

# RANE SL4 INTERFACE QUICK START MANUAL



## **Important Safety Instructions**

For the continued safety of yourself and others we recommend that you read the following safety and installation instructions. Keep this document in a safe location for future reference. Please heed all warnings and follow all instructions.

Do not use this equipment in a location where it might become wet. Clean only with a damp cloth. This equipment may be used as a table top device, although stacking of the equipment is dangerous and not recommended.

Equipment may be located directly above or below this unit, but note that some equipment (like large power amplifiers) may cause an unacceptable amount of hum or may generate too much heat and degrade the performance of this equipment. Only use attachments and accessories specified by Rane. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as spilled liquid, fallen objects into an opened chassis, exposure to rain or moisture, a dropped unit, or abnormal operation.

**WARNING**: This product may contain chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.

## **FCC 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.

**CAUTION:** Changes or modifications not expressly approved by Rane Corporation could void the user's authority to operate the equipment.

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

## FCC Declaration of Conformity

Brand: Rane Model: SL4

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.

Responsible Party: Rane Corporation 10802 47th Avenue West Mukilteo WA 98275-5000 USA Phone: 425-355-6000



## **Copyright Notices**

©2016 Rane Corporation. All rights reserved. Serato DJ and Scratch Live are trademarks of Serato. Trademarked in the United States and other countries. This software is based in part on the work of the Independent JPEG Group, and uses libping code, copyright © 2000-2002 Glenn Randers-Pehrson. The Serato NoiseMap<sup>™</sup> Control Tone, the audio pressed on Serato Control vinyl and Control CDs, is copyright ©2004-2016 Serato. The Control Vinyl and Control CDs are licensed for personal use only. The creation of personal backups of the Control CD is allowed, however duplicating Control CDs for commercial benefit is strictly prohibited. For avoidance of doubt the duplication or creation of Control vinyl for any use is strictly prohibited. Please respect our copyright. Windows<sup>®</sup> is a registered trademark of Microsoft Corporation in the United States and other countries. Apple, Mac, Macintosh, iTunes, Safari, QuickTime, GarageBand, and OS X are registered trademarks of Apple Inc., registered in the United States and other countries.

## **Check List**

#### These items are included in the box:

- 1 SL4 hardware interface.
- 4 rubber feet for the SL4.
- 1 external power supply for the SL4.
- 1 power supply blade kit.
- 1 Serato DJ software install disc.
- 1 Serato DJ software manual.
- 2 USB cables.
- 6 stereo RCA cables.
- 4 control CDs.
- 4 control vinyl records.
- 1 Warranty card.
- 1 this manual.

## Wear Parts

The SL4 Interface contains no wear parts. The control vinyl records and CDs are wear parts as described in "Limited Warranties" on page 13.







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## Software

This section will help get you started. Refer to the Serato DJ manual for software operating instructions.

#### Serato DJ Software Installation for Mac OS X

serato Before installing, we recommend you check for a newer version of Serato DJ at serato.com/downloads and install the latest Serato DJ version if it is newer than the version on the CD-ROM that comes with your SL4.

- 1. Insert the Serato DJ Installer CD-ROM that came with your unit, -or-
- browse using Finder to the location where the Serato DJ download was saved.
- 2. Double click the Serato DJ .dmg installer file.
- 3. The software EULA screen will appear read the License Agreement, then click Agree.
- 4. The disk image mounts and opens the actions folder, once this is finished you can unmount the disk image and launch Serato DJ.
- 5. Drag the Serato DJ application icon to the Applications folder alias.
- 6. You may then need to enter your User Password to authenticate.
- 7. Serato DJ will now copy to the Applications folder, once this is finished you can unmount the disk image and launch Serato DJ.

#### Serato DJ Software Installation for Windows

Before installing, we recommend you download and install the latest Serato DJ version from serato.com if it is newer than the version on the CD-ROM that comes with your mixer.

- 1. Insert the Serato DJ Installer CD-ROM that came with your unit,
- -or-

browse using Windows Explorer to the location where the Serato DJ download installer was saved.

- 2. Double click the Serato DJ .exe installer file.
- Accept the Security Warning and click "Run".
- 4. The installer introduction screen will appear, click Next.
- 5. Read the License Agreement, then tick "I agree to the license terms and conditions," then click Install.
- 6. If a User Account Control window appears, click Yes.
- 7. Serato DJ will now perform a standard installation.
- 8. The installation is now complete. You can now click Close.

NOTE: A shortcut will be also be created on desktop.

When you first connect your SL4 via USB, you may see a request to install drivers. Accept the request and allow the driver installation to proceed. After drivers are installed, a SL4 control panel will be available, and your software will recognize the SL4.

#### Serato Scratch Live

Your SL4 is completely compatible with Serato Scratch Live. You may connect to a laptop that has either program installed. The latest version of Scratch Live or Serato DJ is always available for download from serato.com.

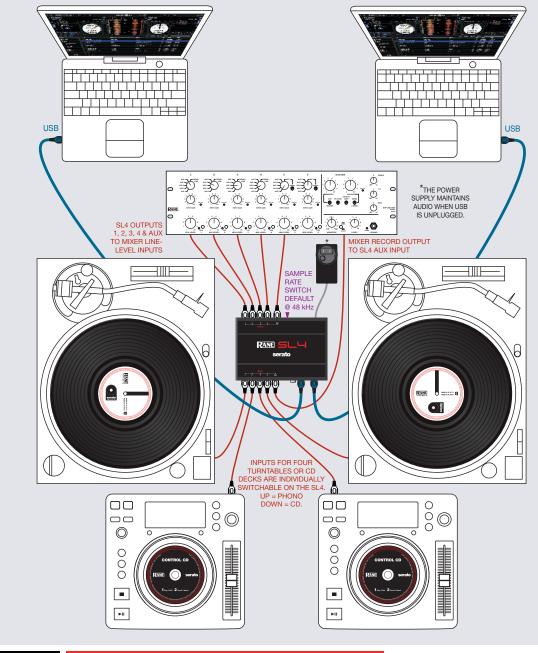


### Hardware

#### System Overview

The Serato control records and CDs are pressed with an audible tone specifically developed for controlling the Serato DJ software application. The SL4 and Serato control records and CDs may also be used with computers running Serato Scratch Live.

The SL4 interface converts the control signal coming from each deck into digital audio, to be sent via USB to the Serato DJ software, which decodes that signal into a stream of information based on what the DJ is doing with the control disc. A virtual 'deck' replicates the movements of the control disc. Audio files loaded onto the Virtual Decks are then played back through the outputs of the hardware, with any manipulation of the control discs reproduced on the audio, effectively emulating vinyl control of the files loaded in software.





#### Connecting the SL4

To integrate an SL4 unit into your setup, connect it to your turntables (or CD players) and mixer as follows:

#### 1. Inputs

Connect your CD players or turntables to the Deck Inputs on the Rane SL4. If you use turntables, connect their ground wires to the ground terminal on the SL4 or your mixer.

**\*Optional Step:** Connect an additional output (such as Aux Out) from your mixer to the Aux Inputs on the SL4 to record your set in Serato DJ.

#### 2. Input Level Selection

Set each input to the correct input level using the dip switches. Set the switches UP for Phono (turntables) or DOWN for CD decks (line level).

If you use turntables, connect their ground wires to either the ground post on the SL4 or your mixer. Turntable ground wires are important for Serato DJ to run properly.



Connect the Outputs of the SL4 to Line inputs on your mixer. You may need to set your mixer's input switch to CD or LINE (*not* PHONO). Connect the SL4 Aux output to another line input or Aux input on your mixer to output the SP-6 sample player to it's own mixer input.



SAMPLE RATE 96 48

SAMPLE RATE: 48 kHz DEFAULT

PHONO = UP CD = DOWN

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\*

**ONE TO FOUR DECKS** 

01

#### 4. Sample Rate Selection

Use this to switch between 48 kHz and 96 kHz. Use 48 kHz by default if you are not using 96 kHz audio files.

#### 5. Connect the SL4 to your computer

Using a provided USB cable, connect either USB A or USB B on your SL4 to an available USB 2.0 port on your computer. Make sure you connect it directly to your computer and not through a hub or splitter. To get started, only connect one computer. To share the SL4, see "Two Computer Connection" on page 10.





#### **Turntable Setup**

**1.** Set the tone arms to the specific recommendations of the cartridge used, so that the needle never leaves the record, but not heavy enough that it heats up significantly. Both produce poor tracking.

2. Grounding is extremely important when using Serato DJ. Make sure you have good connections from the ground wires of your turntables to the grounding post of your SL4 or your mixer. If you don't ground your turntables properly, the control signal will be noisy and the record tracking position will be erratic.

3. Ensure the SL4 is set to receive a Phono level signal - See step 2 of Connecting the SL4.

#### **CD Player Setup**

1. Disable all built-in effects on the CD player, including keylock/master tempo.

2. Ensure the SL4 is set to receive a CD level signal - See step 2 of Connecting the SL4.

#### **Kensington Security Slot**

You can use a Kensington security cable to attach the SL4 to an immovable object. Each side of the SL4 has a Kensington Security Slot. Refer to the instructions provided with your Kensington Lock.

#### **Playing Regular Vinyl and CDs**

# NOTE: the SL4 must be powered by USB or the supplied external power supply for the DECK THRUs to work.

If external power is connected, the SL4 is self-powered and power is not used from the USB port. If external power is not connected, the SL4 draws power from the USB port. Power switching is

automatic and the device continues to operate uninterrupted as long as a power sources is available. To use the SL4 Thru outputs when a computer is not connected, connect the optional external power supply. Thrus are turned on and off in the Control Panel.

#### **Power Supply**

Connect the barrel connector of the power supply to the 7.5 VDC jack on the SL4. Plug the power supply into an AC outlet. The yellow Power indicator will light on the SL4.

The blade kit for the universal power supply includes different input plugs for the USA, Europe, UK and Australia. The USA plug is attached at the factory - you may need to replace it in your country.

To remove a plug, PUSH the button while turning the outer rim counterclockwise. To attach a plug, rotate it to fit into the supply and turn clockwise until it locks in place.

If you need a replacement, check at dj.rane.com.

-(5.5mm) +(2.5mm)







## Rane USB Drivers

The SL4 has two USB ports, allowing simultaneous connection of two computers. Each port is completely independent. Different programs can be run through either port.

Rane ASIO and Core Audio drivers allow the SL4 to act as a 10-in 10-out external USB sound card for use with multiple third-party software applications that support Core Audio or ASIO. These drivers are multi-client, meaning they allow multiple applications on a computer to share the device at the same time. The ASIO and Core Audio drivers are included in the Serato DJ installer.

After Serato DJ is installed, you will be prompted to "Install Driver" in the Online Panel if you connect a new compatible device that has not already had its driver installed.

#### ASIO (Windows)

The SL4 uses a low-latency, multi-client, ASIO device driver to interface with software applications on Windows operating systems. Multi-client ASIO allows different audio software applications to simultaneously stream audio to and from the SL4. If the same playback channel is selected in more than one application, the driver mixes the audio from different applications before streaming it to the device.

The driver Control Panel may be launched from the Windows Control Panel. Select **Start > Control Panel > Rane SL4**.

#### **Core Audio (Macintosh)**

The SL4 uses a low-latency, Core Audio device driver to interface with software applications on Macintosh operating systems. Core Audio allows different audio software applications to simultaneously stream audio to and from the SL4.

To launch the SL4 driver Control Panel, open the System Preferences window. Locate the SL4 in the "Other" section and click the SL4 icon.

#### **Control Panel**

The Driver Control Panel supports:

- Analog Feed Thru check boxes allow stereo outputs 1-4 to select USB playback (computer) or analog input (vinyl or CD) as their source. If a button is on, USB playback is disabled and the SL4 input is fed to the output.
- **Sample Rate** indicators are read-only, showing the sample rate selected on the SL4.



- USB Port Status indicators are read-only and on when a USB port is connected and communicating with the SL4.
- Buffer increases or decreases the USB driver buffer size. The SL4 drivers run very reliably at latencies below 8 milliseconds. However, computer performance and available resources (number of apps running) may adversely affect streaming audio. If pops and clicks are heard in USB audio, try increasing the buffer size. In ASIO, total round-trip latency = buffer size + device latency. In Core Audio, total round-trip latency = buffer size + software application latency + device latency. SL4 latency is 1.3 ms at 48 kHz and 0.8 ms at 96 kHz.
- If the SL4 firmware on your computer is newer than installed in your SL4, the Update Device Firmware panel is enabled. Pressing the **Update Firmware** button updates the SL4 firmware to the newer version installed with your driver.



## **Two Computer Connection**

The SL4 allows two computers to connect to the mixer simultaneously. This allows two DJs to play at the same time and helps make DJ handover easy.

Connect both computers to the two USB ports on the SL4. In Serato DJ or Scratch Live on each computer, select a USB Source for each Virtual Deck. For any Virtual Decks on either computer that aren't to be used, set the USB Source to None.

## NOTE: If you can't select a particular USB source for a Deck, make sure it is not already set on another computer or Virtual Deck.

Each USB Source can only be set to one Virtual Deck on one computer at a time. When two computers are connected, you can use up to four USB sources in total.

#### **DJ Changeover**

Swapping between two DJs is easier than ever! With a computer already connected to the SL4 and playing, do the following:

1. Connect the second computer to the unused USB port on the SL4.

#### 2 a. Using four control sources:

Select a USB Source for a Virtual Deck that is not already being used on the first computer. If the first DJ is using all four USB sources, politely ask them to free up at least one channel for you to take over. **See "USB Sources & Analog Inputs" in the Serato DJ Manual**.

#### 2 b. Using two control sources:

Unassign the USB Source for the non-playing Virtual Deck on Computer A. Then have Computer B assign that same USB Source to one of its Virtual Decks. See "USB Sources & Analog Inputs" in the Serato DJ Manual.

- **3.** Play a track on this Deck and mix it in when ready—you'll now have audio from both computers in the mix.
- **4.** Fade out the audio playing from the first computer to the audio playing from the second computer.
- 5. When only audio from the second computer is left in the mix, remove the first computer.
- 6. Assign USB sources for the remaining Virtual Decks on the second computer and continue DJing.



## **Technical Specifications**

Computer interface	USB 2.0 High Speed			
USB Power Requirement	500 mA, 5.0 Volts			
USB Audio Channels	Ten Record and Ten Playback			
External Power Supply	7.5 Volts (included)			
Converters	24-bit / 48 kHz or 96 kHz (rear switch)			
DAC Dynamic Range	104.5 dB, A-weighted			
ADC Dynamic Range	103 dB, A-weighted			
Dynamic Range	101 dB A-weighted analog in to analog out			
THD+N	0.007% at 1 kHz, 20 Hz to 20 kHz BW			
Frequency Response	-0.6 dB @ 20 Hz, -0.03 dB @ 20 kHz			
Inputs	Inputs 1-4 individual Phono / Line switches			
Aux Input	Line Level only			
Gain	Unity			
Maximum Input / Output	3 Vrms @ 1 kHz			
Switched Phono Input Maximum	70 mV rms @ 1 kHz			
SL4 Unit Size	7.25" x 5" x 1.7" (18.4 x 12.6 x 4.3 cm)			
Shipping Size	14″ x 14″ x 4″ (36 x 36 x 10 cm)			
Weight	6 pounds (3 kg)			
External Universal Power Supply	100-240 VAC input, 7.5 VDC output, barrel plug			
Power Supply Blade Kit with country adaptors	USA, UK, Europe, Australia			
Power: Turn On/Off Muting	Yes			
Galvanic Isolation: Audio I/O is actively isolated from USB port and external power				
Auto-selects USB or external power without interruption				
Unit: Conformity	CE. FCC			
Size	6.8" x 5" x 1.3" (17.3 x 12.6 x 3.3 cm)			
Shipping: Size	14" x 14" x 4" (36 x 36 x 10 cm)			
Weight	5 pounds (2 kg)			



## **Technical Support**

Support for Serato DJ and Scratch Live software is provided for the life of your Rane hardware. Several support avenues are available:

- Check the "support" tab at dj.rane.com.
- Check the "support" tab at serato.com.
- Phone support for USA customers from the Rane Factory at 425-355-6000 is only available 8:30 AM to 1PM and 2PM to 5PM Pacific Standard Time, Monday through Friday, closed on USA holidays.
- International customers may receive phone support from your distributor during their business hours. Contacts are under the "buy" tab at dj.rane.com.
- Serato direct support by email is answered most non-holiday New Zealand weekdays, Monday through Friday.
- Serato direct support by a phone call to New Zealand is answered most non-holiday weekdays, Monday
  through Friday 10AM to 6PM, New Zealand time. The phone number and office hours are at serato.com,
  and a note at the bottom shows if the office is open or closed. From the USA or Canada, dial 011 first,
  and then their number. Note that most cell phones are not able to call internationally, so use a land line.

#### The Rane and Serato Relationship

- "Scratch Live" and "Serato DJ" are digital DJ solutions using software, hardware and Control Vinyl / CD.
- Serato is the company that invented and develops "Serato DJ" and "Scratch Live" software applications.
- Serato holds copyright on the Serato Control Vinyl and Serato Control CD.
- Rane Corporation is a company that manufactures hardware to operate a functional Serato DJ system utilizing Serato Control Vinyl and CD.
- Rane Corporation & Serato both provide technical support for Rane's "Serato DJ" and "Scratch Live" software.
- Rane does not provide technical support for non-Rane hardware used with Serato software.
- Rane does not provide technical support for other Serato software products, such as Serato Video, Serato Video-SL, Serato Itch, or Serato DJ Intro. Technical support options are at serato.com/support.

# **dj.rane.com** is your center for support, accessories, community, and learning how to get the most from your DJ equipment.



## **Limited Warranties**

#### **Factory Authorized Service**

Your unit may someday need to be serviced by the Rane Factory if you live in the USA. International customers should contact your dealer or distributor for service. You must call the Rane factory before shipping. Please do not return your unit to Rane without prior authorization.

To obtain service or a Return Authorization in the USA, please phone Rane Corporation at 425-355-6000, or fax Rane at 425-347-7757.

#### Limited U.S.A. Warranty

RANE CORPORATION WARRANTS ALL RANE PRODUCTS (except those items classified and listed in "Wear Parts" on page 3) PURCHASED IN THE U.S. AGAINST DEFECTS IN MATERIAL OR WORKMANSHIP FOR A PERIOD OF TWO (2) YEARS. WEAR PARTS ARE LIMITED TO A PERIOD OF NINETY (90) DAYS FROM THE INITIAL DATE OF RETAIL PURCHASE FROM AN AUTHORIZED RANE DEALER—WEAR PARTS REQUIRE PROOF OF PURCHASE DATE. This limited warranty extends to all purchasers or owners of the product during the warranty period beginning with the original retail purchase. Rane Corporation does not, however, warrant its products against any and all defects: 1) arising out of material or workmanship not provided or furnished by Rane, or 2) resulting from abnormal use of the product or use in violation of instructions, or 3) in products repaired or serviced by other than the Rane Factory, or 4) in products with removed or defaced serial numbers, or 5) in components or parts or products expressly warranted by another manufacturer. Rane agrees to supply all parts and labor to repair or replace defects covered by this limited warranty with parts or products of original or improved design, at its option in each respect, if the defective product is shipped prior to the end of the warranty period to the Rane Factory in the original packaging or a replacement supplied by Rane, with all transportation costs and full insurance paid each way by the purchaser or owner.

#### Limited Warranty Outside the U.S.A.

RANE PRODUCTS ARE WARRANTED ONLY IN THE COUNTRY WHERE PURCHASED, THROUGH THE AUTHORIZED RANE DISTRIBUTOR IN THAT COUNTRY, AGAINST DEFECTS IN MATERIAL OR WORKMANSHIP, THE SPECIFIC PERIOD OF THIS LIMITED WARRANTY SHALL BE THAT WHICH IS DESCRIBED TO THE ORIGINAL RETAIL PURCHASER BY THE AUTHORIZED RANE DEALER OR DISTRIBUTOR AT THE TIME OF PURCHASE. Rane Corporation does not, however, warrant its products against any and all defects: 1) arising out of materials or workmanship not provided or furnished by Rane, or 2) resulting from abnormal use of the product or use in violation of instructions, or 3) in products repaired or serviced by other than authorized Rane repair facilities, or 4) in products with removed or defaced serial numbers, or 5) in components or parts or products expressly warranted by another manufacturer. Rane agrees, through the applicable authorized distributor, to repair or replace defects covered by this limited warranty with parts or products of original or improved design, at its option in each respect, if the defective product is shipped prior to the end of the warranty period to the designated authorized Rane warranty repair facility in the country where purchased, or to the Rane factory in the U.S., in the original packaging or a replacement supplied by Rane, with all transportation costs and full insurance paid each way by the purchaser or owner.

ALL REMEDIES AND THE MEASURE OF DAMAGES ARE LIMITED TO THE ABOVE SERVICES, IT IS POSSIBLE THAT ECONOMIC LOSS OR INJURY TO PERSON OR PROPERTY MAY RESULT FROM THE FAILURE OF THE PRODUCT; HOWEVER, EVEN IF RANE HAS BEEN ADVISED OF THIS POSSIBILITY, THIS LIMITED WARRANTY DOES NOT COVER ANY SUCH CONSEQUENTIAL OR INCIDENTAL DAMAGES. SOME STATES OR COUNTRIES DO NOT ALLOW THE LIMITATIONS OR EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, ARISING BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE, OR OTHERWISE, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO A PERIOD OF TWO (2) YEARS FROM EITHER THE DATE OF ORIGINAL RETAIL PURCHASE OR, IN THE EVENT NO PROOF OF PURCHASE DATE IS AVAILABLE, THE DATE OF MANUFACTURE, SOME STATES OR COUNTRIES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE, COUNTRY TO COUNTRY.



## Warranty Procedure - Valid in U.S.A. only

# NOTICE! You must complete and return the warranty card or register your product online to extend the Warranty from 2 years to 3 years!

TO VALIDATE YOUR EXTENDED WARRANTY: Use the postcard that came in the box with your unit, or go to the **support** page at dj.rane.com and click on **product registration**. Fill out the warranty completely, being sure to include the model and serial number of the unit since this is how warranties are tracked. If your Rane product was purchased in the U.S.A., mail the completed card or register online with to Rane Corporation within 10 days from the date of purchase. **If you purchased the product outside the U.S.A.** you must file your warranty **registration with the Rane Distributor in that country.** It is advised that you keep your bill of sale as proof of purchase, should any difficulties arise concerning the registration of the warranty card. **NOTICE:** IT IS NOT NECESSARY TO REGISTER IN ORDER TO RECEIVE RANE CORPORATION'S STANDARD TWO YEAR LIMITED WARRANTY.

WARRANTY REGISTRATION is made and tracked by MODEL AND SERIAL NUMBERS ONLY, not by the purchaser's or owner's name. Therefore any warranty correspondence or inquires MUST include the model and serial number of the product in question. Be sure to fill in the model and serial number in the space provided below and keep this in a safe place for future reference.

WARRANTY SERVICE MUST BE PERFORMED ONLY BY AN AUTHORIZED RANE SERVICE FACILITY LOCATED IN THE COUNTRY WHERE THE UNIT WAS PURCHASED, OR (if product was purchased in the U.S.) AT THE RANE FACTORY IN THE U.S.. If the product is being sent to Rane for repair, please call the factory for a Return Authorization number. We recommend advance notice be given to the repair facility to avoid possible needless shipment in case the problem can be solved over the phone. UNAUTHORIZED SERVICE PERFORMED ON ANY RANE PRODUCT WILL VOID ITS EXISTING FACTORY WARRANTY.

FACTORY SERVICE: If you wish your Rane product to be serviced at the factory, it must be shipped FULLY INSURED, IN THE ORIGINAL PACKING OR EQUIVALENT. This warranty will NOT cover repairs on products damaged through improper packaging. If possible, avoid sending products through the mail. Be sure to include in the package: 1. Complete return street shipping address (P.O. Box numbers are NOT acceptable).

- A detailed description of any problems experienced, including the make and model numbers of
- A detailed description of any problems experienced, including the make and model numbers of any other system equipment.
- 3. Remote power supply, if applicable.

Repaired products purchased in the U.S. will be returned prepaid freight via the same method they were sent to Rane. Products purchased in the U.S., but sent to the factory from outside the U.S. MUST include return freight funds, and the sender is fully responsible for all customs procedures, duties, tariffs and deposits.

In order to qualify for Rane's one year extended warranty (for a total of 3 years parts and labor), the warranty must be completely filled out and sent to us immediately. Valid in USA only.

## We recommend you write your serial number here in your owners manual and on your sales receipt for your records.

SERIAL NUMBER:\_

\_\_\_PURCHASE DATE:\_



## **OWNER'S MANUAL**

## **EU Declaration of Conformity**

Product Model: SL4 Serial Numbers: 900000 – 999999 Product Type: Professional Audio Signal Processing

Manufacturer: Rane Corporation Address: 10802 47th Avenue West, Mukilteo WA 98275-5000 USA

This declaration is issued under the sole responsibility of Rane Corporation.

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:			
2014/30/EU	The Electromagnetic Compatibility Directive		
2012/19/EU	The Waste Electrical and Electronic Equipment Directive		
2011/65/EU	The Restriction of Hazardous Substances Directive		

References to the relevant harmonised standards used in relation to which conformity is declared:EN55103-1:2009/AM1:2012Compatibility of professional electronic A/V apparatus emissions.EN55103-2:2009Compatibility of professional electronic A/V apparatus immunity.EN50581:2012Technical documentation for RoHS assessment of electronic products.

New Service

Additional Information: Environment E2 CE mark first affixed in 2011

In order for the customer to maintain compliance with these regulations, high quality shielded cable must be used for interconnection to other equipment. No changes or modification of the equipment, other than that expressly outlined by the manufacturer, are allowed. The user of this equipment shall accept full responsibility for compliance with Union harmonisation legislation in the event that the equipment is modified without written consent of the manufacturer.

EN55103-2 Immunity Results:		THD+N: 4 dBu, 400 Hz, BW 20 Hz - 20 kHz	
Test Description		Measurement	Conditions
RF Electromagnetic Fields Immun	ity		
80 MHz - 1000 MHz, 1 kHz AM, 8	0% depth, 3V/m	<-82 dB	
1400 MHz - 2700 MHz, 1 kHz AM	, 80% depth, 3V/m	<-82 dB	
Conducted RF Disturbances Imm	unity		
150 kHz - 80 MHz, 1 kHz AM, 809	% depth, 3V rms	<-82 dB	
Magnetic Fields Immunity			
50 Hz - 10 kHz, 3.0 - 0.3 A/m		<-81 dB	
Signed for and on behalf of: Rane Corporation Place of issue: Mukilteo WA USA Date of issue: February 11, 2011 Name: Greg Frederick Function: Compliance Engineer		Signature:	
Hamer alog Headhold			





PART 22979