

## How to Verify the FP40's Compatibility with DSL 4.1

### FP40 Instructions:

1. Select the "SPL" approach:
  - a. From the Main Screen press F5 to enter the "PROBE" screen.
  - b. Press F2 to select "SPL" approach.
2. Select the Fitting Rule:
  - a. Press F4 to enter the "TARGET" screen.
  - b. Use F3 to select "DSL LIN" or "DSL WDRC".
  - c. Press F5 to make this the current rule.
3. Select the patients age range using F6.
4. Select "HTL" with F2 and enter the thresholds into the "HTL" column.
5. If custom UCL is desired:
  - a. Select "UCL" with F2.
  - b. Enter the UCLs into the "UCL" column.
6. If DSL WDRC rule is used, select the Compression Threshold:
  - a. Select "CT" with F2.
  - b. Dial in the Compression Threshold with the AMPLITUDE control.
7. Select the Aid Type:
  - a. Press F7 to enter the "COUPLER" screen.
  - b. Use F4 to select the aid type.
8. Select the RECD:
  - a. Press F3 to enter "RECD MODE".
  - b. If average RECD is desired, select "AVG" RECD with F3.
  - c. If custom RECD is desired:
    - i. Enter the RECD's into the RECD column.
    - ii. Select "MEASURED RECD" with F3.
9. Generate the Targets:
  - a. Press F7 to return to the "TARGET" screen.
  - b. Press F5 to generate the targets.

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10. View the Real Ear Speech-Weighted Input targets:

- a. Press F4 to enter the “PROBE” screen.
- b. Make sure the source in the curve box for CRV 2 is either “70 COMP” or “60 NORM”.
- c. If necessary, measure and then undisplay curve 2 to make it so.
- d. The targets for “T”reshold, “A”verage Speech, and “U”CL’s can be viewed as character graphs.
- e. The Average Speech target can also be viewed as a tabulation.
  - i. Press F1 to enter the Setup Menu.
  - ii. Select DATA DISPLAY - TARG SPL under PROBE SETTINGS.
  - iii. Press F1 to return to the Probe screen and press the DATA/GRAPH key.

11. View the Coupler Gain Average Speech Weighted Input Target:

- a. Measure a Composite curve in the “PROBE” screen.
- b. Press F4 and then F7 to enter the “COUPLER” screen.
- c. Make sure the “MODS” and “RESER” are all 0’s.
- d. Use F6 to set the source to 70.
- e. The Coupler Gain Target can now be viewed. Use DATA/GRAPH to select graph or tabular form.
- f. The Compression Ratios for each freq can also be viewed if the DSL WDRC rule is used.

12. View the Coupler Gain Average Constant Level Input Target:

- a. Press F7 and then F4 to return to the “PROBE” screen.
- b. Measure a Normal Sweep curve in the “PROBE” screen.
- c. Press F4 and then F7 to enter the “COUPLER” screen.
- d. Make sure the “MODS” and “RESER” are all 0’s.
- e. Use F6 to set the source from 40-100dB(typically 60dB).
- f. The Coupler Gain Target can now be viewed. Use DATA/GRAPH to select graph or tabular form.
- g. The Compression Ratio for each freq can also be viewed if the DSL WDRC rule is used.

13. View the Coupler SSPL target:

- a. Press F5 to enter “SSPL” mode.
- b. Make sure the “MODS” and “RESERVE” are all 0’s.
- c. The Coupler SSPL Target can now be viewed as both a graph and tabulation.

(DSL 4.1 Instructions on next page)



## **DSL 4.1 Instructions:**

1. Enter the patients birth date.
  - a. Go to the “Client Information” Window.
  - b. Enter the patient’s birth date.
  
2. Fill out the Assessment Data Window.
  - a. Go to the “Assessment Data” Window.
  - b. Enter the thresholds into the “Threshold” row.
  - c. If custom UCL is desired, enter them into the “Upper Limit” row.
  - d. If custom RECD is desired, enter them into the “RECD” row.
  
3. Set up the “Assess” Menu:
  - a. “Transducer”: Always set to ER3 Insert Earphone.
  - b. “HL to SPL transform”:  
Set to “Predicted” for average RECD, or to “RECD” for measured RECD.
  
4. Set up the “HA Fit” Menu:
  - a. “Circuit Type”: Set to Linear , or WDRC(Fixed CR).
  - b. “Style”: Select the aid type(BTE, CIC, ITC, ITE).  
Note: CANAL on the FP40 is ITC on DSL 4.1.
  - c. “RE to 2CC transform”:  
Set to “Predicted”for average RECD, or to “Measured” for measured RECD.
  - d. “Maximum Output”:  
Set to “Predicted” if using predicted UCLs, or to “Measured” if using measured UCLs.
  - e. “Speech Spectrum”:  
Set to UWO Child if using any childs age on the FP40.(0-2 M, ..., >5 YR).  
Set to Cox and Moore if using “ADULT” age on the FP40.
  - f. “Compression Threshold”: Set to (40, 45, 50, 55, 60, or 65).
  
5. View the Real Ear Average Speech-Weighted Input Target:
  - a. Set the “Verify” Menu Mid-Level Input:
    - i. Check both Speech Weighted and Real Ear Aided Response.
  - b. Go to the Verification Mid-Level Targets Window.
  - c. The target can be viewed in the middle row labeled as the selected Speech Spectrum.
  
6. View the Real Ear Maximum Output Target:
  - a. Set the “Verify” Menu High-Level Input to Real Ear Aided Response.
  - b. Go to the Verification High/Low-Level Targets Window.
  - c. The target can be viewed in the top row labeled as “Max. Output”.

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7. View all three Real Ear Targets in graphical form:
  - a. Go to the Speech SPLogram Graph Window.
  - b. Click the Thresholds/Measured, Upper Limits/Measured, and Aided Target/Average boxes.
  - c. The targets can be viewed on the graph.
  
8. View the Coupler Gain Average Speech-Weighted Input target:
  - a. Set the “Verify” Menu Mid-Level Input:
    - i. Check both Speech Weighted and Coupler Gain.
  - b. Go to the Verification Mid-Level Targets Window.
  - c. The target can be viewed in the middle row labeled as the selected Speech Spectrum.
  
9. View the Coupler Gain Average Constant-Level Input target:
  - a. Set the “Verify” Menu Mid-Level Input:
    - i. Check both Constant-Level and Coupler Gain.
  - b. Go to the Verification Mid-Level Targets Window.
  - c. Set the “Measured” box to the left of the middle row to the same as the FP40 in step 12d.
  - d. The target can be viewed in the middle row.
  - e. This target can also be viewed on the “Hearing Aid Specification” window.
    - i. Set the Res. Gain to 0.
    - ii. Set the Input to the same as the FP40 in step 12d.
    - iii. Read the target on the second and third rows.
    - iv. The compression Ratio for each frequency can be read on the fourth row if WDRC is selected.
  
10. View the Coupler SSPL Target:
  - a. Set the “Verify” Menu High-Level Input to Coupler Output.
  - b. Go to the Verification High/Low-Level Targets Window.
  - c. The target can be viewed in the top row labeled as “Max. Output”.
  - d. This target can also be viewed on the “Hearing Aid Specification” window.
    - i. Read the target on the top row labeled as “SSPL”.