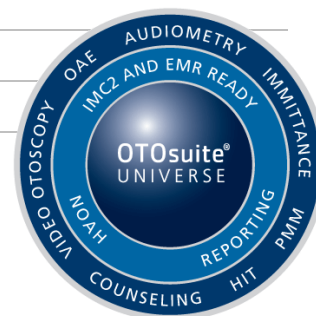


Date	October 2017
Document No.	7-40-03878 Revision 00
Label	Otometrics
Products	OTOsuite OTOsuite REPORTS QUASAR MADSEN Zodiac Firmware AURICAL Aud Firmware AURICAL A450 Firmware MADSEN Astera Firmware
PART number(s)	8-49-75800 rev 50 (version 4.83.00) 8-49-7685 rev 05 (version 1.5) 8-49-88000 rev 04 (v. 1.02.00) 8-49-9550 rev 10 (v. 1.1.0.1290) 8-49-9020 rev 10 (v. 1.05.0092) 8-49-9210 rev 02 (v. 1.05.0092) 8-49-8170 rev 14 (1.05.0016)
Replaces	8-49-75800 rev 49 (version 4.82.00) 8-49-7685 rev 04 (version 1.4) 8-49-9550 rev 09 (v. 1.1.0.1288) 8-49-9020 rev 09 (v. 1.05.0080) 8-49-9210 rev 01 (v. 1.05.0086) 8-49-8170 rev 13 (1.05.0014)
Released by	Lars Bladt Rasmussen



1. Description

OTOsuite® v4.83.00 contains updated features to the installation, display management (DPI), the immittance module for Zodiac and corrections to reported defects.

1.1. Platform – Installation

Overall, the ambition for OTOsuite and associated applications such as OTOsuite REPORTS, speech material, etc. is to make it faster and more intuitive to install in different settings. In continuation of efforts introduced in the last two releases, the launch of OTOsuite® v4.83.00 furthermore enhances the installation along the following lines:

- reduced need for human interaction during the installation process
- consolidation of fragmented installation process
- support for silent installation procedures

The OTOsuite Installer is the next generation of the Single-Click Installer adding a user interface, the ability to deploy multiple applications in a single sequence, support for silent installations amongst other elements relevant for a faster and more seamless experience.

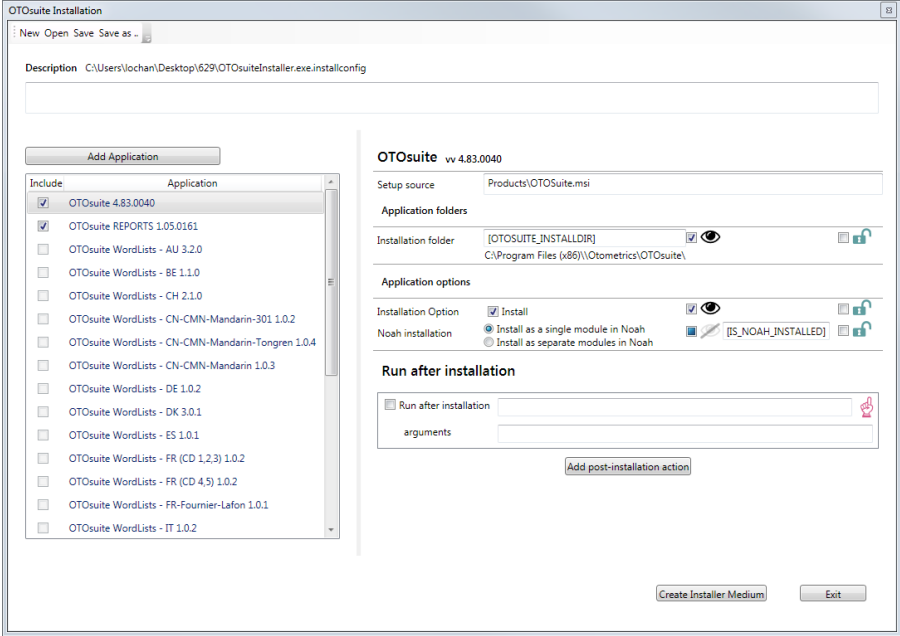


Figure 1: OTOsuite Installer – Customized installation.

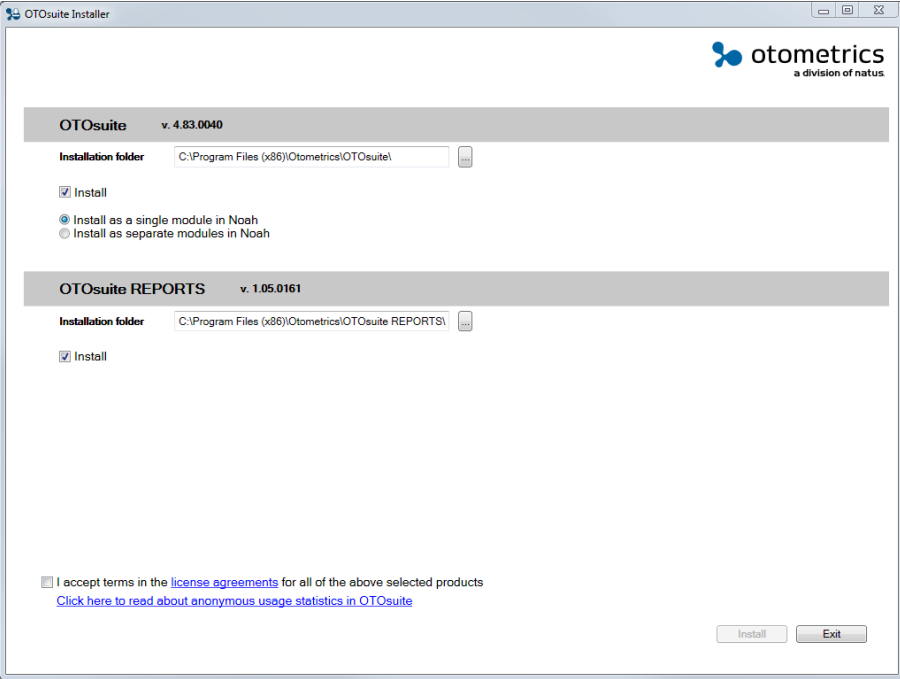


Figure 2: OTOsuite Installer – Installation sequence overview.

1.1.1. OTOsuite Installation Deployment

As a separate application, the installation process of OTOsuite has furthermore been supplemented with a specific deployment tool to accommodate for the procedures followed by many large accounts. It allows for a “one-to-many” installation sequence using SCCM from Microsoft. SCCM stands for System Center Configuration Manager also known as ConfigMgr, formerly Systems Management Server (SMS). SCCM is a systems management software product developed by Microsoft for managing large groups of computers for central dissemination of applications in a one-to-many installation sequence.

Separate documentation – OTOsuite SCCM Deployment User Guide (7-50-18800-EN) – is available in Agile as a reference on how to use the tool.

1.1.2. Precondition Checker

Furthermore, a Precondition Checker is now included, allowing for an easy check if system requirements are fulfilled prior to installation. Running the precondition checker provides a quick overview, generates a report file and offers the possibility to print or email the report as desired.

	Required	Recommended	Actual
CPU	1.5 GHz	2.0 GHz	2.5 GHz ✓
Memory	2.0 GB	4.0 GB	7.7 GB ✓
Free Disk Space	8.0 GB	8.0 GB	74.7 GB ✓

Figure 3: Status screen of the Precondition Checker.

1.2. Platform – Display Management of OTOsuite Modules

OTOSuite with its embedded applications is optimized for a minimum resolution of 1024x768 displayed at a 100% scaling of the screen. However, with the use of some modern HD monitors using certain combinations of screen resolution and DPI settings, OTOsuite might display screen elements that are truncated or only shown partially.

DPI refers to dots per inch, which in the context of OTOsuite is used interchangeably with PPI (pixels per inch), indicating the resolution on computer monitors.

1.2.1. DPI warnings

If OTOsuite is started with a DPI/Screen resolution that may cause problems, no warning will be presented at startup any longer. However, if a test module is launched that does not support the current DPI/Screen resolution setting, a warning message is displayed:

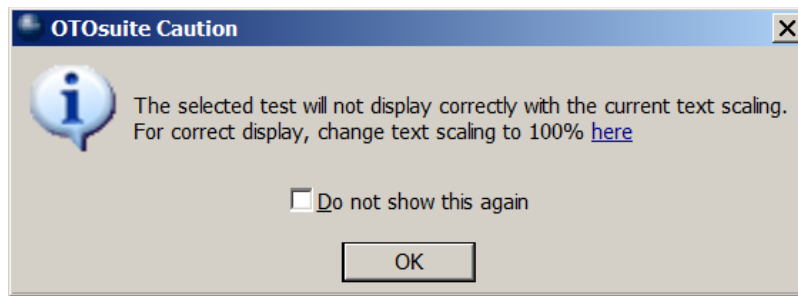


Figure 4: Warning dialog in modules not updated yet.

With the release of OTOsuite v4.83.00, a DPI warning dialog will appear in the following modules:

- Audiometry: Pediatric, SISI, ABLB, MLD, DLI, QuickSIN, Bekesy, LipRead, Tinnitus and Loudness Scaling.
- PMM (C&S): Speech Mapping.

1.3. Immittance Updates

1.3.1. Gellé test

The Gellé test was introduced in the stand-alone version of Zodiac only with the release of v4.82.00. With the release of v4.83.00 the test can now also be performed using the PC-based version of Zodiac. For more information on the test please see the release note for v4.82.00 available on the Otometrics Extranet.

1.3.2. PE Tube mode (Perforated ear)

OTOSuite v4.83.00 includes an update to the leak detection procedure in the Zodiac products in order to accommodate for the challenges experienced in the field. It is considered more important that all Zodiac users can test all patients (robustness) without risk of false leak detection, than being a little bit faster than the competitive devices. All users must be able to test all patients without knowledge about our leak detection technology and workaround.

The Advanced Leak Detection setting is removed from the OTOsuite Control Panel. It is renamed to “Extra Fast Leak Detection” and placed in Options instead.

The Extra Fast Leak Detection is switched OFF in Default settings (Factory defaults and Startup settings) as well as in the existing User Tests. It is provided as an option and User Test for extra fast testing of populations where it does not cause false leak detection and where high speed is particularly useful, e.g. pediatric testing.

A “Tymp AFAP” (As Fast As Possible) user test based on Adult Tymp+RT, with Extra Fast Leak detection enabled together with 600 daPa/s and Stop when Y=0 is included.

In the PE-tube mode, the leak detect is momentarily disabled when building up the start pressure. If the slope on probe pressure is slow (< 24 daPa/sample) the time-out is 850 ms, which is the case if the leak is big. Otherwise, the time-out is 2500 ms, which is deployed for small leaks.

For more details on Zodiac and the Gellé special test please contact Brianna Young, Product Manager: byoung@otometrics.com.

1.4. Capella² firmware naming

In some cases, OTOSuite might show a newer date stamp on the Capella² firmware. However, there is only one released version of Capella² firmware. The issue occurred in an earlier version of OTOSuite which when build used the current date as a date stamp for the Capella² firmware version. Since there is only one version of Capella² firmware, this will have no effect on the functionality of Capella². A separate product note was released in May 2017. Please see Section 11 for an updated firmware overview.

For more information on OTOSuite REPORTS, please contact Brianna Young, Product Manager: byoung@otometrics.com.

1.5. Settings shared by all Users

A new feature has been added to Configuration Wizard with the release of OTOSuite v4.83.00. The application settings can be configured with “Settings shared by all users”, relevant for those sites that want all user to use the same settings across all workstations. Furthermore, when changes are necessary, they only need to be changed for one user.

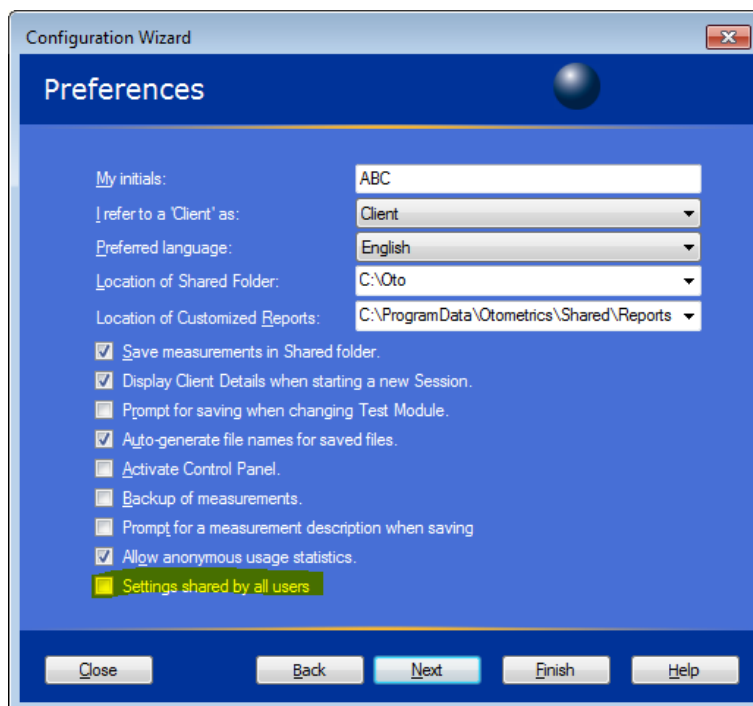


Figure 5: Configuration wizard for deploying the settings feature.

1.6. Quasar Update

Due to changes in the naming of the folder structures as a consequence of removing the GN abbreviation from the naming conventions, the Quasar interface has been updated to be compatible with installation paths from OTOSuite v. 4.83.00 and forward. Version 1.02 of the interface is also backward compatible.

Please see Section 10 for a list of corrected defects.

2. Language versions

OTOSuite is available in English, Chinese, German, French, Spanish, Italian, Finnish, Japanese, Polish, Swedish and Portuguese.

3. Update requirements

Users of OTOSuite v4.82.00 and previous should update to OTOSuite v4.83.00.

4. Installation

OTOSuite is able to operate with Noah and also with OTObase® - or in stand-alone mode. The installation determines whether OTObase/Noah is installed on the computer and will carry out the installation accordingly.

5. System requirements

Please note that Noah 4.0 is not supported; however, earlier and later versions are.

System requirements

- 1.5 GHz processor or higher (2 GHz recommended)
- 2 GB RAM (4 GB recommended)
- 8 GB free disk space for installation of the OTOSuite® software.
- Microsoft® Windows® 7 SP1 (32 or 64 bit) or Microsoft Windows 8.1 (64 bit) or Microsoft Windows 10 (32 or 64 bit)
- All Microsoft Windows updates from Microsoft Update (or .NET 4.6 installed)
- USB port for connecting accessories, v. 2.0 or higher
- DVD drive (only for a minority of features)
- 32 bit color display, 1024x768 screen resolution
- For Noah mode operation: NOAH 3/NOAH 3 for ENTs (version 3.7 or higher), or Noah 4 (version 4.1 or higher) or OTObase®.

Note: If you are going to use speech material supplied by Otometrics, check the Speech Material Installation CD to make sure that your PC has the additional disk space required.

6. Licensing

For OTOSuite, there is no additional licensing in this release.

7. Release dates

OTOSuite v4.83.00 releases globally October 2017.

8. Order information

Part no	Description
8-49-75800	OTOSuite Application Software

9. For more information

For more information, please contact Lars Bladt Rasmussen, Director, Product Management at lbrasmussen@otometrics.com.

10. Corrected defects

SF/RMA ID	DevSuite ID	Area	Description	Reporting country
672	9866	AUD	Poor Italian translations in multiple areas.	IT
753	11294	AUD	TEN test: If inserts are not present a message box will appear saying that it will change to another transducer. However, this results in an incorrect state, at least for AURICAL Aud, where inserts are still chosen, yet greyed out, in the control panel, but routing is in fact going to Phones. The second error here is that the IPSI routing is gone - now it routes to L and R instead of IPSI.	UK
754	11324	AUD	TEN test: AURICAL compatible TEN Special Test needed, or interpreter should change. Currently (OTOSuite 4.75) includes the Audiometry Special Test '12. TEN Test', but is only fully applicable with Astera. At least the dB step is a problem, since the Special Test has the dB step set as 2 dB, which is not applicable for Aurical that only supports 1 and 5 dB. When loading the '12. TEN Test' with AURICAL, the dB step is set to 5 dB, regardless of the default setting. This is considered as an error by users, and reported as a complaint by Matthew Murray. It should be set to x1 dB step, which will make it possible to follow the TEN procedure of always using 2 dB steps, just by adjusting the levels with two key-presses each time.	UK
815	11927	AUD	Poor German translation of the word Complete in two fields in Tinnitus.	DE
CAS-62922-JFSC	12026	AUD	TEN test crashes when connected to an AURICAL Aud with a third party splitter installed.	UK
906	12520	REPORTS	Text is cut off in Spanish DP-gram report: With OTOSuite 4.78, Spanish language, the "date of birth" is printed on top of the date	PA
992	12782	Platform	OTOSuite.pdf in the OTOSuite installation folder is mistaken for being an Adobe PDF: A customer has mistaken the OTOSuite.pdf in the OTOSuite installation folder for being an Adobe PDF file, when it is in fact an abbreviation of Package Definition File. The customer therefore thought that the file was corrupt and that something was wrong with the USB received together with the Capella hardware.	US

Complaint 1004 + SF 00108872	12909	AUD	When selecting inserts as AC transducer in OTOSuite it shows as Phones in the Noah Audiogram module.	US
995/SF 00099579	12915	PMM	If no Gender is set in Noah and NAL-NL2 is set as Target Rule in OTOSuite the following error messages might occur in OTOSuite: "Object reference not set to an instance of an object" and "Unknown Gender value".	AU
1051	12979	REPORTS	Static Admittance (SA)/Static Compliance (SC) units are inconsistent between OTOSuite and OTOSuite REPORTS unless mmho is chosen for SA in Options.	US
1010	12987	Platform	AURICAL Aud connection is lost when playing loud FRESH noise for some speech calibration values.	NL
1062	12993	REPORTS	Default printer color and tray settings are ignored in OTOSuite. A customer complains about OTOSuite 4.81: Whatever the change we make in the printer settings (black white tray 1) and save it, the next time it will print in color and from another tray.	NL
1055	12996	REPORTS	Latest performed tympanogram is no longer shown in OTOSuite REPORTS.	US
1072	13006	PMM	Some PMM data cannot load with DSL v5.0 as Target Rule. PMM modules are just empty. Not reproducible when Target Rule is set to e.g. NAL-NL2.	CH
1026	13032	AUD	TEN noise is limited in output level.	UK
1052	13075	REPORTS	Customer complains that historic data in OTOSuite REPORTS has the behavior as a WYSIWYG element but does not have the symbol (lightning symbol) that usually goes with WYSIWYG elements.	US
959	13088	Platform	Some Astera ² do not meet the ANSI S3.6 test criteria for unwanted sounds for Insert Phones.	US
903	13091	AUD	If choosing HDA200 headphone as masking transducer and bone conductor as stimulus on an AURICAL Aud, then masking noise is only playing at 4 kHz. At any other frequencies the masking is not playing.	UK
1059	13092	PMM	OTOSuite error message in TargetMatch when attempting to perform an REUG measurement.	NO
1081	13095	PMM	Not possible to perform REUG measurement in Phonak Target if "Show Unaided Response test type" is disabled in OTOSuite.	CH
1058	13110	PMM	OTOSuite sends empty curves to Phonak TargetMatch (IMC).	DK

1102	13123	OAE	OTOSuite might show a newer misleading date stamp on the Capella ² firmware (not affecting functionality of Capella ²).	DE
1107	13126	REPORTS	Italic font in Chinese comments header field in OTOSuite REPORTS.	CH
1117	13131	AUD	The MCL option is called CSL in Tone Audiometry when OTOSuite language is German.	GE
1141	13146	AUD	A450 - transducer selection not greyed out in Control Panel.	US
1143	13154	AUD	Score presentation in speech audiometry should show at least one decimal place.	DE
1160	13199	PMM	When a custom hearing aid style is selected, the Tubing selection in advanced details is active and leads to change in targets depending on selection. See attached screenshots of the impact for a CIC when various tubing types are selected. This is erroneous - and leading to inaccurate targets - because tubing is only relevant for BTE. This affects all NAL 2 fittings.	US
1156	13203	PMM	Specific patient data causes no graphics to be displayed in the PMM module window.	UK
1164	13211	IMM	Zodiac calibration PressureCalibration Date + Id.	UK

11. Embedded firmware versions (v4.83.00)

	4.83.00	4.82.00	4.81.00	4.80.00	4.78.00	4.77.00	4.76.01	4.76.00	4.75.01	4.75.00
Astera DSP	1.05.0016	1.05.0014	1.05.0014	1.05.0014	1.05.0014	1.05.0014	1.05.0014	1.05.0014	1.05.0014	1.05.0014
Astera Silabs	1.01.0022	1.01.0022	1.01.0022	1.01.0022	1.01.0022	1.01.0022	1.01.0022	1.01.0022	1.01.0022	1.01.0022
Astera ACP	0.01.0025	0.01.0025	0.01.0025	0.01.0025	0.01.0025	0.01.0025	0.01.0025	0.01.0025	0.01.0025	0.01.0025
AURICAL Aud DSP	1.05.0092	1.05.0080	1.05.0080	1.05.0080	1.05.0080	1.05.0078	1.05.0078	1.05.0078	1.05.0074	1.05.0074
AURICAL Aud Silabs	1.01.0037	1.01.0037	1.01.0037	1.01.0037	1.01.0037	1.01.0032	1.01.0032	1.01.0032	1.01.0032	1.01.0032
A450 DSP	1.05.0092	1.05.0086	-	-	-	-	-	-	-	-
A450 Silabs	1.01.0039	1.01.0039	-	-	-	-	-	-	-	-
Speech Link 100	1.01.00026	1.01.00026	1.01.00026	1.01.00026	1.01.00026	1.01.00026	1.01.00026	1.01.00026	1.01.00026	1.01.00026
FreeFit	2.00.00081	2.00.00081	2.00.00081	2.00.00081	2.00.00081	2.00.00081	2.00.00081	2.00.00081	2.00.00081	2.00.00081
OTOflex 100	2.01.0183	2.01.0183	2.01.0183	2.01.0183	2.01.0183	2.01.0183	2.01.0183	2.01.0183	2.01.0183	2.01.0183
Itera	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54
Xeta	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52
HIT	1.00.0324	1.00.0324	1.00.0324	1.00.0324	1.00.0324	1.00.0324	1.00.0324	1.00.0324	1.00.0324	1.00.0324
OTOair	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
OTOCam	1.0.0773	1.0.0773	1.0.0366	1.0.0366	1.0.0366	1.0.0366	1.0.0366	1.0.0366	1.0.0366	1.0.0366
Capella	20121002	20121002	20161015	20121002	20121002	20160209	20151113	20151005	20121002	20121002
Capella I/F	1.02.00	1.02.00	1.02.00	1.02.00	1.02.00	1.02.00	1.02.00	1.02.00	1.02.00	1.02.00
Capella DSP	20130415	20130415	20130415	20130415	20130415	20130415	20130415	20130415	20130415	20130415
Zodiac	1.3.0.1290	1.1.0.1288	1.1.0.1235	1.0.0.784	-	-	-	-	-	-
Zodiac Upload	0.1.4.208	0.1.4.208	0.1.4.208	0.1.4.39	-	-	-	-	-	-