YORK
Survey Supply

Nothing else measures up!

Follow us!

York Survey Supply Centre

@York_Survey

@York_Survey

Prospect House
George Cayley Drive
Clifton Moor
York
England
YO30 4XE

Tel: +44 (0) 1904 692723
Fax: +44 (0) 1904 690385

E-Mail: sales@yorksurvey.co.uk

www. YorkSurvey .co.uk

…for secure online ordering of all our products!

YORK
Survey Supply

Dual Range Precision Sound Meter

Code: 343050

Operating Instructions

I. ⚠ Safety Information

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

• Environmental Conditions
1 - Altitude up to 2000 meters
2 - Relatively humidity 90% max
3 - Operation Ambient 0-40ºC

• Maintenance & Cleaning
1 - Repairs or servicing not covered in this manual should only be performed by qualified personnel
2 - Periodically wipe the case with a dry cloth. Do not use abrasives or solvents on this instruments.

• Safety Symbols

▣ Meter is protected throughout by double insulation or reinforced insulation
When servicing, use only specified replacements parts.

CE Comply with EMC
APPROVED

II. General Description

Thank you for selecting our Sound Level. To ensure that you can get the most from it, we recommend that you read and follow the manual carefully before use.
The unit conforms to the IEC651 type 2, ANSI S1.4 type 2 for sound level meters.
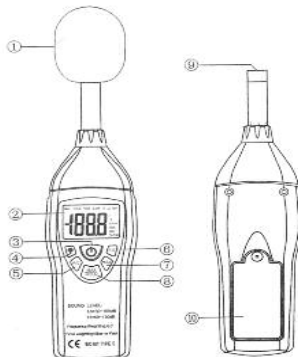The Sound Level Meter has been designed to meet the measurement requirements of Safety Engineers, Health, Industrial safety offices and sound quality control in various environments.
• Ranges from 30dB to 130dB at frequencies between 31.5Hz and 8KHz.
• Display with 0.1dB steps on a 4-digit LCD.
• With two equivalent weighted sound pressure levels. A and C.

III. Specifications

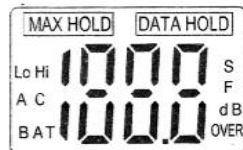|	
Standard Applied	According to IEC651 type 2, ANSI S1.4 type 2
Frequency Range	31.5Hz - 8KHz
Measuring Level Range	30 - 130 dB
Frequency Weighting	A/C
Microphone	1/2 inch Electret condenser microphone
Calibration	Electrical calibration with the internal oscillator (1KHz sine wave)
Display	LCD
Digital Display	4 Digits
	Resolution: 0.1dB
	Display Period: 0.5sec
Time Weighting	FAST (125mS), SLOW (1 sec).
Level Ranges	Lo: 30 - 100dB and Hi: 60 - 130dB
Accuracy	±1.5dB (under reference conditions)
Dynamic Range	65dB
Alarm Function	"OVER" is shown when input is out of range.
Maximum Hold	Hold readings, with decay <1dB/3 minutes.
Auto Power Off	Meter automatically shuts down after approx. 15 minutes of inactivity.
Power Supply	One 9V battery 006P or IEC 6F22 or NEDA 1604
Power Life	About 50 hrs (alkaline battery)
Operating Temperature	0 - 40ºC (32 - 104ºF)
Operating Humidity	10 - 90% RH
Storage Temperature	-10 - 60ºC (14 - 140ºF)
Storage Humidity	10 - 75% RH
Dimensions	210(L) x 55(W) x 32(H)mm
Weight	230g (including battery)
Accessories	9V battery, carrying case, instruction manual.

4. Name and Functions

1. Windscreen
If you operate and wind speeds over 10m/sec, please put protective accessories in front of the microphone.

2. Display

SYMBOL	FUNCTION
LCD	4 digits
MAX	Maximum Value hold
OVER	Over range
F	Fast response
S	Slow response
A	A-Weighting
C	C-Weighting
Lo	Low Range (30-130dB)
Hi	High Range (60-130dB)
BAT	Low Battery

3. Power ON/OFF button ⏻
Turn the meter power ON/OFF

4. Backlight button: ○
Turn the meter backlight ON/OFF

5. A-Weighting / C-Weighting select button A/C
A: A - Weighting. For general sound level measurements.
C: C - Weighting. For checking the low-frequency content of noise.
(If the C-Weighted level is much higher than the A-Weighted level, then there is a large amount of low-frequency noise)

6. Time weighting select button (F/S)
F (fast response): For normal measurements (fast varying noise)
S (slow response): For checking average level of fluctuating noise

7. Level range select button (Lo/Hi)
Lo: 30~100dB;   **Hi**: 60~130dB
When "OVER" is indicated, the ranges switch to another range for measurement.

8. MAX/Hold button (MAX/HOLD)
The max. Hold position is used to measure the maximum levels of sound. The maximum measured level is updated continuously. Press once again the button, will release the hold and allow a further measurement.
Data Hold button: Press and hold the Button for over 2 seconds to turn on or off data hold function.
The hold function freezes the reading of the display.

9. Microphone
1/2 inch Electret Condensor microphone

10. Battery Cover

Measurement Preparation

(1) Battery Loading
    Remove the battery cover on the back and put in one 9V battery.
(2) Battery Replacement
    When the battery voltage drops below the operating voltage, mark "BAT" appears. If it appears, battery should be replaced with new one.

Operating Precautions

(1) Wind blowing across the microphone would bring additional extraneous noise.
    Once using the instrument in the presence of wind, it is a must to mount the windscreen to not pick up undesirable signals.
(2) To achieve more accurate measurement, use an extension cable to separate the Microphone from the main body so that the effect of unexpected sound reflection can be eliminated.
(3) Calibrate the instrument before operation if the instrument was not in use for a long time or operated at bad environment.
(4) Do not store or operate the instrument at high temperature and high humidity environment
(5) Keep microphone dry and avoid severe vibration.
(6) Please take the battery and keep the instrument in low humidity environment. When not in use.

Measurement

(1) Open battery cover and install a 9-volt battery in the battery compartment.
(2) Turn on power and select the desired response Time and Weighting. If the sound source consists of shorts bursts or only catching sound peak, set response to FAST. To measure average sound, use the SLOW setting.
(3) Select desired level
(4) Hold the instrument comfortably in hand or fix on tripod and point the microphone at the suspected noise source, the sound pressure level will be displayed.
(5) When MAX (maximum hold) mode is chosen, the instrument captures and holds the maximum noise level for a long period using any of the time weightings and ranges.
(6) When HOLD (data hold) mode is chosen, the hold function freezes the reading in the display. Press the HOLD button momentarily to activate or to exit the HOLD function,
(7) Turn OFF the instrument and remove the battery when not in use.

Calibration Procedures

(1) Make the following buttons and function switch settings.
     Display: dB, A, Hi or Lo, F
     Function: A-Weighting
     Response Time: FAST
     Level Range: 30 to 100dB(Lo) or 60 to 130dB(Hi)
     Measurement Mode: MAX Hold and Data Hold Mode function disable

(2) Insert the microphone housing into the insertion hole of the calibrator.

(3) Open battery cover and remove the battery to adjust the CAL94dB potenitiometer of the unit. The level display will indicate the desired level.

     The products are all well calibrated before shipment