ERMENRICH DS40 Digital Sound Level Meter User Manual

Contents

DS40 Digital Sound Level Meter

**Ermenrich Seek DS40
Digital Sound Level Meter**
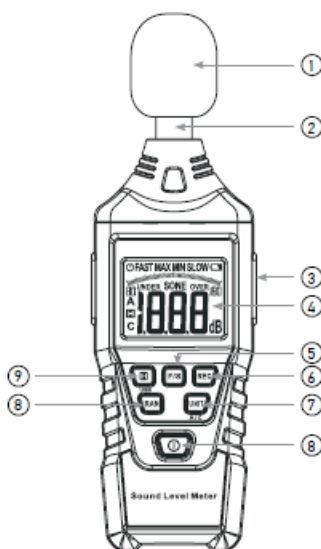
1. Windscreen

2. Microphone

3. USB port

4. LCD
5. F/S (Fast/slow) button
6. REC button
7. UNIT (Unit of measurement) button
8. Power button
9. RAN button
10. Data hold/ USB button

Ermenrich Seek DS40 Digital Sound Level Meter

Please carefully read the safety instructions and the user manual before using this product. Keep away from children. Use the device
only as specified in the user manual.

The kit includes: digital sound level meter, pouch, PC software, user manual, and warranty card.

Getting started

- Unscrew the screw on the back of the sound level meter, remove the battery compartment cover, and insert 3 AAA batteries. Close the

  cover and screw in the screw.
- Press the Power button and hold it for two seconds to turn on the device.
- Press the Power button to turn off the device.

Display information
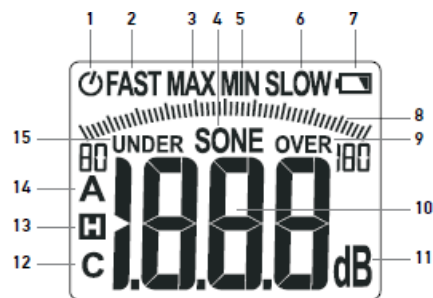
1	Automatic shutdown mode
2	Fast time weighting
3	Maximum value mode
4	Sound level unit (sones)
5	Minimum value mode
6	Slow time weighting
7	Low battery indicator
8	Sound level scale
9	Value over max. range icon
10	Sound level value
11	Sound level unit (decibels)
12	C-weighted value
13	Data hold icon
14	A-weighted value
15	Value under max. range icon

Operation

During the measurement, keep the microphone faced towards the noise source. Wind blowing across the microphone may distort the measurement results. Cover the microphone with the windscreen (included) when in operation. The value of the noise measurement is shown in the field [12] on the display and on the graphical scale [13].

When the unit is not in use, cover the microphone with a protective cover and pack the unit in a special pouch (cover and pouch included).

Automatic shutdown function

The sound meter automatically turns off after 10 minutes from the last action. The automatic shutdown icon [1] on the display indicates that this mode is currently active.

To turn on the sound level meter without using the automatic shutdown function, press the Data hold/USB button and the Power button simultaneously. To restore the automatic shutdown function, turn the meter off and on again.

MAX/MIN measurement

Pressing the REC button once sets the device into the MAX mode [3]. In the MAX mode, the device shows the maximum data value during the current measurement cycle.

Pressing the REC button twice sets the device into the MIN mode [5]. In the MIN mode, the device shows the minimum data value during the current measurement cycle.

To exit the MAX/MIN measurement modes, press the REC button and hold it for 2 seconds.

FAST/SLOW time weighting

Press the F/S button to choose between fast (125ms) and slow (1s) time weighting modes. The display shows either FAST [2] or SLOW [6] icon, depending on which mode is currently selected.

Select the fast time weighting mode to capture noise peaks and quick-emerging noises. This mode is suitable for most applications. Select the slow time weighting mode to monitor sound sources with consistent noise levels and average out the quickly changing noises.

Data hold mode

Press the Data hold/USB button to hold the current measurement values on the display. The Data hold icon [13] will light up on the display. In the Data hold mode, the device will show the last recorded sound value on the display. To exit the Data hold mode, press the Data hold/ USB button again.

A- and C-weighted values

The sound level meter can measure both A- and C-weighted sound values. To switch between the weighting modes, press the UNIT button for two seconds. Icons A [14] and C [12] on the display represent the currently chosen mode.

In the A-weighting mode, the meter captures the sound level in approximately the same way as the human ear does, cutting off the lower and higher frequencies. This mode is suitable for assessing the noise level of work environments and other public spaces to comply with occupational health and safety requirements.

In the C-weighting mode, the meter captures the sound level with a much flatter frequency response. This mode is used to analyse the loudness of motors, machines, and other working equipment.

Measurement range

The automatic mode of the sound level meter can measure noise in the range of 30–130dB. The automatic mode is activated by default when the device is turned on.

To select the measurement range manually, press the RAN button. The available ranges are: 30–80, 40–90, 50–100, 60–110, 70–120, and 80–130dB. The numbers on the edges of the scale [8] will change accordingly.

To return to automatic mode, press and hold the RAN button for two seconds.

Sound level units

The sound level meter can display the measurement value in either decibels (dB [11] on the display) or sones (SONE [4] on the display). To switch between sound level units, press the UNIT button.

USB function

This device can transfer measurement data to a PC via a USB cable (not included). To use the USB function, install the ComSoftware program via the installation disc (included), connect the device to a PC and open the application.

The application can save the measurement data of the sound level meter and export it in the .xls spreadsheet format as well as show the measurement logs in the form of a graph.

PC software
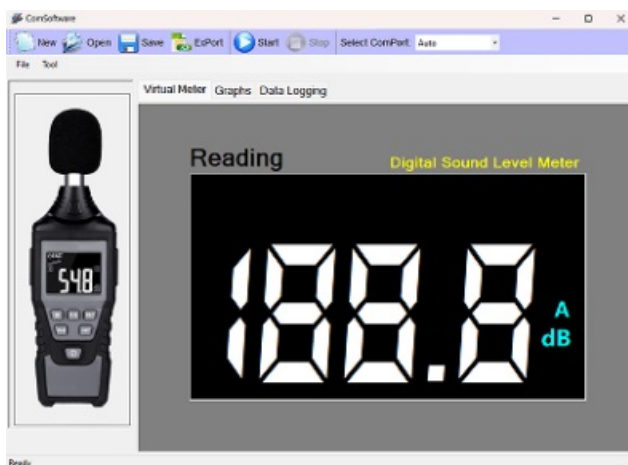
The program uses files with the .Mdata extension to save measurement data.

To create a new file, click the New button.

To save a file, click the Save button.

To open a measurement data file saved in the PC memory, click the Open button.

To export the measurement log in Excel spreadsheet format (.xls), click the ExPort button.

To begin and end the process of measurement on the device connected to the PC use the Start and Stop buttons. To choose the connection port to which the device is connected to, use the Select ComPort field.

The "Virtual Meter" tab on the working field of the program shows the measurement data online on the virtual

display. The "Graphs" tab shows the graph with the changes of the sound level value during the measurement session. The "Data Logging" tab shows the log of the measurement session.

Low battery indication

When the battery voltage is low, the device shows the low battery icon [7]. It is recommended to replace the depleted battery as soon as possible to avoid inaccurate readings.

To avoid damaging the device, do not open the battery compartment cover when the device is turned on.

Specifications

Sound pressure, range	30–130dBA / 35–130dBC
Sound pressure, accuracy	±1.5dB (94dB at 1kHz), ±5dB (94dB at 8kHz)
Sound pressure, frequency response	30Hz… 8kHz
Sound pressure, time weight	FAST 125ms, SLOW 1s
Operating temperature range	0… +50°C (+32… +122°F)
Storage temperature range	−10… +50°C (+14… +122°F)
Power supply	3pcs alkaline AAA batteries (1.5V)
Safety rating	EN61326-1

The manufacturer reserves the right to make changes to the product range and specifications without prior notice.

Care and maintenance

Take the necessary precautions when using the device with children or others who have not read or who do not fully understand these instructions. Do not try to disassemble the device on your own for any reason. Do not use the device if it is damaged or does not operate properly. Replace the battery as soon as the low battery indicator lights up. Do not use solvent to clean the device. Store the device in the place with appropriate temperature (see "Specifications"). Protect the device from sudden impact and excessive mechanical force. Never attempt to operate a damaged device or a device with damaged electrical parts! Only use accessories and spare parts for this device that comply with the technical specifications. If a part of the device or battery is swallowed, seek medical attention immediately.

Battery safety instructions

Always purchase the correct size and grade of battery most suitable for the intended use. Always replace the whole set of batteries at one time; taking care not to mix old and new ones, or batteries of different types. Clean the battery contacts and also those of the device prior to battery installation. Make sure the batteries are installed correctly with regard to polarity (+ and –). Remove batteries from equipment that is not to be used for an extended period of time. Remove used batteries promptly. Never short-circuit batteries as this may lead to high temperatures, leakage, or explosion. Never heat batteries in order to revive them. Do not disassemble batteries. Remember to switch off devices after use. Keep batteries out of the reach of children, to avoid risk of ingestion, suffocation, or poisoning. Utilize used batteries as prescribed by your country's laws.

Ermenrich Warranty

Ermenrich products, except for their accessories, carry a 5-year warranty against defects in materials and workmanship. All Ermenrich accessories are warranted to be free of defects in materials and workmanship for six months from the purchase date. The warranty entitles you to the free repair or replacement of the Ermenrich product in any country where a Levenhuk office is located if all the warranty conditions are met.

For further details, please visit: levenhuk.com/warranty

If warranty problems arise, or if you need assistance in using your product, contact the local Levenhuk branch.

Documents / Resources

ERMENRICH SEEK DS40 DIGITAL SOUND LEVEL METER	**ERMENRICH DS40 Digital Sound Level Meter** [pdf] User Manual DS40, DS40 Digital Sound Level Meter, DS40, Digital Sound Level Meter, Sound Level Meter, Level Meter, Meter

References

- 🟡 **Доживотна гаранция на Levenhuk – Официален уебсайт на Levenhuk в България**
- 🟡 **Doživotní záruka společnosti Levenhuk – Oficiální webové stránky Levenhuk pro Českou republiku**
- 🌐 **Levenhuk's official website in Europe**
- 🟡 **Garantía internacional de por vida Levenhuk – Web oficial de Levenhuk en España**
- 🟡 **Levenhuk Lifetime Warranty – Levenhuk's official website in USA**
- 🟡 **A Levenhuk élettartamra szóló szavatossága – A Levenhuk hivatalos magyarországi weboldala**
- 🟡 **Levenhuk Limited Warranty – Levenhuk's official website in USA**
- 🟡 **Поддержка - Гарантийное обслуживание Левенгук - Levenhuk Russia**
- 🟡 **Gwarancja bezterminowa Levenhuk – Oficjalna witryna internetowa Levenhuk w Polsce**
- **User Manual**