

# SONIC TESTER SC10



User Manual



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# INTRODUCTION

The **NL Sonic Tester** is an accuracy checker that is used together with the **NL Camera**. The device produces a sound signal that is perceived and evaluated by the camera. The perceived dB-level of the signal can be used to ensure the correct level of the NL Camera's readings and the condition of the microphone array.

## User Safety



The NL Sonic Tester is capable of delivering sound pressure levels that may cause permanent hearing damage. The user of the device should always use hearing protection when the device is operated at a distance less than 0.5 m to avoid permanent hearing damage.

**!! NOTE: Sound pressure level may exceed 80 dB (A) at a distance less than 0.5 m.**

- Follow all instructions. Please note that by using the device you agree to the terms of use. Misuse might cause hearing damage, device damage or false readings.
- Do not try to repair the device or open the enclosure of the NL Sonic Tester. Do not use a damaged device or damaged power cords.
- Use only the power supply provided by the NL Camera with the NL Sonic Tester.
- Protect the device and accessories from dirt, dust, impacts, and liquids.
- Do not leave the device plugged in.

# Specifications

## DEVICE

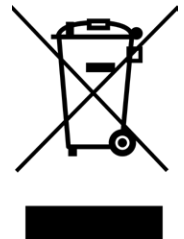
<b>Manufacturer:</b>	Noiseless Acoustics Ltd.
<b>Name:</b>	NL Sonic Tester SC10
<b>Input Voltage Range:</b>	12 – 18 V
<b>Maximum Input Current:</b>	2 A
<b>Frequency Range:</b>	2 kHz – 40 kHz
<b>Serial Number:</b>	See the sticker on the back side of the device ( <b>SC10XXXX</b> ).

The NL Sonic Tester should be sent for calibration once every two years.  
For the instructions, please contact [support@nlacoustics.com](mailto:support@nlacoustics.com).

## DISPOSAL OF ELECTRONIC WASTE

Electrical and electronic equipment (EEE) contains materials, components and substances that may be hazardous and present a risk to human health and the environment when waste electrical and electronic equipment (WEEE) is not handled correctly.

Equipment marked with the crossed-out wheeled bin (above) is electrical and electronic equipment. The crossed-out wheeled bin symbol indicates that waste electrical and electronic equipment should not be discarded together with unseparated household waste but must be collected separately.



For this purpose, all local authorities have established collection schemes under which residents can dispose of waste electrical and electronic equipment at a recycling centre or other collection points, or WEEE will be collected directly from households. More detailed information is available from the technical administration of the relevant local authority.

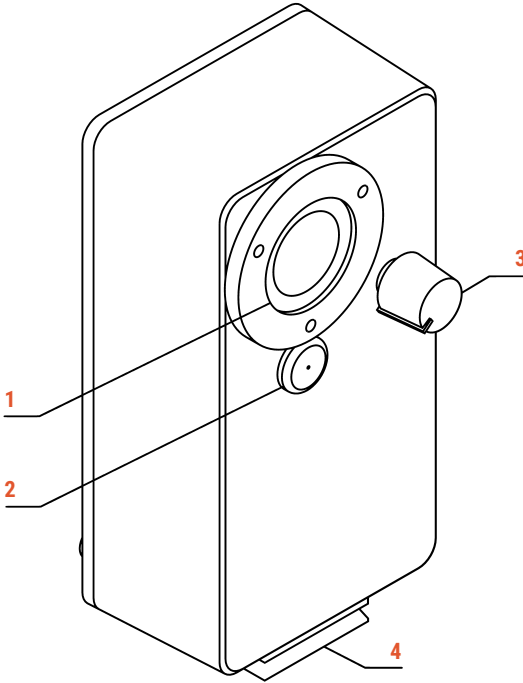
## MARKINGS

An ID-label consisting of the identification data, CE and WEEE markings are on the back side of the NL Sonic Tester.

## MECHANICAL & ENVIRONMENTAL

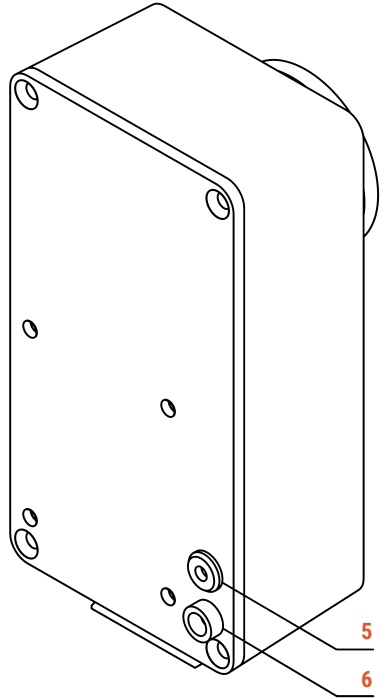
<b>Size:</b>	150 x 80 x 50 mm
<b>Weight:</b>	285 g
<b>Protection class:</b>	IP40

# Device Parts



## FRONT SIDE

- 1 Loudspeaker
- 2 IR LED
- 3 Mode switch
- 4 QR plate



## BACK SIDE

- 5 Power LED
- 6 Power socket

# Getting Started

Accessories needed to get started:

- The **NL Sonic Tester SC10**
- The **NL Camera battery charger** (power supply)
- A **tripod** with quick release mount

## TRIPOD

Any tripod that fits the quick release mount (4) can be used. If the tripod provided with the device is used, see the tripod instruction manual.

## STARTUP

Before startup, make sure the device's switch (3) is in the **off** position. The leftmost position is the off position (see the sticker on the front side of the device). Connect the mains cable of the power supply into a wall socket before connecting the DC barrel connector to the power socket (6) of the device. After connecting the DC barrel connector, the device will take about 10 seconds to start.

**!! NOTE: If the mains cable is plugged into a wall socket AFTER the DC barrel connector is plugged in, the device will not start up.**

## SHUTDOWN

Turn the switch (3) to the off position. Remove the DC barrel connector from the power socket (6) and the device will shut down. Remove the mains cable from the wall socket.

## OPERATING MODES

The switch (3) is used to select the operating mode. Operating modes are selected by turning the switch (3) clockwise from the off position. All available operating modes are listed on the front side of the device.

# Using the Device for Checking the NL Camera Accuracy

## NL SONIC TESTER AND NL CAMERA ACCURACY CHECK PROCEDURE

1. Power on the NL Camera.
2. Click on the cogwheel icon on the bottom left corner of the screen.



3. Select *Advanced settings*

**Advanced settings**

4. Tap on the *More...* button until you can see a *Calibration Mode* selection available. You may need to tap on it once, twice or more, depending on your specific camera configuration. If you accidentally miss the page containing the selection, keep tapping until it appears again.

**More...**

5. Power on the NL Sonic Tester
6. Mount the device on a tripod. Place the device at least 1.0 meter from any surface. If you are using the tripod provided with the NL Sonic Tester (or similar low tripod), place it on a table.
7. Select the *CALIBRATION* mode on the NL Sonic Tester by turning the switch according to the label on the front side of the device.
8. Tap on the *Activate* button on the NL Camera screen to activate the calibration mode.

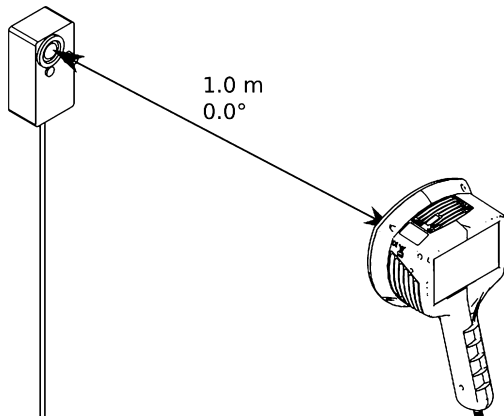
**Calibration mode:**

**Activate**



## CHECKING THE ACCURACY

1. Place the camera at a distance of 1.0 m (distance from the front side of the NL Sonic Tester to the front side of the NL Camera). Make sure that the NL Camera is aligned parallel to the NL Sonic Tester.



2. Align the NL Camera in such a way that the calibrator is exactly within the outline in the middle of the screen and the IR LED (2) is within the circle and it is illuminated at its brightest. This means that the calibrator and camera are aligned properly.

Place the calibrator at a distance of 1.0 m (3.3 ft) from the camera, aligning it with the square in the middle of the display. The direction is correct when the IR LED shines bright inside the circle. Check that the level shown is within the green range.



3. Observe the *dB indicator bar* on the right side of the screen. The NL Camera accuracy is correct if the reading is within the green range. If the reading is in the red range, first make sure that the NL Camera and NL Sonic Tester are set up correctly and that the IR LED is at its brightest. If the device still displays incorrect (red) readings, please contact your distributor.





