S-4000 DIGITAL SNAKE

SPECIFICATIONS

S-4000S-3208: DIGITAL Audio Snake System, 32-IN, 8-OUT STAGE U	
Number of Channels	32 in 8 out
AD Conversion	**Sample Rate:** 96.0 kHz
	Signal Processing: 24 bit
DA Conversion	**Sample Rate:** 96.0 kHz
	Signal Processing: 24 bit
Frequency Response	-2 dB / +0 dB (20 Hz to 20 kHz at +4 dBu)
Total Harmonic Distortion + Noise	**(22 ~ 20000 Hz BW):** 0.05 % or less
Dynamic Range	110 dB
Cross Talk	-80 dB
Nominal Input Level	-65 to -10 dBu (PAD: Off)
(controllable in 1 dB steps)	-45 to +10 dBu (PAD: On) (Max. input +28 dBu)
PAD	20 dB On/Off
Input Impedance	20 k ohms
Nominal Output Level	+4 dBu, Max. +22 dBu
Output Impedance	150 ohms
Recommended Load Impedance	10 k ohm or greater
Residual Noise Level (IHF-A, typ.)	-92 dBu or less
Equivalent Input Noise (E.I.N.)	-128 dB
Network Latency	375 us (AD -> REAC -> DA Latency: about 1 ms)
Connectors	**Input:** 32 (XLR, balanced, phantom
	power, 4 ch input module x 8)
	Output: 8 (XLR, balanced, 4 ch output module x 2)
	REAC: MAIN, BACKUP (RJ-45 EtherCon type)
	Remote Connector: 1 (RS-232C, DB-9 type)
	MIDI Connectors: IN, OUT (5-pin DIN type)
Indicators	EXT Indicator (External power supply)
	INT Indicator
	REAC Indicator
	CTRL Indicator
	ALARM Indicator
	MUTE ALL OUTPUTS Indicator
Power Supply	AC 100 V, AC 117 V, AC 220 V, AC 230 V, AC 240 V (50/60 Hz)
Power Supply	**(for optional power supply; Model S-240P):** +24 V DC
Power Consumption	120 W
Current Draw	**(for optional power supply; Model S-240P):** 6 A
Phantom Power	+48 V / 14 mA (each input on SI-AD4, remote controlled)
Dimensions	482 (W) x 336 (D) x 266.4 (H) mm
	19 (W) x 13.2 (D) x 10.5 (H) inches
Weight	16.8 kg
	37 lb
Operation Temperature	+10 to +35 degrees Celsius
	+50 to +95 degrees Fahrenheit
Accessories	Power Cord
	REAC Cable (10 m, CAT5e crossover cable)
	Owner's Manual
Options	**Power Supply Unit:** S-240P

* 0 dBu = 0.775 V rms

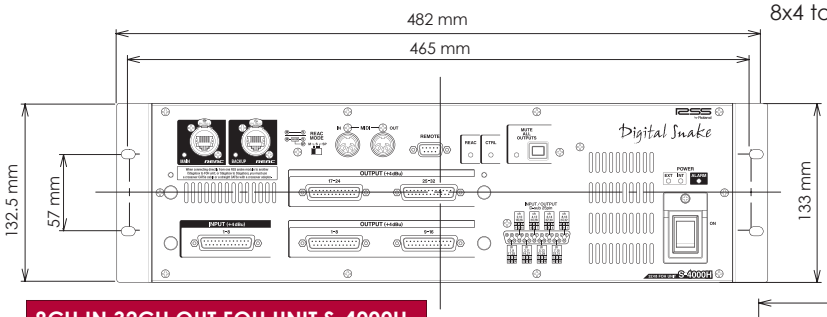
S-4000R: Digital Audio Snake System, REMOTE CONTROLLER	
Connectors	**Remote Connector:** 1 (RS-232C, DB-9 type)
Power Supply	Supplied from connected device
	(S-4000S, S-4000H; through the remote cable)
Indicators	CLIP Indicators 1 to 40
	SIG Indicators 1 to 40
	POWER Indicator
	REAC Indicator
	CTRL Indicator
	Level Meter
Memory	10 memories
Dimensions	215 (W) x 87 (D) x 54.6 (H) mm
	8.6 (W) x 3.4 (D) x 2.15 (H) inches
Weight	0.8 kg
	1.75 lb
Operation Temperature	+10 to +35 degrees Celsius
	+50 to +95 degrees Fahrenheit
Accessories	Remote Cable (3 meter)
	Owner's Manual

S-4000H 8 Ch In 32 Ch Out FOH Unit	
Number of Channels	8 in 32 out
AD Conversion	**Sample Rate:** 96.0 kHz
	Signal Processing: 24 bit
DA Conversion	**Sample Rate:** 96.0 kHz
	Signal Processing: 24 bit
Frequency Response	2 dB / +0 dB (20 Hz to 20 kHz at +4 dBu)
Total Harmonic Distortion + Noise	**(22 ~ 20000 Hz BW):** 0.05 % or less
Dynamic Range	110 dB
Cross Talk	-80 dB
Nominal Input Level	+4 dBu, Max. +22 dBu
Input Impedance	30 k ohms
Nominal Output Level	+4 dBu, Max. +22 dBu
Output Impedance	600 ohms
Recommended Load Impedance	10 k ohm or greater
Residual Noise Level (IHF-A, typ.)	-92 dBu or less
Network Latency	375 us (AD -> REAC -> DA Latency: about 1 ms)
Connectors	**Input:** 4 (D-sub 25 pin connectors, balanced
	8 channels)
	Output: 1 (D-sub 25 pin connectors, balanced
	8 channels)
	REAC: MAIN, BACKUP (RJ-45 EtherCon type)
	Remote Connector: 1 (RS-232C, DB-9 type)
	MIDI Connectors: IN, OUT (5-pin DIN type)
Indicators	EXT Indicator (External power supply)
	INT Indicator
	REAC Indicator
	CTRL Indicator
	ALARM Indicator
	ALL MUTE OUTPUTS Indicator
Power Supply	AC 100 V, AC 117 V, AC 220 V, AC 230 V, AC 240 V (50/60 Hz)
Power Supply	**(for optional power supply; Model S-240P):** +24 V DC
Power Consumption	60 W
Current Draw	**(for optional power supply; Model S-240P):** 3 A
Dimensions	482 (W) x 386.7 (D) x 133 (H) mm
	19 (W) x 15.2 (D) x 5.25 (H) inches
Weight	8.4 kg
	18.5 lb
Accessories	Power Cord
	Owner's Manual
Options	**External Rack-mountable Power Supply Unit:** S-240P
	Cable: SC-A0805DM D-sub to XLR Male
	Cable: SC-A0805DF D-Sub to XLR Female

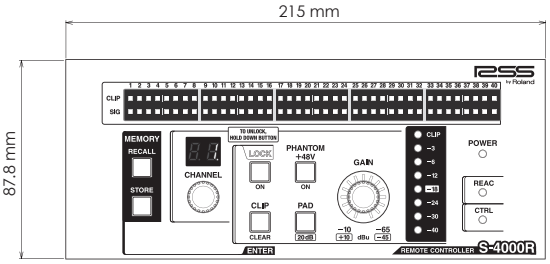
S-4000 DIGITAL SNAKE

PRODUCT SUMMARY

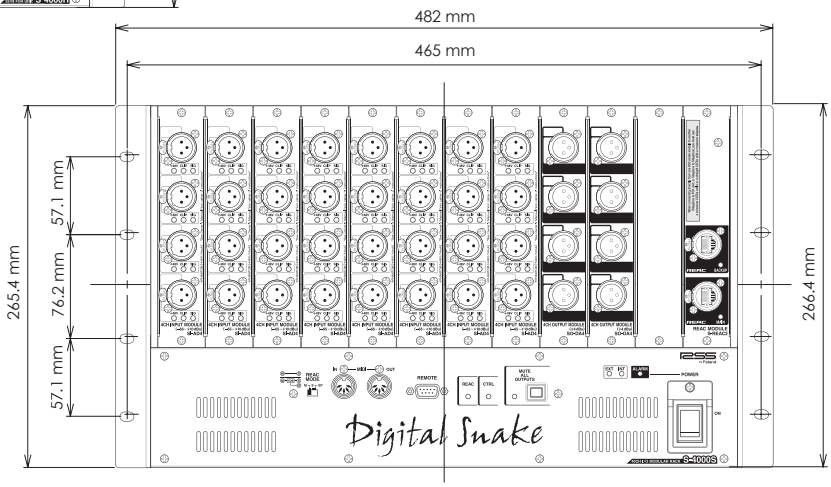
The S-4000S is a modular digital snake system delivering up to 160 channels of high quality 24-bit/96kHz audio over Cat5e cables. System highlights include remote controllable XR-1 professional quality mic preamps, redundant ethernet ports and unlimited splits using standard Ethernet hardware. The system preamps can be controlled using the S-4000R Remote Controller in zipper-free 1 dB increments. Presets can be stored for recalling different configurations or restoring default settings. The redundant Ethernet cabling system uses automatic switching with no loss of audio. The optional S-240P can be used with any of the system components for seamless switching to backup power. The digital audio transmission over Cat5e cable is immune to induced hums and buzzes and offers lossless audio transmission from Stage to FOH and all Split locations. The system is modular and can be configured for just about any application from 8x4 to 96x32 systems.



8CH IN 32CH OUT FOH UNIT S-4000H



REMOTE CONTROLLER S-4000R



S-4000S-3208 32Ch In 8 Ch Out Stage Unit

ARCHITECTS & ENGINEERS SPECIFICATION

The digital audio transmission system (Digital Snake) shall be a modular system that can be configured in groups of 8 channels up to a maximum of 40 channels per transmission cable. The system shall consist of one Input or Stage Box Module, with XLR inputs as well as the option for multiple line-level "returns" or Outputs. It will also consist of at least one Output or FOH Module that will have line level outputs as well as the option for some line level inputs or returns. The modularity shall allow for different configurations of the Input Module or Stage Box including 40 inputs and 0 outputs, 32 inputs and 8 outputs, or 24 inputs and 16 outputs. The transmission cable between the Input or Stage Box Module and the Output or FOH Module(s) shall be a Cat5e cable.

The inputs shall be of very high quality and accept both line and microphone level inputs with individually selectable phantom power. The input gains or trims for the inputs as well as their individually selectable phantom power settings, shall be remotely controllable from the Stage or FOH Module using either a hardware remote control unit or a PC computer. The gain level shall be controllable in 1 dB steps. The system shall also offer at least 10 preset memories of different configurations of the input gain and phantom power settings.

The audio protocol shall have a 96 kHz sampling rate and have a protocol latency of 375 microseconds from Input Module to Output Module in a 40-channel system. The system shall have redundant Cat5e ports allowing the connection of two Cat5e cables from Input to Output Modules. The system shall be designed to switch automatically from one cable to the other in the case of damage to one of the cables. The Input Module shall allow the user to duplicate or "split" the input sources to several Output Modules using a fast Ethernet switching hub.

The system shall be the RSS S-4000 Digital Snake System.