

## Tympanometry

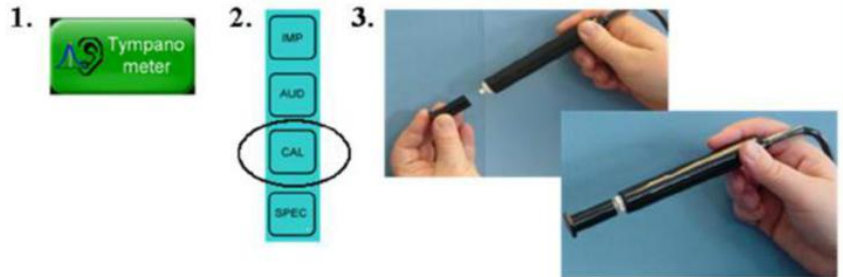
The tympanometer provides an objective assessment of the status of the middle ear and compliance of the tympanic membrane. Findings from the tympanometry exam will help properly diagnose and treat conditions of the middle ear. Foreign matter in the ear canal such as cerumen build up (ear wax) will affect the results and should be removed to obtain an accurate test.

## Using the Tympanometer

### Calibration-

The tympanometer needs to be calibrated daily. Follow the outline below to calibrate your Tympanometer.

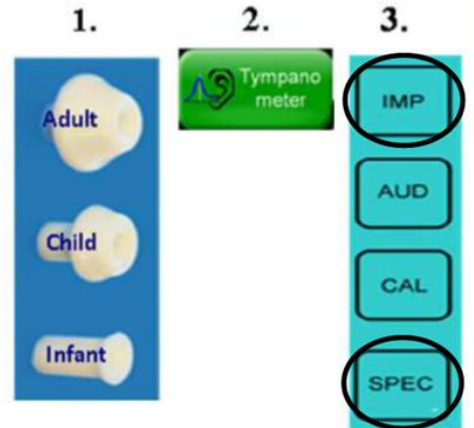
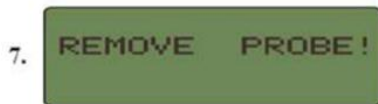
1. Select the button from the Add to Case screen.
2. Depress the CAL button on the device itself.
3. Place probe in calibration cavity.
4. Observe the device display.
5. Remove the probe from the calibration cavity when directed on the device screen.



### Testing-

**IMPORTANT**—Always select the appropriate green button (Image 2.) from the AFHCAN Software before depressing the blue button (Image 3.) on the device.

1. Select the appropriate cuff for the probe and place it on the probe.
2. Select the Tympanometer button from the Add to Case screen.
3. Depress the button on the device that you would like to perform "IMP" or "SPEC".
4. Instruct the patient on the exam procedure.
5. Place the cuff over the opening to the ear canal per clinical guidelines.
6. Follow the prompts on the device screen (small LCD screen on the device).
7. Remove the probe when directed on the screen.



## Additional Information

|                 |   |
|-----------------|---|
| <b>STEADY</b>   | If the seal is satisfactory and the air pressure is building, this is what the screen of the tympanometer will display.             |
| <b>TESTING</b>  | Testing is underway, hold probe steady in ear   |
| <b>AIR LEAK</b> | Causes: Inadequate seal between ear cuff and ear canal. Try repositioning the probe, or use another ear cuff.                       |
| <b>BLOCK</b>    | Causes: The opening on the probe tip is blocked. Try repositioning the probe, check tip for blockage, check ear canal for blockage. |

**Testing Modes-**

**IMP**  
Select this button for normal tympanometry

**AUD**  
Select this button for an audiogram

**CAL**  
Select this button to calibrate the tympanometer

**SPEC**  
Select this button for fast tympanometry  
Normally used with infants and toddlers

**Audiometer**

The audiometer provides you with a tone audiogram hearing test. Follow your clinical guidelines for preparation of the patient.

1. Place the cart in a quiet location, free of distractions. Log in to the AFHCANcart software and select the Audiometer button from the Add to Case screen.



2. Put the headphones on the patient:

- Apply the white covers
- Remove glasses & earrings
- Adjust the headphones for the best fit
- Red on the Right ear
- Blue on the Left ear



3. Give the patient the hand switch, turn so that they cannot see the LCD screen and instruct them to press and release the response button on the hand switch when they hear the tone.



4. Depress the AUD button on the Audiometer Unit and observe the LCD screen as the test runs.



\* Indicates the patient is pressing on the response button  
 -ON- Indicates when a tone is being presented to the patient

5. The test runs for 7 to 12 minutes depending on the patient response.
6. There are 3 potential error messages. If an error occurs counsel the patient and press the AUD button to resume the test.
  - Button Held—Indicates the patient is holding down the response button
  - False Response—Indicates the patient is trying to guess
  - Not Consistent—Indicates the patient is giving inconsistent responses; detects a low tone but doesn't detect a louder tone

