

# Primus

# What's New

Version 4.1.0



Auditdata

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# 1 Introduction

The purpose of this document is to give you an overview of the new features in Primus 4.1.0. This document gives you a brief description of the most important new features.

## 2 Audiometry

### 2.1 Test Definitions Editor

A range of enhancements was introduced to the Test Definition editor. To access the editor, go to **Tools > Test Definitions**.

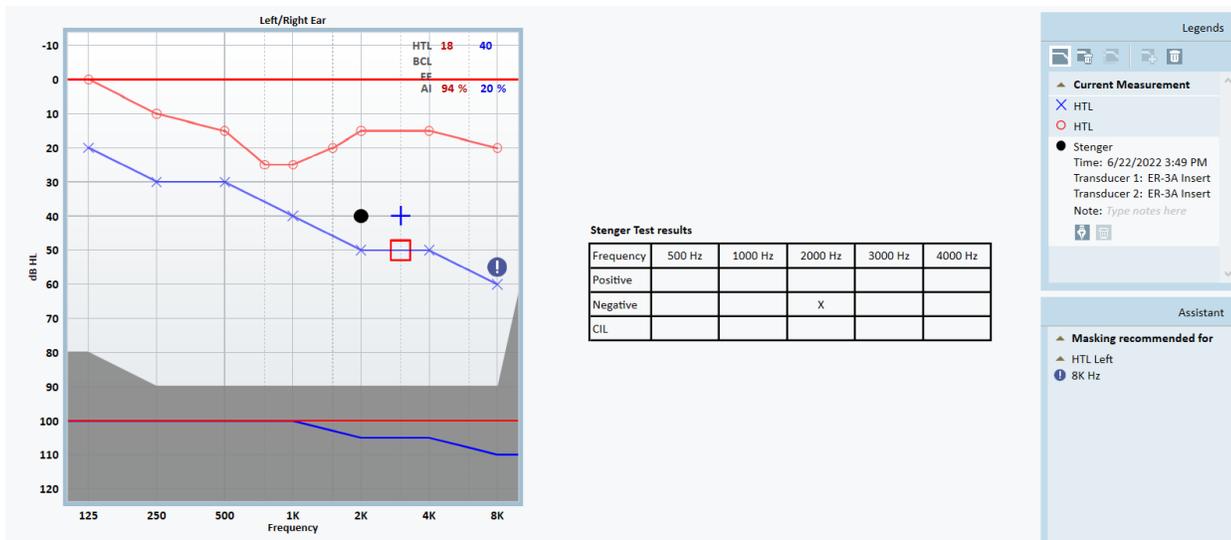
#### Minimum inter-aural attenuation

In the Minimum inter-aural attenuation section, you have a new option - **Frequency specific**. Click Setup to open a window where a user can specify values for each frequency from 125 to 16kHz)

### 2.2 Pure Tone

#### Stenger Test

Stenger test is now available to investigate a unilateral functional hearing loss to confirm whether the HL is non-organic unilateral. It is performed right after ordinary Pure Tone audiometry.



Test design is to start at 10 dB HL above threshold =10 dB SL on the good ear and 10 dB below threshold on the “poorer” ear, the pure tones are presented simultaneously on both ears. The test person should respond to stimuli in whatever ear the tone is heard.

The Stenger Principle states that a person will only hear the louder of two identical tones presented to both ears at the same time. To add and configure the definition for the test, go to **Tools -> Test Definitions > Pure Tone**, then choose **Add > Stenger test**.

Stenger test results can be shown or hidden in the printable audiogram report.

# 3 REM/SM

## Target Assistant

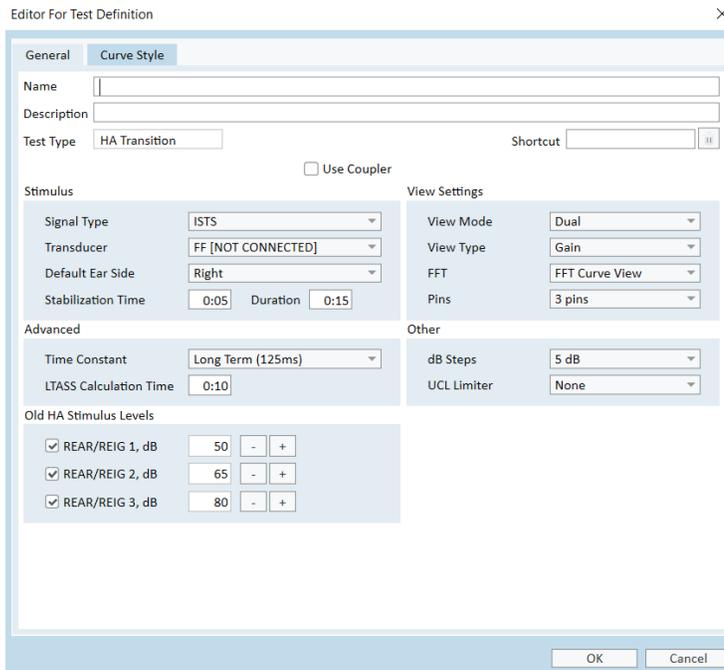
In this new tab, you can enable target hints and set up maximum allowed deviation from the targets in SPL and Gain views for Aided test definitions. Detailed information will also be displayed in the Assistant Panel on the right side of the measurement window.

## HA Transition Test

For audiologists who want to be able to transfer the patient’s existing sound experience to new hearing technology, the newly added HA transition test provides the possibility to obtain information about the patient's preferred audibility and use it to improve their experience when upgrading to a new device.

The solution provides the possibility to measure the output for 50, 65 and 80 dB input levels of the existing hearing aid and use this measure as and preferred setting compared with what a standard fitting algorithm (NAL or DSL) suggests.

To configure the definition for the test, go to **Tools -> Test Definitions > REM/SM**, then choose **Add > HA transition**.



In the section Old HA Stimulus Levels, it is possible to choose the number of measurements to run (up to 3) and predefine test signals and old HA stimulus levels in the range 40-100 dB.

## 3 UI Improvements

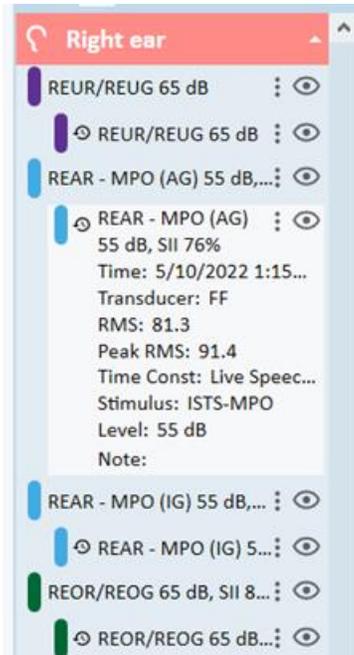
The user interface in REM and SM modules was improved for a better user experience.

### Curve Smoothing

On 1/3 octave view, the option to smooth curves is now available. This configuration can be found in **Tools > Settings > REM – Display Settings**.

### Legends Panel

The Legends panel with improved UI now appears on the right side of the screen to provide a total specification of each curve in the audiogram.



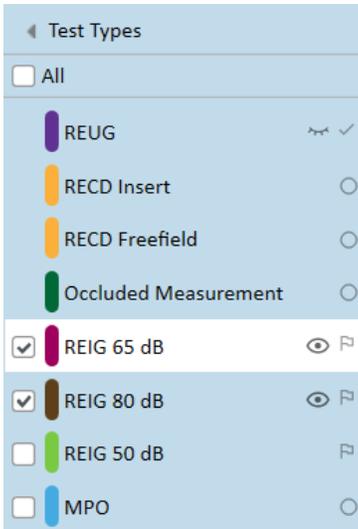
It is now easier to read and use the legend due to the following enhancements:

- Curves for right and left ears are grouped
- Only curves for selected test types are shown
- Historical curves are marked with a special symbol (👁️) and shown in a tree view under the current measurement

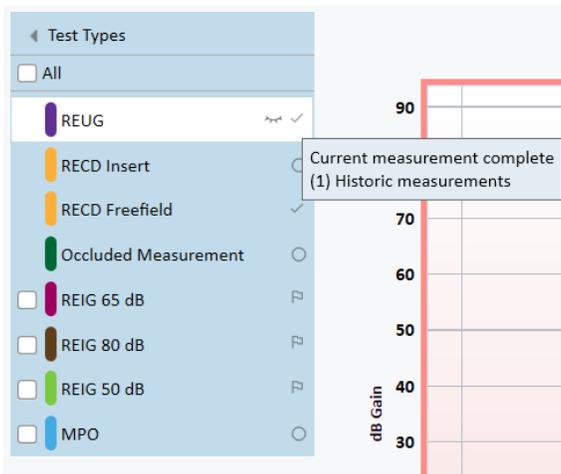
## Test Types Panel

The improved design of the Test types panel (on the left side of the screen) makes it possible to compare two or more test curves by selecting them in this panel.

Mouse over a test type to see a Visibility eye icon (👁️ or 👁️). Click an eye icon to show or hide the curve of the selected test type.



Mouse over the icon on the right to see a tooltip showing the state of current measurement and the information about existing historic measurements for this test type.



State of the current measurement:

- No current measurement
- Goal
- Current measurement complete

## 4 Release Notes 4.1.0

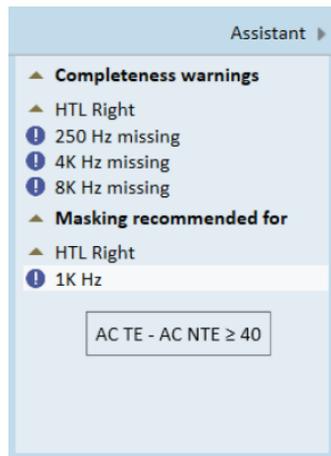
This version of the Primus software release contains the following enhancements:

## Supported languages

The new version of Primus supports 2 new languages: Dutch and Swedish.

## Assistant panel in PT and Speech Audiometry

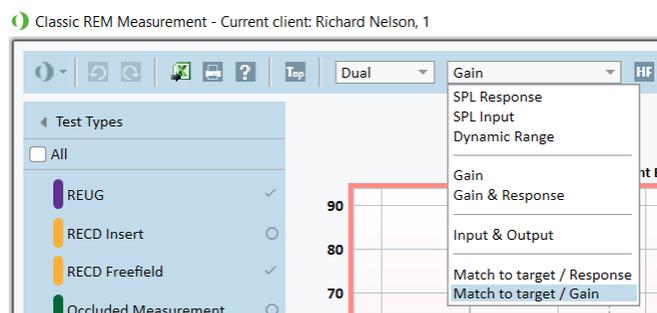
You can now mouse over a certain warning to see which rule has been applied. A detailed description of all rules can be found in the User Manual or Help file.



## Export to Excel in REM

Click the Export to Excel icon (  ) to export measurement data to an XML file and then view the data in an external tool, i.e. Excel. The data are exported in two separate files, one for the left and one for the right ear.

## Match to target view in REM/SM



In the REM/SM top bar:

- Select Match to target view / Response to turn on a view for a selected ear that displays the response (SPL) of the measured signal along with the target on a diagram.
- Select Match to target view / Gain to turn on a view for a selected ear that displays the difference of the measured value and the target (0-line) on a diagram.

## Improvements in QuickSIN

The result of QuickSIN measurement (SNR loss) is now shown in the SP measurement window and in the printable report, both in numeric mode.

### **1/24 octave improvements in REM/SM**

New setting **Enable fitting on 1/24 pins per octave** is enabled by default.

When it is activated, Base audiograms and targets are available in REM/SM.

When it is deactivated, Base audiograms and targets are hidden in REM/SM.

This configuration can be found in **Tools > Settings > REM – Display Settings**.

### **Offset added to symbols in Speech**

### **Weber results added to XML reports**

### **Bug fixes**

### **Installation**

To upgrade to Primus 4.1.0:

1. Run the set-up file: Setup\_Primus\_4\_1\_0.exe.
2. Follow the instructions on the screen and your system will be updated.

## 5 Support

For further information, please visit [www.auditdata.com](http://www.auditdata.com).