zebris Medical GmbH

WINJAW+

Release Notes

Release Notes WINJAW+

describes included functions up to and including version 4.0.8
Illustrations in this user manual may differ.

© zebris Medical GmbH
Am Galgenbühl 14, D-88316 Isny im Allgäu

All rights reserved. Reprints, including excerpts, are only permitted with the express permission of the zebris Medical GmbH permission.
Textrelease R 5
Status: 6/23/2025
www.zebris.de

Manufacturer

zebris Medical GmbH
Am Galgenbühl 14
D-88316 Isny im Allgäu
Germany

Phone +49 (0)7562 9726 - 0
Fax +49 (0)7562 9726 - 50
Email info@zebris.de
Web www.zebris.de

Distribution

zebris Medical GmbH
Am Galgenbühl 14
D-88316 Isny
Germany

Phone +49 (0)7562 9726 - 0
Fax +49 (0)7562 9726 - 50
Email sales@zebris.de
Web www.zebris.de

Support

zebris Medical GmbH
Am Galgenbühl 14
D-88316 Isny
Germany

Phone +49 (0)7562 9726 - 300
Email support@zebris.de
Web https://www.zebris.de/en

Please always quote the serial number of the product when making enquiries!

℞only

CE 2797

Table of content

1 Foreword 4
1.1 Installation 4
1.2 Safety Information 4
1.3 Applicable Documentation 4
1.4 WINJAW+ System Requirements 5
2 WINJAW+ 4.0 6
2.1 New Functions 6
2.2 Optimizations 9
2.3 Bugfixes 10
3 WINJAW+ version history 11
3.1 Patch for WINJAW+ 4.0.8 11
3.2 Patch for WINJAW+ 4.0.6 11
3.3 Patch for WINJAW+ 4.0.4 11
3.4 Patch for WINJAW+ 4.0.2 12

1 Foreword

This document contains the release notes for the respective version of WINJAW+ V4.0.

1.1 Installation

See software instruction manual WINJAW+.

1.2 Safety Information

There are no special safety instructions for this software version. General safety relevant notes can be found in the WINJAW+ user manual.

1.3 Applicable Documentation

#	Description
1	WINJAW+ Software User Manual (EN)
2	JMA Optic Technical Data and User Manual

1.4 WINJAW+ System Requirements

	Minimum requirements	Recommended requirements
CPU	Intel Core i5 / 8th generation or comparable	Intel Core i5 / 11th generation (x64) Intel Core i7 / 11th generation (x64) cf. i7-11800H
RAM	8GB RAM	16GB RAM
Data storage	500 GB SSD technology recommended	1TB SSD
GPU	1 GB available graphics memory (VRAM) OpenGL4.6 support DirectX 9.0c	1 GB available graphics memory (VRAM) OpenGL4.6 support DirectX 9.0c
Graphics card		cf: NVIDIA® GeForce RTX™ 3050Ti cf: NVIDIA® T1200
Display	Full HD (1920x1080pixels)	Full HD (1920x1080pixels)
Connections	1 x USB 2.0	1 x USB 3.1, 1 x USB-C
Operating system	Windows 11	Windows 11 22H2 and higher
PDF viewer	Ex: Adobe Reader DC	Ex.: Adobe Reader DC
WINJAW+ Function and Digital Occlusion	-	O
WINJAW+ Splint Designer, Attachment Designer	-	O
WINJAW+ Basic function Articulator	O	O

If you have any questions regarding the system requirements listed above, please contact your dealer's support department.

2 WINJAW+ 4.0

2.1 New Functions

#	Description
	General
1	The determination of the subnasal point can be adjusted in the program settings in the "Dental" area. You can choose between automatic and manual.
2	From version 4.0, the mesh format text STL is supported
3	Update and expansion of language packages in software and instructions for use.
4	Interface to Medit has been implemented: 1. start the Medit scan from the database and export to WINJAW+ 2. scan from Medit to WINJAW+ import
5	The activation code can be called up in the About dialog and the program settings.
6	The following content can be found under the "License" category in the program settings: - Name of the software package - Version number - Activation code - License (renew/remove)
7	The subnasal point can now also be measured with the pointer of the C-Positioner (black).
8	Optimization of graphics output to be compatible with AMD onboard graphics cards.
9	Presentation remote controls can be connected to the software and can be used to control the measurement. The corresponding settings can be made in the program settings under "Shortcuts".
	Database
10	Patient images can be taken directly with the notebook's camera.
11	Datasets and measurements can be viewed, even if the software license does not include the corresponding measurement module.
	Measure
12	The arrangement of the measurement applications can be customized by the user in measurement mode. The application icons can be moved using drag and drop.
13	A plausibility test for the use of the Alignment Fork has been implemented. The software allows a tolerance of 7.5°.
14	If several movements have been executed within one cycle, these are saved as individual movements when saving.
15	The measurement settings have been revised to increase usability.
	Viewer
16	The settings in the show/hide menu have been adjusted. The tools used for matching, such as Alignment Fork and the intercondylar diagram are not selected by default, but can be displayed.

#	Description
17	Simplification of the playback interface in view mode.
18	The control of the playback function in view mode has been adapted. The control has been reduced to a play button and the playback speed as a drop-down.
19	The EPA circles are supplemented by a colored display both in viewer and report.
20	Data export to Onyxceph and Scheu-Dental has been implemented.
21	A function for switching between different reference planes has been implemented. It is possible to switch between the axis- orbital, camper and patient planes.
22	The movement tracks of the scan markers on the Bitefork are only displayed when the Bitefork is displayed.
	Report
23	The reference plane used for the measurement is listed in the report in the measurement settings.
24	Software versions are displayed in the measurement properties in the report. Both the version with which the measurement was performed and the version with which the report was created are listed in the report.
	Module Functions
25	Jaw Relation: New configured measurement profile for digital registration with gothic arch, without navigated registration has been added.
26	Jaw Relation: The density matrix for the motion traces is visualized both in view mode and in the report of a measurement.
27	Articulator: Report profile "EPA" has been added.
	Function and Digital Occlusion
28	The lower jaw positions and movements have been merged in the measurement settings. In the module Function and Digital Occlusion module, the "Dynamic mode" function in the measurement settings can be used to customize the sequence of the measurement procedure.
29	Measurement settings: Terminal and kinematic axis determination is only available in the measurement settings if they have been activated in the program settings.
30	The matching method is no longer selected in the measurement settings, but in the measurement sequence. An additional step has been added to the measurement process for this purpose.
31	Matching the scan data using Alignment Fork involves two separate matching steps. In the first step, the pointer is defined; in the second, the Alignment Fork is aligned in the posterior region.
32	Bite Optimizer: A tool for correcting artifacts in scan data has been implemented. Imported models are first merged in the software based on the vestibular scan. With the "Adjust model position" tool in the import workflow, the lower jaw position can be adjusted manually. The "Auto arrange gaps" function can be used to resolve overlapping and close open bite situations.
33	The pointer position of the Alignment Fork can be moved anywhere in the room during the matching process.

#	Description
34	In the import process with a Bitefork the initial orientation of the models has been changed from bottom view to front view.
35	The import options have been expanded. In the import function in view mode, 2D photos, 3D facescans and tooth scans can be inserted or exchanged.
36	The following reference points can also be used for matching 3D facescans: - Subnasal point - Porion right or left
37	2D images and 3D facescans can be deleted in the show/hide menu.
38	In view mode, additional models can be imported in addition to existing models.
39	In the "Tracks" view mode, the distances are also displayed in the respective condylar representations.
40	The following articulators can be displayed virtually in view mode: - Amann Girrbach Artex - Ivoclar Stratos - KaVo Protar - SAM S3 - Panadent
41	The functions of the occlusal analysis in view mode are summarized in a drop-down menu. Various representations of the occlusal contacts and the section cuts can be selected here.
42	Protrusion and retrusion movements as well as opening and closing movements can be used to define manual therapeutic positions.
43	The export of measurements in the module Function and Digital Occlusion module to Onyxeph and Scheu Dental is only possible if models have been loaded during the measurement.
	Splint Designer
44	A new tool for creating splints has been implemented in the Function and Digital Occlusion module. The tool can be started from the view mode of a measurement in the Function and Digital Occlusion module. You can choose between two types of splints: - Repositioning splint: Free choice of positioning of the lower jaw - CTS comfort therapy splint: Positioning of the lower jaw based on real opening movements Detailed descriptions of the design process can be found in the WINJAW+ software instructions for use.
	Attachment Designer
45	The module Attachment Designer module enables the design of an individual attachment for attaching the mandibular sensor to the patient's lower jaw. For this purpose, the patient's scanned jaws are imported into the software. The user can then design an attachment based on the imported models. Further information on the procedure and operation of the module can be found in the "Attachment designer" chapter of the WINJAW+ software instructions for use.

2.2 Optimizations

#	Description
	General
1	Graphics performance optimized to reduce flickering when changing the window size.
2	The software can only be reopened 5 seconds after closing. This time is necessary to ensure that all processes from the previous use have been completed.
3	The display of texts in the software has been adjusted.
4	General: Database: Optimization of loading times in the database screen
5	When determining the hinge axis, the range of the movement track used was increased from 1° to 3°.
6	To avoid data loss, a measurement can only be started if the battery status of the measuring system is at least 15 %.
7	In the module Jaw Relation module, the pin positions and values for setting the Amann Girrbach Artex articulator are listed in the report.
	Module Function and Digital Occlusion
8	The accuracy of the output surface data is adapted to the quality of the imported surface data.
9	Matching using Alignment Fork has been optimized.
10	If a measurement is performed with Bitefork only the axis orbital plane (FH) is selected in the Jaw Motion Export.
11	The distance measurement tool in the view mode of the module Function and Digital Occlusion has been extended from two decimal places to three.
12	Manual therapeutic position: Minimum of the slider has been set to -5°.
13	In the "Tracks" view mode, the condylar view has been changed from frontal to top to avoid misinterpretation.
14	User interface of the 2D image import has been optimized.
15	Error messages for missing patient ID of the .dentalproject export have been adjusted.
16	The export menu around module Function and Digital Occlusion has been optimized.

2.3 Bugfixes

#	Description
1	The measurement sequence can be shown and hidden in measurement mode.
2	In the module Jaw Relation module, the Jaw Motion export is only possible if the measurement was carried out with a Bitefork was carried out.
3	The condyle position is displayed with a cross. The schema of the export file to SICAT suite corresponds to the requirements of SICAT.
4	The problem with the display of the condylar position when setting a manual therapeutic position has been fixed.
5	Function and Digital Occlusion: *.dentalProject export: Error in model placement has been fixed (plane correction was also used for model placement).
6	Problems with the formatting of the report in the Function and Digital Occlusion module have been fixed.

3 WINJAW+ version history

3.1 Patch for WINJAW+ 4.0.8

#	Description
Bugfixes	
1	General: Updated the vc_redist.x64.exe delivered with the installer as incompatibility messages occurred on some customer computers.
2	Function and Digital Occlusion: When placing individual markers on the row of teeth, the selected color for the marker and the corresponding movement track were not adopted.
3	General: The medit link interface has been revised because under certain circumstances the interface was not recognized in the medit scan for clinic software.
4	Function and Digital Occlusion *.dentalProject export fixed when additional scans are loaded.
Optimizations	
1	Attachment Designer: By switching from double-click selection to single-click off, the user guidance has been standardized
2	General: Minor optimizations in translations

3.2 Patch for WINJAW+ 4.0.6

#	Description
Bugfixes	
1	Function and Digital Occlusion: Splintmanager: Fix bug in splint visulization
Optimizations	

3.3 Patch for WINJAW+ 4.0.4

#	Description
Bugfixes	
1	Function and Digital Occlusion: export models: add insertion direction to *.constructionInfo File
2	Function and Digital Occlusion: process face morphing only when single mesh is available. Software crashes when mesh contains several components
3	SICAT JMT: Error in the measurement sequence has been fixed.
4	
Optimizations	

#	Description
1	When opening a record with splint the viewer, the splint was positioned at a wrong place.
2	When creating a splint for the upper jaw, the upper jaw must be hidden by default, because it interferes with the retention view.
3	Performing a measurement, between steps an out-of-order view pops up for half a second.

3.4 Patch for WINJAW+ 4.0.2

#	Description
Bugfixes	
1	General: fix mesh loading error: new data type variant of PLY implemented
2	Attachment Designer: Fixed problem with model creation when model has hidden discontinuities
3	Splint Designer: Problems fixed with space substraction from final splint.
4	Driver: Error in connection and pairing to wireless link adapter fixed.
Optimizations	
1	General**:** additional language added: ukrainian