## Testing Automatic Telecoil Hearing Aids with the FONIX FP35 Hearing Aid Analyzer



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In some hearing aids with an automatic telecoil feature, the magnet in the FP35 speaker can accidentally enable the telecoil feature when performing coupler measurements. The easiest way to test these hearing aids is to disable the automatic telecoil feature. However, if this is not possible, you can use the following method as a workaround.

FP35 coupler measurements can be performed with the sound chamber speaker in the upright position as if you were performing a sound field measurement. You will typically need some sort of stand in order to hold the hearing aid and coupler in place during the measurement. You can purchase a table top stand from Frye Electronics (part number 030-0021-00) for this purpose.

## To set up the hearing aid for testing:

- 1. Mount the internal speaker in the sound field position as you would for performing real-ear measurements.
- 2. Place the stand in front of the sound field speaker and attach the coupler microphone to the stand using BLUE STIK (Fun Tak). There should be a distance of 4-6 inches (10-15 cm) between the microphone and the speaker. If you have a short microphone cord, this may limit the distance allowed. See Figure 1.



Figure 1: Leveling for coupler measurements using a sound field speaker

3. From the Opening Screen on the analyzer, press [F3] to enter the Coupler Multicurve screen.

- 4. Press [MENU] to enter the local menu and [NEXT] to go to the advanced local menu. Use the arrow keys to adjust the LEVELING SOURCE to 70 dB SPL. (If you are in the Advanced User Mode, you will need to press [NEXT] again to enter the custom local menu to adjust this setting.)
- 5. Press [MENU] again to close the local menu.
- 6. Press [F5] and [START/STOP] to level the sound field speaker.
- 7. Attach the hearing aid to the coupler in the usual fashion and insert the coupler microphone. See the FP35 Operator's Manual for details.
- 8. Attach the hearing aid/coupler combination to the stand using BLUE STIK (Fun Tak) with the hearing aid microphone where the coupler microphone was during the leveling process. See Figure 2.



Figure 2: Performing coupler measurements using a sound field speaker

9. You can now perform your coupler measurements as usual (ANSI, IEC, or Coupler Multicurve). This testing method is more susceptible to environmental noise than when the sound chamber is closed, so make sure you keep your office as quiet as possible during these measurements.

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## FRYE ELECTRONICS, INC.

P.O. Box 23391 • Tigard, OR 97281-3391 • USA (503) 620-2722 • (800) 547-8209 Fax: (503) 639-0128

www.frye.com • email: sales@frye.com