

AI Mapper Software PC Client User Manual

Preface

Welcome to the AI Mapper PC Client (hereinafter referred to as "this Client"). This manual will elaborate on all functional operations, usage procedures and precautions of the Client in detail, helping you quickly master core operations such as account management, project management, image acquisition, 3D rendering and AI generation, and efficiently complete 3D Mapping-related work. This Client features clear operation logic and is adapted to professional work scenarios, so you can get started easily by following the guidelines in this manual.

Note: The language of this Client will switch along with the language selection of the Client used when sending verification codes and operating the interface, to ensure that the operation interface is consistent with your usage habits.

1. hardware power supply mode

Before use, ensure that the power supply of each hardware in the table below is normal.

- a. Recommended power-on sequence: 1. Switch → 2. Server → 3. Power supply for HDMI cable (if power supply is required) → 4. Screen splitter (if in use) → 5. Display/projector
- b. Recommended power-off sequence: 1. Display/projector → 2. Screen splitter (if in use) → 3. HDMI cable power supply (if power supply is required) → 4. Server → 5. Switch

2. Scenarios and Models

Place the model in the appropriate position and define the projection area. If there is an existing scene, only the projection area needs to be defined.



Off-white material [Recommended]



Translucent material [Avoid]



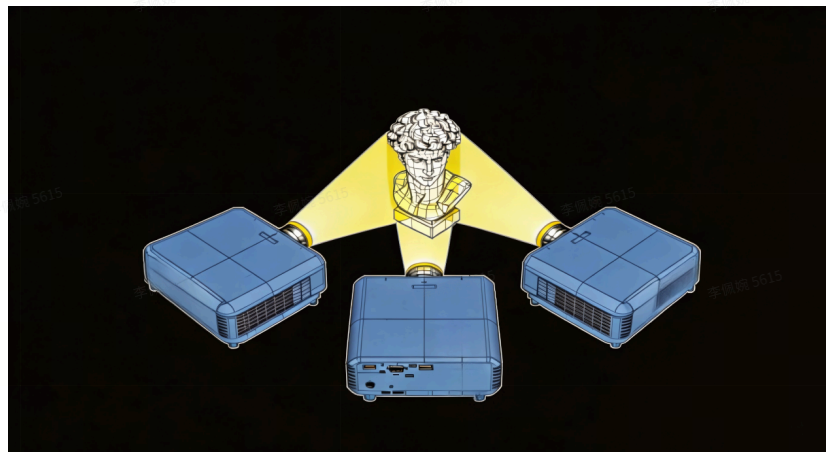
Specular Reflection Material
[Avoid]

Note: The model should avoid using mirror-reflective or translucent materials, otherwise reflection or light transmission will affect the display effect of the projected content. An off-white model is optimal: gray delivers a good texture while white tends to appear overly bright. The model must not have overly obvious scratches, as these will compromise the uniformity of display brightness.

3. Projector Placement

Place multiple projectors (e. g., 3 units) in front of the model display area, power on the projectors and adjust their projection angles. Ensure that the projection range covers the model scene, and there is an overlapping area between the projections of each projector.

When arranging the position and angle of the projectors, the actual site conditions shall also be taken into account to avoid shadow areas that cannot be projected by any projector. If there are areas that cannot be covered by all projectors, the position of the model can be appropriately fine-tuned.

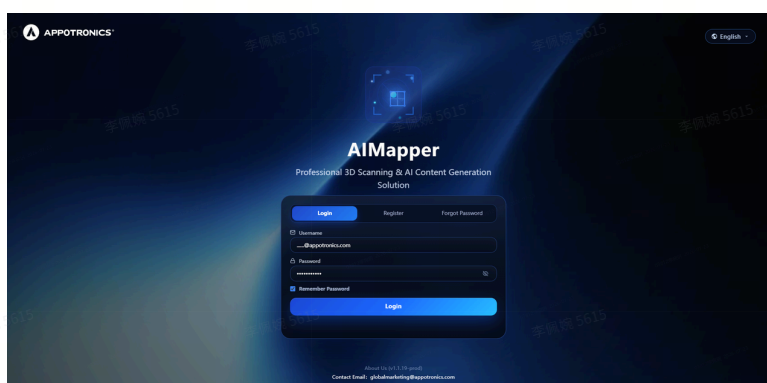


4. Image Acquisition Location

Phase acquisition equipment can be used to perform multiple sets of phase acquisition. Please ensure that the model occupies the main area of the phase acquisition view, and the phase acquisition covers all surfaces of the objects to be projected. It is recommended to perform at least one set of image acquisition from the main viewing angle of the audience.

Chapter 1 Account Login and Registration

1.1 Software Startup and Login Entry



1. Launch the AI Mapper software on PC; after startup, you will be directly directed to the login page, and no functional module is accessible when you are not logged in.

2. The login page features three core options: [Login], [Register], and [Forgot Password]. Users can select the corresponding operation as needed, and will be directed to the main interface of the Client after completing account verification.

1.2 Account Registration

If you have not registered an account, you need to complete the registration first before logging in. The specific steps are as follows:

1. On the login page, click the [Register] option to be redirected to the registration page;

2. Enter your personal email address, make sure the email format is correct, then click the [Send Verification Code] button;

3. After clicking "Send", a [60S] countdown cooldown CD will appear on the button, which restricts users to sending the verification code only once per minute; the button can be clicked to send again once the countdown ends.

4. Check your email for the registration verification code, enter it into the verification code input box, and a corresponding prompt will appear after verification:

- Verification succeeded: the page prompts "Verification code is correct";

- Verification failed: The page prompts "Incorrect verification code", and you need to reacquire and enter the correct verification code.

5. When the verification code has not been successfully verified, both the password setting input box and the [Confirm] button will be grayed out and disabled, making it impossible to proceed to subsequent steps;

6. After the CAPTCHA verification succeeds, the password setting function will be unlocked. Enter a password that meets the requirements to complete the registration;

7. If the entered email is already registered, a toast prompt will pop up showing "Account already exists, please log in directly", and you need to return to the login page to log in with the existing account.

1.3 Forgot Password

If you have forgotten your login password, you can reset it by following the steps below:

1. On the login page, click the "Forgot Password" option to be redirected to the password reset page;
2. Enter the email address you used for registration, click the [Send Verification Code] button, and a [60S] countdown cooldown will appear on the button; only one verification code can be sent per minute.
3. Enter the verification code received in your email, and a corresponding prompt will appear after verification:
 - Verification succeeded: The page prompts "Verification code is correct", and the password reset input box is unlocked;
 - Verification failed: The page prompts "Incorrect verification code", and you need to reacquire and enter the correct verification code.
4. When the verification code has not been successfully verified, both the password reset input box and the [Confirm] button will be grayed out and disabled;
5. The password input box will prompt the password constraint type: [Please enter a new password, which shall contain uppercase and lowercase English letters and be no less than XX characters], then enter the new password as prompted;
6. Enter the new password a second time to ensure the two entries match and avoid input errors;
7. Click the [Confirm] button to complete the password reset. A pop-up window or toast notification will appear on the page showing "Password reset successful", and you can log in to your account with the new password after the reset.

1.4 Account Login

After completing registration or password reset, log in to the Client by following the steps below, with the specific operations as follows:

1. Enter the registered email address and the corresponding password on the login page;
2. Click the [Login] button, wait for the login verification to complete, and you will be directed to the Client welcome page (in the project-unselected state) after successful verification;
3. After successful login, the currently logged-in email will be displayed in the upper right corner of the Client, serving as the entry for account information;
4. If login fails (e. g., incorrect password, unregistered account), a corresponding toast prompt will pop up. Please verify your account information and try again.

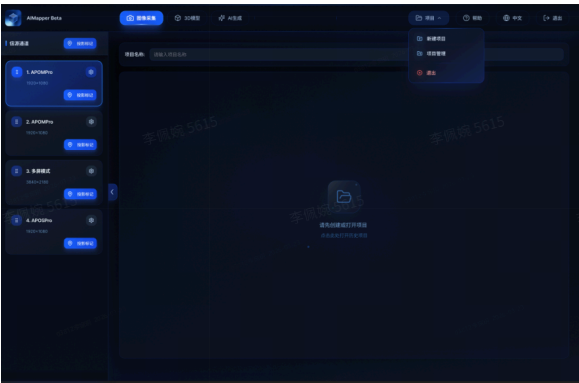
Chapter 2 Guide to Core Function Operations

2.1 Login Module - Account Settings

After successful login, you can view your account information and log out of your account via the account entry in the upper right corner. The specific steps are as follows:

1. Click the login email (in the form of a hyperlink) at the upper right corner of the Client, a pop-up window will appear, displaying the currently logged-in email and account validity period, along with a [Log Out] button;
2. Click the [Log Out] button, and a secondary confirmation pop-up will appear: [The project has been saved in real time. Logging out of your account will automatically exit the project editing. Do you want to continue logging out?];
3. Click "Confirm" to complete account cancellation and automatically return to the login page; click "Cancel" to cancel the cancellation operation and return to the current page.

2.2 Project Management

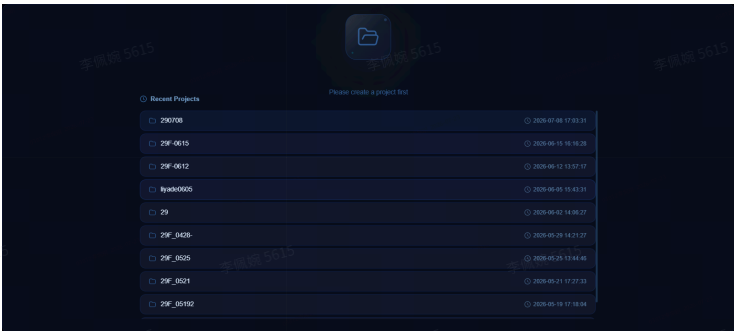


The project management module consists of three sub-functions: welcome page, new project creation, and project management, which is primarily used for project creation, opening, editing and deletion. All image acquisition, 3D rendering and AI generation operations must be performed based on the selected project, with the specific procedures as follows:

2.2.1 Project Management - Welcome Page

When you log in successfully without selecting any project, you will be directed to the project welcome page. The specific operations and interactions are as follows:

1. The welcome page contains two quick operation modules, and you can perform the corresponding operation by clicking on them:
 - New Project: Quickly create a new project (see Section 2.2.2 for details);
 - Open historical projects: Quickly open existing historical projects under your account.



2. The welcome page supports an operation menu bar, which contains two options: [Project] and [Help].

- [Project] menu: the drop-down list contains three options: [New Project], [Project Management], and [Exit];

- **[Help]** menu: Contains auxiliary content such as operation guides and FAQs (view as needed).

3. Click the [Exit] option in the [Project] menu, a secondary confirmation pop-up will appear: [The project has been saved in real time. Are you sure you want to exit?]. Click [Confirm] to exit the Client, and click [Cancel] to cancel the exit operation;

4. When no project is selected, clicking any of the function modules [Image Acquisition], [3D Rendering] or [AI Generation] will trigger a pop-up prompt to guide the user to select a project first, and the corresponding module cannot be accessed for operation.

2.2.2 Project Management - Create New Project

When creating a new project, the uniqueness verification of the project name must be completed. The specific steps are as follows:

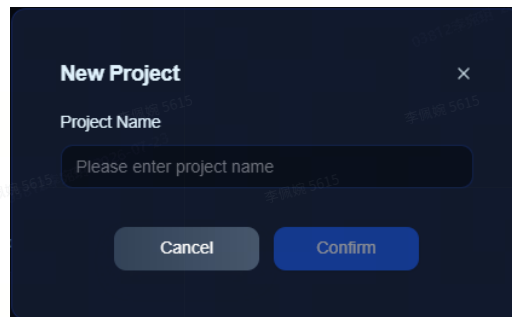
1. There are two entries for creating a new project, and you can choose either one:

- Welcome page shortcut module: Click [New Project];

- **[Project]** menu: Click **[New Project]** after expanding the dropdown list.

2. After clicking, a pop-up window will appear, which contains an input box for the project name and a [Enter Project] button;

3. Enter the project name, and the system will automatically perform a uniqueness check (project names cannot be duplicated under the same email account);

A dark-themed dialog box titled "New Project" with a close button (X) in the top right corner. Below the title is the label "Project Name". Underneath is a text input field with the placeholder text "Please enter project name". At the bottom of the dialog are two buttons: "Cancel" and "Confirm".

4. If the project name already exists, a toast prompt will pop up saying "The project name already exists, please re-enter", and you need to modify the name and re-verify;
5. Before the project name verification (uniqueness check) is passed, the [Enter Project] button is grayed out and unavailable;
6. After the verification is passed, the [Enter Project] button will be unlocked. Clicking it will complete the new project creation and take you to the main interface of the project, where you can start subsequent operations.

2.2.3 Project Management - Project Management

The project management pop-up allows you to view all cloud-stored projects under your account, and perform operations such as opening, renaming, and deleting projects. The specific steps are as follows:

1. Click the [Project Management] option in the drop-down menu of the [Project] tab, and the project management pop-up window will appear;
2. A project list is displayed in the pop-up window, which consists of four columns: [Project Name], [Creation Date], [Last Modified Date], and [Operation];

Project Name	Created Date	Last Modified Date	Actions
290708	2026-07-08 17:03:31	2026-07-08 17:03:31	[Open] [Rename] [Delete]
29F-0615	2026-06-15 16:16:28	2026-06-15 16:16:28	[Open] [Rename] [Delete]
29F-0612 Current	2026-06-12 13:57:17	2026-06-12 13:57:17	[Open] [Rename] [Delete]
Ilyade0605	2026-06-05 15:43:31	2026-06-05 15:43:31	[Open] [Rename] [Delete]
29	2026-06-02 14:05:27	2026-06-02 14:05:27	[Open] [Rename] [Delete]

3. The following operations can be performed on the items in the list (except for the currently open item):

- Open: Click the [Open] button, a pop-up will appear prompting "The project has been saved in real time. Please confirm whether to exit the current project and enter Project A? "(Project A refers to the name of the target project). Click [Confirm] to close the current project and open the target project; click [Cancel] to cancel the open operation;

- Rename: Click the [Rename] button, a pop-up window will appear displaying the current project name and a rename input box. After entering a new name, the system will perform a uniqueness check:

- If the name is duplicated, a toast prompt will pop up: [The project name already exists, please re-enter];

- Before the verification is passed, the [Confirm] button is grayed out and unavailable; after the verification is passed, click [Confirm] to complete the renaming.

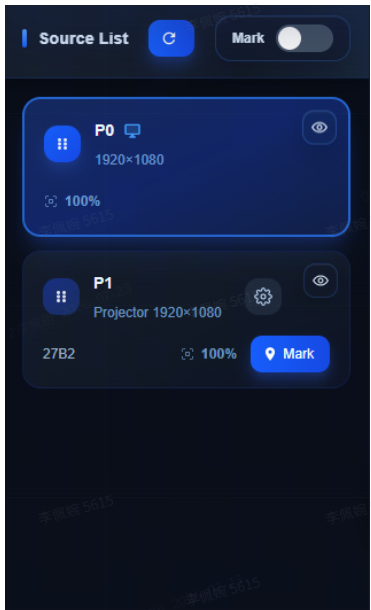
- Delete: Click the [Delete] button, a secondary confirmation pop-up "Please confirm whether to delete Project A" will appear; click [Confirm] to delete all files of this project stored on the cloud server; click [Cancel] to cancel the deletion operation.

4. If the current project is open, all operation buttons corresponding to this project will be grayed out, and a toast prompt "The current project is being edited, please close it before proceeding with the operation" will pop up when clicked;

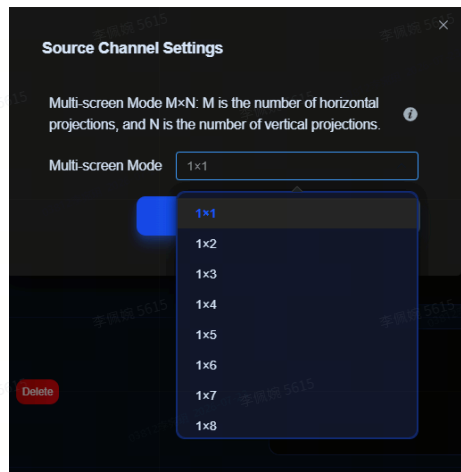
5. Click the [Exit] option in the [Project] menu, a secondary confirmation pop-up window "The project has been saved in real time. Confirm whether to exit" will appear; click [Confirm] to exit the project and return to the welcome page; click [Cancel] to cancel the exit operation.

2.3 Operation of Source Channel Module

The source channel module is designed in a side drawer style, which supports operations such as source management, split screen box settings, and projection marking. The specific operations are as follows:



1. Click the side drawer switch to open/hide the source channel module; after opening, the number of sources connected to the current host will be automatically read.
2. The source list will display the EDID name and the recognized resolution of each channel for easy viewing of source information;
3. Source Sorting: Supports dragging and dropping sources to sort the list, and sources both inside and outside the Split Screen Tool can be reordered via drag-and-drop;
 - Splitter Settings: Each signal source channel can be set to the splitter mode, which can be switched by clicking the corresponding option; meanwhile, a drop-down menu for splitter mode selection is provided to adapt to different requirements.



4. Projection Marking Operation:

- First, confirm whether the render-to-model switch is enabled
- One-click projection: Click the [Projection Mark] button in the function module menu to project [Projection Mark] to all source channels;
- Individual projection: There is a [Projection Mark] button next to each source channel, and clicking it will only project the [Test Pattern] for that single source channel.

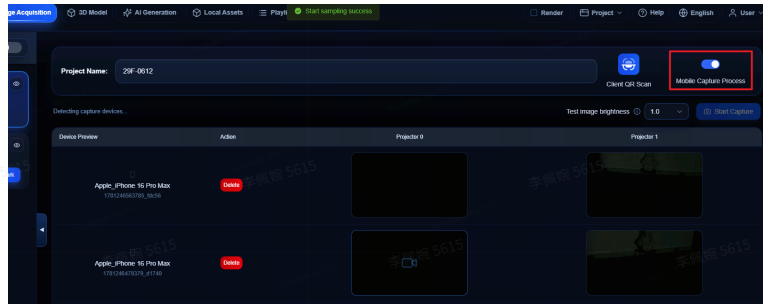
6. Source detection: If the source channels of the opened historical project do not match the quantity or resolution of the current connection, a toast reminder will pop up: "The current channel quantity does not match the historical storage information of the project, please confirm the source channel settings", and you need to check the source connection status before proceeding with the operation.

2.4 Operation of Image Acquisition Module

The image acquisition module consists of three sub-functions: entering the acquisition process, previewing acquired data, and starting modeling. It can only be operated when a project has been selected and needs to be completed in coordination with the mobile terminal. The specific operations are as follows:

2.4.1 Image Acquisition - Enter the Image Acquisition Process

1. On the main interface of the Client, click the [Mobile Collection Process] button and keep the switch turned on;



2. Ensure the collection device is properly connected

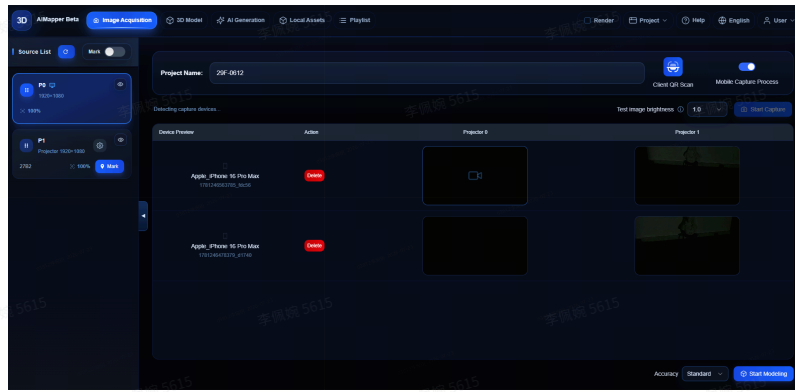


3. Please ensure that during the collection process
 - a. Please place the mobile phone or industrial camera on a tripod for image acquisition to avoid the impact of equipment on shooting.



- b. Please check if the captured image is overexposed. If the image is too bright, adjust the exposure time to 1/240.
- c. If there is reflection on the surface of the modeled object, or the ambient light fluctuates in brightness, it may lead to the failure of model calculation.

2.4.2 Image Acquisition - Acquired Data Preview



1. After entering the image acquisition page or jumping to the acquisition page from the pop-up window of the acquisition process, the system will automatically refresh the image acquisition list;
2. The list will display the thumbnail preview of the video captured by each projector during each acquisition (each video lasts for approximately 12 seconds);
3. The list header consists of three items: [Collected Data], [Action Execution Button], and [Projector Name].
 - Collected data: displays the collection location in the format of [Location A](where A is a sequentially incrementing number), and also shows the name of the collection device;
 - Action: Only the [Delete] button is provided, and clicking it will delete the corresponding collected data.
4. Deletion operation: Click the [Delete] button, and a secondary confirmation pop-up will appear: [Are you sure you want to delete all collected images at Location A (PhoneA)?](where Location A refers to the collection site and PhoneA refers to the collection device). Click [Confirm] to delete the entire row of collected data; click [Cancel] to abort the deletion operation;
5. Video Preview: Click the video thumbnail in the list, a preview pop-up will appear to play the collected video, and you can close the preview by clicking the close button on the pop-up.

2.4.3 Image Acquisition - Start Modeling

1. After confirming that the data in the collected data preview list is correct, click the [Start Modeling] button;
2. After clicking, a loading Progress Bar will appear on the page to show the modeling progress, and no other operations can be performed during the modeling process;
3. Once the modeling is completed, the system will automatically redirect to the [3D Rendering] tab and display the reconstructed 3D model.

2.5 3D Rendering Module Operation

The core of the 3D rendering module is used for viewing modeling results, alignment testing, and model import/export, with the specific operations as follows:

2.5.1 3D Rendering - 3D Model Preview

1. After the modeling is completed, the system will automatically redirect to the 3D model preview page, which will display the 3D model obtained after reconstruction calculation, including the estimated position of the projector;
2. Model Operation: Supports three-axis operation. Users can adjust the viewing angle, distance and size of the model by dragging the mouse and scrolling the wheel, which facilitates a full-range view of the model details.

2.5.2 3D Rendering - Alignment Test Chart

1. On the 3D model preview page, click the [Alignment Test Image] button;
2. After clicking, the projector will display a grid pattern to verify whether the currently estimated 3D model accurately matches the actual scene, facilitating subsequent adjustment and optimization.

2.5.3 3D Rendering - Import and Export Models

1. Model Import:

- Click the [Import Model] button to open the Windows file browser window;
- In the file browsing window, select the local model file and upload it;
- If the system fails to parse the uploaded file type, a toast notification will pop up displaying "Unrecognized file type, please re-upload", and you need to replace the file with the correct format and try again.

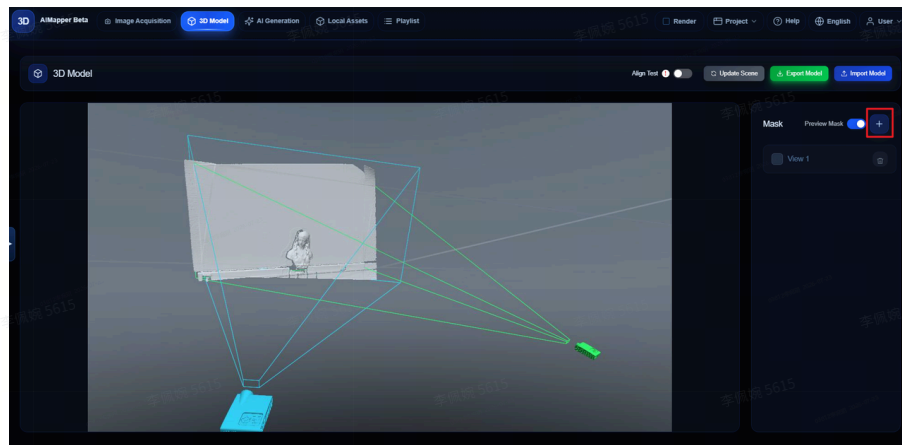
2. Model Export:

- Click the [Export Model] button, and the system will automatically export the current model file;
- After the export is completed, a toast notification will pop up showing [The model file has been exported to: xxxxx](where xxxxx is the specific download path), and you can locate the exported model file according to this path.

2.5.4 3D Model - Mask

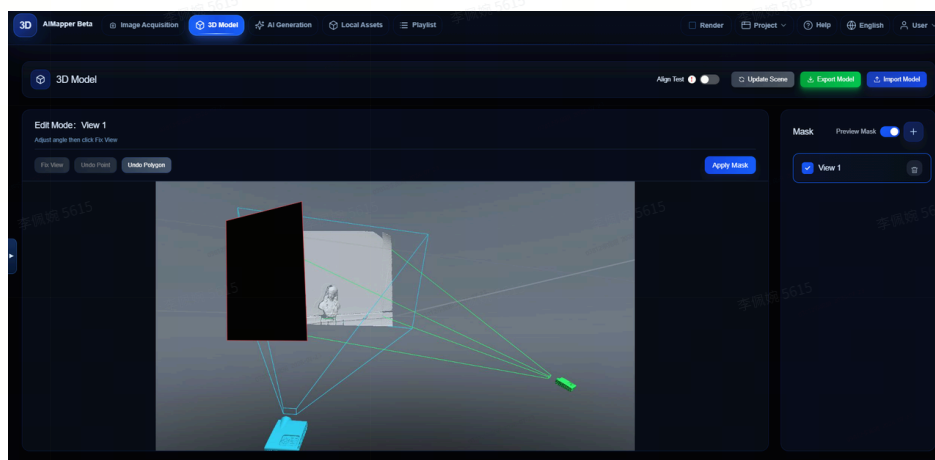
1. Create View

- Click the [Plus] button to create a new view, then the 3D model page will enter editing mode

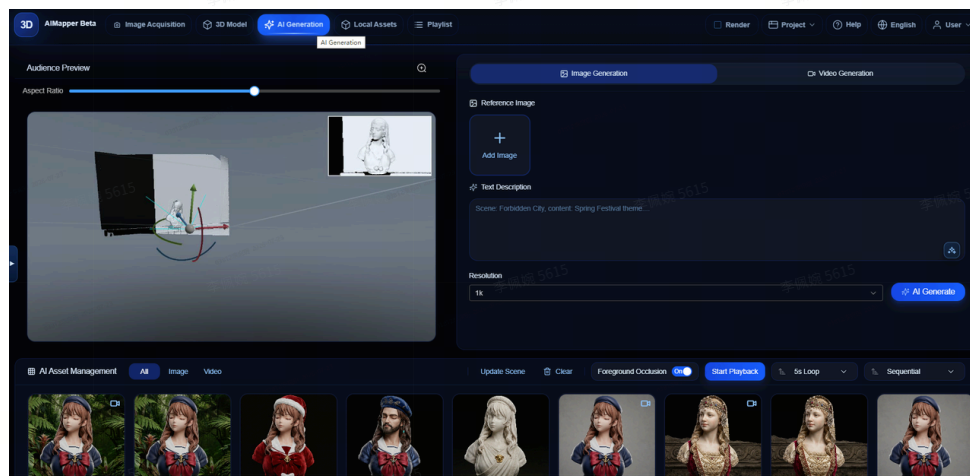


2. Editor's Perspective

-Select the view you want to mask, click "Lock View", then drag to frame the mask area, and click "Apply Mask" to activate the mask



2.6 AI Generation Module Operation



The AI generation module consists of three sub-functions: audience perspective preview, image/video generation, and AI asset management, which are used to generate and manage projection creatives. The specific operations are as follows:

2.6.1 AI Generation - Audience Perspective Preview

1. Enter the AI generation page, where the projection content effect of the current model projection will be previewed in real time;

2. View Adjustment:

- Supports three-axis operation; drag the mouse wheel to adjust the model's viewing angle, distance and size;

- Drag the 3D figure on the page to select different audience perspectives, and the small window in the lower right corner will preview the projection effect from that perspective in real time.

3. Model Settings: The page provides a slider control, which allows users to drag the slider to adjust the aspect ratio of the model to adapt to different projection requirements.

2.6.2 AI Generation - Image/Video Generation

1. Reference image addition: Users can add reference images, with support for dragging and dropping AI asset images or uploading local reference images;

2. Text description: In the text description box, you can use the @ key to quickly call the added reference images, and define the reference images as "style reference" or "subject reference";

3. Parameter Settings:

- Video generation: Select the generation time via the drop-down menu, and set the video duration as needed;

- resolution: A drop-down menu for resolution selection is provided, and users can choose the appropriate resolution according to actual needs.

4. Reference Image Sorting: Reference images will be automatically sorted in reverse chronological order of their addition, and the system will automatically generate image names (numbered sequentially from Image 1 to Image 10);

5. Generation Operation: Click the [AI Generation] button to start generating images or videos, and a loading icon will be displayed on the page as a reminder during the generation process;

6. Exception handling: If the reference image fails to be uploaded, a toast prompt "Upload failed, please try again" will pop up, and the reference image needs to be re-uploaded;

7. Generation completed: The generated creatives will be automatically displayed in the AI asset management list.

2.6.3 AI Generation - AI Asset Management

1. The AI asset management module is designed to display all AI-generated images and videos created by the user in history, which are sorted in reverse chronological order by default, and can also be switched to be sorted by image name;

2. List Classification: The AI asset list can be divided into three categories, and you can click the corresponding category to switch the view:

- All: Display all AI-generated content (images + videos);

- Image: Only display AI image generation content;

- Video: Only display AI video generation content.

3. Render Settings: If the user checks [Render to Model], they can select the rendering mode via the dropdown menu:

- No carousel: The AI asset will be rendered to the model only when the user clicks it manually;

- 10-second interval, full AI asset list carousel: The system automatically switches to a new AI asset every 10 seconds and renders it to the model.

4. Asset Operations:

- Clear the list: Click the [Clear] button, a secondary confirmation pop-up "Are you sure you want to delete all assets? This operation cannot be undone" will appear; click [Confirm] to delete all AI assets, or click [Cancel] to cancel the operation;

- Single asset operation: Right-click on any AI asset, a floating box will pop up containing the [Delete] option. Click [Delete], a secondary confirmation pop-up will appear: "Are you sure you want to delete this asset? This operation cannot be undone", then click [Confirm] to delete the asset;

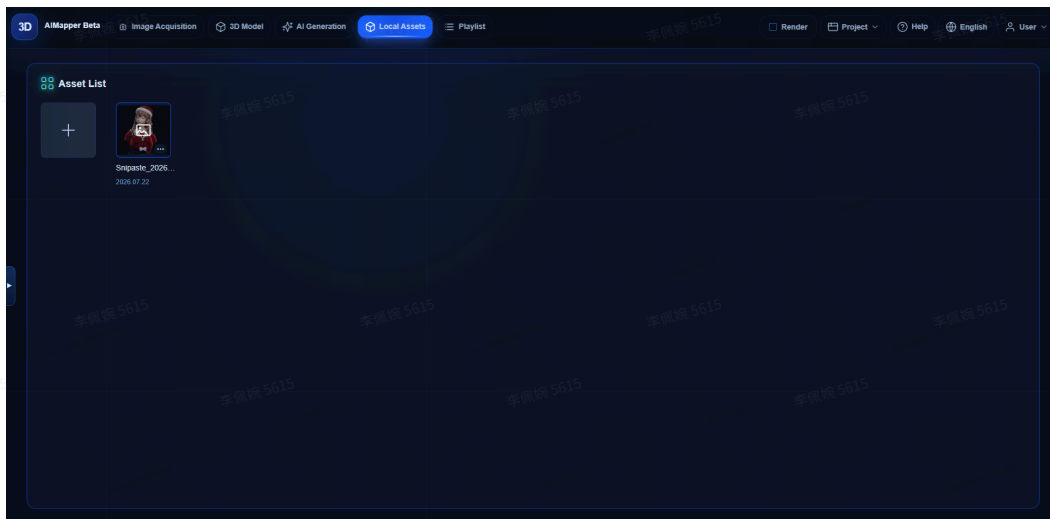
- Asset status: If an AI-generated image or video is being generated, the corresponding asset in the list will display a loading icon, along with a prompt indicating the estimated time to completion (a few minutes).

5. Other operations: The system supports performing the operations of [Copy Prompt], [Project to Model] and [Delete] on AI assets, and you can select the corresponding operation as needed.

2.7 Local Creatives Import Module

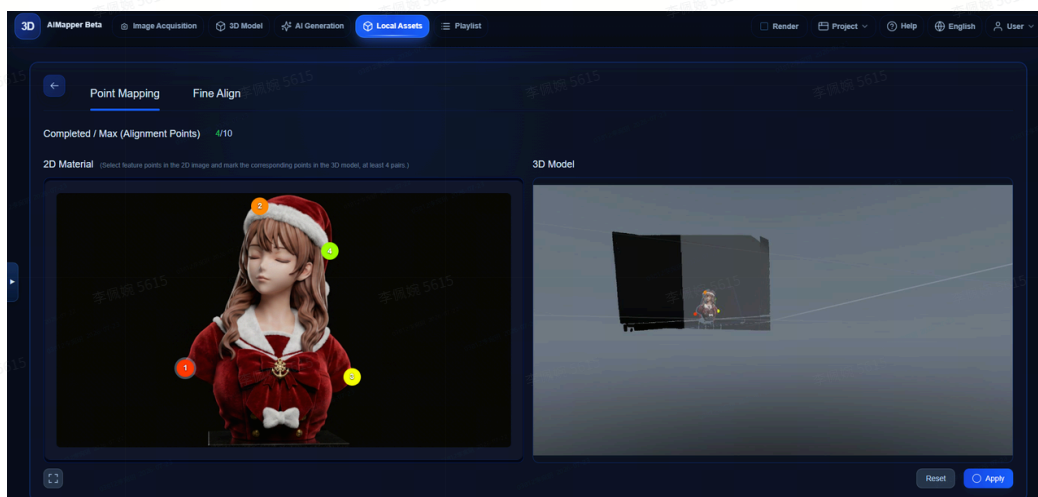
2.7.1 Add creatives

- Click the [+] sign in the creatives list to upload local creatives



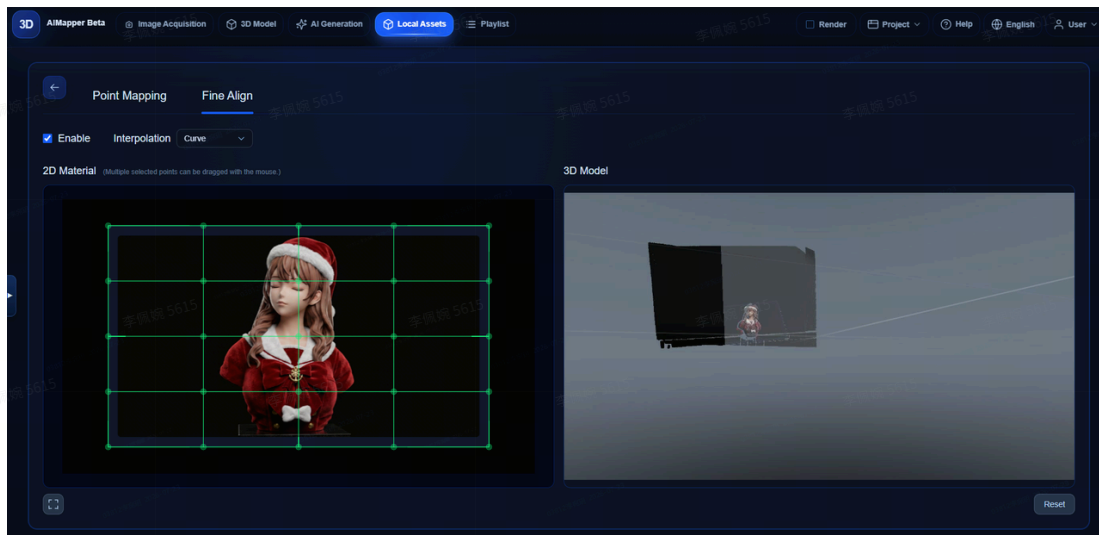
2.7.2 Point Alignment

- Click to select the feature points of the 2D creatives on the left, then click the corresponding positions on the 3D model
- A minimum of 4 sets of points and a maximum of 10 sets shall be configured.
- After completing the settings, click the [Apply] button to display the point alignment effect.



2.7.3. Precision Alignment

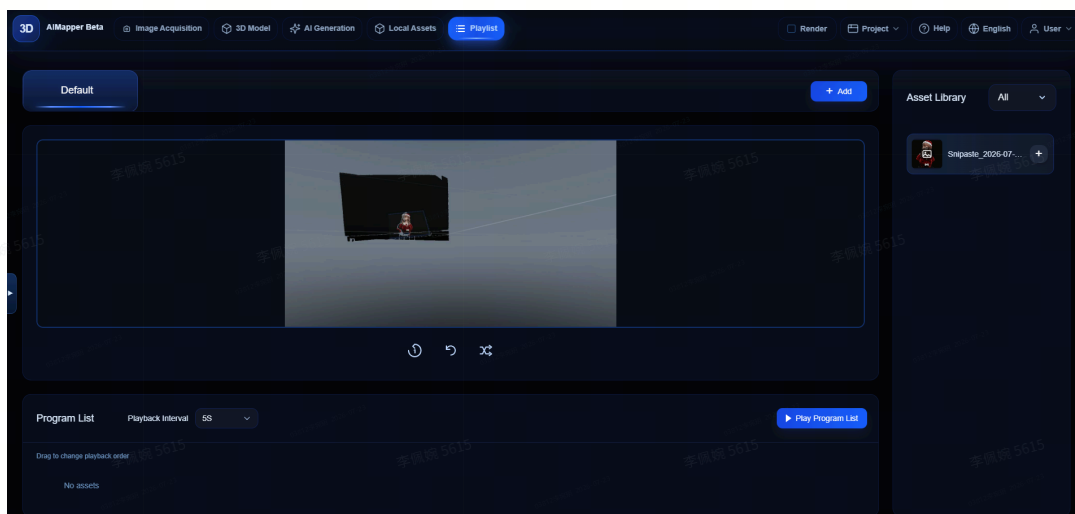
- You can fine-tune the alignment between local creatives and the model by adjusting the corresponding grid.
- Support selecting curve correction or linear correction



2.8 Playlist

2.8.1. Playlist Management

- Click the [Add] button to create a new playlist
- Click the [+] in the creatives library to directly add images or videos from the creatives library to the program list.
- Support setting the time interval of the program list



Chapter 3 Common Issues and Precautions

3.1 Frequently Asked Questions

1. Q: What should I do if the prompt "The account already exists, please log in directly" appears during registration?

Answer: This indicates that an account has already been registered with this email address, so there is no need to register again. Simply return to the login page and log in using this email

address and the corresponding password.

2. Q: What should I do if I don't receive the verification code for a long time after sending it?

A: Check whether the email address is filled in correctly and view the junk email folder of your mailbox; if you still do not receive it, wait for the 60-second countdown to finish, then click the [Send Verification Code] button again.

3. Q: What should I do if I get the prompt "The project name already exists, please re-enter" when creating a new project?

Answer: Project names under the same account cannot be duplicated. Please modify the project name to ensure it is unique, then perform the verification again.

4. Q: What should I do if I cannot enter the image acquisition process and the prompt "Please select a project first" appears?

A: Return to the welcome page or project management page, create a new project or open an existing one, select the target project, and then proceed to the image acquisition process.

5. Q: What should I do if the mobile phone cannot collect data normally after entering the image collection process?

A: Confirm that the pop-up window for the PC Client collection process is open, check whether the network connection between the mobile phone and the PC side is normal, and verify whether the status of the image capture device is "Ready".

6. Q: What should I do if the prompt "Unrecognized file type, please re-upload" appears when importing a model?

A: Replace it with a model file format supported by the system, then re-upload and import it.

7. Q: Can deleted AI assets be restored?

Answer: No, the deletion operation cannot be undone. Please confirm whether you need to retain this asset before deletion.

8. Q: What should I do if the source channel prompts "The current number of channels does not match the historical storage information of the project"?

Answer: Check the number and resolution of the signal sources connected to the current host, verify them against the signal source information stored in historical projects, adjust the signal source connection status and then try again.

3.2 Precautions

- Before using this Client, please ensure that your PC device is connected to a stable network, so as to avoid login failure, project synchronization failure and image acquisition failure caused by network anomalies;
- When creating a new project, ensure that the project name is unique to avoid duplicate creation which will affect project management;
- After entering the image acquisition process, keep the acquisition pop-up window open; otherwise, image acquisition cannot be performed normally on the mobile device.
- Before deleting items, collected data, or AI assets, make careful confirmation, as such operations are irreversible to avoid accidental deletion of important data;
- During the modeling process, please do not close the Client or switch to other software to avoid modeling failure or data loss;
- When importing a model, you need to select a file format supported by the system; otherwise, the import will fail.
- Regularly check for Client version updates and update to the latest version in a timely manner to enjoy a better user experience and functional support;
- When dragging and sorting source channels, please distinguish between the sources inside and outside the split-screen device to ensure the sorting meets usage requirements;
- During the AI generation process, please do not close the AI generation page to avoid generation failure. Once the generation is complete, you can view the creatives in AI Asset

Management.

Chapter 4 Contact Support

If you encounter any unresolved issues during use, you can contact the technical support team for professional assistance:

Contact number: 0755 32950000 ext.#8000

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