

SX-R4+ FADER  
EXTENSION MODULE

**SONOSAX**  
**SX-RC8+**

**USER MANUAL**

*Version 1.2*  
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**Audio equipment manufacturer**

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# 1 Introduction

Congratulations for purchasing your SONOSAX SX-RC8+ fader extension module, a dedicated front panel for the SX-R4+ providing 8 rotary faders with function switch to extend mixing facilities in the field.



As with all SONOSAX products, the SX-RC8+ is build without any compromise in quality, using only the best components available and passes severe quality controls.

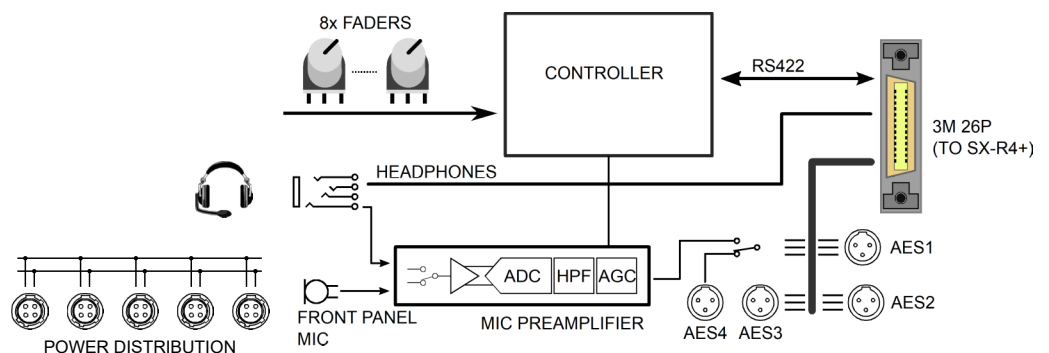
The information and instructions contained in this manual are necessary to ensure safe operations of your equipment and to maintain it in good working condition; please read it carefully.

## 1.1 Key Features

### Inputs / Outputs

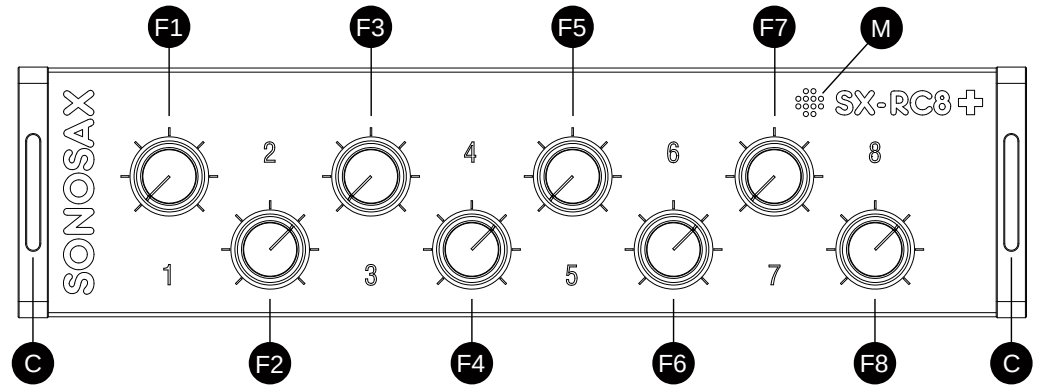
- 4x TA3 connectors used as AES breakout box for the multi-pin AES input connector on the SX-R4+
- 5x Hirose 4 for power distribution
- Additional headphones/headset output with mic support
- Slate/Com microphone

## 1.2 Functional Block Diagram



## 2 Panel Descriptions

### 2.1 Front Panel

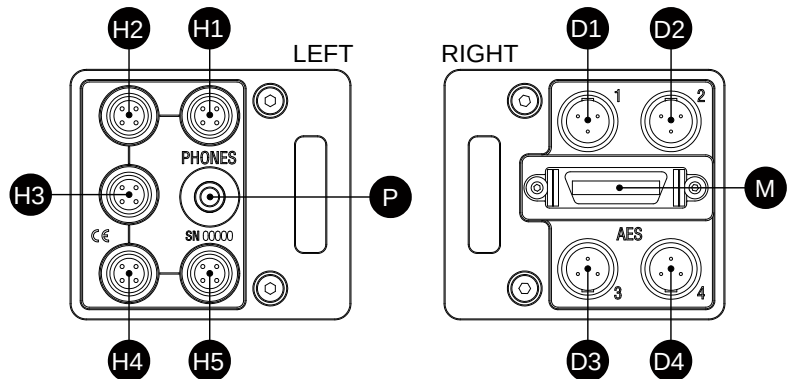


**F1 to F8**  
Fader with push on

**M**  
Internal Slate/Com microphone

**C**  
Cut-out for shoulder strap

### 2.2 Side Panels



**H1 to H5**  
Power Distribution

**P**  
Phones

**D1 to D4**  
AES inputs TA3 male (mini-XLR). D4 (AES 7-8) is shared with MIC operation

**M**  
3M MDR 26-pin for SX-R4+ interconnect

## 3 Operating Instruction

### 3.1 Connecting to the SX-R4+

A [3M MDR 26-pin pin-to-pin cable](#) is required to interconnect the SX-RC8+ to the SX-R4+. The SX-RC8+ is powered by the SX-R4+ and operates as soon as it is connected to it.

### 3.2 Operating modes

The SX-R4+ menu SETUP/POT SETUP allow to select 3 different operating modes:

- Input gains
- Fader -60 to +12 dB
- Fader -60 to +24 dB

Input gains apply to AES input 1 to 8.

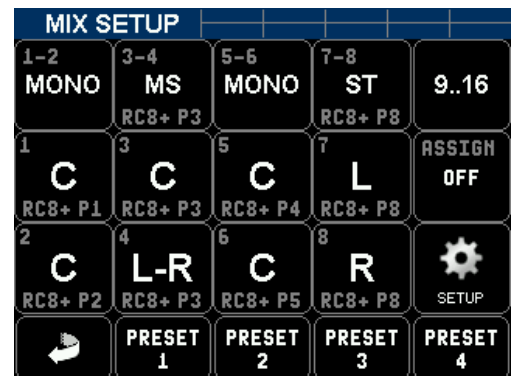
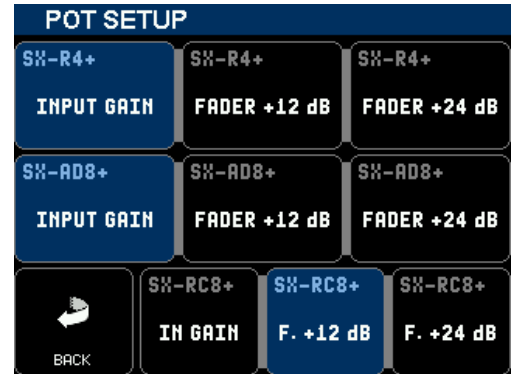
Fader mode have two different curves:

- -60 to +12 dB
- -60 to +24 dB

Both curves mute when fader is closed.

Faders must be assigned in the SX-R4+ MIX menu.

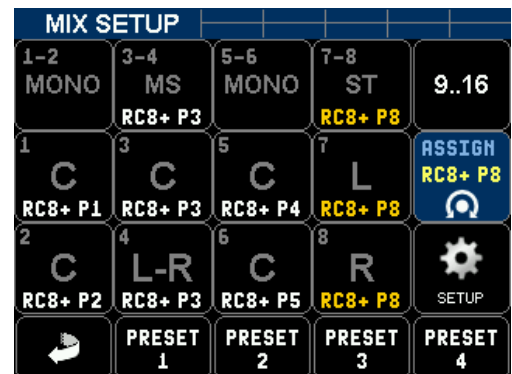
To assign a fader, press the ASSIGN button.



First, choose the fader to be assigned using the rotary encoder.

Then, push all track or track pair buttons where the fader is to be assigned.

Push again the ASSIGN button to disable fader assignment.



### 3.3 AES Breakout

The 4 TA3 connectors are used as AES breakout box, allowing easy connection of AES sources such as digital wireless receivers.

The 4<sup>th</sup> TA3 connector (AES 7-8) is shared with the Slate/Com microphone AES output.

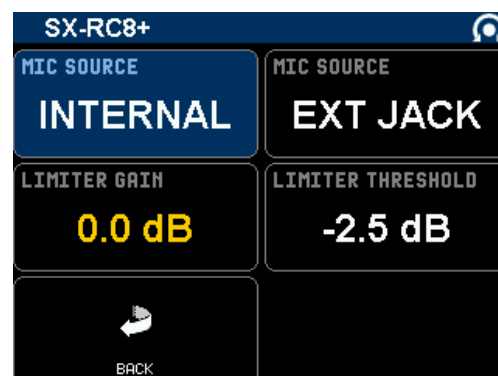
### 3.4 Slate/Com Microphone Control

The SX-RC8+ includes a microphone preamplifier with automatic gain control and Low Frequency Cut filter. User can choose between the front panel mic or an external headset connected to the Headset/Headphones 3.5mm jack.

The SX-RC8+ configuration is integrated into the SX-R4+ touch interface.

The configuration panel is located on SETUP/SYSTEM/MISC/RC8+

- MIC SOURCE are two mutually exclusive buttons where the microphone source is selected
- LIMITER GAIN and THRESHOLD allow user to control the automatic gain control
- POT POS NOISE REDUC. should be enabled in noisy environment where the SX-R4+ detects faulty faders movements.



Any push-button of the SX-R4+ or SX-RC8+ can be used to control the slate/com.

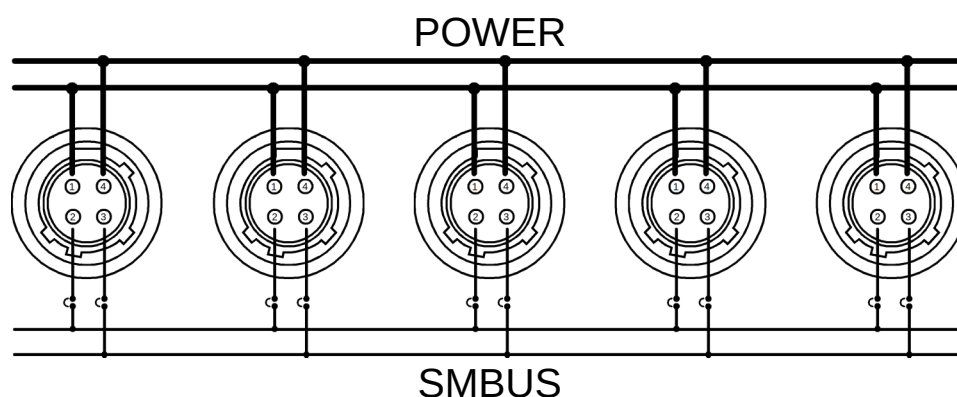
Enter the menu SETUP/SYSTEM/PUSH BUTTONS to modify push-buttons assignation.

The label "SX-RC8+ MIC" correspond to the slate/com microphone enable action.



### 3.5 Hirose Power Distribution

The power distributor on the left panel is fully independent and does not need any power for the SX-RC8+ to operate. There are 5x Hirose 4 connectors connected as following:



Note: there is no connection between the SX-R4+ power for the SX-RC8+ and that power distribution.

The optional solder jumpers on pins 2 & 3 are dedicated for a System Management Bus (SMBUS). By default, these jumpers are open.

## 4 Specifications

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### 4.1 Microphone Preamplifier

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Sampling Frequency	48 kHz
Bit Depth	16-bit

### 4.2 Power

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Input Voltage	+3.3 V on 3M MDR 26-pin
Power consumption	200 mW (mic OFF) 255 mW (mic ON)

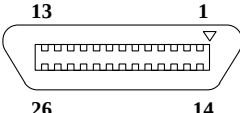
### 4.3 Mechanical

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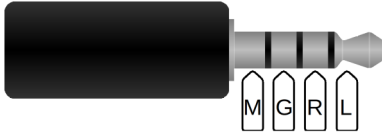
Size (H x W x D)	200 x 50 x 57 mm 7.87 x 1.96 x 2.24 "
Weight	363 g 0.80 lb

## 5 Connector Pin Assignments

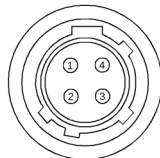
### 5.1 3M MDR 26-pin

	2	AES 1-2 (-)
	3	AES 3-4 (-)
	4	AES 5-6 (-)
	5	AES 7-8 (-)
	6	RS422 RX (-)
	7	RS422 TX (-)
	12	Headphones Right
	15	AES 1-2 (+)
	16	AES 3-4 (+)
	17	AES 5-6 (+)
	18	AES 7-8 (+)
	19	RS422 RX (+)
	20	RS422 TX (+)
	21	DC 3.3V input
	24	Headphones Ground
	25	Headphones Left
	1, 13, 14, 26	Digital ground
	8 – 11, 22, 23	not connected

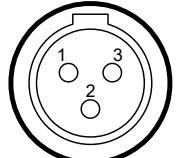
### 5.2 Headset/Headphones 3.5mm jack

	G	Headphones ground
	M	Microphone (optional)
	R	Headphones right
	L	Headphones left

### 5.3 Power Hirose 4-pin

	1	Ground (-)
	2	Not connected or SMBUS DATA (see 3.5)
	3	Not connected or SMBUS CLOCK (see 3.5)
	4	Pos (+)

### 5.4 AES inputs TA3 male (mini-XLR)

	1	Ground
	2	Signal (+)
	3	Signal (-)