



Setup Guide

Thank you, and congratulations on your choice of the XI-SDI expansion interface. Installing the XI-SDI in professional audio/video equipment from Roland lets you expand two series of SDI input and output. For information on devices on which the XI-SDI expansion interface can be installed, check the Roland website. <http://proav.roland.com>



Installing the XI-SDI

Install the XI-SDI on a compatible device.

Important Notes on Handling

To avoid the risk of damage to internal components that can be caused by static electricity, please carefully observe the following whenever you handle the XI-SDI.

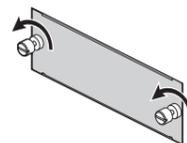
- Before you touch the XI-SDI, always first grasp a metal object (such as a water pipe), so you are sure that any static electricity you might have been carrying has been discharged.
- When handling the XI-SDI, grasp it only by the panel or the XI-SDI's edges. Avoid touching any of the electronic components or connectors.
- Before you connect any cables, make sure they do not carry a static electricity charge. Such charges can be transmitted, for example, if the other end of the cable has been in contact with a carpet (or other object) where there is a static electricity buildup.
- Save the bag in which the XI-SDI was originally shipped, and put the XI-SDI back into it whenever you need to store or transport it.

Installing

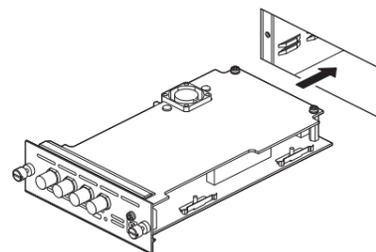
NOTE

- Before installing the XI-SDI, you must first always turn off the unit where installing and unplug its power cord from the power outlet.
- When restarting the device with the XI-SDI installed, wait several seconds before turning on the power.

1. Loosen the EXPANSION SLOT mounting screws (2) on the device where you're installing, and detach the panel cover.

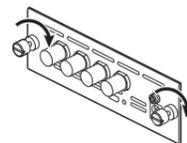


2. Insert the XI-SDI into the EXPANSION SLOT.

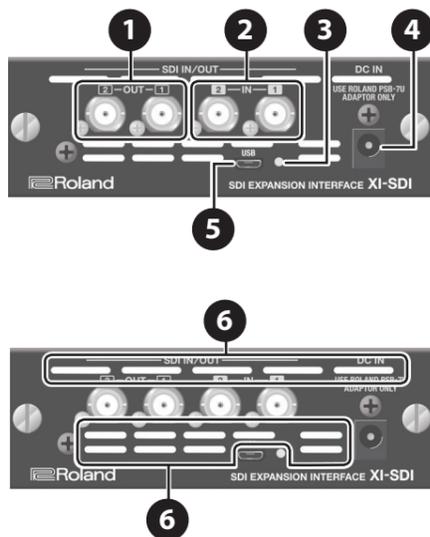


- * Do not touch any of the XI-SDI pathways or connection terminals.
- * Never use excessive force when installing the XI-SDI. If it doesn't fit properly on the first attempt, remove the XI-SDI and try again.

3. Secure the XI-SDI in place using the mounting screws (2).



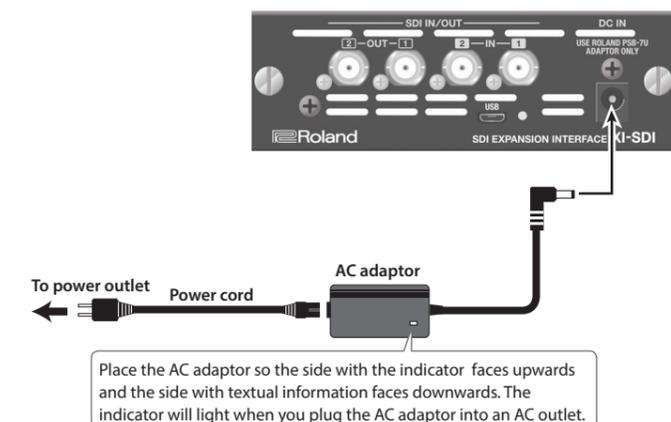
Panel Descriptions



No.	Name	Explanation						
1	SDI OUT 1, 2 connectors	These are BNC connectors for outputting SDI signals. Here you connect video devices equipped with SDI input connectors. 3G-SDI, HD-SDI, and SD-SDI signals are supported.						
2	SDI IN 1, 2 connectors	These are BNC connectors for inputting SDI signals. Here you connect source devices equipped with SDI output connectors. 3G-SDI, HD-SDI, and SD-SDI signals are supported.						
3	POWER indicator	This lights up when the XI-SDI is receiving power. <table border="1"> <thead> <tr> <th>Indicator</th> <th>Power source</th> </tr> </thead> <tbody> <tr> <td>Lighted in red</td> <td>AC adaptor</td> </tr> <tr> <td>Lighted in green</td> <td>Device on which the XI-SDI is installed</td> </tr> </tbody> </table>	Indicator	Power source	Lighted in red	AC adaptor	Lighted in green	Device on which the XI-SDI is installed
Indicator	Power source							
Lighted in red	AC adaptor							
Lighted in green	Device on which the XI-SDI is installed							
4	DC IN connector	Here you connect an AC adaptor (PSB-7U). <p>NOTE</p> Depending on the device on which the XI-SDI is installed, connecting an AC adaptor might be necessary. To determine whether the equipment you're using requires an AC adaptor, check the following Roland website. http://proav.roland.com						
5	USB port	This is a dedicated connector for updating the XI-SDI. <p>* Do not use a micro USB cable that is designed only for charging a device. Charge-only cables cannot transmit data.</p>						
6	Ventilation holes	These inhibit temperature rises inside the XI-SDI by taking in outside air and venting inner air. <p>NOTE</p> Never block the ventilation holes. Using the device with the ventilation holes obstructed can result in internal heat buildup and danger of malfunction of the XI-SDI.						

Connecting the AC Adaptor

Depending on the device on which the XI-SDI is installed, connecting an AC adaptor might be necessary. After installing the XI-SDI on such a device, connect an AC adaptor as shown in the figure below.



- * Depending on the device on which the XI-SDI is installed, connecting an AC adaptor might be necessary. To determine whether the equipment you're using requires an AC adaptor, check the following Roland website. <http://proav.roland.com>
- * For information on how to purchase the PSB-7U AC adaptor, contact the nearest Roland Service Center, or an authorized Roland distributor.

Main Specifications

Roland XI-SDI: SDI EXPANSION INTERFACE

Video	
Processing	4:2:2 (Y/Pb/Pr), 10 bits
Input Connectors	3G/HD/SD-SDI: BNC type x 2 * Conforms to SMPTE 424M(SMPTE 425M-AB), 292M, 259M-C
Output Connectors	3G/HD/SD-SDI: BNC type x 2 * Conforms to SMPTE 424M(SMPTE 425M-AB), 292M, 259M-C
Formats	480/59.94i, 576/50i, 720/59.94p, 720/50p, 1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p * Conforms to SMPTE 274M, SMPTE 296M, ITU-R BT.601-5
Effects	Scaler x 2 * Format Conversion, Manual Scaling
Audio	
Processing	Sampling Rate: 24 bits/48 kHz
Input Connector	3G/HD/SD-SDI: BNC type x 1
Output Connector	3G/HD/SD-SDI: BNC type x 1
Formats	Linear PCM, 24 bits, 48 kHz, 16ch * Conforms to SMPTE 299M, SMPTE272M-C
Others	
Other connectors	USB port: USB Micro-B type x 1 * for System update. AC adaptor jack x 1
Power Consumption	30 W
Operation Temperature	+5 to +40 degrees Celsius +41 to +104 degrees Fahrenheit
Dimensions	120 (W) x 185 (D) x 40 (H) mm 4-3/4 (W) x 7-5/16 (D) x 1-5/8 (H) inches * Protruding parts not included.
Weight	280 g 10 oz
Accessory	Setup guide

* This document explains the specifications of the product at the time that the document was issued. For the latest information, refer to the Roland website.

USING THE UNIT SAFELY

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

About ⚠ WARNING and ⚠ CAUTION Notices

 WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
 CAUTION	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

To completely turn off power to the unit, pull out the plug from the outlet

When using this unit with an AC adaptor, even with the power switch for the installed device turned off, this unit is not completely separated from its main source of power. When the power needs to be completely turned off, turn off the power switch for the installed device, then pull out the plug from the power outlet. To make this possible, the outlet into which you choose to connect the power cord's plug should be one that is within easy reach and readily accessible from the installed device.



Do not disassemble or modify by yourself

Do not carry out anything unless you are instructed to do so in the Setup Guide. Otherwise, you risk causing malfunction.



Do not repair or replace parts by yourself

Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information."



Do not use or store in the following types of locations

- Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
- Damp (e.g., baths, washrooms, on wet floors); or are
- Exposed to steam or smoke; or are
- Subject to salt exposure; or are
- Exposed to rain; or are
- Dusty or sandy; or are
- Subject to high levels of vibration and shakiness; or are
- Placed in a poorly ventilated location.



Use only the specified AC adaptor and the correct voltage

Use only the specified AC adaptor, and make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body.



Use only the supplied power cord

Use only the attached power cord. Also, the supplied power cord must not be used with any other device.



Do not bend the power cord or place heavy objects on it

Otherwise, fire or electric shock may result.



WARNING

Do not allow foreign objects or liquids to enter unit; never place containers with liquid on unit

Do not place containers containing liquid (e.g., flower vases) on this product. Never allow liquids (e.g., water or juice) to enter this product or the device on which it is installed. Doing so may cause short circuits, faulty operation, or other malfunctions.



Turn off the unit if an abnormality or malfunction occurs

Immediately turn the unit off, remove the AC adaptor from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" when:



- The AC adaptor or the power cord has been damaged; or
- If smoke or unusual odor occurs; or
- Objects have fallen into, or liquid has been spilled onto the unit; or
- The unit has been exposed to rain (or otherwise has become wet); or
- The unit does not appear to operate normally or exhibits a marked change in performance.

Be cautious to protect children from injury

Always make sure that an adult is on hand to provide supervision and guidance when using the unit in places where children are present, or when a child will be using the unit.



Do not drop or subject to strong impact

Otherwise, you risk causing damage or malfunction.



Do not share an outlet with an unreasonable number of other devices

Otherwise, you risk overheating or fire.



Do not use overseas

Before using the unit in overseas, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information."



Turn the unit off before installing expansion interfaces

Before installing the expansion interface (XI-SDI), you must first always turn off the unit where installing and unplug its power cord.



CAUTION

When disconnecting the power cord, grasp it by the plug

To prevent conductor damage, always grasp the power cord by its plug when disconnecting it.



Periodically clean the power plug

An accumulation of dust or foreign objects between the power plug and the power outlet can lead to fire or electric shock.



At regular intervals, be sure to pull out the power plug, and using a dry cloth, wipe away any dust or foreign objects that may have accumulated.

Disconnect the power plug whenever the unit will not be used for an extended period of time

Fire may result in the unlikely event that a breakdown occurs.



Route all power cords and cables in such a way as to prevent them from getting entangled

Injury could result if someone were to trip on a cable and cause the installed device to fall or topple.



Avoid climbing on top of the unit, or placing heavy objects on it

Otherwise, you risk injury as the result of the unit toppling over or dropping down.



Never connect/disconnect a power plug if your hands are wet

Otherwise, you could receive an electric shock.



Disconnect all cords/cables before moving the unit

Before moving the installed device, disconnect the power plug from the outlet, and pull out all cords from external devices.



Before cleaning the unit, disconnect the power plug from the outlet

If the power plug is not removed from the outlet, you risk receiving an electric shock.



Whenever there is a threat of lightning, disconnect the power plug from the outlet

If the power plug is not removed from the outlet, you risk causing malfunction or receiving an electric shock.



Install circuit board(s) only in specified units

Install the circuit board only into the specified unit (a device compatible with the XI-SDI). Remove only the specified screws during the installation.



IMPORTANT NOTES

Power Supply

- Do not connect this unit to same electrical outlet that is being used by an electrical appliance that is controlled by an inverter or a motor (such as a refrigerator, washing machine, microwave oven, or air conditioner). Depending on the way in which the electrical appliance is used, power supply noise may cause this unit to malfunction or may produce audible noise. If it is not practical to use a separate electrical outlet, connect a power supply noise filter between this unit and the electrical outlet.
- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause for concern.

Placement

- This unit may interfere with radio and television reception. Do not use this unit in the vicinity of such receivers.
- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.
- Do not place containers or anything else containing liquid on top of this unit. Also, whenever any liquid has been spilled on the surface of this unit, be sure to promptly wipe it away using a soft, dry cloth.

Maintenance

- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Additional Precautions

- * Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- * When disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- * To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.

Intellectual Property Right

- It is forbidden by law to make an audio recording, video recording, copy or revision of a third party's copyrighted work (musical work, video work, broadcast, live performance, or other work), whether in whole or in part, and distribute, sell, lease, perform or broadcast it without the permission of the copyright owner.
- Do not use this product 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 product.
- MMP (Moore Microprocessor Portfolio) refers to a patent portfolio concerned with microprocessor architecture, which was developed by Technology Properties Limited (TPL). Roland has licensed this technology from the TPL Group.
- This product contains eParts integrated software platform of eSOL Co., Ltd. eParts is a trademark of eSOL Co., Ltd. in Japan.
- Roland is an either registered trademark or trademark of Roland Corporation in the United States and/or other countries.
- Company names and product names appearing in this document are registered trademarks or trademarks of their respective owners.

For the U.K.

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE: NEUTRAL
BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.
Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

For the USA

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment requires shielded interface cables in order to meet FCC class B limit.

Any unauthorized changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For Canada

CAN ICES-3 (B)/NMB-3 (B)

For Korea

사용자 안내문

기종별	사용자 안내문
B 급 기기 (가정용 방송통신기자재)	이 기기는 가정용(B 급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

For C.A. US (Proposition 65)

WARNING

This product contains chemicals known to cause cancer, birth defects and other reproductive harm, including lead.

2036-1 Nakagawa, Hosoe-cho, Kita-ku, Hamamatsu, Shizuoka 431-1304, Japan



For EU Countries



This product is intended for use in the following Electromagnetic environments:

E1: residential, E2: commercial and light industrial, E3: urban outdoors, ex. recording studio (broadcasting studio) which are specified in EN55103-1 and EN55103-2.

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 den 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 está 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 opsamlles 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 sbíráán odděleně od domácího odpadu, jak je určeno pro každý region. Výrobky nesoucí tento symbol se nesmí vyhazovat spolu s domácími odpady.

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 olmeprügist 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 kiekviename regione. Šiuo simboliu paženkintai produktai neturi būti išmetami kartu su buitiniemis atliekomis.

LV Šis simbols norāda, ka ES valstīs šo produktu jāievieca atsevišķi no mājsaimeciēbas atkritumiem, kā noteikts katrā reģionā. Produkts ar šo simbolu nedrīkst izmest kopā ar mājsaimeciēbas 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 simbolom 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.