R8060

REED INSTRUMENTS

Sound Level Meter

Instruction Manual

REED Instruments
1-877-849-2127 | info@reedinstruments.com | www.reedinstruments.com

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Introduction

Thank you for purchasing your REED R8060 Sound Level Meter. Please read the following instructions carefully before using your instrument. By following the steps outlined in this manual your meter will provide years of reliable service.

Product Quality

This product has been manufactured in an ISO9001 facility and has been calibrated during the manufacturing process to meet stated product specifications. If a certificate of calibration is required please contact the nearest authorized REED distributor or authorized Service Center. Please note an additional fee for this service will apply.

Safety

Never attempt to repair or modify your instrument. Dismantling your product, other than for the purpose of replacing batteries, may cause damage that will not be covered under the manufacturer's warranty. Servicing should only be provided by an authorized service center.

Features

- High accuracy of ±1.4dB meets Type 2 standards
- Triple range measurement (60dB dynamic range)
- A & C frequency weighting
- Fast & Slow time weighting
- Large, easy-to-read LCD display
- Digital analog bargraph
- Min/Max hold
- AC/DC output signal for use with dataloggers
- Tripod mount for long-term monitoring
- Low battery indicator and auto shut off

Included

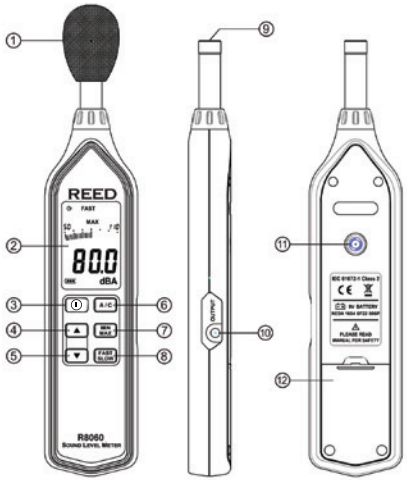
- Windshield Ball
- Soft Carrying Case
- Battery

Specifications

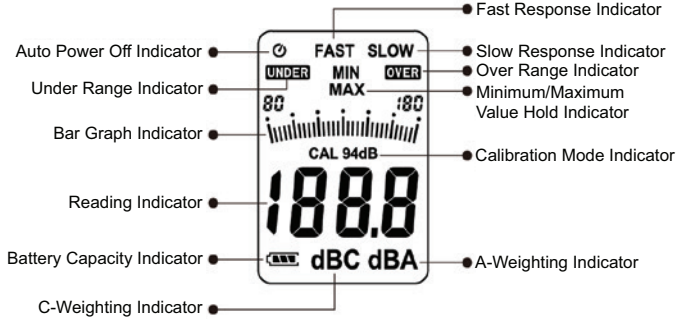
Measuring Ranges:	30 to 130dB Low: 30 to 90dB Med: 50 to 110dB High: 70 to 130dB
Dynamic Range:	60dB (in each range)
Accuracy:	±1.4dB
Resolution:	Digital: 0.1dB Analog: 2dB
Response Time:	Digital: 500ms Analog: 100ms
Frequency Range:	20Hz to 8kHz
Frequency Weighting:	A, C
Time Weighting:	Fast/Slow (125ms and 1s)
Microphone:	0.5" (12.7mm) electret condenser
Digital Analog Bargraph:	Yes (30 segment)
Display:	4-digit LCD
Min:	Yes
Max:	Yes
Alarm Indicators:	Under and Over (visual on-screen)
Auto Shut-off:	Yes (after 30 minutes/off)
Tripod Mountable:	Yes
Low Battery Indicator:	Yes
Power Supply:	9V battery
Output:	Yes (AC/DC)
Battery Life:	Approx 50 hours
Product Certifications:	CE, IEC 61672-1 Class 2
Operating Temperature:	32 to 104°F (0 to 40°C)
Storage Temperature:	14 to 140°F (-10 to 60°C)
Operating Humidity Range:	10 to 90%
Dimensions:	10.2 x 2.2 x 1" (258 x 55 x 25mm)
Weight:	6.5oz (185g)

Instrument Description

1. Windscreen
2. Display
3. Power Button
4. Up Arrow
   (Level Range Increase)
5. Down Arrow
   (Level Range Decrease)
6. Frequency Weighting
   Button
7. MIN/MAX Hold Button
8. Time Weighting Button
9. Microphone
10. AC/DC Output Terminal
11. Tripod Mounting Screw
12. Battery Cover



Display Description



Operating Instructions

1. Turn the meter on by pressing the Power Button.
2. Press the Time Weighting Button to select the desired Response Time. If the sound source consists of short bursts, set the response to FAST. To measure average sound level, select SLOW.
3. Press the Frequency Weighting Button to select the Frequency. Select "A" Weighting for a general noise sound level, or "C" Weighting for measuring high level noise. "C" Weighting is a standard weighting of the audible frequencies commonly used for the measurement of Peak Sound Pressure Level. If the "C" Weighted level is much higher than the "A" Weighted level, then there will be a large amount of low-frequency noise.
4. Press the UP and DOWN arrows to select the desired dB range. Choose a dB range in which the measured level is registering approximately in the middle of the bar graph. If the over range indicator appears during your measurement, the upper limit of the selected dB range has been exceeded. Adjust the selected dB range until the over range indicator disappears from the screen. Furthermore, if the under range indicator appears during your measurement, the lower limit of the selected dB range is too high to register your measurement. Adjust the selected dB range until the under range indicator disappears.
5. Hold the instrument comfortably in one hand (away from your body) or position it on a tripod for long-term monitoring. Point the microphone in the direction of the noise to take a measurement.

Note: Direct contact with strong winds or blowing air on the microphone may cause measurement errors. These effects can be reduced by using the included windscreen.

MIN/MAX Hold

Press the MIN/MAX Hold button to display the Maximum and Minimum sound level values recorded during the measurement process.

1. Press the MIN/MAX Hold Button once to display the maximum value.
2. Press the button again to display the minimum value.
3. Press and hold the button once more to resume normal operation.

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Auto Power OFF

To preserve battery life, the meter is programmed to turn itself off after 30 minutes of inactivity. To turn this function off, while the meter is off, press and hold the Time Weighting Button while turning the meter on. When the meter turns on release both the Time Weighting Button and Power button. The Auto Power Off indicator will not appear on the display, confirming this feature is now disabled. If the meter is turned off then back on, the "Auto Power Off" feature will be enabled again.

Calibration Procedure

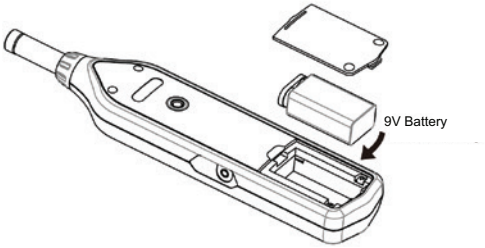
In order to calibrate the R8060 an external calibrator that can provide a 94.0dB signal is required (REED R8090). If the meter has been exposed to extreme conditions or has not been used in a long period of time the meter should be calibrated by following steps 1 through 6 below.

1. Remove windshield ball.
2. While the meter is off, press and hold the MIN /MAX Hold button while turning the meter on.
3. When the meter turns on, release both the MIN/MAX Hold and Power button to enter calibration mode as indicated on-screen by "CAL 94dB".
4. Insert the microphone into the calibrator.
5. Press the UP and DOWN arrow buttons to increase or decrease the dB level to match the Sound Calibrator output.
6. Once the desired dB level has been attained press the **MIN/MAX** button to save the setting and exit the calibration mode.

Note: Press the Power button to exit the calibration mode at any time.

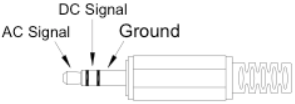
Battery Replacement

Periodically check the Battery Indicator on the display. When there are no more bars on the Battery Indicator the batteries will need to be replaced. Remove the battery cover on the back and insert a new 9V Battery.



AC/DC Signal Output Jack

The meter is equipped with an AC/DC output jack to connect and integrate with external systems. For example, the AC output can be used with a frequency analyzer or oscilloscope to identify the frequency level during a measurement. The DC output is used to identify the dB level during a measurement.

AC/DC Output Connector	3.5mm Sub-Miniature Phone Jack
Connector Diagram	
AC Output Voltage Range	1Vrms at FS (full scale) (FS refers to the upper limit of the selected dB level range. For example if 30-90dB is the selected level range, 1Vrms = 90dB)
DC Output Voltage Range	10mV/dB

Applications

- Preventative Maintenance
- Industrial Machinery/Equipment
- Construction Sites
- Ensuring Safe Working Conditions
- Public Venues / Concerts
- Code Enforcement
- Traffic
- Appliance Noise Testing

Accessories and Replacement Parts

SB-01 Replacement Windshield Ball

CA-05A Soft Carrying Case

R8888 Deluxe Hard Carrying Case

R8090 Sound Level Calibrator

R1500 Tripod

Don't see your part listed here? For a complete list of all accessories and replacement parts visit your product page on www.REEDInstruments.com.

Product Care

To keep your instrument in good working order we recommend the following:

- Store your product in a clean, dry place.
- Change the battery as needed.
- If your instrument isn't being used for a period of one month or longer please remove the battery.
- Clean your product and accessories with biodegradable cleaner. Do not spray the cleaner directly on the instrument. Use on external parts only.

Product Warranty

REED Instruments guarantees this instrument to be free of defects in material or workmanship for a period of one (1) year from date of shipment. During the warranty period, REED Instruments will repair or replace, at no charge, products or parts of a product that proves to be defective because of improper material or workmanship, under normal use and maintenance. REED Instruments total liability is limited to repair or replacement of the product. REED Instruments shall not be liable for damages to goods, property, or persons due to improper use or through attempts to utilize the instrument under conditions which exceed the designed capabilities. In order to begin the warranty service process, please contact us by phone at 1-877-849-2127 or by email at info@REEDInstruments.com to discuss the claim and determine the appropriate steps to process the warranty.

Product Disposal and Recycling

Please follow local laws and regulations when disposing or recycling your instrument. Your product contains electronic components and must be disposed of separately from standard waste products.

Product Support

If you have any questions on your product, please contact your authorized REED distributor or REED Instruments Customer Service by phone at 1-877-849-2127 or by email at info@REEDInstruments.com.

Please visit **www.REEDInstruments.com** for the most up-to-date manuals, datasheets, product guides and software.

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