

Software release notes



Version: 2.08c

Released: 27th Feb 2023

Download link (standard): [\[link\]](#)

Download link (dental): N/A

STANDARD

- Manual alignment now possible in the alignment tool (allows alignment by mouse dragging if the auto alignment fails).
- Improved absolute accuracy (see report).
- Mesh density default low.
- Bug fix:
 - save mesh density settings (would not save).
 - fix crash if near 0 scan data points were captured during Add View.

V2.08b

Bug fix

- Now applies scale correction to raw PC files too.

V2.08c

- More reliable fine alignment algorithm, allows merging of models with less artefacts.

Version: 2.07 beta

Released: 5th October 2022

Download link (standard): [\[link\]](#)

Download link (dental): N/A

STANDARD

- New semi-automatic alignment tool for symmetrical objects like rings.
- Slightly improved edge noise removal options.
- New scan angles - "dense and low" etc. which do upshots to capture the underside of the object.
- UI improvements:
 - Can maximise graphics windows to see the scans full screen.
 - Higher resolution scan data preview.
 - Camera preview image full screen, and flicker stopped.

v2.07b

- Bug fixes

- RAW point clouds cleaned before saving - now you can merge them and generate useful meshes.

- Merge can now handle STL files.

v2.07c

- Option to merge scans without hole filling.
- UI Bug fixes.

V2.07d

- Bug fix: Post processing error issues reduced/ removed. Could happen when processing very high resolution meshes.
- Firmware update can now handle larger updates.

Version: 2.06

Released: 18th August 2022

Download link (standard): [\[link\]](#)

Download link (dental): [\[link\]](#)

STANDARD

- New stitching algorithm, optimised for picking up finer details - much better for jewellery and models.
- Can now save RAW point clouds, and crop/ align/ merge them.
- Bug fix - merge now works on STL and OBJ

DENTAL ONLY

- Hole filling can be turned off - helpful for cast scans that will be merged with dies later.
- Faster cropping
- Language support.
- Supports the latest MK2 scanners.

Version: 2.05

Released: 24th June 2022

Download link (standard): [\[link\]](#)

Notes:

- Bug fix - auto post process would use default settings not actual settings.
- Supports the latest MK2 scanners.

Version: 2.04

Released: 17th May 2022

Download link (standard): [\[link\]](#)

Download link (dental): [coming soon]

Notes:

- New toolkits added for easy scan tuning, and 360 degree object scanning.
 - The editing toolkit includes; cropping, make watertight, hole filling, smoothing, floating noise removal, compression, automatic alignment, and scan merging.
- Can now scan larger objects - medium-large super resolution scan added, and extra large scan volume increased.
- Can reduce turntable speed (if FW 4.05+), to scan delicate objects more gently. Firmware update code now available later in this document.
- Support for new projector hardware added
- Bug fixes:
 - Overwrite filename (could ask to overwrite, even if file didn't exist).
 - Firmware updates, (can now download larger updates, and get updates from within China)
 - Occasional strip artefacts in some machines fixed
 - Can install scanner drivers without admin permission.
 - bug fixes in the viewer.

Version: 2.03

Released: 23rd Feb 2022

Download link (standard): [\[link\]](#)

Download link (dental): [\[link\]](#)

Notes:

- Installation size reduced by 15%.
- Calibration is about 25% faster, and is more reliable with our latest batch of calibration plates.
- Bug fixes:
 - Special characters:
 - If your patient name has éáíóú etc, export will now work.
 - If your windows user name has special characters, you may change the export/database directories to a location without special characters - allowing the software to run smoothly.
 - Edge Noise Removal (for impressions), Dental UI now displays modified settings correctly.

Version: 2.02

Released: 4th Feb 2022

Download link (standard): [\[link\]](#)

Download link (dental): [\[link\]](#)

Higher quality scans:

- Faster and more accurate stitching of the different scan angles, so you get less "blips" in the mesh, and processing time is reduced.
- New user adjustable edge noise filtering - allows you to trade off between reducing mesh blips and capturing more data. Now a wider range of objects can be scanned well.

More scan angle presets were added, including one for coin scanning.

Additionally in the Dental Software:

- Better cast scanning - less noise near sharp edges.
- Bug fix: automatic ground removal is now more reliable, and automatic die holder cropping issues fixed.
- Cropping functions now allow keep selection, or remove selection.

Version: 2.01

Released: Nov 2021

Download link (standard): [\[link\]](#)

Download link (dental): [\[link\]](#)

The first release.

Firmware release notes

Version: 4.05

Released: 17th May 2022

Notes:

- Can choose turntable speed from PC.
- For our benefit:
 - Extra factory debug options added.
 - Support more internal hardware variations.

Version: 4.04

Released: 4th Jan 2022

Auto exposure bug fixed (it would overexpose on dark objects).

How to install new software or firmware

Software (that runs on your PC)

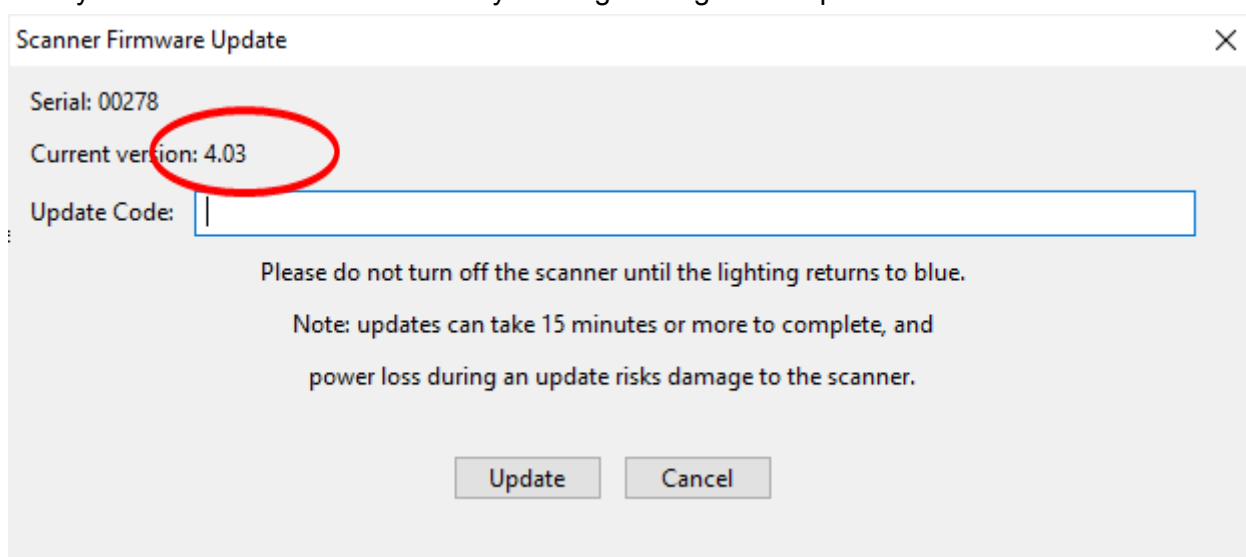
Download and run the installation file using the links in this document.

Notes:

- The links will make a fresh install or update an existing version.
- Your scan data will not be overwritten.
- Owners of the Tupel3D “standard” scanner should use the standard software link.
- Owners of the Tupel3D Dental Scanner can use either the standard software or the dental software. Both can be installed at the same time.

Firmware

1. Run the Tupel3D software on your PC.
2. Find you scanner’s version number by clicking Settings then Update:



Scanner Firmware Update

Serial: 00278

Current version: 4.03

Update Code:

Please do not turn off the scanner until the lighting returns to blue.

Note: updates can take 15 minutes or more to complete, and power loss during an update risks damage to the scanner.

3. Select and enter the appropriate update code from the table below:

Your current firmware version	New firmware version	Update code
4.04	4.05	1r9PFYkzACAyhaH5A-3aEXAujX6vtBsGF
4.02	4.04	1082jq4LfVXNmN9uEu9TM2k8dUir-g4U9

Please use the correct update code for your scanner else you may require a support call to fix it. If your version is not listed feel free to contact us.

4. After starting the update the projection light will change colour, and when it is finished the blue light will return. Please do not turn off the scanner during an update.
5. Your scanner is now ready for use.

Feel free to contact us for guidance.