

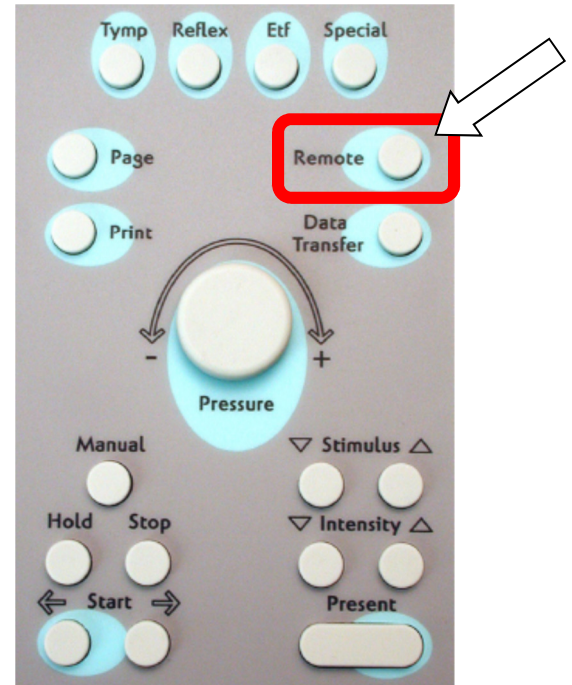
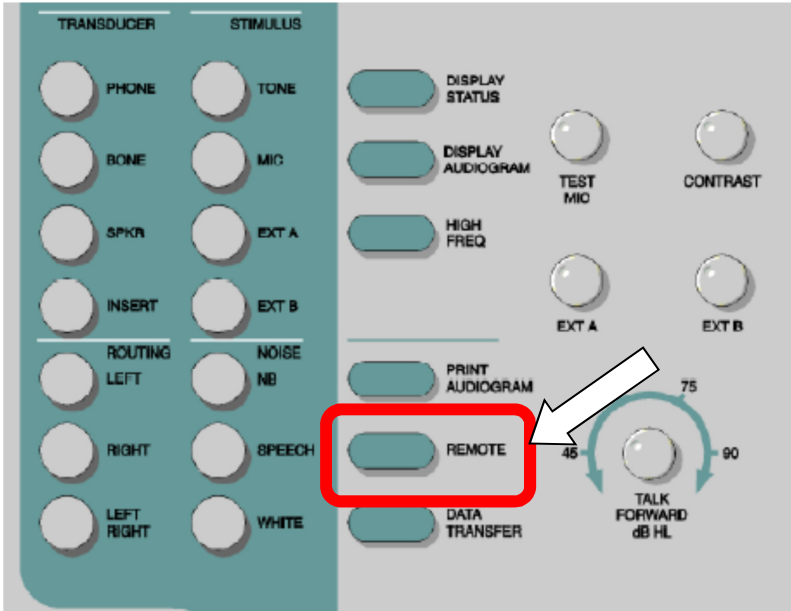
AudBase Guidebook

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Morning Set-up (GSI equipment, only)

Press the "Remote" button on the GSI audiometers and Tymstar immittance bridge to allow data to be transferred to AudBase. "Remote" will appear on the audiometer screen beneath "5 dB Step" and in the lower right hand corner on the Tymstar when activated.

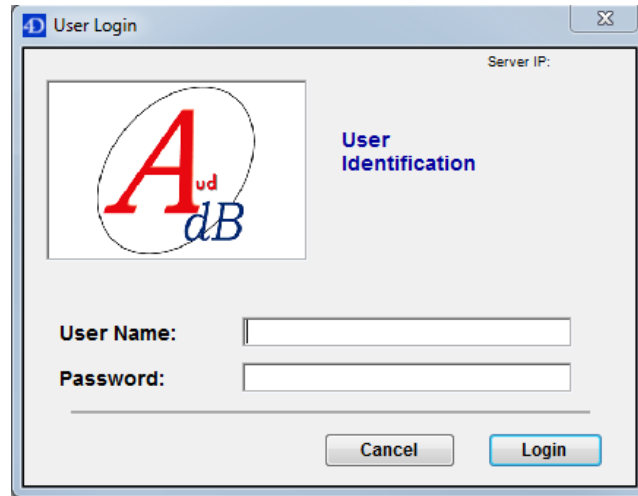


Opening AudBase

1. Login into the computer.
2. Double click on the “AudBase Client.exe” icon on the computer desktop.

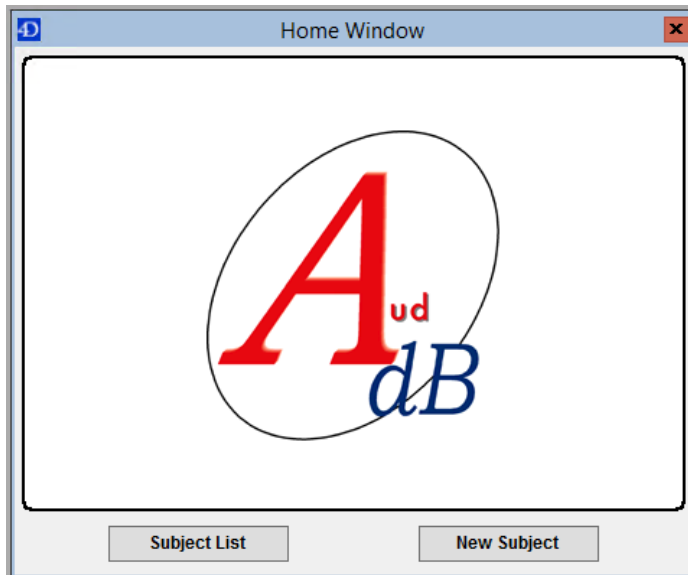


3. Type in your “User Name” and “Password” and click “Login”.

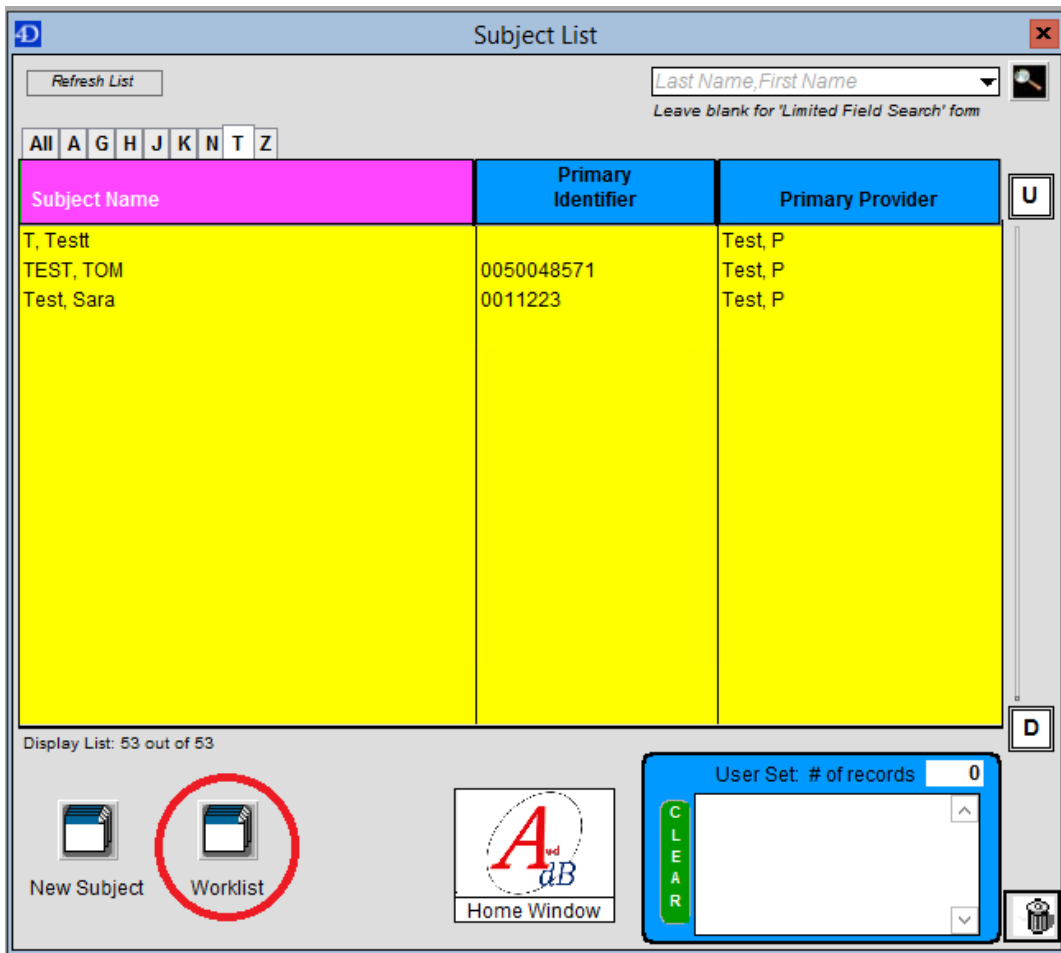


Choosing a patient off the worklist

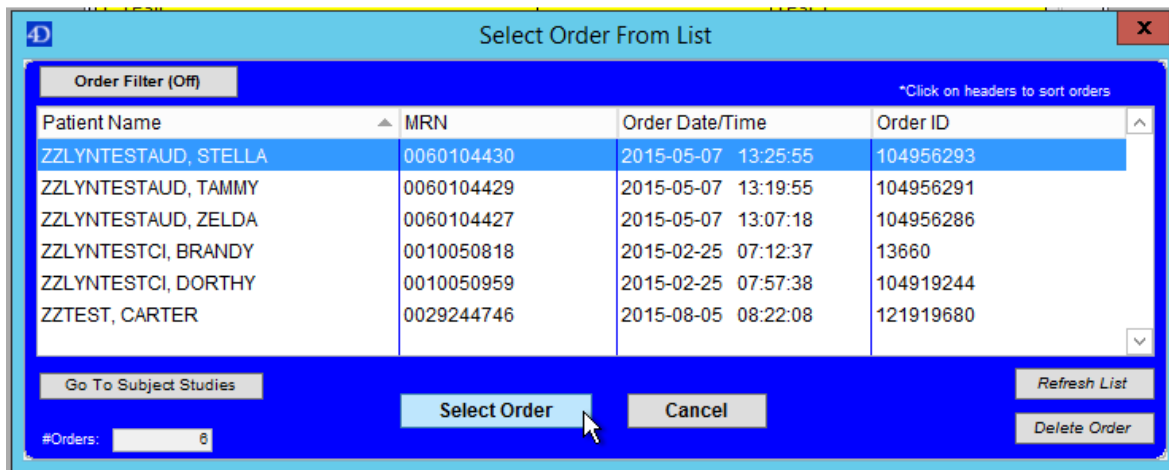
- On the Home Window click Subject list.



- Then click the Worklist button



- Choose the appropriate patient off the worklist, then "Select Order"

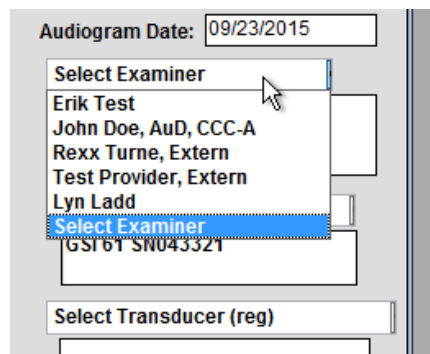


- A new audiogram will open, and you can conduct testing in this record.

Performing Pure-Tone Air & Bone Conduction Testing

Below is the audiogram template:

1. Examiner name, audiometer, transducer, and test method can be defaulted or changed with the drop down menus on the right hand side.
 - a. To change to your name, click on the “Select Examiner” box and click on your name. Two or more names can be added to this box.

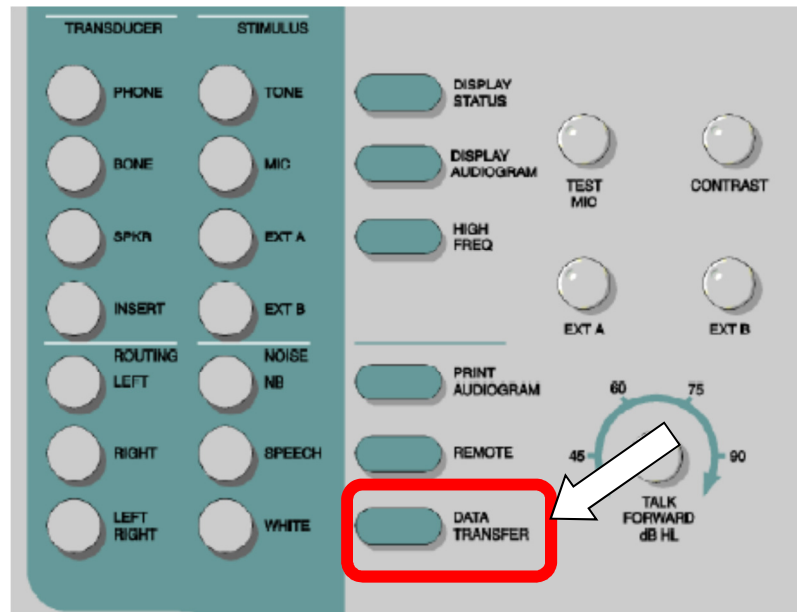


- b. Repeat the same steps for Audiometer, Transducer, and Test method, when appropriate.

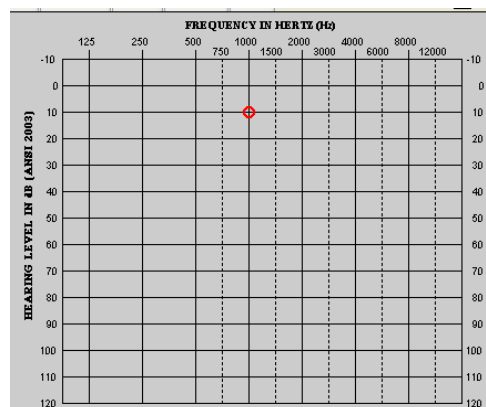
Testing using a GSI-61 Audiometer:

Data Transfer

Perform pure-tone audiometry and find the first threshold. Once the first threshold is established, press the “Data Transfer” button on the audiometer, which is under “Remote”.



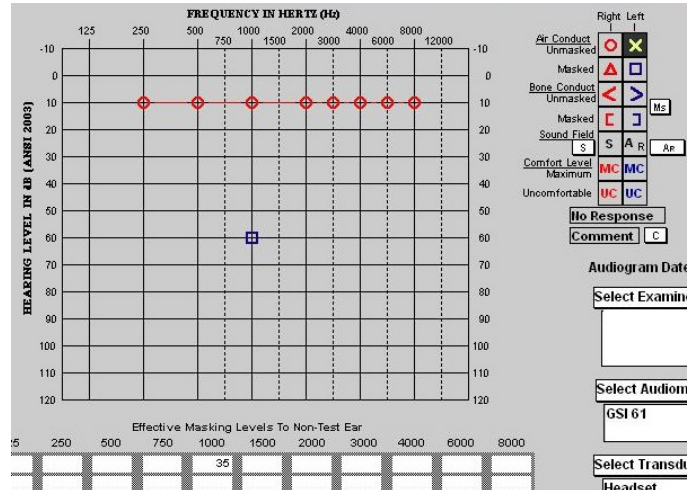
The first threshold will appear in AudBase:



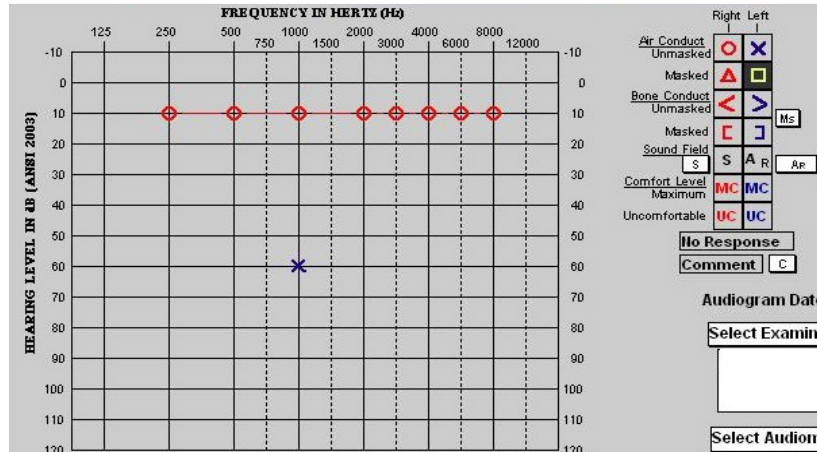
2. Continue performing pure-tone air conduction audiometry at each frequency and press the “Data Transfer” button after each threshold is established.

Masked thresholds:

- a. Leave the masking noise on, press the “Data Transfer” button. **Note: If the noise is turned off and “Data Transfer” is pressed, an unmasked symbol will appear. This will also occur if the masking noise and tone are presented to the same ear.**
 - i. Note that only the final masking level is displayed in the “Effective Masking Levels to Non-Test Ear” box (below audiogram).



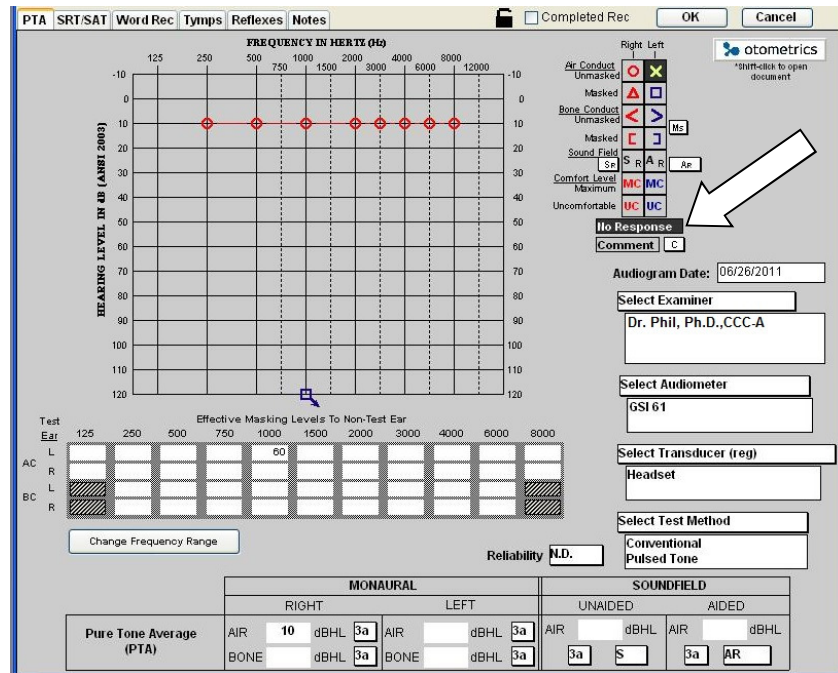
- b. If you forget to leave the masking noise on, turn the masking noise back on and press the “Data Transfer” button or click on the desired masked symbol in the symbol legend on the right side of the screen and click on the unmasked symbol in the audiogram.



- i. To change a masked symbol to unmasked, click the masked symbol in the audiogram legend on the right side of the screen so it is highlighted and click the masked symbol in the audiogram.
- ii. To delete a threshold from the audiogram, click and highlight the unmasked symbol in the symbol legend on the right side of the screen, then click on the symbol in the audiogram. If the symbol is masked, click the masked symbol in the figure legend and click the symbol in the audiogram to change it to unmasked. Then click the unmasked symbol in the figure legend and click the unmasked symbol in the audiogram to delete it.

No response thresholds:

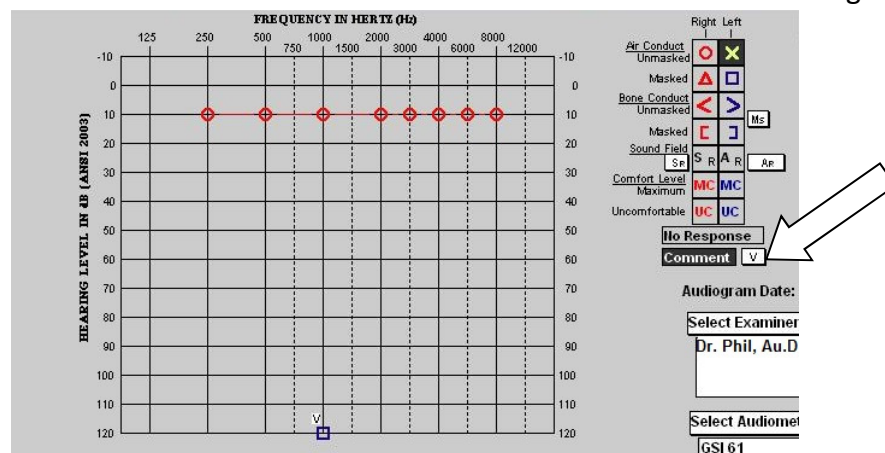
- c. Click on “No Response” in the symbol legend and press the “Data Transfer” button. Click the “No Response” in the symbol legend to de-highlight it for the next threshold if there is a response. **Note: The no response symbol will appear at the specific decibel level on the audiometer screen when you press “Data Transfer” and will not automatically appear at the limits for that particular audiometer.**



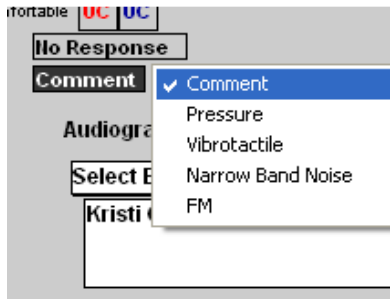
-To remove a no response symbol, de-highlight “No Response” in the symbol legend by clicking on it and press the “Data Transfer” button or click on the symbol without “No Response” highlighted in the symbol legend, which will delete the entire symbol. Then click one more time for it to reappear without the “No Response” symbol.

Adding comments to symbols:

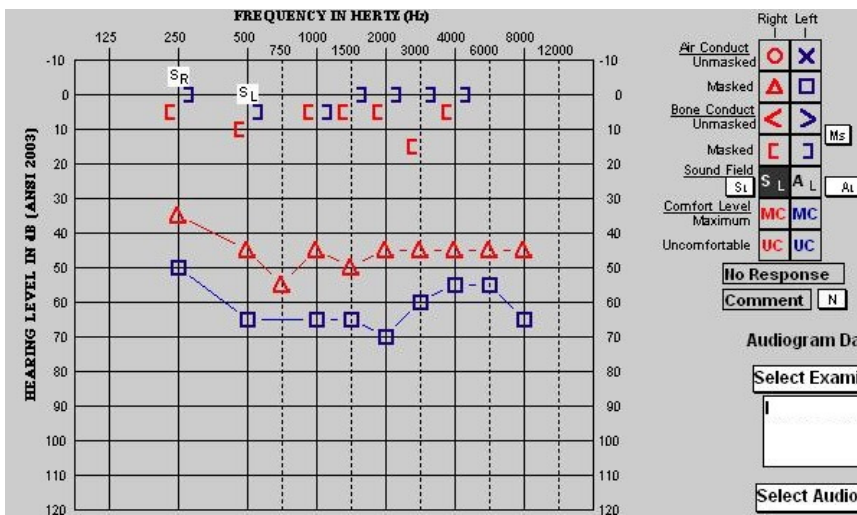
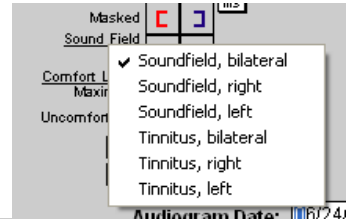
- d. Follow the steps for no response thresholds, except click on the “Comment” box in the symbol legend.



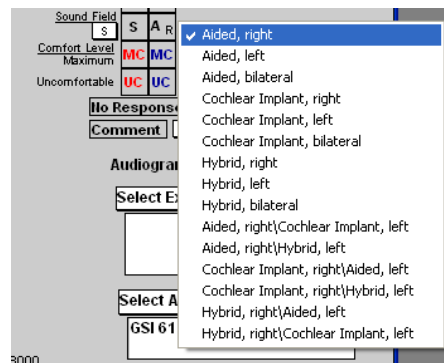
-To choose a specific symbol, click on the box to the right of “Comment” to view the list.



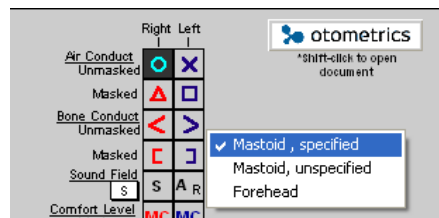
-There are options for comments such as using the “Soundfield” symbols for indicating whether a patient heard a tone in his/her right or left ear. To use this symbol, click on it in the figure legend and click above the desired threshold:



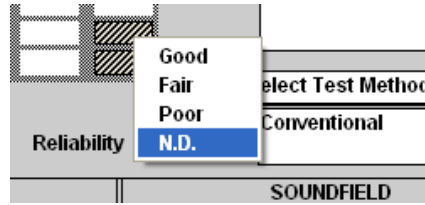
-Or you could use the “Soundfield Aided” symbols for this purpose.



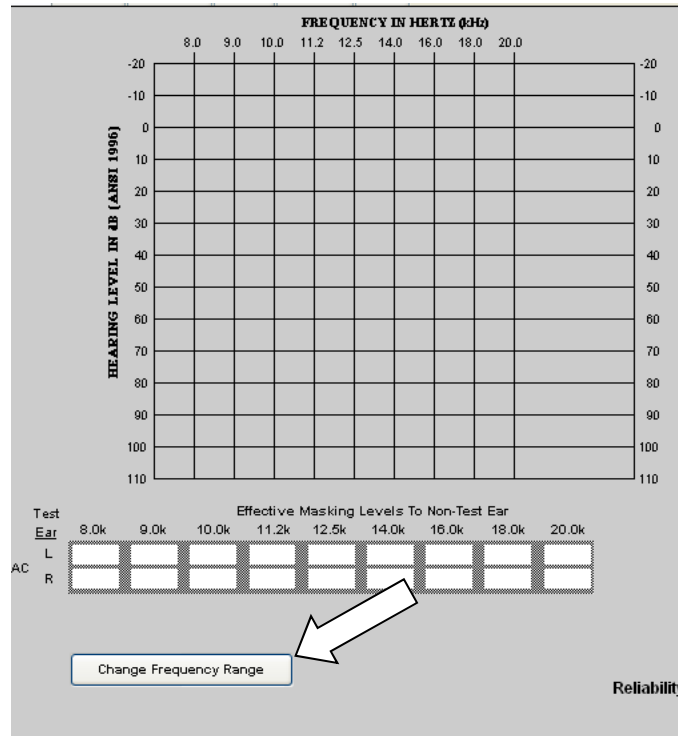
-There is also the option of an unspecified bone conduction symbol or forehead symbol.



- To state the reliability of testing, click on the box to the right of “Reliability” and click on the desired choice. **Note: There is not an option to document validity as in our current audiogram. This information can be added in the notes section.**

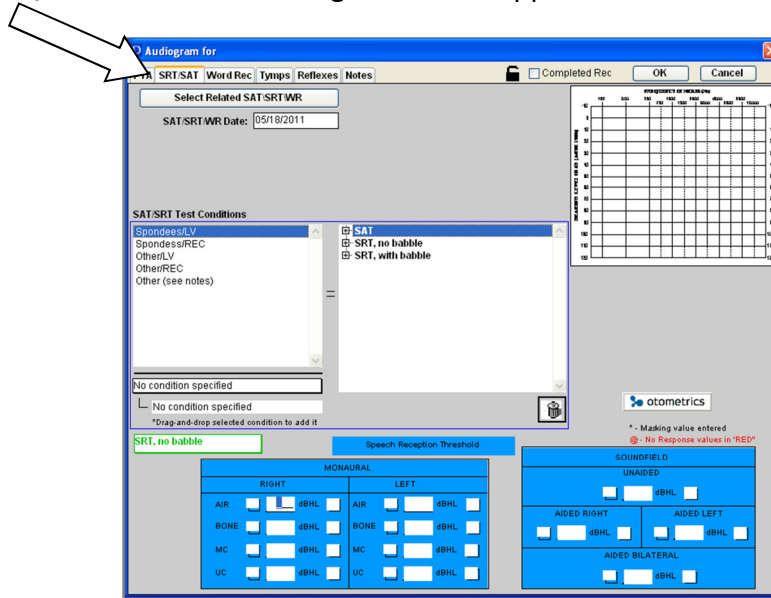


- To view the high frequency audiogram, click on the “Change Frequency Range” button below the “Effective Masking Levels to Non-Test Ear” boxes.

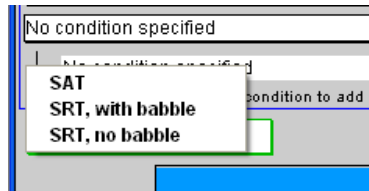


Performing SAT/SRT

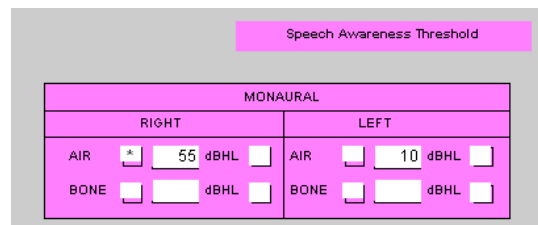
1. Click on the SRT/SAT tab. The following screen will appear:



2. To change from SRT to SAT, click on the box with the green outline and click on SAT. Note: SAT is pink and SRT is blue.



3. When the SAT/SRT threshold has been established, press the "Data Transfer" button. The SAT/SRT threshold will appear as shown:



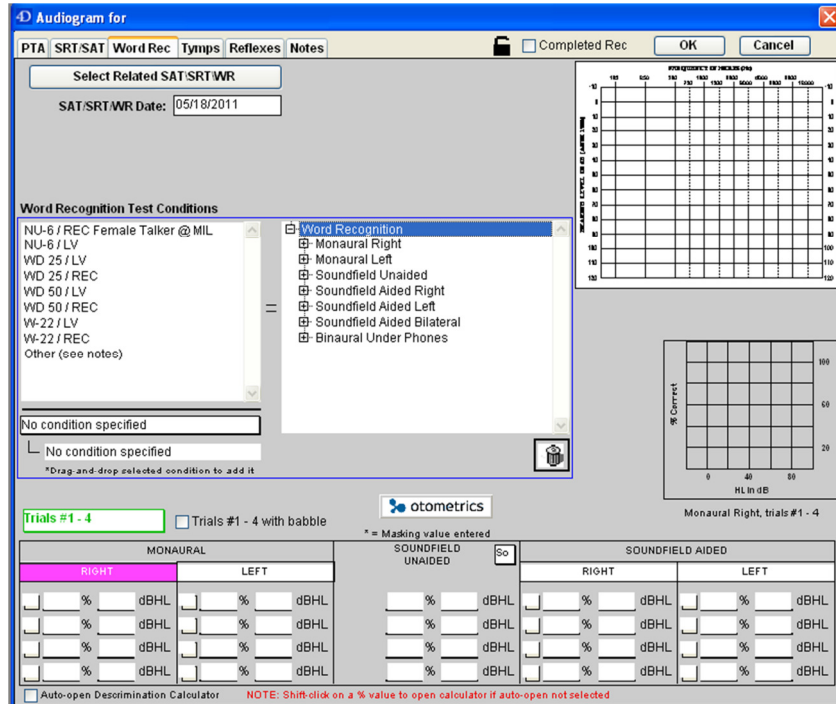
-The SAT/SRT may also be manually entered by clicking on it and typing in the threshold. To add masking, click the first box after "Air" and type in the final masking level. **Note: If masking noise is used, it will appear as an "*" in the first box after "Air".**



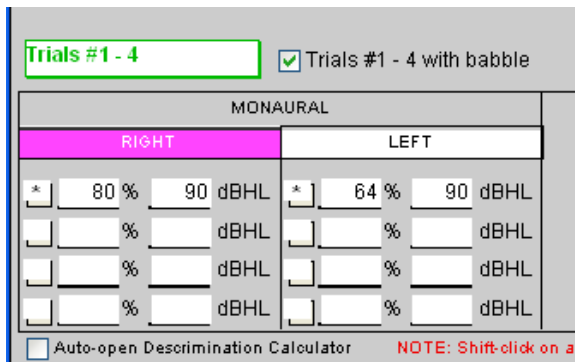
-For a no response SAT/SRT, click the box next to "dB HL". An "@" symbol will appear. When this symbol is present, the SAT/SRT for this ear will be labeled as NR on the final audiogram.

Performing WRS Testing

1. Click on the “Word Rec” tab. The following screen will appear:



2. When the Word Recognition Score has been established, press the “Data Transfer” button. The WRS threshold will appear as shown:

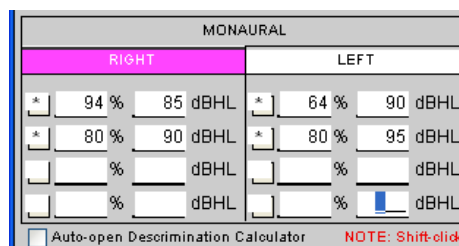


Note: In order for the data to transfer over via “Data Transfer” you must use the “Correct” and “Incorrect” buttons on the GSI-61. If you do not use the “Correct” and “Incorrect” buttons the audiometer will not transfer the data. WRSs may be manually entered into the first box with “%” behind it by clicking on it and typing in the score. Enter the level of the NU-6 lists by typing in the box with “dB HL” behind it. To add masking, click the first box after “Air” and type in the final masking level.

Note: If masking noise is used, it will appear as an “*” in the first box after “Air”.

Word list # information can only be added in the notes section.

3. If more than one WRS is performed per ear, the data will transfer to the slot below:



Testing using an AudioStar Pro (ASP)

- To start a new patient record in the AudioStar Pro, press “Data Erase” button on the audiometer, then either erase the session or all data.
- In order to capture the data from the ASP, you will conduct and build your full test battery in the audiometer by hitting “Save” on the ASP for each threshold.
- Once you have completed the appropriate tests (including SAT/SRT and Word Rec), click on the “Download AudioStar” in AudBase. You may receive a prompt indicating that the selected patient does not have an ID, just click “OK”. All data from the AudioStar Pro will be transferred to the open AudBase record.

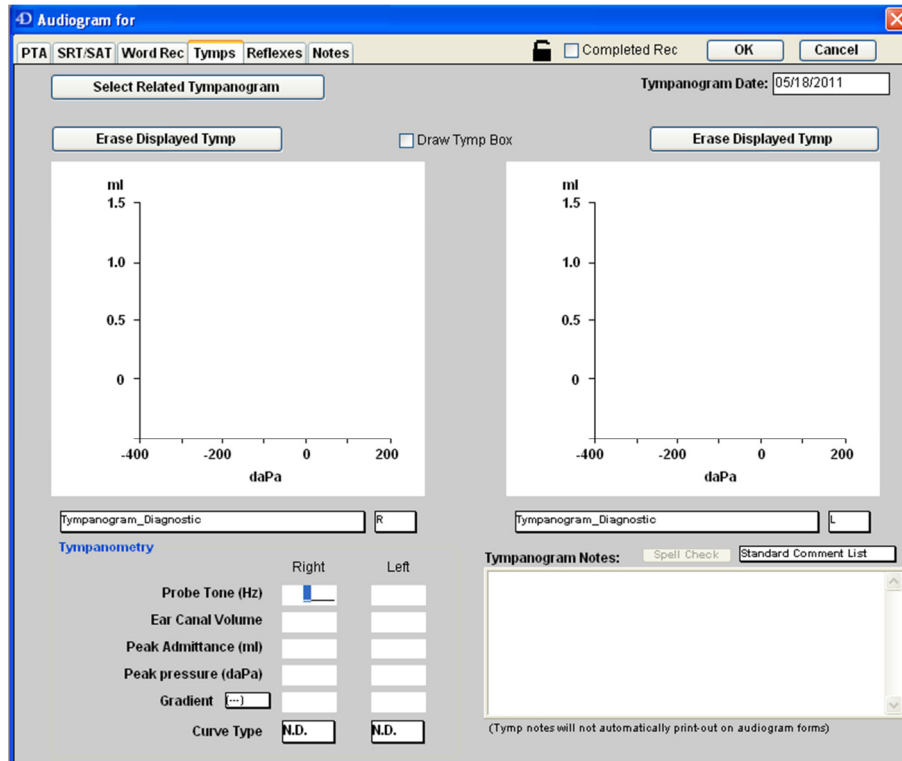
The screenshot displays the Audiogram software interface. The main window is titled "Audiogram for" and contains several tabs: PTA, SRT/SAT, Word Rec, Tymps, Reflexes, and Notes. The "PTA" tab is active, showing a graph of Hearing Level in dB (ANSI 1969) versus Frequency in Hertz (Hz). The graph has a logarithmic frequency scale from 125 to 12000 Hz and a linear hearing level scale from -10 to 120 dB. Below the graph is a table for "Effective Masking Levels To Non-Test Ear" with columns for frequencies and rows for Air Conduction (AC) and Bone Conduction (BC) for both Left (L) and Right (R) ears. The graph and table show shaded areas indicating test results.

On the right side of the interface, there are several control panels:

- Instrument Modules:** A list of modules including "otometrics" and "Download AudioStar", which is circled in red.
- Right Left:** A panel with buttons for "Air Conduct Unmasked", "Masked", "Bone Conduct Unmasked", "Masked", "Sound Field", "Comfort Level Maximum", and "Uncomfortable".
- Buttons:** "No Response", "Comment", "OK", and "Cancel".
- Form Fields:** "Audiogram Date:" (5/22/2014), "Select Examiner", "Select Audiometer", "Select Transducer (reg)", and "Select Test Method" (CA).
- Stenger and Reliability:** "Stenger" (N.D.) and "Reliability" (N.D.) dropdown menus.
- MONAURAL and SOUNDFIELD:** Tables for "Pure Tone Average (PTA)" with input fields for AIR and BONE dBHL for RIGHT and LEFT ears, and UNWAIDED and AIDED for SOUNDFIELD.

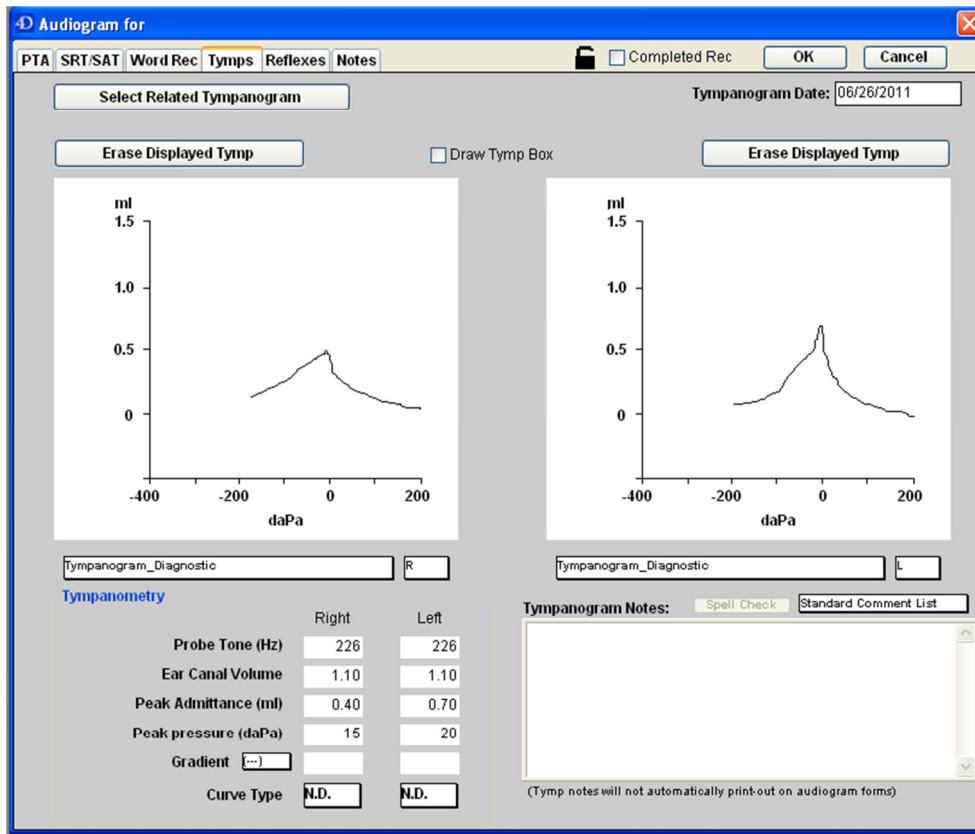
Performing Tympanometry

1. Click on the “Tymps” tab. This is the tympanometry screen:

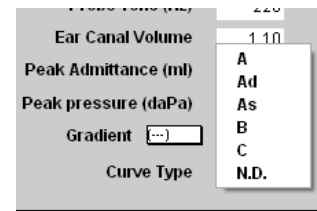


2. It is important when performing all immittance tests that you indicate which side (right or left) you are testing in order for the data to transfer to the proper box.
3. Perform a tympanogram.
4. There are two ways to transfer the data:
 - a. Press the “Data Transfer” button after each tympanogram is completed. Only what is shown on the screen of the Tympstar will transfer to AudBase or
 - b. Wait until all immittance is performed, press the “Page” button, and then press the “Data Transfer” button. With this method, all data on all pages will be transferred over when you press the “Data Transfer” button.
 - i. **Note: If two tympanograms are performed on the same ear, the last tympanogram performed will be the one downloaded into AudBase.**

5. When transferring data, the tympanogram tracing and all data will be transferred to AudBase:

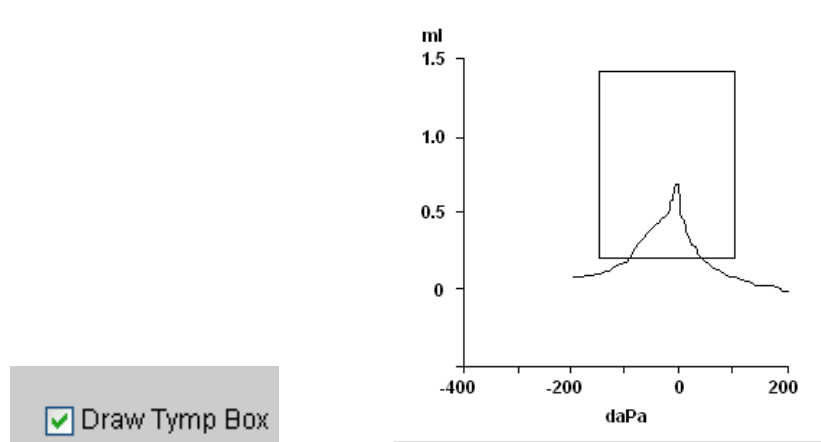


-At the bottom you may choose the tympanogram type by clicking on "Curve Type" menu and clicking on your choice:



the

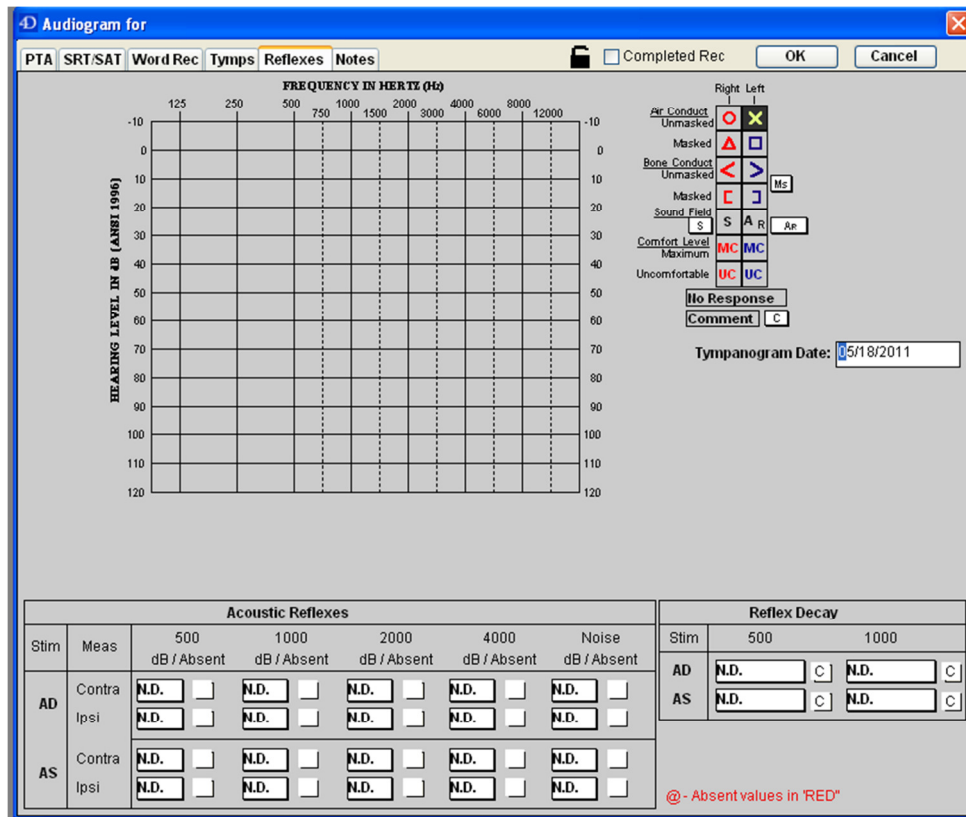
-A box showing normal limits can be displayed by clicking the "Draw Tymp Box".



1. **If only completing tympanometry** and all data has been transferred, press the "Page" button screen and erase all data for the next user.

Performing Acoustic Reflex Thresholds

1. Click on the “Reflexes” tab. Below is the “Reflexes” tab screen:



2. Make sure the ear you are testing is selected.

3. The last reflex threshold on the screen is what will be transferred into AudBase.

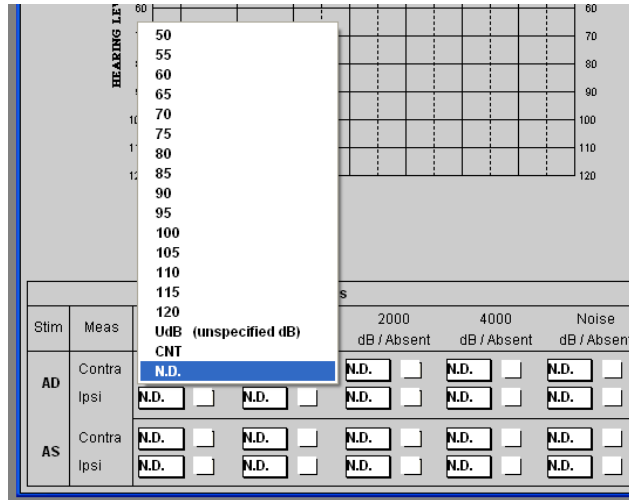
a. Therefore, if you find threshold for example at 80 dB, then go down 5 dB to confirm this threshold, but do not erase 75 dB, 75 dB will be transferred into AudBase.

a. There are two ways to transfer the data:

i. Press the “Data Transfer” button after each reflex threshold is established. What is shown on the screen of the Tymptstar will transfer to AudBase (two reflexes may be sent at a time, or one depending if you erase reflexes before it goes to the bottom screen) or

ii. Wait until all immittance is performed, press the “Page” button, and then press the “Data Transfer” button. All data on all pages will be transferred over when you press the “Data Transfer” button

4. The data can also be entered manually using drop-down menus, by clicking on the respective box and clicking on the value.

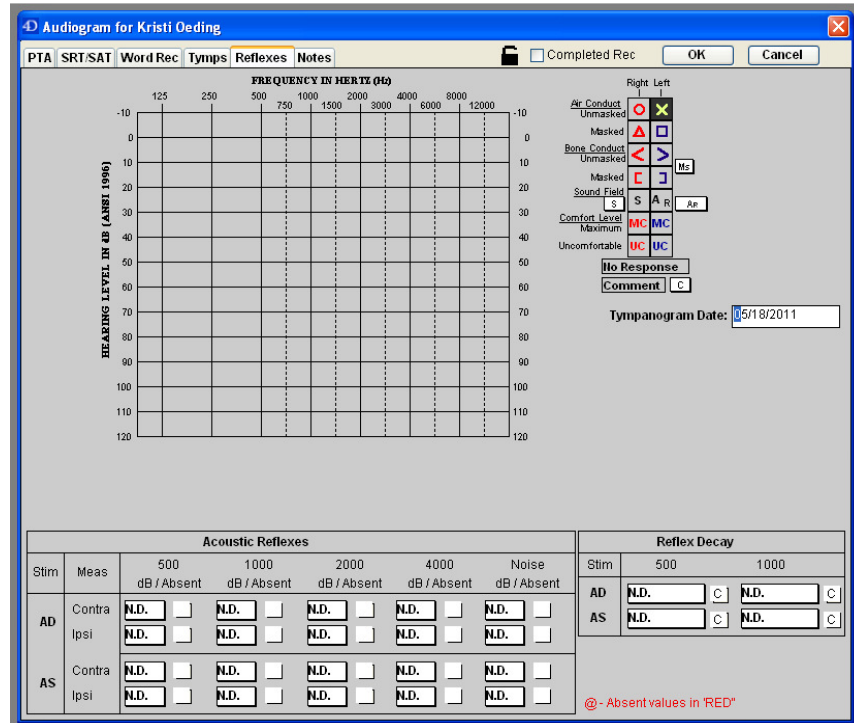


5. **For absent reflexes**, you must click the box next to the respective value, as shown below, so that an “@” sign appears. The final audiogram will read “ABS” at this frequency. To keep track of this, you may want to delete data for the respective frequency so that you know all N.D. are absent reflexes.

Acoustic Reflexes						
Stim	Meas	500	1000	2000	4000	Noise
		dB / Absent	dB / Absent	dB / Absent	dB / Absent	dB / Absent
AD	Contra	N.D.	N.D.	N.D.	N.D.	N.D.
	Ipsi	80	75	75	100 @	N.D.
AS	Contra	N.D.	N.D.	N.D.	N.D.	N.D.
	Ipsi	N.D.	N.D.	N.D.	N.D.	N.D.

Performing Acoustic Reflex Decay

1. Click on the “Reflexes” tab. Acoustic reflex decay is also under the “Reflexes” tab:



2. Make sure the ear you are testing is selected.

3. There are two ways to transfer the data:

- a. Press “Data Transfer”. What is displayed on the Timpstar screen will transfer **OR**
- b. Press the “Page” button and press the “Data Transfer” button to transfer all the data that was collected.

4. Reflex decay will display as either normal or abnormal, but if abnormal the number of seconds in which decay reached 50% will not transfer over.

Reflex Decay			
Stim	500	1000	
AD	N.D.	N.D.	
AS	Normal	Abnormal	

5. Reflex decay can be added manually by clicking on the dropdown menus.

Adding Notes for Case History/Recommendations/Other

1. The notes tab (below) is where you can add:

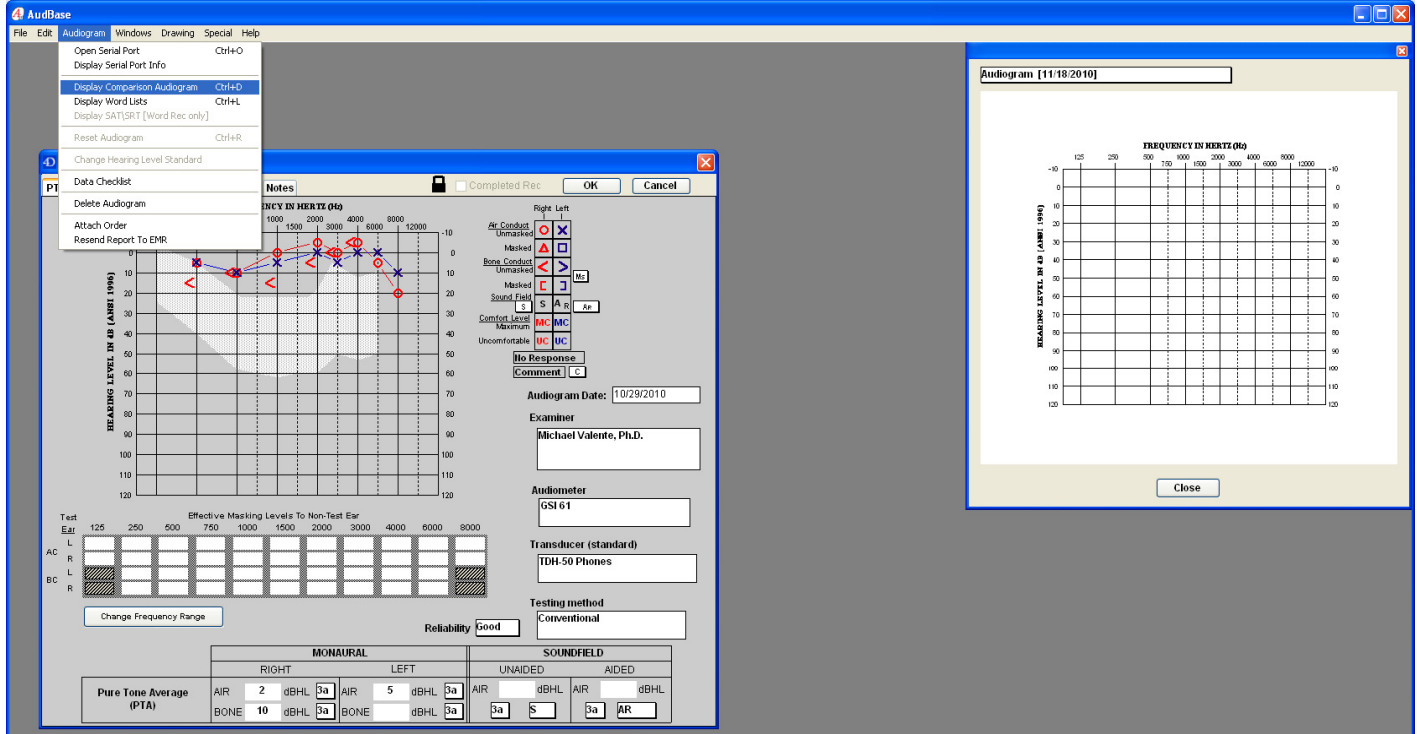
- a. Testing location by clicking on the box below “Testing location”

- b. The booth you tested by clicking on the box under “Testing sublocation”

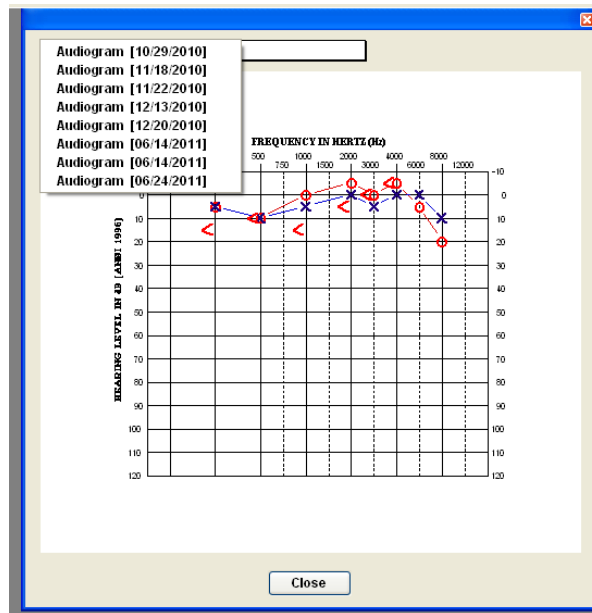
- c. The note sections is a free text section typically used to document:
 - i. Validity
 - ii. SRT/SAT method of presentation
 - iii. Word recognition method of presentation and HL/EM info
 - iv. Explanantion of comment symbols (v=vibrotactile, etc.)
 - v. Case History
 - vi. Recommendations

View Previous Audiograms

1. To view a previous audiogram for comparison, click on "Audiogram" and then click on "Display comparison Audiogram". The comparison audiogram box will display on the right of the screen.



2. To look at a different comparison audiogram, click on the box above the audiogram and select the date you would like to view.

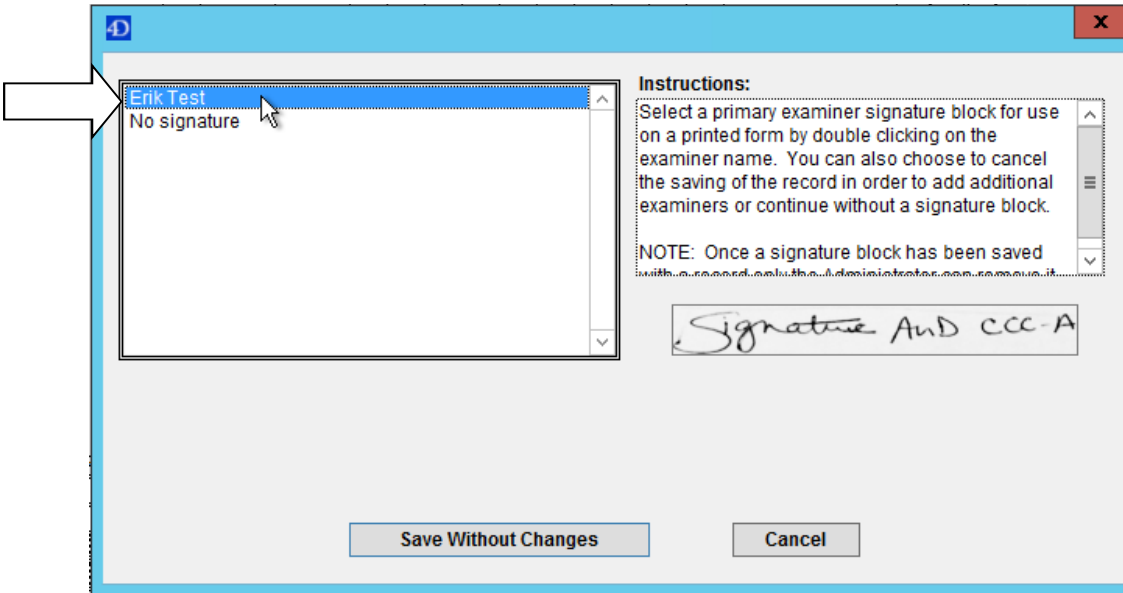


Signing a Record

- When finished with the audiogram, click “OK” and **double click on your name** to the left of the screen to sign the report.

***This is the trigger to send the signed report to your EMR**

- If you are not finished with the report, and wish to add further testing or notes at a later time, click “Save Without Changes” You can revisit this record later to make changes and sign to send the report to your EMR.

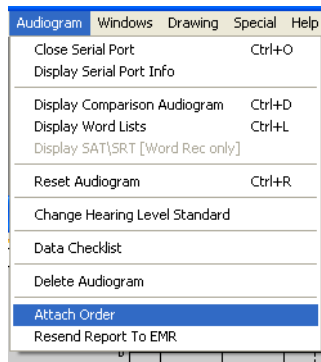


Attaching an Order to a completed Audiogram

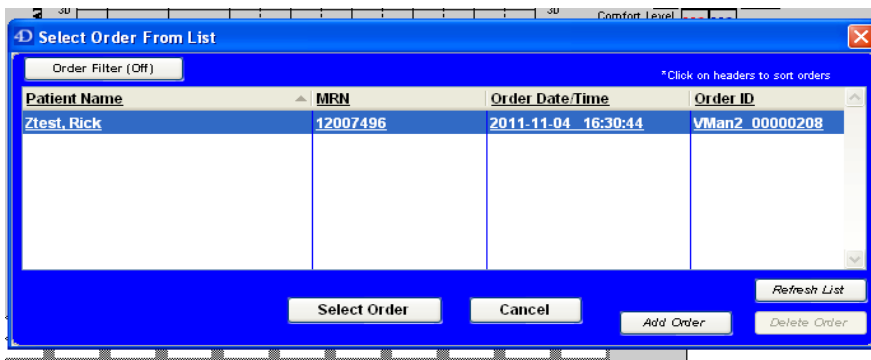
An example of why you would do this is if the patient had not yet been entered into the EMR, so the AudBase worklist did not have the patient listed when you tested the patient. You can still conduct the tests, then “Attach Order” after the Audiogram is completed.

- Open the completed audiogram.

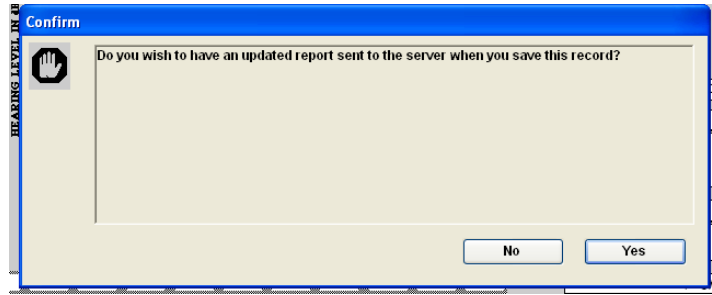
Click “Audiogram” and then “Attach Order”



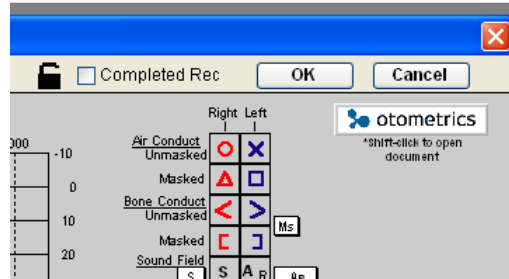
- Click on the order to highlight it in blue, then click “Select Order”



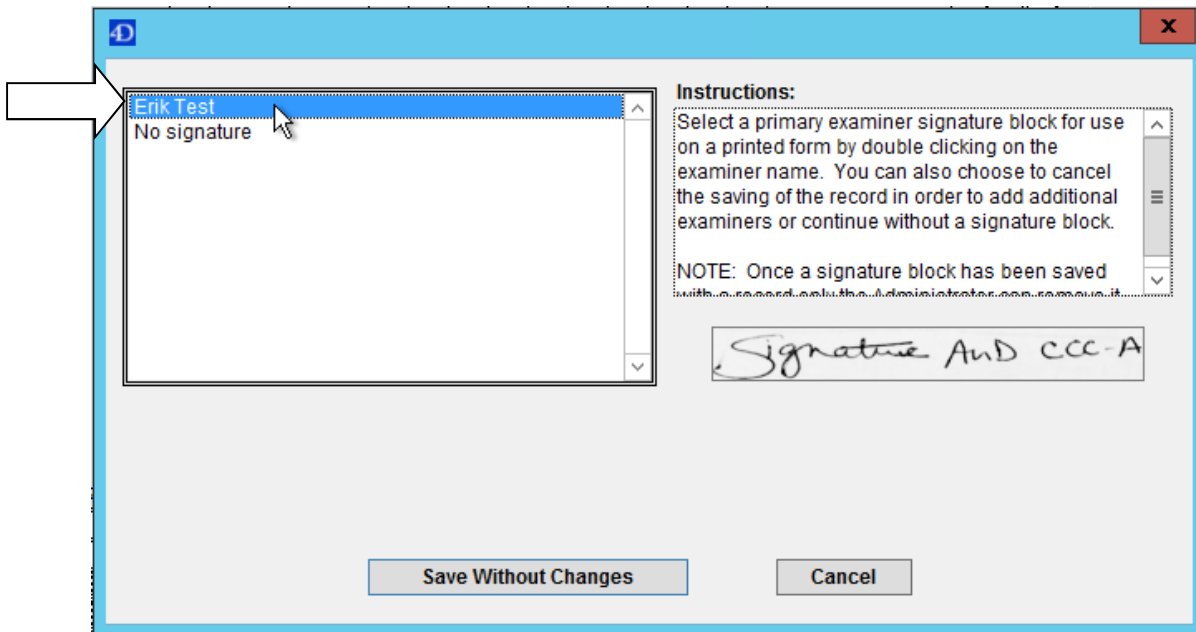
3. Click "Yes"



4. When finished with the audiogram, click "OK" in the upper right hand corner of the audiogram



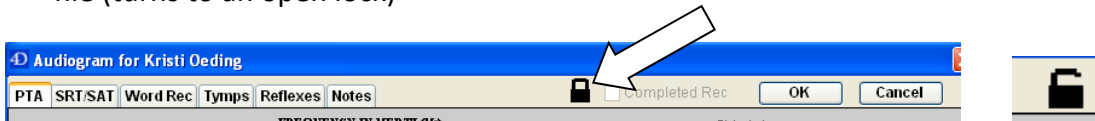
5. Double click on your highlighted name in the box on the left side



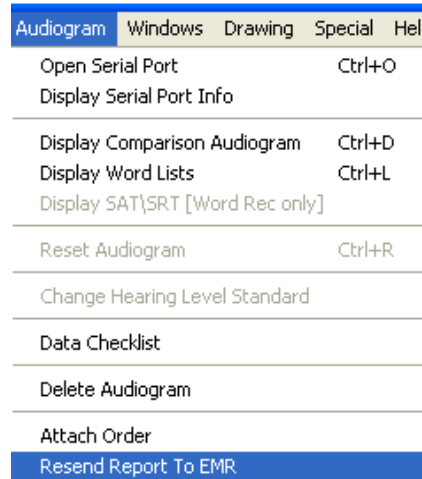
6. The audiogram will appear in your patient's EMR encounter as usual.

Revisions and Sending Revision to the EMR

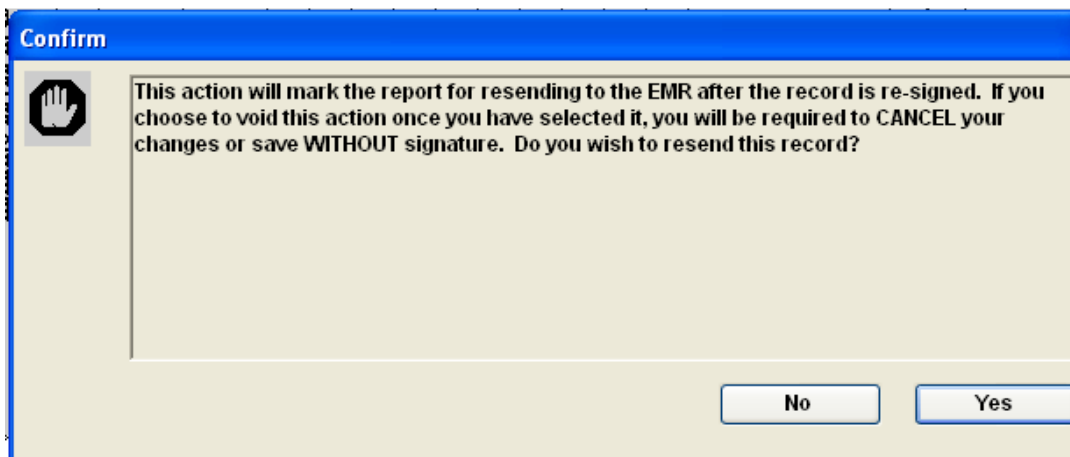
1. Open the audiogram you are revising. Click the lock at the top of the screen by the tabs to unlock the file (turns to an open lock)



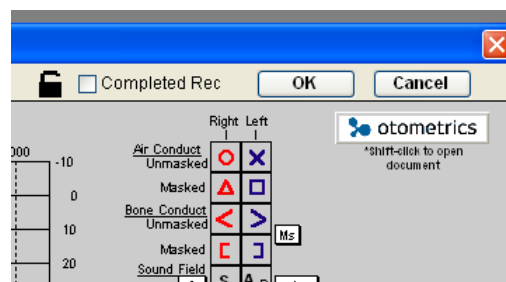
2. Make the changes to the patient record, and click "Audiogram" and select "Resend Report to EMR"



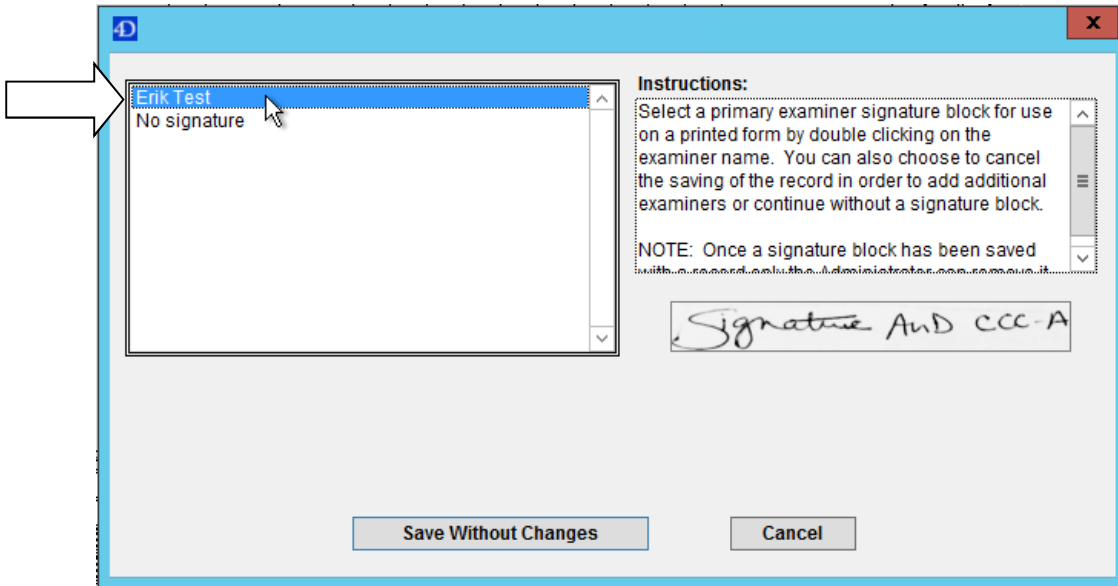
3. Click "Yes"



7. When finished with the audiogram, click "OK" in the upper right hand corner of the audiogram

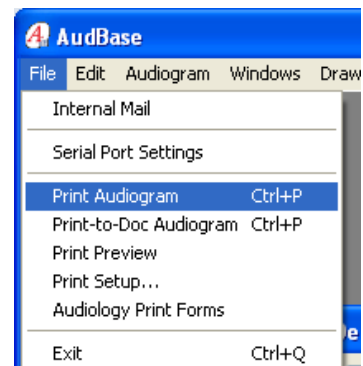


8. Double click on your highlighted name in the box on the left side and the revised audiogram will be resent to the EMR.



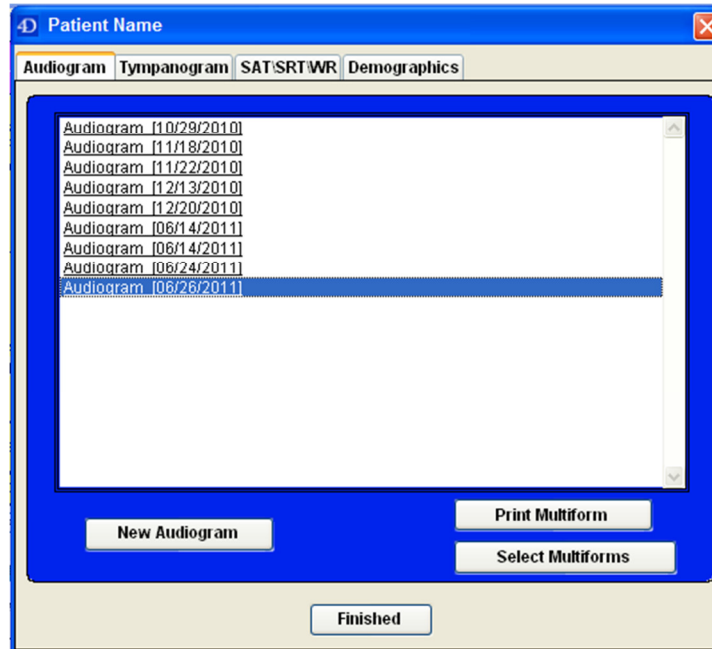
Printing Audiograms

1. If you need to print the audiogram, click on "File" and click "Print Audiogram".
2. Make sure that the correct printer is selected and click "OK".

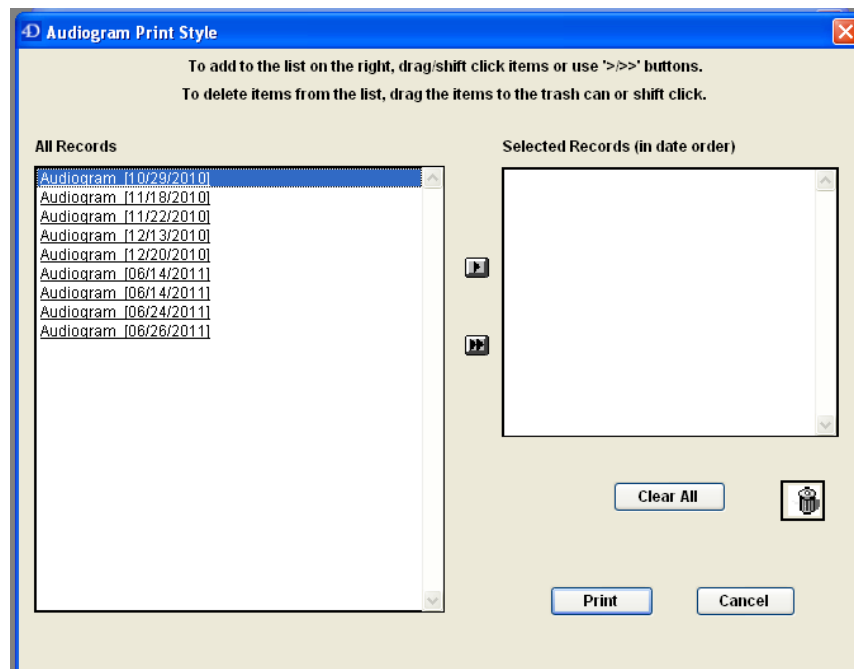


Print Multiforms

This is an option to print a page that reports threshold shifts between audiograms (see example on next page). To do this, double click on the patient you want and click “Print Multiform”



Next select the audiograms you want to be included in the report by clicking on the desired audiogram date(s) and pressing the single arrow button. The double arrow will move all Audiograms to the selected records field.



Once you have all the audiograms you want to compare, click the “Print” button.

Hospital or Clinic Name

Address Line 1
 Address Line 2
 City, State Zipcode
 (888) 555-0000

Testing Location: Center for Advanced Medicine
 West County
 Central Institute for the Deaf

Patient Identifier **100001**

NAME **Ztest, Rick**

D.O.B. **00/00/00**

MEDICAL RECORD

DIFFERENTIAL AUDIOGRAM, STYLE 2

INFORMATION KEY: Threshold shifts are calculated with respect to the previous audiogram in the series: 1) negative = threshold shift better than previous, 2) positive = threshold shift worse than previous.

RIGHT EAR												LEFT EAR											
125	250	500	750	1K	1.5K	2K	3K	4K	6K	8K	12K	125	250	500	750	1K	1.5K	2K	3K	4K	6K	8K	12K

DATE 11/07/2011

- FIRST AUDIOGRAM -

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE 11/23/2011

THRESHOLD LEVELS

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

THRESHOLD TREND

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE 11/23/2011

THRESHOLD LEVELS

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

THRESHOLD TREND

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE 11/28/2011

THRESHOLD LEVELS

	15	25		30		40	40	55	55	55													
--	----	----	--	----	--	----	----	----	----	----	--	--	--	--	--	--	--	--	--	--	--	--	--

THRESHOLD TREND

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE 11/28/2011

THRESHOLD LEVELS

		15																					
--	--	----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

THRESHOLD TREND

		-10																					
--	--	-----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE 11/28/2011

THRESHOLD LEVELS

	15	30		40	30	40	50	45	45	45			15	35		35	35	35	45	50	40	40	
--	----	----	--	----	----	----	----	----	----	----	--	--	----	----	--	----	----	----	----	----	----	----	--

THRESHOLD TREND

		15																					
--	--	----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--