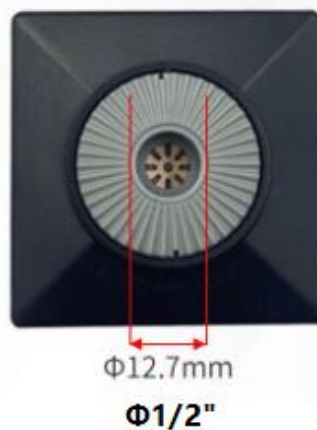
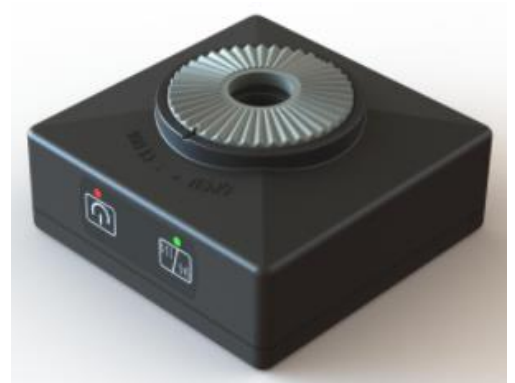
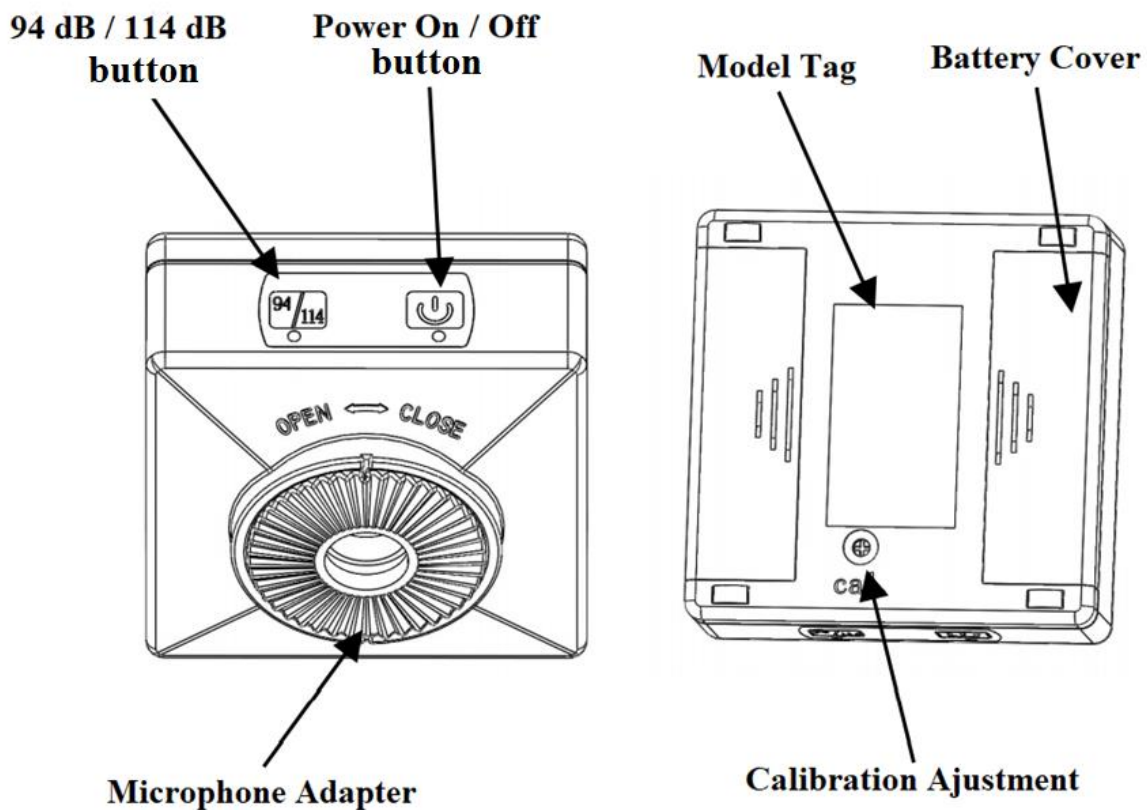




SPL-CAL-6021A sound level calibrator is an IEC 60942: 2017 compliant, Class 1, portable, battery powered sound source suitable for calibration of 1", 1/2" and 1/4" measuring microphones. It features a very stable output sound pressure level through a sound pressure negative feedback control.

Model	SPL-CAL-6021A
Class	1
Compliance	IEC 60942: 2017
Output Frequency	1000 Hz $\pm$ 1 Hz
Output Sound Pressure Level	94 dB and 114 dB
Sound Pressure Level Accuracy	$\pm$ 0.25 dB
THD	$\leq$ 2.5%
Dimension	72 $\times$ 72 $\times$ 42 (mm)
Working Voltage	2.2 V ~ 3.4 V
Battery	2 $\times$ 1.5V AA Alkaline LR6 (No. 5) Last 7 hours continuously
Stabilization Time	<15s
Working Temperature	-10 $^{\circ}$ C ~ +50 $^{\circ}$ C
Working Relative Humidity	25% ~ 90%
Working Atmospheric Pressure	65 kPa ~ 108 kPa
Supported Mic Diameter	1", 1/2", 1/4"
Calibration Certificate	Included





## Equivalent Free Field Sound Pressure Level

The sound pressure level generated inside the calibrator is 94.0 dB or 114.0 dB @1kHz. A small correction should be made to the standard sound pressure level values when calibrating free field microphones. For 1" and 0.5" free-field microphones, the typical correction values are -0.4 dB and -0.2 dB respectively. In other words, sound measuring devices with 1" or 0.5" free-field microphones should display 93.6 dB or 93.8 dB when the sound level calibrator is switched on at 94.0 dB.

*Note that different free-field microphones may have different correction values. The actual correction values should be advised by the microphone manufacturers.*

## Operation

Press the power button for 1 second and then release to start sound generation. The red LED will start blinking. Keep the microphone still in place. The generated sound level is 94 dB after the red blinking stops.

After that, if the "94/114" button is pressed for 1 second and is then released, the green LED in that button will be on. The red LED will start blinking again. The generated sound level will become 114 dB after the red blinking stops.

Press the power button again to stop sound generation.

If the microphone is pulled out from the sound level calibrator, then the sound level calibrator will be powered off automatically after 5 seconds.



## **Battery**

If the sound level calibrator can work only for a few seconds, or the green LED is on for 2 seconds and then the sound level calibrator is powered off automatically, then the battery is flat and needs to be replaced. Two LR6 batteries are required.

## **Microphones with Different Diameters**

The standard microphone adapter is for 0.5" microphones. For 1" microphone calibration, remove it by rotating it along the "Open" direction. For ¼ " microphones, an additional adapter (SPL-APT-8532) is required.

## **Recalibration**

The sound level calibrator is calibrated in factory and thus calibration is not required. Recalibration is possible through the "CAL" using a screw driver.