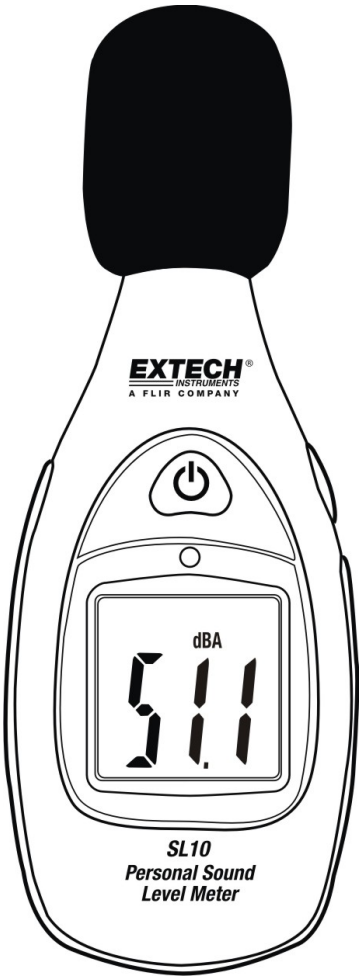
EXTECH INSTRUMENTS

User's Guide

Personal Sound Level Meter

Model SL10



Introduction

Congratulations on your purchase of the Extech SL10 Personal Sound Level Meter. The SL10 measures and displays sound pressure levels in dB from 40 to 130dB with 'A' weighting frequency response (dBA). The LCD is backlit for viewing readings in dimly lit areas and includes a MAX-MIN feature. Careful use of this meter will provide years of reliable service.

Safety

Read the following safety information carefully before attempting to operate or service the meter. Use the meter only as specified in this manual; otherwise, the protection provided by the meter may be impaired.

Environmental Conditions

- Altitude up to 2000 meters
- Relative Humidity: 90% max.
- Operating Temperature: 32 to 104°F (0 to 40°C)

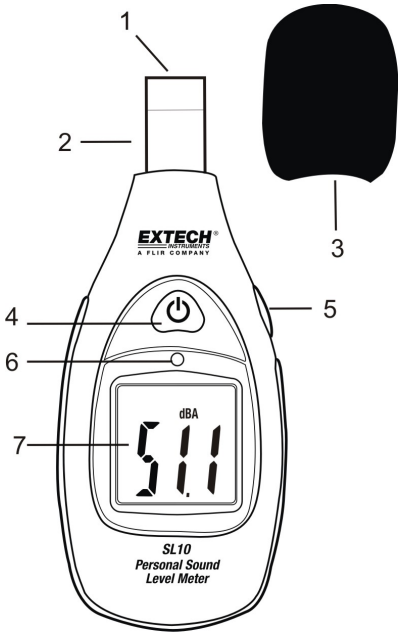
Maintenance and Cleaning

- Repair or servicing not covered in this manual should only be performed by qualified personnel.
- Periodically wipe the case with a dry cloth. Do not use abrasives or solvents.

Meter Description

1. Microphone sensor
2. Microphone chassis
3. Removable windscreen
4. Power switch
5. MAX-MIN button
6. LCD Backlight sensor
7. LCD Display

Battery compartment and tripod mount located on rear of instrument



Measurement Considerations

1. Wind blowing across the microphone increases the noise measurement. Use the supplied windscreen to cover the microphone when applicable.
2. Calibrate the instrument before each use if possible. Especially if the meter has not been used for a long period of time.
3. Do not store or operate the instrument in areas of high temperature or humidity.
4. Keep meter and microphone dry.
5. Avoid severe vibration.
6. Remove the battery when the meter is to be stored for long periods of time.

Operation

1. Power the meter by pressing the ⏻ power button. The meter will begin displaying sound level readings. If the LCD does not switch on, check the 9V battery located in the rear battery compartment.
2. Hold the meter facing the microphone toward the source of the sound to be measured. For tripod use, the meter includes a tripod mount on the rear side of its housing.
3. View the measurement on the meter's LCD. An indication of **OVER** means that the measurement exceeds 130dB.
4. The meter automatically switches off after 15 minutes of inactivity to conserve battery energy. Press the power button to switch the instrument on again.

'A' Frequency Weighting

With 'A' weighting, the frequency response of the meter is similar to the response of the human ear. 'A' weighting is commonly used for environmental or hearing conservation programs such as OSHA regulatory testing and noise ordinance law enforcement.

Fast Response Time

The meter has a fast response time of 125 milliseconds (ms) in order to capture noise peaks and noises that occur very quickly.

Over Range Alarm (OVER)

If the measurement exceeds 130 dB, the display indicates OVER. To avoid damage to the meter, do not continue to use the meter in an environment where the sound measured exceeds 130dB.

MAX-MIN HOLD

In this mode, the meter only updates the LCD reading when a higher reading (MAX mode) or lower reading (MIN mode) is detected. Select MAX HOLD by momentarily pressing the MAX-MIN button. The meter displays the MAX icon when in the MAX HOLD mode. Press the MAX-MIN button again to enter the MIN mode (the MIN icon will display). Press and hold the MAX-MIN button to exit this mode (the MAX-MIN indicators will switch off).

Backlit LCD Display

The LCD is equipped with backlighting for easier viewing, especially in dimly lit areas. The backlight automatically switches on and off based on ambient light conditions. The backlight sensor located just above the LCD display and just below the power button senses ambient light conditions.

Battery Replacement

When the low battery icon **BAT** appears on the LCD replace the 9V battery as soon as possible. The battery compartment cover is located on the rear of the meter. Slide the battery compartment cover off, change the battery, and replace the compartment cover.

Specifications

Display	4-digit (4000 count) backlit LCD
Display update rate	0.5 seconds
Microphone	0.5” Electret condenser
Measurement Bandwidth	31.5Hz to 8KHz
Measurement Range	40 to 130dB
Frequency weighting	‘A’ (dBA)
Accuracy / Resolution	± 3.5dB (under 94dB reference conditions) / 0.1dB
Response time	125 milliseconds
Power	9V Battery
Battery life	50 hours (typical); low battery indicator alerts user
Automatic power off	After approx. 15 minutes of inactivity
Operating temperature	32 to 104°F (0 to 40°C)
Operating humidity	10 to 90% RH
Storage temperature	14 to 140°F (-10 to 60°C)
Storage humidity	10 to 75% RH
Dimensions/weight	8.3 x 2.2 x 1.3” (210 x 55 x 32mm) / 4.8oz (135g)
Approvals	CE