Sound level meter
SDA

CE

TECHNICAL FEATURES

Microphone
Microphone.................................. prepolarised electret condenser.
Nominal sensitivity........................ 20 mV/Pa .

Sound level meter
Standards.....................................IEC 61672-1 Class 2 /
IEC 61651 Class 2 / IEC 60804 Class 2
Measured parameters................... L_A
Other displayed parameters.......... L_{AFmax}, L_{AFmin}, L_{ASmax} , L_{ASmin}
Frequency weighting..................... A
Measuring range........................... 30-130 dB
Time weighting.............................. slow, fast
Overload indicator........................ detected at the peak sound-pressure level
Backlighted display....................... graphic 128x64 pixels.
Adjustable contrast.
Resolution.................................... 0,1 dB
Reference direction...................... microphone axis
Reference range........................... 30 - 130 dB
Reference level............................. 94 dB
Reference frequency..................... 1000 Hz

Environmental effects
Storage relative humidity............... 95 % RH max.
Storage temperature......................from 0 °C to + 50 °C.
Operating temperature.................. from -10 °C to + 50 °C.
Humidity dependence....................in accordance with standard between 30
and 90%RH, reference being at 65%HR
and 40°C.
Static pressure dependence..........According to class 2 requirements
Standards.....................................IEC 61672-1 / IEC 61651 / IEC 60804
Electromagnetical compatibility......As per 89/336/CEE guideline

Power supply
Batteries.......................................3 AAA or rechargeable batteries
(Rq: rechargeable batteries must not be recharged inside
the instrument)
Battery life (at 20°C)......................30 hours min (with alkaline batteries)

Output

⚠ **DO NOT PLUG USB cable.** The output **is not USB** compatible, the plug is maintenance- and optional accessory-specific.

DESCRIPTION

The sound level meter **SDA** is reliable, easy to use and in accordance with metrology requirements. SDA can measures :

- **Sound-pressure level**

Sound-pressure level L_A
as per two weighting times FAST or SLOW

To be used for stable or slightly fluctuating sound sources**.** Sound-pressure level (L_A) unit is **dBA** and L_{Amax} and L_{Amin} values are saved**.**

CTL 100
Automatic check of sound level meter

CE

PRINCIPLE OF AUTOMATIC CHECK

Initial check

To be carried out at the delivery, when instrument is new and calibrated (laboratory or manufacturer) or after periodic calibration procedure, or after repair.

Frequent check

*To be carried out **BEFORE** :*
- each measurement dataset

*To be carried out **AFTER** :*
- an impact applied on the instrument,
- storage in extreme environment (high temperature,   wet environment etc...)
- a long period of storage
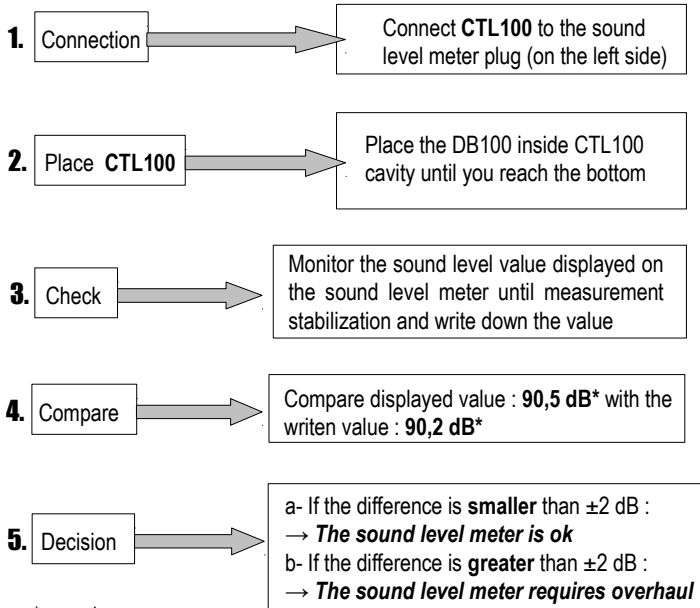

WORKING PRINCIPLE

CTL100 gives a stable acoustic signal **90 dB at 1000Hz**, automatically delivered once plugged to the sonometer. The user shall write down the **LA value**, fast (F) or slow (S) displayed on the sound level meter.
The sound level meter value and the CTL100 reference value must not exceed **90 dB ± 2dB** difference.
In case of greater difference, the sound level meter shall be returned to Customer Service Department.

Note : The sound level meter can not be calibrated with the CTL100. An acoustic calibrator must be used to calibrate sound level meters or the instrument can be sent to specialized laboratories or Customer Service Department. CTL100 works only for DB100.

Operating procedure :

1. Connection → Connect **CTL100** to the sound level meter plug (on the left side)

2. Place **CTL100** → Place the DB100 inside CTL100 cavity until you reach the bottom

3. Check → Monitor the sound level value displayed on the sound level meter until measurement stabilization and write down the value

4. Compare → Compare displayed value : **90,5 dB*** with the writen value : **90,2 dB***

5. Decision →
a- If the difference is **smaller** than ±2 dB :
→ ***The sound level meter is ok***
b- If the difference is **greater** than ±2 dB :
→ ***The sound level meter requires overhaul***

*example

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*Sound level meter supplied separately

PRESENTATION

The automatic check consists in comparing sound level meter value with level produced by **CTL100**. The principle allows to periodically check sound level meter performance, especially the microphone performance which is the sensing element of the instrument.
CTL100 can not replace an acoustic calibrator which must be used for sound level meter calibration.

TECHNICAL FEATURES

Emission
Frequency.................................... 1000 Hz ± 5%
Level... 90 dB ± 1dB
Stability....................................... < 0.5 dB

Automatic power supply
When being connected to the sound level meter

Environment
Operating temperature....................from +5 °C to + 40 °C
Pressure..1013 hPa ± 10%
Storage relative humidity............... 80 % RH max.
CE labelling..................................As per 89/336/CEE guideline

Dimensions
Dimensions (Without cable)...........140 x 28 x 25 mm
Weight...50 g

Distributed by :

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