

# RC PRO SLC 1356 Sound Level Calibrator Instruction Manual

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RC PRO SLC 1356 Sound Level Calibrator



# **Product Information**

| Product Name   | SLC 1356 Sound Level Calibrator |
|----------------|---------------------------------|
| Model          | SLC 1356                        |
| Features       | EN-1                            |
| Specifications | EN-2                            |

# **Product Usage Instructions**

# **Safety Information**

Read the following safety information carefully before attempting to operate or service the calibrator. Use the calibrator only as specified in this manual; otherwise, the protection provided may be impaired. The SLC 1356 is intended for the calibration of sound level meters only.

# **Environmental conditions:**

Temperature: 20°C (68°F)Relative Humidity: 65% RH

• Atmospheric Pressure: 1013 mbar

# Maintenance & Cleaning:

Periodically wipe the case with a dry cloth. Do not use abrasives or solvents on the instrument.

# Repairs or servicing:

Not covered in this manual should only be performed by qualified personnel.

### Symbols:

Complies with the EMC Directive

### **Operating Preparation**

- 1. Remove the battery cover and install a 9V battery in the battery compartment, replace the battery cover.
- 2. To quickly check the operation of the SLC 1356 prior to use, proceed as follows:
  - 1. Slide the power switch from the OFF position to the 94dB position and listen for the 1000Hz audible tone. This indicates that the instrument is functioning. If no tone is evident, the battery may need replacement.
  - 2. Slide the switch from 94dB to 114dB, the increase of 20dB noise level should be audibly detectable.

# **Calibration of Sound-Measuring Instruments**

- 1. The cavity of the calibrator will accommodate a 1 microphone.
- 2. Set the SLC 1356 power switch to the 94dB or 114dB position, depending on the desired level of calibration (select the level closest to the upper limit of the intended measurement range of the microphone).
- 3. Place the SLC 1356 cavity (plus adaptor if necessary) over the microphone of the sound-measuring instrument to be calibrated.
- 4. On the instrument under calibration, set the LEVEL RANGE control to a range having 100dB as its upper limit if 94dB was selected on the SLC 1356. If 114dB was selected on the SLC 1356, choose a range with an upper limit of 120dB. The instrument under calibration may be set to either FAST or SLOW response and C or A weighting.

### **SAFETY INFORMATION**

- Read the following safety information carefully before attempting to operate or service the calibrator.
- Use the calibrator only as specified in this manual; otherwise, the protection provided may be impaired.
- The SLC 1356 is intended for the calibration of sound level meters only

#### **Environmental conditions**

- 1. Altitude = up to 2000 metres
- 2. Relative humidity = 90% maximum
- 3. Operating ambient temperature = 0 40 °C

### 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 the instrument.

# **Symbols**

#### **FEATURES**

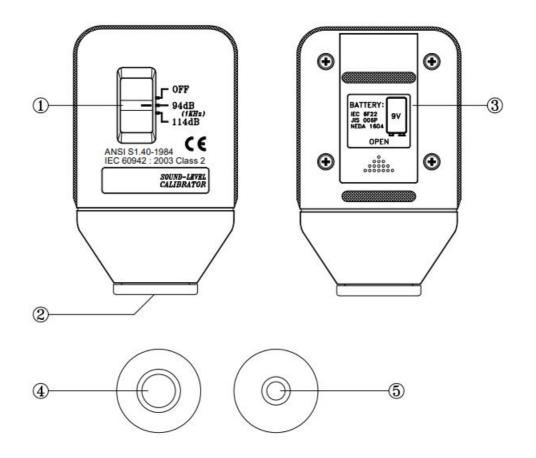
- Conforms to ANSI S1.40-1984 and IEC 60942: 2003 Class 2.
- Calibration levels of 94dB and 114dB.
- Fits 1", 1/2" and 1/4" microphones.

# **SPECIFICATIONS**

- Output Sound Pressure Levels: 114dB and 94dB with reference to 20mPa (threshold of hearing) under reference conditions
- Output frequency: 1000Hz ± 2%
- Reference conditions:
- Temperature : 20°C (68°F)
- Relative Humidity : 65% RH
- Atmospheric pressure : 1013 mbar
- Temperature coefficient: ±0.02dB/ °C Humidity coefficient: -0.1dB/10%RH
- Total harmonic distortion : < 2%
- Accuracy of Sound Pressure Level under stated reference conditions: ±0.5dB
- Power: One 9V battery 006P or IEC 6F22 or NEDA 1604
- Battery life: approximately 20 hours (alkaline battery)
- Battery test: internal circuitry checks the condition of the battery, the calibrator will not operate if the battery voltage falls below an acceptable level.
- **Dimensions**: 103(L) x 63(W) x 54(H) mm
- Weight: approximately 200g (including battery)
- Operating temperature and humidity: -10 to +50°C (14-122°F) at 0-90%RH
- Storage temperature and humidity: -10 to +60°C (14-140°F) at 10-70%RH
- Accessories: Instruction manual, carrying case, 9V battery, ½" and ¼" microphone adaptor

### NOMENCLATURE AND FUNCTIONS

- 1. Power and output level select switch
- 2. Transducer assembly 1" cavity for microphone insertion
- 3. Battery cover
- 4. 1/2" microphone adaptor
- 5. 1/4" microphone adaptor



### **OPERATING PREPARATION**

- 1. Remove the battery cover and install a 9V battery in the battery compartment, replace the battery cover.
- 2. To quickly check the operation of the SLC 1356 prior to use, proceed as follows:
- a). Slide the power switch from the OFF position to the 94dB position and listen for the 1000hz audible tone.

  This indicated that the instrument is functioning. If no tone is evident, the battery may need replacement.
- b). Slide the switch from 94dB to 114dB, the increase of 20db noise level should be audibly detectable.

### CALIBRATION OF SOUND-MEASURING INSTRUMENTS

- 1. The cavity of the calibrator will accommodate a 1" microphone.
- 2. When calibrating an instrument with a ½" microphone, the ½" microphone adaptor must be fitted to the SLC 1356 by gently pushing it all the way in to the 1" cavity until it stops.
- 3. When calibrating an instrument with a ¼" microphone, the ¼" microphone adaptor must be fitted to the SLC 1356 by gentlypushing it all the way in to the 1" cavity until it stops.
- 4. Set the SLC 1356 power switch to the 94dB or 114dB position, depending on the desired level of calibration (select the level closest to the upper limit of the intended measurement range of the microphone).
- 5. Place the SLC 1356 cavity (plus adaptor if necessary) over the microphone of the sound-measuring instrument to be calibrated.
- 6. On the instrument under calibration, set the LEVEL RANGE control to a range having 100dB as its upper limit if 94dB was selected on the SLC 1356. If 114dB was selected on the SLC 1356, choose a range with an upper limit of 120dB. The instrument under calibration may be set to either FAST or SLOW response and C or A weighting.

- 7. Read the level on the instrument under calibration and adjust the sensitivity control for the correct indication as selected in step 4 above.
- 8. When the SLC 1356 is not in use, slide the Power switch to the OFF position.

# **CAUTION**

Ambient sources of noise or vibration can cause a false calibration indication, this can be especially significant at the lower 94dBA level.

# **Documents / Resources**



RC PRO SLC 1356 Sound Level Calibrator [pdf] Instruction Manual SLC 1356, SLC 1356 Sound Level Calibrator, Sound Level Calibrator, Level Calibrator, Calibrator

Manuals+,