

2026

NEXT-LCD

Second Edition

Universal measurement device with a display and ports for connecting external sensors



Table of contents

Table of contents	2
General Information	4
Description.....	4
Ergonomics	4
Package Content	4
Technical Specifications	5
Getting Started with the Device.....	6
Safety Instructions	6
Functional Elements of the Device	7
Device Power Supply.....	8
Performing Measurements.....	9
Initial Startup	9
Measurement Mode	9
SPL Mode	12
AVG Mode	14
RTA Mode	16
SQL Mode.....	18
PWR Mode	20
SPL+PWR Mode	22
AVG+PWR Mode.....	25
Setup mode	28
Main Settings	29
SPL Mode Settings	31
AVG Mode Settings.....	32
SQL Mode Settings.....	34
PWR Mode Settings.....	35
Device Information	37
Connecting the Device to a PC.....	38
Introduction.....	38
Connecting to a PC via USB.....	38
Firmware Update Procedure	40

Audio Test Tracks Description.....42

General Information

Description

Next-LCD SE is a fully universal and autonomous measurement device. All measured parameters are displayed directly on the screen as numeric values and graphs. The high-resolution color display provides detailed visualization of data and signal forms. The closed software environment ensures measurement accuracy. The device features two Lab-Bus digital bus ports that allow connection of pressure sensors, microphones, or power sensors. This makes the Next-LCD SE a fully universal and scalable instrument. For example, after purchasing a sound-pressure measurement kit, the user can later expand it with an RTA microphone for frequency-response measurements or a power sensor for current and voltage measurements. The device supports simultaneous operation with two signal sources. Next-LCD SE can be connected to a PC via USB-C for control or data transfer, for example when measurement values need to be displayed on a large screen.

Ergonomics

The Next-LCD SE is built as a single compact module featuring a high-resolution backlit color graphic display, four control buttons, a USB-C port for PC connection, two Lab-Bus ports for sensor connection, a power switch, and a tri-color LED for device-status indication. The device can be powered via USB-C or by four AA batteries. The housing is made of impact-resistant plastic.

Package Content

- NEXT-LCD SE device
- Spl-Lab Measuring Center software for Windows
- Audio CD with tuning tracks (sine waves, sweep tones, noise)
- USB cable for power or PC connection

Technical Specifications

General	
Processor	ARM 32bit
Display	TFT 320*240
Controls	4 buttons
Indicators	Display, LED indicator
Display modes	Numeric panel, spectrum, oscilloscope
Number of channels	2
Interfaces	
PC connection and power port	USB-C
Sensor connectors	Lub-Bus*2
Power suppl	4× AA batteries
Physical Characteristics	
Weight without batteries	225 G
Dimensions	170*110*35 mm

Getting Started with the Device

Safety Instructions

- ! The manufacturer is not responsible for any damage caused directly or indirectly during operation of the device.
- ! Before using the device, carefully inspect the housing for chips or cracks, as any loss of airtightness may lead to malfunction.
- ! Connection cables must not have damaged insulation to avoid accidental electric shock.
- ! Avoid exceeding the maximum allowable measurement limits.
- ! Do not use or store the device in areas with high humidity, high temperature, or strong magnetic fields.
- ! During maintenance, do not use synthetic detergents or solvents; use moist cleaning wipes instead.
- ! Before powering on the device and the system as a whole, make sure all cables are connected correctly.

Functional Elements of the Device



Front and Side Panel Elements:

- **Sensor 1 and Sensor 2 ports (on the side panel)** — two Lab-Bus ports for connecting external sensors.
- **USB port** (on the side panel), used for:
 - Powering the device from a USB source
 - Connecting to a PC for data transfer
 - Updating the internal firmware
- **High-resolution color display** — shows measured data, graphs, and settings menus.
- **Status LED** — indicates the current operating mode and device status.
- **Power switch** — turns the device on and off.

- **Mode button**
 - Measurement mode: switches display type — numeric panel, oscilloscope, or spectrum
 - Settings mode: switches menu items
 - Long press: toggles between measurement mode and settings mode
- **Option button**
 - Measurement mode: adjusts spectrum and oscilloscope detail level
 - Settings mode: returns to the previous parameter value
 - Long press: zero calibration in PWR mode for DC current and voltage.
- **Hold button**
 - Measurement mode: enables/disables value hold
 - Settings mode: moves to the next parameter value.
- **Start button**
 - Measurement mode: starts or stops measurement
 - Settings mode: switches between menu pages
- **Battery compartment (on the rear panel)** — holds four AA batteries.

Device Power Supply

The device includes a compartment for four AA batteries or rechargeable cells. Operating time depends on usage intensity and the type of connected sensors. The device can also be powered through the USB port using a charger or a PC. Use the LED indicator to assess device status according to the table:

	Green	Orange	Red
Steady Light	Device is powered by batteries; battery level is normal.	Device is powered by an external USB source.	Device is off but connected to an external USB power source.
Blinking	Device is powered by batteries; battery level is low — replace batteries!		

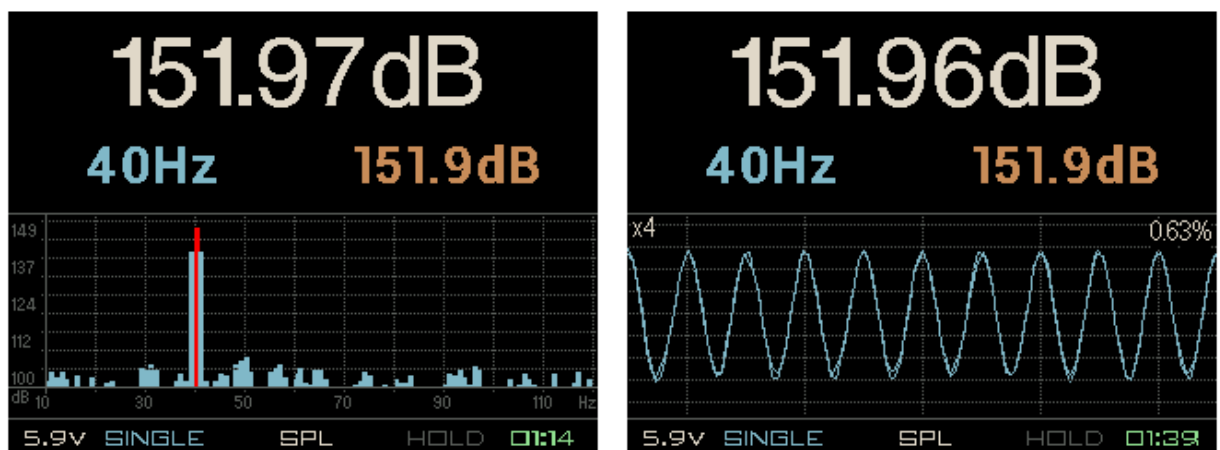
Performing Measurements

Initial Startup



After moving the **Power** switch to the upper position, the device performs an initial boot sequence. During startup, the status LED will blink. The screen will display the logo and the firmware version. Once the boot process is complete, the device switches to **Measurement Mode**.

Measurement Mode



In Measurement Mode, the screen is divided into **three independent sections**. Two sections correspond to measurement data for the selected mode. The set of displayed data depends on:

- the selected measurement mode,
- the number of active channels,
- the chosen display type.

A status bar is located at the bottom of the screen and shows the current state of the device.

Status Bar



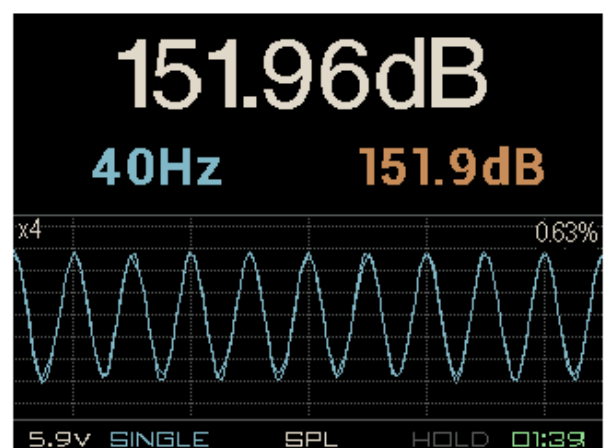
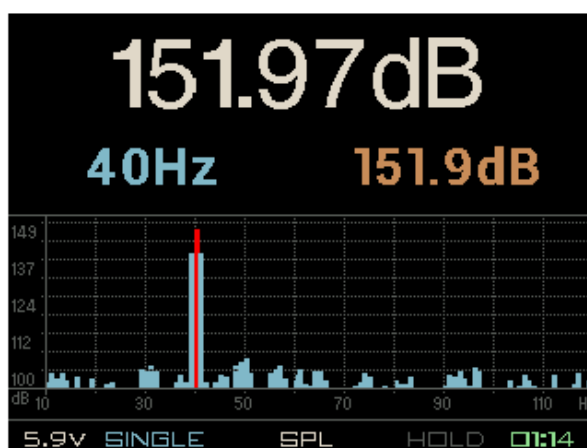
The status bar displays the following parameters:

- **Supply voltage** in volts — the value decreases as the batteries discharge
- Number and type of channels
 - **Single** — single-channel mode
 - **Dual** — dual-channel mode
 - **Hybrid** — hybrid mode combining algorithms of different measurement types
- **Name of the current mode**
- **Hold mode indicator** — including color indication for hold type in PWR mode
- **Elapsed time** since the measurement started

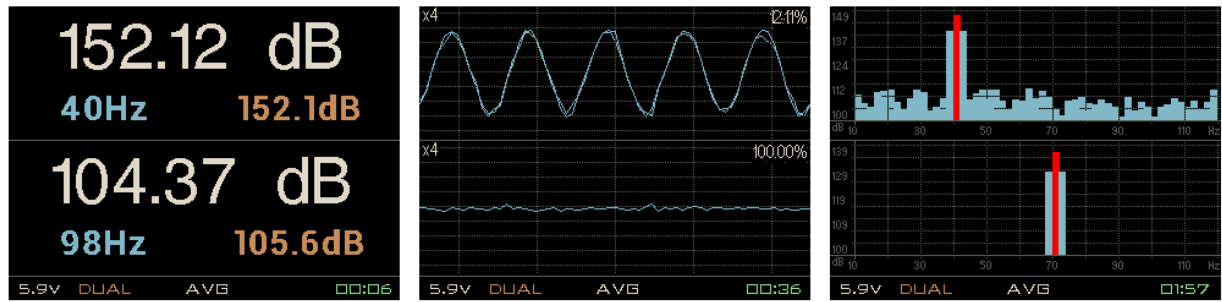
Display Mode

Depending on the selected measurement mode, you can switch the display type using the Mode button. Available display types include:

- numeric panel,
- oscilloscope,
- spectrum,
- and other data views.



In single-channel mode, the **upper section** always displays the numeric panel. The display mode cycles only in the **lower section**. The status bar shows the operating mode: **Single**.



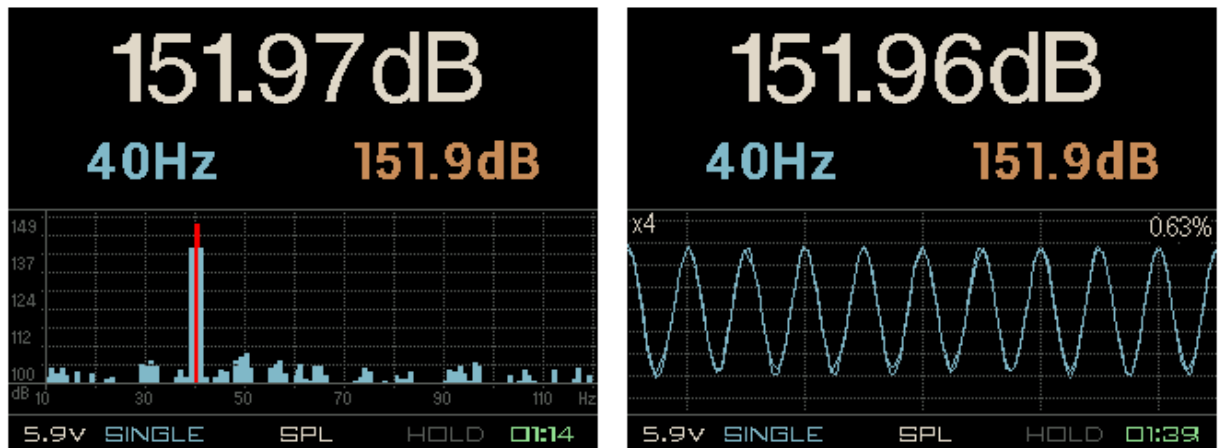
In dual-channel or hybrid modes, the displayed data cycles in **both sections** of the screen:

- The **upper section** corresponds to Channel 1
- The **lower section** corresponds to Channel 2

The status bar shows the operating mode: **Dual** or **Hybrid**.

⚠ **Dual-channel measurement is activated automatically** when identical sensor types are selected for both ports in the device settings.

SPL Mode



SPL mode is used to measure the **peak sound-pressure level** of signals in the **10 to 120 Hz** frequency range with **1 Hz resolution**. In this mode, the device displays the **waveform**, **spectrum**, and **level** of the measured signal. Single-channel or dual-channel measurement is supported.

The **Hold** button is used to enable or disable peak-value hold, with corresponding indication in the status bar.

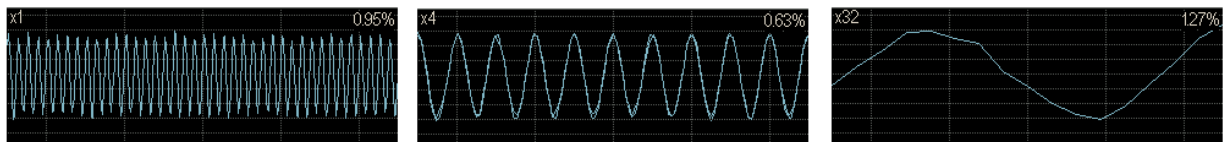
- On the main numeric panel, the **maximum amplitude** reached during the measurement is held.
- In the frequency field, the device holds the **frequency at which the maximum amplitude occurred**.
- On the spectrum, only the **peak component** at the corresponding frequency is highlighted; amplitude values for each frequency are updated only if they exceed previously stored values.
- Disabling Hold mode automatically clears all accumulated peak data.
- **Waveform values are not held.**

Numeric Panel



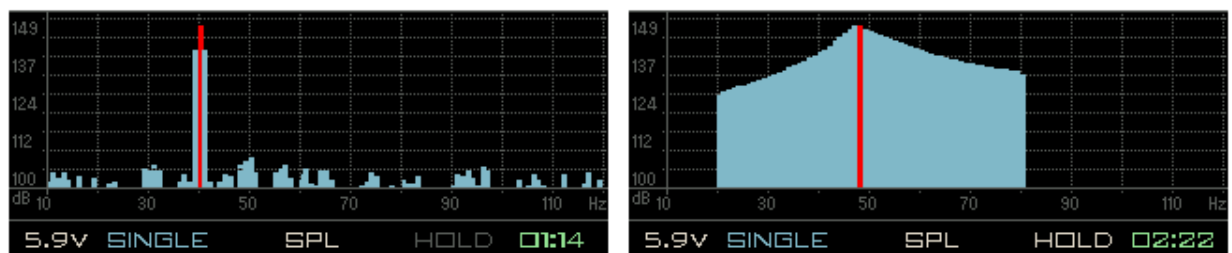
The main value displayed on the numeric panel is the **current or maximum sound-pressure level**. Below it, the device shows the **frequency of the peak spectral component** for the current or maximum SPL. The **current SPL** is always shown in the lower-right corner.

Signal Waveform



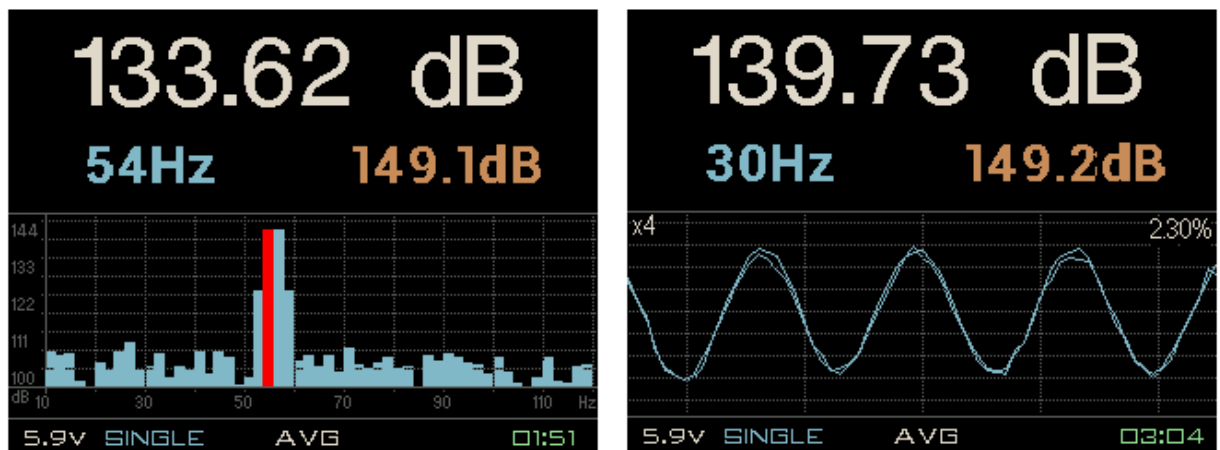
The waveform amplitude is automatically scaled. The time scale can be adjusted using the **Option** button, up to $\times 32$. The current time scale is shown in the upper-left corner. The **harmonic distortion coefficient** is displayed in the upper-right corner.

Spectrum



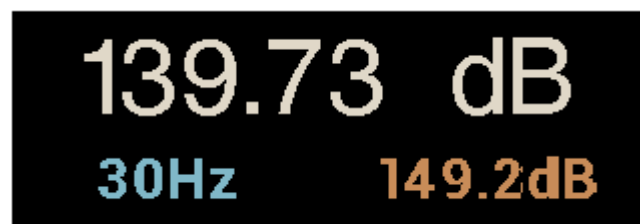
The spectrum is automatically amplitude-scaled. Depending on whether Hold mode is enabled, the device displays either the **current spectrum** or the **held spectrum**. The **peak spectral component** is highlighted in **red**.

AVG Mode



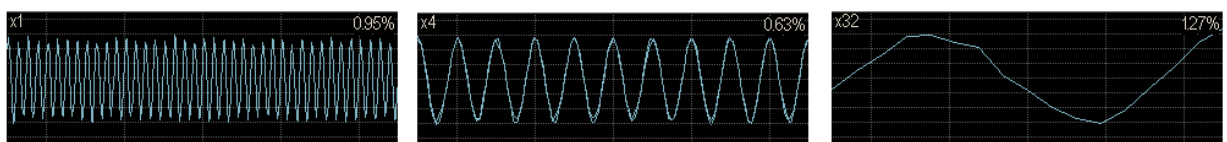
AVG mode is used to measure the **time-averaged peak sound-pressure level** of signals in the **10 to 120 Hz** frequency range with **2 Hz resolution**. In this mode, the device displays the **waveform**, **spectrum**, and **level** of the measured signal. Single-channel or dual-channel measurement is supported.

Numeric Panel



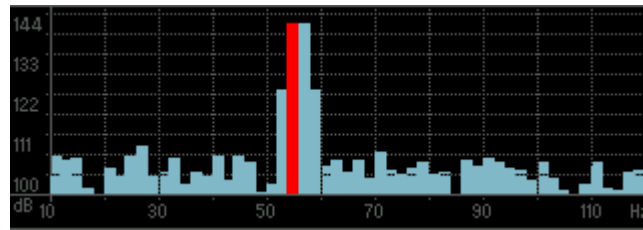
The main value displayed on the numeric panel is the **average sound-pressure level**. Below it, the device shows the **frequency of the peak spectral component** for the current SPL. The **current SPL** is shown in the lower-right corner.

Signal Waveform



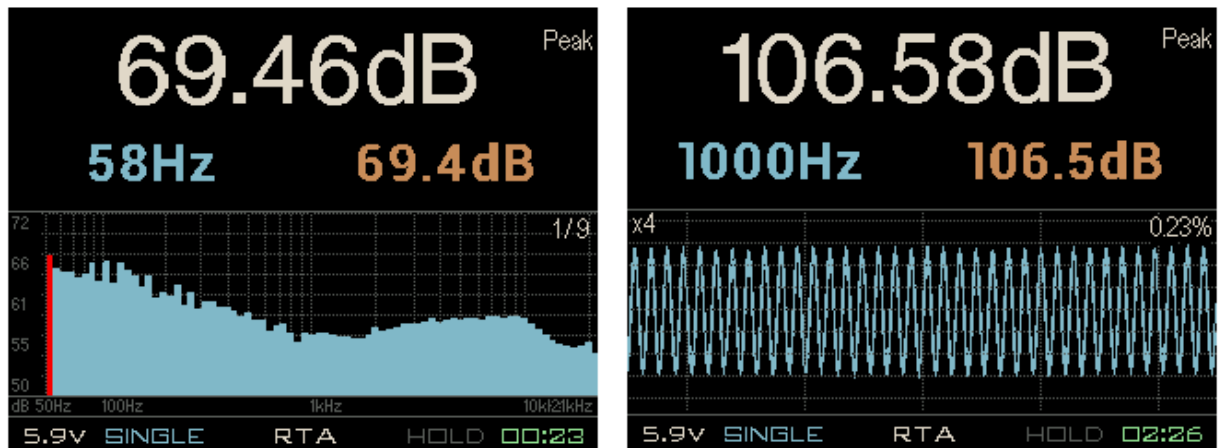
The waveform amplitude is automatically scaled. The time scale can be adjusted using the **Option** button, up to **×32**. The current time scale is shown in the upper-left corner. The **harmonic distortion coefficient** is displayed in the upper-right corner.

Spectrum



The spectrum is automatically amplitude-scaled. The spectrum of the **current signal** is displayed. The **peak spectral component** is highlighted in **red**.

RTA Mode



RTA mode is used to measure the **amplitude** and **distortion** of an audio signal in the **10 to 20,000 Hz** frequency range, with resolution up to **1/12 octave**. In this mode, the device displays the **waveform**, **spectrum**, and **level** of the measured signal. Single-channel or dual-channel measurement is supported.

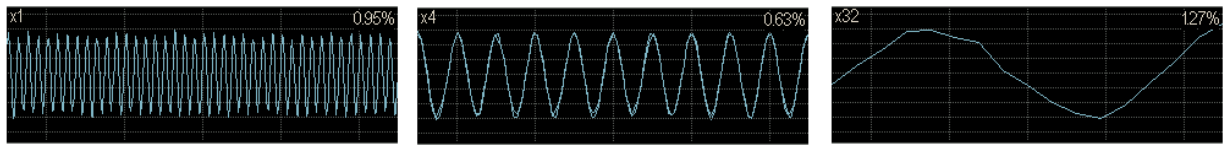
Numeric Panel



The type of the main value displayed on the numeric panel is defined in the mode settings. The indicator showing the selected value type is located in the **upper-right corner**.

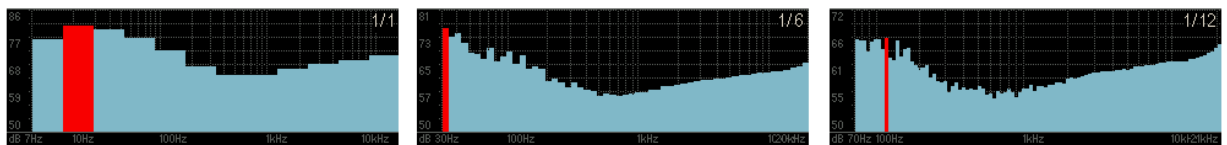
Below it, the device displays the **frequency and amplitude of the peak component** of the current, held, or averaged spectrum.

Signal Waveform



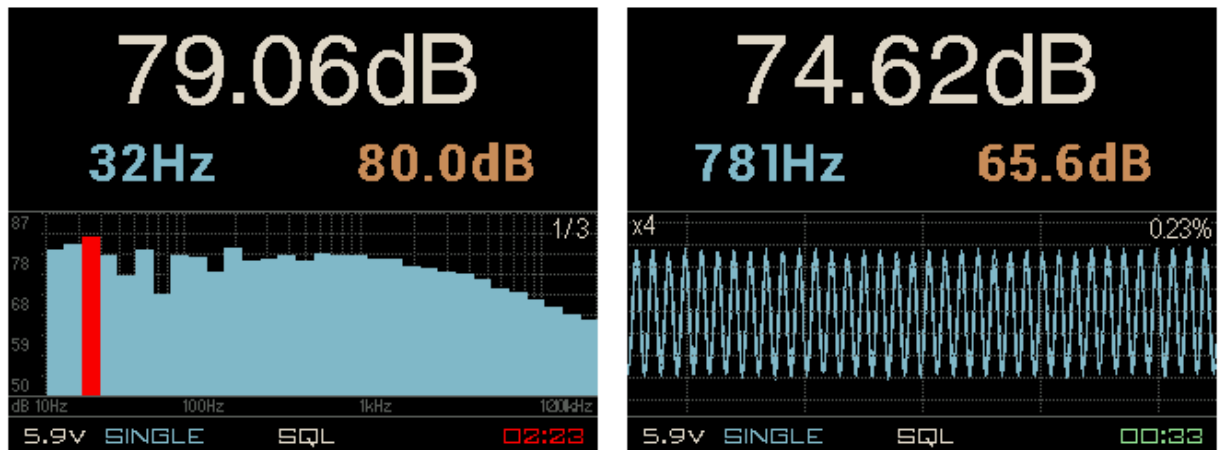
The waveform amplitude is automatically scaled. The time scale can be adjusted using the **Option** button, up to $\times 32$. The current time scale is shown in the **upper-left corner**. The **harmonic distortion coefficient** is displayed in the **upper-right corner**.

Spectrum



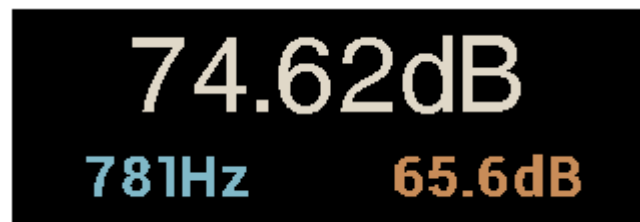
The spectrum is automatically amplitude-scaled. The **peak spectral component** is highlighted in **red**. The octave resolution can be changed using the **Option** button, up to **1/12 octave**. The current octave type is displayed in the **upper-right corner**. When **Hold mode** is enabled, the device will retain either the **maximum spectrum** or the **averaged spectrum**, depending on the settings.

SQL Mode



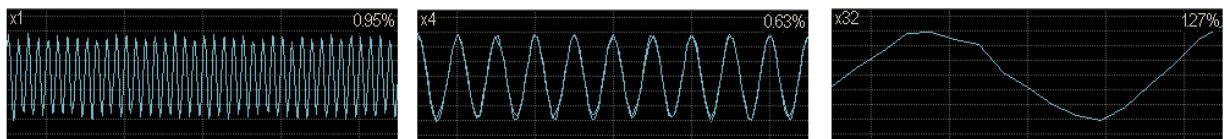
SQL mode is used to measure the **time-weighted sound-pressure level** of signals in the **10 to 20,000 Hz** frequency range, with resolution up to **1/12 octave**. In this mode, the device displays the **waveform**, **spectrum**, and **time-weighted amplitude** of the measured signal. Single-channel or dual-channel measurement is supported.

Numeric Panel



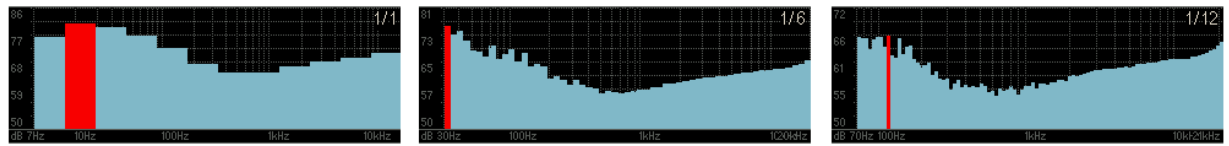
The main value displayed on the numeric panel is the **time-weighted sound-pressure level**. Below it, the device shows the **frequency of the peak spectral component** and the **average SPL** of the current spectrum.

Signal Waveform



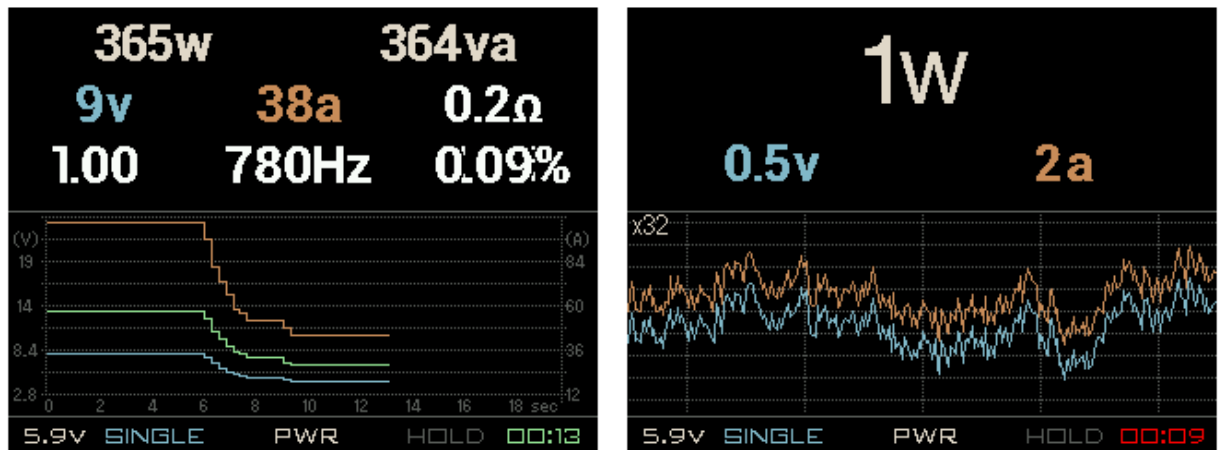
The waveform amplitude is automatically scaled. The time scale can be adjusted using the **Option** button, up to $\times 32$. The current time scale is shown in the **upper-left corner**. The **harmonic distortion coefficient** is displayed in the **upper-right corner**.

Spectrum



The spectrum is automatically amplitude-scaled. The **peak spectral component** is highlighted in **red**. The octave resolution can be changed using the **Option** button, up to **1/12 octave**. The current octave type is displayed in the **upper-right corner**.

PWR Mode



PWR mode is used to measure the **voltage-current characteristics** of AC and DC signals in the **0 to 15,000 Hz** frequency range. In this mode, the device displays **voltage, current, power, signal waveforms**, and **time-based graphs** of measured values. Single-channel or dual-channel measurement is supported.

DC Panel



In DC measurement mode, the main value displayed on the numeric panel is **power**. Below it, the device shows **voltage** and **current**.

When Hold mode is enabled, the values on the panel are retained according to the algorithm defined in the settings.

In **dual-channel DC+AC mode**, the panel additionally displays **efficiency**.

AC Panel

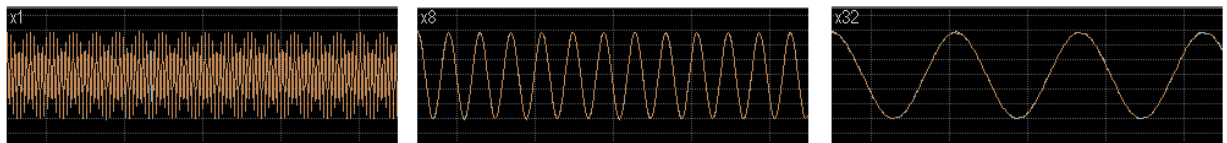


In AC measurement mode, the main values displayed on the numeric panel are **active power** and **apparent power**. Below them, the device shows **voltage**, **current**, and **impedance**.

The bottom line displays: **power factor**, **frequency**, **harmonic distortion coefficient** of the measured signal.

When Hold mode is enabled, the values on the panel are retained according to the algorithm defined in the settings.

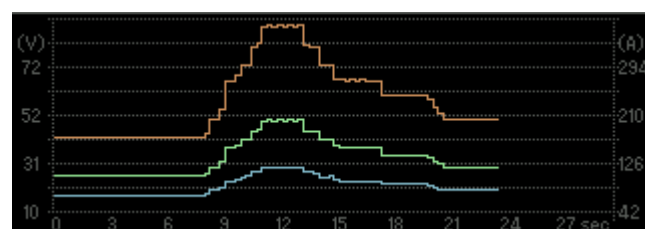
Signal Waveform



The waveform amplitude is automatically scaled **independently** for voltage and current. The colors of the oscilloscope traces correspond to the colors of the values shown on the numeric panel.

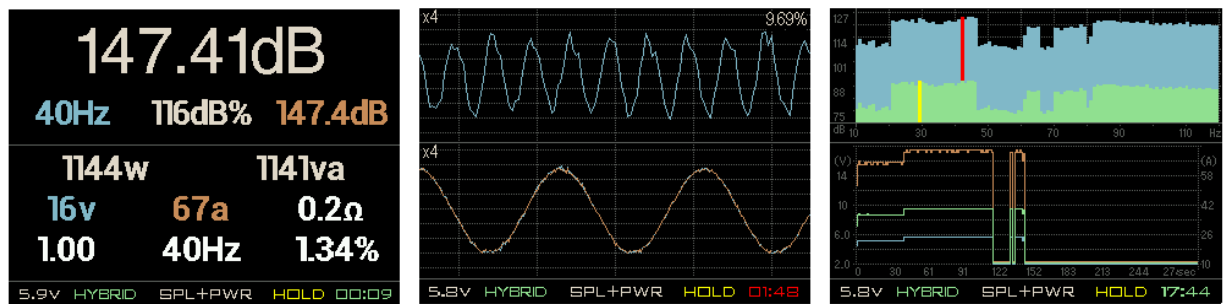
The time scale can be adjusted using the **Option** button, up to **x32**. The current time scale is shown in the **upper-left corner**.

Time-Based Graph



The graph shows the **time-dependent changes** of: power, current, voltage. The colors correspond to the colors of the values on the numeric panel. The graph is automatically scaled both in amplitude and time.

SPL+PWR Mode

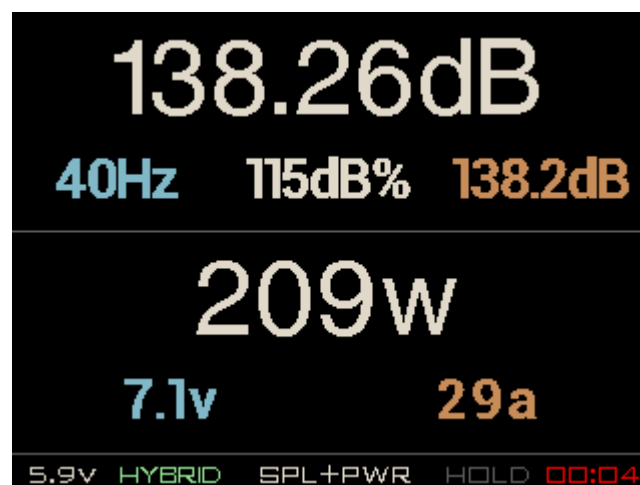


SPL+PWR is a **hybrid mode** that combines:

- **peak sound-pressure measurement** of signals in the **10 to 120 Hz** range with **1 Hz resolution**, and
- **voltage-current measurement** of AC/DC signals in the **0 to 15,000 Hz** range.

In this mode, the device displays **sound pressure**, **voltage-current characteristics**, and also calculates **acoustic efficiency**.

DC Panel

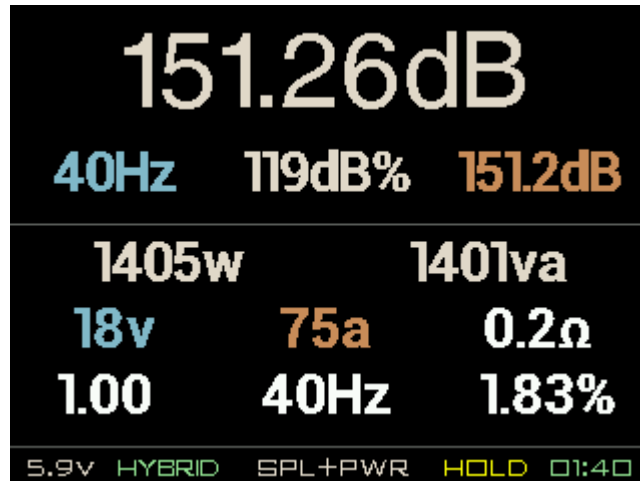


The numeric panel is divided into **two sections**:

- one section displays **sound-pressure measurement data**,
- the other displays **DC voltage-current characteristics**.

The order of these sections depends on the sensor configuration on the device ports. Additionally, the **acoustic efficiency** value is shown in the **center bottom** of the SPL panel. When Hold mode is enabled, values on the panel are retained according to the algorithm defined in the settings.

AC Panel

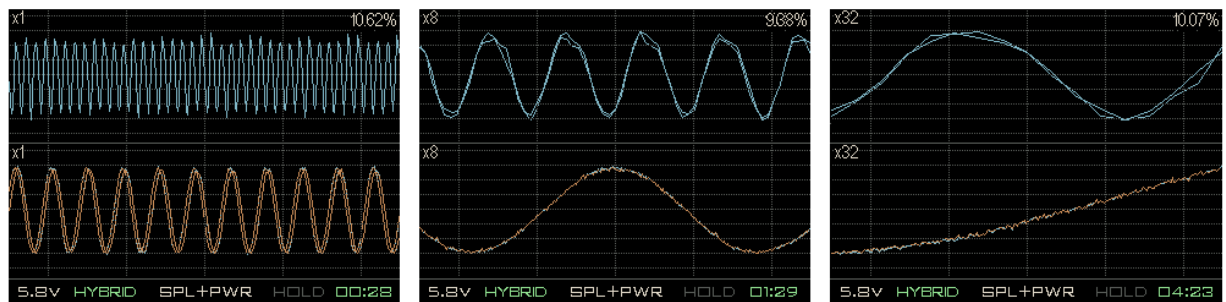


The numeric panel is divided into **two sections**:

- one section displays **sound-pressure measurement data**,
- the other displays **AC voltage-current characteristics**.

The order of the sections depends on the sensor configuration on the device ports. The **acoustic efficiency** value is also shown in the **center bottom** of the SPL panel. When Hold mode is enabled, values on the panel are retained according to the algorithm defined in the settings.

Signal Waveform



The screen is divided into **two waveform areas**:

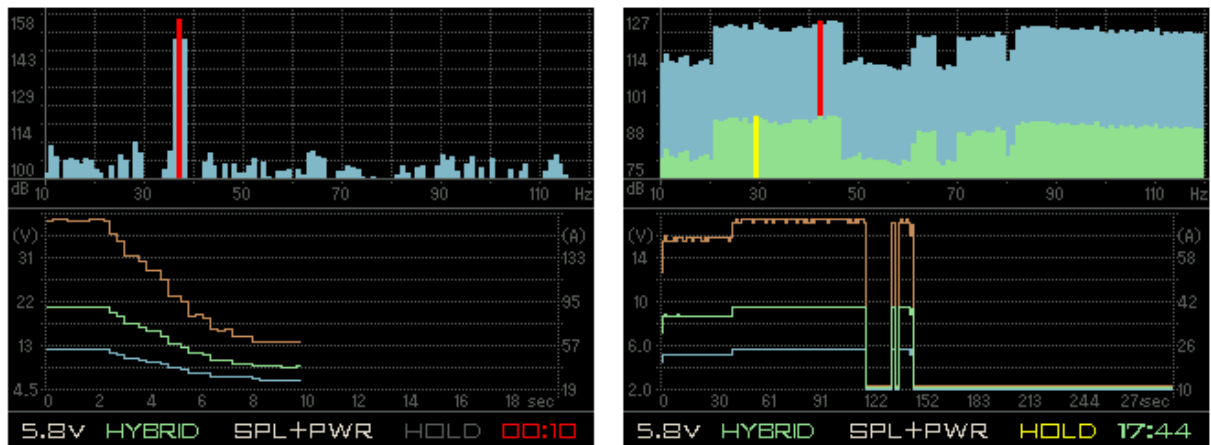
- one shows the **sound-pressure waveform**,
- the other shows the **current and voltage waveforms**.

The order depends on the sensor configuration. Amplitude scaling is performed **independently** for current, voltage, and sound pressure. The colors of the oscilloscope traces correspond to the colors of the values on the numeric panel.

The time scale can be adjusted using the **Option** button, up to $\times 32$. The current time scale is shown in the **upper-left corner** of each waveform.

The **harmonic distortion coefficient** for the sound-pressure signal is displayed in the **upper-right corner**.

Time-Based Values and Spectrum



The screen is divided into **two sections**:

- one displays the **sound-pressure spectrum**,
- the other displays the **time-based graph** of power, current, and voltage.

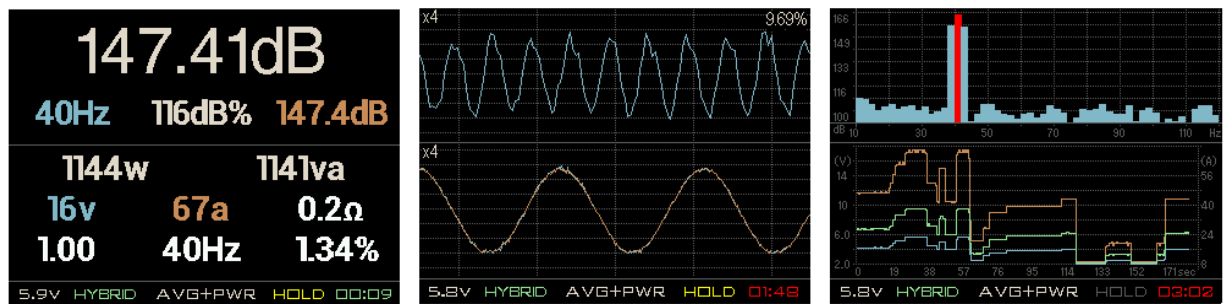
The order depends on the sensor configuration.

The time-based graph shows how **power**, **current**, and **voltage** change over time. Colors correspond to the colors of the values on the numeric panel. The graph is automatically scaled both in amplitude and time.

When Hold mode is enabled, the spectrum additionally displays:

- **acoustic efficiency for each frequency** in **green**,
- **peak efficiency** highlighted in **yellow**.

AVG+PWR Mode

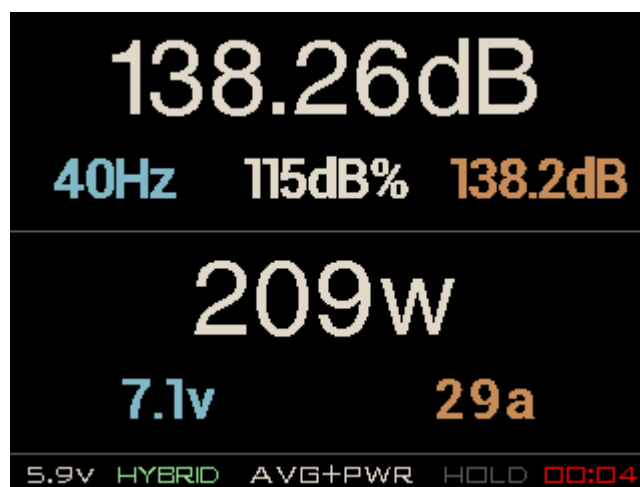


AVG+PWR is a **hybrid mode** that combines:

- **time-averaged sound-pressure measurement** of signals in the **10 to 120 Hz** range with **2 Hz resolution**, and
- **voltage-current measurement** of AC/DC signals in the **0 to 15,000 Hz** range.

In this mode, the device displays **sound pressure**, **voltage-current characteristics**, and also calculates **acoustic efficiency**.

DC Panel

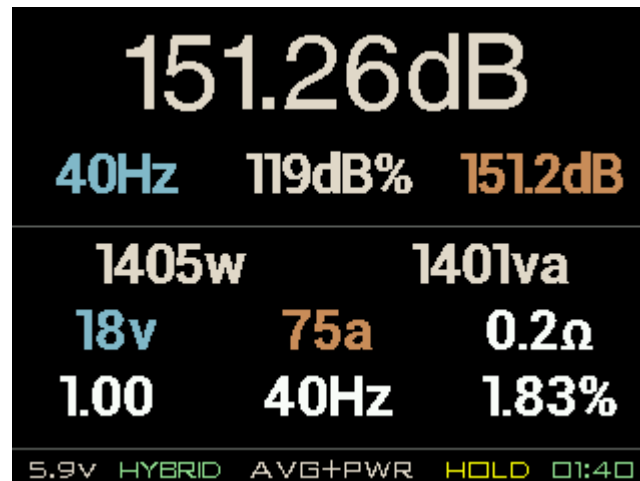


The numeric panel is divided into **two sections**:

- one section displays **sound-pressure measurement data**,
- the other displays **DC voltage-current characteristics**.

The order of these sections depends on the sensor configuration on the device ports. The **acoustic efficiency** value is shown in the **center bottom** of the SPL panel. When Hold mode is enabled, values on the panel are retained according to the algorithm defined in the settings.

AC Panel



The numeric panel is divided into **two sections**:

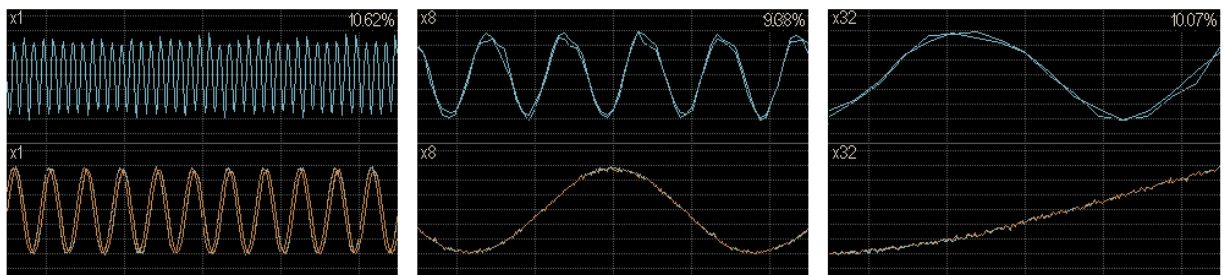
- one section displays **sound-pressure measurement data**,
- the other displays **AC voltage-current characteristics**.

The order of the sections depends on the sensor configuration on the device ports.

The **acoustic efficiency** value is also shown in the **center bottom** of the SPL panel.

When Hold mode is enabled, values on the panel are retained according to the algorithm defined in the settings.

Signal Waveform



The screen is divided into **two waveform areas**:

- one shows the **sound-pressure waveform**,
- the other shows the **current and voltage waveforms**.

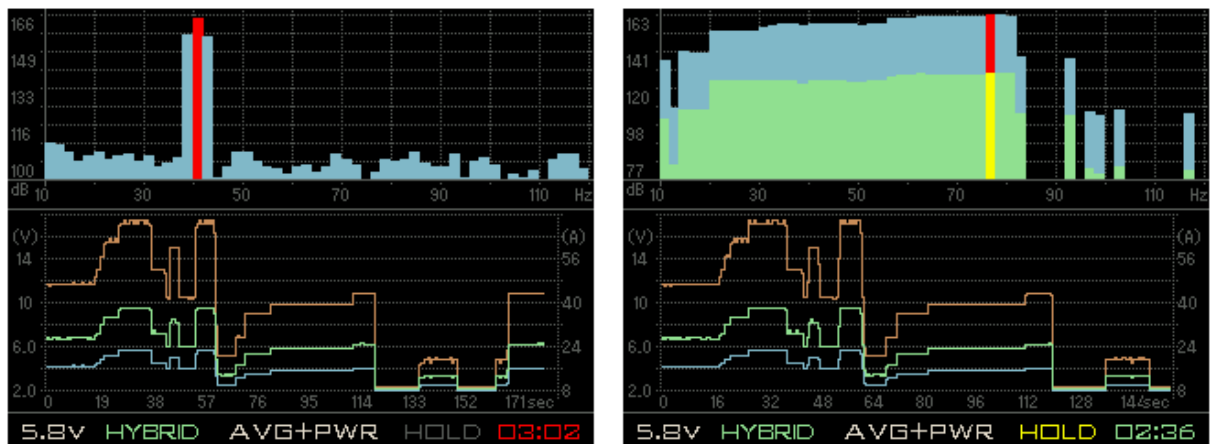
The order depends on the sensor configuration.

Amplitude scaling is performed **independently** for current, voltage, and sound pressure. The colors of the oscilloscope traces correspond to the colors of the values on the numeric panel.

The time scale can be adjusted using the **Option** button, up to $\times 32$. The current time scale is shown in the **upper-left corner** of each waveform.

The **harmonic distortion coefficient** for the sound-pressure signal is displayed in the **upper-right corner**.

Time-Based Values and Spectrum



The screen is divided into **two sections**:

- one displays the **sound-pressure spectrum**,
- the other displays the **time-based graph** of power, current, and voltage.

The order depends on the sensor configuration.

The time-based graph shows how **power**, **current**, and **voltage** change over time. Colors correspond to the colors of the values on the numeric panel. The graph is automatically scaled both in amplitude and time.

When Hold mode is enabled, the spectrum additionally displays:

- **acoustic efficiency for each frequency** in green,
- **peak efficiency** highlighted in yellow.

Setup mode

After powering on, the device automatically enters **Measurement Mode**. To switch between Measurement Mode and Setup Mode, **press and hold the Mode button**.

Main settings Mode: SPL Port 1 sensor type: SPL Port 2 sensor type: None Sleep time: None Calibration type: Classic RTA coefficient: None Count down: None Measure time: None	SPL settings Frequency bound: None Peak detection: No	AVG settings Frequency bound: None Peak detection: No AVG Period: 1 Min. amplitude: None Max. amplitude: None
RTA settings Main value: Peak amp. Octave: 1/6 Averaging: None	SQL settings Min. Frequency: None Max. Frequency: None Octave: 1/6 Min. amplitude: None Max. amplitude: None	PWR settings Measurement type: AC Power type: W Noise Reduction channel: None Min Power: None Max Power: None Hold type: MAX Reset calibration

Once Setup Mode is activated, one of the configuration pages containing a list of parameters will be displayed.

Menu Navigation

- **Mode** — select the next menu item
- **Option** — previous value (long press changes values rapidly)
- **Hold** — next value (long press changes values rapidly)
- **Start** — switch between configuration pages

⚠ The list of available setup pages depends on the selected measurement mode.

Main Settings

Main settings
Mode: SPL
Port 1 sensor type: SPL
Port 2 sensor type: None
Sleep time: None
Calibration type: Classic
RTA coefficient: None
Count down: None
Measure time: None

Mode — selection of the measurement mode

- **SPL Mode** — for measuring peak sound-pressure levels
- **AVG Mode** — for measuring time-averaged sound-pressure levels
- **RTA Mode** — for measuring averaged and peak frequency response across the entire audible range
- **PWR Mode** — for measuring voltage-current characteristics of audio-frequency amplifiers
- **SQL Mode** — for measuring loudness levels of front and rear acoustic systems
- **SPL+PWR Mode** — for simultaneous measurement of peak SPL and amplifier voltage-current characteristics
- **AVG+PWR Mode** — for simultaneous measurement of time-averaged SPL and amplifier voltage-current characteristics

⚠ The list of available measurement modes depends on the sensor types selected for the ports.

Port sensor type — selecting the sensor type for Port 1 and Port 2

- **None** — no sensor connected
- **SPL** — low-frequency sound-pressure sensor
- **RTA** — microphone or wide-band sound-pressure sensor
- **ACDC** — amplifier power sensor

Sleep time — setting the time before entering power-saving mode

This parameter defines the number of seconds after which the device automatically enters power-saving mode and turns off the display. To exit power-saving mode, press any button.

Calibration type — selecting the calibration profile for SPL sensors

This parameter sets the calibration type (**Classic** or **Magnum**) for low-frequency SPL sensors when operating in SPL, AVG, SPL+PWR, and AVG+PWR modes.

⚠ Measurement results will differ depending on the selected calibration type.

RTA coefficient — calibration coefficient for microphones and wide-band sensors

This calibration is used in RTA and SQL modes. Enter the coefficient printed on the microphone or wide-band sensor. Be sure to include the correct sign (positive or negative). If no coefficient is provided, set None.

⚠ Measurement results will differ depending on the coefficient value.

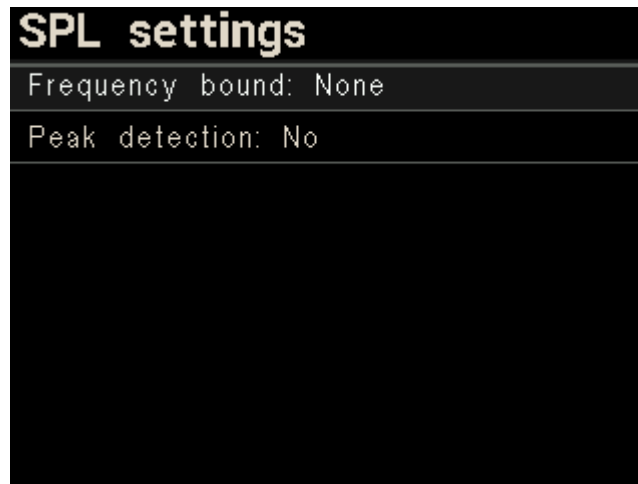
Count down — setting the countdown time before measurement start

This parameter defines the number of seconds for the pre-start countdown. If set to None, no countdown is performed and the measurement begins immediately after starting.

Measure time — setting the measurement duration

This parameter defines the measurement duration in seconds. Once the specified time is reached, the measurement stops automatically. If set to None, the measurement continues until manually stopped by the user.

SPL Mode Settings



This section defines the operating parameters for SPL mode.

Frequency bound — setting the maximum frequency of the measured signal

Signals with frequencies above the specified limit will not be processed.

Peak detection — detection of frequency limit exceedance

This parameter enables or disables detection of frequency exceedance.

If the measured signal exceeds the frequency limit:

- the panel will display the amplitude and frequency with a **red background**,
- further measurements will be blocked until the measurement is restarted.

AVG Mode Settings

AVG settings
Frequency bound: None
Peak detection: No
AVG Period: 1
Min. amplitude: None
Max. amplitude: None

This section defines the operating parameters for AVG mode.

Frequency bound — setting the maximum frequency of the measured signal

Signals with frequencies above the specified limit will not be processed.

Peak detection — detection of frequency limit exceedance

If the measured signal exceeds the frequency limit, the panel will display the amplitude and frequency with a **red background**. Further measurements will be blocked until the measurement is restarted.

AVG Period — averaging period

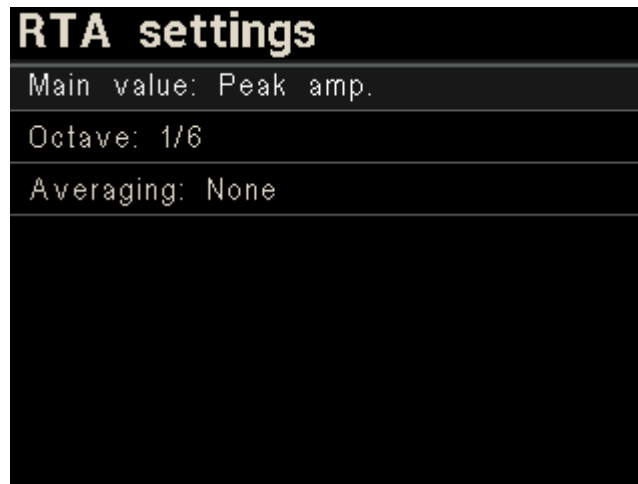
Sets the number of analyzed segments from which the maximum value is selected when calculating the final result. For example, a period of **four** means that the maximum value used for the average calculation will be selected from **four analyzed segments** of the signal with a total duration of **two seconds**.

Min. amplitude / Max. amplitude — allowable amplitude range

Defines the acceptable range of resulting amplitude values. If the resulting amplitude exceeds the specified range:

- the main panel will display the out-of-range amplitude highlighted in **red**,
- the current amplitude field will also be highlighted in **red** (without holding the value),
- further measurements will be blocked until the measurement is restarted.

RTA Mode Settings



This section defines the operating parameters for RTA mode.

Main value — selection of the main displayed parameter

Available types:

- **Peak amp.** — amplitude of the peak spectral component
- **THD** — total harmonic distortion
- **Average amp.** — averaged amplitude across all spectral components
- **Integral amp.** — integrally averaged amplitude across all spectral components

Octave — octave resolution

This parameter can also be changed using the **Option** button during measurement.

Averaging — temporal smoothing level

Defines the number of instantaneous measurements used to produce a time-averaged spectrum.
Useful for stabilizing results when measuring noise signals.

SQL Mode Settings

SQL settings
Min. Frequency: None
Max. Frequency: None
Octave: 1/6
Min. amplitude: None
Max. amplitude: None

This section defines the operating parameters for SQL mode.

Min. Frequency / Max. Frequency — frequency range

Defines the spectral frequency range used for measurement.

Octave — octave resolution

This parameter can also be changed using the **Option** button during measurement.

Min. amplitude / Max. amplitude — allowable amplitude range

Defines the acceptable range of resulting amplitude values. If the resulting amplitude exceeds the specified range:

- the main panel will display the out-of-range amplitude highlighted in **red**,
- the current amplitude field will also be highlighted in **red** (without holding the value),
- further measurements will be blocked until the measurement is restarted.

PWR Mode Settings

PWR settings
Measurement type: AC
Power type: W
Noise Reduction channel: None
Min Power: None
Max Power: None
Hold type: MAX
Reset calibration

This section defines the operating parameters for PWR mode.

Measurement type — measurement mode and channel configuration

- **AC** — measures AC output power
- **DC** — measures DC input power consumption
- **DC+AC** — dual-channel mode:
 - Channel 1: DC input power
 - Channel 2: AC output power
 - Acoustic efficiency calculation is available in this mode

⚠ Dual-channel measurement requires two power sensors connected simultaneously.

Power type — displayed AC power type

- **VA** — displays apparent power (volt-amperes)
- **W** — displays active power (watts)

Noise red. — noise-reduction channel selection

Designed to reduce high-frequency interference when measuring high-power Class-D amplifiers. Noise reduction filters current and voltage components above **1000 Hz**. Recommended for low-frequency measurements.

Options:

- **None** — noise reduction disabled
- **CH1** — enabled for channel 1
- **CH2** — enabled for channel 2
- **CH1+CH2** — enabled for both channels

Min Power / Max Power — allowable power range

If the measured power exceeds the specified range, the corresponding value on the panel will be held and highlighted in **red**. Further measurements will be blocked until the measurement is restarted.

Hold type — hold logic for both channels

- **Max** — holds maximum power, voltage, and current; all other parameters correspond to maximum power; peak spectral values are held
- **Min** — holds minimum power, voltage, and current; all other parameters correspond to minimum power
- **Avg** — displays average values of all measured parameters
- **Min THD** — holds values corresponding to the minimum THD level for AC signals; in DC+AC mode, the DC channel holds values corresponding to the minimum THD detected on the AC channel

Reset calibration — zero-offset calibration reset

Resets zero-offset calibration for DC voltage and current channels. Calibration can be performed in measurement mode by **long-pressing the Option button**. The measurement must be stopped beforehand.

 During zero-offset calibration, the measured equipment must be turned off or disconnected from the power sensors.

Device Information

Device info
Dev. name: Next-LCD SE
Serial num.: 14
Fw ver.: 1.00

This page displays factory parameters of the device and may be used when contacting Support. Parameters on this page cannot be changed.

- **Dev. name** — device name
- **Serial num.** — device serial number
- **FW ver.** — firmware version

Connecting the Device to a PC

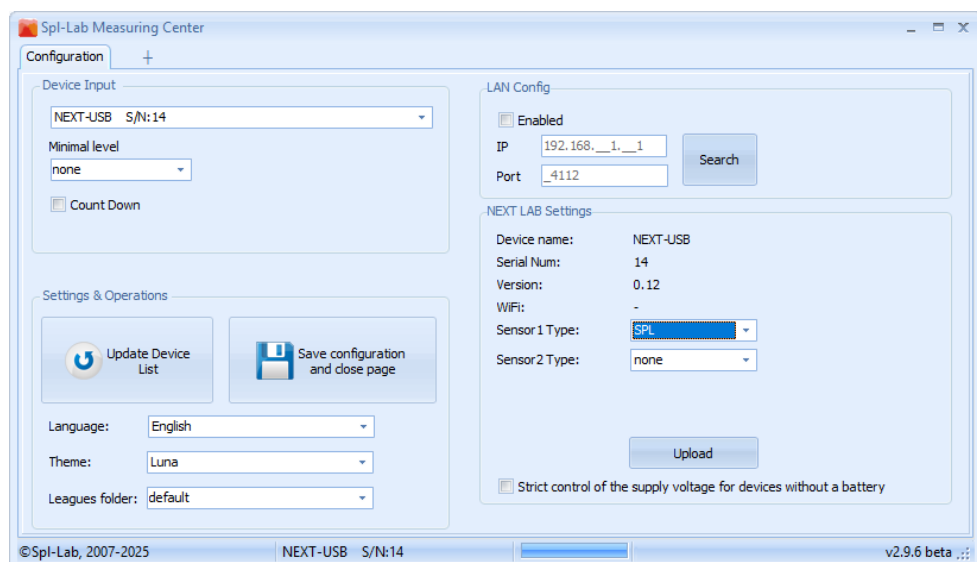
Introduction

The NEXT-LCD SE device can be connected to a personal computer via the USB port located on the device housing. USB connection allows you to: transfer measurement data in real time and update the device's internal firmware.

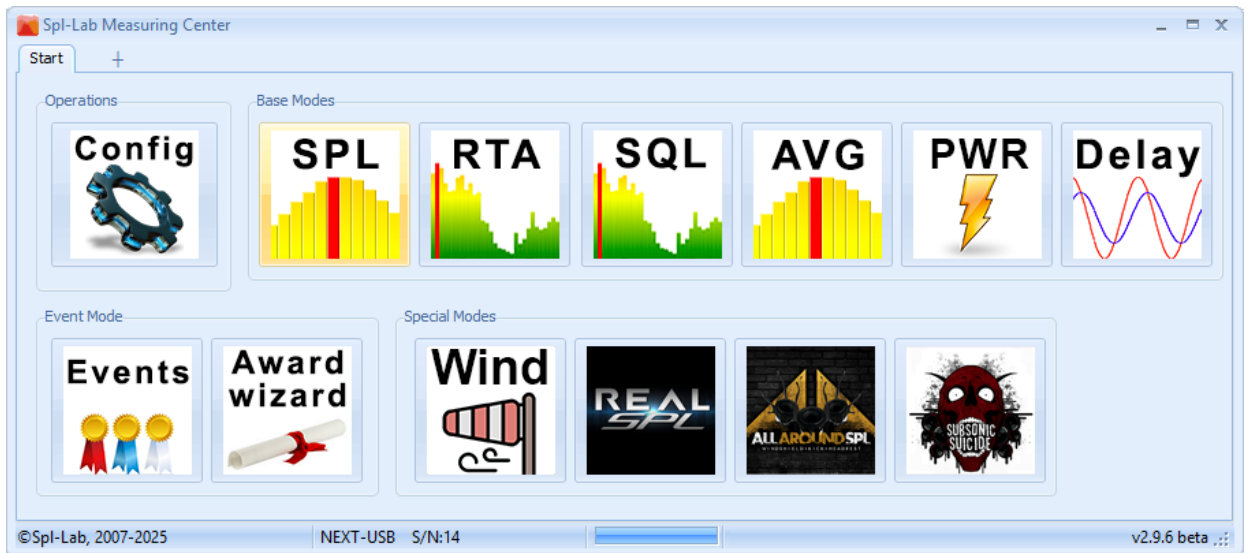
For extended analysis and visualization of measurement results, it is recommended to use the **Spl-Lab Measuring Center** software included in the package. The software provides advanced functions for displaying, processing, and saving data.

Connecting to a PC via USB

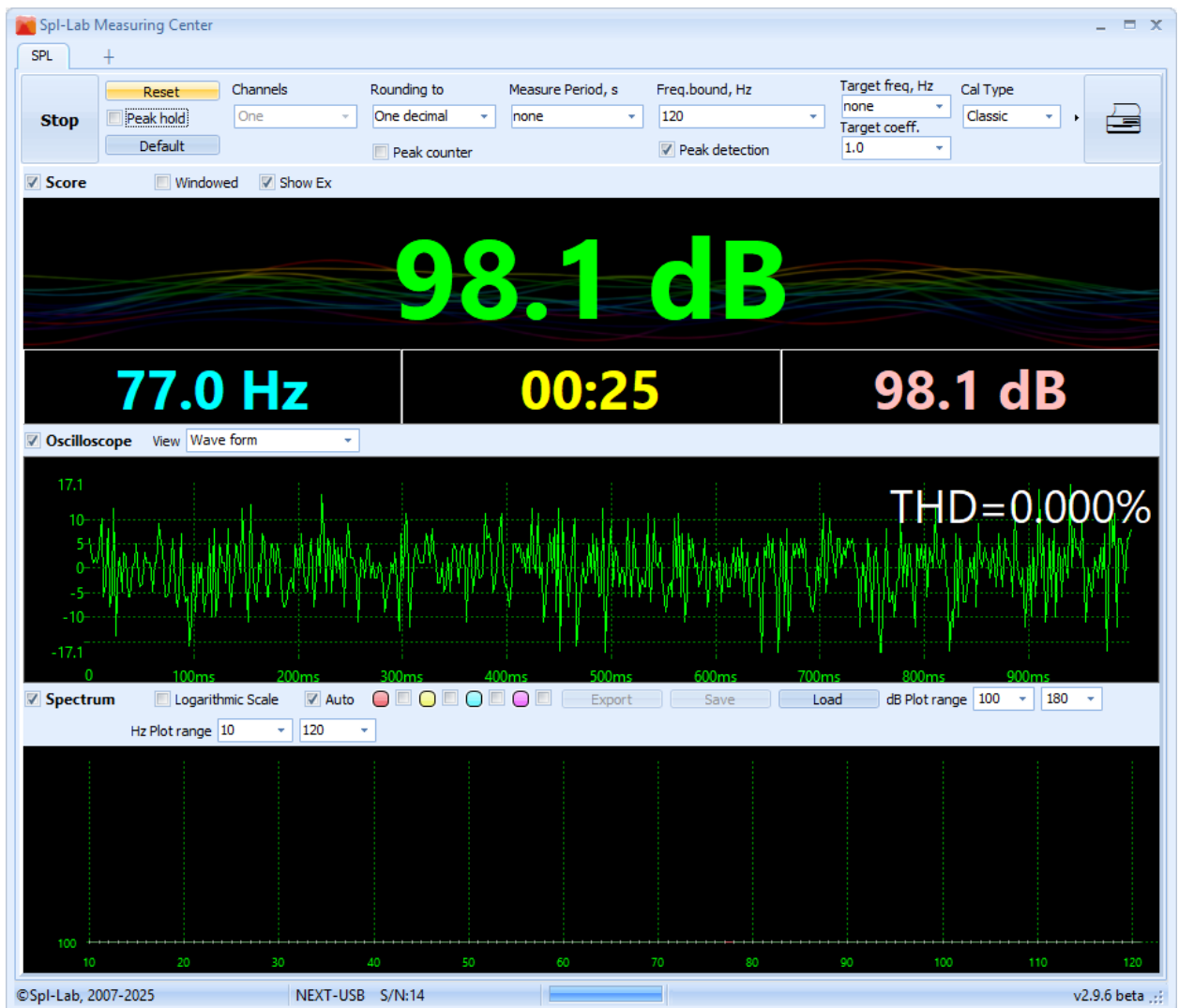
- Install the drivers from the CD included in the package, or download them (**Next-Lab USB driver**) from the Support section of the Spl-Lab website.
- Copy the Spl-Lab Measuring Center software from the CD or download it from the Support section of the website, then extract the archive to any folder (for example, the desktop).
- Connect the device to the PC using the USB port and wait for it to initialize.
- Launch **Spl-Lab Measuring Center** to begin working with the device.



- Open the **CONFIG** tab in the program and save the settings.



- On the main page of the program, select and open the required measurement mode depending on the sensor types connected to the device — for example, **SPL**.



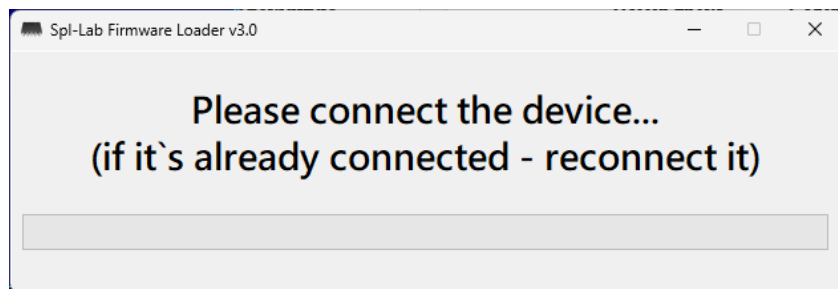
⚠ For detailed information on using the software, refer to the **Spl-Lab Measuring Center User Manual**.

Firmware Update Procedure

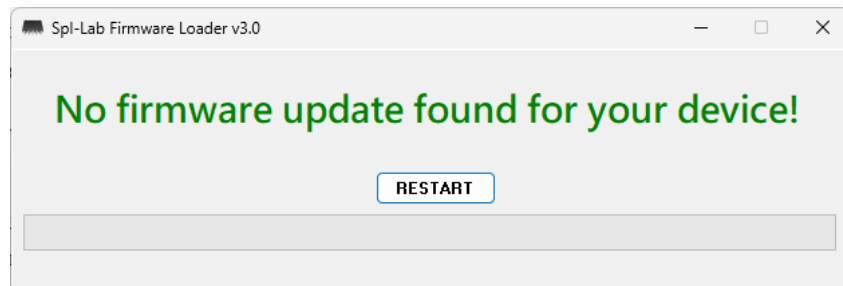
- Install the drivers from the CD included in the package, or download them (Next-Lab USB driver) from the Support section of the Spl-Lab website.
- Download the Firmware Loader Tool for Windows from the Support section of the Spl-Lab website and extract the archive to any folder (e.g., the desktop).
- If the device is operational, check the serial number and current firmware version in the Device Info section of the settings.



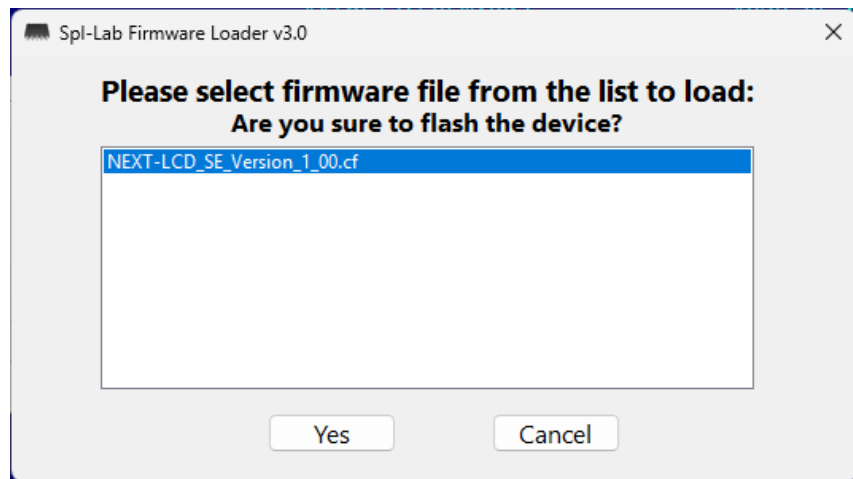
- Turn off and completely power down the device.
- Run the executable file Spl_Lab_Firmware_Loader.exe from the extracted folder.



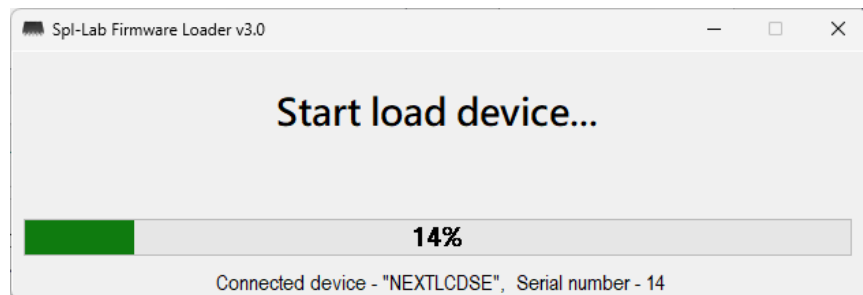
- Connect the device to the PC via USB.



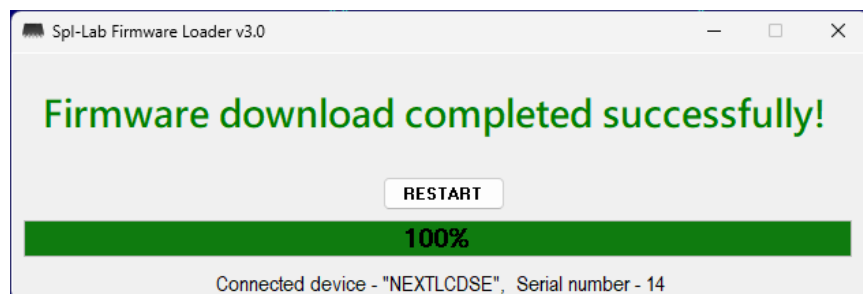
- The program will notify you if no suitable firmware files are found for your device. Otherwise, a list of compatible firmware files will be displayed.



- Select the required firmware file and click Yes.



- It is not recommended to update if the firmware version is lower than or equal to the version currently installed on the device.
- Wait for the update process to complete.



- After successful completion, the device will reboot automatically.
- If this does not happen, reboot the device manually.

Audio Test Tracks Description

The CD included with Spl-Lab equipment contains not only software but also specialized audio test tracks used for system tuning. These tracks are recorded as **Audio-CD tracks**, not as individual audio files. To play them, use software capable of reading Audio-CD format or a standard CD player.

Some CD players may not recognize the audio content. If this occurs—or if you prefer using audio files—you can download a ZIP archive containing all test signals from the **Support** section of the Spl-Lab website.

The table below describes the contents of each track:

Track Number	Description
Track 1	Pink noise 20–20,000 Hz
Track 2	Pink noise 40–60 Hz
Track 3	Pink noise 60–80 Hz
Track 4	Pink noise 80–100 Hz
Track 5	Pink noise 100–120 Hz
Track 6	Pink noise 120–140 Hz
Track 7	Pink noise 140–160 Hz
Track 8	Pink noise 160–180 Hz
Track 9	Sweep tone 30–20 Hz, 0 dB
Track 10	Sweep tone 35–25 Hz, 0 dB
Track 11	Sweep tone 40–30 Hz, 0 dB
Track 12	Sweep tone 45–35 Hz, 0 dB
Track 13	Sweep tone 50–40 Hz, 0 dB
Track 14	Sweep tone 55–45 Hz, 0 dB
Track 15	Sweep tone 60–50 Hz, 0 dB
Track 16	Sweep tone 65–55 Hz, 0 dB
Track 17	Sweep tone 70–60 Hz, 0 dB
Track 18	Sweep tone 75–65 Hz, 0 dB
Track 19	Sweep tone 80–70 Hz, 0 dB
Tracks 20–80	Sine wave; track number corresponds to frequency (Hz), 0 dB
Track 81	Sweep tone 20–20,000 Hz, 0 dB
Track 82	Sine wave 100 Hz
Track 83	Sine wave 200 Hz
Track 84	Sine wave 1,000 Hz
Track 85	Sine wave 2,000 Hz