

## Change log for aural Scan release v3.8.1 – Commit 970ca5d

smart optics is pleased to present a new software update for its scanner software aural Scan. This update is released for the following devices:

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

By updating on version 3.8.1 you will benefit from all corrections and improvements described below.



### 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.



## 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 Rescan and 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



## 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.



- ⊕ #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

- ⊕ #477 Legacy setting "Smooth Shading"

# 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

- ⊕ #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 hide 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 toolbar
- ⊞ #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.



### 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

- ⊞ #251 - Manual object rotation blocked reset of cursor

## 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  $\mu$  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



## 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

- ⊕ #1 - Added support of new duoScan Touch
- ⊕ #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





## 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.



## Removed

- ⊕ #31 - Removed setting "Sound by action "
- ⊕ #34 - Removed setting "Ask for matching on scan data "
- ⊕ #35 - Removed setting "Always do matching on scan data "
- ⊕ #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