

# Digital Snake

## 4-CHANNEL DIGITAL INPUT MODULE **SI-AES4**

### Owner's Manual

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#### Memo and Hint Icons

Throughout the SI-AES4 Owner's manual, you'll occasionally come to areas that provide extra information related to the feature or operation described in the main text. The symbols in the right-hand margin define the nature of this extra information.



A note is something that adds information about the topic at hand.



A tip offers suggestions for using the feature being discussed.

**Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" (SI-AES4 Owner's Manual p. 2) and "IMPORTANT NOTES" (SI-AES4 Owner's Manual p. 2). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, the SI-AES4 Owner's Manual and the S-4000S Owner's Manual should be read in their entirety. This manual should be saved and kept on hand as a convenient reference.**

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# USING THE UNIT SAFELY

## INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

### About ⚠ WARNING and ⚠ CAUTION Notices




<b>⚠ WARNING</b>	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
<b>⚠ CAUTION</b>	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

### About the Symbols


	The ⚠ symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The ⚡ symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The ● symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

## ALWAYS OBSERVE THE FOLLOWING

### ⚠ WARNING

- Do not open or perform any internal modifications on the unit. 
- The S-4000S should be used only with a rack that is recommended by Roland. 
- When using the S-4000S unit with a rack recommended by Roland, the rack must be carefully placed so it is level and sure to remain stable. If not using a rack, you still need to make sure that any location you choose for placing the unit provides a level surface that will properly support the unit, and keep it from wobbling. 

### ⚠ CAUTION

- Keep the included ferrite cores in a safe place out of children's reach, so there is no chance of them being swallowed accidentally. 

# IMPORTANT NOTES

In addition to the items listed under "USING THE UNIT SAFELY" on this page, please read and observe the following:

## Additional Precautions

- When you need to transport the unit, pack it in shock-absorbent material. Transporting the unit without doing so can cause it to become scratched or damaged, and could lead to malfunction.

## Copyright

- Do not use this unit for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this unit.

# Before You Use the Unit

## For the Purchaser — Please Read

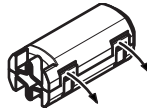
The SI-AES4 is not user installable. Installation must be carried out by an authorized Roland Service Technician.

## Checking the Included Items

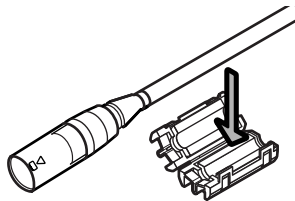
- SI-AES4  
This is a 4-channel digital input module for the S-4000S. It provides for the input of digital audio that complies with the AES/EBU standard.
- Ferrite cores(2)

## How to Use the Ferrite Core

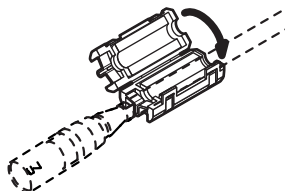
1. Spread open the tabs and open the ferrite core.



2. Attach the ferrite core near the XLR connector on the AES/EBU cable.



3. Close the ferrite core by squeezing together the two halves until you hear them click into place.

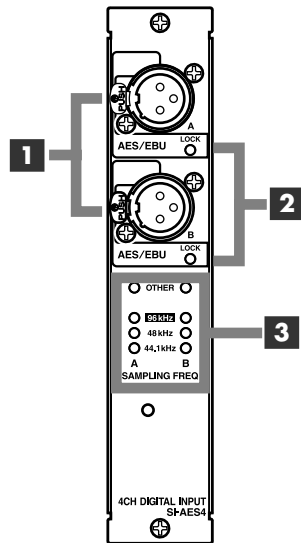


4. Connect the plug that has the ferrite core attached near it to the AES/EBU connector on the SI-AES4.

## Main Features

- 4-channel input of AES/EBU-compliant digital audio
- Built-in sample rate converter providing high sound quality for all inputs
- Support for a variety of sampling frequencies, up to a maximum of 96 kHz

# Names of Things and What They Do



1

## AES/EBU input jacks A and B

These jacks are for input of AES/EBU-compliant digital audio. Use cables that meet AES/EBU standards.

2

## LOCK indicators A and B

These indicate whether the A and B inputs are correctly synchronized.

LOCK	Description
Lighted	Correctly synchronized
Flashing	Unable to synchronize
Unlit	No input

3

## Sampling frequency indicators A and B

These display the sampling frequencies of the A and B inputs.

### MEMO

The SI-AES4 does not support double-wire operation.

### HINT

If a LOCK indicator flashes and correct synchronization is impossible, check the signal format, sampling frequency, and the like for the source device.

### HINT

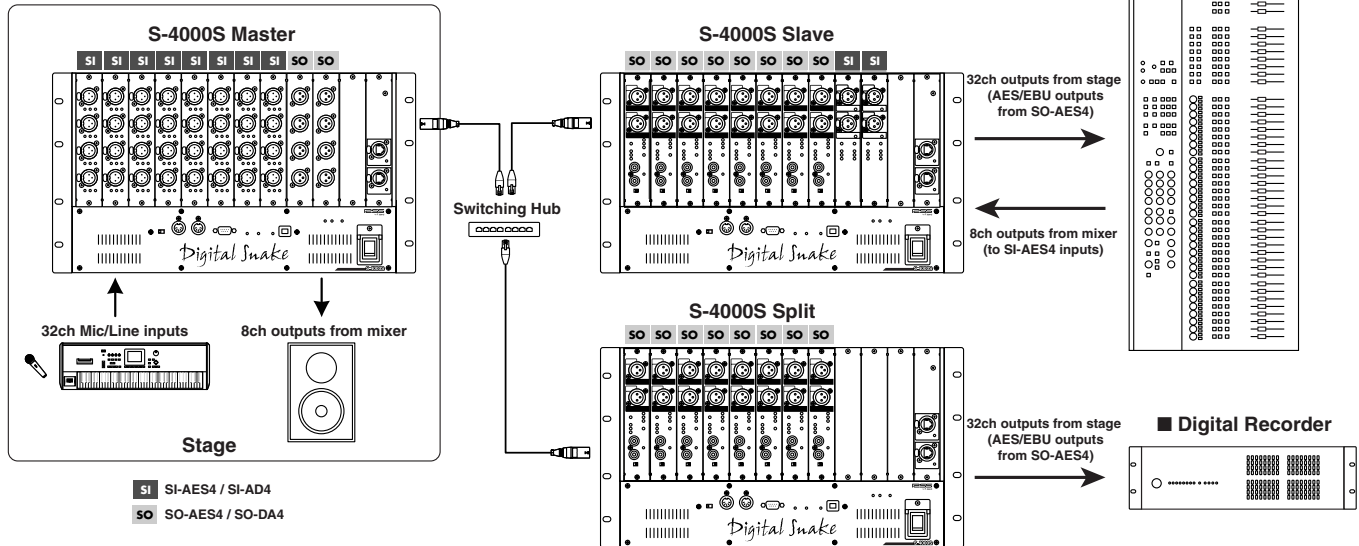
If a LOCK indicator is unlit, check for a broken cable and make sure the output device is working correctly.

### HINT

The OTHER indicator lights up when a digital signal at a sampling frequency other than 44.1, 48, or 96 kHz is input. When the sampling frequency is 88.2 kHz, OTHER and 44.1 kHz both light up.

# Applications

This shows a connection example for sending microphone and line inputs from the stage (32 channels) to a digital mixer and digital recording device via AES/EBU, and providing line outputs on the stage for AES/EBU outputs from the digital mixer.



# Specifications

## SI-AES4 4-CHANNEL DIGITAL INPUT MODULE

### Number of channels

4 (All with sample rate conversion)

### Format

AES/EBU (Professional Use) IEC60958-4 (Professional Use) \*1

### Data length

24 bits

### Connectors

XLR3-31 type

### Indicators

LOCK

Sampling Frequency (96 kHz, 48 kHz, 44.1 kHz, OTHER) \*2

### Dimensions

34.5 (W) x 266.0 (D) x 177.0 (H) mm

1-3/8 (W) x 10-1/2 (D) x 7 (H) inches

### Weight

600 g

1 lb 6 oz

### Operation Temperature

0 to +40 degrees centigrade

+32 to +104 degrees Fahrenheit

### Accessories

Ferrite Cores

Owner's Manual

\* 1: The double wire method doesn't operate.

\* 2: Both "44.1 kHz" and "OTHER" LEDs will light when input sampling frequency is 88.2 kHz.

## For EU Countries



**UK** This symbol indicates that in EU countries, this product must be collected separately from household waste, as defined in each region. Products bearing this symbol must not be discarded together with household waste.

**DE** Dieses Symbol bedeutet, dass dieses Produkt in EU-Ländern getrennt vom Hausmüll gesammelt werden muss gemäß den regionalen Bestimmungen. Mit diesem Symbol gekennzeichnete Produkte dürfen nicht zusammen mit dem Hausmüll entsorgt werden.

**FR** Ce symbole indique que dans les pays de l'Union européenne, ce produit doit être collecté séparément des ordures ménagères selon les directives en vigueur dans chacun de ces pays. Les produits portant ce symbole ne doivent pas être mis au rebut avec les ordures ménagères.

**IT** Questo simbolo indica che nei paesi della Comunità europea questo prodotto deve essere smaltito separatamente dai normali rifiuti domestici, secondo la legislazione in vigore in ciascun paese. I prodotti che riportano questo simbolo non devono essere smaltiti insieme ai rifiuti domestici. Ai sensi dell'art. 13 del D.Lgs. 25 luglio 2005 n. 151.

**ES** Este símbolo indica que en los países de la Unión Europea este producto debe recogerse aparte de los residuos domésticos, tal como esté regulado en cada zona. Los productos con este símbolo no se deben depositar con los residuos domésticos.

**PT** Este símbolo indica que nos países da UE, a recolha deste produto deverá ser feita separadamente do lixo doméstico, de acordo com os regulamentos de cada região. Os produtos que apresentem este símbolo não deverão ser eliminados juntamente com o lixo doméstico.

**NL** Dit symbool geeft aan dat in landen van de EU dit product gescheiden van huishoudelijk afval moet worden aangeboden, zoals bepaald per gemeente of regio. Producten die van dit symbool zijn voorzien, mogen niet samen met huishoudelijk afval worden verwijderd.

**DK** Dette symbol angiver, at i EU-lande skal dette produkt opsamles adskilt fra husholdningsaffald, som defineret i hver enkelt region. Produkter med dette symbol må ikke smides ud sammen med husholdningsaffald.

**NO** Dette symbolet indikerer at produktet må behandles som spesialavfall i EU-land, iht. til retningslinjer for den enkelte regionen, og ikke kastes sammen med vanlig husholdningsavfall. Produkter som er merket med dette symbolet, må ikke kastes sammen med vanlig husholdningsavfall.

**SE** Symbolen anger att i EU-länder måste den här produkten kasseras separat från hushållsavfall, i enlighet med varje regions bestämmelser. Produkter med den här symbolen får inte kasseras tillsammans med hushållsavfall.

**FI** Tämä merkintä ilmaisee, että tuote on EU-maissa kerättävä erillään kotitalousjätteistä kunkin alueen voimassa olevien määräysten mukaisesti. Tällä merkinnällä varustettuja tuotteita ei saa hävittää kotitalousjätteiden mukana.

**HU** Ez a szimbólum azt jelenti, hogy az Európai Unióban ezt a terméket a háztartási hulladéktól elkülönítve, az adott régióban érvényes szabályozás szerint kell gyűjteni. Az ezzel a szimbólummal ellátott termékeket nem szabad a háztartási hulladék közé dobni.

**PL** Symbol oznacza, że zgodnie z regulacjami w odpowiednim regionie, w krajach UE produktu nie należy wyrzucać z odpadami domowymi. Produktów opatrzonych tym symbolem nie można utylizować razem z odpadami domowymi.

**CZ** Tento symbol udává, že v zemích EU musí být tento výrobek sbírán odděleně od domácího odpadu, jak je určeno pro každý region. Výrobky nesoucí tento symbol se nesmí vyhazovat spolu s domácím odpadem.

**SK** Tento symbol vyjadruje, že v krajinách EÚ sa musí zber tohto produktu vykonávať oddelene od domového odpadu, podľa nariadení platných v konkrétnej krajine. Produkty s týmto symbolom sa nesmú vyhazovať spolu s domovým odpadom.

**EE** See sümbol näitab, et EL-i maades tuleb see toode olemprügist eraldi koguda, nii nagu on igas piirkonnas määratletud. Selle sümboliga märgitud tooteid ei tohi ära visata koos olmeprügiga.

**LT** Šis simbolis rodo, kad ES šalyse šis produktas turi būti surenkamas atskirai nuo buitinių atliekų, kaip nustatyta kiekvienoje regione. Šiuo simboliu paženklinoti produktai neturi būti išmetami kartu su buitinėmis atliekomis.

**LV** Šis simbols norāda, ka ES valstīs šo produktu jāievāc atsevišķi no mājsaimecības atkritumiem, kā noteikts katrā reģionā. Produktus ar šo simbolu nedrīkst izmest kopā ar mājsaimecības atkritumiem.

**SI** Ta simbol označuje, da je treba proizvod v državah EU zbirati ločeno od gospodinskih odpadkov, tako kot je določeno v vsaki regiji. Proizvoda s tem znakom ni dovoljeno odlagati skupaj z gospodinskimi odpadki.

**GR** Το σύμβολο αυτό υποδηλώνει ότι στις χώρες της Ε.Ε. το συγκεκριμένο προϊόν πρέπει να συλλέγεται χωριστά από τα υπόλοιπα οικιακά απορρίμματα, σύμφωνα με όσα προβλέπονται σε κάθε περιοχή. Τα προϊόντα που φέρουν το συγκεκριμένο σύμβολο δεν πρέπει να απορρίπτονται μαζί με τα οικιακά απορρίμματα.

# Information

When you need repair service, call your nearest Roland Service Center or authorized Roland distributor in your country as shown below.

## ASIA

### INDONESIA

PT. Citra IntiRama  
JL. Cideng Timur No. 15J-15O  
Jakarta Pusat  
INDONESIA  
TEL: (021) 632-4170

### TAIWAN

ROLAND TAIWAN  
ENTERPRISE CO., LTD.  
Room 5, 9fl. No. 112 Chung Shan  
N.Road Sec.2, Taipei, TAIWAN,  
R.O.C.  
TEL: (02) 2561 3339

### SINGAPORE/ MALAYSIA

Roland Asia Pacific Sdn.  
Bhd.  
45-1, Block C2, Jalan PJU 1/39,  
Dataran Prima, 47301 Petaling  
Jaya, Selangor, MALAYSIA  
TEL: 3-7805-3263

## CENTRAL/LATIN AMERICA

### BRAZIL

Roland Brasil Ltda.  
Rua San Jose, 780 Sala B  
Parque Industrial San Jose  
Cotia - Sao Paulo - SP, BRAZIL  
TEL: (011) 4615 5666

### Other CENTRAL/ LATIN AMERICA

Roland Systems Group U.S.  
425 Sequoia Drive Suite 114,  
Bellingham, Washington,  
98226 USA  
TEL: 360-594-4282

## EUROPE

### AUSTRIA/BELGIUM/ FRANCE/GERMANY/ HOLLAND/ LUXEMBOURG/ PORTUGAL/SPAIN/ SWITZERLAND

Roland Iberia, S.L.  
Paseo García Faria, 33-35  
08005 Barcelona SPAIN  
TEL: 93 493 91 00

### CROATIA

ART-CENTAR  
Degenova 3.  
HR - 10000 Zagreb  
TEL: (1) 466 8493

### CZECH REP. CZECH REPUBLIC DISTRIBUTOR s.r.o

Voctárova 247/16  
CZ - 180 00 PRAHA 8,  
CZECH REP.  
TEL: (2) 830 20270

### DENMARK

Roland Scandinavia A/S  
Nordhavnsvej 7, Postbox 880,  
DK-2100 Copenhagen  
DENMARK  
TEL: 3916 6200

### FINLAND

Roland Scandinavia As,  
Filial Finland  
Elannontie 5  
FIN-01510 Vantaa, FINLAND  
TEL: (0)9 68 24 020

### HUNGARY

Roland East Europe Ltd.  
Warehouse Area 'DEPO' Pf.83  
H-2046 Torokbalint, HUNGARY  
TEL: (23) 511011

### NORWAY

Roland Scandinavia Avd.  
Kontor Norge  
Lilleakerveien 2 Postboks 95  
Lilleaker N-0216 Oslo  
NORWAY  
TEL: 2273 0074

### POLAND

ROLAND POLSKA SP. Z O.O.  
UL. Gibraltarska 4.  
PL-03664 Warszawa POLAND  
TEL: (022) 679 44 19

### ROMANIA

FBS LINES  
Piata Libertatii 1,  
535500 Gheorgheni, ROMANIA  
TEL: (266) 364 609

### RUSSIA

MuTek  
Dorozhnaya ul.3,korp.6  
117 545 Moscow, RUSSIA  
TEL: (095) 981-4967

### SLOVAKIA

DAN Acoustic s.r.o.  
Povazská 18.  
SK - 940 01 Nové Zámky  
TEL: (035) 6424 330

### SWEDEN

Roland Scandinavia A/S  
SWEDISH SALES OFFICE  
Danvik Center 28, 2 tr.  
S-131 30 Nacka SWEDEN  
TEL: (0)8 702 00 20

### UKRAINE

EURHYTHMICS Ltd.  
P.O.Box: 37-a.  
Nedecey Str. 30  
UA - 89600 Mukachevo,  
UKRAINE  
TEL: (03131) 414-40

### UNITED KINGDOM/ IRELAND

Roland (U.K.) Ltd.  
Atlantic Close, Swansea  
Enterprise Park, Swansea  
SA7 9FJ,  
UNITED KINGDOM  
TEL: (01792) 702701

## OCEANIA

Roland Corporation  
Australia Pty.,Ltd.  
38 Campbell Avenue  
Dee Why West, NSW 2099  
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For New Zealand  
TEL: (09) 3098 715

## NORTH AMERICA

### CANADA

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(Head Office)  
5480 Parkwood Way, Richmond  
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425 Sequoia Drive Suite 114,  
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98226 USA  
TEL: 360-594-4282

As of May 1, 2007 (RSS)



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