



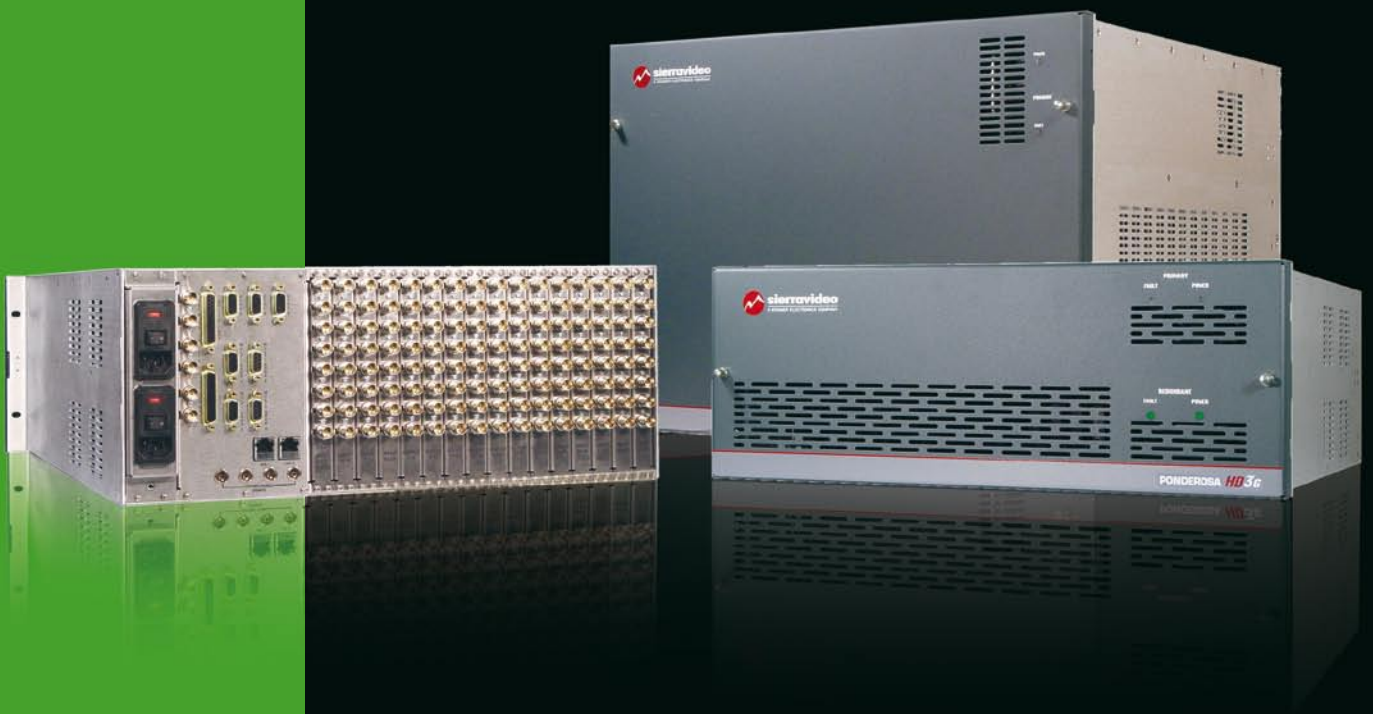
sierravideo
A KRAMER ELECTRONICS COMPANY



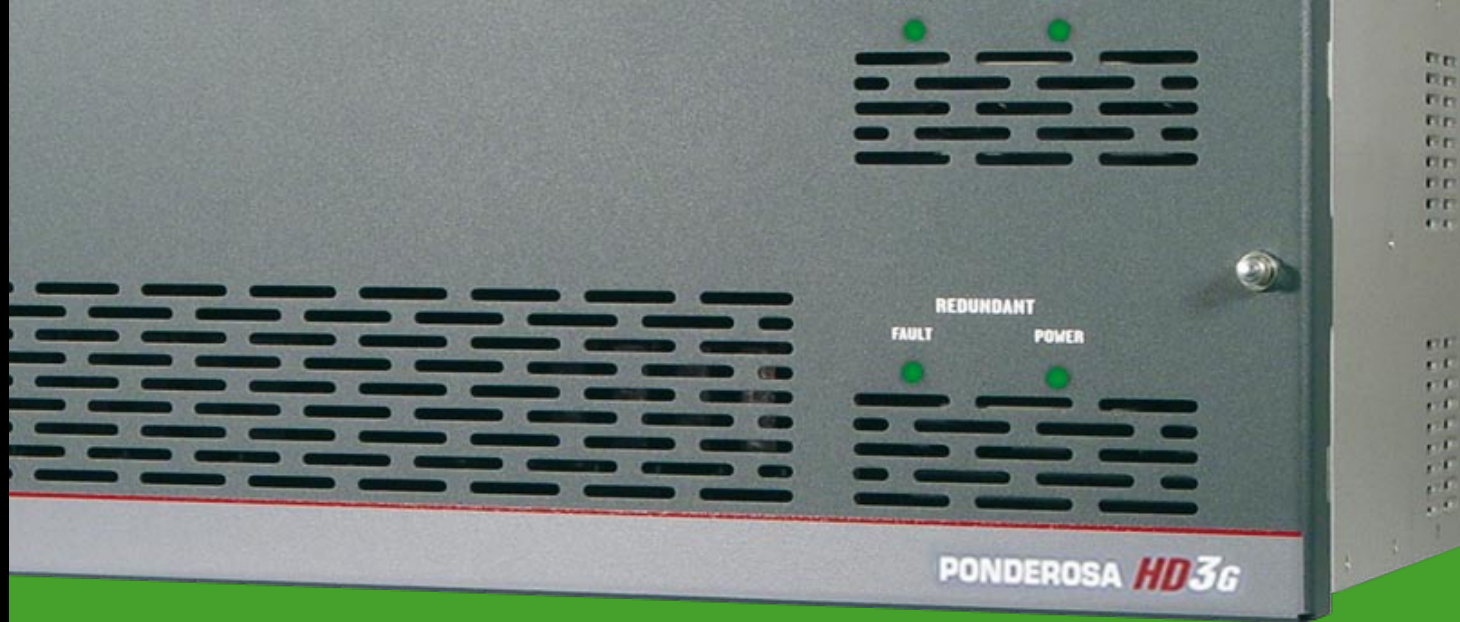
PONDEROSA™

HD-SDI/SDI Multi-Format
Routing Switcher
with Digital and Analog Audio

64 x 64 / 128 x 128



FOR HD VIDEO FITTED TO YOUR NEEDS, SWITCH TO PONDEROSA



Feature-rich and format-flexible, the Ponderosa multi-format routing switcher is the premiere HD routing switcher for critical broadcast, production, and post-production facilities. Ponderosa provides the full feature set required for critical video environments including fiber optic I/O modules, D-to-A video conversion, redundancy and reclocking options. Reliability and rugged construction make Ponderosa an ideal hub for video in live staging events where equipment must work right the first time, every time.

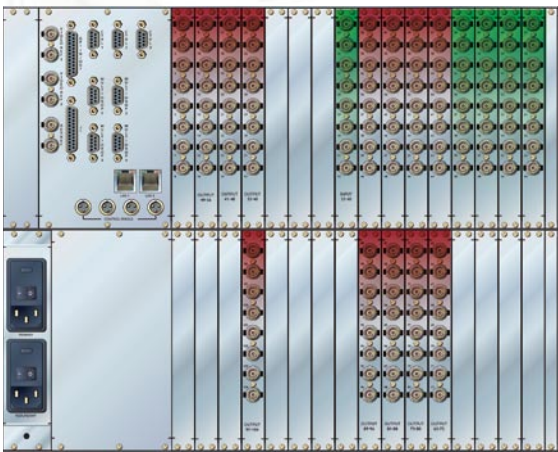
FEATURES:

- HD-SDI/SDI multi-format flexibility
- 19Mbps - 3Gbps HD-SDI/SDI video
- 64x64 in 4RU frame, up to 128x128 in 8RU frame
- Expandable by 8 input and/or 8 output increments
- Fiber optic I/O board set option
- D-to-A video card option for monitoring or distribution of composite video
- Intelligent reclocking and automatic cable equalization
- Hot-swappable video modules, CPU boards, and power supplies
- Optional redundant power supplies and controllers
- GPI/GPO control/alarms send e-mail alerts and make switch commands on failure or external contact closure



HD-SDI/SDI Multi-Format Flexibility

Ponderosa is a format-flexible HD-SDI/SDI routing switcher capable of handling standard serial digital video signals including SMPTE 310M, SMPTE 259M, SMPTE 344M and DVB-ASI up to 540 Mbps as well as HD serial digital video signals conforming to 292M and SMPTE 424 3G.



40 Inputs x 104 Outputs

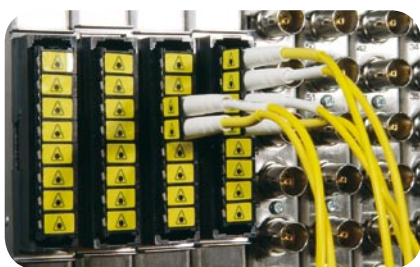
Modular Design

Ponderosa is fully modular, giving it the flexibility to meet your precise HD video needs. The routing switcher can be built out in 8 input and/or 8 output increments. Choose a matrix size that fits your exact needs – 48 x 16, 64 x 24, 128 x 96, etc. – up to 64 x 64 in only 4RU, 128 x 128 in 8RU. At the same time, Ponderosa is designed to be easily expandable, allowing the matrix size to grow as your HD needs grow.



Hot-Swappable Boards

Ponderosa's forward-thinking design allows video boards, CPU boards and power supplies to be swapped out of a functioning unit. Video I/O boards can be added on site, eliminating the disruption of factory modifications and making future expansion of your Ponderosa routing switcher that much easier. Additionally, optional redundant processors and power supplies are available.



Fiber Optic I/O Modules

A new fiber optic module option allows fiber optic cables to be directly connected to Ponderosa routing switchers. Bringing fiber optic cable directly to the routing switcher allows facilities to route fiber feeds either on fiber connectors or BNC connectors. Each module handles eight (8) inputs or eight (8) outputs on LC style connectors using single-mode cable and eliminates external conversion equipment commonly required. The fiber optic module provides bandwidth from 50Mbps to 3Gbps. It allows a cable distance up to 10km @ 3Gbps and can be used wherever long cable runs or distribution and routing of fiber feeds are needed.

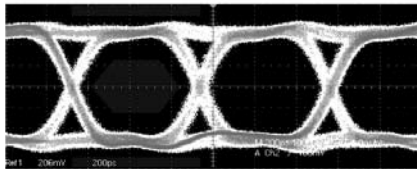


Digital-to-Analog Conversion Output Module

A new digital-to-analog conversion output module for Ponderosa takes a valid 270Mbps digital video input signal and converts the signal to output composite analog video. Each output automatically detects the incoming format and delivers the corresponding composite output in either NTSC or PAL. The module provides high-quality D-to-A conversion where digital signals are monitored or where conversion to composite is required for duplication or distribution.



Before Reclocking



After Reclocking

Intelligent Reclocking

Ponderosa's microprocessor operates a unique algorithm that intelligently analyzes the data rate of incoming signals. If the incoming rates are within range of standard SMPTE data rates, Ponderosa will optimize the signal to its target rate. If the data rate of incoming signal is outside typical SMPTE data rates, like MPEG-2, Ponderosa will allow the signal to pass without reclocking.



64x64 Companion Audio



128x128 Companion Audio

Audio Options

The Ponderosa family of routing switchers offers companion analog or AES digital audio frames. For both digital and analog frames, 64x64 units stand at 3RU (5.25") and 128x128 units stand at 5RU (8.75"). Two audio frames of like format may be used together for analog stereo audio or two-stream (balanced) digital audio: 6RU (10.5") for 64x64 and at 10RU (17.5") for 128x128. Companion AES audio units offer both asynchronous and synchronous options. Redundant power supply is optional on all companion audio routing switchers.



Control Options

The Ponderosa frame is outfitted with a standard TCP/IP port for IP (Ethernet) control via Mac or PC. The full suite of Sierra Video control products is available for Ponderosa, from our SCP line of programmable control panels to our TyLinx Pro™ Router Control Software featuring extensive customization options, as well as our network-enabled TyLinx Pro Net™ Router Control Software. Ponderosa also offers an RS-232 and RS-422 serial interface supported by all major third party control systems.

PERFORMANCE SPECIFICATIONS

HD-SDI/SDI MULTI-RATE DIGITAL VIDEO SPECIFICATIONS		
DATA RATES	19Mbps – 2.97Gbps	
DATA TYPES	SMPTE 424, SMPTE 372M, SMPTE 310M, SMPTE 259, SMPTE 344M, SMPTE 292M, DVB-ASI, ITU-R BT.601	
JITTER	< 0.2 UI	
INPUT		
VIDEO LEVEL	800mV p-p +/-10%	
IMPEDANCE	75 Ohm	
RETURN LOSS	< -15dB up to 1.5GHz	
CABLE EQUALIZATION RANGE	0-100 meters for SMPTE 292M or SMPTE 372M, Belden 8281 0-300 meters for all other standards, Belden 8281	
CONNECTOR TYPE	BNC	
OUTPUT		
VIDEO LEVEL	800mV p-p +/- 10%	
IMPEDANCE	75 Ohm	
RETURN LOSS	<-15dB up to 1.5GHz	
RISE/FALL TIMES	< 270psec	
CONNECTOR TYPE	BNC	
AES/EBU DIGITAL AUDIO		
	AES3	AES3id
DATA RATES	32kHz - 96kHz	32kHz - 96kHz
JITTER	<0.025 UI p-p	<0.025 UI p-p
MAX. DISTANCE	100 m	100 m
CABLE	STP	BNC
INPUT		
AUDIO LEVEL	6V p-p for 110 Ohm systems	1V p-p for 75 Ohm systems
RETURN LOSS	<-30dB @ 6MHz	<-30dB @ 6MHz
MINIMUM INPUT	1V p-p	1V p-p
CONNECTOR TYPE	8 balanced lines plus removable	BNC converter panels for terminal strips for 110 Ohm systems
OUTPUT		
AUDIO LEVEL	6V p-p for 110 Ohm systems	1V p-p for 75 Ohm systems
RETURN LOSS	<-30dB @ 5MHz	<-30dB @ 5MHz
CONNECTOR TYPE	8 balanced lines plus removable	BNC converter panels for terminal strips for 110 Ohm systems
ANALOG AUDIO		
FREQUENCY RESPONSE	20Hz to 20kHz +/-0.1dB	
DYNAMIC RANGE	90dB ref. +24dBu	
CROSSTALK	>80dB @ 1kHz >60dB @ 10kHz	
IM & THD	≤ 0.05% +24dBu	
INPUT		
MAX. SOURCE LEVEL	+24dBu	
IMPEDANCE	> 10k Ohm balanced	
CONNECTOR TYPE	Lockable 5-pin terminal block	
OUTPUT		
MAX. SOURCE LEVEL	+24dBu	
IMPEDANCE	150 Ohm balanced	
CONNECTOR TYPE	Lockable 5-pin terminal block	
CONTROL		
SERIAL	3 general purpose 9 pin-D, each switchable RS-232 or RS-422 9600, 38400, 115200 baud	
PROTOCOLS	SVS host, simple Kramer and select others Ethernet	
ETHERNET	10/100 Base-T, full duplex, RJ-45 connector	
PROTOCOLS	ARP, ICMP, TCP/IP, Telnet, HTTP	
WEB SERVER	For control	
REDUNDANT CONTROL PROCESSOR	Optional	
CONTROL PANELS	Supports full line of SCP remote control panels	
LEGACY SVS PRODUCT CONTROL	25 pin-D expansion port, up to 8 additional signal levels	
GPI/GPO	5 inputs/5 outputs	
GENERAL		
RACK UNIT/FRAME SIZE		
UP TO 64X64	4RU	
UP TO 128X 128	8RU	
DIMENSIONS		
UP TO 64X64	19" w x 7" h x 20 3/8" d	
UP TO 128X128	19" w x 14" h x 20 3/8" d	
	Mounts in standard 19" rack Depth measurements do not include front panel hardware or rear cabling	
POWER	90 VAC -> 240 VAC 50/60Hz (<150 Watts) auto-detecting	
REDUNDANT POWER SUPPLY	Optional	
STORAGE TEMPERATURE	-40° to +150° F	
OPERATING TEMPERATURE	30° to 100° F ambient	
HUMIDITY	10% to 90% non-condensing	
WARRANTY	7 years	

SOFTWARE & CONTROL

TyLinx Pro and TyLinx Pro Net Router Control Software

TyLinx Pro Router Control Software offers an intuitive, user-friendly interface for comprehensive routing system control with extensive options for customization. Our standard TyLinx Pro is free for download and provides unique profiles for each user with additional security features for the control system all based on a single host computer. Our TyLinx Pro Net software is a network-enabled version of TyLinx Pro, offering the same robust features with additional administrative and configuration capabilities, and allowing unlimited seats within your network.

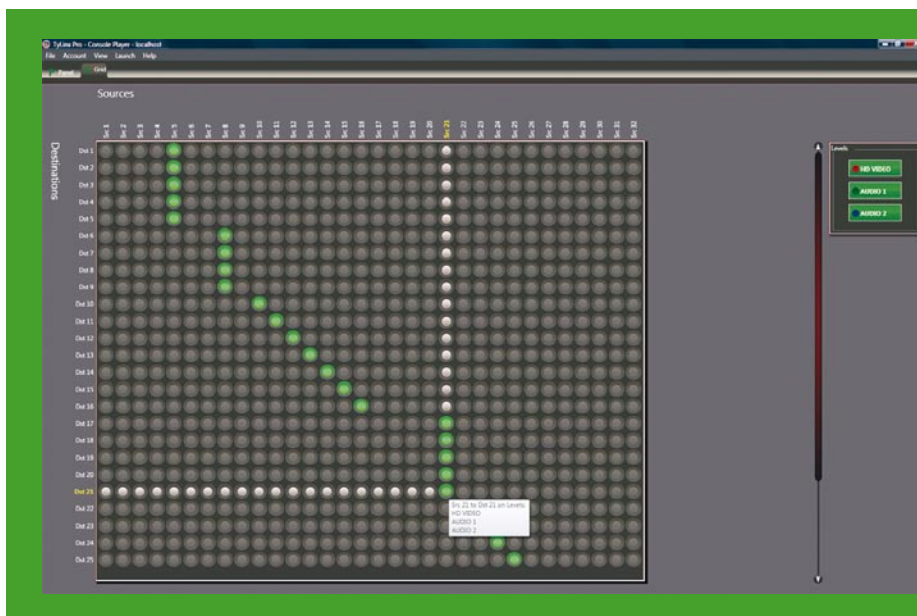
TyLinx Pro Features:

- Compatible with Windows® XP SP2, XP Pro x64 SP1, Windows Server® 2003
- Also compatible with Windows Vista® x86 & x64 editions
- Supports multiple routing switchers
- Automatically retrieves source and destination names from the router
- Records and stores routing commands for routine routing requirements
- Virtual Room Grouping allows each user to create custom views for their individual requirements
- Ethernet (IP) or RS-232 serial communication suppliers

Free download available at <http://tylinxpro.sierravideo.com>

TyLinx Pro Net Features:

- Network-enabled with unlimited seats
- Provides complete administrative, configuration, and control functions
- Shared/savable database for off-site data storage
- Windows & Mac OS® compatible
- Supports multiple routing switchers
- Provides all features of TyLinx Pro standard edition, including retrieval of source and destination names, recorded/stored routing commands, and Virtual Room Grouping
- Ethernet (IP) or RS-232 serial communication



Remote Control Panels

The SCP Series of programmable control panels features tremendous flexibility in external routing switcher control. The series has an onboard microprocessor which is combined with an effective 1stC-bus architecture to provide customers with 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 own TyLinx Pro Router Control Software and they provide error-free serial communication with our routing switchers.

Sierra Video also offers a complete array of convenient and simple Single-Bus, Button Per Source and XY panel for all our product families.

RELIABLE PRODUCTS, EXPERT SUPPORT



For over 25 years, Sierra Video has been assisting customers and providing solutions for almost any signal routing application imaginable. Our outstanding Customer Service and Technical Support teams are industry experts, skilled at answering your questions and optimizing your systems. Call direct during business hours and speak with a Technical Support Engineer, or take advantage of our 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. You can reach our Customer Service Department from 8 A.M. to 5 P.M. Pacific, Monday through Friday, or access 24-hour online support: www.sierravideo.com.

Seven-Year Warranty



Routers are the core of your system - "glueware" that is often taken for granted. In today's demanding video environment, you need to know that the backbone of your system will keep on working. When choosing a routing switcher, it is important that you discuss your requirements with a knowledgeable sales staff and identify the company's ability to provide long-term support. Be sure to make the right choice! Sierra Video is proud to offer a Seven-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.

Trade In - Trade Up™ Routing Switcher Exchange Program

With Sierra Video, you can maximize the impact of your investment by adding or exchanging systems as your needs grow. Most of our routing systems are designed to expand with you, using flexible plug-in modules or easy factory modifications. With these, you may choose from a variety of frames and modular combinations that meet your needs. However, if your system is a single frame all-in-one solution, simply send it back and we will either modify it by adding new modules or you can opt to trade it in for a new, larger system using our unique Trade In - Trade Up Routing Switcher Exchange Program. The Trade In - Trade Up Routing Switcher Exchange Program allows a generous credit for a customer's entire system when it is traded in for a larger Sierra Video routing switcher.

Let us know what your needs are and we will make every effort to accommodate you.

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