

SX-R4+ LINEAR FADER  
EXTENSION MODULE

**SONOSAX**  
**SX-LC8+**

**USER MANUAL**

*Version 1.1*  
*August 2019*

**Audio equipment manufacturer**

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## Revision History

Revision	Date	Description
1.0	August 2019	Initial release
1.1	August 2019	Replaced cable 002353 and 002354 with 002358

## Legal Notices

Product specifications and features are subject to change without prior notification.

## Compliances

### WEEE Statement

This product is classed as electrical or electronic equipment within the meaning of the Waste Electrical and Electronic Equipment (WEEE) Directive 2002 / 96 / EC and must not be disposed of in domestic household waste.



### RoHS

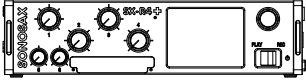
Sonosax complies fully with Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)



# 1 Introduction

Congratulations for purchasing your SONOSAX SX-LC8+ linear fader extension module, a dedicated front panel for the SX-R4+ providing 8 linear faders with function switches to extend the comfort of mixing in the field.



PRODUCT COMPATIBILITY	
	This product requires the SX-R4+ runs with <b>firmware revision 3.5 or greater</b>

Like all SONOSAX products, the SX-LC8+ was build without any compromise in terms of quality, using only the best components available and successfully passing strict quality controls.

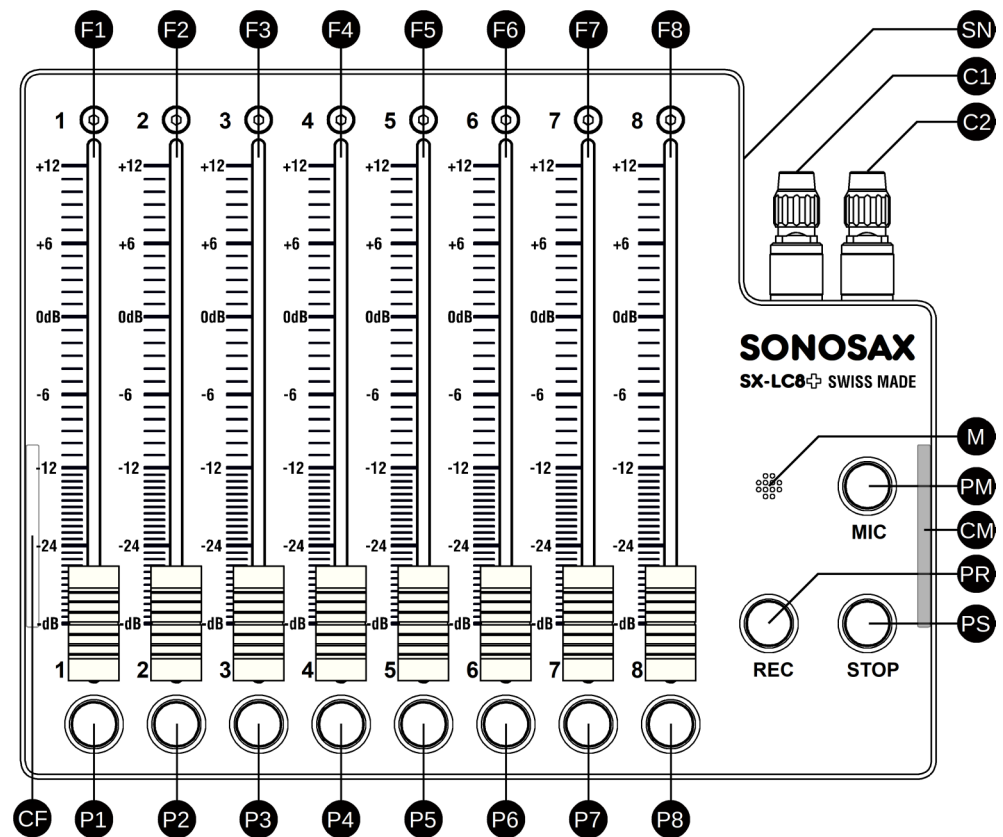
The information and instructions contained in this manual are necessary to ensure safe operation of your equipment and to keep it in good working order; please read it carefully.

## 1.1 Key Features

- 8 full length 100mm linear faders that can be assigned to any SX-R4+ input gain control or fader (in the mix matrix)
- 8 assignable function push buttons
- Dedicated REC / STOP push buttons
- Slate/Com microphone with AES output
- May be linked to another SX-LC8+ to operate with 16 linear faders
- May be operated with a SX-RC8+ or a SX-AD8+

## 2 Panel Description

### 2.1 Front Panel



#### F1 to F8

Linear faders

#### P1 to P8

Function push-buttons

#### SN

Device Serial Number marking

#### C1, C2

Binder 8-pin to connect with a SX-R4+ or another SX-LC8+. Ports are identical and may be switched

#### CM

Magnetic coupling (magnet side)

#### CF

Magnetic coupling (ferromagnetic side)

#### M

Internal slate/com microphone

#### PM

Slate/com mic push button. Mic is enabled as long as this button is kept pressed.

#### PR

Record start push-button. A short press starts the recording or adds an index if already in recording mode. This button has an integrated LED, which blinks in record ready state and is set while recording.

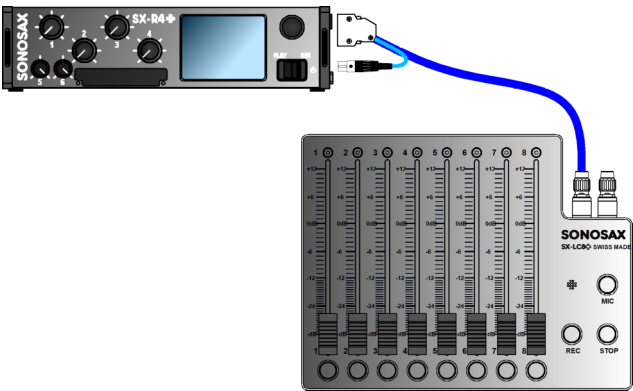
#### PS

Record stop push-button. A **long press** is required to stop the recording.

### 3 Operating Instruction

#### 3.1 Connecting to the SX-R4+

A dedicated cable is required to connect the SX-LC8+ to the SX-R4+.



On the SX-R4+ side, a 3M MDR 26-pin connects with the SX-LC8+. The female TA3 connector is the SX-LC8+ slate/com microphone output, it is intended to be connected to the SX-R4+ AUX AES input.

#### NOTE

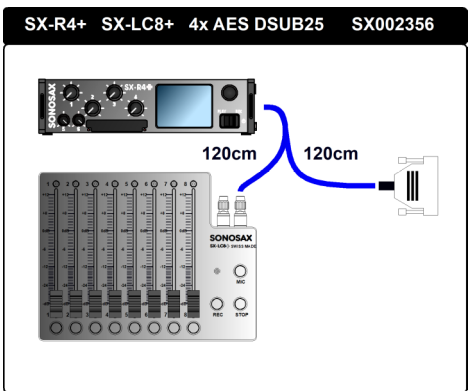
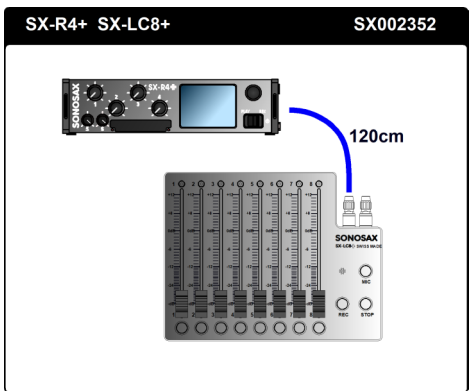


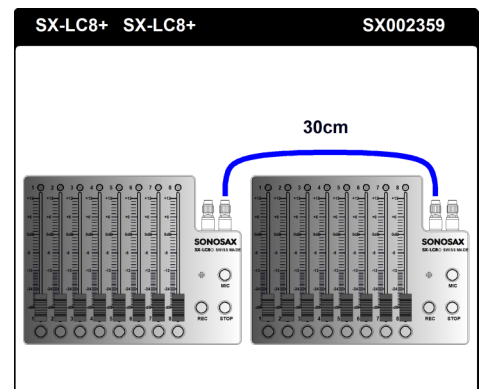
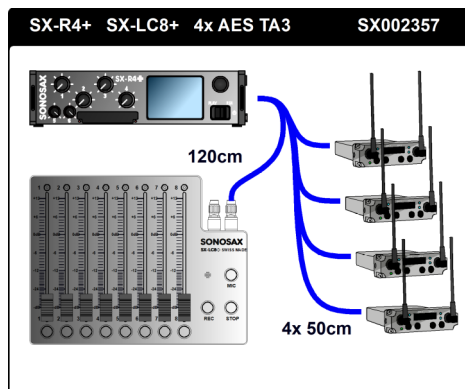
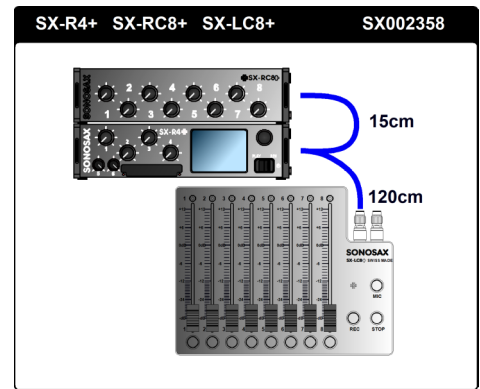
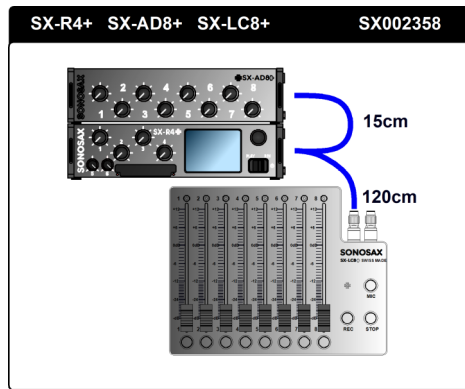
Remember to enable the AUX AES input on the SX-R4+

Two 8-pin Binder connectors are located on the side of the SX-LC8+. The cable can be connected to any connector.

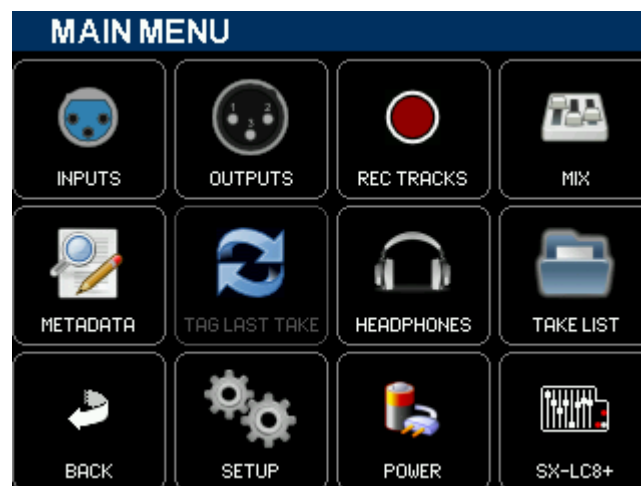
The SX-LC8+ is powered by the SX-R4+ and is automatically detected by the SX-R4+ (firmware revision 3.5 and upper).

The following tables illustrate all connection cables options. Sonosax cable reference number is on top right of each drawing:



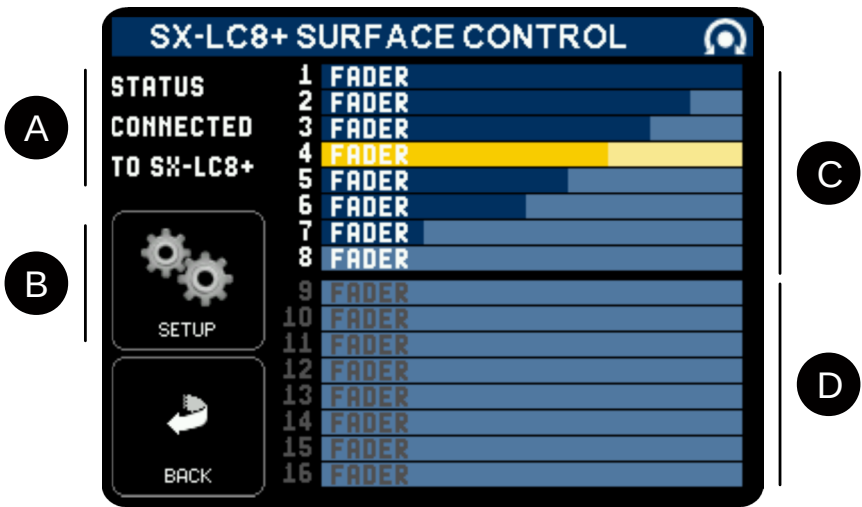


As soon as the SX-LC8+ is detected, a new sub-menu appears on the main menu screen, bottom right.



### 3.2 SX-LC8+ Screen

When pushing the SX-LC8+ button in the main menu, the following screen is displayed:



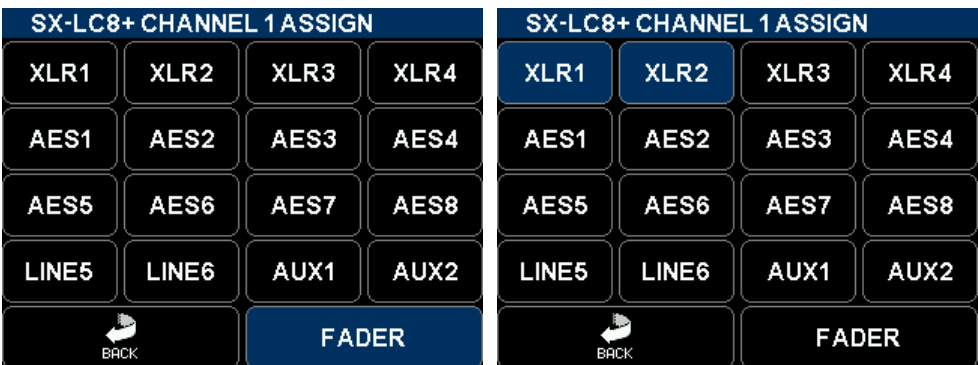
where:

- (A) SX-LC8+ connection status
- (B) SX-LC8+ setup button
- (C) active SX-LC8+ fader gauges
- (D) secondary SX-LC8+ fader gauges (when two SX-LC8+ are connected)

The fader gauge color shows the fader position. The rotary encoder is used to select a fader (which gauge becomes yellow). A short press on the rotary encoder will call the corresponding fader assignment screen.

### 3.3 Fader Assignment

Each SX-LC8+ fader can be assigned independently as an input gain control or as a mixing fader. The default operation mode is mixing fader; any other choice will set the fader channel as an input gain control.



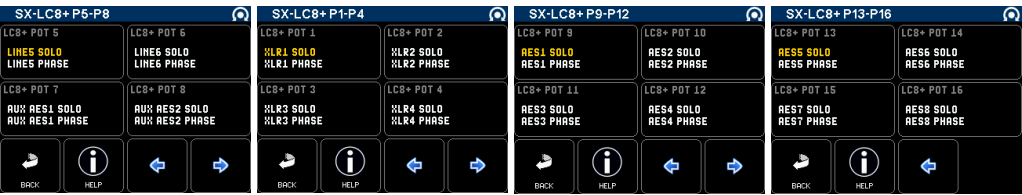
On the left screen, fader 1 is assigned as a mixing fader. To operate with mixing faders, these must be assigned to mix tracks in the MIX menu.

When selecting any other option, the fader becomes an input gain control. On the right screen, fader 1 is assigned to both XLR1 and XLR2 input gain.

### 3.4 Function Push-button Assignation

The 8 push buttons below the linear faders are assignable function keys. They can be assigned in the SX-R4+ SETUP / SYSTEM / PUSH BUTTONS menu.

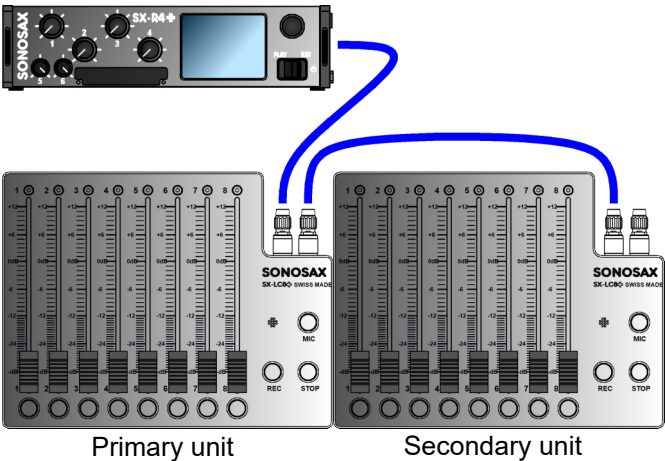
The following screen captures shows the default assignation:



First line shows the function called with a short press. Second line shows the function called with a long press. Functions may be selected using the rotary encoder. A short press on the touch screen will toggle between first and second line.

### 3.5 Linking two SX-LC8+

Two SX-LC8+ can be operated together using the link cable reference SX002359. The device connected directly to the SX-R4+ is the primary unit, while the other device is the secondary unit.



The following table resumes how a secondary unit differs from the primary one:

	Primary	Secondary
Faders	1 to 8	9 to 16
REC / STOP buttons	operating	disabled
MIC	operating	operating

*Note: do not press both MIC buttons at the same time, as they share the same AES line*

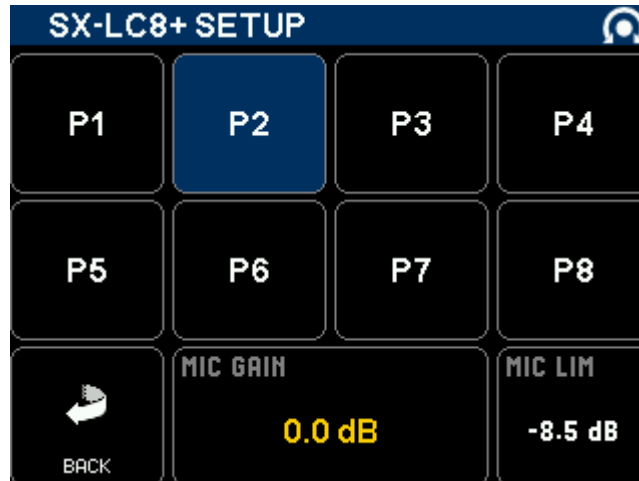
NOTE	
	Two SX-LC8+ have magnet mutual attraction, they don't need any mechanic coupling.

## 3.6 Setup Menu

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The SX-LC8+ setup menu includes two different zones:

1. 8 presets buttons to store and recall user configurations
2. The slate/com microphone settings



The presets are labeled P1 to P8. To store the current configuration, press and hold the corresponding button until a confirmation message appears. To recall a preset, short press the corresponding button.

The SX-LC8+ includes a slate/com microphone preamplifier with automatic gain control and low frequency cut filter. The gain and the limiter threshold may be adjusted using the corresponding touch screen buttons and the rotary encoder.

## 4 Specifications

### 4.1 Internal slate/com Microphone Preamplifier

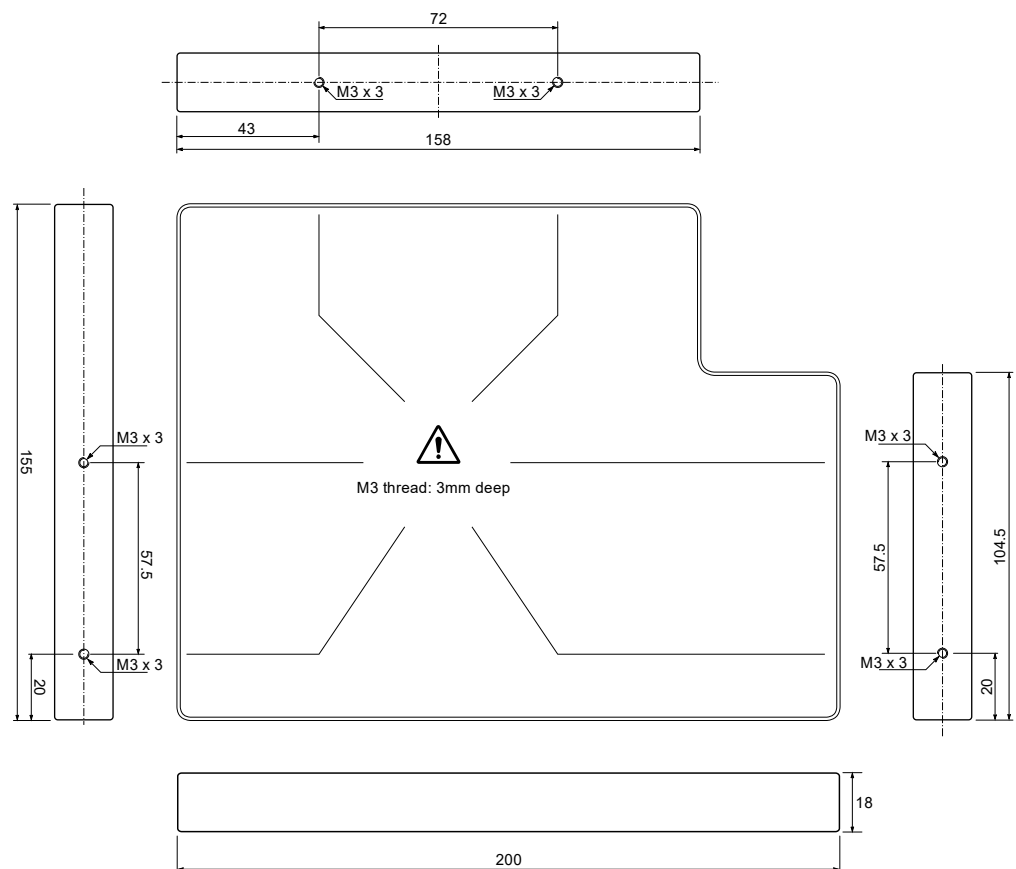
Sampling Frequency	48 kHz
Resolution	16-bit
Output format	AES

### 4.2 Power

Input Voltage	+3.3 to 5.5 V on Binder 8-pin
Power consumption	65 mW (REC LED OFF, mic OFF) 125 mW (REC LED OFF, mic ON) 77 mW (REC LED ON, mic OFF) 137 mW (REC LED ON, mic ON)

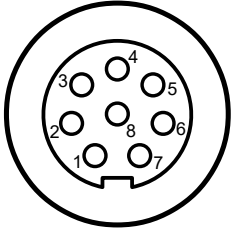
### 4.3 Mechanical

Size (H x W x D)	200 x 155 x 28 mm 7.87" x 6.10" x 1.10"
Weight	780 g 1.72 lbs
Fader length	100 mm 3.94"



# 5 Connector Pin Assignments

## 5.1 Binder 8-pin

	<table><tr><td>1</td><td>RS422 TX LOW</td></tr><tr><td>2</td><td>MIC AES HI</td></tr><tr><td>3</td><td>MIC AES LOW</td></tr><tr><td>4</td><td>GND</td></tr><tr><td>5</td><td>DC INPUT</td></tr><tr><td>6</td><td>RS422 RX HIGH</td></tr><tr><td>7</td><td>RS422 RX LOW</td></tr><tr><td>8</td><td>RS422 TX HI</td></tr></table>	1	RS422 TX LOW	2	MIC AES HI	3	MIC AES LOW	4	GND	5	DC INPUT	6	RS422 RX HIGH	7	RS422 RX LOW	8	RS422 TX HI
1	RS422 TX LOW																
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