

Digital Snake

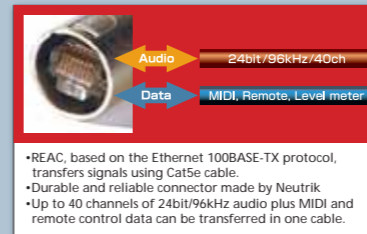
Multi-Channel Digital Audio Transfer Systems



Digital Snake

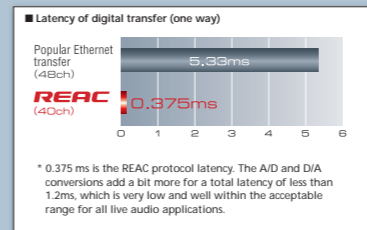
Multi-Channel Digital Audio Transfer Systems

The superior quality and reliability of RSS Digital Snakes is made possible by coupling high quality preamps with Roland's REAC digital transmission technology. RSS Digital Snake systems are immune to the hums, buzzes and general impedance and capacitive losses that plague analog snakes. By having the mic preamps close to their source and by avoiding the transmission losses of long runs of analog cables, your audio has a chance to sound its best throughout your whole system. The system provides superior clear sound, great intelligibility with minimum latency and the freedom to easily split or extend your source audio. Digital Snakes are the next generation of audio quality for concerts, corporate events, houses of worship and any kind of audio installation.



REAC Roland's original Ethernet technology

REAC (Roland Ethernet Audio Communication) is newly designed technology for digital audio transfer by Roland. The REAC spec provides a high quality and safe, redundant digital audio transfer system that can be easily installed or integrated for any audio snake application. REAC is a "plug and play" system that is easy to configure and requires no complex setup or computer operation. Plug in your mics, plug in the Ethernet cable and you're ready to go!



REAC Super low latency digital transmission

Degradation of the audio signal is minimal in any digital transfer system. However, musicians, performers or even audiences may suffer from the excessive latency of other digital transfer systems. REAC eliminates these digital audio transmission problems with its super low latency. Even when transmitting 40 channels at 24bit/96kHz/Linear, REAC's latency is only 0.375ms*. This very low latency makes any RSS Digital Snake system perfect for all audio installations, especially in-ear monitoring systems.

Superior Sound Quality

ANALOG ▶ Boost after transfer means degradation and cross talk can be created during analog transfer

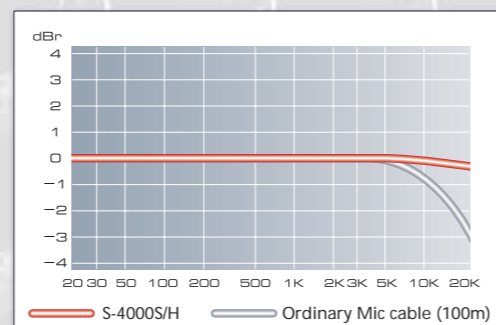
REAC (Digital) ▶ Gain boost before transfer means the best possible source audio is then transferred in the snake

REAC High Quality Pre-amps on each input channel

In an analog system, low-level microphone signals are boosted using a mic preamp only after the long, arduous journey down the analog snake. For this reason it's difficult to avoid degradation and cross talk. The digital snake is equipped with high quality and remote controllable pre-amps that boost the input gain very close to the source, where the highest quality signal is found. This ensures that your audio will sound its best. And of course once the signal is in digital form, it is immune to analog cabling losses. The pre-amp has been specially designed for live audio applications and is made of high quality components carefully selected by Roland's engineers.

REAC High quality and low noise digital transfer

In the analog domain, it is impossible to avoid signal degradation during long distance audio transfer at concerts or events in large halls or arenas. Digital transfer of REAC provides extremely flat and pure audio transfer for the whole frequency bandwidth. Furthermore, additional audio benefits occur because the source signal is transferred after boosting the gain using the high quality and remote controllable mic pre-amps.



Digital Transport Advantages

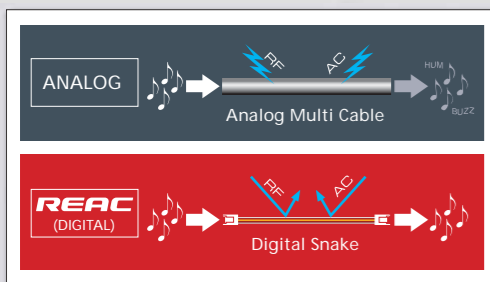
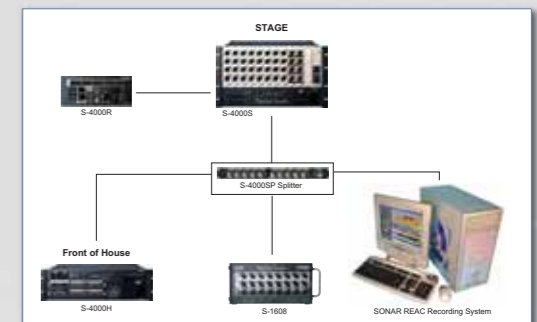


REAC Simple and low cost installation with Cat5e cabling

REAC brings another revolution to audio installations by eliminating the need to use thick, heavy and hard to handle analog multi-pair cables by transmitting audio using light, slim and easy to handle Cat5e cable. On one very thin Ethernet cable, REAC can transfer 40 channels of high quality 24bit/96kHz audio signal plus MIDI and remote control signals. Since the cable used for REAC transfer is ordinary Ethernet cable, the low cost and easy availability of the cable is a big advantage compared with using analog cable. From temporary installations in outdoor concerts to permanent installations in arenas or halls, REAC provides the benefit of light weight, inexpensive and easy to install cable.

REAC Limitless splitting of all input sources

The RSS Digital Snake systems are designed to provide splits of source audio using standard Ethernet hardware. Using a standard switching hub, you can send source audio to multiple recording consoles, a monitor position, broadcast location and more. No signal degradation will occur from the source's master output to the recording or any other split output.



REAC Minimize a signal's damage due to "noise pollution"

Hums and buzzes from external noise sources can often be a problem for analog snake installation. It can be difficult to know where potential noise sources might be before installing a snake. Solving subsequent noise problems requires a lot of experience and time. REAC provides an effective solution to these installation problems. Technically, the risk of noise pollution such as the induction of hums and buzzes into a digital snake is much lower than in an analog snake, and cross talk is minimal or non-existent. This provides almost complete routing freedom for your cable installations.



REAC Very long distance snake systems can be designed using an S-OPT REAC Optical converter

The S-OPT is a REAC optical converter that converts RSS Digital Snake System REAC signals to and from optical signals for long distance digital audio transmission. By using the REAC optical converter and optical cables (sold separately), the REAC transmission distance can be extended to a maximum of 2 kilometers (1.2 miles).

Parameters and display on S-4000RCS

Parameters : Input channel gain, Phantom power and PAD settings
 Display : Level meters of all input channels on one screen.



REAC Remote Control by computers

A computer can be connected to the REMOTE terminals (RS-232C) of any digital snake end. Once the S-4000RCS software* is installed, up to 160 channels of a snake system can be remote controlled from your computer using up to 4 RS-232c ports.

* S-4000RCS software is free and downloadable from www.rssamerica.com.



REAC 40 Channels of Digital Recording

The SONAR REAC Recording System when used in conjunction with the RSS Digital Snakes provides the most comprehensive live recording, mixing, mastering and delivery product available. Capture up to 40 channels of audio from your Digital Snake/V-Mixing System directly into SONAR all via a simple Cat5e connected to the network port on your PC.

S-4000 Digital Snake System



Input Channel Indicator
This indicates Signal, Clip and On/Off status of the phantom power for each input channel. The status of the input channels can be checked even from the stage.

Analog Input Modules
On board 24bit/96kHz AD converters and high quality mic pre-amps with phantom power supply.

Analog Output Modules
On board 24bit/96kHz DA converters.

REAC Module
Redundant REAC transfer provides continuation of audio transmission even in case of accidental damage of one cable.



Mode Selection Switch

| | |
|--------|---|
| Master | Outputs source audio to the Slave and Split devices. It receives input from the Slave device. |
| Slave | Receives input from and sends output to the Master device. |
| Split | Receives input from all of the Master device's sources. |

MIDI terminals
MIDI is transferred down the snake from both the In and Out MIDI connectors. These enable the remote control of mixers or musical instruments from external MIDI devices at the stage or FOH positions.

REMOTE terminal (RS-232C)
Connection for either the dedicated remote controller (S-4000R) or a computer installed with the remote control software (S-4000RCS*).
* S-4000RCS software is free and can be downloaded from www.rssamerica.com.

Mute All Outputs button
When this button is pressed and held, all Outputs in the S-4000 system will be muted. This is convenient for changing cable connections.

Cooling fans x 3
Internal heat is exhausted using 3 fans on the rear panel reducing the operational noise of the fans.

Power Inlets
The Locking Arm is equipped to prevent accidental unplugging of the power cord. The DC power supply connection is provided for use with an optional redundant power supply in case of power supply failure.

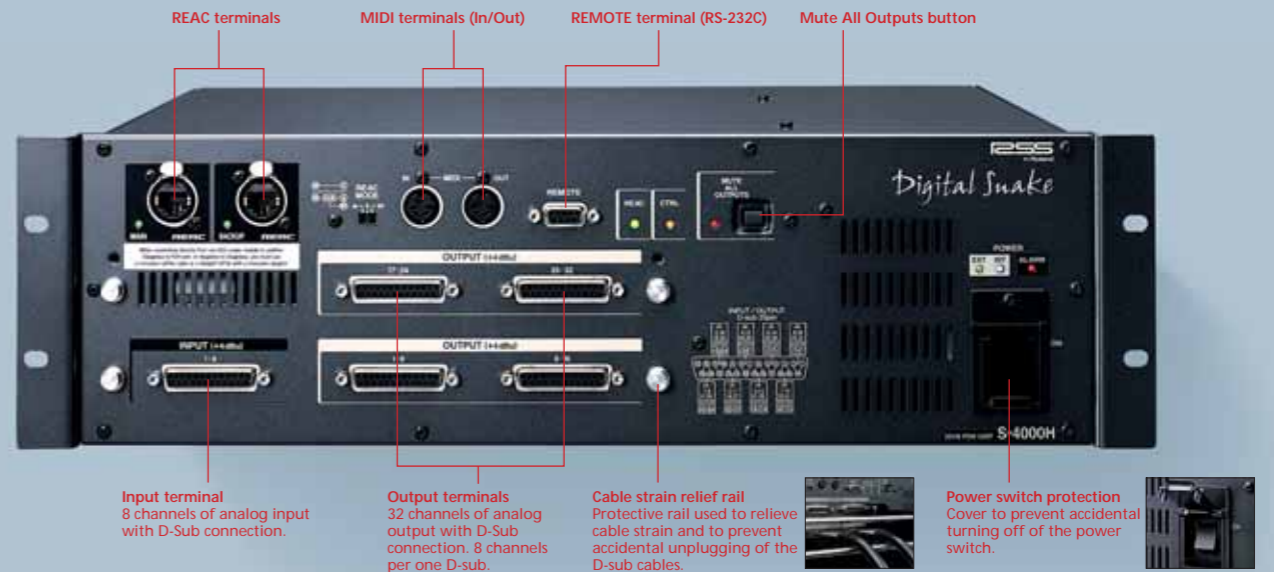


S-4000S-3208 40CH I/O Modular Rack

This unit has 32 inputs + 8 outputs and is typically installed at stage side. The AD/DA conversion is 24bit/96kHz. High quality XR-1 pre-amps are provided for each input channel, which can accept both mic and line level inputs, eliminating the need for direct boxes. Phantom power and an input PAD is available for each channel.



Mix Magazine Certified Hit



REAC terminals MIDI terminals (In/Out) REMOTE terminal (RS-232C) Mute All Outputs button

Input terminal
8 channels of analog input with D-Sub connection.

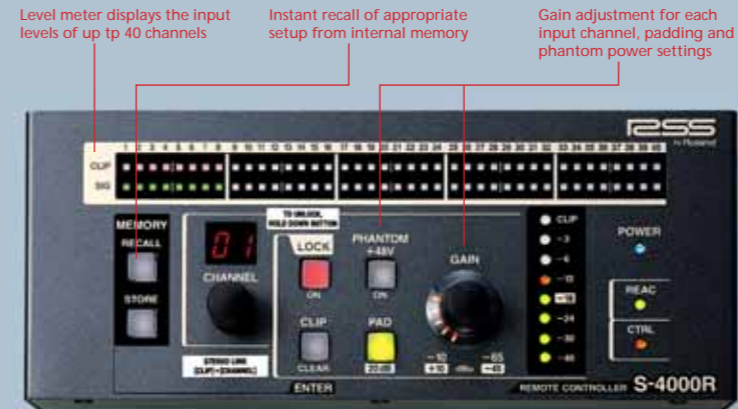
Output terminals
32 channels of analog output with D-Sub connection. 8 channels per one D-sub.

Cable strain relief rail
Protective rail used to relieve cable strain and to prevent accidental unplugging of the D-sub cables.

Power switch protection
Cover to prevent accidental turning off of the power switch.

S-4000H 8x32 FOH Unit

The S-4000H receives signals from the stage and is typically placed next to the FOH mixing console. Its 32 analog outputs are used to send signals from the stage to the mixing console and its 8 inputs for returning signal such as Main audio or monitor mixes to the stage. AD and DA conversions are 24bit/96kHz.



Level meter displays the input levels of up to 40 channels Instant recall of appropriate setup from internal memory Gain adjustment for each input channel, padding and phantom power settings

S-4000R Pre-Amp Remote Controller for the S-4000S or S-1608

The S-4000R can be connected to any RSS digital snake device via the serial interface. It provides easy remote control of all input gain adjustments, phantom power and PAD settings. Since the remote can save up to 10 setups to internal memory, you can instantly recall the right settings for performance/stage configurations and room defaults instantly.



Optional Configurations for S-4000S



S-4000S-0832
The 40ch I/O modular rack configured to be used at the Front of House position for connection to mixing console with ordinary XLR cables. This configuration would be used with an S-4000S-3208 at the stage position.



S-4000S-MR
Modular rack chassis with no pre-installed In/Out modules. Designed for custom configurations such as 24x16 and 40x0.

Input/Output Modules

Analog Input/Output Modules



Digital Input/Output Modules



Four-channel AES/EBU input and output modules with Sample Frequency Rate conversion
*Input and Output Modules are not user installable. Installation must be carried out by an authorized Roland Service Technician.

Optional Cables

S-OPT
REAC Optical Converter
For distances up to 2km or 1.2 miles



SC-A0805DF
25 pin D-Sub Female XLR (x8) cable x1
Length : 4.5 meters

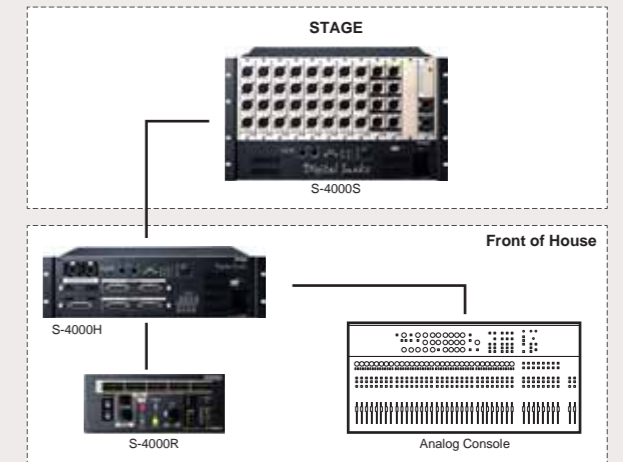
SC-A0805DM
25 pin D-Sub Male XLR (x8) cable x4
Length : 4.5 meters



SC-W100S
100 meter Cat5e cable
Crossover cable with Neutrick (R) Ethercon connectors

W100S-R
100 Meter REAC Cable and Reel
Reel-mounted crossover cable with Neutrick (R) Ethercon connectors

Typical Configuration



S-1608 Digital Snake System



Analog Output Terminals
On board 24bit/96kHz DA converters.

Analog Input Terminals
On board 24bit/96kHz AD converters and high quality mic pre-amps with phantom power supply.

Pre-Amp Remote Control with the S-4000R.
See page 5.



S-1608 Shown with included rackmount kit.



S-1608 Stage Unit

The S-1608 and S-0816 Digital Snake are compact versions of the popular S-4000S Digital Snake system. Easy to use and quick to install, the S-1608/0816 Digital Snake system is a small format audio snake solution that offers the highest quality audio signal available in a portable snake system.



Remote Terminal (RS-232C)
Connector for either the dedicated remote controller (S-4000R) or computer installed with S-4000-RCS remote control software.

Digital Output (Optical)
Output the audio signal input to INPUT 1/2 of the S-1608/ 0816 for monitoring sync.

Mute All Output Button
When this button is pressed and held, all outputs in the system will be muted.

Mode Selection Switch

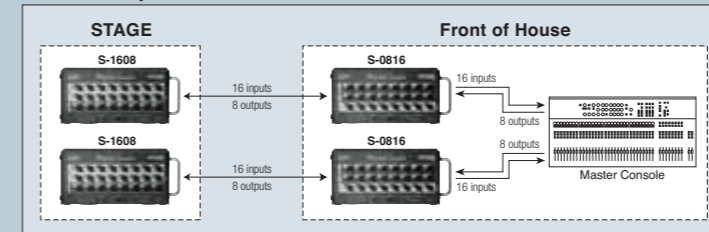
| | |
|--------|---|
| Master | Outputs source audio to the Slave and Split devices. It receives Input from the Slave device. |
| Slave | Receives Input from and sends output to the Master device. |
| Split | Receives Input from all of the Master devices sources. |

S-0816 FOH Unit

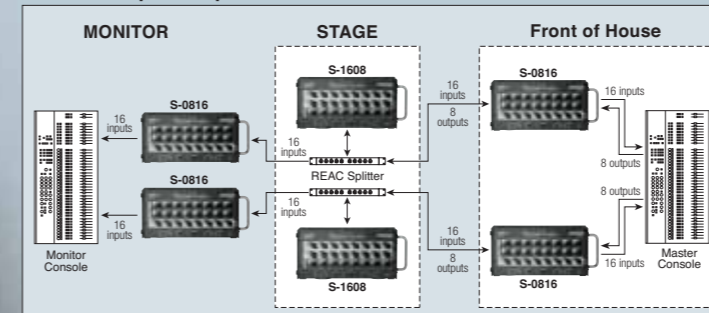
The S-1608/0816 Digital Snake system is ideal for bands, corporate A/V events, seminars, rental and staging houses, Houses of Worship and broadcasters that need the best possible sound quality from their audio without the high frequency losses and bulk of analog snakes.

Easy and Expandable

32 x 16 setup



32 x 16 setup with split

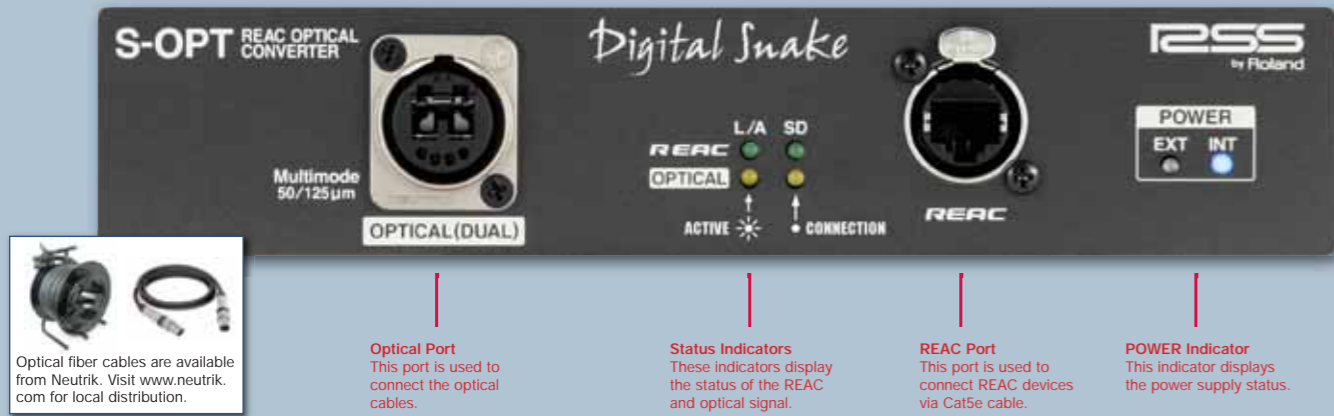


Ideal Channel Count Expansion for the S-4000 Digital Snake System

The S-1608/0816 Digital Snake System can be used to easily expand the channel count of the S-4000 32x8 Digital Snake System to 48x16 or more. Mix and match S-4000 and S-1608/0816 Digital Snake systems for customizable rental and installation systems.



S-OPT REAC Optical Converter



Optical fiber cables are available from Neutrik. Visit www.neutrik.com for local distribution.

Optical Port
This port is used to connect the optical cables.

Status Indicators
These indicators display the status of the REAC and optical signal.

REAC Port
This port is used to connect REAC devices via Cat5e cable.

POWER Indicator
This indicator displays the power supply status.



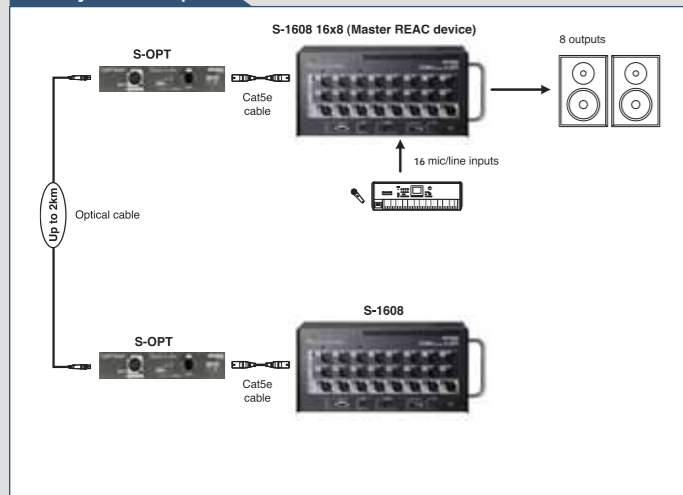
POWER LINK
When running two S-OPT units in redundant mode, connect together via this power link to ensure backup power. If one power supply fails, the power link will share power with the second unit.

The S-OPT is an optical converter that converts RSS Digital Snake System REAC signals to and from optical signals for long distance digital audio transmission. By using the REAC optical converter and optical cables (sold separately), the REAC transmission distance can be extended to a maximum of 2 kilometers (1.2 miles.)

Features

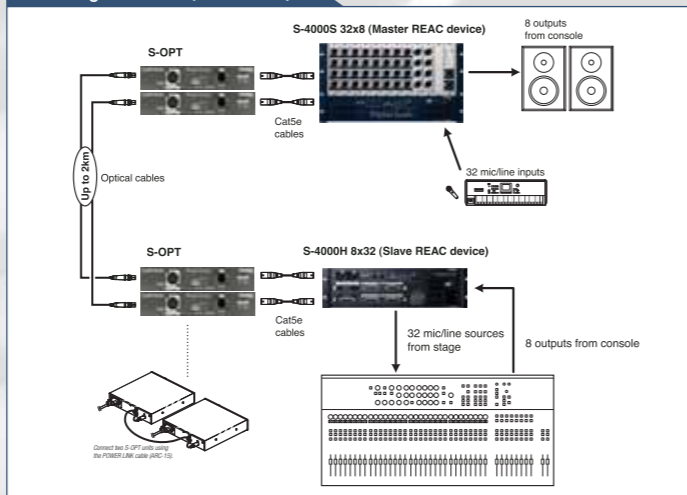
- The S-OPT optical connectors are Neutrik OpticalCon® connectors and support Mobile Fiber Cable from Neutrik. This optical interface provides for transmitting audio over long distances using optical cables while still taking advantage of the RSS Digital Snake System's mobility.
- OpticalCon® provides a Dual LC optical connector (standard LC-Duplex connector, IEC 61754-20) enabling the use of less expensive optical cables with the RSS Digital Snake System.
- Two S-OPT units can be connected using the proprietary POWER LINK cable (ARC-15, sold separately) so that redundant power can be supplied from one unit to the other. If power to a single unit is interrupted due to un-expected situation or is damaged, both units will still continue to operate.

Basic System Example



This system setup is for anyone needing REAC transmission over 100 meters and up to 2 km (1.2 miles). Connect an Ethercon cable from the S-1608 Digital Snake to the S-OPT stage unit. Connect an OpticalCon or standard optical cable from stage S-OPT to the FOH S-OPT. Simply connect an EtherCon cable from the FOH S-OPT to the S-0816. If you require more than 2 km in distance you can gain an additional 100 meters of Cat5e cable from the stage and FOH positions giving you a total of 2.2 km in distance.

32 x 8 Digital Snake (Redundant)



This system is a must for anyone requiring REAC transmissions over 100 meters with redundancy. The S-4000S-3208 Digital Snake has built in redundant REAC ports so simply connect two S-OPT's at the stage and FOH positions. Two S-OPT units can be connected using the proprietary POWER LINK cable (ARC-15, sold separately) so that redundant power can be supplied from one unit to the other. If power to a single unit is interrupted due to an unexpected situation or is damaged, both units will still continue to operate.

SONAR REAC Recording System



SONAR REAC Recording System

The SONAR REAC Recording System when used in conjunction with the RSS V-Mixing System or RSS Digital Snakes provides the most comprehensive live recording, mixing, mastering and delivery product available. Capture up to 40 channels of audio from your Digital Snake/V-Mixer System directly into SONAR all via a simple Cat5e connected to the network port on your PC.

The SONAR REAC Recording System includes:

- SONAR 7 Producer Edition
- REAC Technology Driver
- Cakewalk SPS-66 FireWire audio interface
- V-Mixer and Digital Snake Templates
- Users Guides
- SONAR 7 Producer Edition DVD-ROM
- SONAR 7 Producer Edition Manual
- SONAR REAC Driver CDROM
- Power Supply
- 6pin-6pin and 6pin-4pin Firewire Cables

SONAR 7 Producer Edition

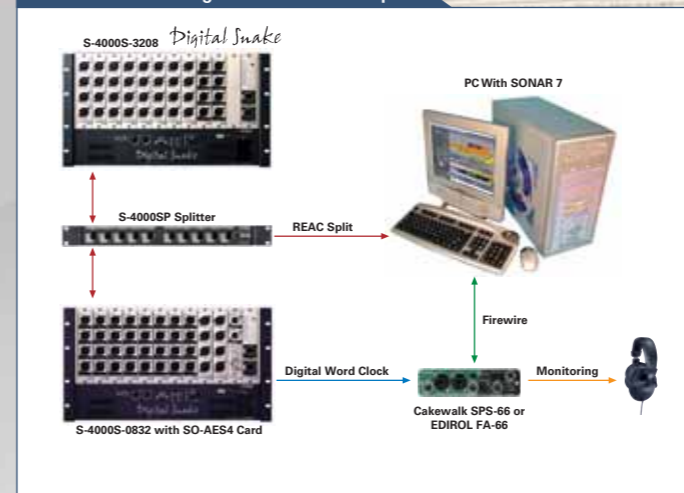
SONAR 7 Producer Edition places no limits on your track count, bus routing, effect or instrument inserts, and includes an ample array of audio effects, virtual instruments, and innovative technologies to power your productions.

- Capture up to 40 channels of audio over REAC (cat5e)
- Mix, EQ, Master, Burn and Deliver
- Record and edit unlimited tracks of audio and MIDI with effects on input
- The industry's best 64-bit double precision floating point mix engine
- Smart MIDI Tools—intuitively use one tool for multiple editing tasks: completely customizable
- Thousands of instruments—Access thousand of instruments sounds with Dimension LE, Rapture LE, DropZone, and more
- Integrated Step Sequencer view—the most innovative step sequencer feature set available in any DAW

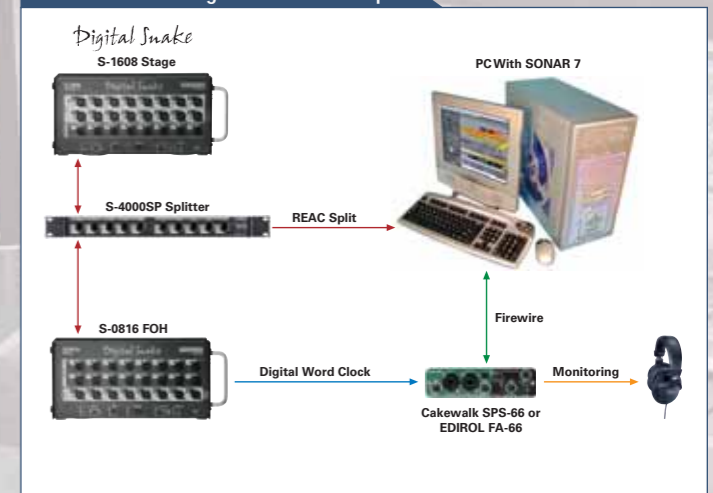


- Cakewalk SPS-66 FireWire Audio Interface**
- 6-In/6-Out FireWire Interface
 - 1-in/1-out MIDI Interface (16 channels)
 - FireWire bus powered for mobile use
 - 24-bit/192 kHz audio resolution
 - +48V phantom power
 - +4 dBu output for professional integration

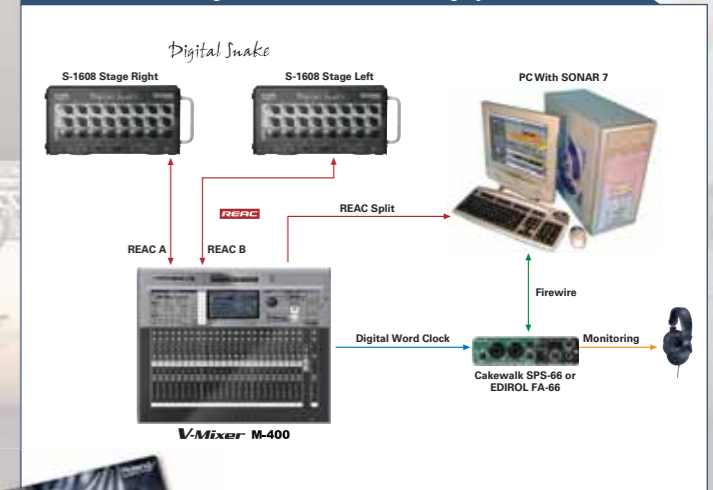
Sonar REAC Recording with S-4000s Example



Sonar REAC Recording with S-1608 Example



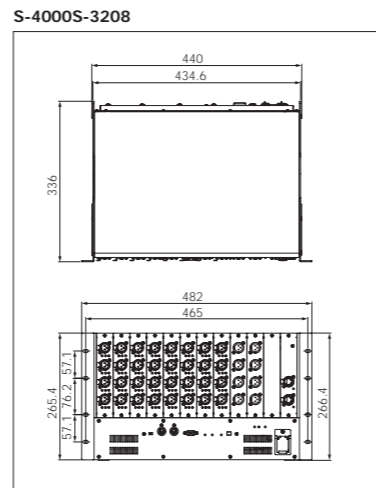
Sonar REAC Recording with the Standard V-Mixing System



Find out more about the V-Mixing System at www.V-MixingSystem.com

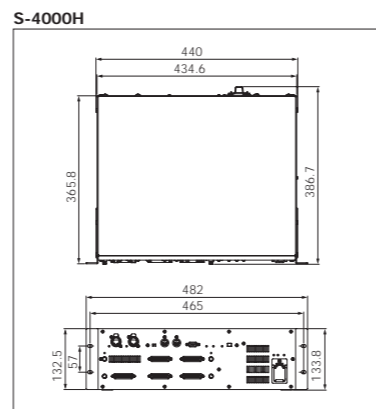
| S-4000S-3208 40CH I/O Modular Rack | | |
|---------------------------------------|---|---|
| Number of Channels | 32 in 8 out | |
| AD Conversion | Sample Rate: 96.0 kHz Signal Processing: 24 bit | Connectors |
| DA Conversion | Sample Rate: 96.0 kHz Signal Processing: 24 bit | Input: 32 (XLR type, balanced, phantom power, 4 ch input module x 8) Output: 8 (XLR type, 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) |
| Frequency Response | -2 dB / +0 dB (@ +4 dBu, 20 Hz to 20 kHz) | Indicator |
| Total Harmonic Distortion + Noise | 0.05 % or less (Pad: On, Input Gain: +4 dBu, 22 to 20000 Hz) | EXT Indicator (External Power Supply Unit) INT Indicator REAC Indicator CTRL Indicator ALARM Indicator MUTE ALL OUTPUTS Indicator |
| Dynamic Range | 110 dB | AC Power Supply |
| Cross Talk | -80 dB | AC 115 V, AC 117 V, AC 220 V, AC 230 V, AC 240 V (50/60 Hz) |
| Nominal Input Level | -65 to -10 dBu (PAD: Off) -45 to +10 dBu (PAD: On) (1 dB step, Max. +28 dBu) | DC Power Supply |
| PAD | 20 dB On/Off | +24 V (from optional external power supply unit : S-240P) |
| Input Impedance | 20 k ohms | Power Consumption |
| Nominal Output Level | +4 dBu, Max. +22 dBu | 130 W |
| Output Impedance | 150 ohms | Current Draw |
| Recommended Load Impedance | 10 k ohms or greater | (for an optional external power supply unit: Model S-240P) 6 A |
| Residual Noise Level (IHF-A, typ.) | -90 dBu | Phantom Power |
| Equivalent Input Noise Level (E.I.N.) | -128 dB | +48 V / 14 mA (each input on SI-AD4, remote controlled) |
| Network Latency | 375 microseconds when using REAC cable only (AD - REAC - DA Latency: about 1.2 ms) | Dimensions |
| | | 482.0 (W) x 336.0 (D) x 266.4 (H) mm 19 (W) x 13-1/4 (D) x 10-1/2 (H) inches |
| | | Weight |
| | | 17.0 kg, 37 lbs 8 oz |
| | | Operation Temperature |
| | | 0 to +40 degrees Celsius +32 to +104 degrees Fahrenheit |
| | | Accessories |
| | | Power Cord, REAC cable (10 m, Cat5e crossover cable) Adhesive-backed number label sheets, REAC Connector Covers Ferrite Cores, Owner's Manual |

* 0 dBu = 0.775 Vrms



| S-4000H 8x32 FOH Unit | | |
|------------------------------------|---|---|
| Number of Channels | 8 in 32 out | EXT Indicator (External Power Supply Unit) |
| AD Conversion | Sample Rate: 96.0 kHz Signal Processing: 24 bit | INT Indicator REAC Indicator CTRL Indicator ALARM Indicator MUTE ALL OUTPUTS Indicator |
| DA Conversion | Sample Rate: 96.0 kHz Signal Processing: 24 bit | AC Power Supply |
| Frequency Response | -2 dB / +0 dB (@ +4 dBu, 20 Hz to 20 kHz) | AC 115 V, AC 117 V, AC 220 V, AC 230 V, AC 240 V (50/60 Hz) |
| Total Harmonic Distortion + Noise | 0.05 % or less (Input Gain: +4 dBu, 22 to 20000 Hz) | DC Power Supply |
| Dynamic Range | 110 dB | +24 V (from optional external power supply unit : S-240P) |
| Cross Talk | -80 dB | Power Consumption |
| Nominal Input Level | +4 dBu, Max. +22 dBu | 70 W |
| Input Impedance | 30 k ohms | Current Draw |
| Nominal Output Level | +4 dBu, Max. +22 dBu | (for an optional external power supply unit: Model S-240P) 6 A |
| Output Impedance | 600 ohms | Dimensions |
| Recommended Load Impedance | 10 k ohms or greater | 482.0 (W) x 386.7 (D) x 133.0 (H) mm 19 (W) x 15-1/4 (D) x 5-1/4 (H) inches |
| Residual Noise Level (IHF-A, typ.) | -90 dBu | Weight |
| Network Latency | 375 microseconds when using REAC cable only (AD - REAC - DA Latency: about 1.2 ms) | 9.4 kg, 20 lbs 12 oz |
| | | Operation Temperature |
| | | 0 to +40 degrees Celsius +32 to +104 degrees Fahrenheit |
| | | Accessories |
| | | Power Cord, REAC Connector Covers, Ferrite Cores, Connector Guard, Screws for Connector Guard Installation Manual |

* 0 dBu = 0.775 Vrms

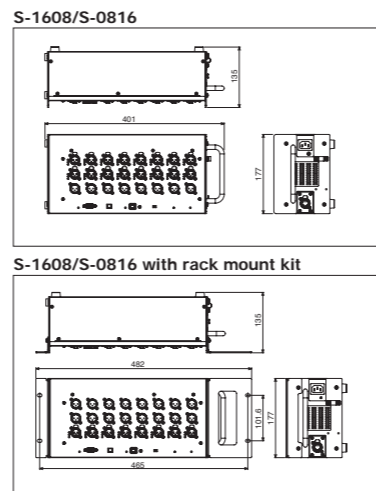


| S-1608/S-0816 | | |
|------------------------------------|--|--|
| Number of Channels | S-1608 : 16 in 8 out S-0816 : 8 in 16 out | |
| AD and DA Conversion | 24 bit / 96 kHz | |
| Frequency Response | -2 dB / +0 dB (@ +4 dBu, 20 Hz to 20 kHz) | |
| Total Harmonic Distortion + Noise | 0.05 % or less (Pad: On, Input Gain: +4 dBu, 22Hz to 20 kHz) | |
| Dynamic Range | 110 dB | |
| Cross Talk | -80 dB or less (Input Gain: +4 dBu, typ.) | |
| Nominal Input Level | -65 to -10 dBu (PAD: Off) -45 to +10 dBu (PAD: On) (1 dB step, Max. +28 dBu) | |
| PAD | 20 dB On/Off | |
| Input Impedance | 14 k ohms | |
| Nominal Output Level | +4 dBu, Max. +22 dBu | |
| Output Impedance | 600 ohms | |
| Recommended Load Impedance | 10 k ohms or greater | |
| Residual Noise Level (IHF-A, typ.) | -80 dBu or less | |
| Equivalent Input Noise Level | S-1608: -128 dB S-0816: -124dB | |
| Network Latency | 375 microseconds when using REAC cable only (*1) (AD>REAC>DA Latency: approx 1.2 ms) | |
| Connectors | S-1608 : Analog Input x 16 (XLR type, balanced, phantom power) Analog Output x 8 (XLR type, balanced) Digital Output connector x 1 (Optical type) REAC Connector x 1 (RJ-45 EtherCon type) Remote Connector x 1 (RS-232C, DB-9 type) S-0816 : Analog Input x 8 (XLR type, balanced, phantom power) Analog Output x 16 (XLR type, balanced) Digital Output connector x 1 (Optical type) REAC Connector x 1 (RJ-45 EtherCon type) Remote Connector x 1 (RS-232C, DB-9 type) | |
| Indicators | POWER Indicator x 1, REAC Indicator x 1, REMOTE Indicator x 1, MUTE ALL OUTPUTS Indicator x 1 | |
| Power Supply | AC 115 V, AC 117 V, AC 220 V, AC 230 V, AC 240 V (50/60 Hz) | |
| Power Consumption | 45W | |

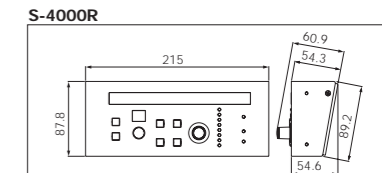


| | |
|-----------------------|--|
| Phantom Power | +48 V / 14 mA (each input, remote controlled) |
| Dimensions | 401 (W) x 135 (D) x 177 (H) mm or 15-13/16 (W) x 5-3/8 (D) x 7 (H) inches |
| Weight | 5.5 kg 12 lbs 3 oz |
| Operation Temperature | 0 to +40 degrees Celsius +32 to +104 degrees Fahrenheit |
| Accessories | Power Cord x 1, REAC Connector Cover x 1, Ferrite Cores x 1 Rubber Foot x 4, Rack Mount Kit x 1, Owner's Manual |

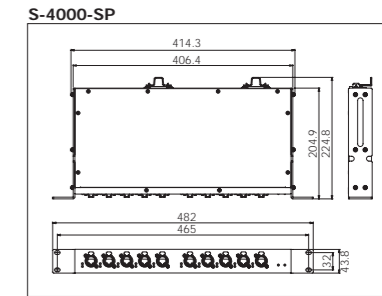
*1: When a REAC Splitter S-4000-SP or a switching hub is used in-line with REAC cables, the network latency will increase by the amount of processing delay introduced by the splitting device itself. The actual delay is dependant upon the specifications of the splitting device.
* 0 dBu = 0.775 Vrms



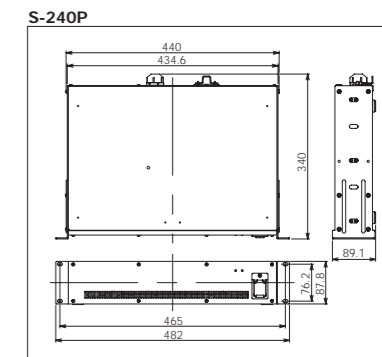
| S-4000R Remote Control Unit | |
|-----------------------------|---|
| Connector | Remote Connector: 1 (RS-232C, DB-9 type) |
| Indicators | CLIP Indicators, SIG Indicators, POWER Indicator, REAC Indicator, CTRL Indicator, Level Meter |
| Power Supply | Supplied from connected device. (S-4000S, S-4000H: through the remote cable) |
| Dimensions | 215.0 (W) x 87.0 (D) x 54.6 (H) mm, 8-1/2 (W) x 3-7/16 (D) x 2-3/16 (H) inches |
| Weight | 0.8 kg, 1 lb 13 oz |
| Operation Temperature | 0 to +40 degrees Celsius, +32 to +104 degrees Fahrenheit |
| Accessories | Remote Cable (3 m), Rack Mount Brackets, Installation Manual |



| S-4000-SP REAC Splitter | |
|-------------------------|--|
| Connectors | MAIN REAC (RJ-45 EtherCon type) x 5 BACKUP REAC (RJ-45 EtherCon type) x 5 |
| Indicators | MAIN LINK/ACT Indicator: Green x 5, Orange x 5 BACKUP LINK/ACT Indicator: Green x 5, Orange x 5 POWER A Indicator x 1, POWER B Indicator x 1 |
| Power Supply | AC 115 V, AC 117 V, AC 220 V, AC 230 V, AC 240 V (50/60 Hz) |
| Power Consumption | 13 W |
| Dimensions | 482.0 (W) x 224.8 (D) x 43.8 (H) mm or 19 (W) x 8-7/8 (D) x 1-3/4 (H) inches |
| Weight | 2.8 kg or 6 lbs 3 oz |
| Operation Temperature | 0 to +40 degrees Celsius or +32 to +104 degrees Fahrenheit |
| Accessories | Power Cord x 2, REAC Connector Cover x 10, Rubber Foot x 4, Owner's Manual |



| S-240P External Power Supply Unit | |
|-----------------------------------|---|
| Connectors | AC Input and DC Output |
| Indicators | POWER and ALARM (front panel) |
| Power Supply | AC 115 V, AC 117 V, AC 220 V, AC 230 V, AC 240 V (50/60 Hz) |
| Power Output | +24V / 6A DC |
| Power Consumption | 180 W |
| Dimensions | 482 (W) x 340 (D) x 89 (H) mm or 19 (W) x 13-7/16 (D) x 3-9/16 (H) inches |
| Weight | 5.4 kg or 11 lbs 15 oz |
| Operation Temperature | 0 to +40 degrees Celsius or +32 to +104 degrees Fahrenheit |
| Accessories | Power Cord, Owner's Manual |



| S-OPT REAC Optical Converter Unit | |
|-----------------------------------|--|
| Connectors | OPTICAL Port(Dual LC, OpticalCon type) x 1, REAC Port (RJ-45, EtherCon type) x 1, POWER LINK Port (mini-DIN 8pin type) x 1 |
| Indicators | REAC ACTIVE Indicator: Green x 1, REAC CONNECTION Indicator: Green x 1, OPTICAL ACTIVE Indicator: Orange x 1, OPTICAL CONNECTION Indicator: Orange x 1, POWER EXT Indicator: Blue x 1, POWER INT Indicator: Blue x 1 |
| Power Supply | AC 115 V, AC 117 V, AC 220 V, AC 230 V, AC 240 V (50/60 Hz) |
| Power Consumption | 10 W |
| Dimensions | 218.0 (W) x 239.9 (D) x 46.3 (H) mm, 8-5/8 (W) x 9-1/2 (D) x 1-7/8 (H) inches |
| Weight | 1.3kg, 2 lbs 14 oz |
| Operation Temperature | 0 to +40 degrees centigrade, +32 to +104 degrees Fahrenheit |
| Accessories | Power Cord x 1, REAC Cable (5m) x 1, REAC Connector Cover x 1, Rubber Foot x 4, Screw Set x 1, Owner's Manual |
| Options | REAC Cable(100m): SC-W100S, POWER LINK Cable: ARC-15 (AR-LINK CABLE), Rack Mount Adaptor: RAD-50 |

Optional Items

S-4000R

Remote Controller

S-4000R can be used with both the S-4000S and S-1608 snake systems. It provides easy remote control of gain adjustments and controls Phantom power and PAD Settings. The S-4000R can save up to 10 setups to internal memory for instant recall of the all settings.



S-OPT

REAC Optical Converter Unit

The S-OPT unit converts REAC signals to and from optical signals for long distance digital audio transmission (up to 2km or 1.2 miles).



S-240P

External Power Supply Unit

Supplies redundant DC power to an S-4000S or S-4000H. Outputs DC24V 6A power.



W100S-R

100 meter REAC Cable and Reel

Reel-mounted crossover cable with Neutrik(R) Ethercon connectors



S-4000-SP

REAC Splitter

The S-4000SP is a dual 5-port dedicated gigabit splitter for the RSS Digital Snake System that provides the highest level of reliability with backup REAC ports, two power supplies and Neutrick(R) Ethercon Connectors.



SC-W100S

100 meter Cat5e cable

Crossover cable with Neutrick (R) Ethercon connectors



Analog Breakout cables for connecting an S-4000H with a mixing console



SC-A0805DF
25 pin D-Sub
Female XLR (x8) cable x1
Length : 4.5 meters



SC-A0805DM
25 pin D-Sub
Male XLR (x8) cable x4
Length : 4.5 meters

S-4000 RCS

Remote Control Software

As an alternative to the S-4000R a computer can be connected to the REMOTE terminals (RS-232C) of any snake system and controlled by the S-4000 RCS Remote Control Software. This software is available as a free download for Mac or PC.





"The fact that there is no noise when I turn the snake on is a vast improvement over previous years. No hums, buzzes or clicks, which means one less place to look when I am trouble shooting."

Jon Laterza, Freelance Audio Engineer,
Lincoln Center Out of Doors Festival, NY



"The sonic quality and clarity of the digital snake is awesome, I feel and hear the dynamics of the sound clearer than any analog snake. Plus it's extremely easy to move for touring."

Bernie Sandor
Springfever Productions, Toronto, Canada



"Even though sound quality was an important factor in selecting the RSS Snake, the flexibility of the system was the key selling point. We're thrilled to have invested at the beginning to have a system to grow with us for years."

Rick Charleton
Audio Engineer, Grace Lutheran Church



"The 64x16 system is perfect; it's very flexible, so we can configure the I/O's as needed for ballroom events, our live concert locations and any special audio need."

Gino Mulcahy
Mohegan Sun Casino



"What can I say... the Digital Snake just worked flawlessly and sounded great!"

Jefferey Bruton
GMB Technical (KPLU), Seattle, WA



Never in my decades of audio experience had I heard such a vast improvement in sound quality.

Art Yeap, Designer/Integrator
Co-Owner of the Novo Group Inc.



"We tested the RSS snake against a 300 foot copper snake. The Cat5 audio was much smoother overall. It has much greater clarity at the top end. We did a blind listening test and chose the RSS Digital Snake every time!"

Jon Garber
FOH Engineer, Rascal Flatts

In the Americas: www.rssamerica.com/snake/
Worldwide: www.rolandsystemsgroup.net