

# REM Target Match

REM Target Match is a feature for verifying hearing aid fittings with real ear equipment and the Inspire X software. REM Target Match provides a streamlined process for automatically matching real ear targets to provide a more accurate and efficient fitting experience.

## Compatibility Requirements

- Inspire X 2020.1
- Requires Noah Version 4.5.1 or higher
- Compatible with the following real ear systems:
  - Otometrics Aurical FreeFit
  - MedRx Avant REM
  - Inventis Trumpet
- Compatible with all technology tiers and styles for Muse/NOW/A4 products and forward.

*Launch Inspire X and connect the hearing aids. Refer to the Initial Fit Protocol QuickTIPs for information on getting started.*

On the QuickFit screen, Select **REM Target Match**.



Figure 1

## Step 1: Setup

- 1 From the REM Target Match tool, select the ear to be measured (Right, Left, Binaural) at the top of the screen.
- 2 View the experience level, fitting formula and acoustic options. Exit the tool to make any necessary changes to these items before continuing. Changes cannot be made within the tool.
- 3 Ensure the real ear system you wish to use is powered on and selected in the bottom left corner of the tool.
- 4 Click **Launch** to begin.

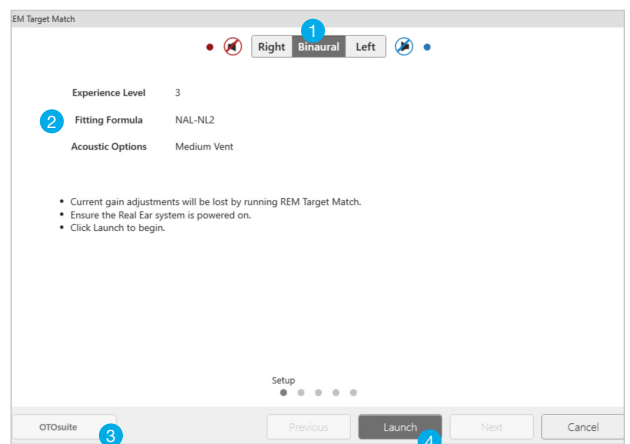


Figure 2



## Step 1: Setup (Continued)

- 5 In the bottom left corner the name of the real ear system will display with a red circle. Once the real ear system has finished launching, the circle will turn green indicating the real ear system has been successfully launched.
- 6 Click **Next** to proceed.

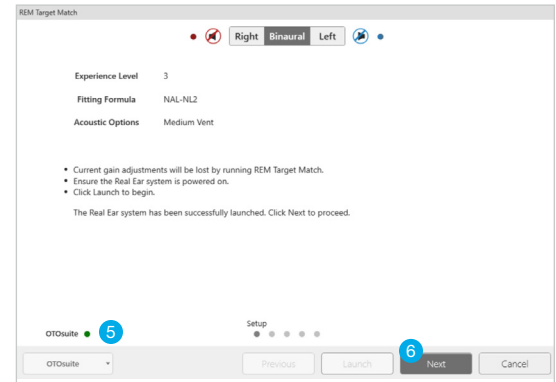


Figure 3

## Step 2: Calibration

Probe-tube calibration resolves the acoustic effects the probe tube and microphone introduce during real ear measurement.

- 1 Fold the probe tube over and place the probe tube opening on top of the reference microphone.
- 2 The reference microphone should be approximately 0.5 meters or 1.5 ft away from the real ear system speaker.
- 3 Select **Start**.
- 4 The calibration test will stop automatically when completed.
- 5 Once calibration is finished, verify the curves look correct.
- 6 Click **Next** to proceed.

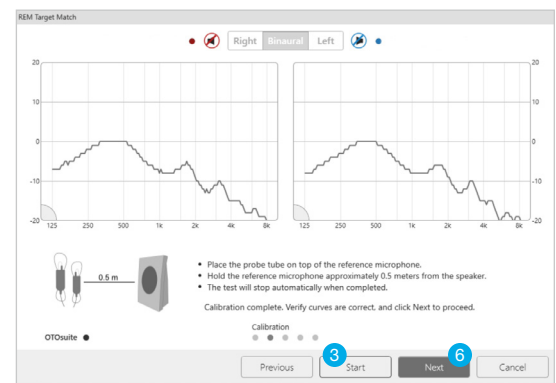


Figure 4

## Step 3: Unaided

Real Ear Unaided Gain (REUG) is a measurement of the resonant peak or boost in high frequency sounds in the patient's open ear without a hearing aid inserted.

- 1 Seat the patient in front of the real ear system speaker, approximately 1 meter or 3 ft away.
- 2 Carefully place the probe tube in the patient's ear canal (without the hearing aid inserted) within approximately 5 mm of the tympanic membrane.
- 3 Instruct the patient to remain still and quiet during the measurement.
- 4 Press **Start**.
- 5 The test will stop automatically when completed. The grey line on the graph is the average REUG and the blue line is the measured REUG.
- 6 Click **Next** to proceed.



Figure 5

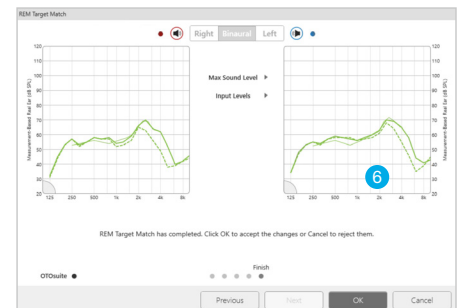
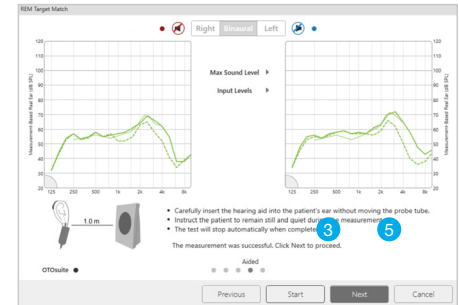
## Step 4: Aided

When a hearing aid is placed in the ear canal, the open ear gain is impacted. Compensating for the loss of natural gain requires measuring the gain of the hearing aid across frequencies while inserted into the patient's ear.

There are two adjustable options available for the aided response:

- **Max Sound Level:** Select the level at which the system will automatically stop measuring. Default is 120 dB.
- **Input Level:** Check the boxes to view soft and loud curves. Input levels can be customized by going to the upper toolbar and selecting Preferences > General > Target.

- 1 Carefully insert the hearing aid into the patient's ear without moving the probe tube.
- 2 Instruct the patient to remain still and quiet during the measurement.
- 3 Click **Start**. The aided measurement will run two times. First is the baseline measurement. Adjustments are then made to match target and the second measurement will show the result.
- 4 The test will stop automatically when completed.
- 5 Click **Next** to proceed.
- 6 The REM Target Match is complete. Click **OK** to finish.



Figures 6A and 6B

Thin green line: SPL Target

Dotted green line: Pre-adjustment

Thick green line: REM Target Match

## Clear REM Target Match Measurements

- 1 Select the **Tools Menu** in the upper toolbar.
- 2 Choose **Clear REM Target Match** from the drop down menu.
- 3 Select **OK** to delete.

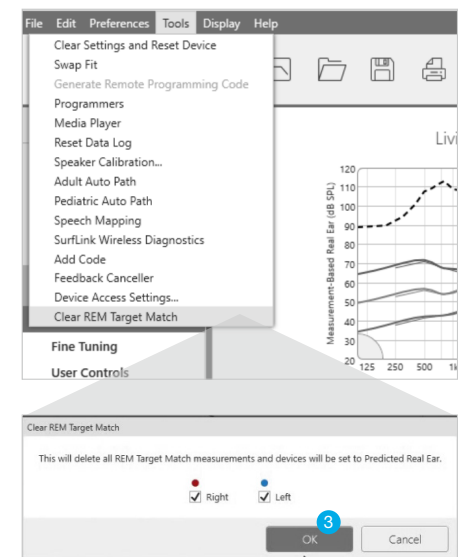


Figure 7