SOUND LEVEL METER
(with 🅱 bluetooth communication)

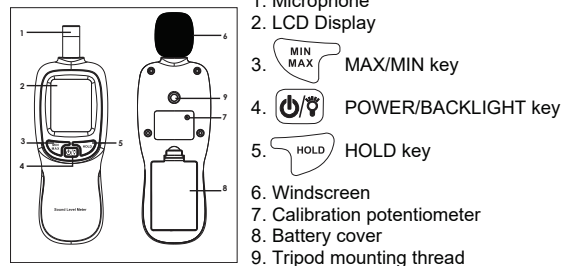## User Manual
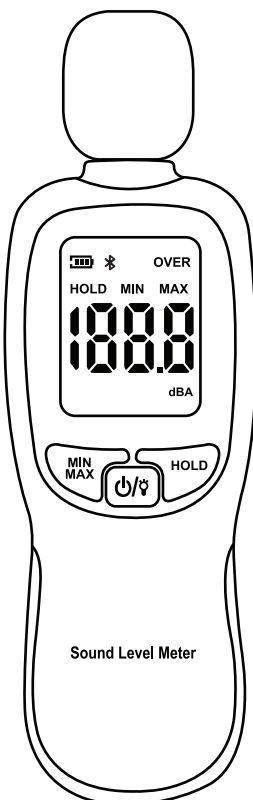
Sound Level Meter

INTENDED USE

This sound level meter is a portable and handheld digital meter to measure sound level. Its wide application includes but not limits to construction site, working and engineering sound level measurement. It is supported by an app, **dB-Tester**, which makes the usage more user-friendly and transforms the data set into an easier way to read.
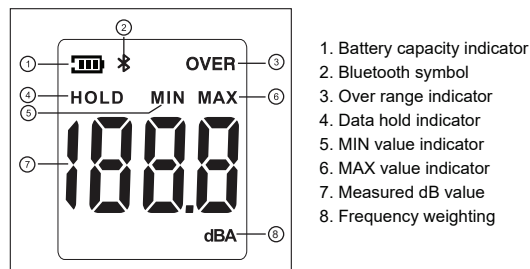
Features:
- High accuracy
- Data hold and Max/Min hold functions
- With data export function via bluetooth function
- Compatible with Apple IOS (IOS 9.0 or above version) and Android smartphones (Android 5.0 or above version)

PRODUCT DESCRIPTION

1. Microphone
2. LCD Display
3. 🔲 MAX/MIN key
4. ⏻ POWER/BACKLIGHT key
5. HOLD key
6. Windscreen
7. Calibration potentiometer
8. Battery cover
9. Tripod mounting thread

LCD DISPLAY

1. Battery capacity indicator
2. Bluetooth symbol
3. Over range indicator
4. Data hold indicator
5. MIN value indicator
6. MAX value indicator
7. Measured dB value
8. Frequency weighting

OPERATING INSTRUCTION

To diminish other factor affecting the accuracy of the measurement, please use the windscreen when making outdoor measurement in windy weather or when measuring air conditioning equipment or similar.

**• Turning the meter ON/OFF**
a. Remove the battery cover and insert 3 AAA batteries.
b. Short press " ⏻ " to turn on the meter.
c. Press and hold " ⏻ " to turn off the meter.

Note: The meter is equipped with an Auto Power Off feature that shuts the meter off after approximately 10 minutes of inactivity. The meter defaults to Auto Power Off each time it is turned on. To disable the auto power off function, press and hold "⏻" key to turn on the meter while it is off. **"UOF"** will appear on the display indicates that the auto power off function now is disabled. The meter will now remain on until the user turns it off or until the battery run out.

• Turning the backlight ON/OFF
Press the " ⏻ " key to turn the backlight on or off.

• Setting alarm level if needed
a. With the meter on, press the "HOLD" key to display **"HOLD"** and then press and hold " ⏻ " key to enter setting mode.
b. Press the "MIN/MAX" key or "HOLD" key to increase or decrease the alarm level to your desired value.
c. Press the " ⏻ " key to save the value.

Note: Alarming level can also set through APP as below,
Menu --> Settings --> Parameter Settings --> Interval and Alarm --> Alarming level (dB). *(Please refer to Page 4 - Data recording & exporting - 1.a.)*

• Taking measurements
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.

• Selecting the MAX/MIN value measurement
a. Press the "MIN/MAX" button once to display "**MIN**" and the minimum recorded dB level. The display will be updated only when reaching the lower dB reading.

b. Press the "MIN/MAX" button again to display "**MAX**" and the maximum recorded dB level. The display will be updated only when the max dB reading is exceeded.

c. Press the "MIN/MAX" button again to exit MIN/MAX mode. The current reading will now display and continually updating.

• Using the Hold function
With the meter on, press the "HOLD" key to display **"HOLD"** and the last dB reading. Press "HOLD" again to exit the function.

## BLUETOOTH COMMUNICATION, DATA RECORDING & EXPORTING

• Bluetooth communication
1. Download the IOS or Android **"dB-Tester"** APP on your smartphone.

IOS version
Scan the QR code to download the dB-Tester App

Android version
Scan the QR code to download the dB-Tester App

2. Turn on your smartphone's Bluetooth and then launch the **"dB-Tester"** app.
3. Press and hold the "HOLD" key on the meter to activate or deactivate the Bluetooth. 🅱 will appear on the LCD when the Bluetooth is activated.
4. Click " 🅱 " on the APP and choose **"SoundMeter"** from the device list that now appears.

IOS version — dB-Tester — Bluetooth — SoundMeter

Android version — dB-Tester — Device List — SoundMeter — 30:45:11:3C:58:6F
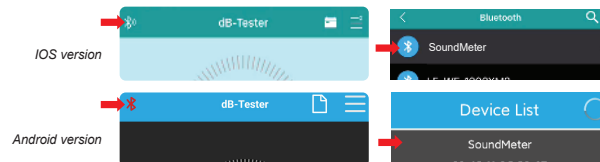
Note:
For Android version, it is necessary to allow the dB-Tester app to access your phone's location, photos, media, and the files on your phone to search the device and to save the data when installing the app.

If the Bluetooth connection does not work, close the app and reopen it to try the above steps from 2.~4. again.
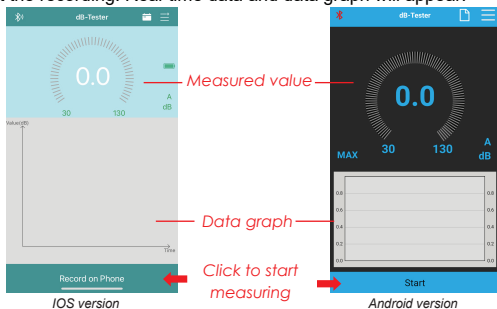
• Data recording & exporting

1. <u>Data recording through APP on the phone</u> (the data will be stored on the app and can store up to 100,000 groups).
 a. Click "Setting" in the "Menu", then set the mode of reading, recording intervals, and alarm value to your liking and save the settings.

Menu   *Menu*

IOS version   *Android version*
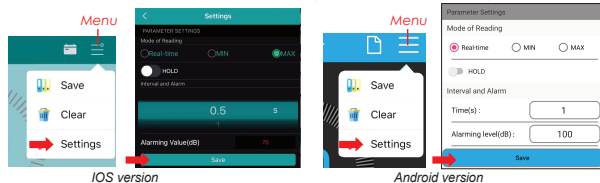
  b. Click "Record on Phone" on IOS version and "Start" on Android version to start the recording. Real-time data and data graph will appear.

Measured value — Data graph — Click to start measuring

IOS version   *Android version*

  c. Click "Stop" to stop the recording and then click "Save" in the "Menu" to save the data. You will now be asked to name and save the file.
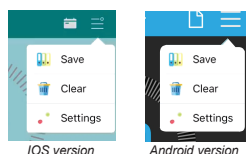
 d. To clear the data recorded on the app, click "Clear" in the "Menu".

IOS version   *Android version*

Note: *Please must save the data first after finishing the recording. The data recorded on the app will be cleared up when you close the app.*

2. <u>Data recording on Meter</u> (the data will be stored in the meter and can store up to 20,000 groups).
  a. Click "Setting" in the "Menu", then set the recording intervals and the total number of records you wish to set for your meter


IOS version   *Android version*
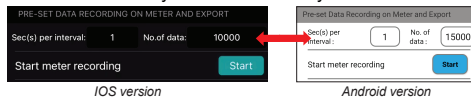
Note: *The meter will automatically stops recording when the saved data reaches the total number of records you set.*

  b. To start the data recording, click **"Start"** on the app or press and hold the " ⟳ " key on the meter until the dBA symbol starts flashing.
  c. To stop the data recording, click **"Stop"** on the app or press and hold the " ⟳ " key on the meter until the dBA symbol stops flashing.
  d. Click **"Export"** on the app to export the stored data in the meter to the app. Set the name and then save the file.
  e. To clear the data recorded in the meter, click **"Clear"** on the app.
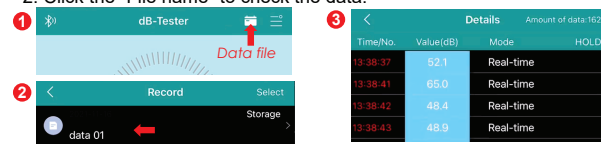

IOS version   *Android version*
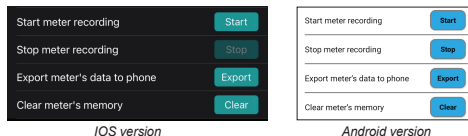
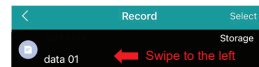## VIEWING & SHARING SAVED DATA

FOR IOS VERSION ONLY
• To View the data
  1. Click the "data file" on the top right corner of the interface.
  2. Click the "File name" to check the data.

• To share the data
  1. While on the Data file page, swipe the file to the left. Share and Delete icon will be shown.

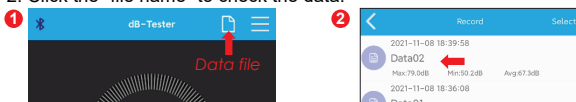2. Click the "Share" icon, and can share on the available apps.

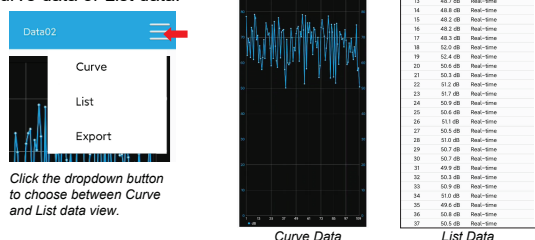*Save or share the file through the application on the Share Sheet.*

FOR ANDROID VERSION ONLY
• To view the data
  1. Click the "data file" on the top right corner of the interface.
 2. Click the "file name" to check the data.

3. Can be viewed as Curve data or List data.

Click the dropdown button to choose between Curve and List data view.

Curve Data   *List Data*

• To export the data
1. While on the "record file", click the dropdown button and select "Export".
2. Choose to export via PDF or Excel file.
3. Click "Confirm" to download the file. The downloaded file will be stored in the "dB_Tester" folder located in the /storage/emulated/0/


downloaded files location
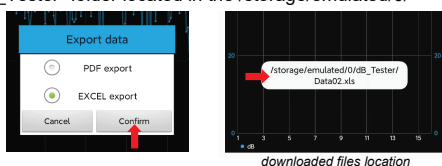
CALIBRATION METHOD

To calibrate the meter, an external sound level calibrator that can provide a 94.0dB signal at 1kHz and a small flat screw-driver are required. Follow the steps below to calibrate the instrument.

1. Turn on the meter and carefully plug the microphone head in 1/2 inch hole of calibrator
2. Turn on the calibrator and set the calibrator to output 94dB@1KHz.
3. Use flat screwdriver to adjust the calibration potentiometer located at the back, and make the LCD display 94.0.
4. Turn off the calibrator and remove the microphone very carefully.
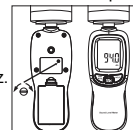
The meter has been calibrated properly in the factory, the recommended calibration interval is **1 year.**

BATTERY REPLACEMENT

The meter is powered by 3 pcs of AAA 1.5V Batteries.
Replace the batteries when:
  • The low battery signal icon ▭ will appear on LCD.
  • The meter cannot be powered on.
To install the batteries:
  1. Turn off the meter and remove the battery cover.
  2. Replace the old batteries with 3 new AAA 1.5V batteries.
  3. Put back the battery cover.

Install three 1.5V AAA batteries
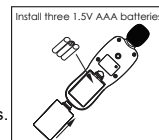
TECHNICAL PARAMETERS

Measuring Range	30 ~ 130dBA
Accuracy	±1.5dB
Frequency Response	31.5Hz ~ 8KHz
Frequency Weighting	A Weighting
Resolution	0.1dB
Working Temperature and Humidity	0 ~ 40°C, 10 ~ 80%RH
Storage Temperature and Humidity	-10 ~ 60°C, 0 ~ 90%RH
Power Source	3*1.5V AAA Batteries
Weight	96.38g (Excluding Battery)
External Dimension	56.1 x 177 x 36.03 mm
Data Storage	20000 groups
Auto power off	10 minutes without operation

MAINTENANCE

1. If the device will not be used for a long period of time, remove the battery to prevent damage to the device due to battery leakage.
2. To prevent damage or severe deterioration to the device, do not open the inside of the device or modify its circuitry.
3. Do not place the device in a humid, dusty, acidic, alkaline or corrosive environment to avoid damage to the device.
4. Use a clean, soft cloth to wipe the meter if it becomes dirty.