SONOSAX
SX-RC8+

USER MANUAL

Version 1.1
March 2018

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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.
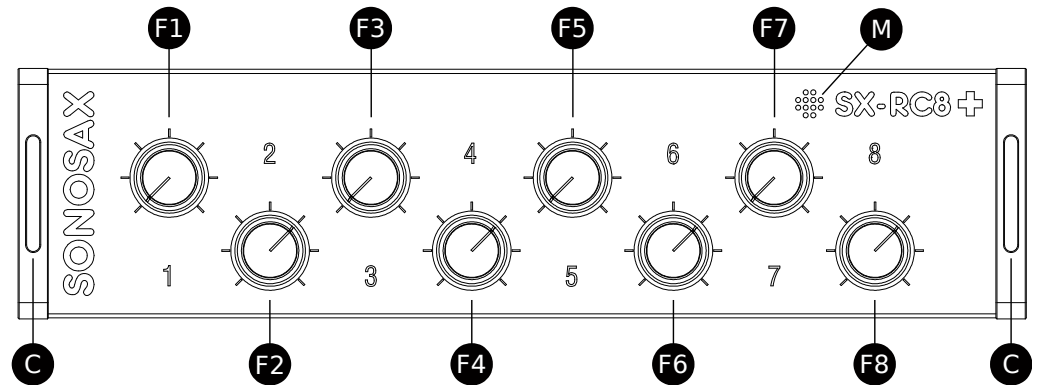
1.1   Key Features

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
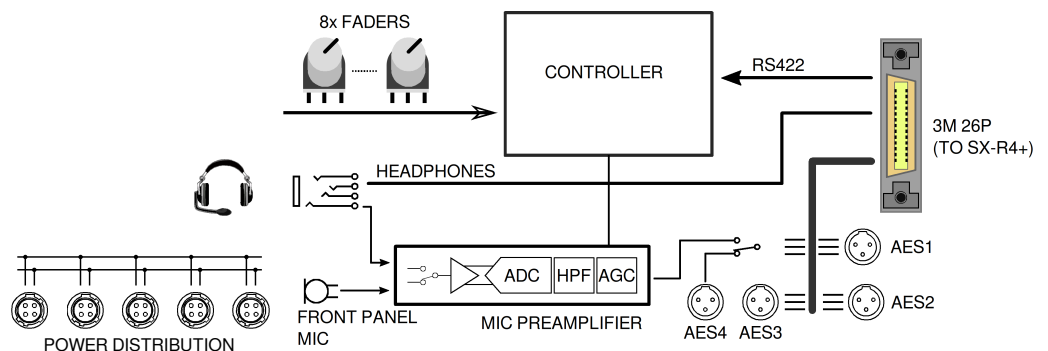
2 Panel Descriptions

2.1 Front Panel

F1 to F8
Fader with push on

C
Cut-out for shoulder strap

M
Internal Slate/Com microphone

2.2 Side Panels
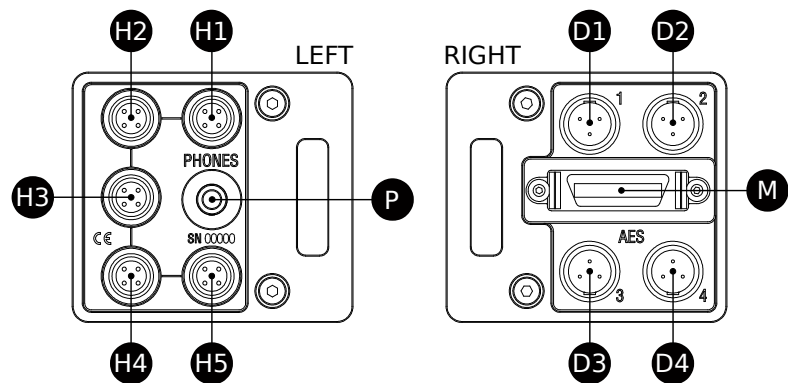
H1 to H5
Power Distribution

P
Phones

D1 to D4
AES inputs. 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.
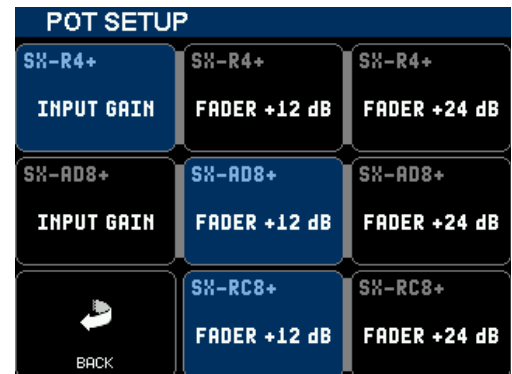
3.2 Assigning faders

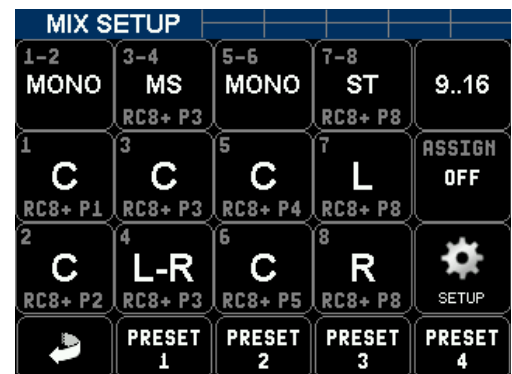First, choose a fader curve in the SX-R4+ menu SETUP/POT SETUP menu.

The two bottoms concerns the SX-RC8+: two curves are available:
- -60 to +12 dB
- -60 to +24 dB

Both choices mute the signal when the fader is closed.

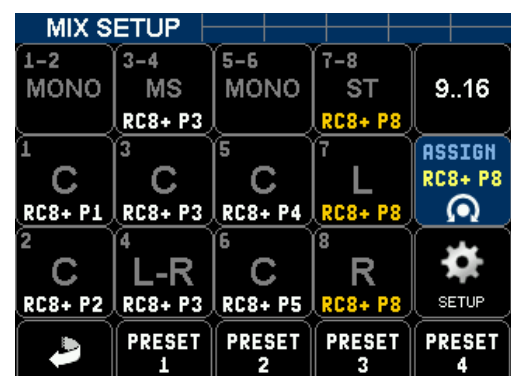Entering the MIX menu shows the faders assignation.

When pressing the ASSIGN button, fader assignation is enabled.

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

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

Push again ASSIGN button to disable fader assignation.

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 4th 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.
Enter the menu SETUP/SYSTEM/MISC/RC8+ to view the configuration panel:

- • 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
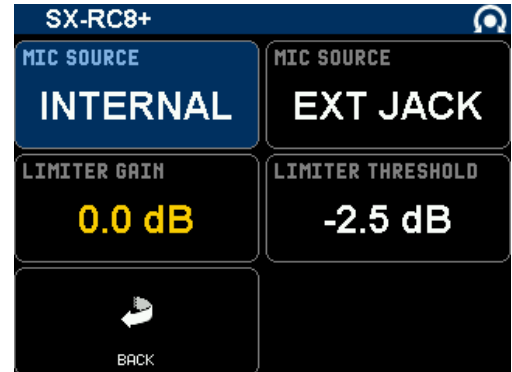
Any push-button of the SX-R4+ or SX-RC8+ can be used to control the slate/com.
Enter the menu SETUP/SYSTEM/PUSH BUTTONS to modify push-buttons assignation.

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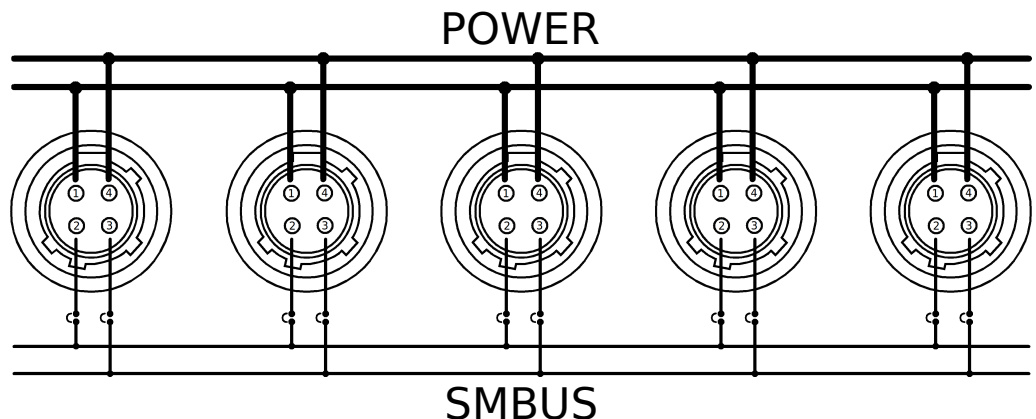
The optional solder jumpers on pins 2 & 3 are dedicated for a System Management Bus (SMBUS). By default, these jumpers are open.

4 Specifications

4.1   Microphone Preamplifier

Sampling Frequency	48 kHz
Bit Depth	24-bit

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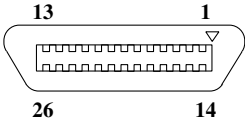
Input Voltage	+3.3 V on 3M MDR 26-pin
Power consumption	200 mW (mic OFF)
	255 mW (mic ON)

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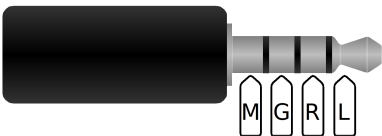
Size (H x W x D)	200 x 50 x 57 mm
	7.87 x 1.96 x 2.24 ''
Weight	363 g
	0.80 lb

5 Connector Pin Assignments

5.1 3M MDR 26-pin
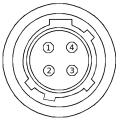
	1 ground 2 AES 1-2 (-) 3 AES 3-4 (-) 4 AES 5-6 (-) 5 AES 7-8 (-) 6 RS422 RX (-) 7 RS422 TX (-) 8 – 11 not connected 12 Headphones Right 13, 14 ground 15 AES 1-2 (+) 16 AES 3-4 (+) 17 AES 5-6 (+) 18 AES 7-8 (+) 19 RS422 RX (+) 20 RS422 TX (+) 21 DC 3.3V input 22 – 23 not connected 24 Headphones Ground 25 Headphones Left 26 ground

5.2 Headset/Headphones 3.5mm jack

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

5.3 Power Hirose 4-pin

	1 ground (-) 2 not connected 3 not connected 4 DC input (+)

5.4   Min-XLR (TA3)

	1	ground
	2	signal (+)
	3	signal (-)