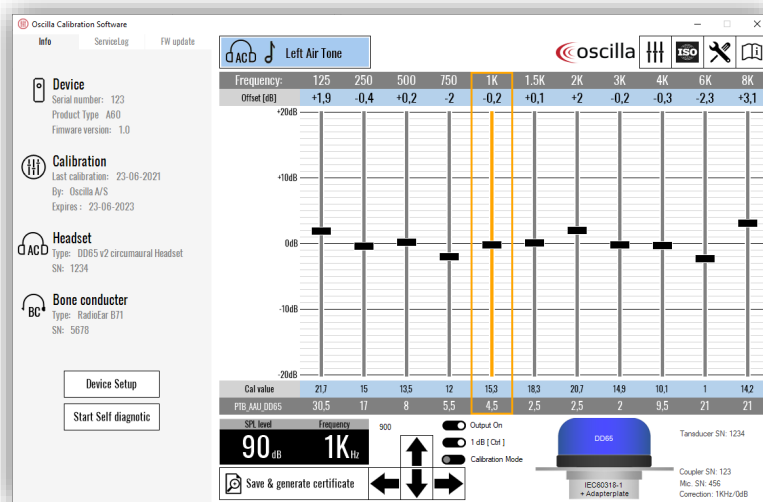


# Calibration & Repair Guide

Oscilla® A30, A50 and A60  
Diagnostic Audiometers  
English



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This manual contains instructions regarding safety. Read these instructions carefully and completely before you start to service or calibrate the Oscilla products. If you are uncertain about the use of the software, you are recommended to join a training course, contact Oscilla support for information about this.

## 1. Introduction

This document provides instructions for Calibration of Oscilla® A30, A50 and A60

Features	Configurations		
	Oscilla A30	Oscilla A50	Oscilla A60
Air conduction	•	•	•
Automatic Test	•	•	•
Ear protection Test	•	•	•
SISI Test	•	•	•
Bone Conduction		•	•
Weber Test		•	•
Talk Over			•
Speech Test			•

## Abbreviations

SPL: Sound pressure level

HL: Hearing level software

RETSPL: Reference Equivalent Threshold Sound Pressure Level

## 2. Installation

1. Install the Oscilla calibration software on the PC.
2. Connect the Oscilla device to the computer via USB. Windows automatically detects and installs the device. Wait for the automatic installation to finish.
3. Launch Oscilla calibration software.

### System requirements

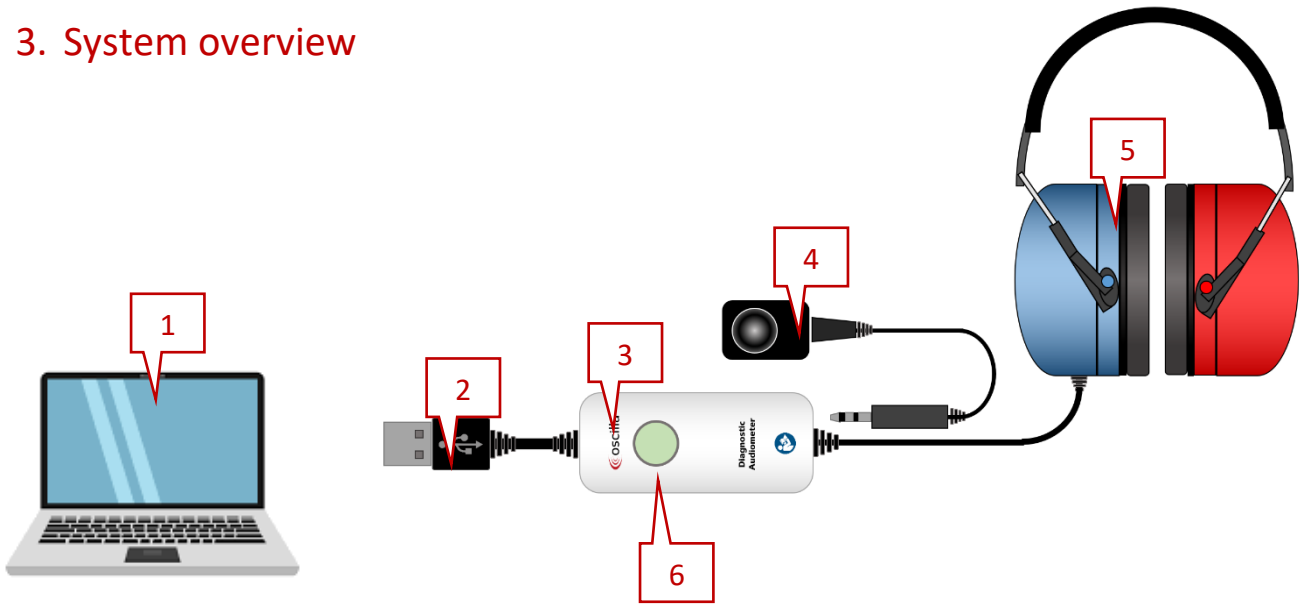
#### Minimum system requirements

- **Processor:** 2 GHz
- **RAM:** 2 GB
- **Free space:** 150 MB
- **Display resolution:** 1024 x 600 (1440 x 900 recommended for optimal performance)
- Available USB port for the audiometer
- Available USB port for the operator headset (Only relevant for A60)

#### Supported operating systems

Microsoft Windows 10

### 3. System overview



1. PC with the Oscilla Calibration software.
2. USB Plug.
3. Main unit.
4. Bone conductor (Only A50 & A60).
5. Patient Headset.
6. Patient response button with status light indicator

#### Status light indicator

Dim white light



The device is in sleep-mode

Bright white light



The is active and connected to the AudioConsole software

Orange light



The device is in test mode

Green light



The Patient button is activated

## Calibration equipment

For calibration of the Oscilla audiometers A30, A50 & A60, you need following equipment:

#	Equipment	Standards	Products examples	Need for
1	Sound level meter	complies with IEC60651 class 1 with 1/3 octave filters: IEC 61672-1:2002 class 1	BK2250 Norsonic NOR140	Oscilla A30 Oscilla A50 Oscilla A60
2	Artificial ear type with adapter plate mounted on the top	IEC60318-1	BK4153 GRAS 43AA	Oscilla A30 Oscilla A50 Oscilla A60
3	Sound reference/ Sound calibrator	Sound calibrator class 1 according to EN/IEC 60942 : 2017 Class 1 and ANSI/ASA S1.40-2006 (R2011).	Norsonic Nor1256 BK4231	Oscilla A30 Oscilla A50 Oscilla A60
4	Artificial mastoid	IEC 60373 (1990) and meets the requirements of the British Standard BS 4009 (1991) and American National Standard ANSI S3.13-1987 and ANSI S3.26-1981.	BK4930	Only for Oscilla A50 Oscilla A60



Sound level meter



Artificial ear



Sound calibrator



Artificial mastoid

Verify that the calibration equipment function as intended and is calibrated before you start calibrating any Oscilla equipment.

Corrections for the microphone and mastoid can be stored in the Oscilla calibration software  
See section:

## 4. Operation of the calibration & service software

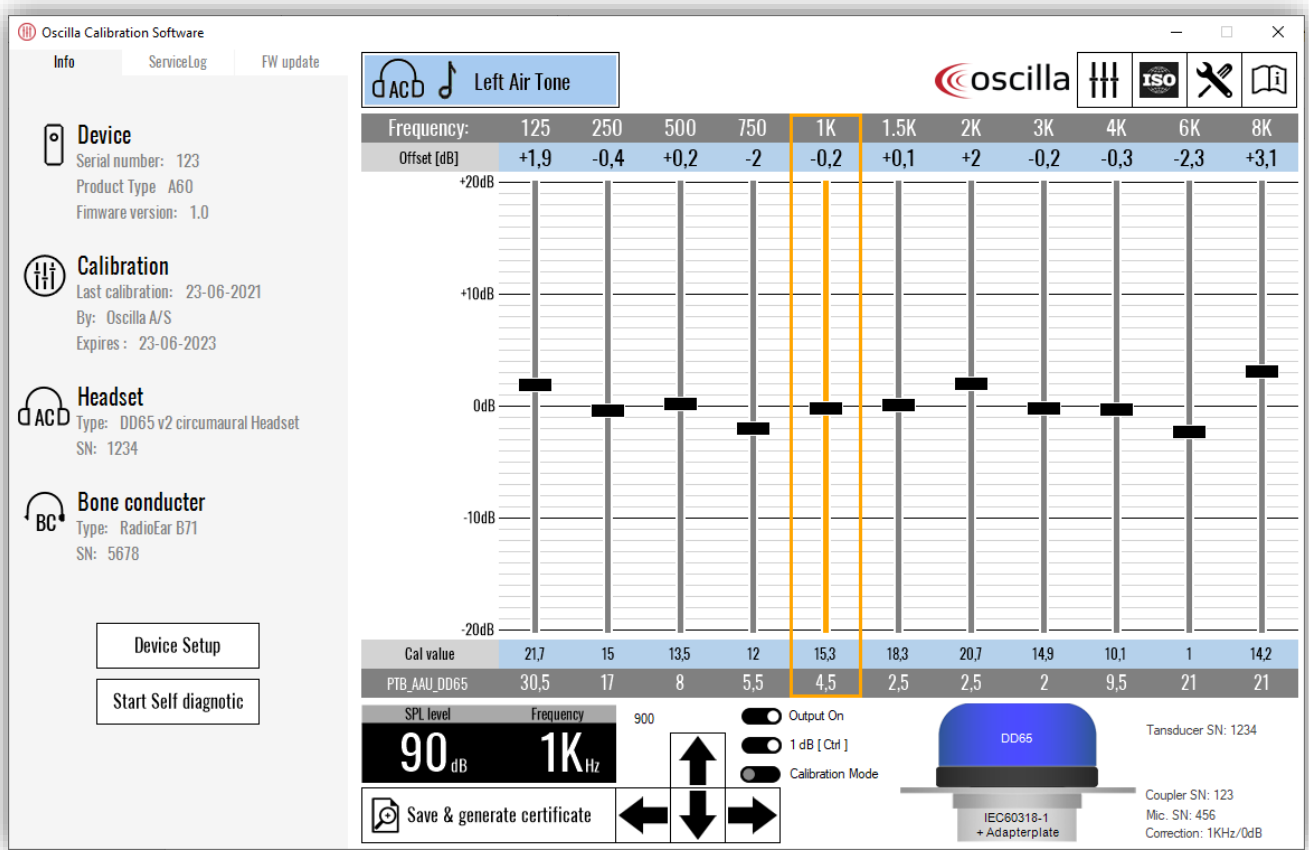


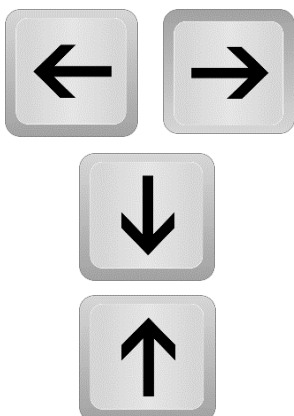
Fig. 1 shows the main screen of the calibration software

### Basic operation

Start the program and connect the audiometer to the USB port. The program will start at 125 Hz, left channel and 90 dB calibration level(SPL), and the tone output will be turned on.

The available buttons that appears in the program depends of which USB audiometer is connected to the PC.

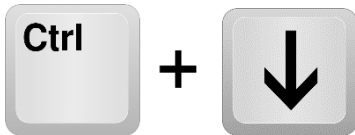
The program can be controlled by the mouse, dragging the sliders and clicking the buttons. However, to make the calibration process more convenient, it can also be controlled by the keyboard.



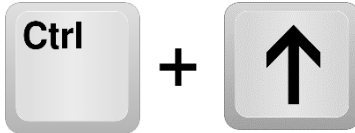
Changes the frequency.

Move calibration sliders 1 step down, -0.1 dB

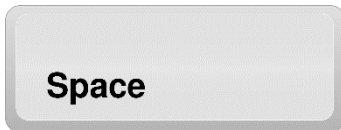
Move calibration sliders 1 step up, +0.1 dB



Move calibration sliders 10 step down, -1 dB



Move calibration sliders 10 step up, +1 dB



Change function between air, left, right, and bone

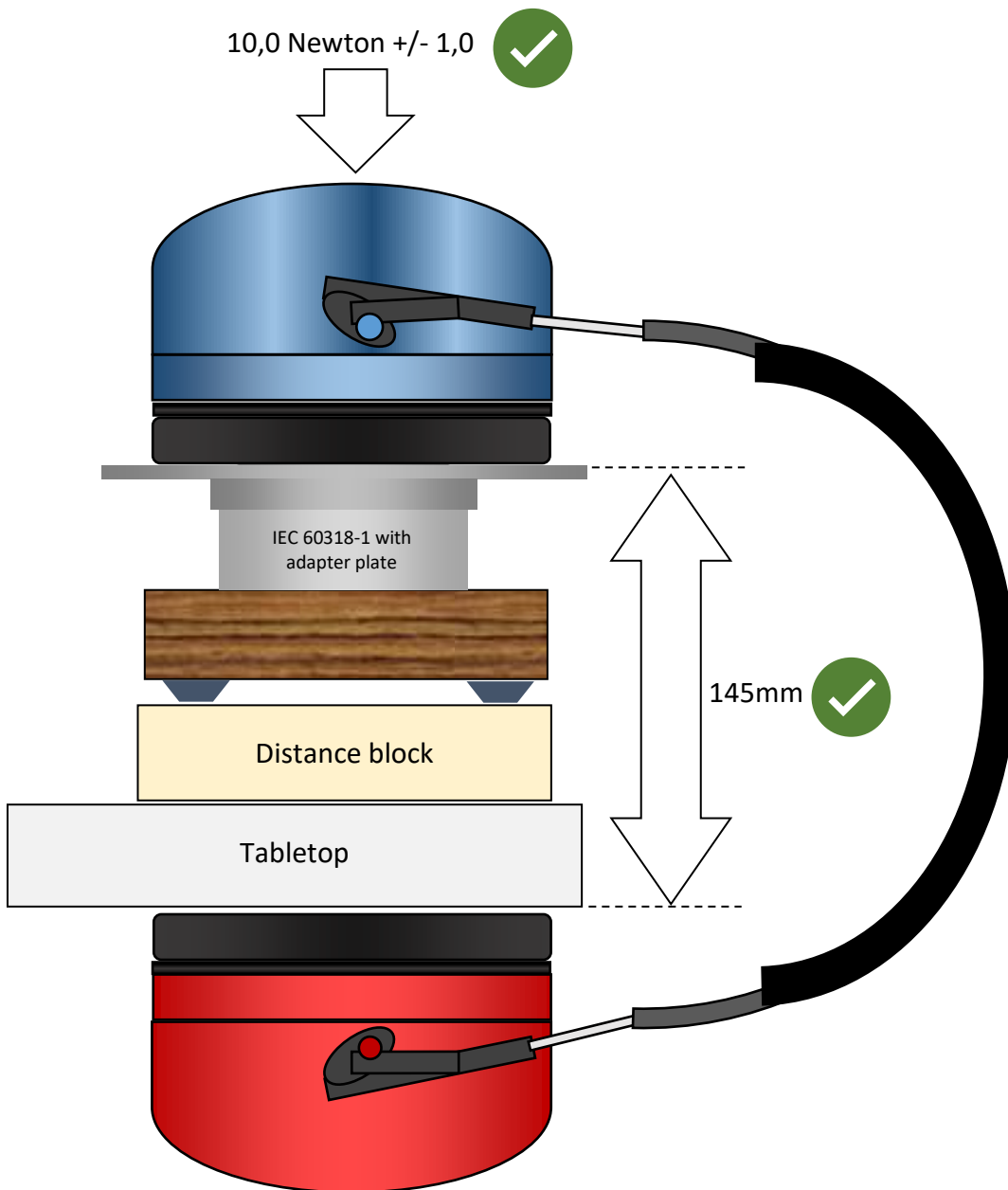
The program automatically detects the audiometer type, and the bone and masking buttons in the top of the main screen and will only be present if the audiometer supports bone and masking. By using the keyboard, you can keep your eyes on the calibration equipment all the time, instead of having to look at the PC monitor to follow the mouse pointer.



## Preparing calibration of headset

The artificial ear type IEC60318-1 with adapter plate mounted on the top, must be used for calibrating the circumaural headset.

To calibrate correctly, it is important that the circumaural headset is forced down to the plate with 10,0N +/- 1,0N. this can be done by using the force from the headband of the headset, but it requires that the phone are separated with 145mm, we recommend to place it around a table top with a "distance block" to ensure the 145mm, see the illustration below.



## Air Tone calibration

By means of the 11 calibration sliders, calibrate the sound pressure for the 11 frequencies to the level set in the Calibration Level box. This is 90 dB by default, but may be changed if desired with the Down and Up buttons.



Start with "Left Air Tone" and adjust the intensity for each of frequencies.

When left tone calibration is completed you must continue with the masking calibration if the device is a A50 or an A60, else you are able to continue with distortion test for left headphone.

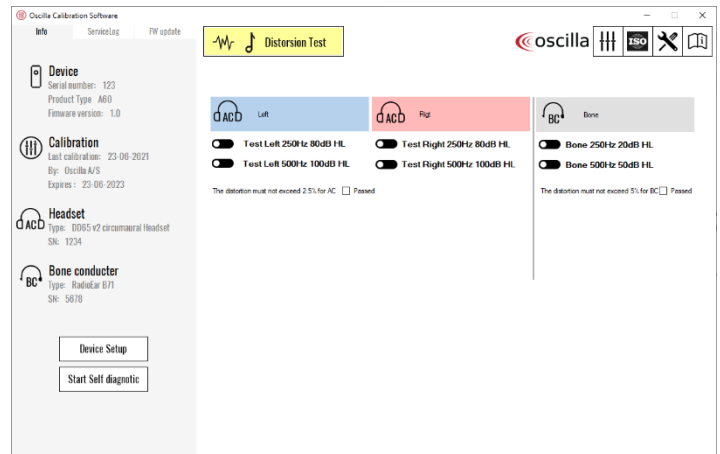
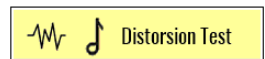
## Air Masking calibration(Only A50 & A60)



Masking calibration is similar to tone calibration, the only difference is the sound output now is narrow band noise instead of the sinus tone, all 11 frequencies must be adjusted to 90 dB SPL.

## AIR Distortion test

The Distortion test is not a calibration, since you are not able to adjust anything, it's only a optional check, to see if the distortion is lower than 2.5% at 80dB HL for 250Hz and lower than 2.5% at 100dB HL for 500Hz. The test is always done by the manufacture, but is optional for service partners in the field. Complete the Distortion test for the left headphone before you change to the right headphone.



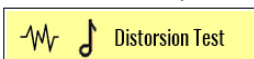
Swap the headset and place the right headphone on the artificial ear and continue the same procedure as the left side starting with Right Air Tone.



Then Right masking if the device is a A50 or A60.



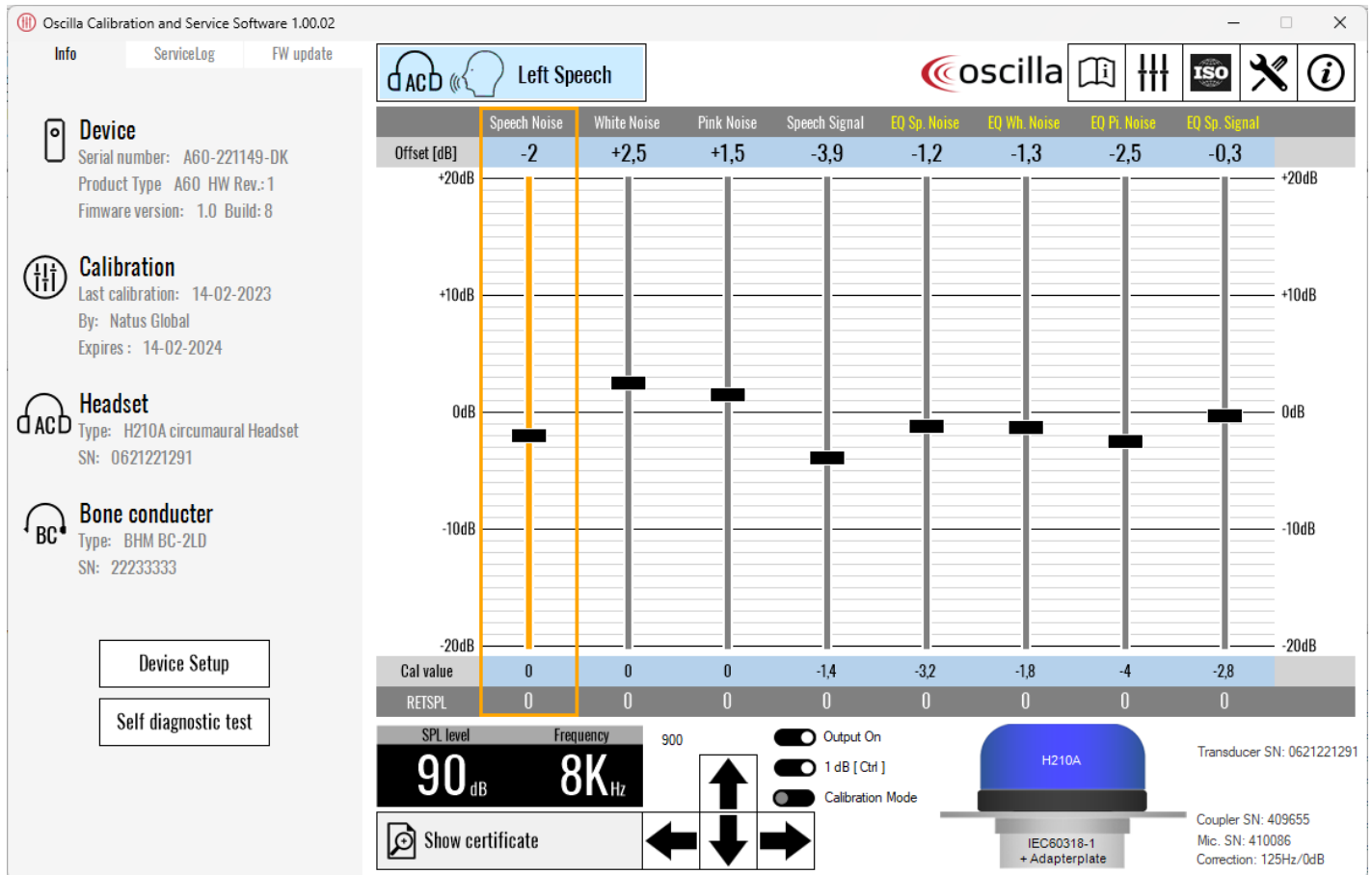
And then the optional distortion test



## Speech calibration(Only A60)



Speech test in the Audioconsole software can be conducted with or without equalizing(EQ) so both options must be calibrated, the first four slides adjust without equalizing, and the last four sliders are with equalizing. All levels must be adjusted so they reach 90dB.



The slider for speech Signal and the slider for "EQ Speech Signal" are both calibrated with a wav file that will be presented, the signal will be presented in 1 minute, then it will turn off, by moving to another slider, and back again, it will again be presented.

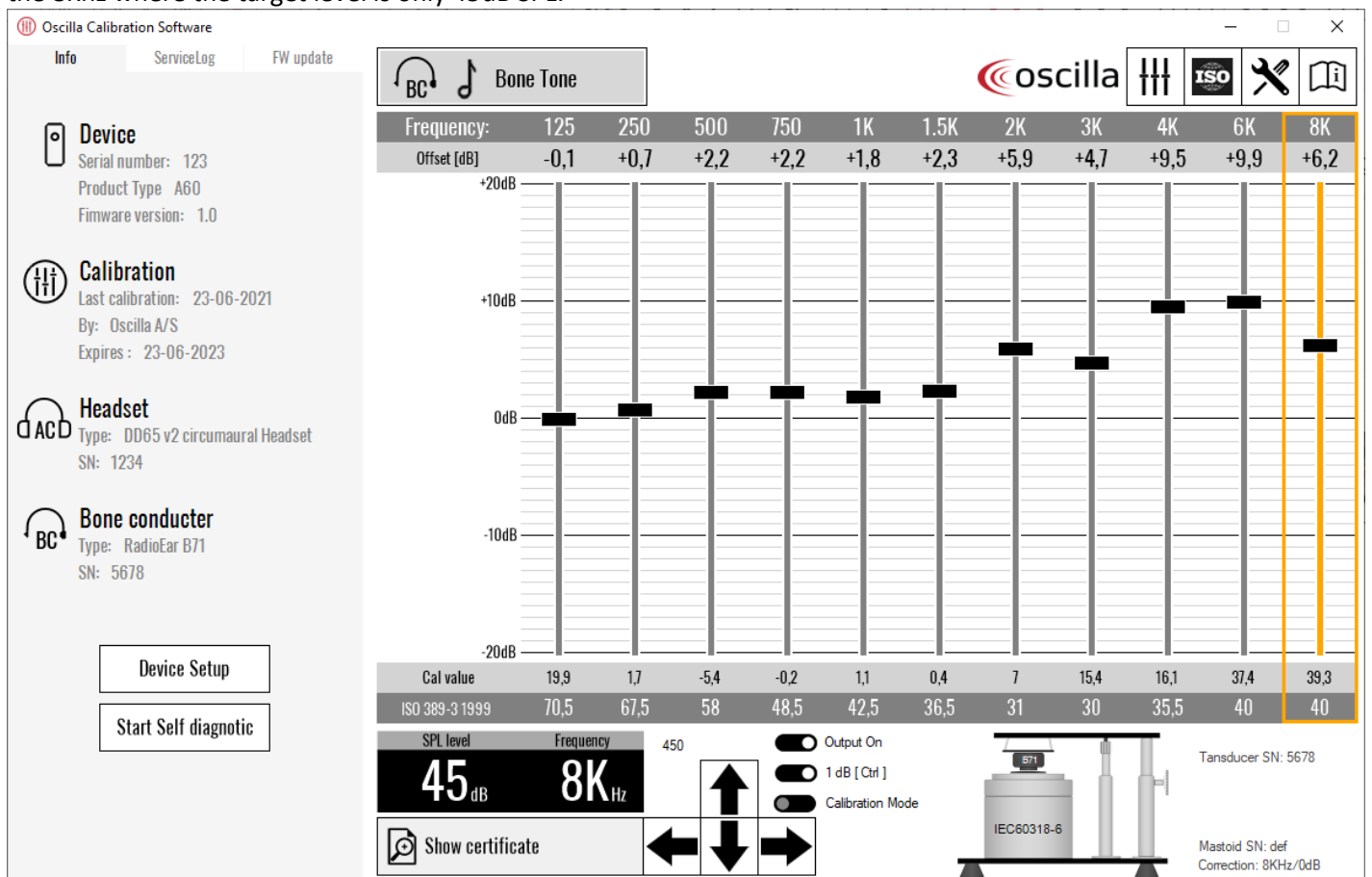
## Preparing calibration of bone conductor(Only A50 & A60)

Use the artificial for calibration of the bone conductor, the placement of the bone conductor on the mastoid can have a big impact on the accuracy of the calibration, must be place precisely in the center of the mastoid.



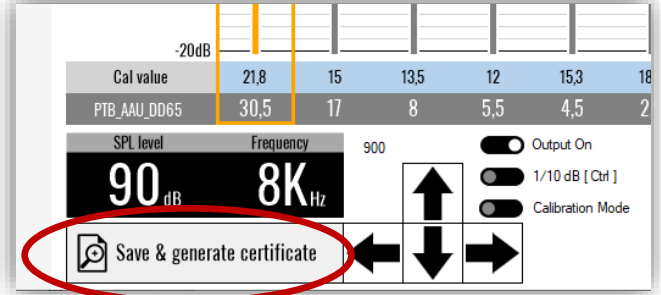
## Bone conductor calibration (Only A50 & A60)

The bone conductor calibration is also done with sinus tone output, and are again very similar to the Air Tone calibration, the level for calibration 60 dB SPL on all frequencies except 6000Hz where the target level is 50fB SPL, and the 8Khz where the target level is only 45dB SPL.



## 5. Calibration certificate

When the calibration is completed, then you must “Save & Generate a calibration Certificate”



Before the calibration certificate will be generated, a window will appear, in this window it is possible to add “customer informations, Company logo and a digital signature from the operator.

It is also possible to add a warning to the customer on when the audiometer should be calibrated next time, and at last to export/store the certificate on a specific location. Press “continue” to see calibration certificate.

The calibration certificates for Oscilla A50 & A60 will have both Air and bone calibration values, The Oscilla A30 will only have the Air calibration values, since this device don't have bone conductor.

Oscilla A50 & Oscilla A60

IEC60645 Audiometer Calibration Certificate.

Customer: Device for verification & validation Type: A60  
 Device: SN: 123 FW: 1.0  
 Operator: Oscilla A/S

oscilla

AC Phone  
 Transducer: DD65 v2 circumaural Headset SN: 1234

Frequency Hz	Nominal dB level	Tone Soundpressure adjustment* (dB)		Tone RETSPL <sup>***</sup> PTB_AAU_DD65	Frequency accepted deviation%	Masking pressure adjustment* (dB)		Masking RETSPL <sup>**</sup>	Accepted deviation dB
		Left	Right			Left	Right		
125	90.0	+2.0	+2.0	+30.5	+/- 1	+0.5	+7.0	+34.5	+/- 3
250	90.0	-0.4	-12.7	+17.0	+/- 1	+2.0	+6.0	+21.0	+/- 3
500	90.0	+0.2	-11.5	+8.0	+/- 1	+1.0	+2.1	+12.0	+/- 3
750	90.0	-2.0	0.0	+5.5	+/- 1	+0.8	0.0	+10.5	+/- 3
1K	90.0	-0.2	+0.7	+4.5	+/- 1	+0.9	+0.9	+10.5	+/- 3
1.5K	90.0	+0.1	+0.9	+2.5	+/- 1	+0.6	+2.0	+8.5	+/- 3
2K	90.0	+2.0	+1.7	+2.5	+/- 1	+1.2	+2.0	+8.5	+/- 3
3K	90.0	-0.2	+2.0	+2.0	+/- 1	0.0	+1.5	+8.0	+/- 3
4K	90.0	-0.3	+2.0	+9.5	+/- 1	+0.2	+2.0	+14.5	+/- 3
6K	90.0	-2.3	+3.0	+21.0	+/- 1	+1.4	+2.0	+26.0	+/- 5
8K	90.0	+3.1	+0.8	+21.0	+/- 1	+1.0	+2.0	+26.0	+/- 5

BC Bone conductor  
 Transducer: RadioEar B71 BC SN: 5878

Frequency Hz	Nominal dB level	Soundpressure adjustment* (dB)	RETFL <sup>**</sup> Mastoid	RETFL <sup>***</sup> Forehead	Accepted deviation dB
125	60.0	+1.5	+70.5	+82.5	+/- 3
250	60.0	+0.7	+67.5	+79.5	+/- 3
500	60.0	+2.2	+58.0	+72.0	+/- 3
750	60.0	+2.2	+48.5	+61.5	+/- 3
1K	60.0	+1.8	+42.5	+51.0	+/- 3
1.5K	60.0	+2.3	+36.5	+47.5	+/- 3
2K	60.0	+5.9	+31.0	+42.5	+/- 3
3K	60.0	+4.7	+30.0	+42.0	+/- 3
4K	60.0	+9.5	+35.5	+43.5	+/- 3
6K	50.0	+10.0	+40.0	+51.0	+/- 5
8K	45.0	+6.2	+40.0	+50.0	+/- 5

Calibration equipment  
 AC Phone: IEC60318-1 + Adapterplate SN: 455  
 BC Bone conductor: IEC60318-6 SN: def  
 Level Meter: IEC1672 class 1 Type: SN

Date of calibration: 21. juli 2021  
 Signature: Joachim Boll  
 Expiration date: 21. juli 2023

oscilla Doc-id: Calcert.frw Version: 1.00

Oscilla A30

IEC60645 Audiometer Calibration Certificate.

Customer: Device for verification & validation Type: A30  
 Device: SN: 123 FW: 1.0  
 Operator: Oscilla A/S

oscilla

AC Phone  
 Transducer: DD65 v2 circumaural Headset SN: 1234

Frequency Hz	Nominal dB level	Tone Soundpressure adjustment* (dB)		Tone RETSPL <sup>***</sup> PTB_AAU_DD65	Frequency accepted deviation%	Accepted deviation dB
		Left	Right			
125	80.0	+2.0	+2.0	+30.5	+/- 1	+/- 3
250	80.0	-0.4	-12.7	+17.0	+/- 1	+/- 3
500	80.0	+0.2	-11.5	+8.0	+/- 1	+/- 3
750	80.0	-2.0	0.0	+5.5	+/- 1	+/- 3
1K	80.0	-0.2	+0.7	+4.5	+/- 1	+/- 3
1.5K	80.0	+0.1	+0.9	+2.5	+/- 1	+/- 3
2K	80.0	+2.0	+1.7	+2.5	+/- 1	+/- 3
3K	80.0	-0.2	+2.0	+2.0	+/- 1	+/- 3
4K	80.0	-0.3	+2.0	+9.5	+/- 1	+/- 3
6K	80.0	-2.3	+3.0	+21.0	+/- 1	+/- 5
8K	80.0	+3.1	+0.8	+21.0	+/- 1	+/- 5

Calibration equipment  
 AC Phone: IEC60318-1 + Adapterplate SN: 455  
 Level Meter: Type: SN

Date of calibration: 21. juli 2021  
 Signature: Joachim Boll  
 Expiration date: 21. juli 2023

oscilla Doc-id: Calcert.frw Version: 1.00

## 6. RETSPL Corrections

The Reference Equivalent Threshold Sound Pressure Level are connected to the transducer, it is possible to see an overview by clicking on the "ISO" icon in the top menu



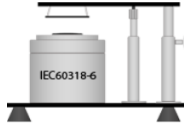


The two tables below is all RETSPL corrections, first IEC 60645 and the ANSI S3.6 on the next side:

### RETSPL: IEC 60645 - 2018

Calibration table according to IEC 60645-1 2017



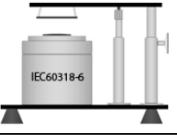
Name	Air conduction				Bone conduction			Additional corrections	
	Supra aural Headphones		Circumaural Headphones		Mastoid vibrator			Air	BC
RETSPL Source	ISO 389-1 1998	WDH DD45	PTB_AAU_D D65	PTB 4106973	ISO 389-3 1999	ISO 389-3 1999	ISO 389-3 1999	NBN correct.	BC forehead correct.
125	45	47,5	30,5	34,7	70,5	70,5	70,5	4	12
250	25,5	27	17	16,5	67,5	67	67,5	4	12
500	11,5	13	8	5,1	58	58	58	4	14
750	7,5	6,5	5,5	0,9	48,5	48,5	48,5	5	13
1K	7	6	4,5	3,1	42,5	42,5	42,5	6	8,5
1.5K	6,5	8	2,5	0	36,5	36,5	36,5	6	11
2K	9	8	2,5	-2,9	31	31	31	6	11,5
3K	10	8	2	-0,7	30	30	30	6	12
4K	9,5	9	9,5	9,2	35,5	35,5	35,5	5	8
6K	15,5	20,5	21	17,8	40	40	40	5	11
8K	13	12	21	22,3	40	40	40	5	10
Speech	20	20	20	20					
Equipment	IEC60318-3		IEC60318-1		IEC60318-6				

IEC60318-3 Artificial ear	IEC60318-1 Ear simulator with adapter plate	IEC60318-6 Artificial mastoid
		
1 Inch microphone with a 6cc acoustic coupler(NBS6A) for supra-aural earphones	½ Inch microphone with a 2cc acoustic coupler with adapter for circumaural calibration	Mechanical coupler for the measurement on bone vibrators

# RETSPL: ANSI S3.6 - 2018

Calibration table according to ANSI S3.6 - 2018

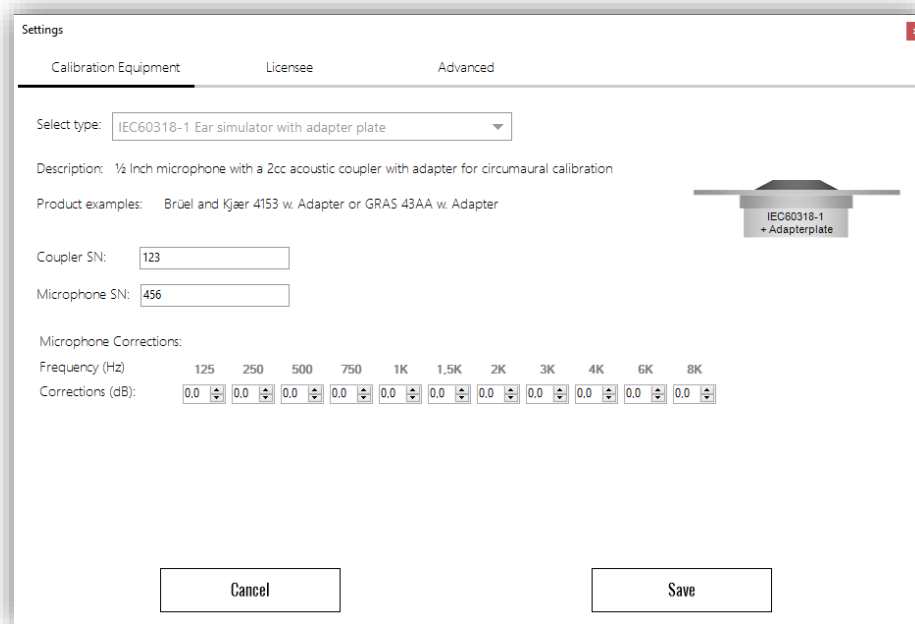
Name	Air conduction				Bone conduction			Additional corrections	
	Supra aural Headphones	Circumaural Headphones		H210A	Mastoid vibrator			Air	BC
RETSPL Source	ANSI S3.6 Table 5 R2	ANSI S3.6 Table 5 R3	PTB_AAU_D D65		PTB 4106973	ANSI S3.6 table 8 R1	ANSI S3.6 table 8 R1	ANSI S3.6 table 8 R1	NBN correct.
125	45	47,5	30,5	34,7	70,5	70,5	70,5	4	12
250	25,5	27	17	16,5	67	67	67	4	12
500	11,5	13	8	5,1	58	58	58	4	14
750	7,5	6,5	5,5	0,9	48,5	48,5	48,5	5	13
1K	7	6	4,5	3,1	42,5	42,5	42,5	6	8,5
1.5K	6,5	8	2,5	0	36,5	36,5	36,5	6	11
2K	9	8	2,5	-2,9	31	31	31	6	11,5
3K	10	8	2	-0,7	30	30	30	6	12
4K	9,5	9	9,5	9,2	35,5	35,5	35,5	5	8
6K	15,5	20,5	21	17,8	40	40	40	5	11
8K	13	12	21	22,3	40	40	40	5	10
Speech	19,5	18,5	17	15,6					
Equipment	IEC60318-3		IEC60318-1		IEC60318-6				

IEC60318-3 Artificial ear	IEC60318-1 Ear simulator with adapter plate	IEC60318-6 Artificial mastoid
		
1 Inch microphone with a 6cc acoustic coupler(NBS6A) for supra-aural earphones	½ Inch microphone with a 2cc acoustic coupler with adapter for circumaural calibration	Mechanical coupler for the measurement on bone vibrators

## 7. Correction values for microphone and mastoid

To make the calibration of the audiometer easier, there is an option to type in the frequency-dependent dB-corrections for the microphone and mastoid. This will allow you to calibrate to same SPLs and VFLs for each frequency. Click on the Settings button in the top menu, and select the "Calibration Equipment" tab.

Select "IEC60318-1" to adjust the corrections for the ½ inch mic. To AC calibration of the circumaural headsets:



Settings

Calibration Equipment Licensee Advanced

Select type: IEC60318-1 Ear simulator with adapter plate

Description: ½ Inch microphone with a 2cc acoustic coupler with adapter for circumaural calibration

Product examples: Brüel and Kjaer 4153 w. Adapter or GRAS 43AA w. Adapter

Coupler SN: 123

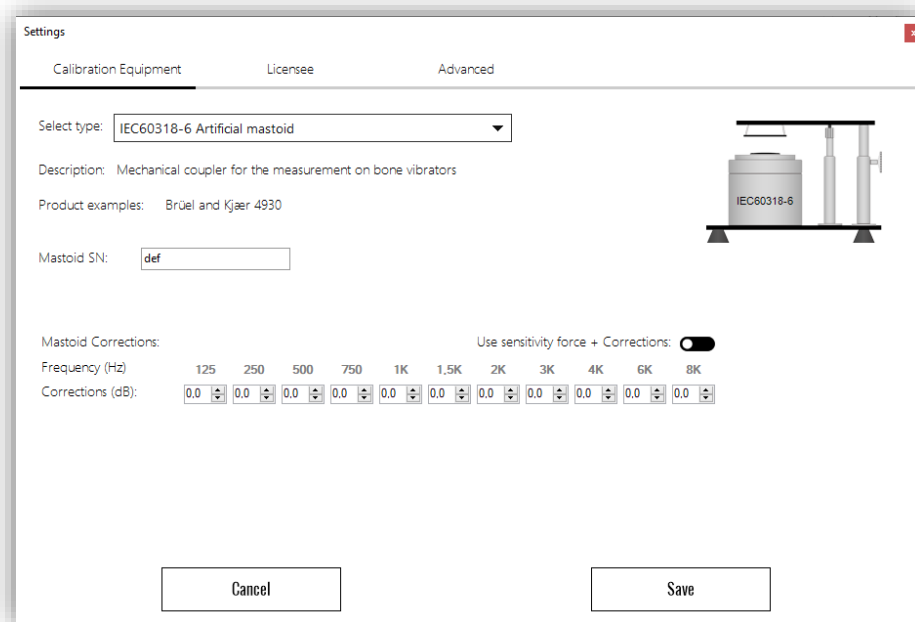
Microphone SN: 456

Microphone Corrections:

Frequency (Hz)	125	250	500	750	1K	1.5K	2K	3K	4K	6K	8K
Corrections (dB):	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cancel Save

Select "IEC60318-6" to adjust the corrections for the mastoid(Bone conductors):



Settings

Calibration Equipment Licensee Advanced

Select type: IEC60318-6 Artificial mastoid

Description: Mechanical coupler for the measurement on bone vibrators

Product examples: Brüel and Kjaer 4930

Mastoid SN: def

Mastoid Corrections:

Frequency (Hz)	125	250	500	750	1K	1.5K	2K	3K	4K	6K	8K
Corrections (dB):	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Use sensitivity force + Corrections:

Cancel Save

The normal corrections for the mastoid will be between -16dB to -20dB, if the certificate for the mastoid only shows very small correction values, then it is because it also show sensitivity force, then you need pus the toggle button "Use sensitivity force + correction" and then type both the small values and the sensitivity force value from the certificate



## 8. Authorized Service Levels

The table below shows which tasks the End users, authorized technicians and Oscilla depot repair are allowed to conduct.

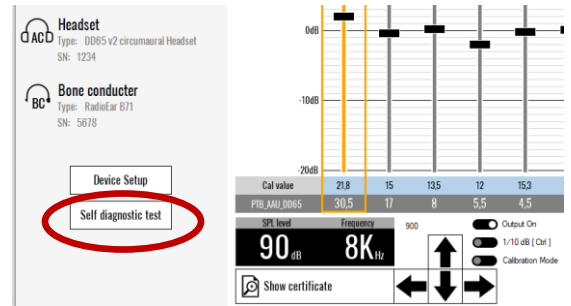
#	Service / repair tasks	End users	Authorized technicians	Oscilla Depot repair
		Level 1	Level 2	Level 3
1	Installation	Yes – Ref. IFU	Yes – Ref. IFU	Yes – Ref. IFU
2	Cleaning	Yes – Ref. IFU	Yes – Ref. IFU	Yes – Ref. IFU
3	Updating the PC software	Yes – Ref. IFU	Yes – Ref. IFU	Yes – Ref. IFU
4	Updating the firmware	No	Yes – Ref. SCM	Yes – Ref. SCM
5	Calibration of the device	No	Yes – Ref. SCM	Yes – Ref. SCM
6	Replacement of the “P-1210 ATM4 Headset cable”	No	Yes – Ref. SCM	Yes – Ref. SCM
7	Replacement of the “P-1211 ATM4 USB cable”	No	Yes – Ref. SCM	Yes – Ref. SCM
8	Replacement of the “P-1202 ATM4 response button”	No	Yes – Ref. SCM	Yes – Ref. SCM
9	Replacement of the “P-1201 ATM4 Enclosure”	No	Yes – Ref. SCM	Yes – Ref. SCM
10	Replacement of the “P-1207 PCB support foot”	No	Yes – Ref. SCM	Yes – Ref. SCM
11	Replacement of the complete headset	No	Yes – Ref. SCM	Yes – Ref. SCM
12	Replacement of the complete bone conductor	No	Yes – Ref. SCM	Yes – Ref. SCM
13	Replacement of complete PCB	No	Yes – Ref. SCM	Yes – ref. procs
14	Replacement of transducer inside headset	No	Yes – Ref. SCM	Yes – ref. procs
15	Replacement of components on PCB	No	No	Yes – ref. procs
16	Warranty repairs	No	No	Yes – ref. procs

## 9. Final test after repair

#	Type	Description
1.	Ocular inspection	Cables, Enclosure, Button, Headset, Bone conductor are carefully inspected for breakage, cracks and faulty assembly.
2.	Test	Run the “Self-diagnostic test” after any type of service to ensure that the complete system is working as intended, see section 10.

## 10. Self diagnostic test

The ATM4 audiometers have an onboard “Self diagnostic test” system that can find errors on the system. The test should be used after any type of service to ensure that the complete system is working as intended. All ATM4 audiometers must pass this test as a part of the production. The “Self diagnostic test” can be started from the calibration software



Start the test with or without the bone conductor connected

The screenshot shows the 'Self diagnostic test' window with three test configurations. The results are summarized in the following table:

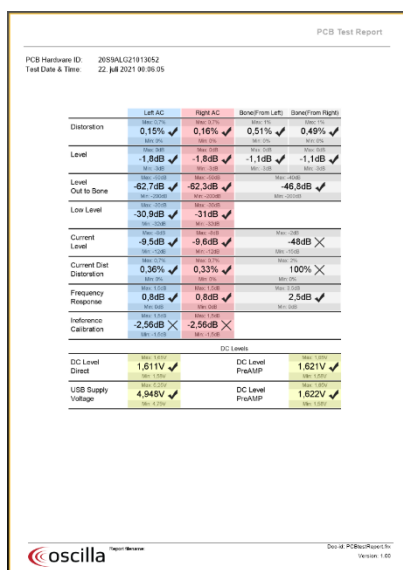
	Left AC	Right AC	Bone(From Left)	Bone(From Right)
<b>Distortion</b>	0,15% ✓	0,16% ✓	0,51% ✓	0,49% ✓
<b>Level</b>	-1,8dB ✓	-1,8dB ✓	-1,1dB ✓	-1,1dB ✓
<b>Level Out to Bone</b>	-62,7dB ✓	-62,3dB ✓		-46,8dB ✓
<b>Low Level</b>	-30,9dB ✓	-31dB ✓		
<b>Current Level</b>	-9,5dB ✓	-9,6dB ✓		-48dB ✗
<b>Current Dist Distortion</b>	0,36% ✓	0,33% ✓		100% ✗
<b>Frequency Response</b>	0,8dB ✓	0,8dB ✓		2,5dB ✓
<b>Inference Calibration</b>	-2,56dB ✗	-2,56dB ✗		

Below the main table, there are sections for 'DC Levels' and 'USB Supply Voltage':

	DC Level Direct	DC Level PreAMP
<b>DC Level Direct</b>	1,611V ✓	1,621V ✓
<b>USB Supply Voltage</b>	4,948V ✓	1,622V ✓

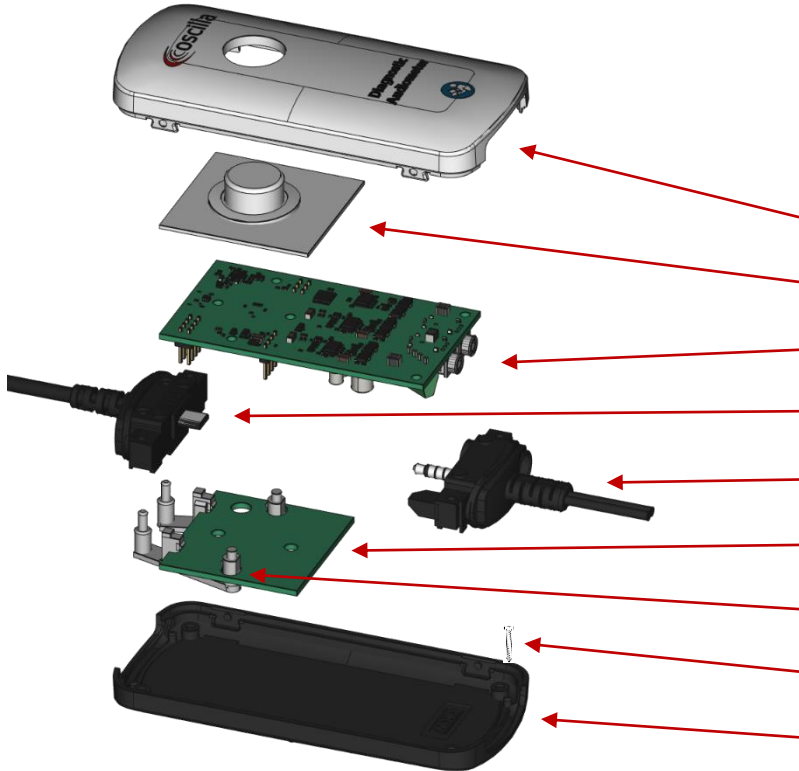
A 'Show or Print Test Report' button is located at the bottom left of the window.

The result can be printed or stored as a pdf file as evidence for the test result

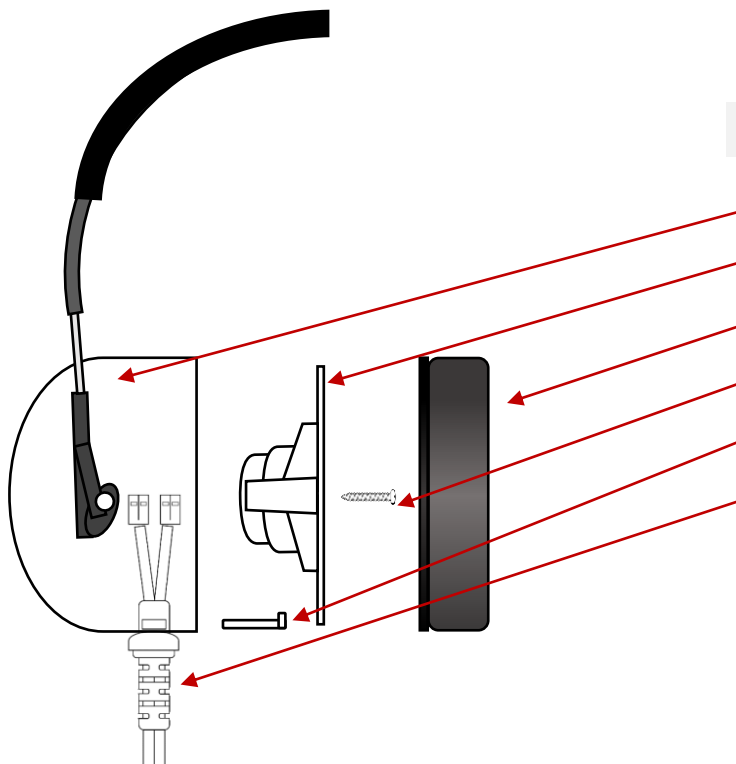


# 11. Repair & Service

## Service parts



Part No.	Description
1201	Enclosure with label Oscilla® Axx series
1202	Patient bottom for Oscilla® Axx series
1200	ATM4 PCB including firmware and SN No.
1211	USB cable for Oscilla® Axx series
1210	Headset cable for Oscilla® Axx series
1203	ATM4 shield Board
1207	Internal PCB support foot
1250	Tapping Screw 2,2x13mm T6 Torx
1201	Enclosure with label Oscilla® Axx series



Part No.	Description
1253	Oscilla® H210A Headset whit out transducers
1254	Oscilla® H210A Transducer
1214	Cushion set for Oscilla® H210A Headset
1250	Tapping Screw 2,2x13mm T6 Torx
1248	Internal CableLock for H210A Headset
1210	Headset cable for Oscilla® Axx series

## Service tools for the A-series



Part No.	Description
1265	Hex Screwdriver for H210A Trans. inside headset
1266	Torx Screwdriver T6 for ATM4 mainunit
1206	Enclosure Service tool

Service must only be provided by service technicians that are trained and authorized by Oscilla A/S, Denmark.

## 12. Symbols



Manufacturer



Serial number



Catalogue/product number



Caution



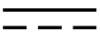
Follow instruction for use



Consult instruction for use



Type B applied part



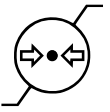
Direct current



Medical device according to Medical Device Directive 93/42/EEC.



Humidity limitation



Atmospheric pressure limitation



Temperature limit



The device must be recycled or disposed of in a proper manner in accordance with the WEEE Directive 2012/19/EU.



Do Not Use if Package is Damaged symbol.

## 13. Manufacturer



Oscilla A/S  
Åbogade 15  
DK-8200 Aarhus N  
Denmark

Phone: +45 61 72 81 70  
Website: [www.oscilla.dk](http://www.oscilla.dk)  
Mail: [info@oscilla.dk](mailto:info@oscilla.dk)

### Responsibility of the manufacturer

The manufacturer is only responsible for the safety, reliability and performance of the device if:

- All assembly operations, extensions, re-adjustments, modifications, service, calibration or repairs are carried out by the device manufacturer or by personnel authorized by the manufacturer.
- The electrical installation, to which the device is connected, complies with EN/IEC requirements.
- The device is used in accordance with the instructions for use.

The manufacturer reserves the right to waive all responsibility for the operating safety, reliability and performance of devices serviced, calibrated or repaired by unauthorised parties.

## 14. License for Oscilla calibration software

All right to the calibration software belongs to Oscilla A/S, only authorized service partners with the necessary training can be issued a license to borrow the calibration software from Oscilla A/S.

The use of the Oscilla Calibration software is exclusively for Authorized service partners with a valid activation license key.

Authorized service partners are not allowed to:

- Misuse the Oscilla calibration software.
- Distribute Oscilla calibration software under your own brand.
- Install the Oscilla calibration software on non-company PCs.
- Share the Oscilla calibration software with third parties.

Violation of the terms above will be met with legal action from Oscilla A/S.

In case of liquidation, merge or any situation where preconditions for this agreement changes, Oscilla A/S reserves the right to withdraw the license without notice.

The name Authorized service partners that have the licensee to use the software can be found in the settings window in the "Licensee" tab

