2016

Wireless Bass Meter

User Manual

Wireless noise meter - sound pressure meter

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General Information

The Wireless Bass Meter noise meter (Second Edition) is intended for measuring the noise level and sound pressure at the low frequency. The measured signal can be provided by both the industrial equipment and the acoustic systems. The distinctive feature of the noise meter is its ease of use and mobility. No more wires! It allows taking measurements in complex environment, where use of wired devices is problematic. Owing to the built-in ADC measured signal is digitalized inside the device and sent to your PC or smartphone/tablet PC via wireless network (WiFi) without alterations. Usage of the solid-state pressure transducer allows receiving results with high accuracy of 0.1 dB.

Ergonomics

The Wireless Bass Meter (Second Edition) device is performed as a monoblock, combining the high-frequency solid-state sensor, ADC module and WiFi module. The device has Power button, LED, USB port and a feature button. There is of charging completion indication and low battery level indication. At the back cover there are vacuum suction cups for affixing the device on any smooth surfaces, for example, glass. The case of the device is made of shockproof plastic material.

Package Contents

- Wireless Bass Meter (second edition) Noise Meter
- Spl-Lab Measuring Center software for Windows
- Audio-CD with audio tracks for tuning (sine, sweep-tones, noise)
- USB cable for charging

Working with the device

Important safety information:

- The manufacturer does not bear responsibility for damage, caused directly or indirectly, as a result of improper use of device.
- Before using the device, examine its case for cracks and splits, because any depressurization of the device will result in its breakage.
- To avoid the risk of electric shock all the connector cables should not have insulation defects.
- Avoid measuring load beyond the maximum limit.
- Do not use or store the device in the areas with high humidity or heat, as well as, close to the devices, generating strong magnetic field.
- During the preventive maintenance of the device do not use the synthetic detergents, do not apply solvents. Using wet wipes is more preferable.
- Before starting the device and a system on the whole, ensure that all the connection cables are plugged in correctly.

Identifying the functional parts of the device:

No.	Element	Assignment
1	Power Indicator	Three-coloured LED for indicating status of the device
2	Feed Switch	The slide switch for switching the device on/off.
3	Feature Button	Is not enabled in current firmware version

Charging the battery of the device

The device has an inbuilt battery. The running time of the device depends on the intensity of use of the device. For charging, please, connect the device via the USB port to charger or to PC. Consider that for the complete charge the device should be switched off. Use the three-coloured LED for estimating the extent of battery charge and status of the device (according to the table below):

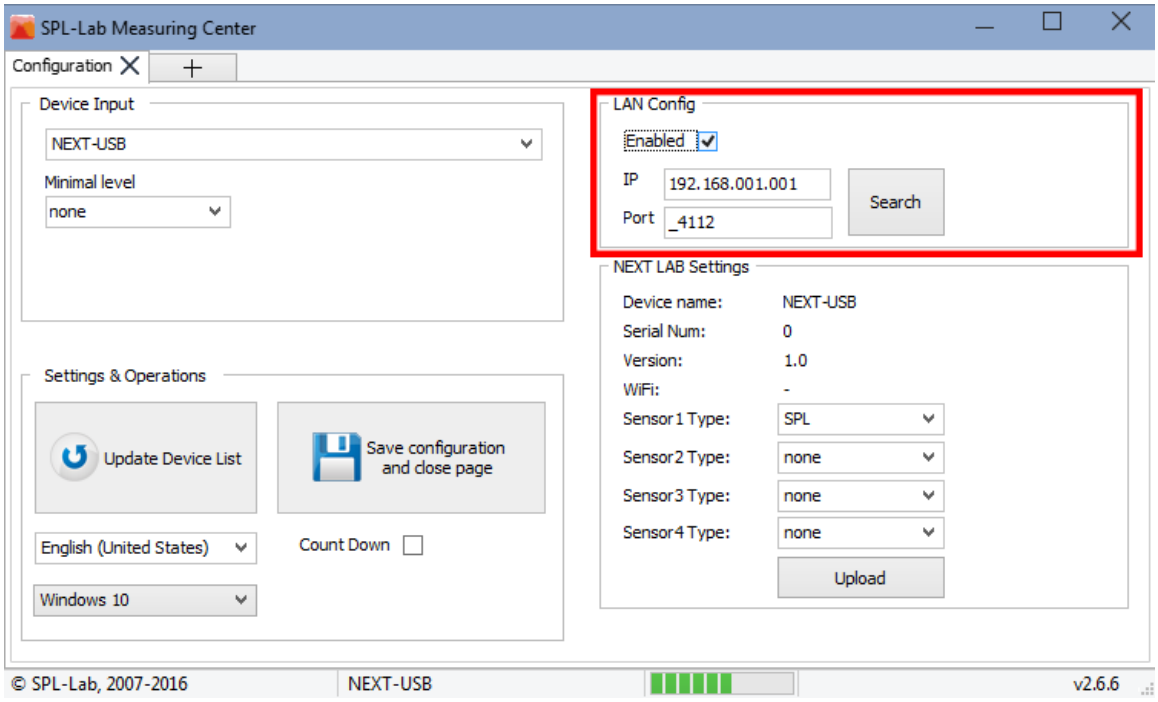
	Green	Orange	Red
Glows continuously	The device is on; battery charge above 80%. Charging complete or not connected	The device is on; battery charge above 80%. Charging is in process.	Device is off. Charging is in process.
Blinks slowly	The device is on; battery charge above 50%. Charging complete or not connected	The device is on; battery charge above 50%. Charging is in process.	
Blinks quickly	The device is on; battery charge above 20%. Charging complete or not connected	The device is on; battery charge above 20%. Charging is in process.	

Connecting to PC via the USB port

- Install drivers from the CD, which is included into the delivery set, or download (Next-Lab - USB driver) them from *Support* section at Spl-Lab web site www.spl-lab.ru.
- Start the device and wait until it is booted.
- Connect the device to a PC using USB port.
- Start Spl-Lab Measuring Center for operation with the device.

Connecting to PC via the Wireless network

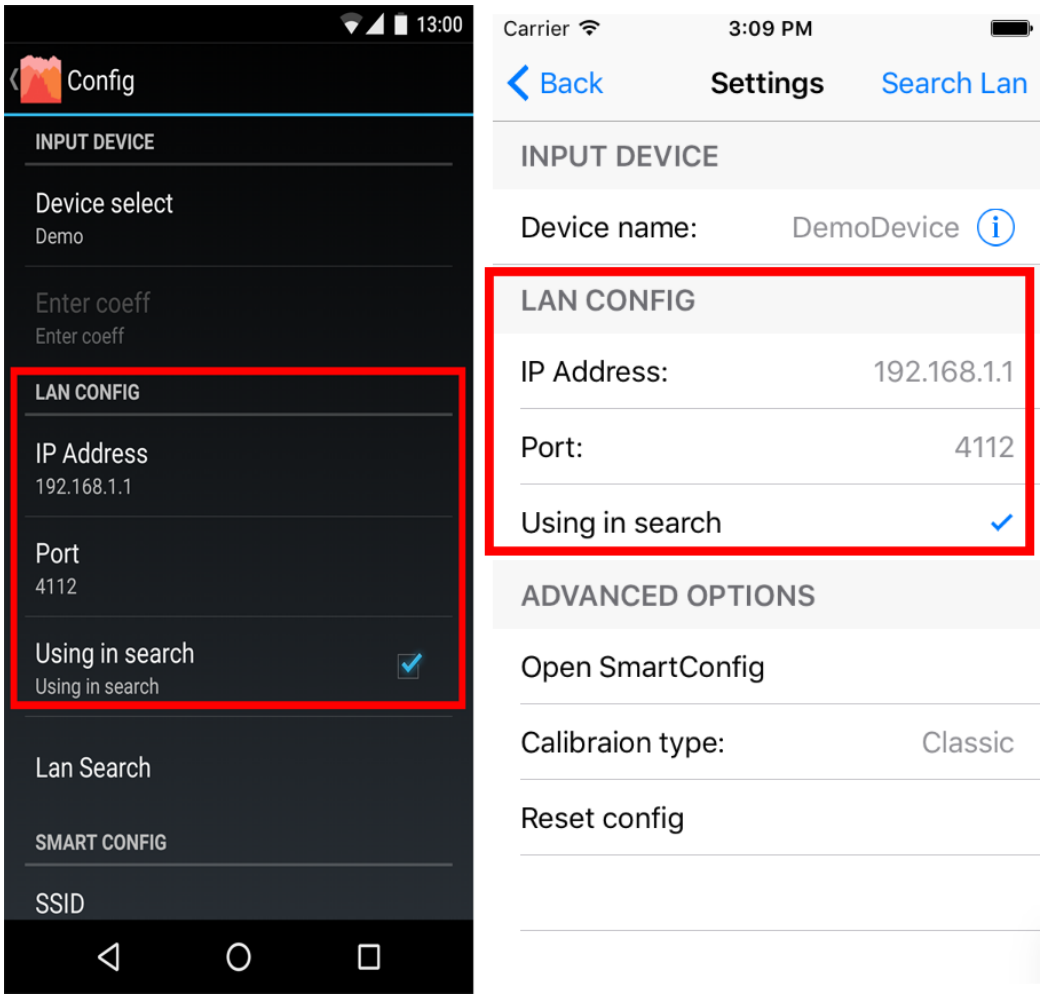
- Connect the PC to the Wireless network "Wireless Bass Meter" using OS settings. **Entering a password is not required.**
- For **initial** configuration of wireless network parameters connect the device to PC using USB port.
- Start Spl-Lab Measuring Center for connecting with the device.
- On **"CONFIG"** tab in **"LAN Config"** field check **"Enabled"**, in **"IP"** field set value **"192.168.001.001"**, and in **"Port"** field - value **"4112"**.



- Save configurations and close the Spl-Lab Measuring Center.
- Disconnect the device form USB port.
- Start the Spl-Lab Measuring Center - connection with the device should be established automatically.

Connecting to Android/iOS devices

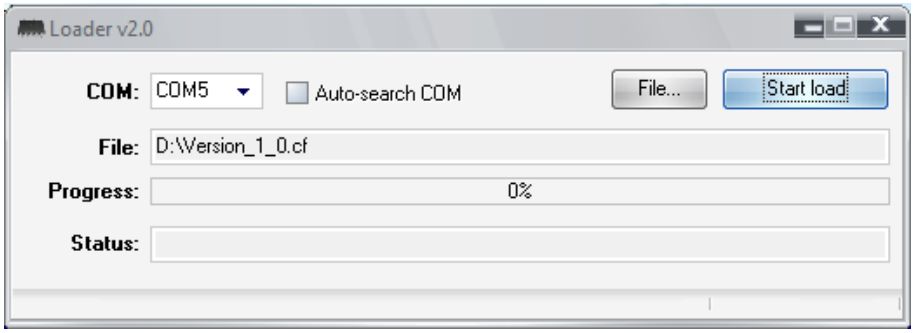
- Download Measuring Center software for Android/iOS from the appropriate application store. You can find links in *Support* section of the www.spl-lab.ru web-site.
- Connect your Android/iOS device to the Wireless network “Wireless Bass Meter” using OS settings. Entering a password is not required.
- **When working with the device on Android OS disable mobile network data transfer in the settings of the operating system.**
- Run Measuring Center for Android/iOS application.
- On **“CONFIG”** tab in **“LAN CONFIG”** field **“IP”** field set value **“192.168.1.1”**, in **“Port”** field set value **“4112”** and check **“Using in search”.**



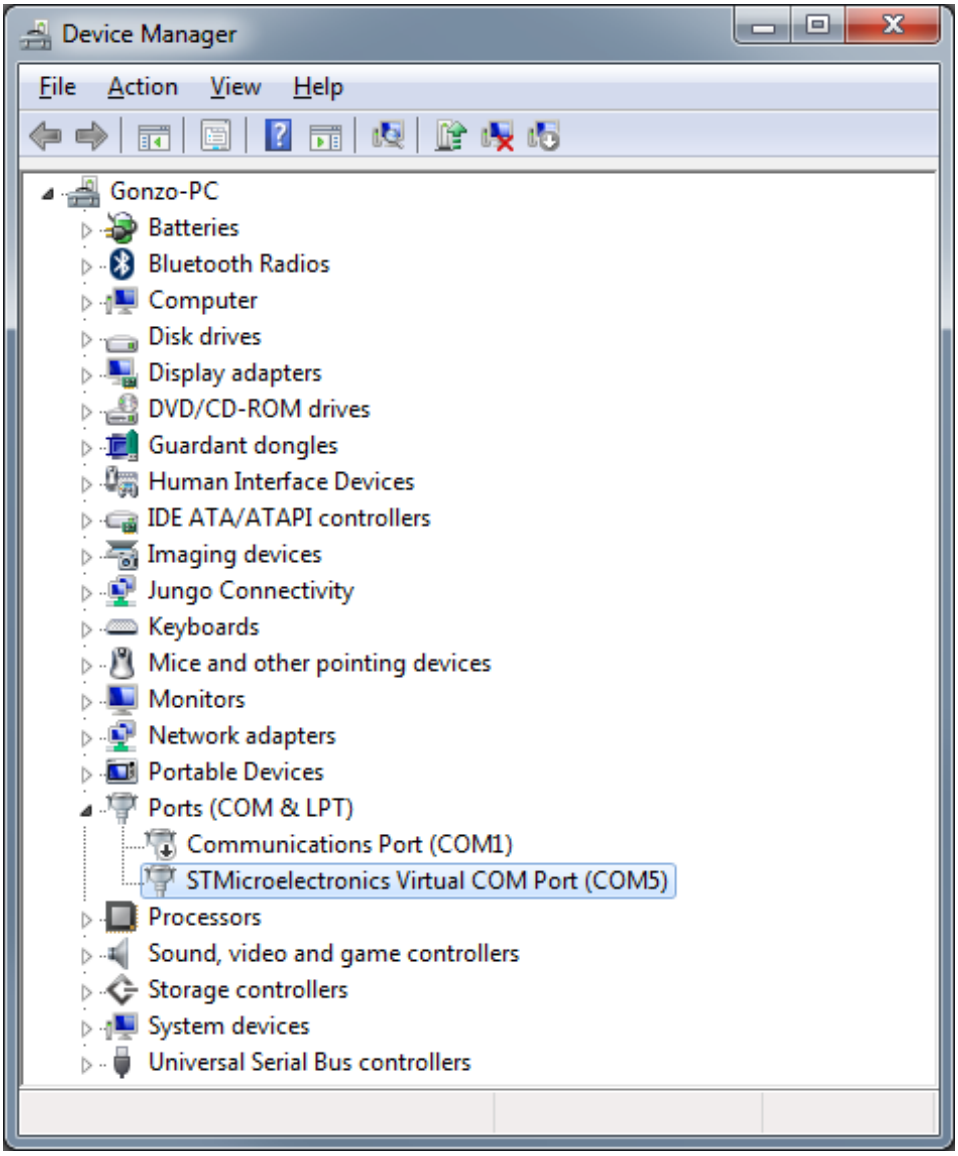
- Exit and re-enter CONFIG mode.
- In the “Device select” dropdown list select “Next-Lab Device”.
- Exit calibration mode and start the work.

Firmware upgrade using PC

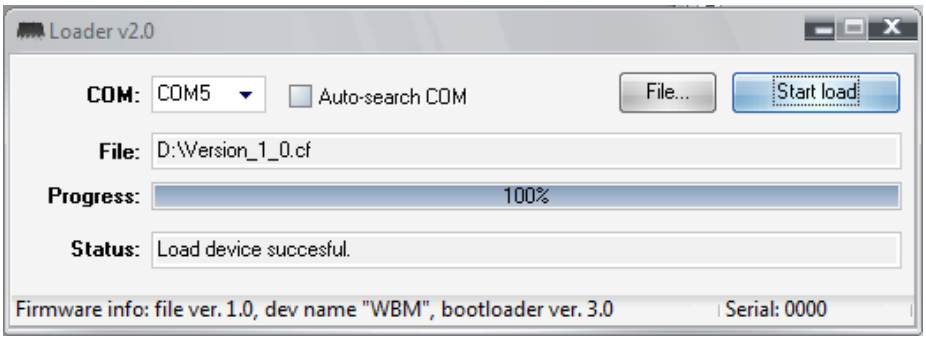
- Download the latest firmware version from *Support* section of the www.spl-lab.ru web-site.
- Connect the device to a PC using USB cable.
- Unpack the archive with firmware to hard drive.
- Run **Loader.exe** and select firmware file.



- Set a number of COM Port according to Port in Device Manager **(My Computer – Device Manager – LPT and COM Ports– Virtual COM Port)**



- Switch the device on and within **3 seconds** press **“Start load”** in the program.
- Wait until firmware is successfully downloaded onto the device.



Description of the CD tracks

The CD included in the Spl-Lab equipment distribution kit alongside with software contains specialised audio tracks with test signals for adjusting a system.

Consider that these tracks are recorded not in the file form, but as tracks in Audio-CD format.

For playing back the tracks from the CD use specialised software or CD player.

It is possible that some CD player models will not read the audio content of the CD. In such case or if it is more convenient for you to use the audio files, download the archive with test signals from ***Support*** **at Spl-Lab web site.**

Table with track description below:

Track No.	**Contents**
Track 1	Pink noise 20-20000 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 noise160-180 Hz
Track 9	Sweep-tone 30-20 Hz. Level 0 dB
Track 10	Sweep-tone 35-25 Hz. Level 0 dB
Track 11	Sweep-tone 40-30 Hz. Level 0 dB
Track 12	Sweep-tone 45-35 Hz. Level 0 dB
Track 13	Sweep-tone 50-40 Hz. Level 0 dB
Track 14	Sweep-tone 55-45 Hz. Level 0 dB
Track 15	Sweep-tone 60-50 Hz. Level 0 dB
Track 16	Sweep-tone 65-55 Hz. Level 0 dB
Track 17	Sweep-tone 70-60 Hz. Level 0 dB
Track 18	Sweep-tone 75-65 Hz. Level 0 dB

Track 19	Sweep-tone 80-70 Hz. Level 0 dB
Track 20-80	Sine signal. The number of track corresponds to the signal frequency. Level 0 dB
Track 81	Sweep-tone 20-20000 Hz. Level 0 dB
Track 82	Sine signal with frequency of 100 Hz
Track 83	Sine signal with frequency of 200 Hz
Track 84	Sine signal with frequency of 1000 Hz
Track 85	Sine signal with frequency of 2000 Hz