# **Earscan**®

# Microprocessor Pure Tone Audiometer OPERATING GUIDE

#### START UP

- 1. Insert headphone plug into side panel "phone" location.
- 2. Insert patient response button plug into side panel "button" location.
- 3. Plug unit into grounded outlet.
- Press rocker switch on back panel to "on" position. After Earscan does a brief system check you are ready to begin testing.

#### **SETTING PARAMETERS**

Allows frequency and stimulus selection. Test parameters will default to factory pre-set levels when power is shut off.

- Press <MAN> and hold until "AUDIOMETER SET-UP MODE" appears on LCD.
- 2. Press **<DISP>** to observe keys operating function.
- Press <DISP>. Use <Hz⇐⇒ and <Hz⇒> to select frequency.

Press **<TONE>** to include frequency.

Press **CLEAR**> to remove frequency.

Press **<AUTO>** to set starting frequency.

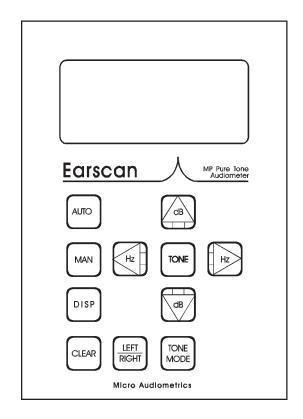
- 4. Press **<DISP>** to access stimulus range programming. Press **<Hz** ⇒ to select minimum stimulus range. Toggle **<dB** → and **<dB** → to set the desired minimum dB level. Press **<Hz** ⇒ to select maximum stimulus range. Toggle **<dB** → and **<dB** → to set the desired maximum dB level.
- Press <MAN> to save parameters; exit programming mode.

#### PATIENT SET-UP

- 1. Seat patient so the front panel of the audiometer cannot be seen by the patient.
- 2. Place headphones securely over ears, making sure red phone covers right ear and blue phone covers left ear.
- 3. Instruct the patient to listen for either a continuous tone or a series of beeping sounds. He should raise his hand on the same side the sound is coming from. If the patient response button is used, the patient should press and release the button whenever a sound is heard.

#### **MANUAL TESTING**

- Press < DISP>, then press and hold < CLEAR> until NEW TEST appears.
- 2. Press **<RIGHT/LEFT>** to select test ear.
- 3. Increase and decrease frequency using the Hz keys.
- 4. Increase and decrease dB level using the dB keys.
- 5. Press **TONE**> to present stimulus.



#### **AUTOMATIC TESTING**

- 1. Follow steps 1 and 2 of manual testing.
- 2. Press <AUTO>.
- 3. Earscan will determine and store thresholds for each frequency. Earscan will signal the completion of testing by presenting a series of tones.

#### HAND-RECORDING RESULTS

- 1. Press **<DISP>**. Repeated pressing toggles results on LCD.
- 2. Record test results on audiogram pad.

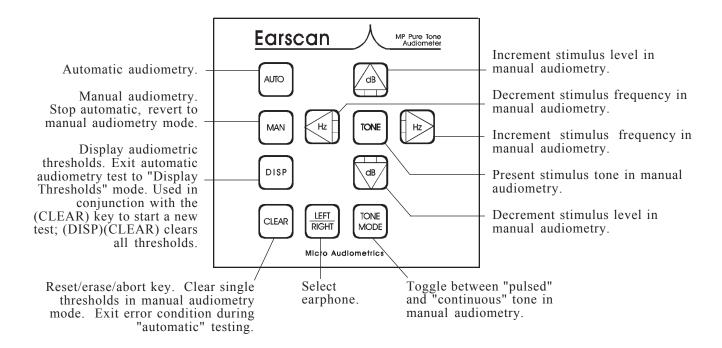
O = right ear

X = left ear

#### **IMPORTANT NOTES**

- 1. Rerun any test if the results are in question.
- 2. DO NOT swap headsets among units. Each Earscan is calibrated to match a particular headset. The last digits of the Earscan serial number are engraved on each headphone label.

### **KEYPAD SUMMARY**



## SCALE OF HEARING LOSS

Reporting the degree of hearing loss is somewhat subjective in that not all hearing tests are conducted in the same manner. Test results may vary from person to person depending on ambient noise levels present at the same time of testing. If testing conditions are optimal, the following scale may be helpful in understanding or reporting results.

0dB - 20dB	Hearing within normal limits
25dB - 40dB	Slight to mild hearing loss
45dB - 55dB	Moderate hearing loss
60dB - 70dB	Moderately severe hearing loss
75dB - 90dB	Severe hearing loss
90dB+	Profound hearing loss

