EN

Original Instructions
Version 1 – June 2023

DIGITAL

SOUND LEVEL METER

12442

Read this manual in full before using this product and retain it for future use. Always use the latest version of the manual. Please visit **drapertools.com/manuals** for the latest version.

1. Intended Use

This product is a hand-held device designed to measure sound levels in a given environment. An indication of temperature is also shown. This device is best used for measuring ambient noise. Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.

Part of our core range, this product is suitable for regular use by enthusiasts and tradespersons alike.

2. Specification

Stock No.:	12442
Part No.:	180-DSLM-1
Sound measurement	
Measurement range:	35–135dB
Dynamic rage:	50dB
Frequency range:	31.5–8,000Hz
Accuracy:	±2.0dB
Resolution:	0.1
Frequency weighting: A-weighted	
Time weighting: 0.125s (Fast mode) /1.0s (Slow mode)	
Microphone: 1/2" electrets condenser microphone	
Temperatre measurement	
Measurement range :	-20 to +70°C
Accuracy :	±1.5°C / ±2.7°F
Resolution :	0.1
Operating time:	Up to 60 hours
Batteries:	3 × 1.5V AAA (not supplied)

Permissible ambient conditions:	Temperature	Humidity
Operation:	-20 to +60°C (-4 to +140°F)	10–90% RH
Storage:	-20 to +60°C (-4 to +140°F)	10–75% RH
Dimensions:		W 56 × H 144 × D 30.5mm
Weight (with batteries):		123.5g

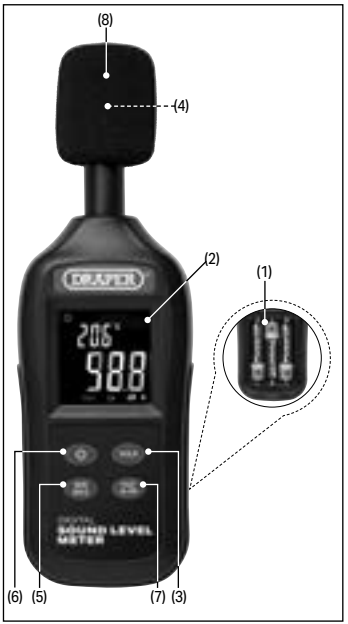
3. Health and Safety Information

Important: Read all the Health and Safety instructions before attempting to use this product.

- Use this product **ONLY** as instructed in this manual.
- **DO NOT** attempt to open, dismantle or modify this product in any way.
- Before every use, inspect the device for missing, broken, loose or corroded parts and battery leakage.
  - **DO NOT** use this product if it is damaged in any way; contact Draper Tools to discuss repair and replacement options.
  - If battery acid comes into contact with your skin, wash it off immediately with plenty of clean water.
  - If battery acid comes into contact with your eyes, flush them with plenty of clean water and seek immediate medical attention.
- **DO NOT** expose this product to liquids or wet environments.
- **DO NOT** use this product in environments in which dust, steam or smoke are present as this may interfere with the readings.
- **DO NOT** use this device in environments that exhibit or are affected by strong magnetic fields.
- **DO NOT** use this product if it exhibits abnormal behaviour and have it checked by a qualified and authorised technician before next use.
- Keep a lose but firm grip on the device and hold it as steady as possible as vibrations may affect the measurements recorded.
- **DO NOT** abuse, mutilate or burn the battery.
- Keep this product out of reach of children.

4. Identification

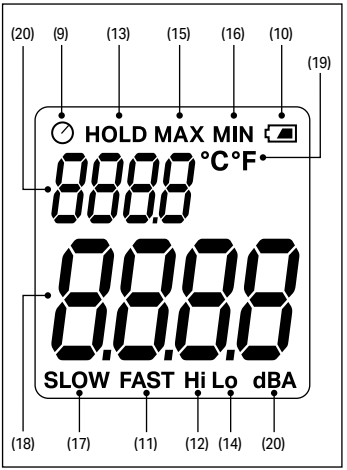
4.1 Product Overview



(1) Battery compartment
(2) Display
(3) Hold button
(4) Microphone
(5) Min/max button
(6) Power button
(7) Update speed button
(8) Wind shielding microphone cover

Please visit **drapertools.com** for our full range of accessories and consumables.

4.2 Display Overview



(9) Auto-off indicator
(10) Battery level indicator
(11) Fast update speed indicator
(12) High sound level indicator
(13) Hold data indicator
(14) Low sound level indicator
(15) Max value indicator
(16) Min value indicator
(17) Slow update speed indicator
(18) Sound level value
(19) Temperature unit indicator
(20) Temperature value
(20) Frequency weighting icon

5. Operation

5.1 Installing Batteries

This product requires 3 × 1.5V AAA batteries (not supplied). To install the batteries, slide the battery compartment cover (1) down and away from the back of the device and insert the batteries according to the correct polarity.

5.2 Switching On and Basic Operation

To switch on the device, press the power button (6). The device performs a diagnostics check during startup for approximately two seconds before readings are shown on the display.

Stand in the position to be measured and direct the microphone (4) toward the source of the sound. The top end of the microphone is the most receptive to sound and will deliver the most accurate readings.

Avoid adjusting your grip, moving the device and creating other audible interference when taking a sound level measurement. Keep in mind that low-level sound readings may be affected by sounds generated by the operator.

Important: Ensure that the foam windshield is installed onto the microphone to reduce interference caused by wind or air across the face of the microphone. The windshield slides easily onto the microphone.

Important: Take several measurements in the location to ensure that the readings are consistent and accurate.

The device begins measuring sound levels and temperature immediately upon loading and the readings are indicated on the display. Sound level readings are updated according to the update speed selected. Temperature readings are updated every 300ms.

To switch off the device, press the power button. This resets the device, including any overload warnings.

5.3 Freezing the Display

The current readings can be held on the display by pressing the hold button (3). The hold data indicator (13) illuminates to show that the display has been frozen.

Important: While data is held on the display, no other measurements are taken.

To resume measurements, press the hold button again. The hold data indicator is hidden and the display updates in real-time.

5.4 Maximum and Minimum Values

The display can be set to show the maximum or minimum value recorded for both sound levels and temperature during an active session.

Press the min/max button to display the maximum value recorded. Each subsequent press of the min/max button (5) alternates between the highest and lowest values recorded since the device was switched on. The max (15) or min (16) value indicators illuminate as appropriate to identify the value shown on the display.

Important: While min/max mode is active, no other measurements are displayed unless they exceed the min or max reading currently shown on the screen. These new readings are then locked until they are surpassed by new data.

To exit min/max display mode, press and hold the min/max button for three seconds.

5.5 Time-Weighting Modes

The device can be set to display a real-time sound level reading that updates every 125ms (fast update mode) or to display an average of the level measured over the course of every 1s (slow update mode).

Use fast mode to detect peaks in sound levels that occur very quickly. Use slow mode for more consistent sound environments.

To switch between update speed modes, press the update speed button (7). The fast (11) and slow (17) update speed indicators illuminate as appropriate according to the enabled mode.

5.6 High- and Low-Level Indicators

While the measured sound level remains lower than 100dB, the low sound level indicator (14) is illuminated.

If the sound level rises above 100dB, the high sound level indicator (12) illuminates until the level drops.

5.7 Temperature Reading Units

The unit of the temperature reading can be changed during startup.

Important: Ensure the correct unit of measurement for temperature is enabled before capturing meaningful readings as all readings are lost when the device is switched off.

While the device is off, press and hold the hold button (3). Keeping the hold button depressed, also press the power button (6) to switch on the device. The device will launch with the other temperature units enabled.

The default unit for temperature measurement is degrees Celsius.

5.8 Automatic Switch-Off

By default, the device is configured to power off automatically after approximately 15 minutes of inactivity.

If automatic switch-off function is enabled, the auto-off indicator (9) is illuminated on the device display.

To disable the automatic switch-off function, press and hold the min/max button (5) while the device is off and, keeping the min/max button depressed, also press the power button (6) to switch on the device. The device will launch with the function disabled.

Important: If automatic switch-off is disabled, this applies only to the current active session. Automatic switch-off is automatically enabled the next time that the device is switched on.

Important: If automatic switch-off is disabled, the device can only be powered down by pressing the power button.

5.9 Low Battery Warning

An approximate indication of the device battery level is shown in the corner of the display. When the battery level indicator (10) is empty, the batteries must be changed.

Important: Low power to the device may affect the accuracy of the measurements displayed.

5.10 Overload Warnings

If the measured sound exceeds the upper or lower limits permitted by the device, "OL" or "LO" is indicated on the display as appropriate.

6. Maintenance and Disposal

Important: Other than the batteries, this product has no user-serviceable parts; however, regular product care will extend the life of the product. Any additional servicing or repairs **MUST** be performed by an authorised and qualified professional.

Important: Remove the batteries from the product before cleaning.

- Keep the windshield and microphone apertures free from dust and debris.
- **DO NOT** allow the microphone to suffer impact damage.
- Keep the buttons free from dust and debris to ensure that they function effectively when pressed.
- Clean the device with a dry cloth **ONLY**; **DO NOT** allow moisture to enter the device housing.
- **Important: DO NOT** clean this product using abrasives, solvents or other aggressive substances as they may damage plastic or insulated parts.
- Have the device recalibrated every 12 months by an authorised technician.
- Store this product in a cool, clean and dry location, out of direct sunlight and out of reach of children.
- Remove the battery when storing the device for extended periods of time.

At the end of its working life, dispose of the product responsibly and in line with local regulations. Recycle where possible.

- **DO NOT** dispose of this product with domestic waste; most local authorities provide appropriate recycling facilities.
- **DO NOT** burn or mutilate batteries; this may release toxic or corrosive substances.
- Dispose of batteries separately and in accordance with local regulations.

7. Warranty

Should the tool develop a fault, return the complete tool to your nearest distributor or contact Draper Tools directly. Proof of purchase must be provided.

If, upon inspection, it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This warranty covers parts and labour for 12 months from the date of purchase. However, if the tools are hired out, the warranty period is 90 days from the date of purchase.

This warranty does not apply to any consumable parts, batteries or normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper Tools repair agent.

Visit **drapertools.com/warranty** for full details.

8. Explanation of Symbols

Read the instruction manual

Warning!

Do not abandon in the environment

Do not incinerate or throw onto fire

WEEE – Waste Electrical
& Electronic Equipment

Do not dispose of Waste Electrical & Electronic Equipment in with domestic rubbish

CE

European conformity

UK CA

UK Conformity Assessed