

AUDIOMETER MONTHLY BIOLOGICAL CALIBRATION CHECK PROCEDURE

All individuals must be able to hear all frequencies at 25 dB or better.

Screen the individual at an intensity of 25 dB HL in each ear at the following frequencies: 1000, 2000, 4000, 6000, 500, and 250 Hz, in that order.

1. Start with the right ear and set the frequency dial at 1000 Hz.
2. **Set the HL dial at 40 dB HL and present the tone for two to three seconds.**
3. **If the individual responds, lower the intensity by 10 dB HL (to 30 dB HL on the HL dial) and present the tone again.**
4. Continue to **lower** the HL dial in **10 dB** steps until no response is obtained or until 20 dB is reached.
5. If no response is obtained, **increase** the HL dial setting in **5 dB** steps until the individual again signals that the tone is heard and **Record** this numeric HL setting at 1000 Hz for the right ear.
6. Reset the HL dial at 40 dB HL and turn the frequency control dial to 2000. Hz.
7. Repeat the sequence (steps number 3–6) until you establish the numeric HL setting for 2000 Hz and record it.
8. Continue in this manner for each of the frequencies in the following sequence: 4000, 6000, 500, and 250 Hz. Remember, each time you begin screening a new frequency, return the HL dial to 40 dB and begin the sequences of down 10 until the individual does not respond and up 5 until the individual responds, or 20 dB is reached.
9. **Establish and record the numeric HL setting for all six frequencies in the right ear.**
10. **Set the output selector to the left ear and begin the procedure on that ear at 1000 Hz.** The sequence remains the same for the left ear: 1000, 2000, 4000, 6000, 500, and 250 Hz. **Numeric HL settings are recorded in the same manner as for the right ear.**
11. Once the numeric HL settings for all frequencies in the right and left ears have been recorded, the base line procedure is complete.
12. Each month following when the audiometer is in use, check the base line for one of the other individuals above. If you detect a hearing difference of 5 dB or greater for any of the screening frequencies between 250 Hz and 6000 Hz on the monthly check of one individual, check one of the other two people. Record this information at the bottom part of the form.
13. If you can confirm a change of 5 dB or greater in the same direction from the additional biological checks, the audiometer needs an electronic calibration.
14. A distorted signal or attenuator/tone switch transients also indicates a need for calibration.

NOTE: If the listener responds to a frequency at 20 dB, record the numeric HL setting as 20 dB for that frequency.

AUDIOMETER MONTHLY BIOLOGICAL CALIBRATION CHECK (M-45)

Mfg. Beltone Model Serial #: 12B342 Owner: School District

Date of last calibration: 2/12/22 Assigned to: Your Name

HEARING SCREENING REFERENCE DATA (Obtain after calibration)								
Names of three individuals	Ear	6	5	1	2	3	4	Date
		250	500	1000	2000	4000	6000	
1. Person # 1 John	R	25	25	20	20	25	25	3/2/22
	L	20	25	20	25	20	25	
2. Person # 2 Mary	R	25	25	20	25	20	25	3/2/22
	L	20	20	20	25	20	25	
3. Person # 3 Nancy	R	25	25	25	20	25	20	3/2/22
	L	25	25	20	20	25	25	
RECORD MONTHLY RESULTS ON ONE OF THE ABOVE								
Person # 1 John	R	25	25	20	20	25	25	4/2/22
	L	20	25	20	25	25	25	
Person # 3 Nancy	R	25	25	25	20	25	20	4/2/22
	L	25	25	20	20	25	25	
Person # 3 Nancy	R	25	25	35	20	25	20	5/2/22
	L	25	25	20	20	25	25	
Person # 2 Mary	R	25	25	30	20	25	25	5/2/22
	L	20	20	20	25	20	25	
	R							
	L							
	R							
	L							
	R							
	L							
	R							
	L							
	R							
	L							

Johns 4000 frequency for the left ear is off by 5dBs from the original screening conducted one month prior. You have to screen someone else to determine whether it is equipment failure or John. In this case was John

In this case it is equipment failure because both individuals fail the same frequency and were off by the same number of dBs