

Change log for aural Scan release v3.9.1 - Commit 1c6da4

We are pleased to present a new software update for our scanner software. This update is released on the 2024-11-21 for the following devices:

- mono Scan
- duo Scan
- duo Scan Touch
- ds Production
- free Stage
- free Stage one
- free Stage twin

By updating, you will benefit from the fixes and improvements listed below:

+ Added

- #3867 Added a new advanced export setting:

 "Bypass and auto confirm export dialog". When enabled, the
 export dialog is skipped, and files are automatically copied to the
 target directory without user confirmation
- #3867 Added a new advanced export setting:

 "Close project after export". When enabled, the project will
 automatically close after completing an export action such as

 "Send via Mail", "Upload to FTP", or "Copy to Target Folder"

🛣 Fixed

#3881 - Resolved an issue where loading existing scans from NOAH failed when NOAH database was located on an external network drive.



aural Scan Release v3.9.0

Release 2024-10-25 - Commit Hash 0e14d3f4

the Project tab.

Added

- #3455 Added support for new upcoming sensor and camera types by smart optics
- #3449 "New Project" and "Save Project" buttons to the main UI as a replacement for the "Finish Work" mechanism.

 The configuration of whether a project was saved or not, and what export should be used was way too complicated.

 Instead, the User can now decide if a project folder should be generated using the "Save Project" button.

 If the user has finished the work, it's possible to start a new Project using the "New Project" button. A warning is shown if unsaved changes are present, this warning can be disabled using the

This might be useful for users who don't want to generate a project folder and prefer an export-only approach

Advanced setting "Show warning dialog for unsaved changes" in

- #3449 Setting "Keep application running in system tray after closing" as a replacement for the prior standby mode. Depending on the configured setting the close button in the upper right corner will now exit the application or send it to standby
- #3449 Added a "Connect to scanner" button. The button is shown if the software is called as a Viewer via CLI
- #3526 Add a new rendering mode "Visualize impression".

 This allows to display the surface of the impression on the scan data in its raw form
- #3808 Add a new option, "ShowPathInCopyToTargetFolderDialog," in the settings.xml file to hide the target folder panel in the "Copy to Target Folder" dialog
- #3802 Add support for new monoScan and duoScan with new motor control



- #3490 Add functionality to read reference values from QR codes on calibration objects for 3D calibration and validation
- #3504 Add a PDF report if a 3D calibration fails, with more specific error messages included to provide insights into potential issues
- #3434 Add support for the Noah ES cloud service and database
- #3434 Add "Fast data view" feature of Noah for the "PDF order document" of aural Scan
- #3527 Add `ShowProjectNoteButton` entry to settings.xml to show or hide the project note button
- #3433 Add "Upload to FTP server", and "Copy to target folder" export dialogs including a update file explorer. Each button can be hidden via a XML value in the "UserInterface" section of the "Settings.xml"
- #3433 Add dedicated "Send via Mail" button to send files directly via mail without using a dialog. This can now also be done if a file was loaded. The button can be hidden via a XML value in the "UserInterface" section of the "Settings.xml"

🗹 Changed

- #3518 Rework "ManageConnections" dialog to configure remote server connections.
- #3801 The "Thinning" setting was renamed to "Level of Detail". The old default thinning setting "strong" is now represented by the level of detail value "low"
- #3449 It's now possible to perform a hole filling after a cut was applied in the viewer, a prior save is no longer needed. Additionally, the processing is now performed for the active viewer, allowing for side-independent editing
- #3449 All available buttons are now always shown and enabled/disabled instead of hidden



#3449 - The main window size is now 1440x810 pixels.

Minimum resolutions for aural Scan are:

1440x960 (3:2)

1440x1080 (4:3)

1440x900 (8:5)

1600x900 (16:9)

2520x1080 (21:9)

- #3449 Renamed CLI keyword "AutoSave" to "AutoMatching", "ExportAs" to "ScanFormat", and "ExportPath" to "ProjectPath" as it better represents their actual function
- #3449 Renamed CLI keyword "ExitWithFinishButton" to

 "ExitOnCloseButton" and "StandByWithFinishButton" to

 "StandbyOnCloseButton", as the "Finish Work" button is no longer
 available
- #3449 The CLI keywords "AutoFinish" and "AutoExit" will now also execute a "Save Project". "AutoFinish" will close the application depending on the configured user settings now. For further info please request our latest interface documentation
- #3434 The file storage for the Noah 4 interface on the hard disk has been replaced by a new mechanism for storing the files in the Noah database. Old entries can still be opened but saving outside the database is no longer possible. The export of the scans can be performed using the export functions of aural Scan
- #3434 Open Noah patient browser if no patient is selected
- #3434 aural Scan will now display both scans if an action containing two ear scans is opened via Noah
- #3455 Microsoft Visual C++ 2015-2022 Redistributable 14.32.31326.0 to 14.40.33810.0
- #3434 Update Noah SDK from 4.7 to 4.15
- #3433 Setting section "Export Method" to "Automated Export Method"



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Fixed

- #3434 Fix placing of annotations if use standard mouse button assignment is enabled
- #3632 Fix conversion of calibration object values in the 3D calibration dialog
- #3655 Import and export HPS files with compatible texture colors to 3Shape CAD
- #3672 Make datetime entries in the "scanner.xml" independent from the current number format of the operation system

Removed

- #3449 Removed device type and version in the application title and system tray. This can now be seen in the "About" dialog
- #3449 Removed the "Save" button in the viewer toolbar as it's not necessary to have two save buttons
- #3449 Removed the "Finish Work" button as it's replaced by "New Project and "Save Project"
- #3449 Removed project setting "Always save" and "Always discard project folder. Instead, the "Save Project" button now handles whether a project wants to be saved
- #3449 Removed export settings "Export Method", instead the buttons "Upload to FTP", "Send via Mail", and "Copy to target folder" are now available in the main UI
- #3449 Removed Noah interface setting "Enable standby mode" and menu entry "Send to Standby", instead the setting "Keep application running in system tray after closing" will now handle whether the app is sent to standby on close
- #3433 Removed the export method "Decide in export dialog"



aural Scan Release v3.8.2

Release 2024-08-01 - Commit Hash 4ee2f2



Fixed

#3767 - Limit the overall brightness of the projector's LED to prevent LED flickering, which leads to a measurement error.

aural Scan Release v3.8.1

Release 2024-04-12 - Commit Hash 970ca5d

Added

- #3527 Add `ShowProjectNoteButton` entry to settings.xml to show or hide the project note button.
- #3502 Add `ShowOpenScanFile` entry to settings.xml to show or hide the open file menu item
- #3502 Add `ShowAddActivationCode` entry to settings.xml to show or hide the add activation code menu item
- #3502 Add `ShowStandBy` entry to settings.xml to show or hide the standby menu item
- #3596 Show file name prefix in dialog informing about file length restrictions
- #3563 Add Korean, Japanese, Czech and Greek language to installer
- #3505 Start software in system language by default
- #3503 Earcast text boxes can now be locked if

 `AllowUserToChangeScanNames` is set to `false` in "settings.xml"



Changed

#3503 - Side description is now always applied when the setting is active, even in projects started via the command line interface

🛣 Fixed

- #3614 Limit the number of threads to 300 to prevent the software from crashing when using a CPU with a lot of cores
- #3630 Fix wrong French translation `Delete annotation` for trash can button mouse over

aural Scan Release v3.8.0

Release 2024-03-08 - Commit Hash c6a97bfe

± Added

- #3428 Add Himsa Packed Scan Standard "HPS" data output format
- #3451 Add "--noah-register-and-exit" and "--noah-unregister-and-exit"

 CLI commands. This will un/register aural Scan as a Noah module and then close the software without the GUI showing up
- #3437 Add option to include Noah's patient ID into file names
- #3495 Add earcast detection to filter out useless measurements.

 Measurements with no ear cast will be discarded.

 Can be configured in the "EarcastDetection" section in the "settings.xml"
- #3495 Add minimum required points filter for measurements.

 Measurements with fewer points will be discarded.

 Can be configured with

 "MinimumRequiredValidPointsToKeepData" in the "settings.xml"
- #3506 Add support for Czech, Greek, Japanese, and Korean language



🗹 Changed

- #3441 The lookup and validation of calibration data are revised.

 The data is now automatically copied from the removable media to the correct directory if it is found. Otherwise, a dialog shows which device is connected, and the user can search for the calibration data manually
- #3441 The connected device is now shown in the "About" dialog
- #3435 Overhauled the "Color Texture Scan" completely. Markings are displayed as a texture regardless of the quality settings of the scan.

 Washy markings are therefore a thing of the past.

 Available for "PLY" and "HPS" scan data format
- #3445 The "Scan" button is no longer available after matching for dual-axis devices. Now the "New Scan" button is used to start a new project
- #3445 For dual-axis devices, the "Enter" key now only triggers a scan when the project is empty
- #3445 For single-axis devices, the "Enter" key now only triggers a scan when the corresponding side that has focus is empty
- #3444 Always deactivate rescan mode before activating "Scan again"
- #3495 Cutting of the bottom and top is now already applied on measurements and no longer on meshes
- #3432 Users can now do successive cuts without having to click on the scissor buttons after each cut
- #3494 Installer will now show the commit hash in the welcome screen
- #3522 Calibration data will no longer be copied during installation because that could lead to undesired behavior under certain conditions.
- #3587 Resize certain dialogs to improve the visibility of translations
- #3598 Whether a scan is performed with or without color texture can now only be defined at the start of the project.



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Fixed

- #3451 Fix for Noah "Can not change patient" when previously an existing mesh was loaded via Noah and then aural scan went into standby.

 In this case, aural scan kept a lock on the current patient in Noah which led to the Noah error that the patient cannot be changed
- #3439 In the settings dialog, the path of the target folder will be highlighted in red if the path does not exist
- #3493 Estimated required disk space in the installer is now correct
- #3432 Undo of cutting and rescans is more reliable now
- #3514 Perform a Centerview for both sides when using the view mode buttons
- #3516 Fix matching after rescans for some devices
- #3555 Fixed rare cases where, if a second rescan followed an already processed rescan, the second rescan would be positioned incorrectly for devices without motor shutdown.
- #3560 Fixed a case where the name was not synchronized when the "Use the same name for the left and right ear casts" option was enabled and the names were entered in the empty scan side.

Removed

#3441 - Scanner Installation Tool

aural Scan Release v3.7.0

Release 2023-11-15 - Commit Hash b32d13

Added

#434 - Add support for SFTP



- #543 Automatically load the correct calibration folder from the `CalibrationFolderSearchPath` specified in the `Settings.xml`
- #124 Add new open workflow for single-axis devices (mono Scan and free Stage one)
- #544 Add new images for calibration and validation
- #542 Add a "Project" settings tab including a setting to "Always discard" or "Always save" the project folder
- #542 Add the "Copy to target folder" export method in the "Export" tab to restore similar behavior of version 3.2 in combination with the "Always discard" project folder. This setting replaces the former "Export folder"
- #542 Add the Setting "Files to Include" in the "Export" tab to filter export files
- #542 Add the setting "Add export files to a ZIP archive" in the "Advanced" section of the "Export" tab, as well as the "Export" Dialog.

 This replaced the "Export ZIP" function and now also allows export files directly to FTP or mail without creating a ZIP file.
- #434 #550 Add support for free Stage One and free Stage Twin
- #583 Add a prefix that can be configured inside the settings for file names
- #582 Add sensor ID and prefix to calibration protocol file name
- #571 Automatic detection of inserted object tone
- #623 Export method "No export" to only save the project without using any export methods

Changed

- #544 Merge verification step into 3D-Calibration
- #521 Axes and 3D-calibration dialog images for all scanners to point out what to insert during the calibration
- #577 Show the validation results of both the XY and Z in the 3D Calibration dialog



- #549 Ear cast names are now included in the project folder name.

 You can deactivate this in the `Settings.xml` via

 `IncludeEarcastNamesInProjectDirectoryName`
- #549 Start scan buttons are no longer visible when a mesh is loaded from the disk. To discard loaded data now the "New Scan" menu entry must be used instead
- #549 `project.log` naming convention to `{scanNames}.project.log`
- #549 `project.xml` naming convention to `{scanNames}.notes.xml`
- #549 `order_{scanfile}.pdf` naming convention to `{scanName}.order.pdf`
- #549 The project log no longer includes the export directory name
- #566 Hide Rescanand Measurement toolbar buttons for single-axis scanners instead of disabling them
- #542 Move "Data Format" and "Orientation" to the "Project" tab
- #542 The "Preferred Export Method" section now uses radio buttons and is renamed to "Export Method". The "Export dialog" now becomes an export method on its own.
- #542 The "Finalize" button in the "Export" dialog no longer writes the export files to disk. It now functions as a "Save project" button.

 To export the scan data the "Folder" button will open a file browser to export the data instead.
- #542 Move settings "FTP", "PDF File", and "3D Calibration Protocol Folder" to the "General" settings tab
- #542 Change the "Project Folder" default path from "C:\Scans" to "C:\Projects"
- #573 Rename settings tab "3D Viewer" to "Appearance"
- #573 Rename the settings tab "Matching" to "Processing"
- #573 Rename "Project.log" to "Project protocol"
- #573 General improvements of texts and tooltips
- #553 New brand logos for application and installer



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Fixed

- #544 False display of start button after failed validation
- #630 Fix rare calibration failure when switching between devices

Removed

- #542 Setting "Export Folder" and "Enable export without creating subfolders"
- #542 Preferred export method "Export ZIP" from "Setting" and "Export" dialog

aural Scan Release v3.6.0

Release 2022-12-23 - Commit Hash 9cfde6fe

± Added

#522 - Support for camera daA1440

Changed

- #522 Updated Basler pylon dependency to version 7.2.0
- #150 Update FlyCap viewer/sdk/driver to version 2.13.3.31

👬 Fixed

#520 - Fix sizing of user advice label so that no buttons are hidden after minimization.



#534 - Create export folder if path does not exist instead of failing on finalization.

aural Scan Release v3.5.2

Release 2022-10-14 - Commit Hash 5530b2c1

Fixed

#517 - Fix ActivityCalibration so that calibration data be loaded by thirdparty api again.

aural Scan Release v3.5.1

Release 2022-10-14 - Commit Hash c9954aa

± Added

- #476 Add support for ultra-fast scan strategy and improve performance of existing strategies.
- #478 Make it possible to rename files before uploading to FTP servers.
- #414 Moved setting 'Work Folder' to 'Export' tab and renamed it to 'Project Folder'
- #414 Moved Setting 'Save scan data additionally in a separate directory' to own category 'Export Folder' and renamed it to 'Enable export without creating subfolders'
- #398 A new "Report" button to directly open the calibration protocol after validating the 3D calibration. This report is opened with the default PDF viewer configured in Windows. The export path of the "3D Calibration Protocol Folder" can now be configured in the "Export" settings tab.
- #470 Add support for new color capable scanners.

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#470 - Add "LED Test" tool to ActivityKalibration to individually enable RGB LEDs.

Changed

- #468 Update dependency Pagoda v4.13 to v5.1.
- #458 "Open SSP" button now using environment variables 'ActivityKalibration_Audiology_SSPActivationKeyURL' and 'ActivityKalibration_Audiology_SSPSharePath'.
- #398 Format of the 3D calibration report was changed from HTML to PDF.

Fixed

- #398 Fix localized German strings in the 3D calibration report.
- #488 Install and use the font 'Roboto' to create PDF documents.

 This fixes the error 'Glyph table length must be even' when creating a PDF on Windows 11 Version 22H2 or later.
- #487 Objects should no longer move around when clicking "Save" during manual alignment in ActivityKalibration.
- #501 If a 3D calibration was triggered after a scan was previously performed, the calibration failed.

Removed

aural Scan Release v3.4.1

Release 2022-09-15 - Commit Hash 602676



Fixed

#424 - Fixed random failure of 3D calibration

aural Scan Release v3.4.0

Release 2022-04-11 - Commit Hash 194764fe

(+) Added

Following features were added or updated:

#428 - Add support for alvium camera

Changed

 \pm #451 - Update code signing certificate

Fixed

#424 - Fix random failure during axis calibration by using correct scan angle

aural Scan Release v3.3.2

Release 2022-02-21 - Commit Hash 5af7c8cb

Fixed

#429 - Fixed FTP connection test with irregular symbols



aural Scan Release v3.3.1

Release 2020-04-23 - Commit Hash b48144

Added

Following features were added or updated:

#379 - Advanced export option "Save scan data additionally in a separate directory"

aural Scan Release v3.3.0

Release 2020-03-13 - Commit Hash 585843

+ Added

- #59 Added new project.log in which used scan strategies, matching and cutting parameters of the scanned project are documented
- #189 New setting to include patient names provided by Noah 4 as scan file names
- #229 New setting to select if Noah sends aural Scan to standby or Noah should close the application instead
- #240 Settings dialog can be configured to hides specific tabs or the whole dialog via Setting.xml entry "Hidden="true"
- #253 Documentation of last axis calibration and 3D calibration
- #254 Added a not skippable axis calibration notification after 30 days
- #255 Added support of FTPS protocols for the FTP module
- #265 Added a customizable order.pdf document which contains comments, informations and project related screenshots



- #268 Added feature to mark specific areas on the object surface which can be commented. The visibility of the pins can be toggled by a new render button inside the tollbar
- #275 Reworked user interface
- #303 New Function to show order.pdf if you right click and select "print" in Noah 4
- #309 Added restriction if files will be loaded via 'open file' they now must be located inside the same directory
- #312 Added new feature for adding project specific notes



! IMPORTANT NOTICE!

This version will be the last to support Windows 7 and Windows 8.1. x86 based operating systems will no longer be supported in the future.

Z Changed

- #11 Enabled uninstall of older version on update installation.
- #59 Info.log was replaced by project.log
- #70 Currently active toolbar buttons will now be highlighted
- #256 FTP upload now supports a list of servers and parallel uploads
- #257 Improved error messages when no camera/scanner is found
- #264 Files are now exported to a project folder inside the export directory (The command line interface stays untouched)
- #270 Simplified the installation folder structure
- #283 Only 3D viewer settings are accessible in viewer mode now
- #300 Files are exported to a subfolder inside for Noah 4 now
- #314 To speed up barcode scanning, the right name box will be preselected after scanning the left side
- #315 Corrected view angle of "front" view
- #316 We decided to unlock the FTP feature for every user



Fixed

- #223 Fixed text highlighting issue when name has not fulfilled name requirements for mono scan
- #325 Fixed software freeze if image acquisition or validation fails
- #239 Fix encoding issues with UTF16 Windows user names e.g. Asian and Arabic Windows users
- #261 Issue with holes in ASCII export point cloud

aural Scan Release v3.2.1

Release 2019-08-10 - Commit Hash 2bc547



Fixed

aural Scan Release v3.2.0

Release 2019-09-03 - Commit Hash 97c1b7

+ Added

- #242 Support of future firmware
- #247 Highlight results of the 3D calibration with a deviation of more than 14 μ in red inside the calibration record

Changed

#234 - Automatically place cursor in left text box when a case is closed



#246 - Disable CPU idle state during measurements



Fixed

#222 – Software start-up issues after deinstallation of Himsa Noah

aural Scan Release v3.1.1

Release 2019-04-08 - Commit Hash bc3dc6

Changed

#232 - Changed service position for free Stage

aural Scan Release v3.1.0

Release 2019-03-01 - Commit Hash 989368

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Added

Following features were added or updated:

- #23 Configurable automatic rotation of mesh after completion of matching process
- #85 New translations
- #155 3D Calibration including protocol saved in "C:/Scans/ Calibration" after validation.
- #163 Support of the new audiology scanner "freeStage"
- #177 Added support tool "ActivityKalibration" to the installation directory



#218 - Added new XML attributes to define STL RGB values for 3Shape CAD software



! IMPORTANT NOTICE!

The 3D-calibration is an additional feature and is only possible with a special calibration object offered by smart optics.

Changed

- #91 Changed "Scan Object Tone" categories with more practical orientation to material color
- #145 Allow parallel installation of "duoScan" and "aural Scan
- #146 Improved CLI command environment at software start-up
- #147 Full commit hash is now available in About dialog
- #149 Disable Touch Screen for Calibration dialogs
- #171 The installer now deletes 'Settings.xml' during installation
- #183 Improved confidence settings based on v2.8.1

Fixed

- #128 The Finish key could be activated twice
- #186 Duo Scan Touch is detected in the title bar
- #188 "Move to Service" was not called when "Scan Again" was enabled.

Removed

#143 - Panel "About 3DV_Control" after double click next to text box



aural Scan Release v3.0.0

Release 2018-07-30 - Commit Hash 2b5df2

Added

- #2 Added function to allow direct scan start and enabled naming during scan process
- #9 Added "freedom of choice" for "Follow-up strategy" inside Settings menu
- #12 Added new GUI design for the Audiology Software
- #29 Added workflow for instant scanning if barcode is scanned using a barcode scanner
- #39 Added commands "Copy" "Cut" and "Paste to menu of right mouse key if users click into the text box
- #40 Added function to bypass unsupported characters in text box including automatic monitoring of filename
- #56 Added new settings menu and cleaned up tabs

Changed

- #5 Harmonized language menus of "Installer" & "Software Settings"
- #8 Improved undo of Cutting Tools
- #33 Renamed setting "Move reduced" to "Show point cloud when mesh is moved"
- #65 Renamed Setting "Saving Images" and implemented saving of more support files.
- #84 Changed setting "object scan tone dark" to improve scanning of pink silicone
- #117 'Scanner installer tool' now supports .NET Framework 4



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Fixed

- #8 Fixed buggy undo of Cutting Tools
- #19 Fixed issue where settings Thinning and Smoothing had impact on axes calibration
- #22 Fixed issue where empty folders will be dropped in %localappdata%
- #25 Fixed issue where software cannot find scanner because comport 0 was missing in settings.xml
- #79 Fixed issue where undo of cutting tools was no longer available after rescan was matched.
- #95 Fixed issue where system setting
 "Minimum/MaximumScanFileNameLength" had no function.
- #97 Fixed issue where various old files remained in temp folder
- #100 Fixed issue of Software freezes after several measurements in a row
- #135 Fixed an issue where a dot in the file name caused a forced file extension.

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Removed

- #34 Removed setting "Ask for matching on scan data "
- **E** Removed
- #64 Removed relation of Setting "Thinning" to confidence calculation
- #94 Removed "Application is stating" text on start-up splash screen
- #112 Removed Setting "Delete scan data on exit"
- #121 Removed axis calibration in rescan mode

