XSCAN HD

User Manual

CONTENTS

01 /Basic information

1.1 Application

A high-precision scanner independently developed and produced has been changed into a high speed scanner, which is suitable for scanning various restorations, helping the laboratories enter the digital age.

1.2 Configuration

For better using experience, the configuration requirement below needs to be fulfilled.

Operating system	Windows10, 64-bit Professional Edition
RAM	16GB (32GB for better experience)
Graphics card	NVIDIA GeForce1060 and above
CPU	Intel Core i7-10700 and above
Hard disk	Refer to dual disks: SSD 512G+1TB mechanical hard disk drive (7200 RPM)
USB interface	3.0 (at least two)

1.3 Accessories

Accessory	Unit	Photo	Applicable model
USB cable	1		All models
Power cable	1		All models
Blu-tack	1		All models
Block	1		UP400
Calibration plate	1		All models
Model fixing plate	1	Screw retained plate	All models
	2	Model plate	All models

Accessory	Unit	Photo	Applicable model
Multi-dies plate	1	9-hole dies plate	UP400
Impression jig	1		UP400
Dongle	1		All models
Manual	1		All models

1.4 Hardware installation

1.4.1 Connect the scanner

a. Connect the USB cable to the USB 3.0 port on the back of the computer

b. Power on the scanner

c. Insert dongle into the computer USB port
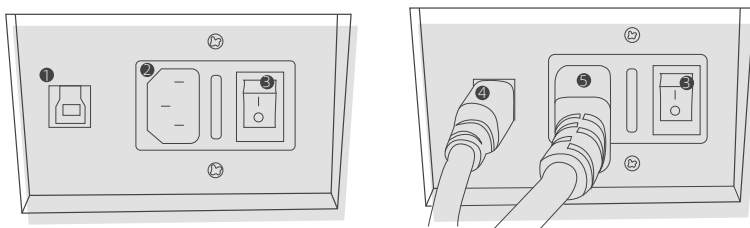
❶ USB interface   ❷ Power interface   ❸ Power switch

❹ USB cable   ❺ Power cable

1.4.2 Software Installation

A.Confirm the software installation files below:

Installation file 1: UP3D DentalStation[version number].exe

Including components like Orders manager(DentalStation), design restorations(CAD), model viewer(Viewer), dongle manager(DongleManager)

Installation file 2: UP3D Scanner[version number].exe Including UPSCAN

B.double click to install the software, it will pop up the language selection dialog box, select the corresponding language to install.

UP3D DentalStation supports multiple languages: Chinese, English, Russian, Korean, Italian, Bulgarian, Turkish, etc, the users can select by themselves

C.Click Ok button to enter the installation guide

D.Click Next to select the installation directory, the software is installed under C:\UP3D by default, please make sure there is enough space to install the software

E.Click Next and select the components needed to install, all components will be selected by default

F.Click Next and add the shortcut

G.Click Next and create the desktop icon

H.Click Install to begin the installation

I.Installation is complete

J.Double click the installation file to enter the UPScanner installation guide, select the installation directory

K.Click Ok and select the language

L.Click Next and select the components to install

M.Click Next and add the shortcut

N.Click Next and create the desktop icon

O.Click Install to begin the installation

P.The desktop will create the shortcut of UP3D DentalStation and related software

1.5 Notes

Confirm if the hardware configuration meets the following requirements:

A. Independent graphics card is needed

B. Sufficient USB interface

B. Recommended to use a brand computer, try not to use an assembled computer

D. Please be noted that the scanner must be grounded

The software installation steps will be different according to different hardware versions.

02/**UPDentalStation**

UPDentalStation, mainly provides the new order creating and management, order query and other functions

2.1 Main interface
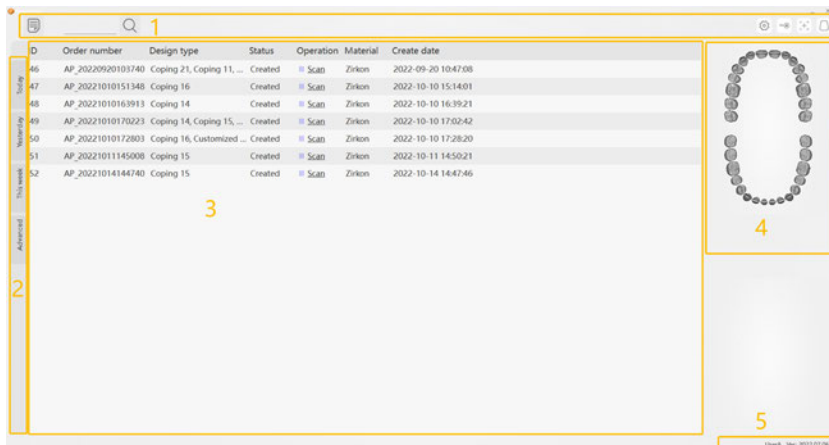
The main interface consists of the following parts

1.Menu bar	2.Order query	3.Order list
4.Design information	5.Prompt bar	

A.The menu bar includes the following functions

New order button: Build the new order.

Fuzzy search: Used to search for orders containing the specified text information in order number, name, and memo.

System setting: set the parameters of UPDentalStation, CAD/SCAN etc.

Dongle management: check and update the dongle license.

Calibrate the scanner: start the calibration.

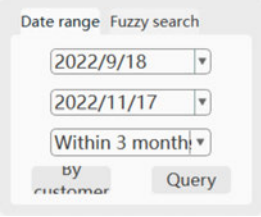Virtual articulator calibration: start the scanner virtual articulator calibration function

B.Order query

Search the orders from yesterday or this week

Advanced Search: search by date range or by customer

C.Order list

Display the queried order list. The basic information of every order could be checked here directly, such as: ID number, name, date, design type, status etc.

Operation：

Single click： click on the order management list to display the tooth number and design type of current order, also could view the model in real time at the information area (right bottom corner)

Right click： select the order and right click or right click at the blank area, pops up the menu.
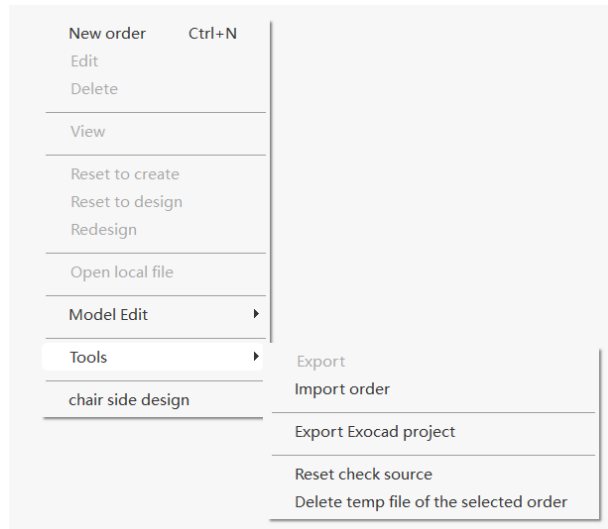
D.Design information

Tooth diagram： display the tooth number or design type of current order on the tooth diagram

Model viewer: preview the scaned model and design model of current order

E.Prompt

Dongle license information: display the dongle license information, click to start the dongle management

User: display the current user information, click to start the user management

2.2 Order Management

A. 3 ways to create a new order

Click Create icon

Right click and select Create a new order

Keyboard shortcut: Ctrl+ N

B. Edit orders: modify order information.

When editing an order, please pay attention to the following:

1.Do not modify model source

2. After saving modification, it will be prompted re-scan or import order?

The key information includes: add or delete tooth, modify design type, teeth design parameters, scan settings

C. View the order: check the details of the order.

D. Delete order.

Delete the specified order from the order library. When deleting the order, it will pop up [Delete completely or Keep the data?].

Delete completely: completely remove the order from the order library and delete the model file stored on the disk

Keep the data: orders are only deleted from the order library, but the model files on the disk are still kept

E. Reset order: change order status

Reset to design: the order that have been designed or milled will revert to the state when the scan was completed to redesign the order

Reset to create: an order that has been scanned, designed, or milled will revert to the state when the creation was completed, and rescanned

F. Open local file

open the directory where the order is located, the folder contains scanned data and design data

G. Order import and export

Export order: export order information and order model file to uorder2 file in the order library. You can back up any orders you want.
Uoder2 file can be imported into UPDentalStation by Import order function.
Import order : import uorder2 order into UPDentalStation
export exocad project: UP3D order can be exported to exocad project files so you can import to exocad for design easily

H. Reset the checkout source

as long as the data source computer user name is changed when the order is checked out, in order to avoid the data source computer name does not match the computer IP, so it needs to be reset the checkout source. But resetting the checkout source is only for the current order.

I. Delete selected order temporary data

delete the temporary scanned data

J. Order Search

Fuzzy search: in the search box of the menu bar, input directly content that you want to search and click Enter. The search range can be selected from the fuzzy search options in the advanced menu of the search area, including the order number, memo, and name.

Quick search: click Yesterday or This week icons. All orders for yesterday or this week are displayed in the order list.

Advanced search:

According to date: after selecting the date range, click [Search] icon, all orders during the date range will be displayed in the order list.

According to precise time: if you select Today in the drop down list, click [Search] icon, all orders for today are displayed in the order list.
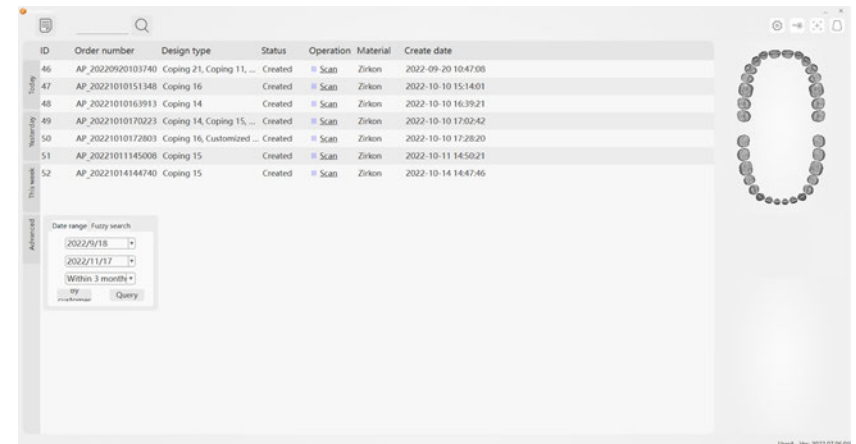
According to status: mouse moving over the status column title bar of the order, select [Unscanned], [Scanned] or [Designed] in the pop-up window to display all orders currently selected.
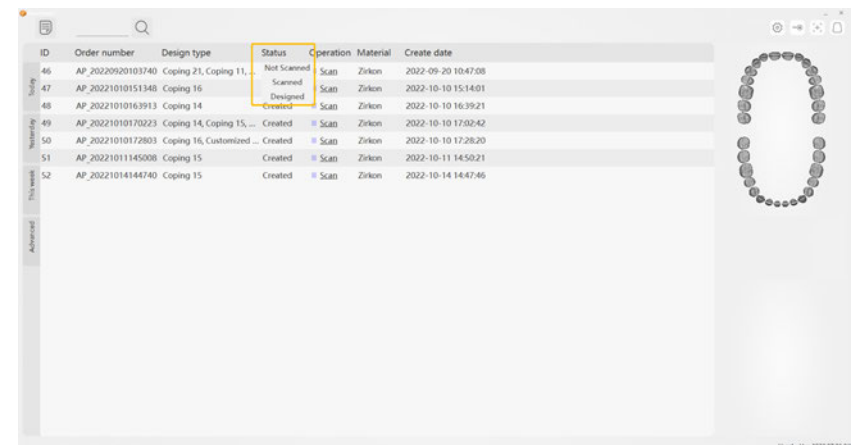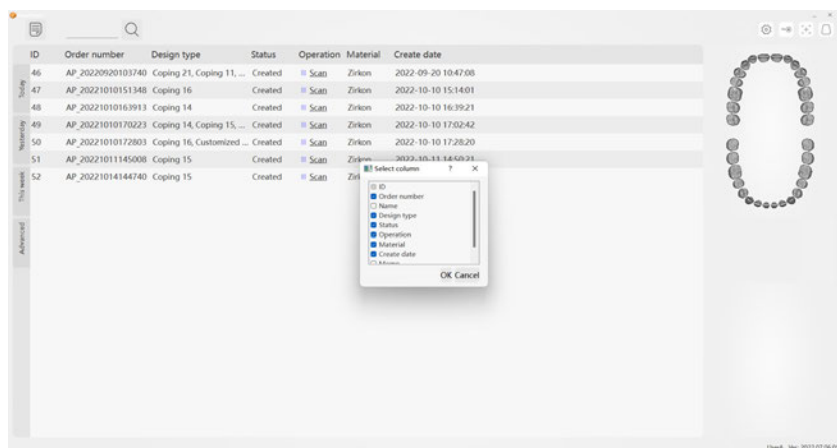
K.Enter Scan and Design

Double click [Scan] or [Design] icon, it will start to scan or design according to current status.

L.Other functions

Calibrate scanner: click [Calibrate] icon, it will enter calibration interface.

Select column function: right click at the title bar of the order list, select column in the pop-up window, select [Hide] or [Show] column.


Sharing and checkout function

Applicable scenario: for computer A, it is only responsible for scanning orders. (ie,the scanned model files are in the computer A's disk), the other computers B, C and D are just responsible for designing orders.

The order server IP of computer B,C and D are set as IP of computer A by 'CAD Configuration' .

When opening UPDentalManager in the Computer B, C and D, it will display all created orders by computer A. Double click the order, it will download model files automatically from computer A to current computer for designing.

2.3 UPDentalStation configuration

2.3. 1 General setting
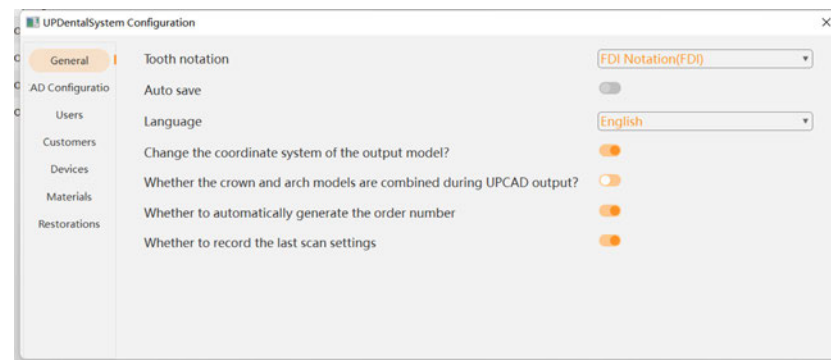
(1) Tooth notation: the default is the FDI Notation and it can be changed.

(2) Save orders automatically: when you are designing, the order design files will be saved automatically.

(3) Language: the default language when installed.

(4) Whether to transform the coordinate axis system of the output model: whether the coordinate system is transformed when the UPCAD completes the output model

2.3.2 UPCAD configuration
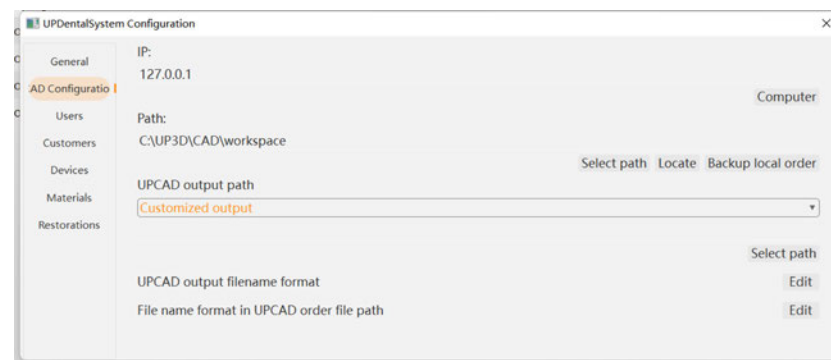
A.Order server IP address: when using orders in this computer, click current computer. If you need sharing orders function, please input a IP address of computer that providing orders (IPv4).

Reference: Checkout function.

B.Orders storage path: the folder location of the scanned and designed model.

C.UPCAD output path: the folder location of designed model.

Default output order: outputs in <orders storage path:\OutputFile>.

Custom output: the output location of designed model is defined by the user.

D.UPCAD output filename format: the file name used to personalize the output model. You can type the file name directly, or double click in the list to select the information contained in the output file name.

Note: when modifying, please make sure that the folder name does not conflict with the same name

E.UPCAD order path filename format: folder names used to personalize the storage order

Note: when you are modifying, please make sure that the folder name does not conflict with the same name.
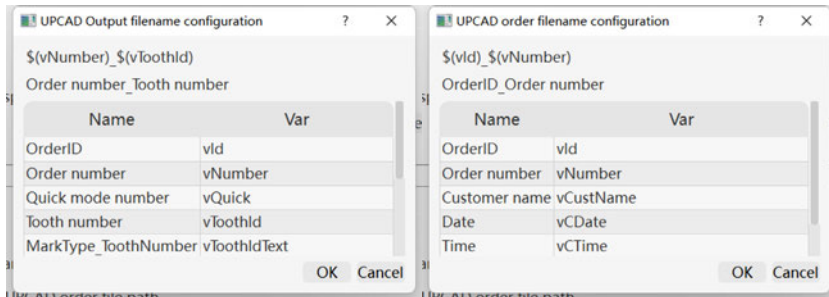
2.3.3 Manage Users

DentalStation can be used by one technician,and also can be used by other technicians at the same time. For this point, different customers can be assigned to each technician.

Multi-user functions are generally used for scanning on one computer and designing on other multiple computers (refer to order checkout function).

In Manage Users, you can create new, edit, and delete users as needed.
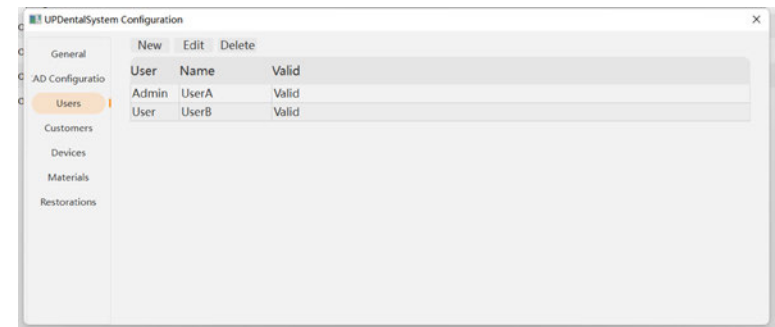
2.3.4 Manage customers

When creating an order, one customer needs to be chosen. Customer types are divided into dental hospital, dental clinic and dental laboratory.

You can add, edit, delete or search for customers in Manage customers.

When choosing one customer, right click and set as default customer, so you don't need to choose customer when creating an order.

The customer name can be used to search the order when searching the order.
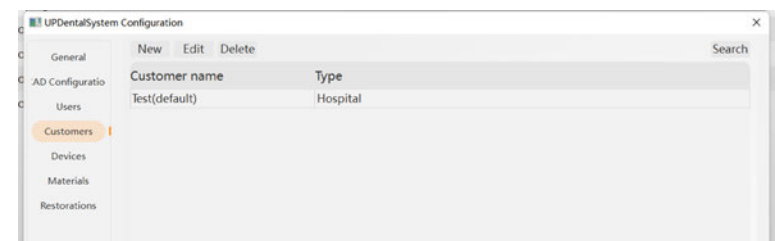
2.3.5 Manage devices

It is used for the parameters setting for the drill compensation of the crowns.

You can add, edit and delete the devices in Manage devices.

When choosing one device, right click and choose default parameters.
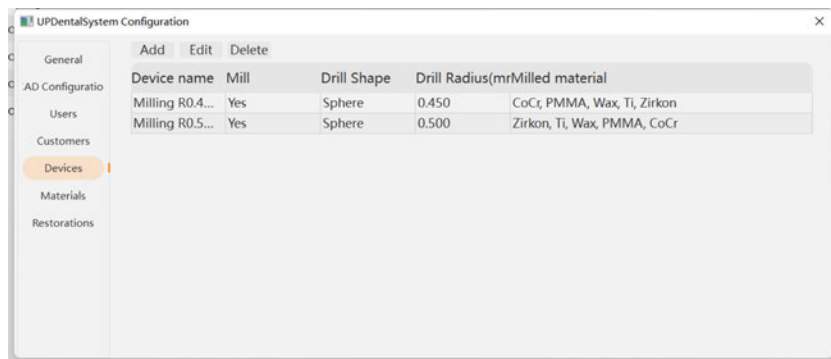
2.3.6 Manage materials

When choose one material for the design type, the software will obtain the default design parameters of the material automatically in crown or bridge generation step.

You can add, edit and delete the materials in Manage materials.

When choosing one material, right click and set the default material.
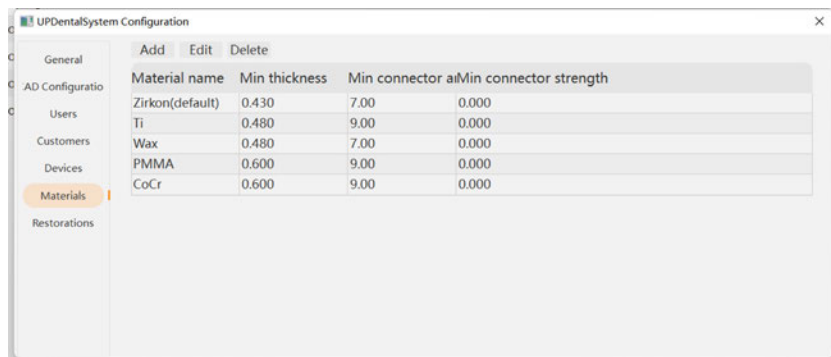
2.3.7 Manage restorations

Different restorations will use different design parameters of cement gap setting for different materials.

You can add, edit or delete the parameters in Manage restorations.

The default parameter can be set in each parameter style of material.
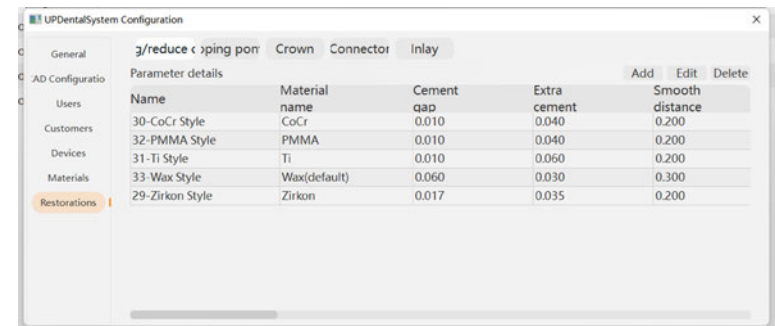
2.4 Create new order

You can create a new order in UP3D DentalStation interface for scanning and designing.

2.4. 1 User interface
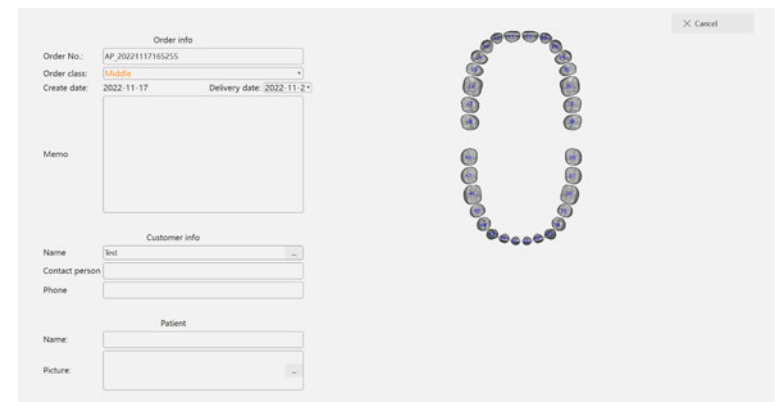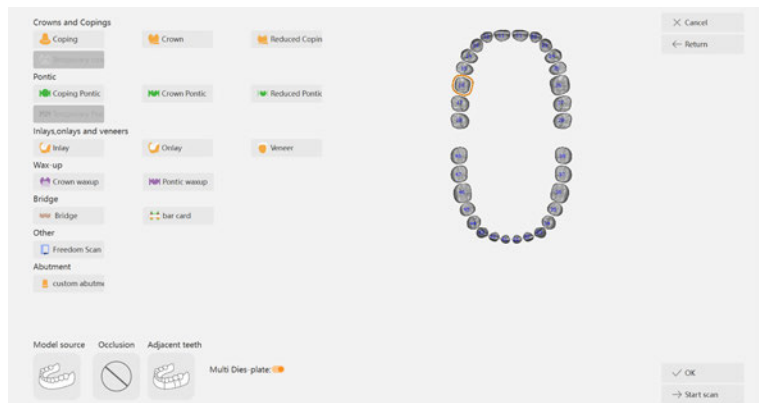
Components:

1. Orders detail area   2. Teeth diagram area   3. Restoration type area

4. Restoration list area   5. Design parameter and scanning setup area

6. Data source area   7. Menu bar area

1. Orders detail area

A. The order number will be generated automatically or filled by the user.

B. Customer information: choose the customer existed or create new customer information. (Required field)

C. Patient information: enter or choose the patient information. (Optional field)

2. Teeth diagram area

A. Single click the specified tooth number on teeth diagram, the order information area will switch to restoration type area.

The tooth number selected will be displayed with orange color circle.

Hold and drag the left button to select multiple teeth numbers with the rectangular frame.
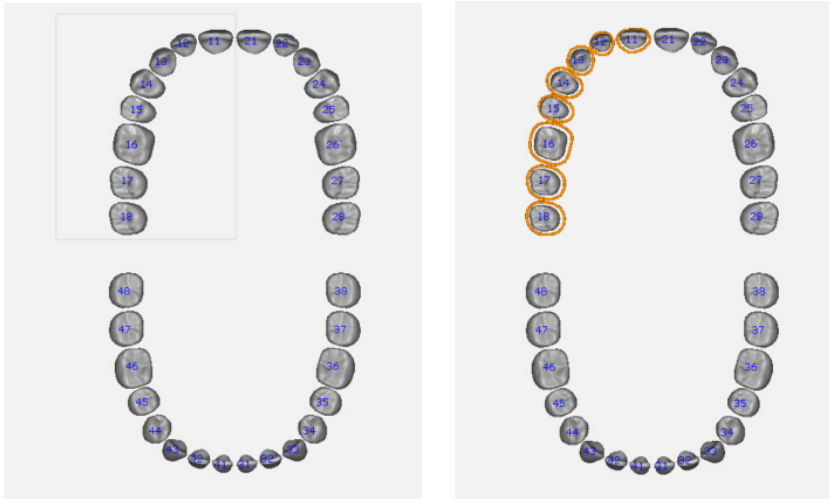
Define the restoration type, there will be different colors for different restoration type on the teeth diagram.

Note: there will be a white point on the yellow circle of the selected tooth.
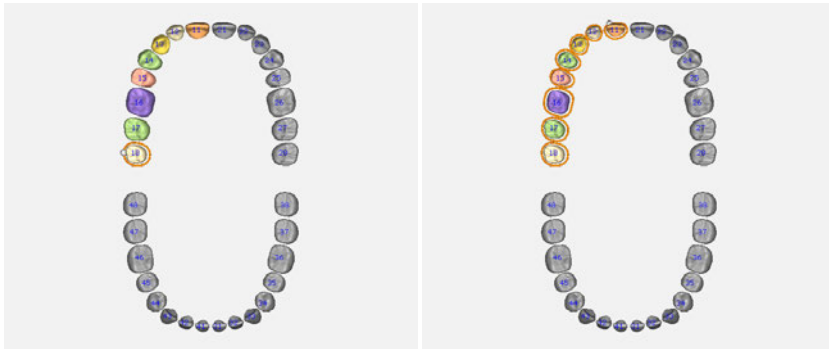
3. Restoration type area

Restoration type area simply groups the restoration type into coping, crown, reduced crown, temporary crown, coping pontic, crown pontic, reduced pontic, temporary pontic, inlay/onlay, veneer, wax-up crown, wax-up reduced crown, wax-up pontic and template.

Single click the relevant design type button to define the restoration type of the tooth number, the restoration list area will display the teeth which has already chosen the restoration type.

4. Restoration list area

On the tree chart all the restoration teeth can be seen, single click the teeth number on the area, the relevant teeth on the teeth diagram will be shown in real time.
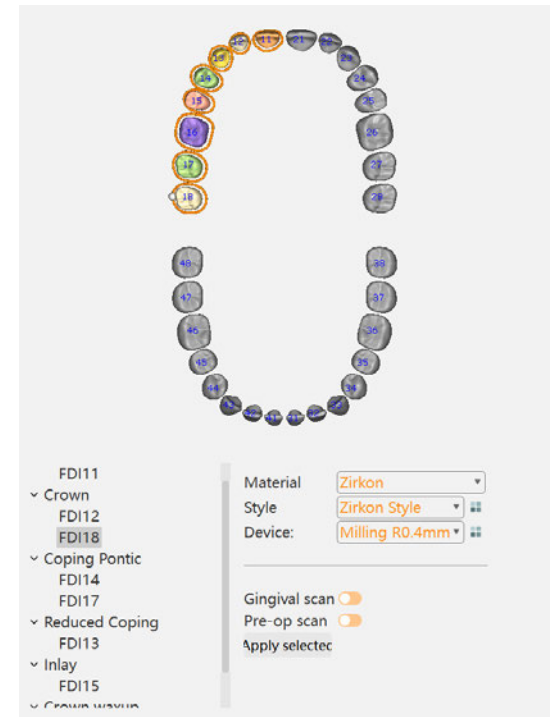
5. Design parameters and scanning setup

Materials, parameters style and devices can be switched according to different requirement.

1) Apply all button is only used for coping

2) Rapid prototype parameter is for lingual band of coping

Scanning setup includes: implant type and scanning relevant setup, which can be chosen according to the requirement of the order.
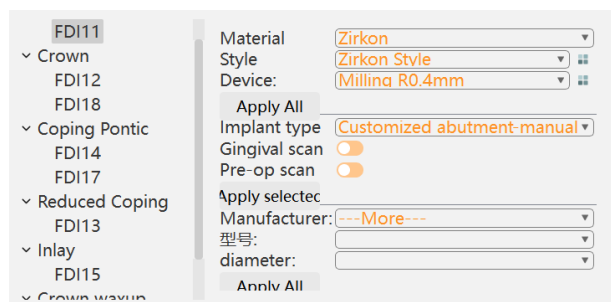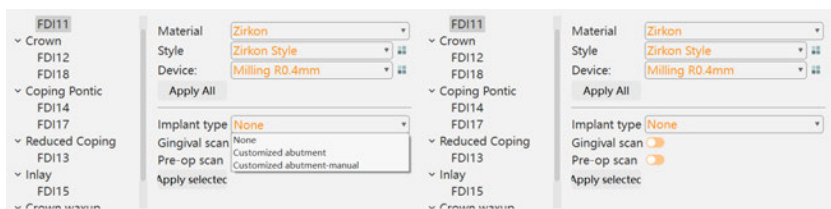
6. Data source area

A.Data source

- Stone model

- Impression

- Import existed model file
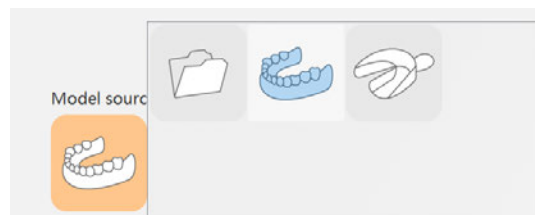
B.Occlusion: the occlusion relationship of the stone model, including:

-Without occlusion

-Antagonist

-Wax-bite

-Articulator

-Quadrant model
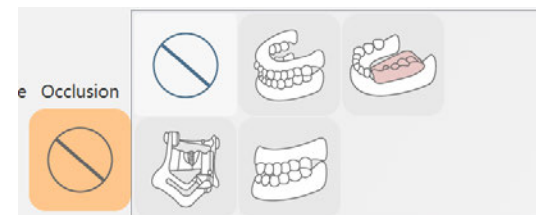
C.Adjacent teeth scanning: the adjacent teeth situation about the dies, including:

-Only multi-dies

-Segmented model

-Unsegmented model
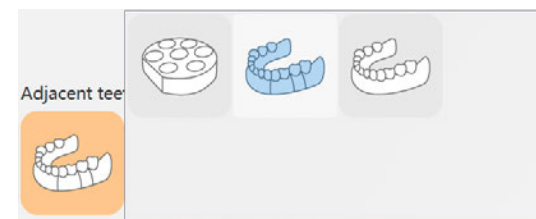
D. Multi-dies plate

There two kinds of scanning method of multi-dies when the adjacent teeth is segmented model:

· Use the multi-dies plate to scan the dies

· Do not use the multi-dies plate, remove the adjacent teeth except the restoration teeth on the fixation plate to scan the dies.
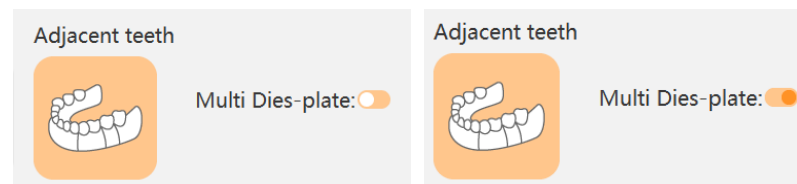
E. Import file: the scanning data is from other devices or local file on computer.

7. Menu bar area

Cancel: cancel to create new order and return to the orders management interface

Return: return to the order detail interface

Ok: confirm the order and enter orders management interface

When the model source is file, you need to follow the instructions to import the file. (The tips are according to the restoration type and occlusion)

Start scanning: click this button to start the scanning and enter the scanning interface when the model source is stone model or impression.

Start designing: when the model source is file, it will ask you to import the model file, after importation, the design will be started and it will enter CAD interface.

2.4.2 Create new order in UPCAD

A.Choose [New order] to create a new order for scanning or designing.
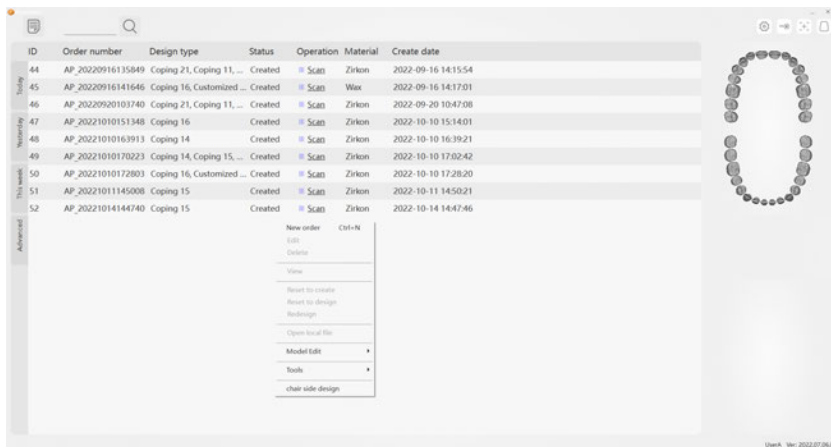
B.Enter order information

Fill in the necessary order information according to the order requirement.

C. Define restoration type

Define:

Select the tooth on teeth diagram, the restoration type interface will pop up, click the relevant button to confirm the restoration type.

When the restoration type is bridge, at least two teeth need to be chosen, then click bridge button.

Delete:

Select the tooth needs to be deleted, right click and it will pop up the button to delete the design type, single click to confirm.
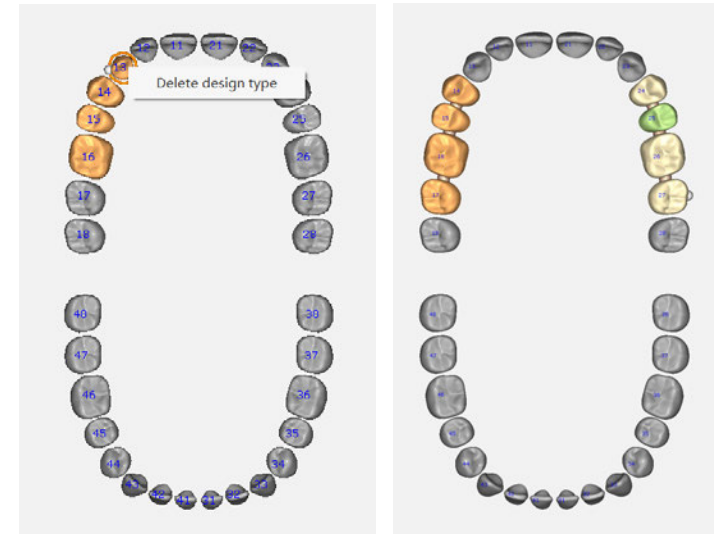
Only needs to select the tooth and re-select the restoration type on teeth diagram.

After defining the bridge, it must be connected with other restoration type (such as crown). Select the teeth to be connected and select the bridge type.

When the restoration type is template, other restoration types can not be in the same order, and no needs to setup any parameters.

D. Scanning setup

-Model source: choose the model source, occlusion and adjacent teeth scan according to the order requirement.
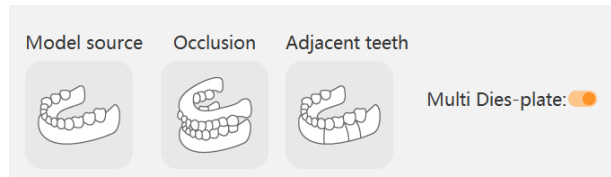
-Implant type: choose the implant parameters according to the order requirement. For example, implant type is customized abutment, shared scanbody, Gingival scan is none, Pre-op scan is enabled.

E. Design setup

Setup the design parameters according to the order requirement.

F.Save the order

2.5 Dongle management

Please be sure that the dongle is connected to the USB port of your computer correctly before starting UPSCAN/UPCAD/UPCAM software, it will automatically detect whether the software has connected the dongle and verify that the authorization module and permissions when it starts. The software will not open if it has not been connected or the permissions are incorrect.

You can open the UP3D Dongle Manager by clicking the dongle button in the menu of the order management or by clicking the dongle information in the information bar.
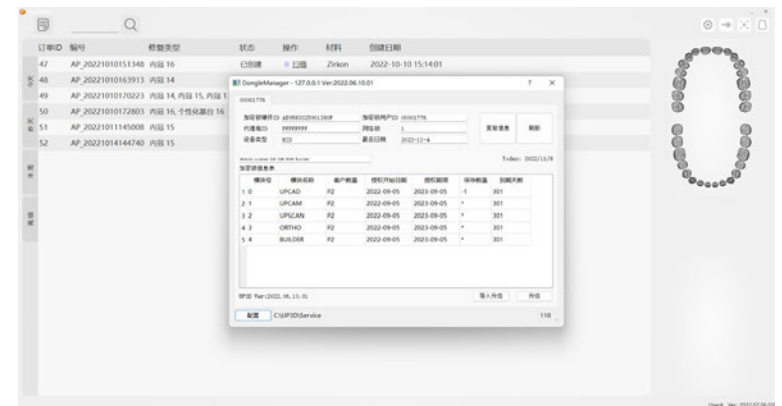
Dongle Manager provides the following features:

1. Check the dongle information (Hardware ID, User ID, etc.)

2. Check product authorization information (authorization module, authorization period, etc.)

3. Update dongle online or locally

03 / Calibration

Calibration will affect the accuracy and it is generally required in the following situations:

·The first use of scanner or use again after long period of time

·When the scanner is used again after transportation

·When there is rough surface or abnormal data quality in the scanning process

To calibrate the scanner, you need to start it from UPDentalStation, click Calibrate icon to enter the calibration operation interface.
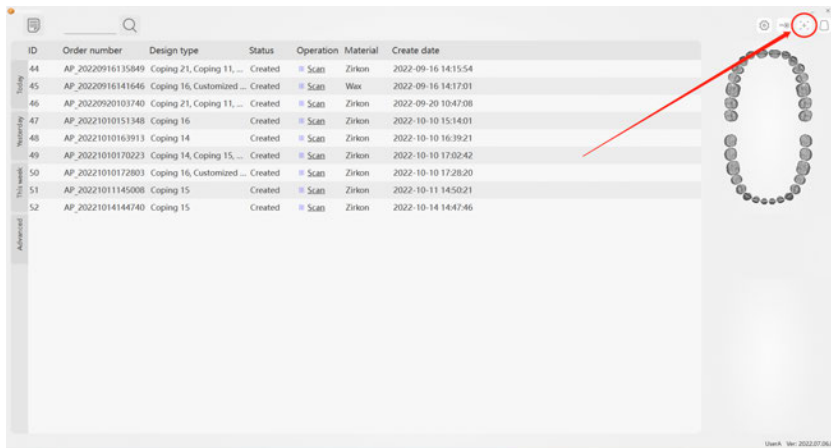
There are two modes of calibration interface: user version and professional version, only the authorized distributors by UP3D or certified technical support can use the professional version to calibrate the scanner.

3.1 User version

To calibrate the scanner, it will enter the user version operation interface by default, which is mainly used by end users.

Only the automatic calibration option is reserved in this interface, the interface is simple and the operation is convenient.

After entering the calibration page, click the [Auto calibration] button to start the automatic calibration.
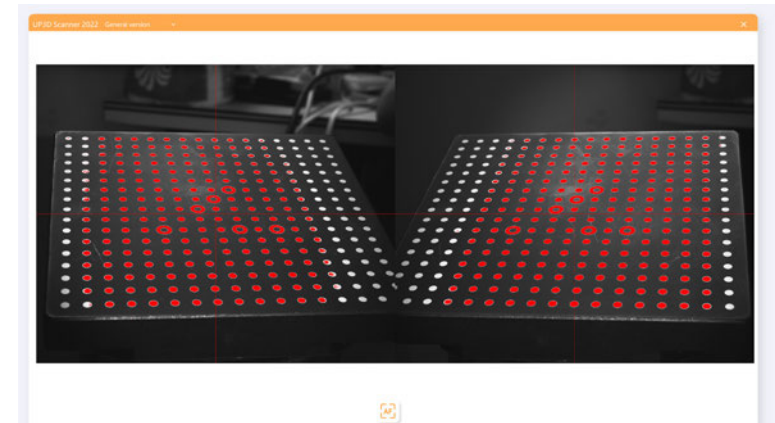
During the calibration process, it will display the calibration plate acquisition result and calibration progress in real time.

If needs to cancel the calibration, you can click the [Cancel] button to stop the calibration.
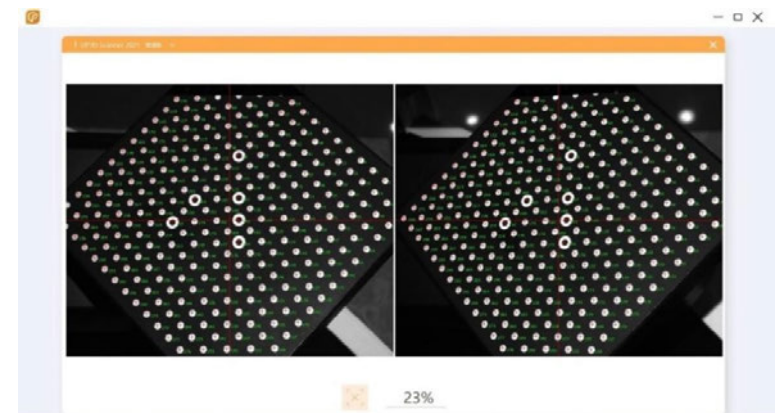
	Start automatic calibration
	Cancel automatic calibration

After the calibration image acquisition is completed, a calibration prompt is displayed.
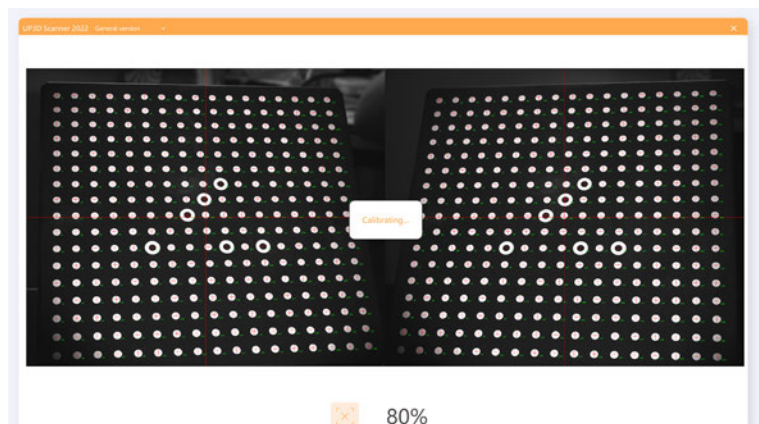
Click Ok to quit the calibration interface after the calibration is complete.
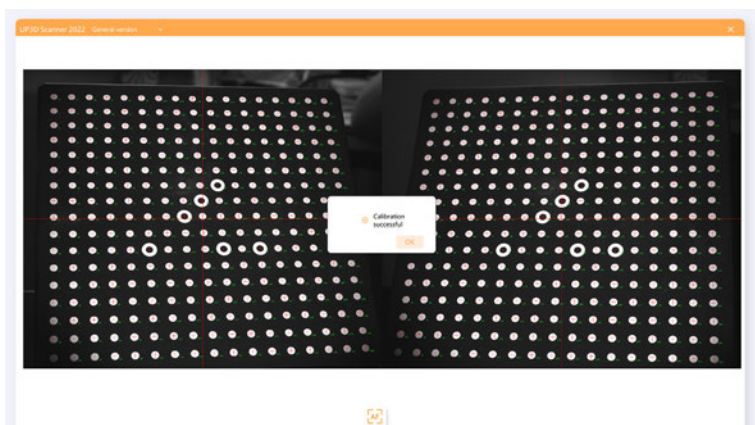
When the acquired calibration image is abnormal, [Adjust parameter] prompt will appear.

Then you need to enter the professional version to manually complete the calibration process.
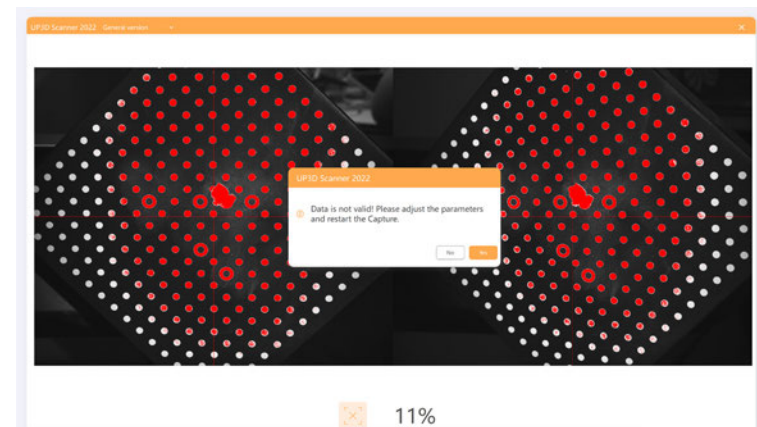
3.2 Professional version

In the professional version mode, it is mainly provided for debugging and used by technical support with certain professional knowledge.

The interface mainly includes options such as automatic calibration, manual calibration, camera control, projection control, and turntable control.

3.2.1 Interface overview

1. Camera display area displays the current camera image in real time.

2. Collection result display area displays the collection and recognition of the calibration plate.

3. Camera control area can adjust the camera exposure time and brightness (L is the left camera, R is the right camera).
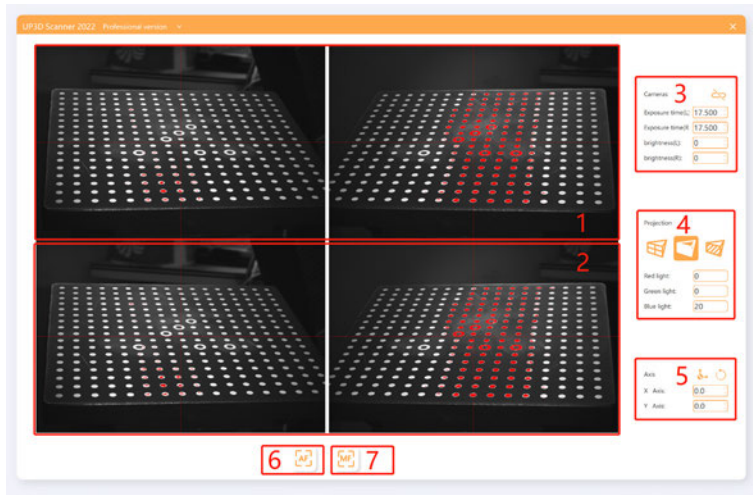
☌ The status is unsynchronized, at this time the left and right cameras can adjust the parameters independently, click to open the camera synchroniza-tion adjustment mode 🔗 ,at this time the left and right camera parameters will be synchronized to adjust.

4. Projection control area can control the RGB value of the light projected by the projector, and can also adjust the light path pattern projected.

🔲	Project cross light
🔶	Project light with set RGB values
🔳	Project fringe grating

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5. Turntable control area can control the absolute movement angle of the axis, after setting X and Y axis value, click ⟳ to rotate the axis to the corresponding angle.

The X-axis can generally be rotated in a full circle, and the adjustment interval limit of the Y-axis needs to be determined according to different models of scanners

6. Automatic calibration button

7. Manual calibration button

🔶	Initialization	After clicking, the axis performs an angle initialization
⟳	Axis adjustment	After clicking, the axis moves to the corresponding input angular position

3.2.2 Calibration

When the automatic calibration is abnormal, you need to adjust the parameters in manual calibration mode to complete the calibration. Click 🔲MF to start manual calibration.
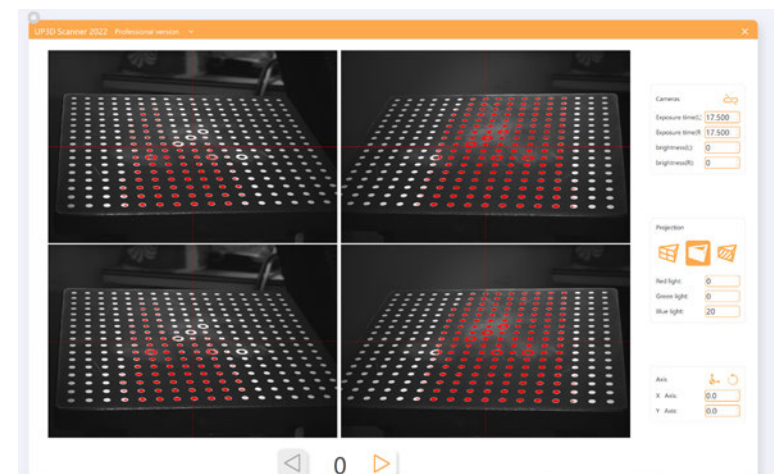
Click [Next] to start acquiring the calibration plate image, and you can modify the camera and projection parameters before each acquisition.

After image acquiring finished, a prompt shows Under calibration.

It will display camera calibration results after calibration is completed.
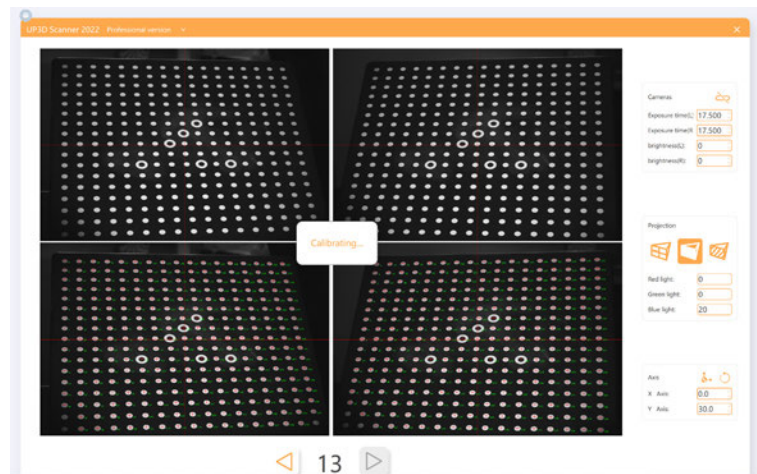
3.3 Virtual articulator calibration

Single click the right top button of the order creating interface to enter the virtual articulator calibration page
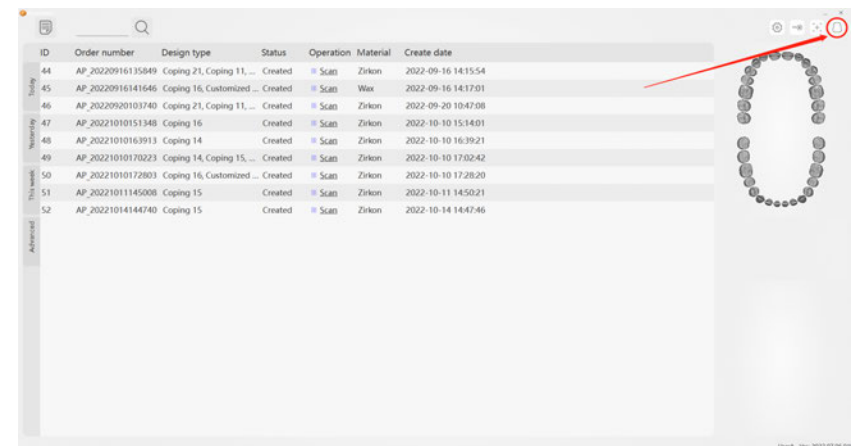
The calibration piece needs to be sprayed and put on the scanning chamber, no need to put the block below it.

Click button to adjust the scanning height, then click Ok to start scanning.
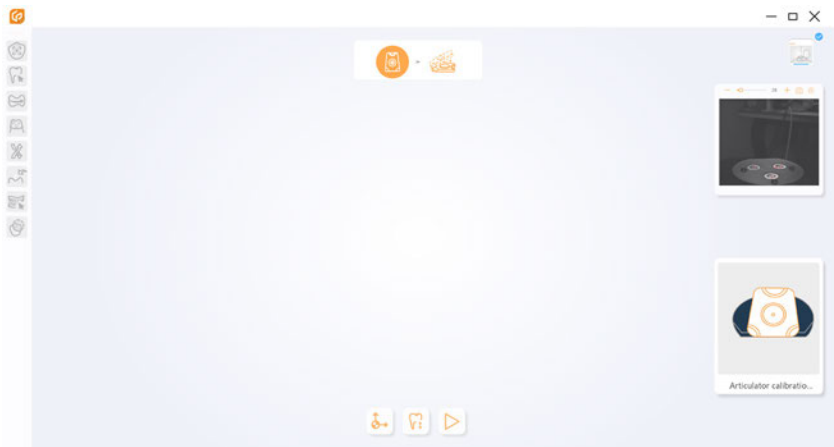
Scanning of calibration pieces is complete.
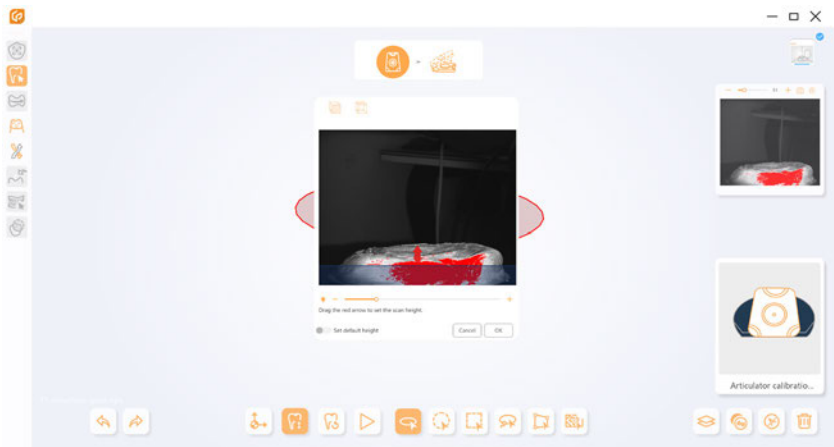
Click Next to enter the auto registration interface.

If auto registration fails, manual registration needs to be carried out.
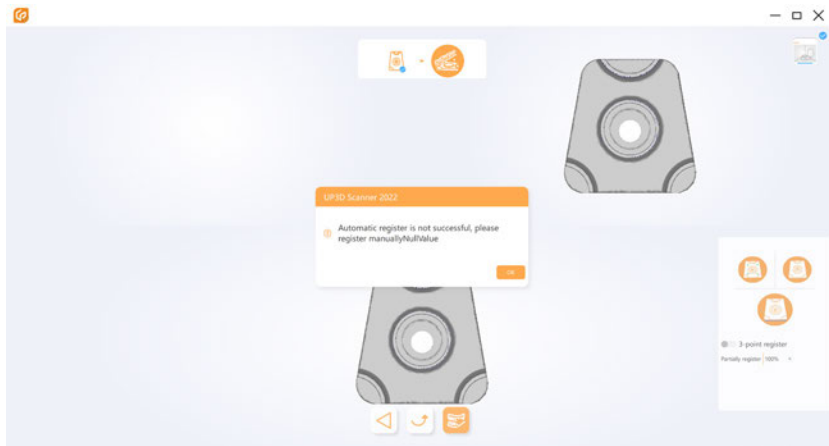
Click Ok and select the 3-points registration on the lower right corner to manually register.

Select 3 similar points on the upper left and upper right models, the registration will begin after selection. Click ![icon] to quite the calibration after the registration is complete.

04/Scanning guide

4.1 Scanning interface overview

After creating an order, click [Scan] to enter the scanning interface.

Settings: Set the parameters of the scanning software.
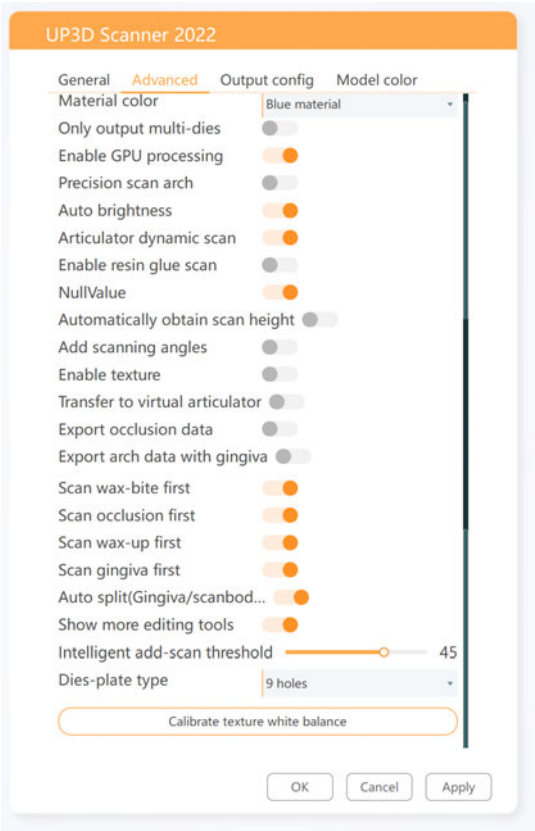
Editing tools area: the tools in the editing tools area can edit the scanned model.
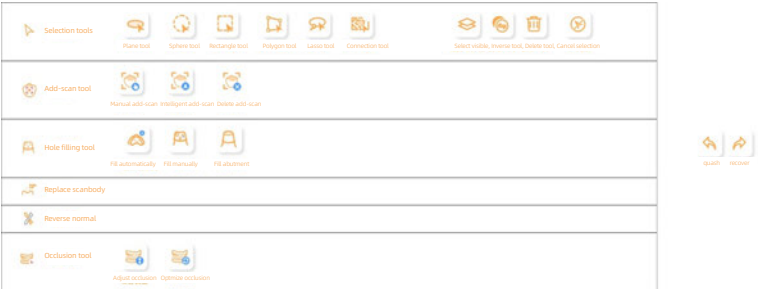
Scanning process display area: this area shows all the processes that need to be performed to complete the scan.
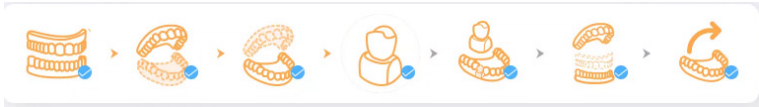
Scanning operation area: this area includes all operations required during the scanning processes.

Prev　　Next　　Stop/Start scan　Rescan　　Apply　Define scan area　Axis initialization　Finish
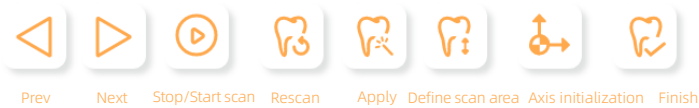
Scanner status: this area shows whether the current scanner status is normal.
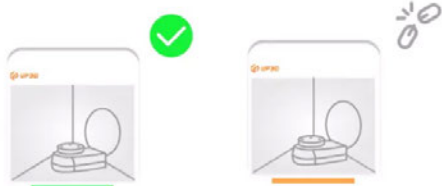
Camera adjustment area:

This area adjusts the left and right field of view and brightness of the camera before scanning.

Schematic diagram of the model:

This area displays the pictures of the models placed in the scanning process.

4.2 Settings

Click the [Settings] button to enter the scanning settings interface, which mainly includes: general settings, advanced settings, output settings, model color settings.

4.2.1 General settings

General settings mainly include language and font settings.

Language setting: select the different language according to the requirement.

Font: The software provides a variety of font options, and users can change the font style, size, display effect, etc. according to their own preferences.
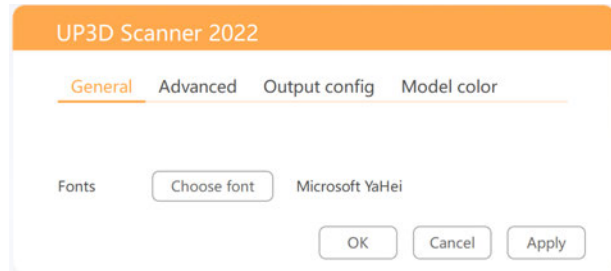
4.2.2 Advanced settings

(1) In advanced settings, users can set additional functions and usage habits of the scanner by themselves.

(2) Material color: The user can set the material color according to the model color or actual needs, and the scanner will use different colors of light to scan accordingly.

(3) Export dies independently: After selection, the orders with segmented model and using dies plate for scanning will export the dies data.
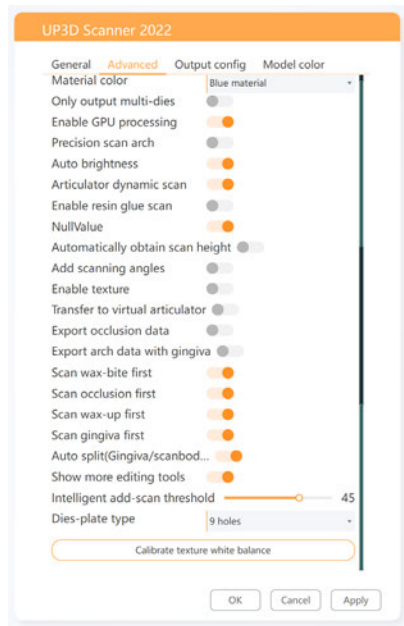
(4) Arch detail scan: After selection, more detail data will be scanned and displayed

(5) Auto brightness: After selection, the brightness will be adjusted automatically during the scanning

(6) Acquire scanning height automatically: After selection, the scanning height will be automatically acquired when scanning or rescanning the arch.

(7) Add scanning angle: When selected, unsegmented model scans will add more scanning angles.

(8) Enable texture: When selected, the model will display its true color. After scanning the texture, you need to disable it for normal scanning.

(9) Transfer virtual articulator: When selected, the articulator scanning data can transfer to exocad software

(10) Export the occlusal data: When selected, the exported data includes the data of the occlusal model.

(11) Export arch data (including gingiva): When enabled, the exported arch data includes gingival data.

(12) Auto split (gingival/scanbody/wax-up/wax-bite): After selected, the data of gingiva/scanbody/wax-up/wax bite attached to the model will be displayed as independent data after the registration is completed, and the model data will be deleted.

(13) Show more editing tools: When selected, it will provide more types of model selection tools.

(14) Select intelligent add-scan threshold: You can select the intelligent add-scan threshold as required, and the system default threshold is 10.

(15) Color texture white balance calibration (UP1000): Click to calibrate the texture.

4.2.3 Output settings

Select the export coordinates according to the requirement, the software will select exocad and common cad by default.
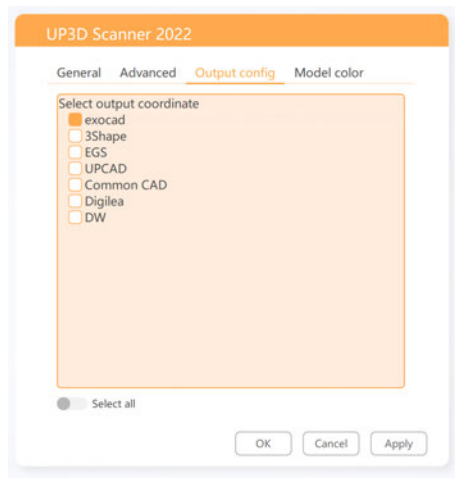
4.2.4 Model color setting

Users can set the model color according to their preferences. Click the color on the model color setting page, the setting takes effect immediately.

After scanning and application, you can see the final result on the export page.
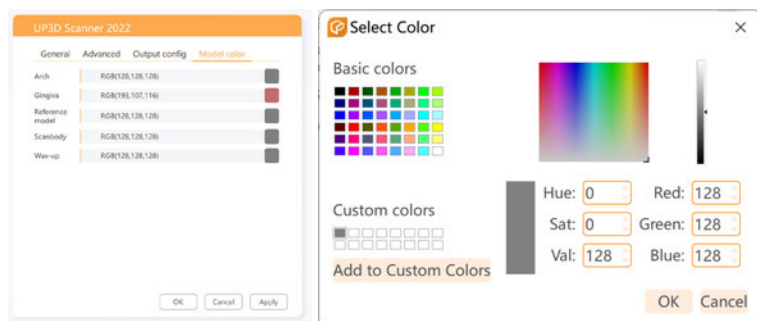
4.3 Editing tools
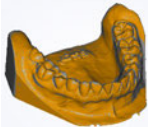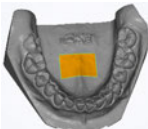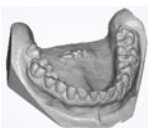
The editing tools are used to operate on the scanning model, and the software provides six types of editing tools.

The icon highlights accordingly when the editing tool is available.

	Add-scan tools	To complete the unscanned model data
	Selection tools	To select the model area
	Hole filling tools	To fill holes
	Reverse normal tool	To Reverse the model normal direction
	Replace scanbody tool	To replace the scanbody with standard data
	Occlusion tool	To adjust occlusion of the model
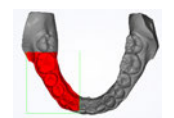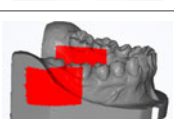
4.3.1 Add-scan tool

The tools are divided into two types: [Manual add-scan] and [Intelligent add-scan], which are used to complete the unscanned model data. Click [Add-scan] in the editing tool area to enable related operations.

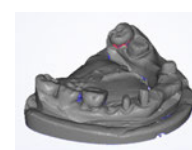|		
Manual add-scan	After manually adjusting the model angle, click [Manual add-scan] to perform the scan	
Intelligent add-scan	Click [Intelligent add-scan], software will detect the holes and add scan automatically	
Delete add-scan	Delete the add-scan data	

4.3.2 Selection tools

You can select the area of the model data with different kinds of tools as needed. Click [Selection tools] in the editing tools area to enable the related operations.

Plane	Move the plane up and down for data selection, and the selected part is shown in red	
Sphere	Select the scanning area with the sphere selection tool	
Rectangular	Select the scanning area with the rectangular selection tool	
Polygon	Select the scanning area with the polygon selection tool	
Lasso	Select the scanning area with the lasso selection tool	
Connection	Select the scanning area with the connection selection tool	
Visible	Select the scanning area which is visible or invisible	
Cancel	Cancel the selected area	
Delete	Delete the selected area	

4.3.3 Hole filling tool

After applying the scanning, if there are still some holes, you can use the hole filling tool. Click [Hole filling tool] in the editing tool area to enable related operations.

|		
Manual hole filling	Click the [Manual hole filling] button, the software will automatically detect the hole and display with a blue line, move the mouse to the blue line border, the border turns red, click to perform the fill hole	
Auto hole filling	After clicking [Auto hole filling] button and adjusting the hole-filling threshold value, click to fill all selected holes	
Abutment hole filling	Click the [Abutment hole filling] button, then use the left button of the mouse click to surround the holes to be filled on the model. Click [Apply] to fill the hole, click [Clear] to clear the selected point, and click [Reset] to reset the filled hole	

4.3.4 Invert normal tool

Select [Reverse normal] and then click the model, the normal of the model is reversed.
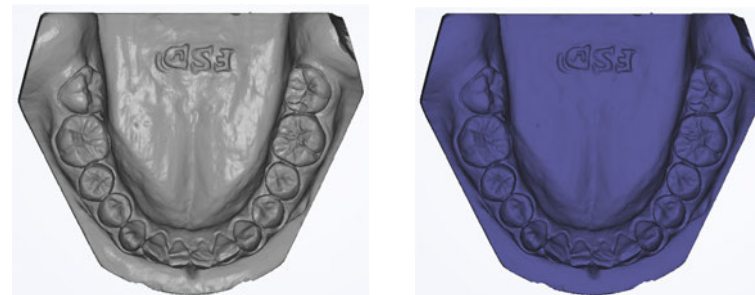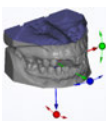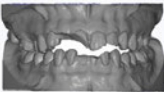
4.3.5 Replace scanbody tool

Select [Replace Scanbody], drag the mouse to select the data to be replaced, and right-click [Replace data] and then will show different selectable scanbody data, you can select from a database or loaded from a file.
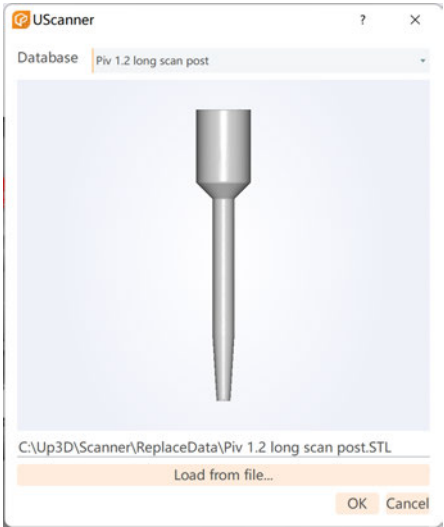
4.3.6 Occlusion tool

The occlusion tool can adjust the occlusion of the model.

Adjust occlusion	After clicking [Adjust occlusion], you can adjust the model occlusion spatially.	
Optimize occlusion	After clicking [Optimize occlusion], the occlusal surface will be fine-tuned automatically	

4.4 Scanning Process

It shows whole processes required to complete the order, and completed processes will be marked with. Users can scan according to the given process sequence, or click the scan step icon to jump to the corresponding scan step.

Taking the illustrated process as an example, the scanning process is: full jaw scan–> maxillary scan–> mandible scan– > dies scan–> dies registration–> occlusal registration–> Export.

After scanning and application, you can see the final result on the export page.

If you click 🧑 button, it will jump to dies scan step, as the following diagram:

Notes: 1. Only the scanning steps can be switched

2. The registration steps cannot be switched

4.5 Scanning operations

The following buttons are to control all the operations during the scanning

🔼	Axis initialization	Start the axis initialization
◁	Last step	Jump to the last scan process
▷	Next step	Jump to the next scan process
🦷	Scan height	Adjust the scan height
▶	Stop scanning	Stop current scanning
🦷	Rescan	Scan the model again
🦷	Apply	Post-processing of the scanned model
🦷	Finish	End whole scan process

4.6 Camera adjustment

The button of camera adjustment area can control and adjust the brightness of the camera before scanning, and switch the angle of view of observation and scanning.

＋	Increase Brightness	Manually increase the brightness of the camera
－	Decrease Brightness	Manually decrease the brightness of the camera
📷	Switch camera manually	Manually switch the left and right angles of camera
☀	Auto adjustment	Adjust the brightness of the camera's field of view automatically

＋/ － Manually adjust the brightness, increase/decrease by 1 with every click, the effect shown as below:
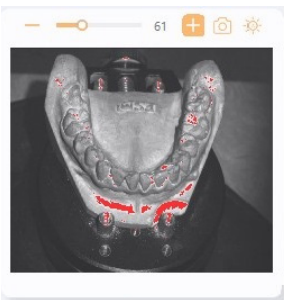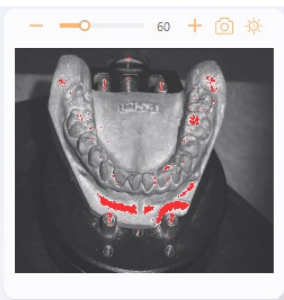
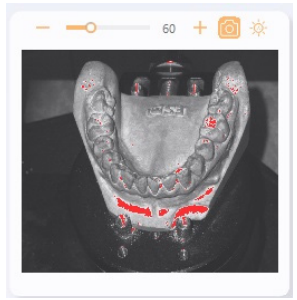

When clicks [+]
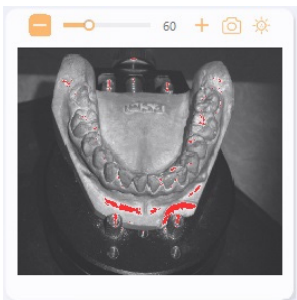
When clicks [-]
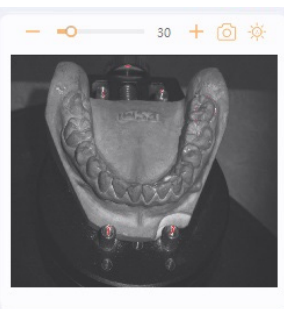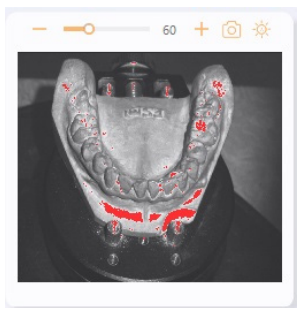
📷 Switch left and right cameras.

Before switching

After switching

☀ Automatically adjust the brightness, the effect is as follows:

Before adjusting

After adjusting

05 /Scanning procedures

Choose desktop scanning mode in UPStudio and create an order to enter the scanning operation interface. The following segmented model with multi-dies plate scanning is an example to show the scanning procedures.
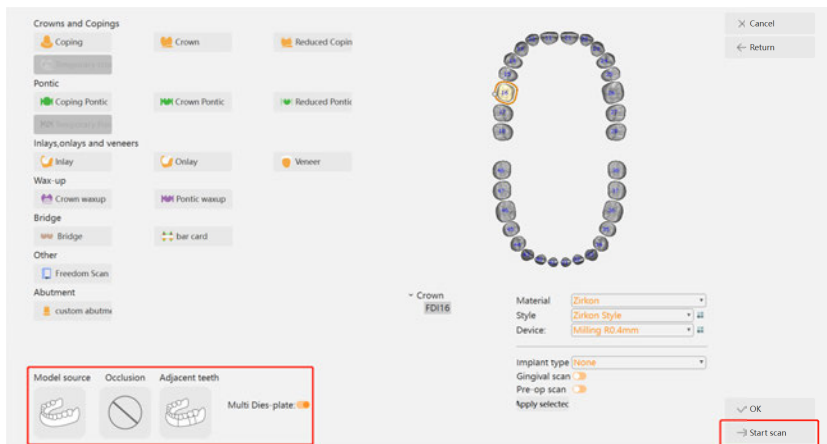
5.1 Create an order

A. Create an order, select the tooth position and define the design type

B. Click [Start scan] to enter scanning procedure after selecting the scanning options below
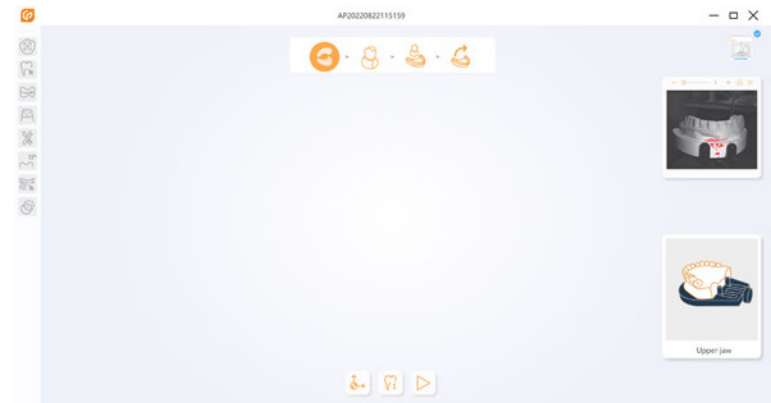
Model source: stone model

Occlusion: none

Adjacent teeth: segmented

Multi-dies plate: yes

5.2 Scanning

The order scanning procedures are: upper jaw scan–>dies scan–>registration–>export

Click to adjust the scanning height, the interface is as following:

Drag the red arrow to set the scan height.

Set default height | Cancel | OK
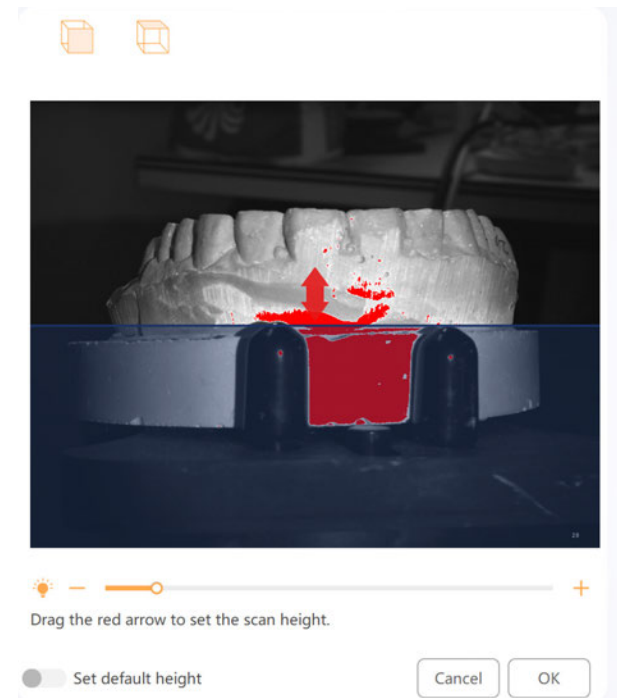
The upper part of the blue horizonal line is the scanning area, and the lower part of it is the area which will not scan, you can drag the red arrow with two-direction to adjust the required scanning height, then click Ok to start the upper jaw scanning, or click ▷ button to directly scan the upper jaw.


After scanning the upper jaw, click 🦷 button to rescan it directly or click 🦷 to adjust the scanning area again and rescan. Click ▷ button to scan the dies, the operations are the same with the upper jaw.
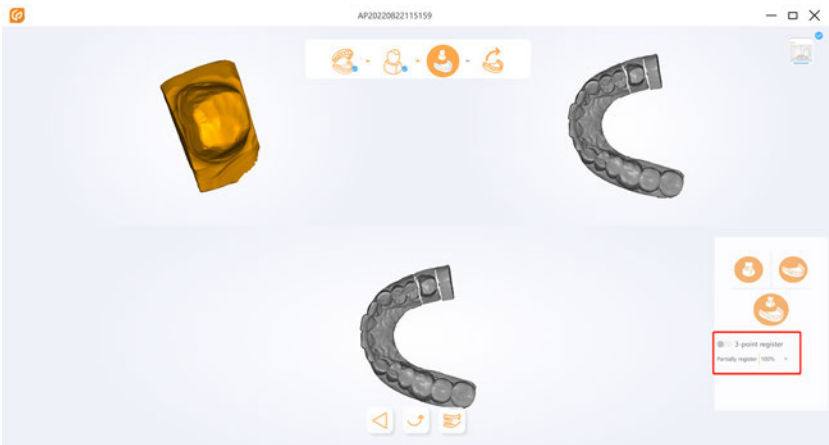
After scanning the dies, click ◁ to rescan the upper jaw, click ▷ to enter the registration step.
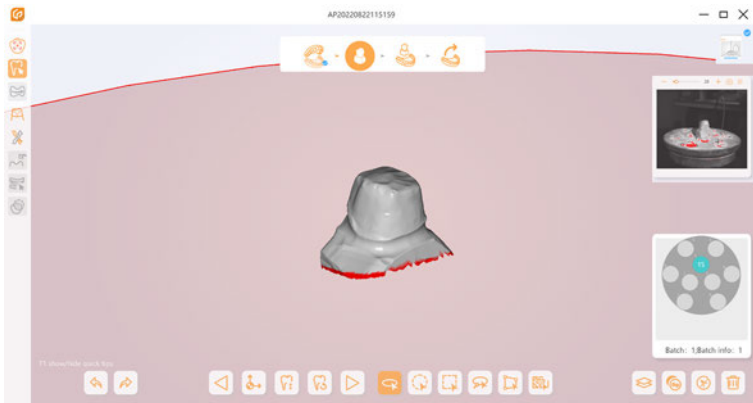
5.3 Registration

The scanning software will auto register when entering the registration step. When auto registration fails, there will be a prompt, click Ok to enter manual registration.
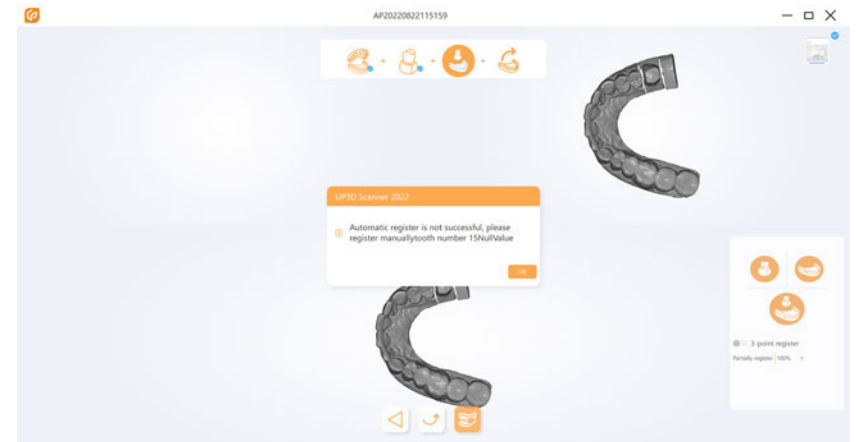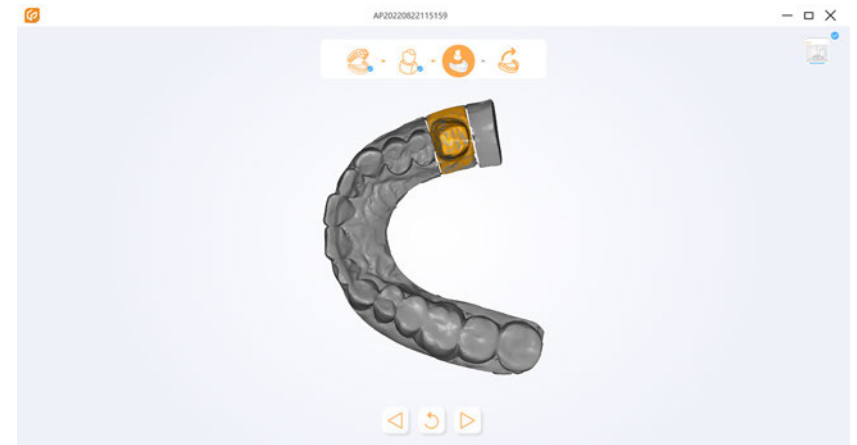
Manual registration is one-point registration by default, that is, select one similar point on the upper left and right models. You can also change to 3-points registration at the lower right corner to choose 3 similar points. And the registration percentage can be adjusted, click ↺ to reset the current operation, click 📖 to apply the registration.

After registration is successful, click ↺ to manually register again, click ▷ to enter the export step.

5.4 Export

The final scanning data can be edited on the export step, click 📝 to export the model after editing.

The order can be found on the orders list of UPStudio after exportation, right click and select open local folder, there is a STL file in the folder (texture file type is PLY), which is the exported file of the scanning software.

Notes: if exocad is used, select exocad format on advanced setting-export setting on the scanner software.