



Deciphering Your OTO-CHEK Print Out

The OTO-CHEK is used as a bio-simulator(it simulates a patient taking a test).

The print out that you get out at the end of the test is used to compare to the base line of the unit.

The base line of the OTO-CHEK is either the first test that you ran after setting up your unit, or the first Test ran on your OTO-CHEK after it has been calibrated. When ever your audiometer used with the OTO-CHEK is calibrated a new base line should be generated, and will take the place of the old one.

The Print out of a 2500 (typically used with the OTO-CHEK) will list the following information

NORMAL TEST

AMBCO 2500 SERIAL# 2500
 CALIBRATION DATE 01/01/96 BY: AMBCO
 CALIBRATION DUE DATE 01/01/97
 TEST :000 DATE 01/01/96 TIME 08:00
 SS# 000000000 JOB ID: A018

PATIENT _____

FREQUENCY	LEFT	RIGHT
1000 VALIDITY		55
500 HZ	60	60
1000 HZ	60	55
2000 HZ	55	55
3000 HZ	55	60
4000 HZ	55	50
6000 HZ	60	55
8000 HZ	55	65

OTO-CHEK TEST

AMBCO 2500 SERIAL# 2500
 CALIBRATION DATE 01/01/96 BY: AMBCO
 CALIBRATION DUE DATE 01/01/97
 TEST :000 DATE 01/01/96 TIME 08:00
 OTO-CHEK# 01 JOB ID: A018

PATIENT _____

FREQUENCY	LEFT	RIGHT
1000 VALIDITY		55
250 HZ	60	60
500 HZ	60	55
750 HZ	55	55
1000 HZ	55	60
1500 HZ	55	50
2000 HZ	60	55
3000 HZ	55	65
4000 HZ	55	55
6000 HZ	55	60
8000 HZ	60	70

The two test shown above are tests that are generated from a 2500 audiometer

If you look closely you will see that there are numbers for left and right. Just like the human ear a microphone will have different numbers from one another sometimes this is ok as you can see On the OTO-CHEK TEST at 8000 HZ left is 60db and right is 70db this is fine for them to differ from one another, since there are two microphones used in each OTO-CHEK.



COMPARING TEST RESULTS

Lets use the NORMAL TEST above as the base line, when you run your daily test you will be get a print out similar to the one above. You will compare the numbers on the daily test to the base line.

If all numbers are within ± 5 db then you are good to go. You can use this as an example, at 8000 HZ on the left side the base line is 55db and the right side is 65(shown above), the daily test that you just ran show 60db on the left side and 60db on the right side.

BASE LINE			DAILY TEST		
FREQUENCY	LEFT	RIGHT	FREQUENCY	LEFT	RIGHT
8000 HZ	55	65	8000HZ	60	60

In order to find out what the variance is you would take the BASE LINE'S number left side of 55db and subtract the DAILY TEST'S left side of 60db ($55-60 = -5$) you will get a -5db which meets the ± 5 db variance. Same goes for the right side ($65-60= 5$) you will get a 5db difference.

What you are looking for is ± 10 db variance. You can use this as an example, at 8000 HZ on the left side the base line is 55db and the right side is 65(shown above), the daily test that you just ran show 60db on the left side and 60db on the right side.

BASE LINE			DAILY TEST		
FREQUENCY	LEFT	RIGHT	FREQUENCY	LEFT	RIGHT
8000 HZ	55	65	8000HZ	60	80

In order to find out what the variance is you would take the BASE LINE'S number left side of 55db and subtract the DAILY TEST'S left side of 60db ($55-60 = -5$) you will get a -5db which meets the ± 5 db variance. But the right side ($65-80= -15$) you will get a -15db difference this is what you are looking for as a bad result.

When you see the above happen (varies in freq, but the db level of difference that your looking for is ± 10 db), there may be an issue with the audiometer, OTO-CHEK, connections or even how the headset is placed on the OTO-CHEK.

Also the above method can be used in calculating patient hearing shift levels.