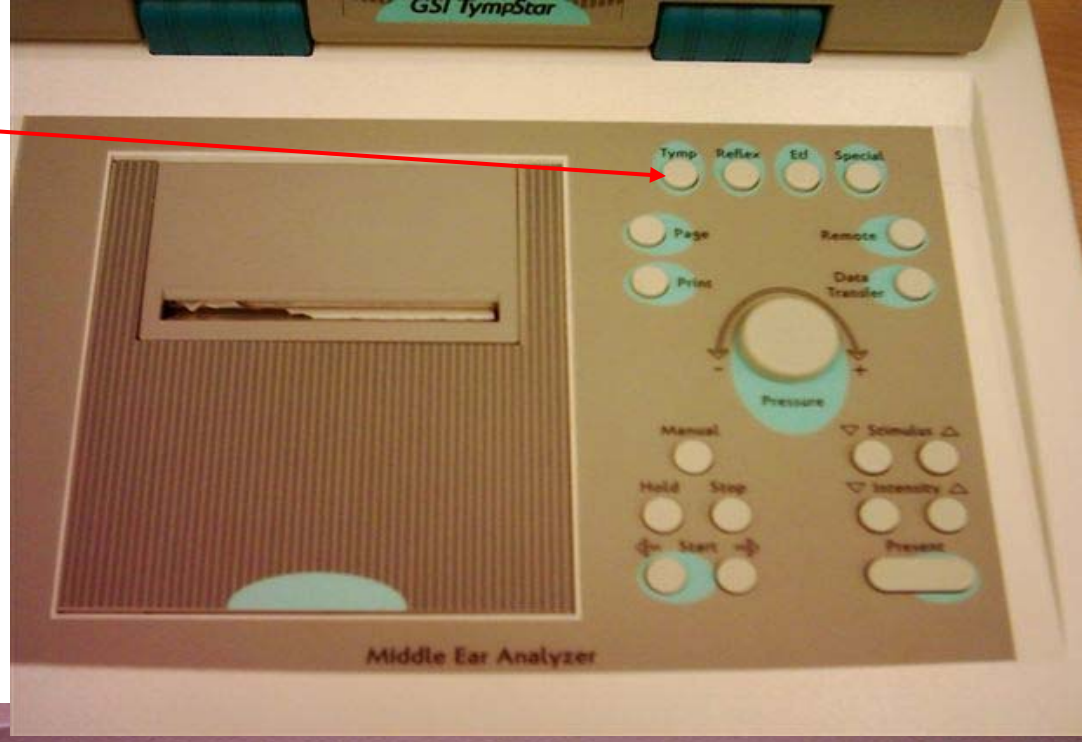
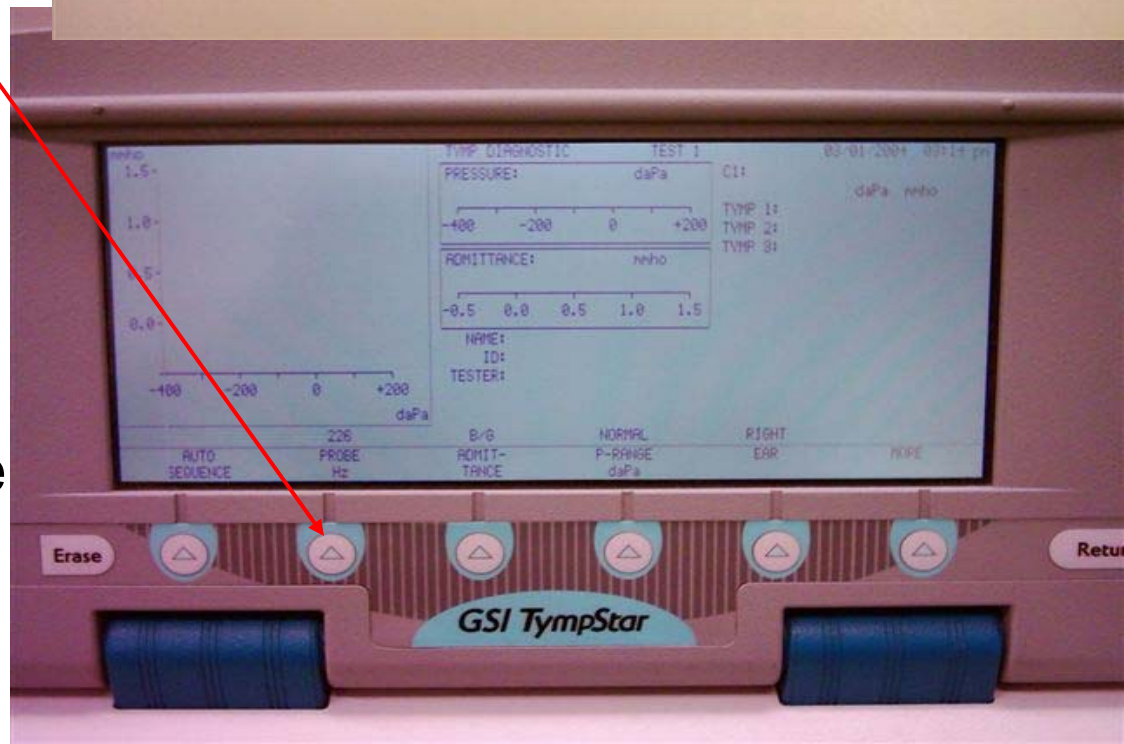
GSI-Tympstar Operation

- **Hard Keys** - Designates all pushbuttons labeled on front panel keyboard.

- **Soft Keys** - Designates six pushbuttons below CRT whose function or parameter labels appear on lower portion of the CRT (Selectable parameters appear on screen directly above the appropriate soft key.)





Features

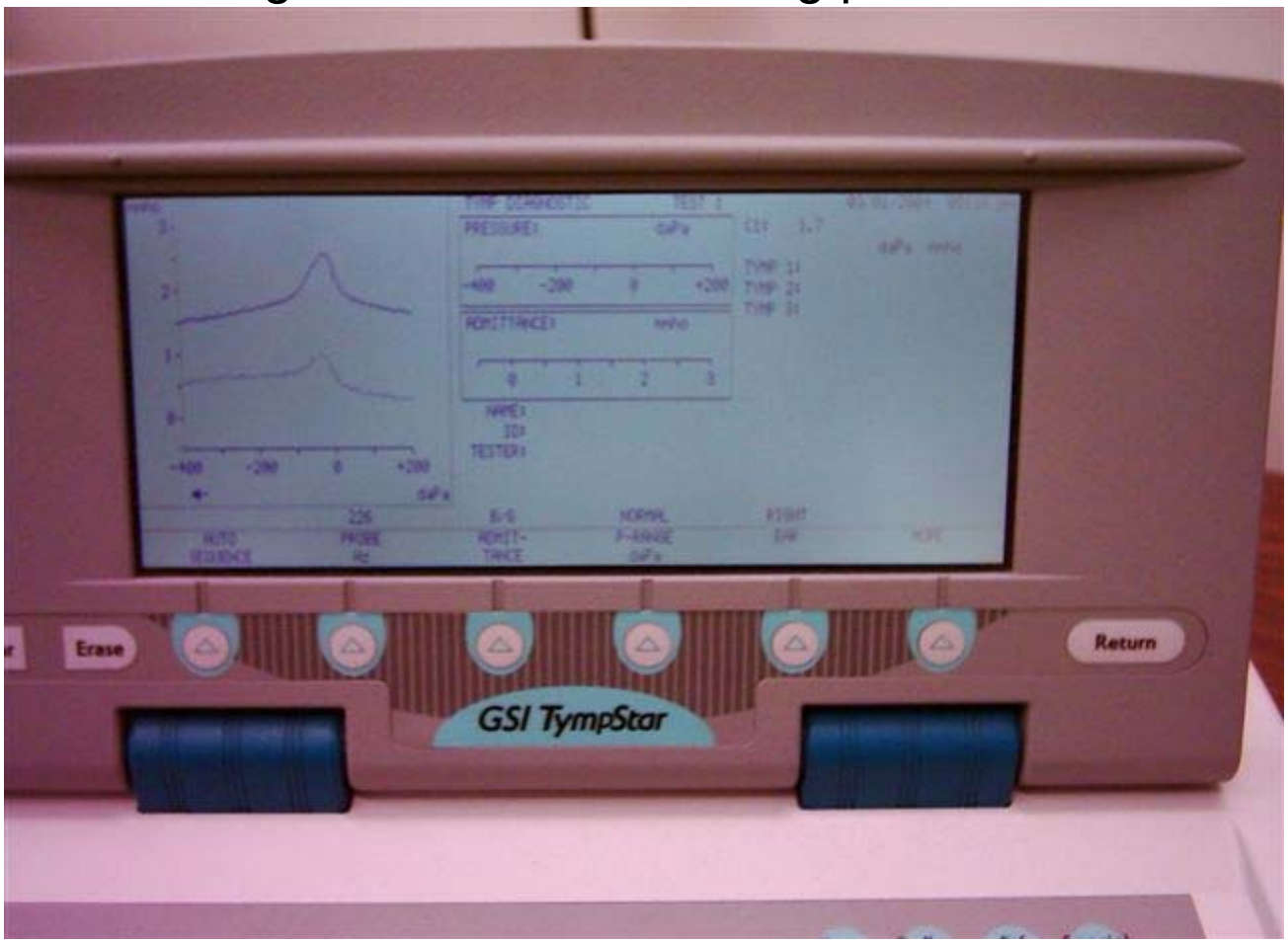
- Probe Tone Frequencies Available:
  226 Hz - **678 Hz** - and**1000 Hz**
- Instrument measures Admittance (Y), and its components:
  - Susceptance (B)
  - Conductance (G)
  - Y and B tracings are highlighted by a bolder display than G.
- **SPECIAL:** Causes GSI 33 to initialize to GSI (or user programmed) default criteria for Reflex Decay test.
- **RETURN:** Allows operator to go back to next higher level in the soft key menu. Depressing RETURN while in CLEAR, PAGE, or PRINT mode restores user to the mode previously selected.
- **START:** Causes selected test sequence to begin in direction indicated by arrow.

Performing the B/G Admittance tests

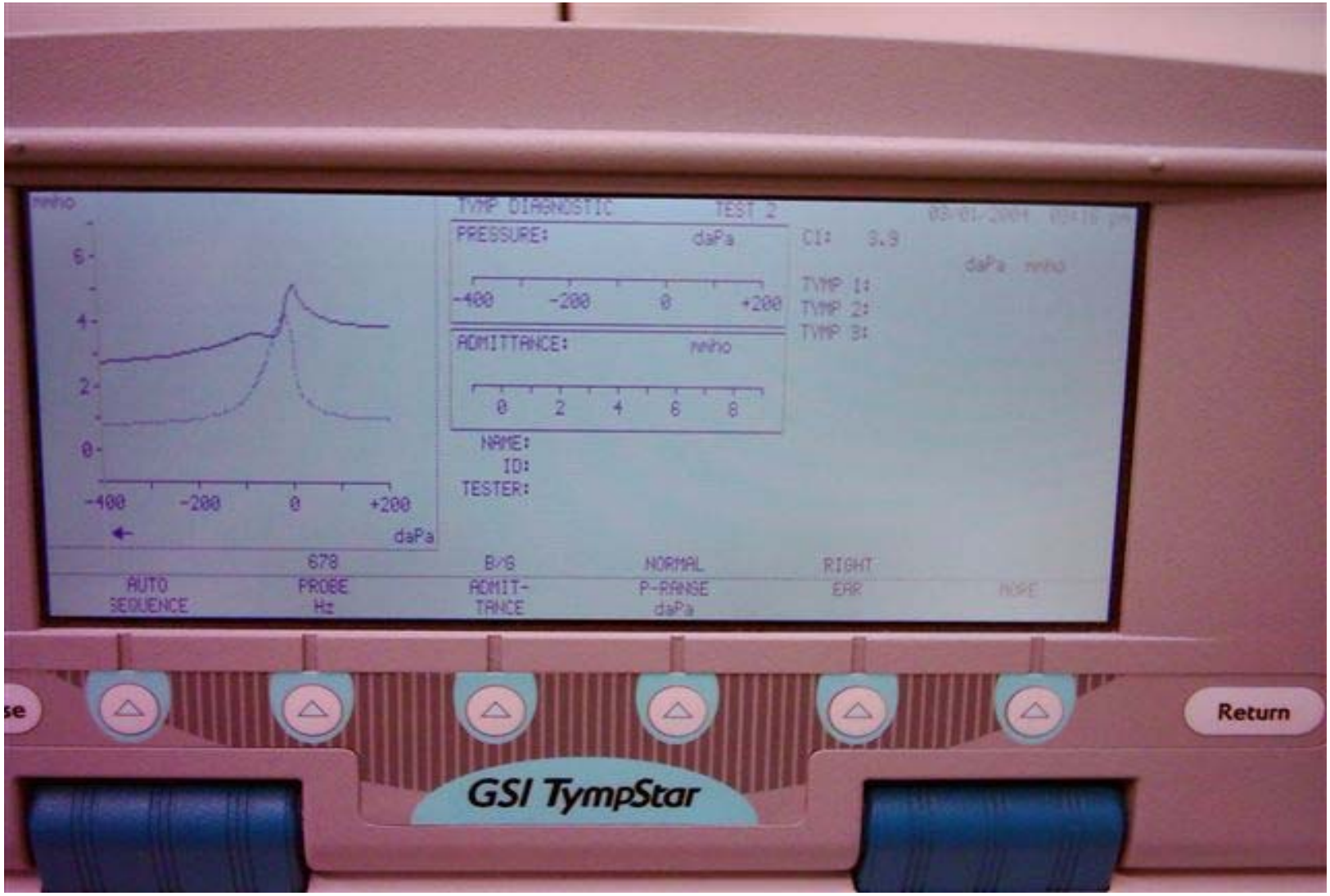
- Select test mode by turning **POWER ON**, or by depressing **TYMP** hard key.
- Default test parameters are displayed above soft keys on the CRT.
  - Selectable Probe Tone Hz: **226, 678, 1000**
  - Selectable Admittance Components: **Y, B, G, B/G**
-
  - Select **BASELINE-OFF** if tymp test is performed with the following parameters:
- Always record B/G simultaneously with 226 Hz, 678 Hz, or 1000 Hz

Performing the B/G Admittance tests

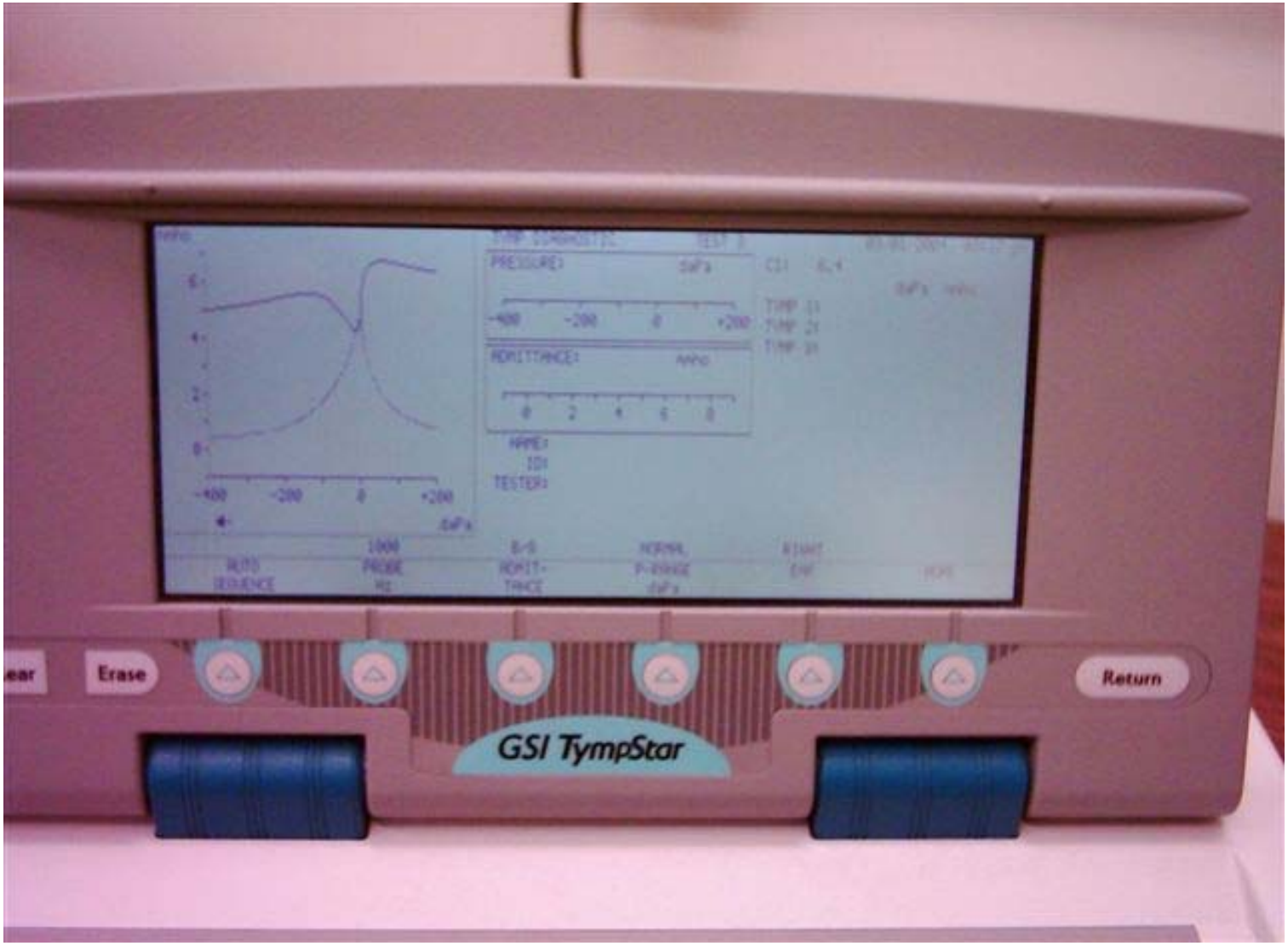
After performing the B/G Admittance test for 226 Hz, the screen should show something similar to the following picture.



678 B/G Tympanogram

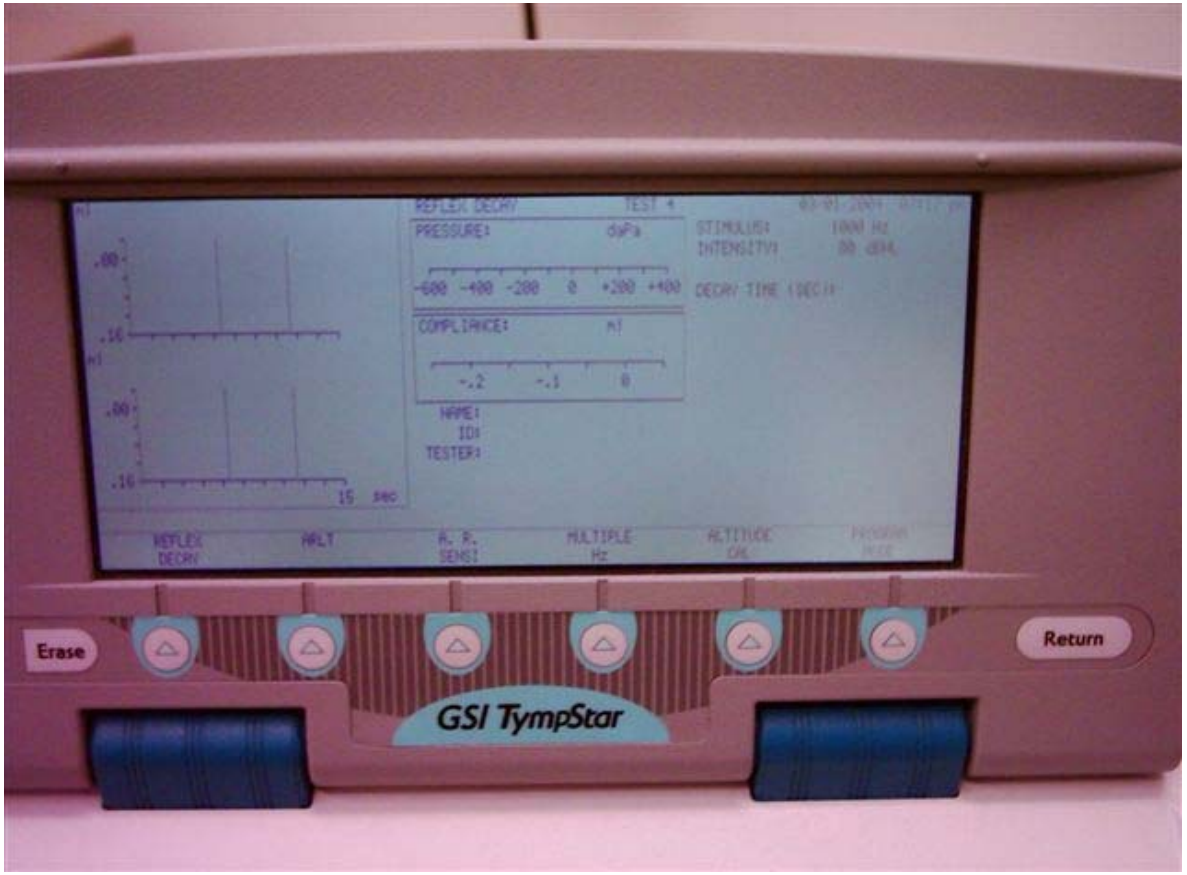


1000 B/G Tympanogram



Sweep Frequency Tympanometry (MULTIPLE Hz)

- Depress **SPECIAL** followed by **RETURN**.
- The following screen should be seen.

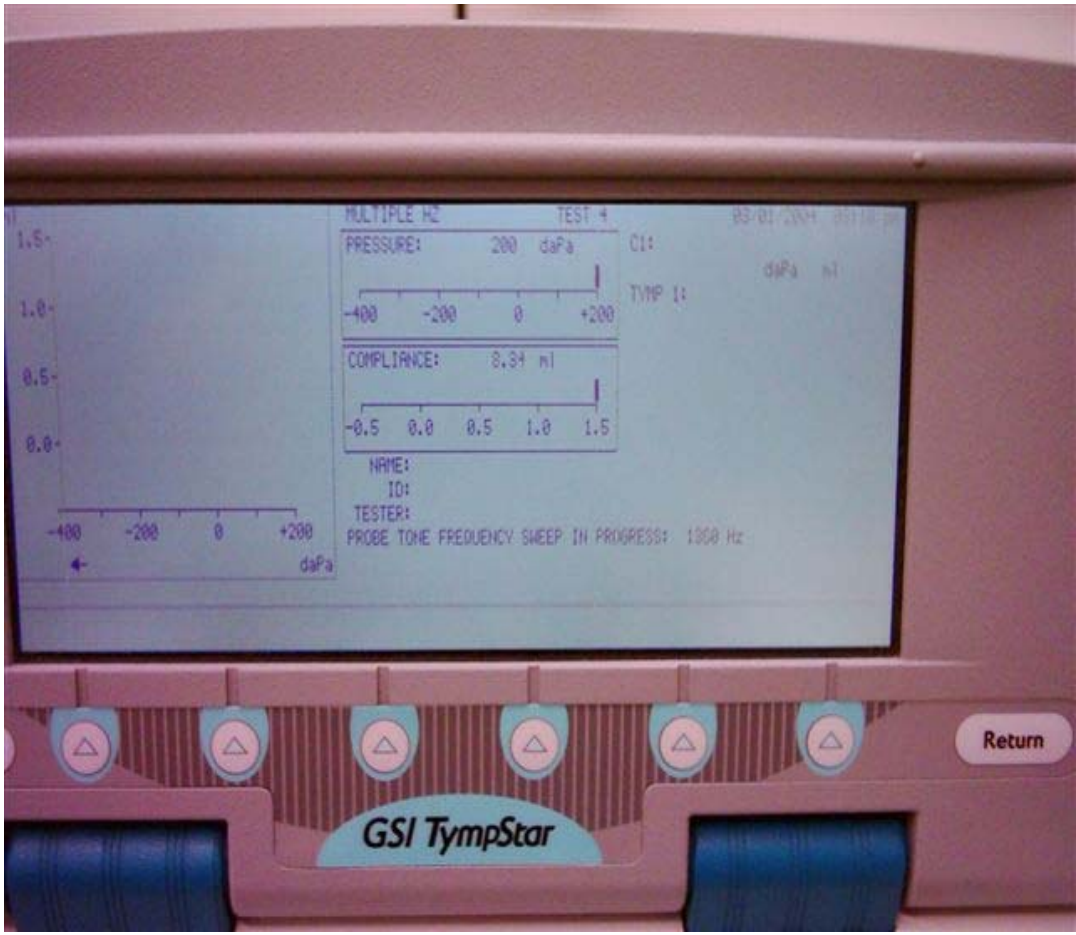


MULTIPLE Hz

- Select test mode by depressing **MULTIPLE Hz** soft key.
- The following screen should be seen.

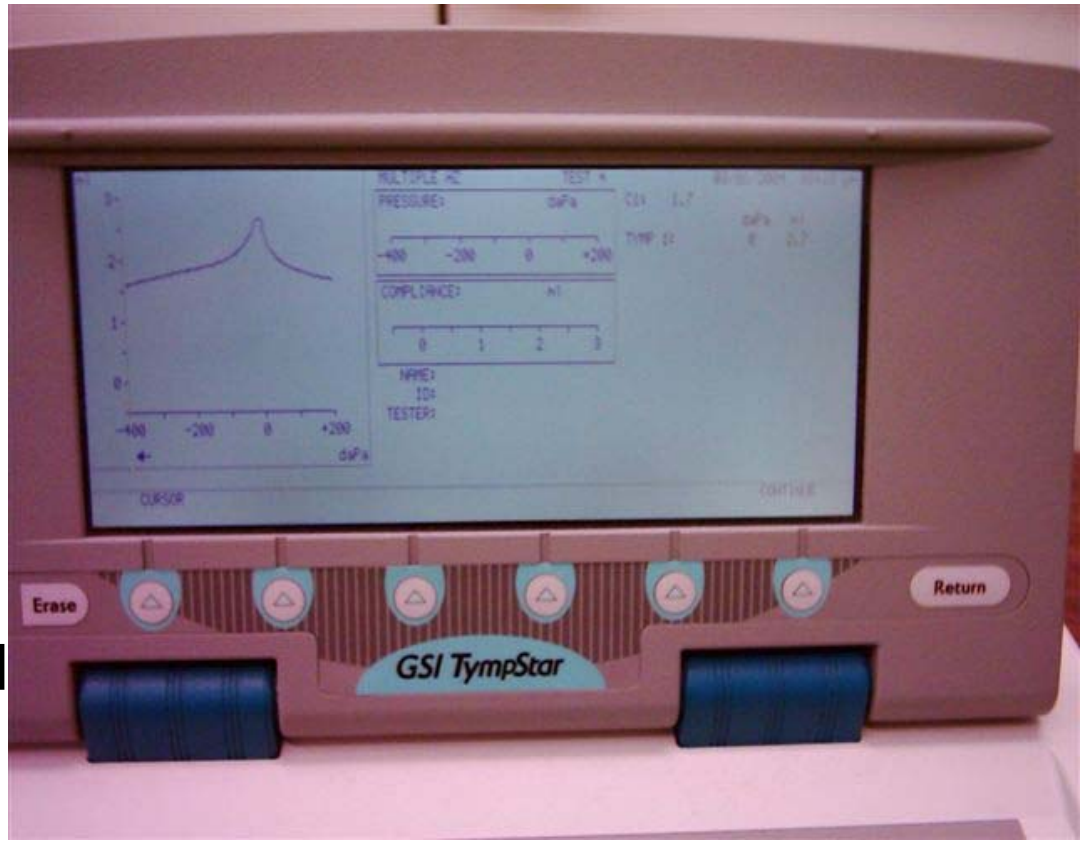
MULTIPLE Hz

- Make sure that the DELTA PLOT option on the screen is B. This will perform a Delta B test, where as a G will perform a Delta G test.
- Press ←**START** to initiate test.
- The tympstar automatically sweeps the frequency from 250-2000 Hz in 50 Hz interval at + 200 daPa
- Once this part is done you have to select the “Continue” on top of the soft key
- The GSI Tympstar automatically runs a 226 Hz Y tympanogram to determine the peak pressure



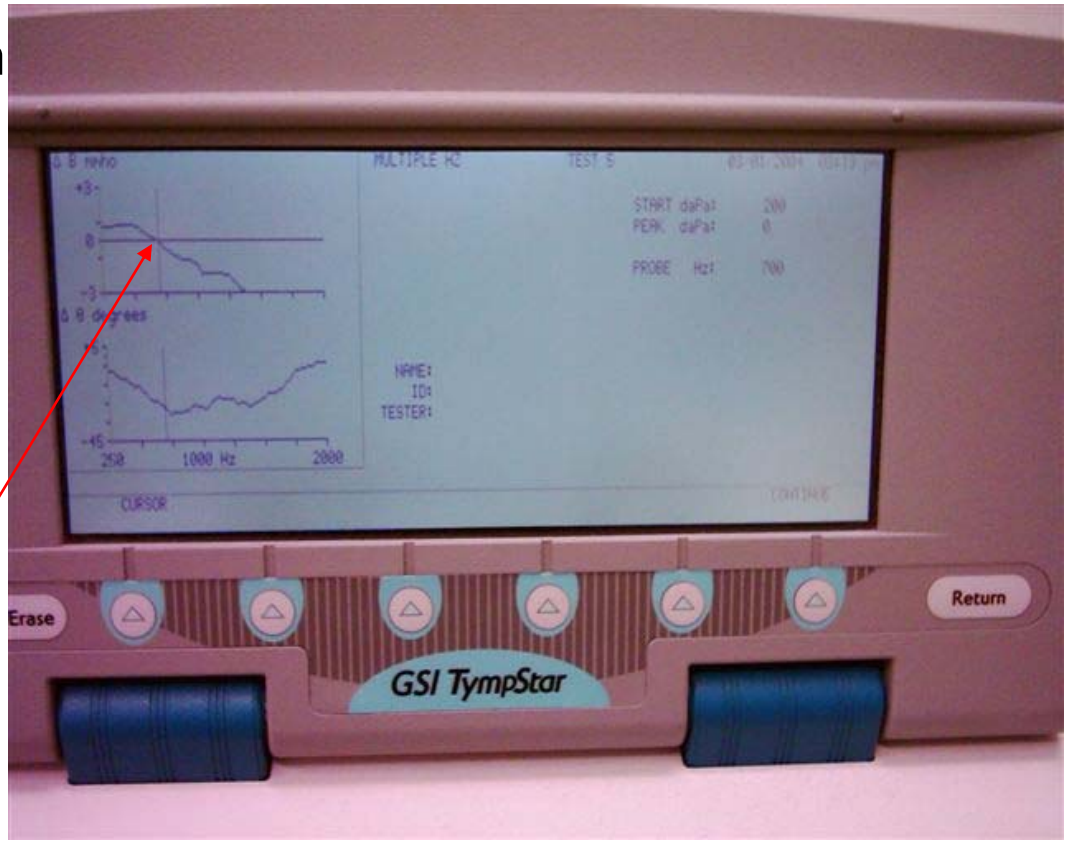
MULTIPLE Hz

- The GSI Tympstar automatically runs a 226 Hz Y tympanogram to determine the peak pressure
- The ADMITTANCE soft key indicates which component is measured as a function of probe frequency at the start and peak pressures. (B is the best component for this test.)



MULTIPLE Hz

- After Tympstar automatically runs a 226 Hz Y tympanogram and determined the peak pressure, it sweeps the frequency again from 250-2000 Hz in 50 Hz interval at the peak pressure
- ΔB and ΔΦ are automatically calculated and plotted as a function of probe frequency on upper graph display by subtracting the peak B value form the tail B value
- Resonant frequency is displayed as the ΔB crosses the Zero line



MULTIPLE Hz

- Tymps may be obtained for frequencies below and above identified resonance point of the ear. To select probe tone frequency for next tymp:
  - Press **PROBE Hz** soft key.
  - Use arrows ↓ ↑ to arrive at desired Hz.
  - Press **SET Hz** soft key to select probe ton e. Use ← **START** or **CONTINUE** to run next tymp,