are inevitable and that you need to plan for future expandability. No matter which of our products you choose, you can be certain they are built using the finest components and that they are rigorously tested. Sierra products have been in continuous use in hundreds of installations for the past two decades, providing reliable service year after year.

Our customer support is known as some of the best in the business, and continued improvement is our #1 priority. At Sierra Video Systems we know that our success is based on meeting the high expectations of our customers, whether in product design or customer support. We also know that our customers recognize value. Given the quality of the products we offer, we will not always be the least expensive, but we are committed to offer the best value for your capital investment. Please contact us here at Sierra Video Systems to review your needs and let us help you price out your requirements.

We look forward to working with you in the coming year and providing you with the quality products and support you've come to expect. In the meantime, we appreciate your continued support of Sierra Video Systems.

CUSTOMER SERVICE

Kay Turner — Customer Service Manager

The Most Knowledgeable Support Team In the Business

For two decades, Sierra Video Systems has been assisting customers and providing solutions for almost any application imaginable. We pride ourselves in our qualified customer service and technical support team that is skilled at answering your questions.

We want you to be 100% happy with your new and old systems—that's what customer service is all about. You can call direct during business hours and speak with a Technical Support Engineer. We also offer after-hours Technical Service; check our website for details. Technical manuals and online help are also available 24 hours a day at www.sierravideo.com.

Whether you need immediate on-site guidance or have repair questions, contact the best real-time customer service in the business and check out their outstanding experience in the routing switcher and terminal equipment industries. You can reach our Customer Service Department from 8 A.M. to 5 P.M., Monday through Friday, or access 24-hour online support: www.sierravideo.com.

- **Direct:** (530) 478-1000
- **After Hours:** (530) 888-3195
- **Fax:** (530) 478-1105
- **Email:** support@sierravideo.com
- **Online:** http://www.sierravideo.com/support
- **Mail:** Sierra Video Systems
  P.O. Box 2462
  Grass Valley, California 95945

WARRANTIES

Seven-Year Warranty

In today's demanding video environment, it is good to know that the backbone of your system will keep on working. When choosing a routing switcher, it's important to discuss your requirements with a knowledgeable sales staff and identify the company's ability to provide long-term support. Routers are the core of your system - "glueware" that's often taken for granted. Your system will be built around them. Be sure to make the right choice! Sierra Video Systems is proud to offer a 7-year warranty on most of our products. We've offered this warranty for two decades and stand behind our quality products. We have been successful because we believe in providing quality products that don't come back, to customers who do.*

Future Expansion

We are in the business of personalizing systems. Sierra Video Systems offers a unique trade-up policy on our routing switchers. Leverage your investment in Sierra Video Systems by adding or exchanging systems as your needs grow. Each system is designed to expand with you, using flexible plug-in modules or easy factory modifications. With SVS, you really can have everything you want, the way you want it. Choose from a variety of frames and modular combinations that meet your needs. Or if your system is a complete all-in-one solution, simply send it back, and we will either modify it by adding new modules or exchange the upgraded system entirely, based on your upgrade needs.

Trade-Up

Your investment is important to the success of your organization. Sierra Video Systems knows that upgrades may require significant changes and may require a whole new system all together. That is why we offer the Trade-Up program. This plan allows a generous credit for a customer's entire system when it is traded for a larger SVS routing switcher. Let us know what your needs are and we will make every effort to accommodate you.*

** See our website for details*

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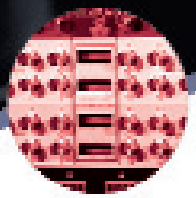

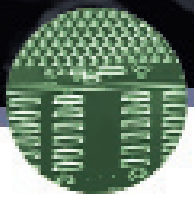

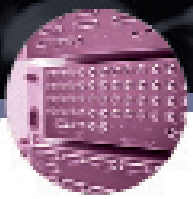

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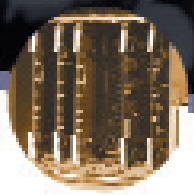
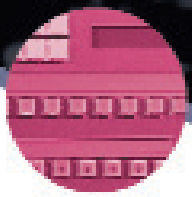




Compact Broadcast Video & Audio Routing

Sierra Video's Lassen VS video/audio routing switchers offer full-broadcast routing performance for space-constrained applications. These small and mid-size routers provide optimal performance and features in a variety of matrix sizes. Our new routers are an ideal part of live-to-air and post-production facilities, remote trucks, and corporate, scientific, military and educational installations.

Features

- **Adjustable Audio Gain & Attenuation on a per-channel basis**
- **Ability to select from our new SCP line of advanced, programmable control panels**
- **Interface capability to other router frames such as Shasta, Tahoe and Yosemite**
- **Built-in Front Panel Control**
- **Small, compact designs**
- **Convenient "Phoenix" style audio connectors**
- **RS-232/422 Serial Control Standard on all models**
- **Analog Video / Stereo**

Space-Saving Features

The Lassen VS Series offers flexibility and adaptability to any application where saving space and economics are important. The VS Series offers adjustable audio gain & attenuation on a per-channel basis, the ability to select from our new SCP line of advanced, programmable control panels, and interface capability to other SVS router frames. The VS Series offers exceptional linear frequency response in critical, on-air switching environments.

VS frames offer an internal power supply and have built in RS-232/RS-422 control. The additional data port allows for complete control of the routing switcher via Ethernet or dial-up using the simple SVS control system. All VS models come standard with front panel control and can be linked to any of the SCP Series control panels for ultimate control of any size broadcast system. The VS Series offers more control, a compact design, and flexibility in software management. Signal routing has never been more compact or powerful.

LASSEN

Format & Size Advantage

Lassen switchers accommodate two levels and complete control in compact frame sizes. We have fit 32 inputs and 32 outputs of video and audio into a desirable 3RU frame with BNC connectors and Phoenix style audio connectors for easy installation. The 12 Series and 16 Series are a mere 2RU. The line also includes the Lassen 1602, a VS product with optional DC clamping, allowing for real-time switching between video sources without loss of sync, all in a 1RU frame. The entire series offers state-of-the-art, frame accurate switching with an amazing size advantage for compact installations.

Connect to Other SVS Routers

Before the VS Series, it was impractical to connect our small RS-422 machine control router to some of our smaller routers. The VS line makes that possible. In addition, the new VS routing switchers can be either a Master or a Slave in the control system. Meaning, you can add additional format levels to the VS control system, or you can add this router to an SVS router such as a Sierra PRO, Tahoe, Shasta, Sequoia, or Yosemite system.

3216VS
1616VS
1608VS
1602VS
1212VS
1208VS

Optional Configurations:

3232VS

SIERRA PRO

Broadcast-Quality Routing Switchers For Wideband Presentation Use

The Sierra PRO family of component analog and audio routing switchers offers high-bandwidth 3, 4, or 5 channel (RGB+HV) video and stereo audio routing capability in a series of attractive, compact frames. Sierra PRO is designed specifically for presentation environments in corporate boardrooms, live staging events, churches and universities, government/military and command & control facilities. Advanced features like video muting, room grouping and adjustable audio gain distinguishes Sierra PRO routers from competing products.

Features:

- **RGBH/V and stereo audio in one frame**
- **High bandwidth and very low crosstalk**
- **Balanced or unbalanced audio and removable screw terminal connectors**
- **Adjustable audio gain & attenuation on a per-channel basis**
- **RGB muting for clean routing to projectors**
- **Room grouping for optimum control**
- **Unique independent level mapping allows more devices per router by making the router virtually larger**
- **Mix different format types on one input**
- **Multiple signal types in the same frame (Composite, S-Video, RGBHV, and Audio)**
- **Color coded rear panel for easy installation**
- **Standard front panel control included**
- **Full line of remote control panels are available**
- **Selectable Input Impedance**
- **400MHz + for high resolution graphics**
- **Redundant power supplies available**

Compact, Attractive Frames

The Sierra PRO models feature a user-friendly, color-coded (RGB+HV+S) rear panel layout for easy installation. Each system contains its own unique mother-board with 7 slots for additional configuration options. Frames also come with RS-232 serial interface supported by all major third party control systems. Sierra PRO's +400MHz bandwidth supports most high-resolution sources with very low crosstalk. The standard front control panel and an extensive line of XY or single-bus remote control panels are available. The RGBHV frames can be populated with 3, 4, or 5 channels as needed with onboard stereo audio optional. Dual power supplies are available for mission critical environments on larger models.

Individual Breakaway Levels

The Sierra PRO Family boasts unique features offering independent breakaway in every video & sync level of the 5 or 7-channel Sierra PRO frame. This allows

for a multi-level, single frame routing switcher, utilizing idle analog video inputs for room groupings and individual level switching. For example, if your application requires only Y-V, stereo audio, and one level of composite video, the Sierra PRO frame can be configured to accommodate these signals all in one frame. In this example, you could use the third video level for composite while keeping the H or V sync boards.

This also allows Sierra PRO to capture current sync rates on different levels. The Sierra Video Systems software Host command and G.R.I.P. software can acquire the H and V sync rates, displaying the data in hertz.

Independent Gains Structure

The independent Gains Structure of our Stereo Audio levels is very flexible. Every audio input and output offers attenuation gain control and mute delays. With Sierra PRO, you can adjust the audio level gains from a consumer –10dB up to professional +4dB on both inputs and outputs. This allows you to run either type of consumer or professional system with the proper gain structure.

High Design Standard

Sierra PRO's component video architecture meets the industry standard for high bandwidth routing. Supporting video resolutions up to 1920x1080 for, the Sierra PRO family satisfies the demanding requirements of today's video professional. The PRO Family is commonly used for switching high-resolution graphic outputs from computer systems to large projection displays in corporate boardrooms, stadiums, churches, and universities. With nearly two decades invested in the video broadcast industry, SVS has successfully developed a wide range of products for broadcast, post-production, professional video, government/military, education, and worship markets. Presentation professionals now have the opportunity to enjoy Sierra Video Systems' years of trusted experience and technical expertise with a product designed specifically with them in mind, Sierra PRO.

Optional Configurations:

3232V5S
3216V5S
1616V5S
1608V5S
1208V5S
1204V5S
88V5S
84V5S

TAHOE

High Performance Mid-Sized Video and Audio Routing Switchers

Capable of meeting the most demanding applications of today's video professionals, the Tahoe Series is our most extensive line of analog routing switchers, setting the industry standard in mid-sized switchers for two decades. These powerful signal distribution systems are an important part of live-to-air and post-production facilities, remote trucks, and corporate, scientific, military and educational installations. The Tahoe Series has a range of inputs from 16 to 48, and up to 128 outputs. With over twenty frame styles to choose from, Tahoe frames can be partially populated, providing flexibility for future expansion.

Features:

- **16, 20, 32 and 48 inputs in a variety of standards**
- **Analog component video/audio**
- **Analog composite video**
- **AFV and video-only configurations**
- **Y-C or S-VHS video (2 channels)**
- **RS-232 serial interface control; RS-485 control panel network**
- **Up to 64 panels on a simple twisted pair network**
- **Battery backed-up RAM protection of all personality and crosspoint information**
- **256 salvo registers capable of holding a total of 800 or more crosspoints**

Modular Design

Tahoe routing switchers excel in signal handling capability and offer flexible expansion. This modular design concept, using plug-in circuit modules and high-quality edge connectors, gives you a system that's reliable and easy to expand. Our modular construction makes any maintenance routine.

Rugged, High-Quality Construction

With solid stainless steel frames, Tahoe Series systems are nearly indestructible. There are no self-tapping screws or formed threads anywhere in our products, only the best threaded inserts. The power supply on all models uses high-quality toroidal line transformers and conservatively rated, current limited regulators on each circuit board. Even with quality components throughout, our systems have a lower price than the competition.

TAHOE

For reliable operation, Tahoe Series routing switchers have whisper-quiet fans to keep your system running cool even in the warmest conditions. There's quality everywhere you look. For example, years of experience and tests have shown that not every BNC connector can meet our stringent requirements for reliability and physical integrity, so we use only high-grade BNCs for video inputs and outputs on the rear of the frame. We apply our high standards to every single part. That's why you can depend on Sierra Video Systems for superb value and dependable service.

Variety of Configurations

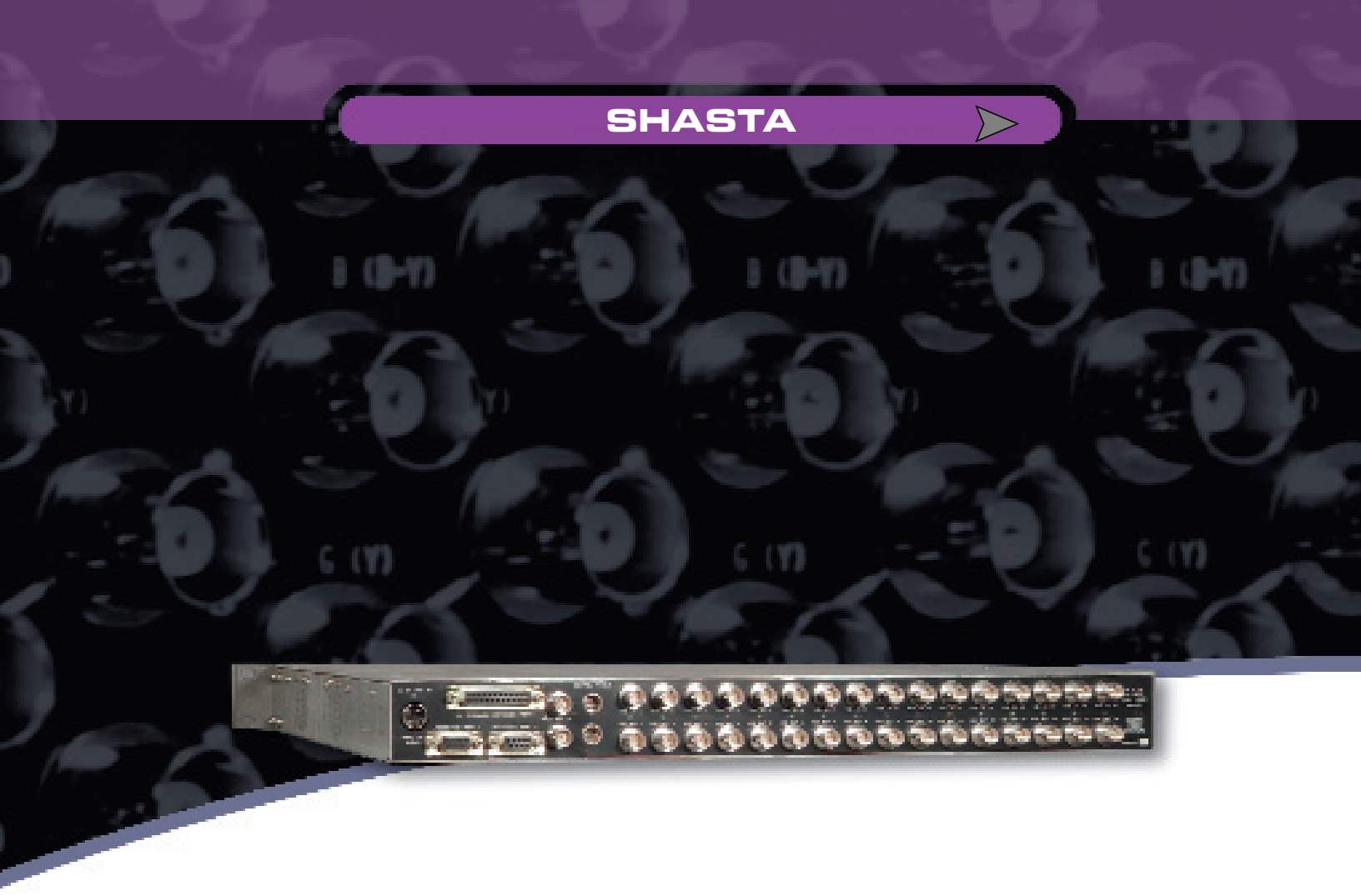
Offering diverse configurations in 3RU, 4RU and 9RU frames, Tahoe can be configured composite or component video; and mono audio or multi-channel audio; with 16 through 48 inputs and 8 through 128 outputs. The video, audio, and pulse switching modules are available to create robust video and audio distribution.

The modular design of Tahoe easily facilitates stereo or independent audio switching, ideal for bilingual applications. With high-end performance, modest prices and an extensive variety of models, the Tahoe Family offers significant features found nowhere else in this size or price range. Select the frame that meets your projected requirements and fill it with the modules you need for your current application. Then, when you need to expand your system, just add modules or new frames. Multiple frames can be connected together (up to 8 levels) under the same Tahoe control system. For multiple frames, only one Tahoe serial control module is required.

Optional Configurations:

1616VAA
1616VAAAA
1616AAAA
1616V
1632V
1648V
1648AA
2020VAA
3216VAA
3232V
3232AA
3232CAA
3264VAA
32128V
4848V
4848AA

SHASTA



Digital & HD Solutions

The Shasta Family of serial digital video, 1.485 HD video, DVB/ASI, and AES/EBU audio routing switchers are robust and compact solutions for transition to digital and all digital facilities. The Shasta family offers digital matrices from 8x8 to 32x32 in eight basic frames. The powerful control system also connects with all of our VS/DS, Sierra PRO, Tahoe, Yosemite, and Sequoia products. Providing frame accurate switching, the Shasta family is ideal as the main switcher for small broadcast facilities, radio stations, and post-production houses.

Features:

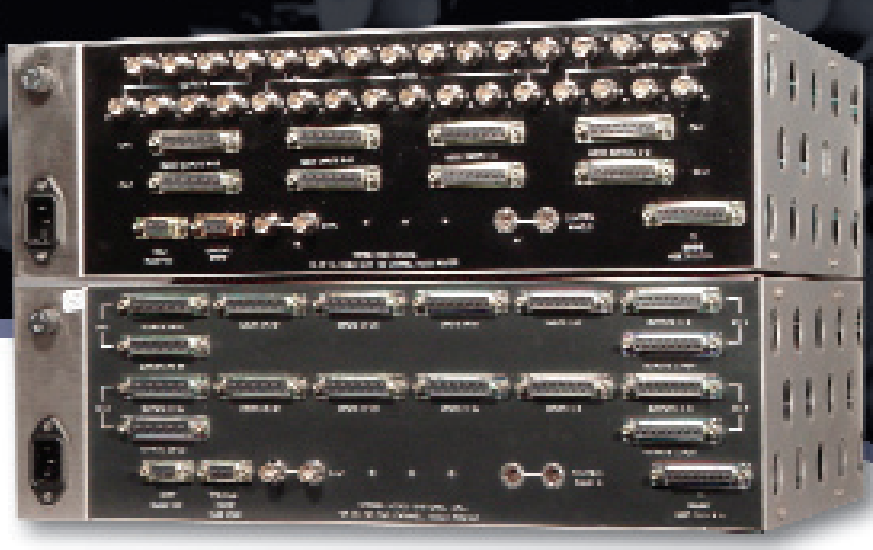
- **1.485 Gbps HD video**
- **Serial Digital Video**
- **DVB/ASI**
- **AES/EBU digital and analog audio**
- **8 basic frames, dozens of system configurations**
- **Frames accept any mix of digital and analog crosspoint modules**
- **Variety of control solutions from SCP control panels to flexible software GUIs**

Serial Digital Video & Digital Audio

Shasta digital video matrices can be combined to flexibly address the diverse switching requirement of today's digital and hybrid analog/digital facilities. From our compact 1RU 8x8 digital video and audio routing switchers to our medium-sized 3RU 16x16 and 32x32 switchers, Shasta provides unique configurations for all of your basic digital needs. Shasta switchers can be used for stand-alone applications or used in more complex configurations for analog, digital, and HD.

The Shasta 88DE and 161D are compact systems in 1RU frames, ideal for applications such as monitor switching or VTR input selection. These routers consist of single level video. For applications requiring greater than 8 outputs, the Shasta 16x16 and 32x32 are compact solutions in digital video and audio.

SHASTA



DVB/ASI

Sierra Video Systems 16x16 and 32x32 Shasta routing switchers are capable of running industry standard DVB-ASI signals. For traditional broadcasters, the ASI format is different but easy to understand. The DVB-ASI signal type compresses 5 mpeg data streams into one 270 Mbps SDI pipe. This form of compression is extremely efficient for sending data through a Headend infrastructure.

High Definition Video

The 1RU HD routing switcher provides 1.485Gbps serial digital HDTV routing of 16 inputs to 16 outputs. This versatile frame can also be depopulated with fewer inputs and outputs to offer smaller and cost-effective HD routing.

Configurations include: 8x8, 16x1, 16x4, 16x8 and16x16.

Shasta's HD Series includes the 1602HD-LS "Live Switch," a 1RU router that switches HD video with embedded audio without pops or clicks. "Live Switch" is also available in 4x2 or 8x2 configurations.

This high-density solution offers Tahoe control system compatibility for expansion to other SVS frames and great integration flexibility. Two local RS-232 / RS-422 ports allow versatile terminal and machine control interface while a local control option allows the entire routing solution (including user interface) to fit into one rack unit of space. The 1616HD data rate range extends down to include 270Mbps signals while providing automatic cable equalization for all 1.485Gbps inputs. The versatile vertical interval switching reference input accepts NTSC, PAL, composite sync, V drive, HD tri-level sync, and two non-standard composite sync signals used in the graphics industry.

Optional Configurations:

1602HD-LS
1616HD
168HD
164HD
161HD
88HD
88DE
1601D
1616D
1616DEE/DAA
1616DVB/ASI
3232DEE/DAA
3232DVB/ASI

HD = High Definition (1.485 GBps)
D = SDI Digital Video
E = AES/EBU Digital Audio
A = Analog Audio

YOSEMITE

Think Big.
Think Yosemite.

For mid to large size routing requirements, our Yosemite family of routing switchers fits the bill. Providing analog and/or digital solutions from 32x32 up to 128x256, the Yosemite has been chosen by broadcast and professional video engineers worldwide.

Yosemite also means versatility. The flexible Yosemite control system connects with all other Sierra Video Systems routing switchers to give the user ultimate format flexibility. You can add up to sixteen levels of independent control, which allows you the opportunity to route analog video and audio, digital video and AES/EBU, RS-422 machine control, time code and even HD under the same control system.

And speaking of control, Sierra's wide range of programmable and fixed button control panels gives the Yosemite owner a wide range of control options that rivals any industry product. See page 18 for more information.

Features:

- **Analog and/or Digital SDI and AES/EBU with synchronous option**
- **Wideband analog available**
- **Sizes range from 64x64 up to 128x256**
- **Rugged, compact frames expandable from 32x32**
- **Analog frames are upgradeable to digital**
- **Frames connect to all Tahoe/Shasta**
- **Frames (up to 16 levels)**
- **Redundant power supplies and control processors available**
- **Variety of control panels**
- **Flexible control software**
- **Front loading & hot-swappable modules**
- **Convection cooled by "chimney effect" eliminates noisy and unreliable ventilation fans**
- **Multiple RS-232 / R2-422 network connectors**
- **Externally mounted input buffers**
- **Dual outputs standard on all video models**
- **Front LED power supply and processor indicators**

Frames

The Yosemite Family provides rugged reliability in affordable, feature rich packages. We have incorporated our familiar matrix design with the most advanced hardware and software available to the broadcast and professional markets. Yosemite analog and digital compact frame design incorporates hot-swappable redundant power supplies and redundant control processors. Video configurations are convection cooled, eliminating noisy and unreliable ventilation fans. Modules are front loading with front LED power supply and control processor indicators. The rear configuration features dual outputs, externally mounted input buffers (to minimize return loss) as well as multiple RS-232 / RS-422 network connectors for flexible control.

Analog

Our analog Yosemite video frames are available in 64x64, 96x96, and 128x128. Yosemite design allows for flexibility and

YOSEMITE

plenty of room to grow. Multiple channel component routing like RGBHV, wideband, and multi-channel versions of video and audio versions can be configured. Multiple frames can also be connected together to provide break-away audio and/or time code routing capability. Sierra Video Systems can prepare your facility for the final stage of your transition from analog to digital.

All Yosemite video frames are field upgradeable from analog to digital, and our Trade-In / Trade-Up program provides economical cost savings. Keep the durable frame and upgrade the modules whenever they are needed. SVS routing switchers provide a flexible upgrade path that will protect your investment for years to come.

Digital

Yosemite digital routing switchers are based on a third generation low-jitter GaAs switching matrix, reducing internal jitter. Sizes available in digital include 64x64 and 128x128. Often with medium-to-large systems, cable lengths can grow to be quite long resulting in problematic signal loss. Automatic cable equalization is critical to maximum performance. Yosemite features a separate shielded enclosure for each input equalization circuit. Impedance and return loss occur less frequently than in competing designs while maintaining excellent reliability. This provides optimal and superior performance for situations specifically with analog or digital signals.

Multi-Format Routing:

- **SDI**
- **AES / EBU**
- **Synchronous & Asynchronous Audio**
- **Dolby AC-3**
- **MP-3**
- **Analog Monaural Audio**
- **RGB**
- **YUV**
- **RS-422 Machine Control**
- **Time Code**
- **NTSC**
- **PAL**

Optional Configurations:

6464A / 6464E
128128A / 128128E
6464V / 6464D
9696V
128128V / 128128D

Check website for additional sizes

The Next Level In Multi-Format Routing...

The Sequoia Family of multi-format mixed matrix routing switchers is the next generation in affordable, large-scale distribution technology. SVS has designed a complete new line of matrix switchers offering mixed format flexibility, intelligent control, and linear expandability for broadcast, government, post-production, CATV head-ends, and AV professionals. Based on customer demand for larger routers, the new Sequoia Family accommodates customers' needs up to 1024x1024 in a compact, efficient 7RU frame design.

Features:

- **Multi-format configuration in compact 7RU frame**
- **Expand by 32x32 crosspoint modules**
- **Host 64x64 analog & 64x64 digital video in one frame**
- **Compatibility with VS/DE, Sierra PRO, Tahoe, Shasta, Yosemite routing switchers**
- **RS-232 serial interface uses common SVS serial protocol**
- **Hot-swappable & redundant power supplies**
- **Redundant control processors available**

Mix & Match Signals

Sequoia is a mixed matrix system, providing the ability to inter-mix signal formats within the same frame. With up to 16 levels of control, you can mix analog composite, analog component, SDI, HD, DVB/ASI, analog audio, AES synchronous and asynchronous audio, and RS-422 machine control all within the same SVS system controller. The Sequoia system allows you to expand your population by inter-connecting the 7RU frames, linking a large router of a single format or different levels under one control system. Mixed matrix design is ideal for smaller installations too, allowing up to four video formats to fit in one 7RU frame. A single frame system will house a 64x64 analog video and a 64x64 digital video matrix, or a mix of 64x64 SDI and a 64x64 HD. The Sequoia system could start with a single format frame populated at 32x32 and expand up to 128x128, or be populated with other signal crosspoints. This allows you to match your specific growth

SEQUOIA

requirements exactly with your routing population. Adding frames will add formats and size up to 1024x1024 under one SVS control system. Sequoia is the perfect tool to support today's complex distribution environments.

Signal Formats:

- **Analog composite**
- **Analog component**
- **Wideband analog component**
- **Serial Digital Interface**
- **1.485 Gbps High Definition**
- **DVB/ASI**
- **Analog audio**
- **AES synchronous and asynchronous audio**
- **RS-422 port data for machine control***

**Available fall 2003*

Frame Design Architecture

Sequoia incorporates everything you would expect from a SVS switcher. The 7RU (12.25") frame uses hot-swappable, fan-cooled redundant power supplies and includes internal failure alarms and fan monitoring. The front-loading module slots are non-format specific, meaning the modules are field upgradeable and swappable to accommodate and expand the inputs, outputs, and levels at anytime. The modular design uses 32x32 crosspoint modules, and the rear I/O panels are easily replaced and reconfigured.

For critical applications, redundant control processors are also available in a secondary 1RU frame, complete with diagnostics, module alarms, and intuitive control GUIs. For simplified applications, a single control processor is self-contained in the single frame with the same monitoring features. The internal, single control processor allows for efficient 7RU rack-space density.

Optional Configurations:

32x32
64x64
128x128
256x256
384x384
512x512
640x640
768x768
896x896
1024x1024

Check website for additional sizes

Control Panels

A router is only as good as it's control system.

A good control system is reliable, yet flexible enough to allow the switcher to be controlled in a variety of ways. It will allow the use of a large number of different control panels, intelligent software GUIs, and third-party automation systems. Sierra Video Systems' universal control system gives you all of that, and more.

From simple push button control panels to fully programmable panels customized to your individual installation, Sierra Video Systems offers a panel and software for every application.

SCP Control Panels

The SCP Series of programmable control panels, feature unlimited flexibility in design and control.

The SCP Series has an on-board microprocessor capable of handling a small or large router database. This design manages error free serial communications with the router. Combined with a cost effective I^2C buss architecture, customers are offered a multitude of button configurations resulting in the most powerful user definable line of control panels the industry has to offer.

SCP Series panels are programmed using our free Windows program. Our G.R.I.P. software lets you choose your panel, select your functions and assign them to the buttons. Store these settings in memory or copy configurations to multiple panels of the same type. Additionally, a point utility lets you easily make button labels

SCP Series Features Include:

- **Alpha/Numeric Labeling and Display**
- **Virtual or Physical status**
- **Programmable buttons**
- **Category routing**
- **Router I/O names**
- **LCD displays**
- **Locks and Protects**
- **Select and Execute Salvos stored in router**
- **Paging and Scrolling**
- **Shift Keys**
- **Multiple Level Control and Display**
- **Re-legendable Backlit Buttons**

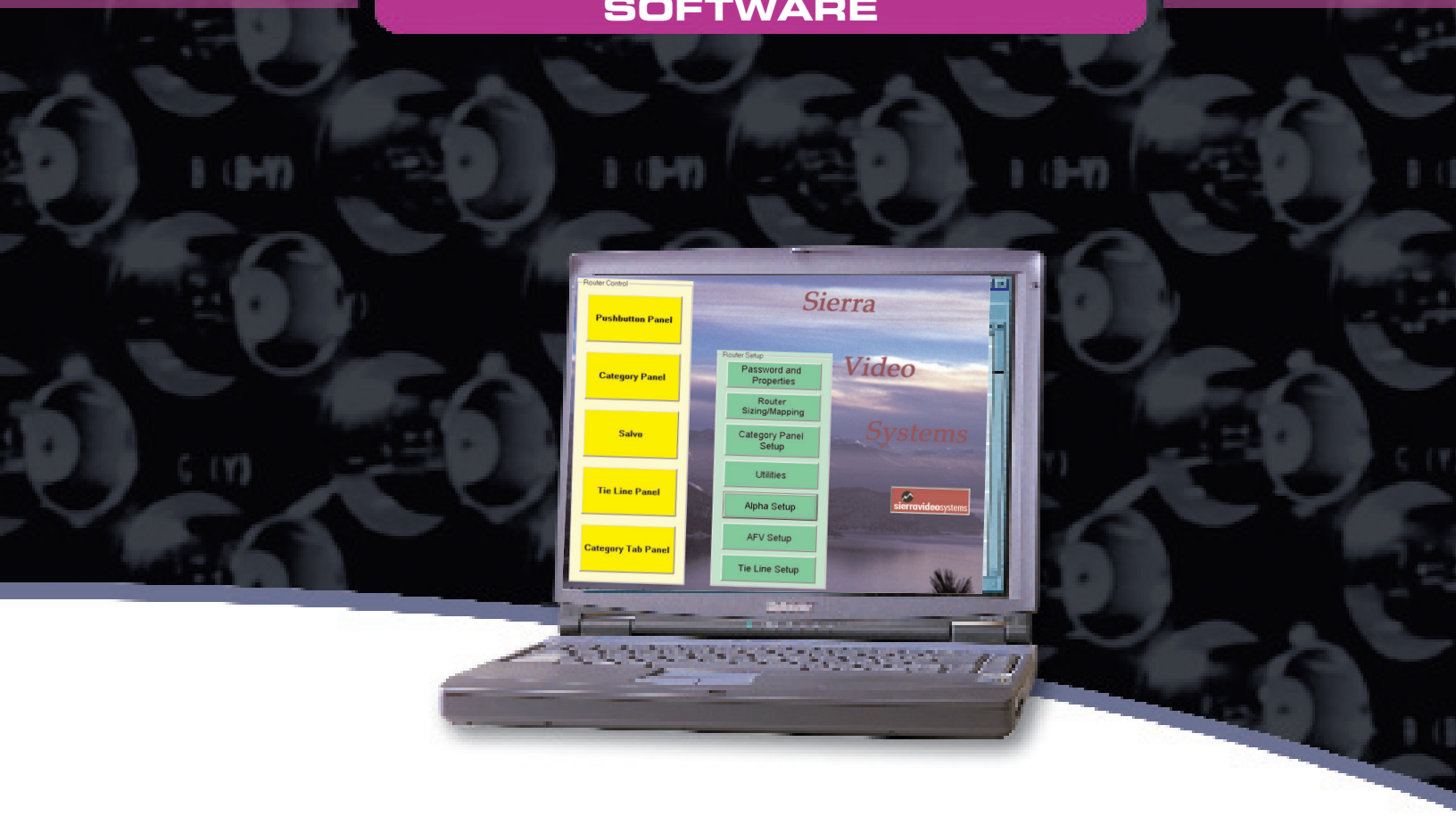
SCP Series Favorites Include:

- **SCP-20 Programmable Desktop**
- **SCP-112 Basic Programmable LCD Keypad**
- **SCP-132 Push Button with Rotary**
- **SCP-150 Push Button**
- **SCP-200 Programmable & Fully-mappable**
- **SCP-224 Advanced Programmable LCD Keypad**
- **SCP-240 Multi-bus / Multi-level**
- **TCP / IP Internet Control**

Traditional Options

Sierra Video Systems continues to offer a complete array of Single-Bus, Button Per Source, and XY panels for all product families. These basic rack mount and desktop keypad control panels are ideal for use where space is tight and more sophisticated control is unnecessary.

SOFTWARE



Software Solutions

Sierra Video Systems robust software solutions range from our free Graphical Router Interface Program, or G.R.I.P.™, to the full featured IntelliPath™ facility management software package.

G.R.I.P. & GRIPNet

G.R.I.P. uses a Windows-based graphical user interface (GUI) to allow users the ability to name sources and destination, levels and set up personalities of individual control panels. Likewise, G.R.I.P. allows graphical communication with the router processor eliminating the need for antiquated terminal communication. G.R.I.P. also allows users to execute up to forty pre-loaded "salvos". You can view the status and location of routing switchers, learn information about control panels, name destinations and sources, and create room groupings for all users. The GRIPNet version of this software allows the use of a LAN network with user access and complete administrative control.

GRIP Features:

- **Eliminates the need for Terminal Mode**
- **Simple router configuration**
- **Naming & router control**
- **Salvo setup and control**
- **User-friendly GUI**

IntelliPath Facility Management Suite

IntelliPath is a new modular software expands on the complimentary features of G.R.I.P. and incorporates powerful new features. Choose from modules that program and launch over 40 salvos automatically or control multiple routers direct from any PC on your network. IntelliPath allows you to configure tie-line management actions from one intuitive user screen. Administrative features determine network access, user IDs and TCP/IP Ethernet control for access from anywhere in the world. IntelliPath can also isolate and control third-party routing switchers and other devices using the translator module. This attractive package allows you to upgrade to digital and incorporate legacy routing equipment with new Sierra routing systems.

IntelliPath Modules & Features:

- **All the features of G.R.I.P. & GRIPNet**
- **Router and control panel configuration**
- **Easy password administration**
- **Naming & router control**
- **Salvos setup, control, and naming**
- **Panel configuration**
- **Network proxy server for TCP/IP**
- **Tie-line management**
- **Router protocol translator**

Web & Ethernet Control

Sierra Video Systems offers web control solutions other than GRIPNet and IntelliPath. From our simple Windows 2000/XP server interface to third-party appliances, SVS can accommodate any need for remote and local network computer topology. Finally, nearly all third-party controller and automation suppliers, including AMX, BarcoNet, Buf Technologies, Crestron Electronics, and Leightronix, support our protocol.

Modular Terminal Equipment:

In any production or broadcast environment, signal distribution, format conversion, and timing are essential functions. The DigiLinx™ family of modular digital terminal equipment is designed expressly for hybrid analog/digital, transition-to-digital, and all digital facilities where these functions are critical.

SVS offers serial digital video and audio delay, video storage, and frame sync modules, high quality 10-bit analog and digital converters, high definition DAs, and many other modules to complement large distribution systems. With over 20 different functions to choose from, DigiLinx provides a variety of solutions for your terminal equipment needs.

Features:

- **Compact Modular Design**
- **1RU and 3RU Mounting Frames**
- **High Level of Density and Integration Within Each Module**
- **Enables Remote Setting and Monitoring of System Modules From Any PC**
- **SmartLinx Interface Allows Control and Integration of Up to 170 DigiLinx Modules**
- **Conversion Modules**
- **Distribution Modules**
- **Synchronization Modules**
- **Delay & Timing Modules**

Frame Design

The 1RU DigiLinx frame can accept up to six single-width modules, or 3 double-width modules, in any combination, and comes with a single built-in power supply. By ordering the Host Adapter module, the DigiLinx 1RU frame can be controlled via the SVS SmartLinx protocol by using our SmartLinx Windows application program. The universal DigiLinx frames make it possible to mix and match any type of DigiLinx module including analog, digital or HD.

The 3RU frame offers great flexibility because of its capacity to accommodate up to 18 single-width modules or 9 double-width modules. This 3RU frame is available with either single or redundant power supplies. All modules are designed to plug into the rear of the mounting frame to reduce impedance, jitter, and return loss.

Our designs move the input buffer to a circuit that is right next to the BNC connector to considerably improve performance and reliability.

Creative Applications

DigiLinx is a perfect complement to SVS routing systems and can be used for creative broadcast and presentation technologies. Sierra Video Systems offers an array of DAs for a wide range of data rates for video and audio. Our A-to-D and D-to-A converters combine precision 10-bit processing, automatic multi-standard versatility with exceptionally high density. Modules in this family provide frame synchronization and storage for local and remote control of SDI component video output to sync input timing and up to 12 non-volatile frame storage. DigiLinx also offers many unique modules that balance a good distribution infrastructure with innovative inserts, delays, and timing. The FITN-100 Skirt Generator, for example, is used for HD broadcasting allowing for 16:9 wide screen display with a skirt image on the side of a 4:3 broadcast. The TimeCache: Video variable time delay is used to broadcast the yellow first down marker for national football games, synchronized 360-degree arena camera angles, and real-time statistics for televised automotive racing.

SmartLinx™

Operation and maintenance are exceptionally important issues in system design. An exclusive feature of the DigiLinx family is our SmartLinx Control Interface. The SmartLinx interface makes it possible to control and interrogate individual DigiLinx modules in any size system. SmartLinx protocol simplifies the ability for external control devices and third-party systems to access remote control of various DigiLinx modules. Using our exclusive PC-based applications program, you can set operating parameters and monitor the status of any SmartLinx-capable module in your system. SmartLinx can control complex DigiLinx mode functions, such as DigiCache delay and YUV/RGB selection for A-to-D and D-to-A conversions.

Optional Modules:

- **Variable Video and Audio Time Delay**
- **Analog to Digital / Digital to Analog Converters**
- **Analog, Digital, & HD Video Equalizing DAs**
- **Analog, Digital, & HD Video Reclocking DAs**
- **AES/EBU Unbalanced Digital Audio DA**
- **AES/EBU Digital Audio Embedders / De-Embedders**
- **FITN-100 Skirt Generator**
- **Frame Synchronization**
- **Non-Volatile Frame Storage**
- **Host Adapter Network Interface Module**

Complete Your System

Sierra Video Systems offers a variety of distribution amplifiers, format converters, and supporting products. We offer a complete selection of DAs and RS-422 port data routing systems. We also offer format converters, video keyers and mixers, cables, fan out adapters, and other important accessories to help you install your system. You will find that SVS supplies everything you need to configure a complete system.

RS-422 Port Data Routing Systems

Large installations frequently use RS-422 machine control routing. Our RS-422 port routers allow centrally located, shared resources that feed the central routing switcher system to have their control ports routed when needed. These resources include tape machines, DDR's, and servers.

The SVS RS-422 port routing switchers are used with VS/DE, Sierra PRO, Tahoe, Shasta, Yosemite, and Sequoia routing and control systems. The 16-port 1RU router features m/s tracking ports and is controlled as a separate level. The 64-port 4RU frame can also be linked to one of these systems, or it can stand-alone with its own serial control module. These switchers are "port" rather than "XY designs". A port system has the same total number of connectors, but unlike the "XY" system, any connector, or "port", can be connected to any other connector. In the case of tape machines, this feature allows a machine to control another tape machine that it is set to remote. A 64-port system can be thought of as a 32x32 XY. It can also be used as a 48x16 or a 56x8, etc.

Mapping is one special feature of the port system's control. The RS-422 I/O ports are assigned to individual inputs and outputs of the corresponding video router by means of the personality port. This allows the RS-422 level of a large routing switcher to be configured with only as many RS-422 ports, as your system needs: you don't need an RS-422 matrix as large as the video levels.

Optional RS-422 Sizes:

- **16 Port 1RU Frame**
- **64 Port 4RU Frame**

Distribution Amplifiers

Sierra Video Systems makes a complete line of high performance 10-output video and audio distribution amplifiers (DAs) for broadcast, production, and CATV applications. Distribution Amplifiers are the unsung heroes of every video and audio facility. Many of our DAs are still being used daily after being in service for over 18 years. Many of our DAs are reinstalled again in other capacities, extending their lives even further.

We offer the Delta Series three channel video distribution amplifier for analog component video and computer graphics

applications. These cost-effective plug-in amplifiers offer reliable, high-end performance at a very attractive price. Each member of our DA family is a plug-in module for installation in a 19" rack mounting chassis. Each module uses a state of the art design to ensure the low distortion and wide bandwidth essential for transparent performance. Our extensive video and audio DAs have 10 outputs each.

Optional DA Configurations:

- **Frames Accept 3, 10 or 20 Modules**
- **Each Video and Audio DA Module Contains 10 Outputs Each**
- **Basic Video DAs**
- **Differential Input Video DAs**
- **Equalizing Video DAs**
- **Pulse DAs**
- **Stereo Audio DAs With Adjustable Gain**

Video Format Converters, Keyers, & Mixers

With RGB and color difference video formats, there is a big need to convert signals from one format to another. Cameras, monitors, computers, character generators and large screen projectors use the red, green, blue (RGB) component video format. Component video production switchers, Beta cam, MII VTRs use YUV and our Delta Series format converters are the ideal bridge between these formats.

Our CIK-1 and CM-3 systems are multi-function component video keyer and mixing systems. The CIK-1 allows full keying from R, G, or B signal, luminance keys derived from the insert video source, external key source input with a true linear keyer for superb video keys, and Matte or insert video fill. It includes an internal chroma key generator allowing use of any highly saturated color for keying and Mix Mode to dissolve between foreground (insert) and background video inputs. CM-3 is a two-input component video mixer for large-screen multimedia applications, and is ideal for mixes or cuts between component sources or to Black. The CM-3 can be controlled either via its RS-232 interface using an easy to follow protocol and/or via 9 GPI closures that provide different transition modes and rates.

Accessories

Sierra Video Systems can help you complete your system. We offer many optional components like cables, audio pin insertion and extractor tools as well as Bittree audio interfacing wiring assemblies. We also offer routing switcher extenders, crimp tools, audio fanout adapters, and our long time favorite Break out Boxes.

MANZANITA/SIERRA

Small Utility Routing Switchers

The Manzanita and Sierra Families are small routing switchers offering composite, component, pulse, and wideband functionality. These time-tested routing switchers have been the first choice for broadcast studios, systems integrators, post-production houses, and military applications. We have thousands or Manzanitas in place still providing flawless performance today. Sierra control uses a binary parallel-serial system to interconnect local and remote control panels, and to manage outputs and levels. The serial portion of the system allows for controlling video and audio levels, AFV, or breakaway.

Manzanita

Manzanitas are 1RU compact switchers, but they provide the same high performance video and audio signal processing as our larger routers. The Manzanitas share a modular design that makes servicing and troubleshooting easy. All of their active circuitry is on a single circuit board, which means a lower cost to you.

Features:

- **Compact 1RU high performance**
- **Analog composite video**
- **Analog 3 and 4 channels component video/audio**
- **AFV and video-only**
- **Modular designs for easy access**
- **Space saving local control panels on front covers**
- **Remote control panels available**
- **RS-232 serial interface controls**
- **Optional Configurations: 321VS, 82VS & 82C, 44VS & 44CP, 161VS, 51C**

Sierra

The Sierra Family is the next step up in both size and functionality from the Manzanitas. This family consists of 8, 12, and 16 input analog routing switchers in a variety of composite video only, stereo audio, and AFV configurations. The Sierras are built with our trusted modular design approach to offer exceptional flexibility.

Features:

- **8, 12, and 16 input analog routers in a variety of standards**
- **Analog composite video**
- **AFV and video-only configurations**
- **Remote control panels can be daisy-chained to simplify system wiring**
- **Serial control system allows for multiple level control, providing audio breakaway***
- **RS-232 serial interface option uses common SVS serial protocol**
- **CE & FCC compliant**
- **Optional Configurations: 1616V, 168VAAAA, 1212VAAAA, 88VS, 84VS**

Company Statistics

Type of Business	Designers and manufacturers of Video and Audio Routing Switchers and Terminal Equipment
Headquarters	Grass Valley, California
Years in Business	20
Products in Use	25,000+
Delivery Time	Overnight to 6 weeks
Warranty	7 Years
Trade-Up	Up to 80% allowance
Channels	Direct Regional US representatives Kramer dealers worldwide
Customers	Broadcast — Staging Pro Video — Gov't/Military Education — Worship
Customer Service	Best in the business
Benefits	Dependability Price/Performance Expandability

sierravideosystems
A KRAMER ELECTRONICS COMPANY

P.O. Box 2462
Grass Valley, CA 95945 U.S.A.
www.sierravideo.com

Tel **(530) 478-1000**
Fax **(530) 478-1105**
E-mail **info@sierravideo.com**