Press F3, choose the **presentation mode for the signal:** continuous (C), pulse (P) and press ↵ o ⟳.

| A LGO **C** | A LGO **C** |
|---|---|
| **CONTIN.** | **CONTIN.** |

Choose the **signal intensity.**

| A LGO C | A LGO C |
|---|---|
| **60** 00/10 | **60** |

Use F1 to choose the **input device**: auxiliary **(AUX)** or technician microphone **(MIC)** and press ↵ o ⟳ o ⟳.

| NW**F1:AUX/MIC** | VD |
|---|---|
| 10 | 03 |

Choose the **number of words (NW)** and press ↵ o ⟳ o ⟳.

| NP F1: AUX/MIC | VD |
|---|---|
| **10** | 03 |

Choose the **volume of the input device (VD):** auxiliary **(AUX)** or technician microphone **(MIC)** and press ↵ o ⟳ o ⟳.

| NW F1: AUX/MIC | **VD** |
|---|---|
| 10 | **03** |

Choose the number of **correct words.**
To set the counter to zero, **press** RESET.

| A LGO C | A LGO C |
|---|---|
| 60 **02**/10 | 60 |

## COMMON FUNCTIONS

**Applying the signal** to the patient.

Choose **inverted mode** (the signal is enabled when the SIGNAL key is not pressed).

| A HZ C | A HZ C |
|---|---|
| 60 ▮▮ 1000 | 60 |

**Threshold memorisation.**

| TEST | XXXXX |
|---|---|
| THRESHOLD SAVED | |

**Threshold revision, choose the conduction with ⟳ and the frequency with ▽ △**

| A --- XXX | A --- |
|---|---|
| 60 1000 | 60 |

**Printing** the audiometric report (**the thresholds have to be memorised**).

| TEST | XXXXX |
|---|---|
| PRINTING | |

**Save a test** to the database.
Accessing the Database menu if there are no thresholds.

| TEST | XXXXX |
|---|---|
| SAVED | |

Activating the **intercom** (the patient receives the signal from the technician microphone and vice-versa). Choose the volume for the **technician's earphones (E.TC)** and the **patient'smicrophone**. **(M.PA)**

| INTERCOM | |
|---|---|
| E.TC 03 | M.PA 03 |

CE 0318 Product class IIa according to Directive 93/42/EEC

**SIBEL S.A.U.**, Raimon Casellas, 6-8. 08205-Sabadell (Barcelona). Spain.
Domestic Sales: Tel. 93 436 00 08 - E-mail: comercial@sibelmed.com
International Sales: Tel. +34 93 436 00 07 - E-mail: export@sibelmed.com
Technical Assistance: Tel. +34 93 433 54 50 - E-mail: sat@sibelmed.com
www.sibelmed.com

520-711-GR2 Rev. 2.01

www.sibelmed.com



# Quick Start Guide
# SIBELSOUND 400

**Congratulations for purchasing an audiometer from SIBELMED, a leading company in the sector. To optimise the use of this device, please refer to the USER'S MANUAL.**

**The SIBELSOUND 400 clinical audiometer is a compact two-channel device, the main components of which are a tone generator, a noise generator, a set of earphones for air conduction, a vibrator for bone conduction and an alphanumeric liquid crystal screen.**
**The whole system is controlled by a Digital Signal Processor DSP that allows audiometric examination to be carried out quickly, simply and reliably to establish hearing thresholds and to**

## INSTALLATION

Install the device somewhere:
- With a 90V - 264V mains outlet and ground connection (required power is < 50 VA).
- With room temperature between 10 ºC and 40 ºC.
- With relative humidity lower than 90% without condensation.
- Next to a soundproof cabin or in a room with a very low level of ambient noise (another possibility is placing noise dampers in the earphones).
- Away from possible splashes of water or any other liquid.
- Free from objects that prevent air flow during operation.

## MENUS

**The audiometer has several options that can be accessed by pressing the MENU key, as follows:**

**1. TESTS**
- 1. TONE
- 2. Sisi*
- 3. Speech*
- 4. Fowler*
- 5. Tone Decay*
- 6. Luscher*
- 7. Weber*
- 8. Pure Tone HF*
- 9. Free

**2. CONFIGURATION**
- 1. SAVE CONFIG.
- 2. Modif Default
- 3. Reset Default
- 4. Diagnosis
- 5. Sel. Freq.
  - 1. Freq. Sel.
  - 2. Musical Freq.
- 6. Printer
- 7. Language
- 8. CONTRAST
- 9. DATE - TIME

**3. MAINTENANCE**
- 1. TEST DEVICE
  - 1. CPU
  - 2. LCD
  - 3. KEYBOARD
  - 4. Printer
  - 5. Update key
  - 6. Version
  - 7. RESET DEVICE
- 2. CALIBRATION
  - 1. ANSI / ISO
  - 2. CAL. WARNING
  - 3. CAL. DEFECT
- 3. MONITOR*
- 4. LOGO-INTER*
- 5. AUXILIARY*

**4. DATABASE***
- 1. Display
- 2. Delete DB
- 3. Find patient
- 4. Delete Patient.

**5. REF TONE****
**6. AUTO MASK**

*Depending on models
** Permitted in models, AOM, AOM+ AND SUPRA

**Press ▽ △ or turn ⟳ to move around the various options of the menu.**
**Press ↵ or ⟳ to access the selected option and press RESET to return to the previous menu (press this key for more than 1 second to return to the screen of the selected test).**

www.sibelmed.com

www.sibelmed.com

## PERFORMING AN AUDIOMETRIC TEST, step by step

1. Make sure that the **patient** is sitting comfortably, relaxed and rested and paying as much attention as possible to the test.
2. Explain what the **audiometric test** that is going to be performed consists of and what the patient should answer after hearing the tones.
3. Depending on the test, place the air conduction earphones or the bone conduction vibrator on the patient and remove glasses or any ornaments that may prevent correct positioning, and ensure that the patient's hair does not get in the way of the connection between the two transducers and the ear lobe or the mastoid bone.
4. Connect the **mains cable** to the audiometer and the power supply.
5. Connect the **accessories** to the corresponding connection points.
6. Move the **switch**  located at the back of the device to the **"I" ONposition.** The equipment then performs a self-check in which it tests whether all the accessories are connected and whether the original calibration is correct. If the result is negative, it displays an alert showing which accessories are missing and/or the date of the most recent calibration.
7. Press the MENU key and use the ▽ / △ keys to choose **TESTS** and choose the test type: **TONAL** (Tonal Audiometry)/ **SISI** (Sisigram)/ **SPEECH** (Speech audiometry)/ **FREE** (Free audiometry). Press ⏎
8. Press the 🧍 key, enter a **reference** and press ⏎ (**this option is not available during the free test**).
9. Continue the procedure corresponding to the selected test type. The basic functions for performing the tests are as follows:

### TEST TONE

| A | HZ | C | A | HZ | C |
|---|---|---|---|---|---|
| 60 | | 1000 | | | 60 |



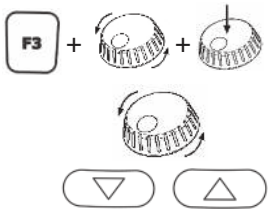

Press F1, choose the **application mode of the signal:** air (A), bone (B), open field (F optional) or disabled (-) and press ⏎ o .

| **A** | HZ | C | **A** | HZ | C |
|---|---|---|---|---|---|
| **AREA** | | | **AREA** | | |




Press F2, choose the **signal source:** pure tone frequency HZ), masking with narrow bandwidth noise (NBWN optional) or masking with white noise (WN) and press ⏎ o .

| A | **HZ** | C | A | **HZ** | C |
|---|---|---|---|---|---|
| | **TONE** | | | **TONE** | |




Press F3 and choose the **presentation mode for the signal:** continuous (C) or pulse (P) and press ⏎ o .

| A | HZ | **C** | AHZ | **C** |
|---|---|---|---|---|
| | **CONTIN.** | | **CONTIN.** | |

Choose the **signal intensity.**

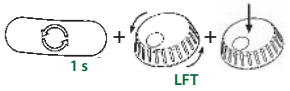
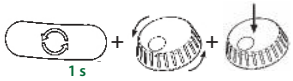
| A | HZ | C | A | HZ | C |
|---|---|---|---|---|---|
| **60** | | 1000 | | **60** | |

Choose the **signal frequency.**

| A | HZ | C | A | HZ | C |
|---|---|---|---|---|---|
| 60 | | **1000** | | | 60 |

| A | R00 | S | A | E00 | - |
|---|---|---|---|---|---|
| 60 | | 1000 | | | 60 |

### SISIGRAM TEST

| KEYS | PROCEDURE | SCREEN |
|---|---|---|
|   | Press F1, choose the **application mode of the signal:** air (A), or disabled (-) and press ⏎ o . | **A** R00 S **A** E00 - **AREA** **AREA** |
|   | Press F3, choose the **presentation mode for the signal:** sisigram (S) or disabled (-) and press ⏎ o . | A R00 **S** A E00 - **SISI** **DEACT.** |
|  | Choose the **signal frequency.** | A R00 S A E00 - 60 **1000** 60 |
|   | Press inver for 1 second, choose the **intensity for the signal increases (INC)** : from 1 to 5 dB and press ⏎ o o . | A R00 S A E00 - **INC** 1.0 FREQ MAN |
|   | Choose the **frequency (FREQ)** with which to **apply the increases:** from 1 to 9 seconds or manual **(MAN)** and press ⏎ o o . | A R00 S A E00 - INC 1.0 **FREQ MAN** |
|   | Applying the **increases** of the signal **manually.** Starting the SISI test. | |
|   | **Setting the** stimuli counters (E00) and response counters (R00) to zero. | A R00 S A E00 - 60 1000 60 |

### SPEECH AUDIOMETRY TEST

| KEYS | PROCEDURE | SCREEN |
|---|---|---|
|   | Press F1 and choose the **signal pathway**: air (A), open field (F optional) or disabled (-) and press ⏎ o . | **A** LGO C **A** LGO C **AREA** **AREA** |
|   | Press F2,choose the **signal source:** speech audiometry (LGO) or masking with speech noise (SN) and press ⏎ o . | A **LGO** C A **LGO** C **LOGO** **L O G O** |

www.sibelmed.com