



94 dB/114 dB

# SOUND CALIBRATOR

72-2680



<http://www.tenma.com>

Your purchase of this SOUND CALIBRATOR marks a step forward for you into the field of precision measurement. Although this SOUND CALIBRATOR is a complex and delicate instrument, its durable structure developed. Please read the following instructions carefully and always keep this manual within easy reach.

## OPERATION MANUAL

# TABLE OF CONTENTS

1. FEATURES.....	1
2. SPECIFICATIONS.....	1
3. FRONT PANEL DESCRIPTIONS.....	2
3-1 Couple Section.....	2
3-2 0.5" Microphone Adapter.....	2
3-3 Off/94 dB/114 dB Switch.....	2
3-4 Power/Low Battery Indicator.....	2
3-5 Battery Cover/Compartment.....	2
4. CALIBRATION.....	3
5. BATTERY CHECK.....	4
6. REPLACEMENT of BATTERIES.....	5
7. SERVICE & REPAIR.....	5

# 1. FEATURES

Standard 94 dB/1000 Hz & 114 dB/1000 Hz sound calibrator, useful to calibrate another " Sound Level Meter " precisely.

## 2. SPECIFICATIONS

Frequency	1000 Hz $\pm$ 2%
Sound Pressure Level	94 dB $\pm$ 0.75 dB. 114 dB $\pm$ 0.9 dB. <i>* Spec. tested under the environment RF Field Strength less than 3 V/M &amp; frequency less than the 30 MHz only.</i>
Suitable Microphone Type	1 " mic. & 0.5 " mic. <i>* 0.5" microphone is calibrated with 0.5" mic. adapter(standard acc.)</i>
Distortion	94 dB range harmonic distortion : $\pm$ 2 %. 114 dB range harmonic distortion : $\pm$ 5 %.
Operating Temperature	0 to 50 °C (32 to 122 °F).
Power Supply	DC 9 V battery (006P, 6F22) x 2 PCs. <i>* Recommend use the Alkaline or Heavy duty type battery.</i>
Power Consumption	Approx. DC 7 mA.
Battery Check	Build in " Low Battery Indicator "
Dimension	Dia 50 mm ( round ) x 145 mm ( length ).
Weight	Approx. 350 g/0.77 LB (include the batteries).
Accessories Included	Instruction manual..... 1 PC. 0.5" mic. adapter..... 1 PC. Adjust Screw Driver..... 1 PC. Carrying case..... 1 PC.

### 3. FRONT PANEL DESCRIPTION

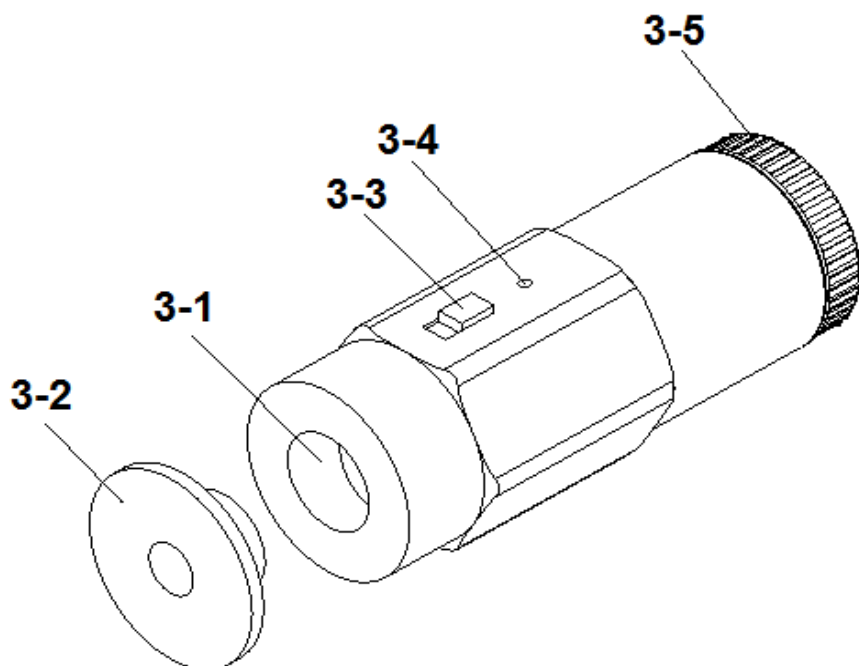


Fig. 1

- 3-1 Couple Section
- 3-2 0.5" Mic. Adapter
- 3-3 Off/94 dB/114 dB Switch
- 3-4 Power/Low Battery Indicator
- 3-5 Battery Cover/Compartment

## 4. CALIBRATION

- 1) If the calibrated " SOUND LEVEL METER " used the 0.5" microphone, then on the " Couple Section " (3-1, Fig. 1) should install the " 0.5" Mic. Adapter " (3-2, Fig. 1) first.

*Consideration :*

*If the calibrated " SOUND LEVEL METER " used the 1 inch microphone, then on the " Couple Section " (3-1, Fig. 1) should take away the " 0.5" Mic. Adapter ".*

- 2) Insert the microphone of calibrated " SOUND LEVEL METER " carefully all the way into the coupler section of the Sound Calibrator. (Refer to Fig. 2).
- 3) Set the calibrated " SOUND LEVEL METER " to a range suitable for measuring " 94 dB " or " 114 dB ".
- 4) Slide the " Off/94 dB/114 dB Switch " ( 3-3, Fig. 1 ) to " 94 dB " position if the sound level meter intend to check or be calibrated on 94 dB value.  
Slide the " Off/94 dB/114 dB Switch " ( 3-3, Fig. 1 ) to " 114 dB " position if the sound level meter intend to check or be calibrated on 114 dB value.

**A pure 1,000 Hz tone is produced.**

- 5) Adjust the calibration VR ( knob ) of the calibrated " SOUND LEVEL METER " until that the display reach to 94.0 dB ( 114 dB ) exactly or the meter pointer points to the " CAL " mark. ( Refer Fig. 2 )

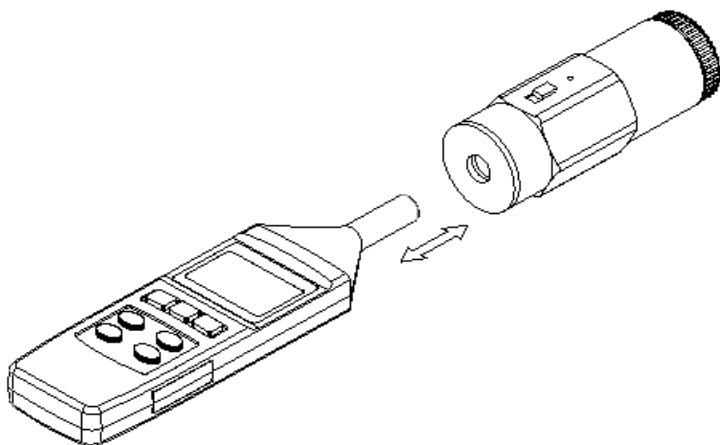


Fig. 2

## 5. BATTERY CHECK

Under the normal operation, slide " Off/94 dB/114 dB Switch " ( 3-3 , Fig. 1 ) to the " 94 dB " or " 114 dB " position, the " Power/Low Battery Indicator " ( 3-4, Fig. 1 ) will light up, then the battery voltage is normal.

If the " Battery Indicator " does not light up, then the batteries are under low voltage condition, it should replace the batteries.

## 6. REPLACEMENT of BATTERY

- 1) Take away the " Battery Cover " (3-5, Fig. 1).  
Please refer to Fig. 3.
- 2) Remove the old batteries & replace the two new 9V batteries.
- 3) Make sure the battery is installed to the right position & connected to the proper polarization with the battery snap.
- 4) Reinstall the battery cover after changing the batteries.

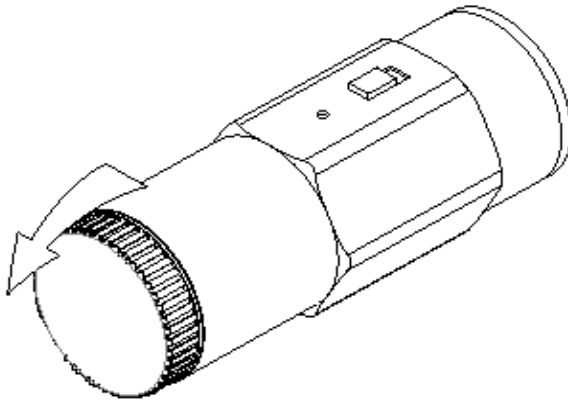


Fig. 3

## 7. SERVICE & REPAIR

For service repair and calibration, please contact your local Tenma distributor.