

The Saramonic logo, featuring the brand name in a white, sans-serif font on a dark rectangular background.

SR-AX104

The SARAMONIC SR-AX104 is a 2-channel XLR audio adapter with preamplifiers and phantom power, ideal for any DSLR cameras with a built-in microphone jack.

Statement

Please read this manual carefully before using and strictly operate and store in accordance with the instructions. Please save it for your future reference. If the user manual can not help you to solve certain problems, please ask your retailer for help or email us: info@saramonic.com.



Cautions

1. Do not use the unit under water, don't expose it to rain. Please store it in a cool, dry place.
2. Please use and store it in normal temperature. Do not move it from overheated to supercooled condition frequently as well as keep away from heat sources such as heater and oven.
3. When using and storing, please pay attention to dust and moisture.
4. Be careful to violent collision.

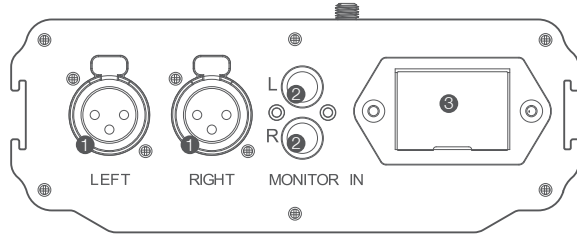
1 PRODUCT INTRODUCTION

1.1 General Introductions

The SARAMONIC SR-AX104 is a 2-channel XLR audio adapter with preamplifiers and phantom power, ideal for any DSLR cameras with a built-in microphone jack. Wide-variety of audio devices like professional condenser microphones, wireless microphones, external audio mixers, sound boards and more can be connected to the camera via this adapter.

The SR-AX104 makes your recording work much easier. Level meter allows you to verify the proper input levels in real time, the output signal can be adjusted by the level controls for optimum recording. The phone jack lets you monitor the audio from the adapter during recording, or from camera during playback. The AGC disable feature reduces noise during quiet moments of recording.

1.2 Product Structure



1 XLR Inputs

Two balanced XLR inputs

2 Monitor In

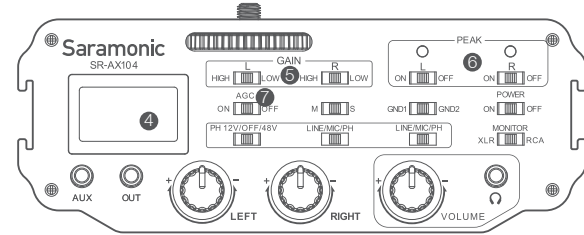
Monitor input jacks for connecting the AV cable

3 Battery Compartment

Operates on one 9 volt battery (not included).

You could use an alkaline or lithium type battery for the longest operating type.

The adapter can also operate without a battery for limited functions



4 Level Meter

Indicates the sound level in dB for each channel

5 Gain Switches

Selects LOW for unity gain or HIGH for +20dB boost

6 Peak Switches

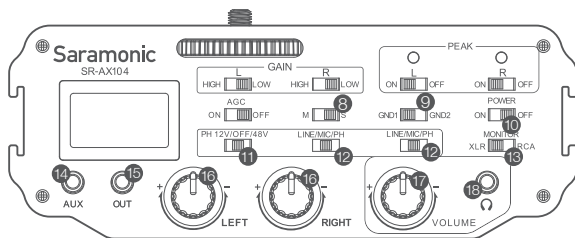
Turn on/off the LED signal indicators which flash red for overload

7 AGC ON/OFF

Turn the AGC switch to ON to active camera AGC function

Turn the AGC switch to OFF to disable camera AGC function

Note: The AGC ON/OFF is only applied to cameras with built-in AGC function.



8 M/S Switch

Select mono or stereo output mode

The mono mode is for one mono microphone recording. It can send the mono audio signal to each channel and output stereo audio signal.

The stereo mode is for two channels recording. It provides two separate channels of audio.

9 GND1/GND2 Ground Switch

Eliminate ground hum and noise for getting the best sound

GND1: Separate the output signal ground from the input signal ground. To avoid the noise of the input signal passing to the output signal. This noise is usually caused by AC power, for instance, mixer with AC power adapter

GND2: Connect the output signal ground to the input signal ground

10 POWER Switch

Main power switch for adapter

11 PH 12V/OFF/48V

Optional 12 or 48 volt phantom power for condenser microphones that require phantom power to operate.

Many microphones will operate on 12V to save battery power.

12 LINE/MIC/PH Switches

Select LINE or MIC or Phantom levels

The MIC level is for self powered microphones or wireless system.

The LINE level is for mixers and other audio devices with a line level output, set the switch to LINE to attenuates the signal to about 40dB.

The PH level is for microphones that require phantom power.

13 XLR/RCA Switch

Select XLR for headphone monitoring audio from the microphones during Recording.

Select RCA for headphone monitoring playback audio from the camera.

14 Aux Input

1/8" (3.5 mm) auxiliary mini-jack input

15 Audio Output

One stereo 1/8" (3.5 mm) mini-jack output

16 Left and Right Control Knobs

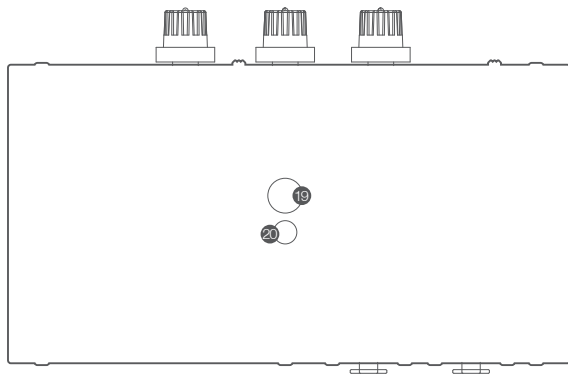
Adjust the signal of each channel to the optimum recording levels

17 Volume Control Knob

Adjusts the headphone volume level

18 PHONES

Headphone jack to monitor the audio from microphones or camera



19 3/8" Female Screw

20 1/4" Female Screw

1.3 Product Structure

Maximum Input Levels	MIC level: -3 dBu LINE level: +14 dBu
Output Level	Nominal MIC levels
Frequency Response	20 Hz to 20 kHz (+/- 0.5 dB)
THD	Less than 0.01% @ 1kHz, -36dBu input
S/N Ratio	85 dB @ 1 Khz, -30 dBu input
Gain	LO gain: 0 dB HI gain: 20 dB
Phantom Power	Dual regulated 12 or 48 volt power supplies Current to 14 mA (direct short)
Level meter	-18 to +3 dB in 3 dB increments
Battery Type	One 9 volt alkaline or lithium battery
Battery Duration	3 hours typical with alkaline battery (no phantom) 8 hours typical with lithium battery (no phantom)
Dimensions	(L x W x H) 155 mm x 98 mm x 64 mm
Weight	20.9 oz (0.593 kg)

2. Operation

2.1 Set up Guide

- (1) Install the battery.
Lift up and pull out the drawer from the battery compartment.
Insert 9V battery into place aligning + and - polarity as shown.
Slide the drawer closed until it clicks into place.
- (2) Attach the SR-AX104 to the base of the camera. Spin counter-clockwise to tighten up the adapter with the camera. Mount the adapter to a tripod with the tripod socket on the bottom of the adapter.
- (3) Connect the supplied signal transmission line from the output jack (OUT) of adapter to the MIC input of camera. If there is a MIC/Line switch on the camera, select it to MIC.
- (4) For monitor audio from the camera during playback, connect the red and white RCA plugs on the supplied AV cable, or the AV cable that came with the camera to the corresponding red and white MONITOR IN jacks on the adapter. Attach the other end to the AV output of the camera.
- (5) Connect balanced XLR microphones, wireless mics or other audio sources to the LEFT and RIGHT XLR or AUX inputs on the SR-AX104.

Note: The AUX Input is ideal for connecting wireless devices with a 3.5mm output. As it sends signal to the right channel, please do not use the right XLR Input while using the AUX Input.

- (6) Set the GAIN switches.
Set the Gain switches to HIGH for most microphones.

Set the Gain switches to LOW for very sensitive condenser microphones or recording very loud sounds.

- (7) Set the PEAK switches for both channel to ON.
- (8) Set AGC ON/OFF.
Please read the AGC Operation Guide for your reference.
- (9) Set the M/S switch.
When using one channel, switch to M for mono.
When using two channels, switch to S for stereo.
- (10) Set the GND1/GND2 switch
Set the ground switch to GND1 initially. When recording, if there are some odd noises from ground loop, you could switch it to GND2. Please switch it flexibly to the side with a better sound quality.
- (11) Set the LINE/MIC/PH switch.
When using microphones and wireless systems, set to MIC for microphone.
When using other audio devices, set to LINE for Line.
When using microphones operating on phantom power, set to PH for phantom power.

Note: Please DO NOT select Phantom level when recording with microphones that do not operate on phantom power, wireless receivers, mixing boards or any unbalanced devices, because it may cause damage to both the adapter and audio device.
- (12) Set the 12V or 48V phantom power according to your needs.
- (13) Set the MONITOR switch to XLR to monitor the audio from the microphones during recording.
- (14) Turn the adapter POWER switch to ON.

- (15) Plug an earphone into the headphone terminal on the camera to monitor the audio. Please make sure that both channels can be heard and adjust the gain controls if any distortion. Be sure that the VOLUME control is set low to avoid excessively loud audio from damaging your hearing.
- (16) We suggest you could do a test recording and playback the audio to see if it is acceptable. When test recording, you could adjust the knobs flexibly to get the the optimum signal levels.

2.2 AGC Operation Guide

Automatic gain control (AGC) provide a controlled signal amplitude at its output, despite variation of the amplitude in the input signal. By disabling AGC function, the hiss can be eliminated when the camera is recording during quite moments.

When recording under stereo mode and set the AGC switch to off, a 20kHz sine wave will be sent from left channel to the camera to turn off the AGC function. The 20kHz sine wave can be easily filtered out, and the left channel can still be used for normal recording.

When recording under mono mode, you could set the M/S switch to S and recording only on the right channel. Leaving the left channel unused, so the 20kHz sine wave will not be recorded into the audio file.

Suggestion:

- (a) When turn the volume of each channel to the maximum but the recording sound is still low or not clear, you could turn off the AGC.***
- (b) When turn the volume of each channel to the minimum but the recording sound is still high, you could turn off the AGC.***

(c) When the background noise affect the recording, please turn off the AGC.

(d) If you don't want the 20KHz sine wave to be recorded into the audio file, please turn on the AGC.

Please do a test recording and play back the audio to see if it is acceptable.

3 Warranty

- (1) Saramonic International provides one-year warranty under normal use and lifelong paid maintenance from the date you purchase this product.
- (2) Saramonic International will repair or replace the product that under the warranty for free during the one-year valid period, but customers should pay for shipping and insurance charges for returning the product to Saramonic International.
- (3) This warranty only applies where a defect has arisen, wholly or substantially, as a result of faulty manufacture, parts or workmanship during the warranty period.
- (4) This warranty does not cover:
- (a) All damages caused by human factors include using the products in abnormal conditions and operate the device without according to the user manual.
 - (b) The guarantee is invalid if defect is caused by incorrect use, poor maintenance or if persons not authorized by Saramonic International have carried out alterations or repairs.
 - (c) Damages caused by poor transportation after you purchased this product.
 - (d) Force majeure such as fire, flood, lighting stroke, earthquake.
 - (e) Customers who can not show valid invoice.

(5) Wherever you purchased our products, you will be served very well at local retailer.

(6) Saramonic International reserves all the rights for the ultimate interpretation.

4 Compatibility

Professional XLR microphones, wireless systems, other audio devices such as mixing boards.
Any DSLR cameras with video making function.

5 Packing List

One SR-AX104 main unit

One signal transmission line

One 3.5mm to 2.5mm output cable

AV cable

User manual