

# Sound Level Meter





Instruction Manual

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#### Introduction

Thank you for purchasing your REED R8075 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

- Do not expose the microphone to direct airflow, dust, or moisture as this can affect accuracy.
- Clean the microphone regularly with a soft, dry cloth as needed.
- Avoid dropping or hitting the sound level meter.
- Securely mount the meter when needed to prevent accidental movement.
- Do not use the sound level meter in extreme temperatures or humidity.
- Be aware of the potential health risks associated with high noise levels.
- If measuring high noise levels, take appropriate precautions like wearing hearing protection.
- Never attempt to repair or modify the instrument. Dismantling the product 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 ±1.4 dB meets Type 2 standards
- A & C frequency weighting
- · Fast & Slow time weighting
- Digital analog bargraph
- 7" (178mm) high-resolution color TFT LCD (1024 x 600 pixels)
- User adjustable high and low alarms
- Internal 16GB memory stores data points in CSV format
- Virtually limitless data logging capacity, supporting expansive data sets
- User selectable sampling rate from 1 second to 24 hours
- Internal time and date stamp
- Rechargeable li-ion battery
- · Built-in desk stand and wall mounting bracket
- Low battery indicator

## Included

- · Sound Level Meter
- Windshield Ball
- USB Cable
- Power Adapter
- Wall Mounting Bracket

# **Specifications**

Measuring Range(s): 30-130 dB

Dynamic Range: 50 dB

Accuracy: ± 1.4 dB

Resolution: 0.1 dB

Response Time: 500mS

Frequency Range: 31.5 Hz to 8 kHz

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Frequency Weighting: A, C

Time Weighting: Fast/Slow (125mS and 1s)

Microphone: 0.5" (12.7mm) electret condenser

Digital Analog Bargraph: Yes

**General Specifications** 

Display: 7" (178mm) high-resolution color TFT

Display Resolution: 1024 x 600 pixels

Adjustable Brightness: Yes Datalogging Capabilities: Yes

Real-Time Clock and

Date Stamp: Yes

Selectable Sampling Rate: Yes (between 1 second and 24 hours)
Internal Memory: 16GB (Up to 247, 890, 307 data points)

Alarms: Yes (Low and High)

Kick Stand: Yes
Low Battery Indicator: Yes

Power Supply: 3000mAh rechargeable Li-ion

battery/power adapter

Battery Life: ~2 hours
Charge Time: ~9 hours

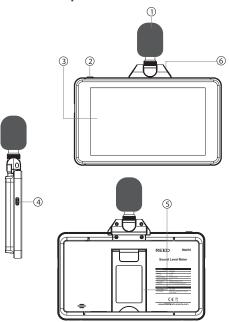
Product Certifications: CE, IEC61672-1 Class 2
Operating Temperature: 14 to 104°F (10 to 40°C)
Storage Temperature: 14 to 104°F (10 to 40°C)

Operating Humidity Range: 10-90%

Dimensions: 7.8 x 4.6 x 1" (198 x 118 x 25.7mm)

Weight: 12.9oz (365g)

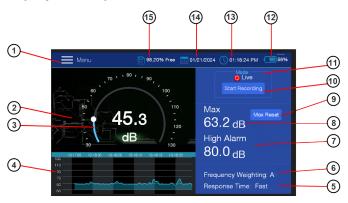
# **Instrument Description**



- 1. Windshield Ball/Microphone
- 2. Power Button
- 3. LCD Display

- 4. USB Terminal
- 5. Kickstand
- 6. Rotating Hinge

# **Display Description**



- 1. Menu Function
- 2. Digital Bar Graph
- 3. Sound Measurement Value
- 4. Historical Bar Graph
- 5. Time Weighting Indicator
- 6. Frequency Weighting Counter
- 7. High/Low Alarm Values

- 8. Maximum Measurement Value
- Max Reset Button
- 10. Start Recording Button
- 11. Recording Status Indicator
- 12. Battery Status Indicator
- 13. Time Stamp
- 14. Date Stamp
- 15. Memory Status Indicator

# Operating Instructions

## Setting up the R8075

The R8075 can be mounted on a wall using the supplied wall mount bracket. Mount the bracket on the wall first and then snap the meter onto the bracket. The wall mount bracket has a swivel arm for convenient angling. Make sure to mount the bracket with the hinge to the right in order for the display to be upright.

## Power ON/OFF

To turn the meter ON, press and hold the POWER button for approx. 3 seconds. To turn the meter OFF, press and hold the POWER button for approx. 2 seconds and tap on power OFF when it appears on the LCD display.

## Main Operating Modes (Live and Data Logging)

#### Live Mode

In Live mode (the default setting), the R8075 displays sound level measurements graphically and digitally on the main interface screen while also digitally displaying the Max values for each.

#### **Data Logging Mode**

In data logging mode, the R8075 displays sound level measurements as it does in live mode, logging measurement data into internal files at a programmable sampling rate. To manually start a recording at a programmable sampling rate, tap the Start Recording button. You can open and view these internal files on the meter screen or transfer them as CSV-formatted files directly to a PC (See the manual's Data Upload and Setup Mode sections for additional details).



## Setup Mode

- Tap the MENU button on the Main Interface Screen to enter Setup Mode.
- 2. Tap the screen to select between the following parameters:

General Setup	Set the alarm values, audible beep, frequency weighting, and response times
Recording Setup	Set the data logging sampling rate
View Alarms	View historical alarms
History	View historical data files
Display	Adjust the display settings
Date & Time	Set the time and date
Info	View meter information and upgrade firmware

Once the appropriate parameter has been selected, follow the instructions below.

## General Setup

- 1. Set the Alarm ON or OFF by tapping on the toggle switch.
- 2. Set the Beeper ON or OFF by tapping on the toggle switch.
- To set the HIGH and LOW Alarm thresholds, open the numerical keypad by tapping the small arrow to the right of each alarm programming field (Alarm must be enabled).
- Tap F (Fast)/S (Slow) buttons to select the desired Response Time. If the sound source consists of short bursts, set the response to FAST (125ms). To measure average sound level, select SLOW (1 second).



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- 5. Tap the A/C button to select the Frequency weighting. 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.
- Tap SAVE to confirm your settings or tap on the X to cancel and resume normal operation.

**Note:** At any time, you can tap on the X to exit the Setup mode and resume normal operation.



## Recording Setup

The sampling rate can be set from "1" second to 23 hours, 59 minutes and 59 seconds.

- To set the sampling rate, open the interactive numerical keypad by tapping the required hours, minutes, and seconds sampling rate fields.
- 2. To enable or disable a scheduled recording, tap on the toggle switch.
- To set a recording start time, open the interactive calendar by tapping the small arrow to the right of the programming field (Scheduled recording must be enabled). Note: The default start time is the current system date and time.
- To select the maximum number of data points, open the interactive options box by clicking the small arrow to the right of the programming field.
- 5. Select between 500, 1k, 5k, 10k, 20k or MAX.

**Note:** If MAX is selected, the meter will create multiple 20,000-data-point files, and recording will continue until you manually stop the recording (by tapping STOP RECORDING on the Main Interface Screen) or until it reaches full internal memory (16GB).

Tap SAVE to confirm your settings or tap on the X to cancel and resume normal operation.

**Note:** At any time, you can tap on the X to exit the Setup mode and resume normal operation.





#### View Alarms

- 1. Swipe up or down to scroll through the history of Alarm events (if any).
- 2. To sort the Alarm events by date, open the interactive calendar by tapping the programming fields next to "Sort by date".
- To sort the Alarm events by high/low measurement values, open an interactive keypad by tapping on the programming fields next to "Sort by value" for Noise.

**Note:** At any time, you can tap on the X to exit the Setup mode and resume normal operation.



#### History

- 1. Scroll up or down to scroll through the list of historical data files.
- Select a data file by first tapping it (to highlight it) and then tap OPEN or CANCEL.
- To delete a file, tap the check box located on the right end of the specific data file, and then tap DELETE.
- To delete all files, tap the check box located next to "All", and then tap DELETE.

**Note:** At any time, you can tap on the X to exit the Setup mode and resume normal operation.



## Display

 To adjust the brightness of the display, drag the Brightness slider to the right or left.



Tap SAVE to confirm your settings or tap on the X to cancel and resume normal operation.

**Note:** At any time, you can tap on the X to exit the Setup mode and resume normal operation.



#### Date & Time

- 1. To set the Date and Time, open the interactive calendar by tapping the small arrow to the right of the programming field.
- 2. Scroll up or down to set the applicable Year, Month, Day, Hour, Minute and AM or PM (12 hour format must be enabled).
- Tap OK to confirm your selections or tap on CANCEL. 3.
- 4. To set the Date format, open the interactive options box by tapping the small arrow to the right of the programming field.
- Select between DD/MM/YYYY or YYYY/MM/DD. 5.
- Set the required time format by tapping on the circle next to 6. "12-Hour" or "24-Hour" format.

Note: At any time, you can tap on the X to exit the Setup mode and resume normal operation.



## Info

Information on the model number, current firmware version, and manufacturer name and allows you to update the firmware version (if required).

Note: At any time, you can tap on the X to exit the Setup mode and resume normal operation.

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## **Data Upload**

Connect the R8075 via the included cable to a USB port on your PC, to download the recorded data files. The R8075 saves recorded data to a CSV (Excel) in the RH-T Data folder. Once connected, the PC will recognize the R8075 as a USB storage device. View the R8075 internal memory as you would any external storage device.

# Charging the Battery

To charge the Li-ion battery, connect the R8075 via the cable to a USB port on your PC or into a wall outlet using the included USB Power Adapter.

**Note:** Charge the meter until the battery indicator appears full and remove the charging cable when done.

#### **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 email at 1-877-849-2127 or 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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