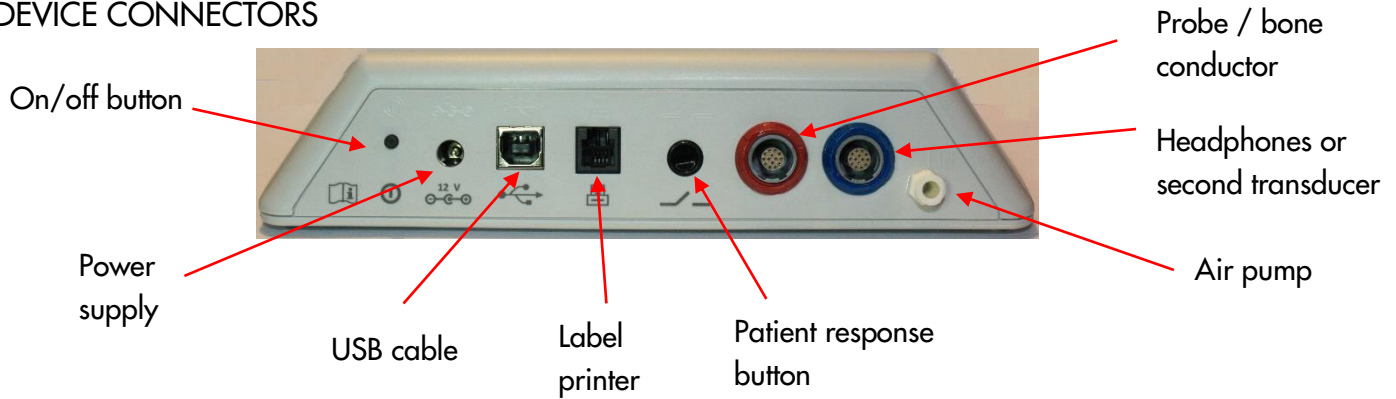


QUICK START GUIDE SENTIERO DESKTOP DIAGNOSTIC (WHITE HOUSING)

DEVICE CONNECTORS



START MENU

Note: not all Start Menu options will be available depending on the configuration of your device

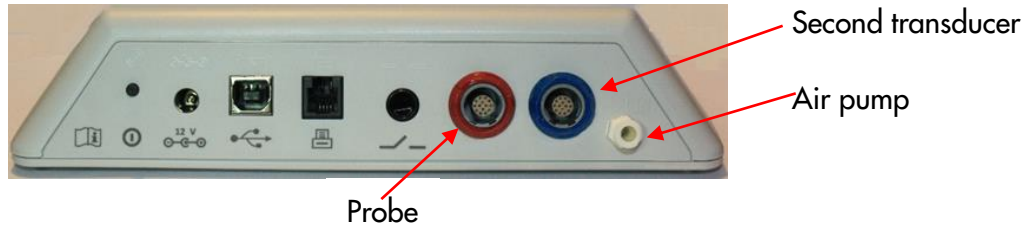


QUICK START GUIDE SENTIERO DESKTOP DIAGNOSTIC (WHITE HOUSING)

TESTING

TYMPANOMETRY

Connect the probe to the red connector and the air cable to the pump connector. From the start menu, select the Immittance button, then select Tymp, and select TIC. Select the test ear by pressing either the Right or Left button. Cartoon mode will show an airplane on the screen during the tympanometry test. Connect a second transducer to the blue connector for Contralateral Reflex testing.

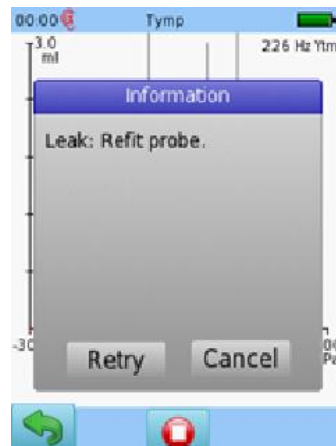
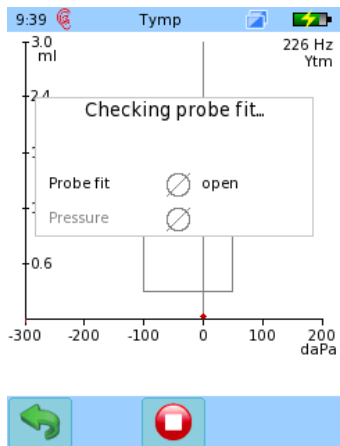


Select the appropriate ear tip size and place it on the probe tip. Insert the probe in the ear making sure that the ear tip fits tightly into the ear canal.

TYMPANOMETRY TEST SCREEN

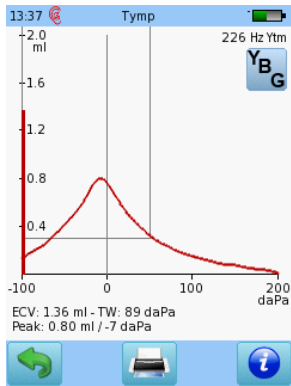
The system will first check the probe fit and wait for the pressure build up.

Note: The LED light on the probe will pulse at a steady pace to indicate a correct fit. During the test, if the probe tip fit is not correct, the LED light will blink at a fast pace and an error message prompting you to retry or cancel the test will appear on the screen.

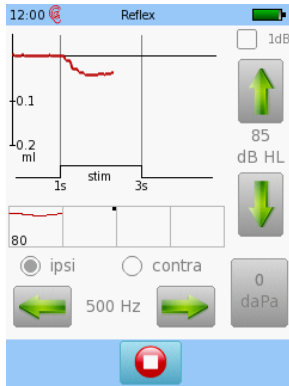


QUICK START GUIDE SENTIERO DESKTOP DIAGNOSTIC (WHITE HOUSING)

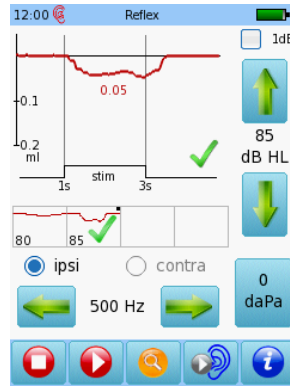
Once a proper seal has been obtained, the test will proceed. A tympanometry test will be performed, followed by a reflex measurement (when TIC chosen)



Tympanometry test result



Reflex test in progress



Reflex threshold found



Overall Reflex test result

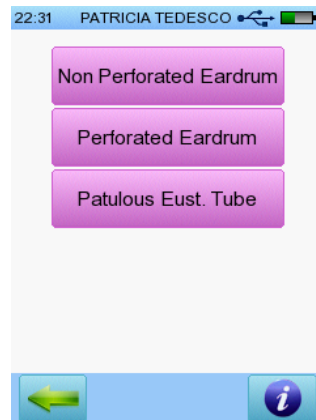
EUSTACHIAN TUBE FUNCTION (ETF) TESTING

Connect the probe to the red connector and the air cable to the pump connector and select the ETF button from the start menu. Select the test ear by pressing either the Right or Left button.



Select the appropriate ear tip size and place it on the probe tip. Insert the probe in the ear making sure that the ear tip fits tightly into the ear canal.

Select the type of test you would like to perform: Non Perforated Eardrum, Perforated Eardrum or Patulous Eustachian Tube

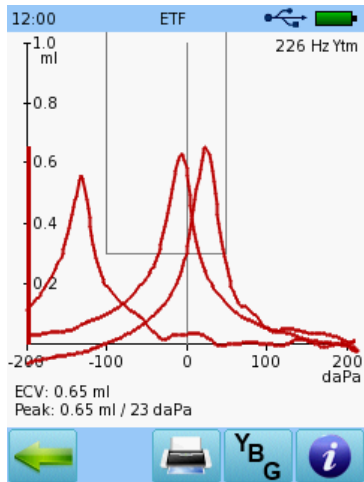


QUICK START GUIDE

SENTIERO DESKTOP DIAGNOSTIC (WHITE HOUSING)

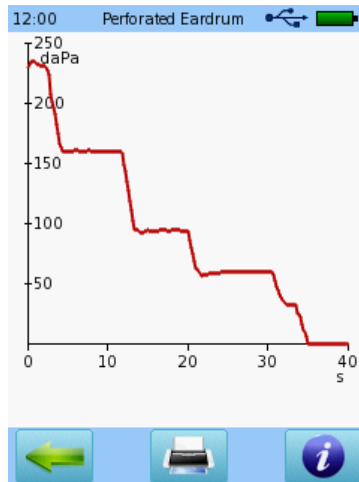
Non Perforated Eardrum:

This test records three tympanograms, with the patient performing the Toynbee and then Valsalva's maneuver between the tests. This changes the middle ear pressure, causing the tympanogram peaks to shift between the recordings.



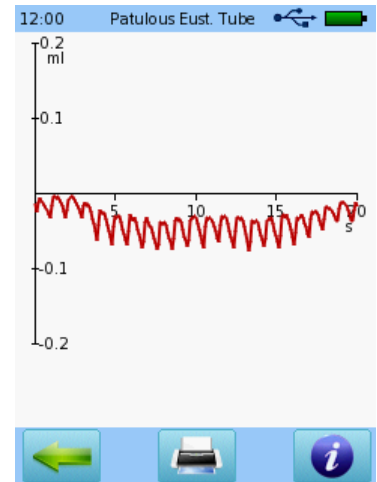
Perforated Eardrum: This test pressurizes the ear canal (and middle ear when the eardrum is perforated). To test the Eustachian tube function, the patient should be instructed to swallow multiple times during the test. If the Eustachian tube opens, pressure will drop.

Special care must be taken to ensure an airtight fit of the probe during testing, to make sure the observed pressure drop is through the Eustachian tube and not caused by leakage.



Patulous Eustachian Tube:

This test is performed without stimulus. If the Eustachian tube is permanently open, the resulting higher fluctuation of admittance may mean that the rhythms of heartbeat or breathing can be identified in the admittance curve. An airtight fit of the probe during testing is essential.



DISTORTION PRODUCT OTOACUSTIC EMISSIONS (DPOAE) SCREENING

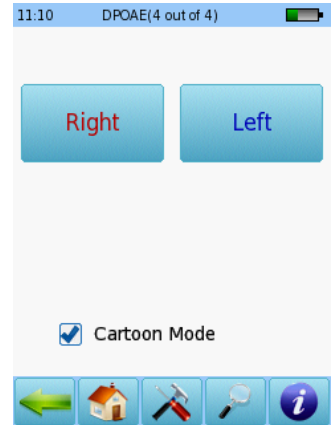
Connect the probe to the red connector and select the DPOAE Quick button from the start menu.



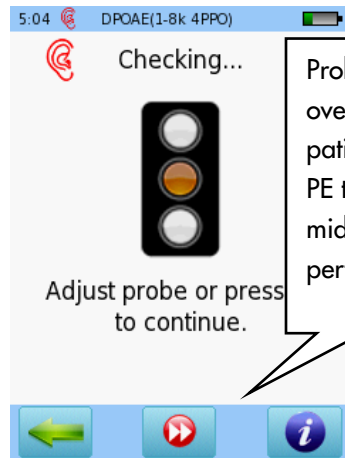
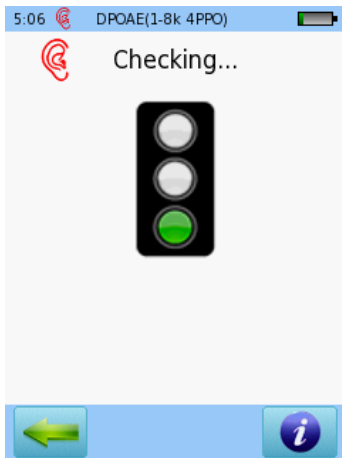
QUICK START GUIDE SENTIERO DESKTOP DIAGNOSTIC (WHITE HOUSING)

Select the appropriate ear tip size and place it on the probe tip. Insert the probe in the ear making sure that the ear tip fits tightly into the ear canal.

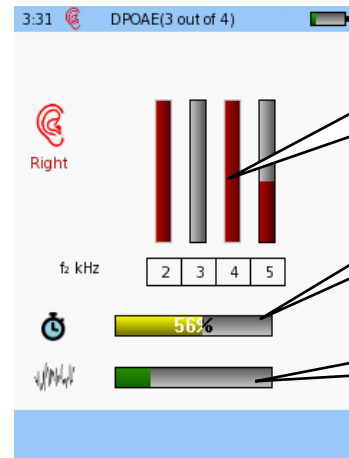
Select one of the available Presets. Then select the test ear by pressing either the Right or Left button. Cartoon mode will start the test showing a cartoon instead of the progress bar.



A calibration will be performed prior to measurement. A green light indicates successful calibration. After successful ear probe calibration, the test will start automatically.



Probe fit
override for
patients with
PE tubes or
middle ear
perforations



Progress for
each tested
frequency

Overall test
progress

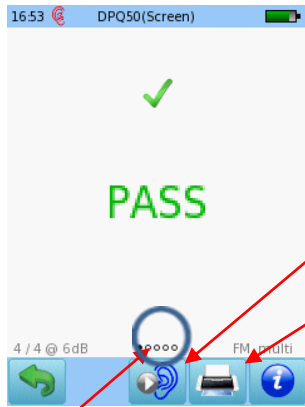
Noise floor
level

QUICK START GUIDE SENTIERO DESKTOP DIAGNOSTIC (WHITE HOUSING)

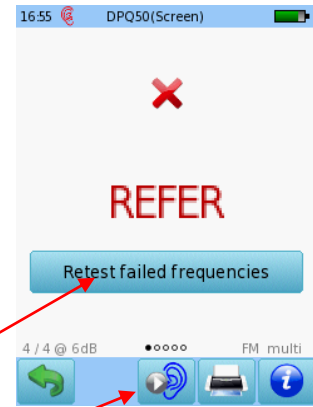
DPOAE SCREENING TEST RESULTS

BASIC RESULTS VIEW

Please note that the initial result screen depends on the module settings in "DPOAE Preferences"

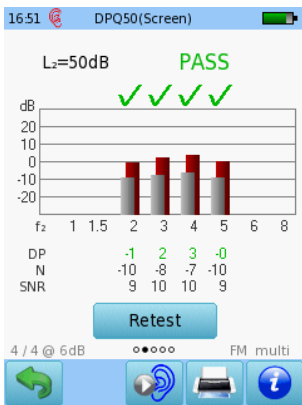


- If the required criteria were met, the result will be **PASS**. If not, it will be **REFER**.
- Test other ear
- Print results to a label or to a pdf file or full page report on PC.
- Re-test failed frequencies
- Switch to results of the other ear after both ears have been tested

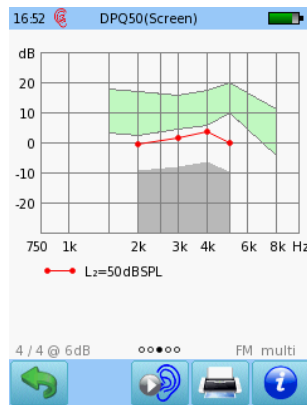


Note: These circles indicate that other screens are available to view. Swipe your finger right or left to get other views.

DETAILED RESULTS VIEW



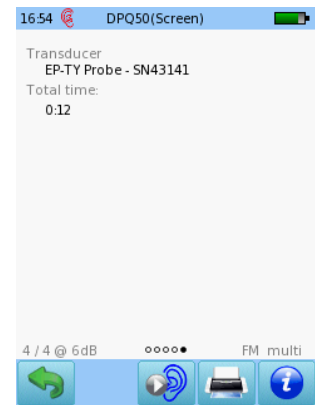
Red or blue bars indicate response, grey bars indicate noise



Outcome for each test sorted by f2 and L2

L2	f2	DPOAE	N	SNR
50	2000	-0.7	-9.5	8.8
50	3000	1.6	-8.2	9.8
50	4000	3.3	-6.6	10.0
50	5000	-0.3	-9.6	9.3

Numeric values shown in table format



Test parameters details

QUICK START GUIDE SENTIERO DESKTOP DIAGNOSTIC (WHITE HOUSING)

DPOAE DIAGNOSTIC / HIGH RESOLUTION

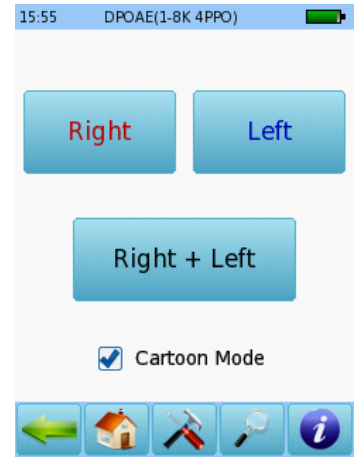
Select one of the Presets for DPOAE Diagnostic and connect the red probe to the red connector. To perform binaural testing, also connect the blue probe to the blue connector.



Select the appropriate ear tip size and place it on the probe tip. Insert the probe in the ear making sure that the ear tip fits tightly into the ear canal.

Select the test ear by pressing either the **Right** or **Left** button, or the **Right + Left** button for binaural testing.

Cartoon mode will start the test showing a cartoon instead of the progress bar, this can be changed during the test by tapping on the plane icon at the bottom of the device screen.



A calibration will be performed prior to measurement. A green light indicates successful calibration. After successful ear probe calibration, the test will start automatically.

5:10 DPOAE(1-8k 4PPO) Checking...

Adjust probe.

Probe fit override for patients with PE tubes or middle ear perforations

14:03 DPOAE(Diag65/55)

Skip a frequency

Pause/resume test

Stop test

Progress for each tested frequency in each ear

Overall test progress

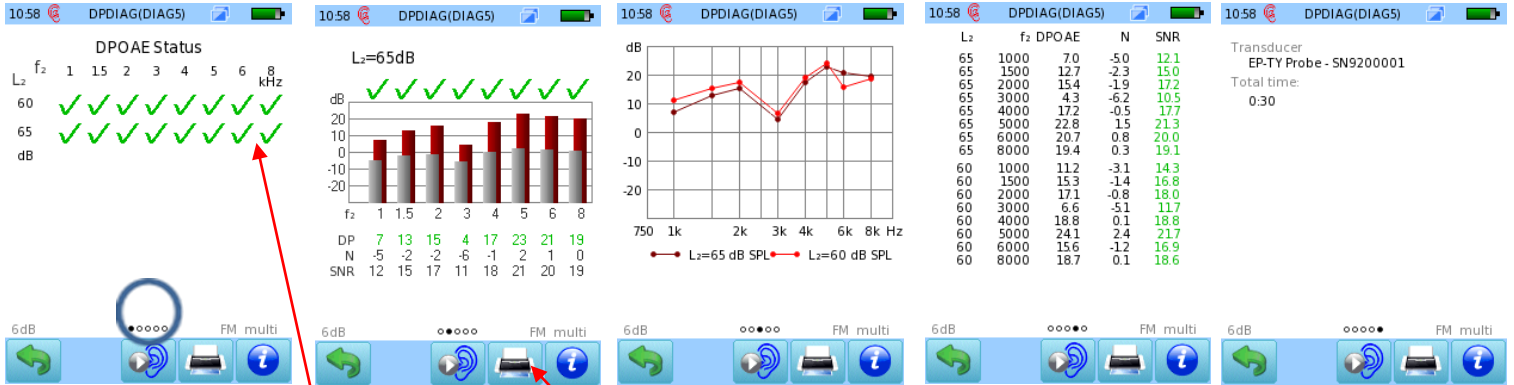
Noise floor level

Switch to cartoon mode

Binaural, multifrequency testing

QUICK START GUIDE SENTIERO DESKTOP DIAGNOSTIC (WHITE HOUSING)

DPOAE DIAGNOSTIC TEST RESULTS



Note: These circles indicate that other screens are available to view. Swipe your finger right or left to get other views.

Red or blue bars indicate response, grey bars indicate noise

Outcome for each test sorted by f₂ and L₂

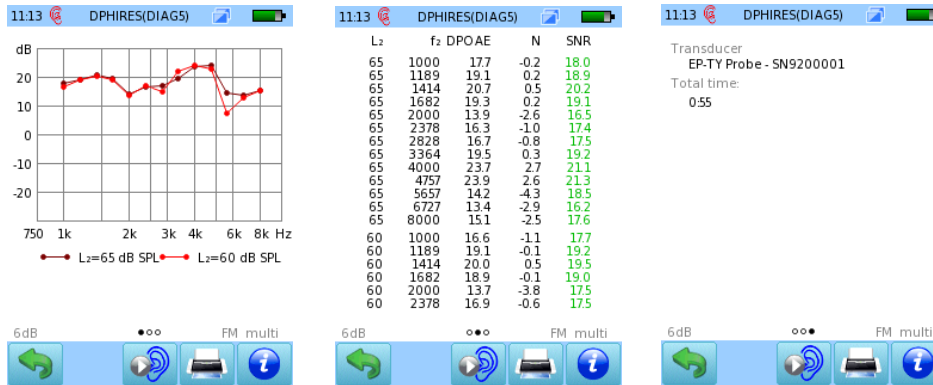
Numeric values shown in table format

Test parameters details

Green check marks indicate valid response

Print results to a label or to a pdf file

HIGH RESOLUTION TEST RESULTS



Outcome for each test sorted by f₂ and L₂

Numeric values shown in table format

Test parameters details

QUICK START GUIDE SENTIERO DESKTOP DIAGNOSTIC (WHITE HOUSING)

DPOAE THRESHOLD

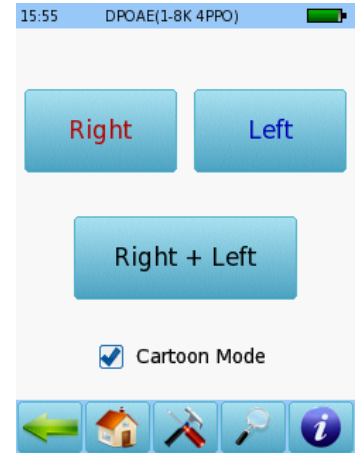
Select one of the Presets for DPOAE Threshold and connect the red probe to the red connector. To perform binaural testing, also connect the blue probe to the blue connector.



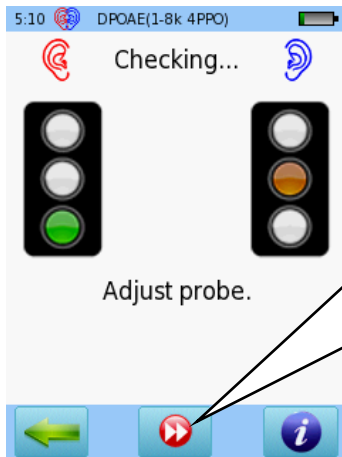
Select the appropriate ear tip size and place it on the probe tip. Insert the probe in the ear making sure that the ear tip fits tightly into the ear canal.

Select the test ear by pressing either the **Right** or **Left** button, or the **Right + Left** button for binaural testing.

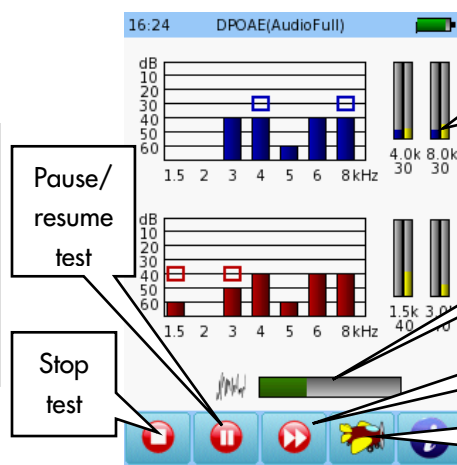
Cartoon mode will start the test showing a cartoon instead of the progress bar, this can be changed during the test by tapping on the plane icon at the bottom of the device screen.



A calibration will be performed prior to measurement. A green light indicates successful calibration. After successful ear probe calibration, the test will start automatically.



Probe fit override for patients with PE tubes or middle ear perforations



Pause/resume test

Stop test

Progress for each tested frequency

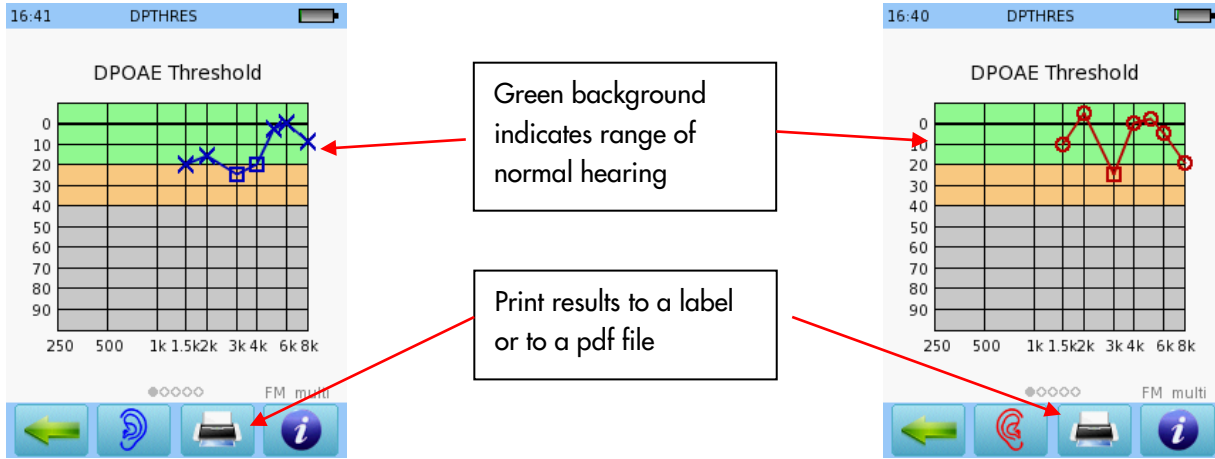
Noise floor level

Skip a frequency

Cartoon mode for children

QUICK START GUIDE SENTIERO DESKTOP DIAGNOSTIC (WHITE HOUSING)

DPOAE THRESHOLD TEST RESULTS



AUDIOMETRY (Available only on web description SOD09)

Connect the headphones to the blue connector and select an Audiometry Preset from the start menu.



Select the ear on which you want to start the test. The test screen will be displayed

QUICK START GUIDE SENTIERO DESKTOP DIAGNOSTIC (WHITE HOUSING)

TEST SCREEN

Stimulus on indicator

Patient response indicator

Select the stimulus levels

Stimulus presentation button

Additional information about options for current screen

Select the frequency

Stop the test

Select the ear to test

Select the type of stimulus: pure tone
pulsed tone **FM** or warble

1 kHz

50 dB HL

AC Right

125 250 500 1k 2k 4k 8k

-10
0
10
20
30
40
50
60
70
80
90
100
dB

AUDIOMETRY TEST RESULTS

Green background indicates range of normal hearing

Print results to a label or to a pdf file

13:31 Audio Result

13:33 Audio Result

Audiogram

0.125 0.25 0.5 1 2 3 4 6 8 12.5 16k

-10
0
10
20
30
40
50
60
70
80
90
100
dB

QUICK START GUIDE SENTIERO DESKTOP DIAGNOSTIC (WHITE HOUSING)

AUDIOMETRY SCREENING

Connect the headphones to the blue connector and select the Audiometry: Screening button from the start menu. Select the ear on which you want to start the test.



AUDIOMETRY SCREENING TEST SCREEN

Stimulus on indicator

Select the stimulus levels

Select the frequency

Press to present the stimulus

Additional information about options for current screen

Stop test

Select the ear to test

Select the type of stimulus: pure tone —
pulsed tone ... or warble FM

The screenshot shows a mobile application interface for an audiometry test. At the top, it displays the time 4:05, signal strength, and battery level. Below this is a status bar with 'Audio' and 'AC Right'. A 'Stimulus on' indicator is shown as a brown oval. The main area features a grid for selecting frequency (1, 2, 4 kHz) and ear (L, R). The current selection is 1000 Hz and 40 dB HL. There are up and down arrows for adjusting levels, and a play button to present the stimulus. At the bottom, there are buttons for 'Stop test', 'Select the ear to test' (L/R), and 'Additional information about options for current screen'. A legend at the bottom right shows stimulus types: pure tone (solid line), pulsed tone (dotted line), and warble (FM).

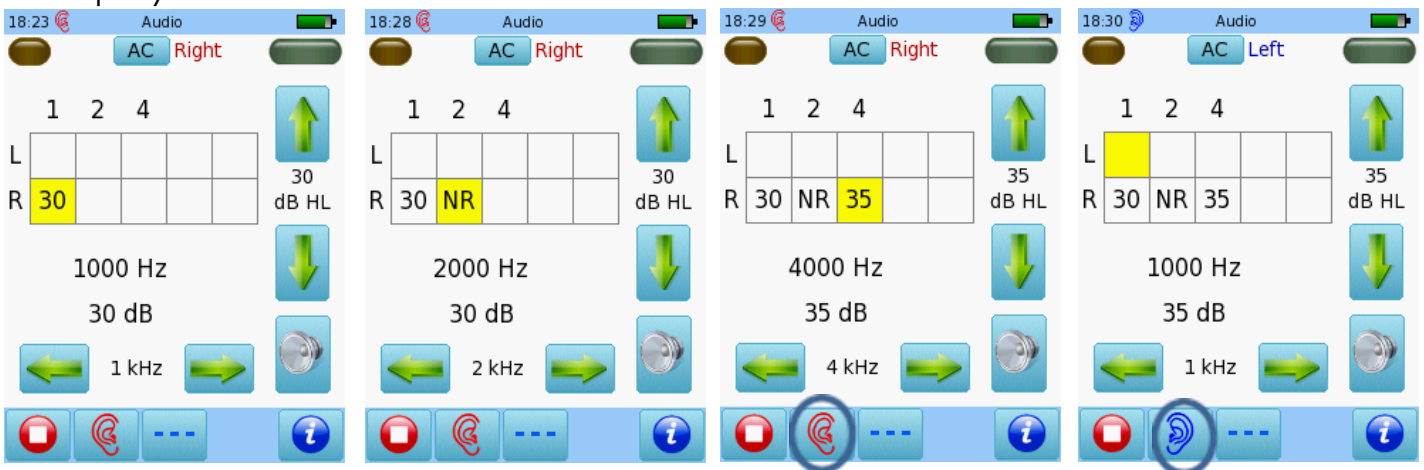
QUICK START GUIDE SENTIERO DESKTOP DIAGNOSTIC (WHITE HOUSING)

As you present the stimulus, the current level will be displayed in the corresponding square. Once the hearing status for a frequency has been identified, move on to the next frequency.

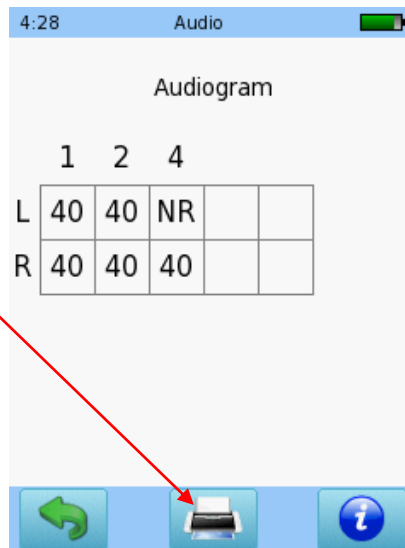
Tapping twice on a square will display NR (no response).

Tap three times to get back to blank square.

Once all frequencies have been tested for one ear, you can test the other ear.



When the test is finished, press the Stop button. You can add the patient's personal data, and save on the device, print to a label (a label printer is required) or print to a pdf file or full page report on PC.



QUICK START GUIDE SENTIERO DESKTOP DIAGNOSTIC (WHITE HOUSING)

Quick Guide Information

Release date: 2019-04
Revision: 03
Valid from: Firmware Rev. 2.5, Mira PC Software Rev. 2.0
Applies to: Model: SOD100497, web description SOD06, SOD07, SOD08 and SOD09

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The latest revision of the Quick Start Guide is available online at www.pathme.de/download.

Errors and omissions excepted.

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