SONOSAX
SX-LC8+

USER MANUAL

Version 0.8
May 2019

Table of Contents

Revision History

Revision	Date	Description
0.8	May 2019	Initial release (draft)

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)
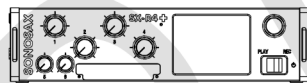
1 Introduction

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 switch to extend mixing facilities in the field.

PRODUCT COMPATIBILITY	
	This product requires the SX-R4+ runs with **firmware revision 3.5 or greater**

As with all SONOSAX products, the SX-LC8+ is build without any compromise in quality, using only the best components available and passes severe quality controls.
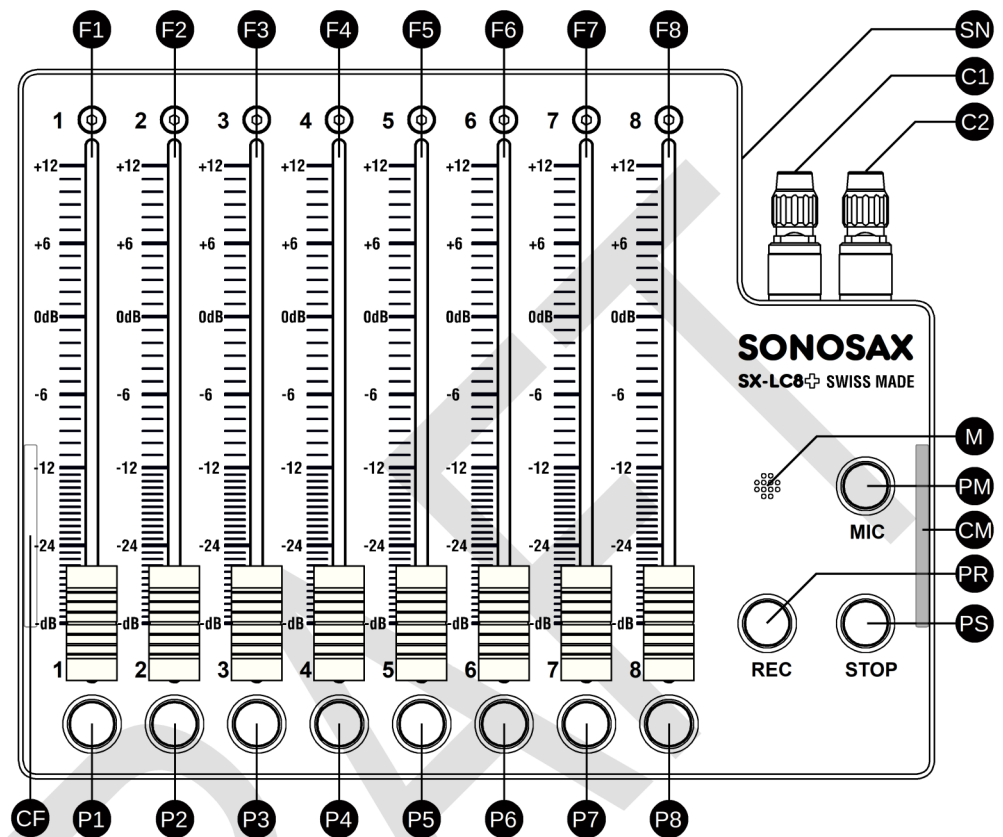
The information and instructions contained in this manual are necessary to ensure safe operations of your equipment and to maintain it in good working condition; please read it carefully.

1.1   Key Features

- 8 linear faders that can be assigned to a SX-R4+ input or fader (for the mix channels)
- 8 assignable function switches
- dedicated REC / STOP buttons
- Slate/Com microphone with AES output
- can be linked to another SX-LC8+ to operate with 16 linear faders
- can 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, there isn't any difference between them.

CM
Magnetic coupling (magnet side)

CF
Magnetic coupling (ferromagnetic side)

M
Internal slate/com microphone

PM
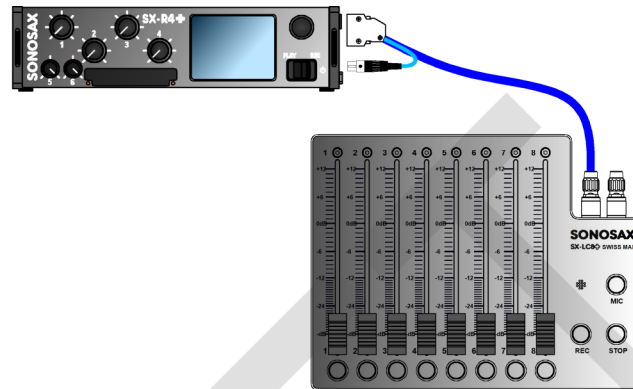Slate/mic push-on button. Mic is enabled as long as this button is kept pressed.

PR
Record start push-button. A short press starts the record or add an inex (if already recording).
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 record.

3 Operating Instruction

3.1 Connecting to the SX-R4+

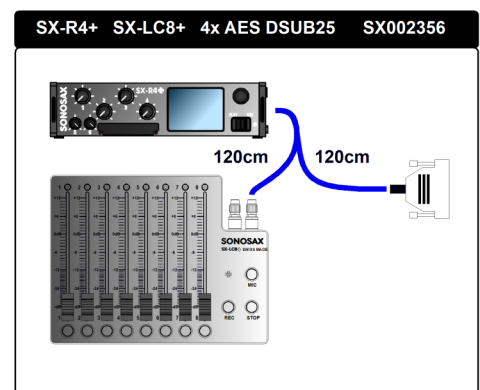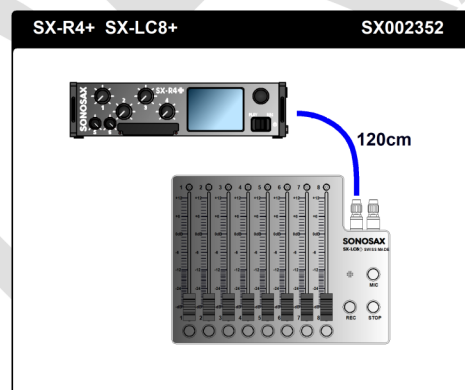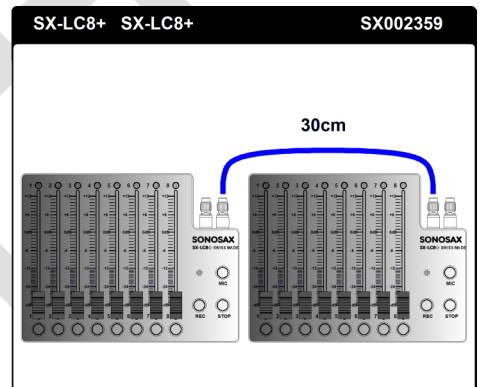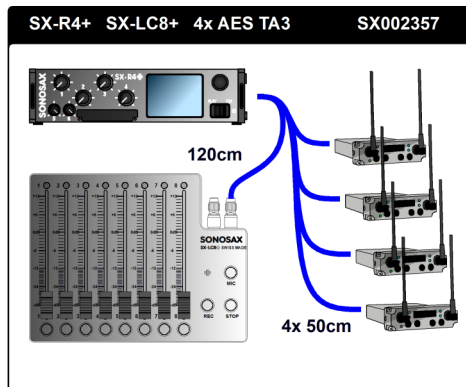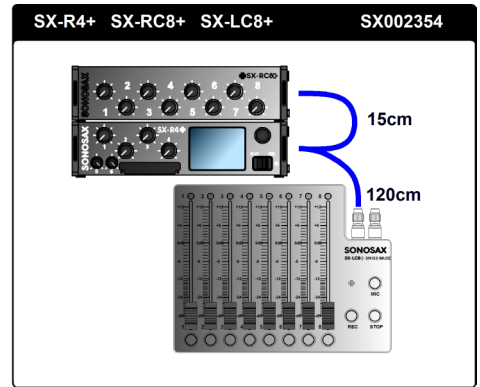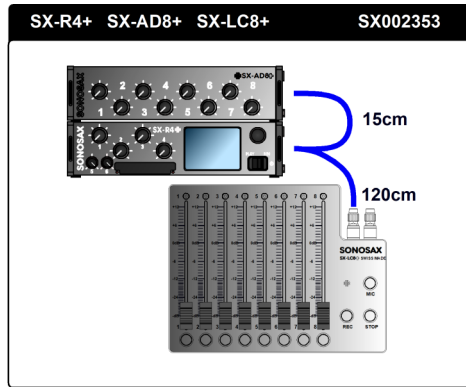A dedicated cable is required to interconnect the SX-LC8+ to the SX-R4+.

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

On the SX-LC8+ side, there is two 8-pin Binder connectors. Cable can connect to any of these connectors.
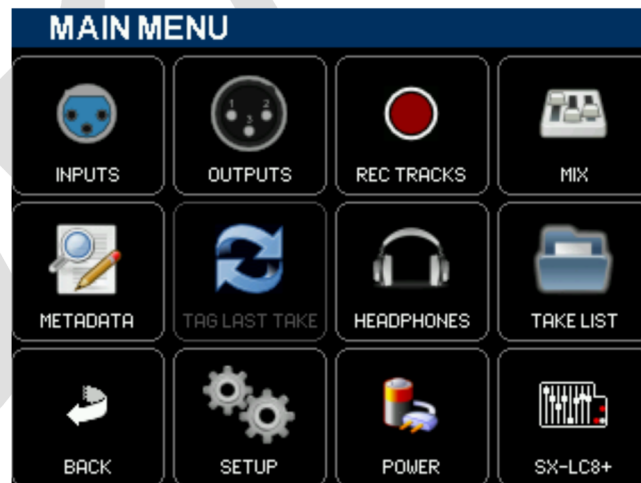
The SX-LC8+ is powered by the SX-R4+ and is automatically detected by the SX-R4+ (firmware revision 3.5 and upper).

The following table illustrate all connection cables. Sonosax cable reference number is on top right of each drawing:
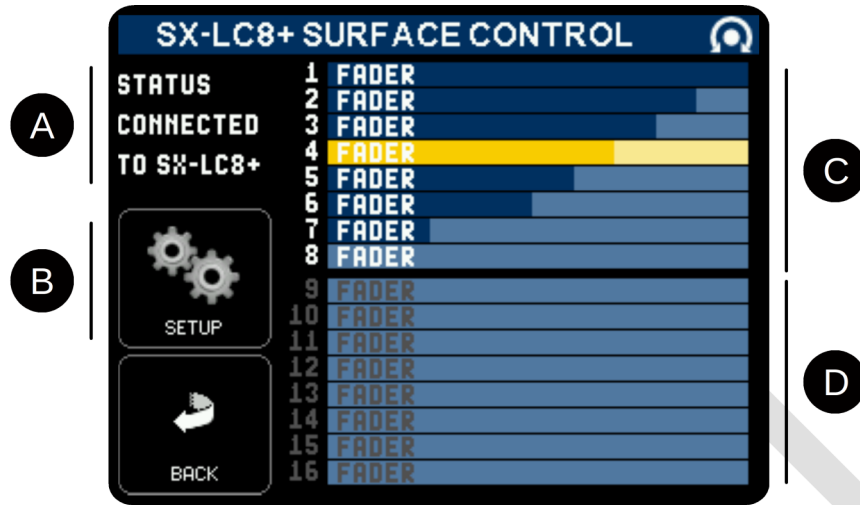
As soon as the SX-LC8+ is detected, a new menu appears in the main menu, on bottom right.

3.2   SX-LC8+ Screen

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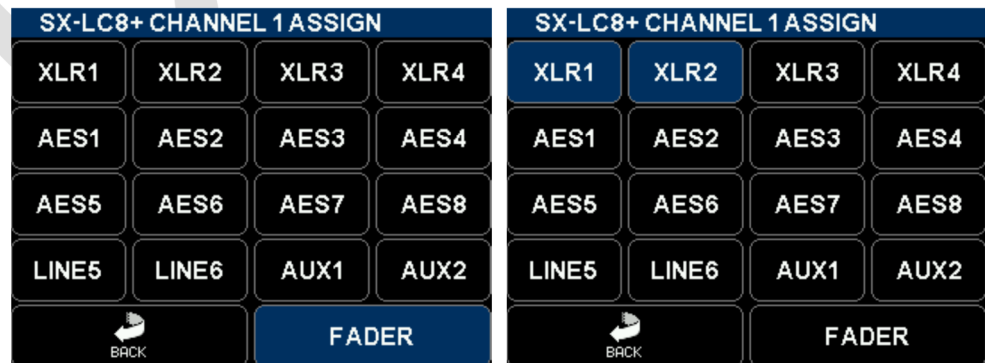

where:

- (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 gives the fader position. The rotary encoder is used to select the fader (which becomes yellow). A rotary encoder push will enter the fader assignation screen.

3.3   Fader Assignation

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

When pushing the rotary encoder on a fader channel in the SX-LC8+ menu, the SX-R4+ will display then fader channel assignation screen:

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

By selecting any other choices, the fader becomes an input level fader. Screen on the right shows a fader assigned to both XLR1 and XLR2 input level.
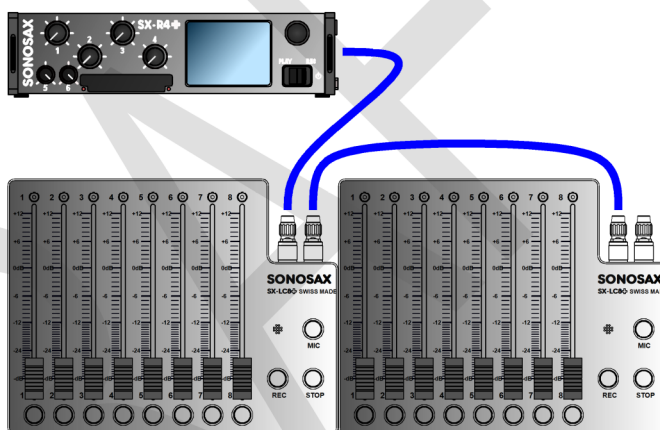
3.4   Function Push-button Assignation

The 8 knobs under the linear fader are assignable function switches. They can be assigned in the SX-R4+ SETUP / SYSTEM / PUSH BUTTONS menu.

The following screen captures shows the default assignation:

3.5   Linking two SX-LC8+

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

On the image above, primary unit is on the left, secondary on the right. The following table resumes how a secondary unit differs from the primary one:

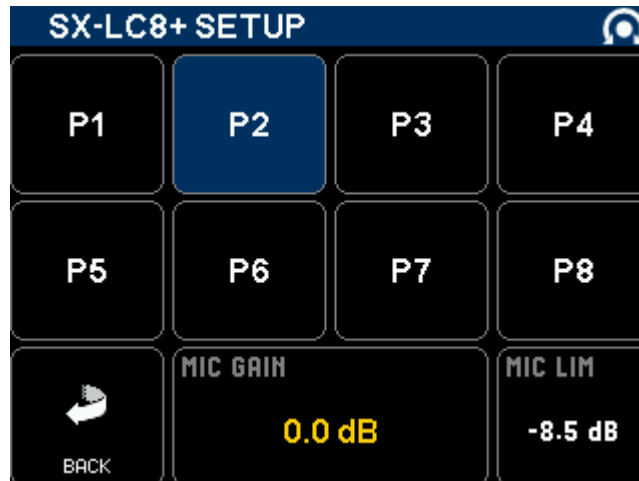|	Primary	Secondary
Faders	1 to 8	9 to 16
REC / STOP buttons	operating	disabled
MIC	operating	operating

Note: do not press both MIC buttons at the same time, 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

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

1.   8 presets to store and recall

2.   the slate/com microphone adjustments

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

The SX-LC8+ includes a microphone preamplifier with Automatic Level Control (ALC) and Low Frequency Cut filter. The gain and the ALC limiter threshold can be adjusted.

4 Specifications

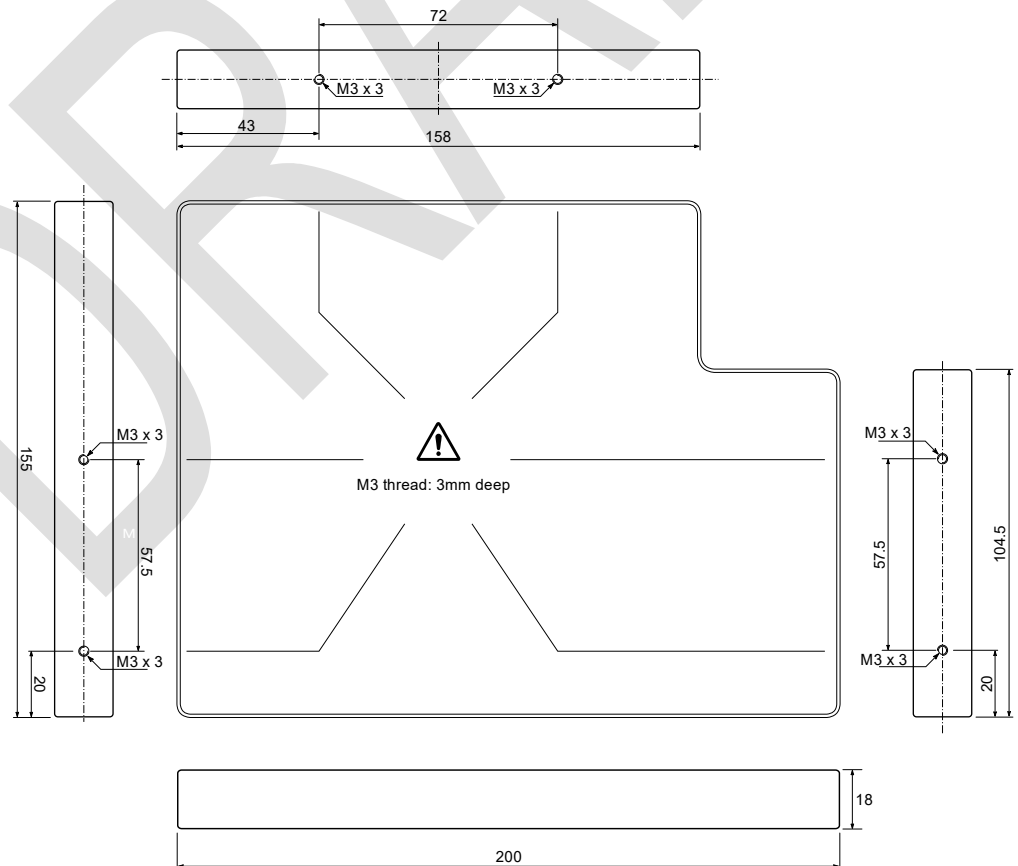## 4.1 Internal Microphone Preamplifier

Sampling Frequency	48 kHz
Resolution	16-bit
Output format	AES

4.2 Power

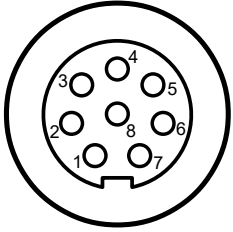|	
Input Voltage	+3.3 to 5.5 V on Binder 8-pin
Power consumption	65 mW (REC LED OFF, mic OFF)
	125 mW (REC LED OFF, mic ON)
	77 mW (REC LED ON, mic OFF)
	137 mW (REC LED ON, mic ON)

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

	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