LIMIT

7000

Sound Level Meter

Operating manual

Language Contents

Language	page

LiMiT

Sound Level Meter Limit 7000.

General information

Limit 7000 is designed for measure sound level of environment in home, in work from traffic and machinery sound etc.

Two different weighting A or C and also Quick or Slow response time.

A-weighting response to the human ear andfiltret. A-weighting is commonly used for environmental cases. C-weighting is a much flatter response and is suitable for analysing of machinery and engines etc.

Fast is used to capture noise peaks and noise that occur very quickly e.g hamerblow.

Slow is used for most applications. Slow response for sound source that have a consistent noise level or to average quickly changing levels.

Sound level can be measured instantaneous or as an average value in a period of time, from 10 seconds to 24 hours.

Memory for 30 groups of results.

Communicate with PC by optional cabel and software for statistics, printing or analysing.

Automatic Hold function for registration of max value.

Alarm function which show with LED light when sound level is over selected alarm level and percent of all measured values which are over alarm value.

Adjustable automatic off or manual off.

Built in calibration signal 94 dB.

2

LiMiT

Specification

Mesuring range dB	30 – 130	
Reading dB	0,1	
Accuracy dB	± 1	
Time weighting	Fast ms	125
	Slow sec	1
Equivalent	10sec, 1min, 5min, 10min, 15min, 30min, 1h, 8h, 24h	
Memory	number 30	
Frequency range Hz	20-12500	
Battery	4 pcs 1,5V LR03 AAA	
Size mm	236x63x26	
Weight g	170	

Compatible with standards IEC 651 Type 2, ANSI 1,4 Type 2.

Optional accessories

Cabel and software for communication with PC.
Connection RS-232. (15152 0202)
Extern sound level meter calibrator 94 and 114 dB. (15152 0301)
AC Adapter. (15152 0400)

Measuring

1. On and off. Push the Ɵ-button.
2. Select parameters.
3. Push FAST/SLOW-button and select FAST (125 ms) or SLOW (1 sek).
4. Push FUNCTION-button and select Lp, Leq, or Ln. Lp shows current sound level.

Leq is Equivalent continuous A sound. Gives an average noise level over an preset period of time. As longer time period as more accurate reading. Set time of period by push MENU- button for 8 secunds till LEQ shows on the display. Select time period with the ▲▼- buttons. 10sec, 1min, 5min, 10min, 15min, 30min, 1h 8h 24h. Confirm by push FUNCTION-button.

Ln funktion shows percent of all measured values which are over or equal alarm value.

5. Push WEIGING to select A or C weighting. With A weighting the frequency respond the human ear. A is commonly used for environmental measuring. C weighting is a much flatter respond and is suitable for analysing of machines, engines etc.

A weighting will automatically be selected when measuring Leq.

Max value.

Push MAX HOLD-button and only the peak value will be showed on the display.

Push again for return to instantaneous reading.

Alarm.

A LED-light on the instrument shows when the value is over selected alarm level.

Ln functionen shows percent of all measured values which are over or equal to the alarm value. The alarm value is preset 85 dB, but can easy be changed between 30-130 dB.

Memory.

4

30 groups of measurings can be stored.
1. When M is showed on the display push SAVE button.
The Display show number of stored values.
2. Push READ button for reading stored values. R
shows on the display and latest value are showed. Push
▲▼- buttons for reading the other stored values.
3. Push DEL/MENU-button to delete stored value on the
display.
4**.** Return by push FUNCTION-button.

Calibration
Standard method for calibration requires an external
calibrator. Code no 15152-0301.
1. Push the Ө-button.
2. Select A-weighing and SLOW.
3. Place the microphone into the calibrator. Turn the
calibrator on.
4. Adjust the meters CAL potentiometer on the meters
right side with a small screwdriver so the value on the
display matches the output of the calibrator 94 dB or
114 dB.

Limit 7000 have a built in signal for calibration.
1. Push FUNCTION-button till CAL shows on the display.
2. The value on the display should be 94. If not, adjust
the meters CAL potentiometer on the meters right side
with a small screwdriver so the value on the display is
94 dB.

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Automatic / Manual OFF.

The meter is preset for automatic off after 5 minutes. To chance off time.

1. Push DEL/MENU-button for 10 seconds till AUTO shows on the display.

2. Select new off time with ▲▼- buttons from 1 to 9 minutes. Select 0 for manual off.

3. The meter can always be turned off by push the power Ө-button.

Battery

When the battery symbol shows on the display.

Remove the battery lid on the instruments backside and replace with 4 pcs 1,5 V battery type AAA.

Remove always the battery if AC adapter is used or when the meter not is being used for a longer time.