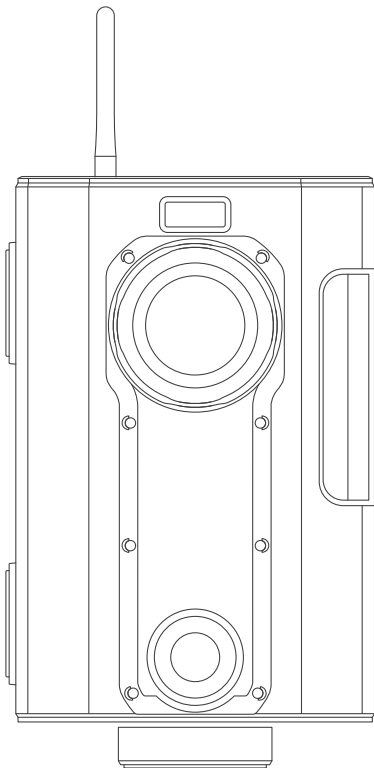


4DKanKan Minion

User Manual

V1.7



Instructions

Tutorial

4DKanKan Minion provides detailed shooting tutorials and operation tips to users. Learn more about it on the 4DKanKan official website.



eur.4dkankan.com

Notice before Use

Users must first download and install the 4DKanKan App, register, and log in before using the 4DKanKan Minion.

1. Go to the App Store and search for "4DKanKan" or download the App from the official website.

2. Sign up

Go to "Me"-"Log In/Sign up" and create an account, according to the instructions.

3. Bind your device

After signing up and logging in, go to "Me"-"Bound Cameras"-"Management"-"Bind a camera," scan the SN barcode at the bottom of the camera, or manually enter the SN barcode for binding. The Tours uploaded by the camera will be synchronized to the bound account once the binding is completed.

Contents

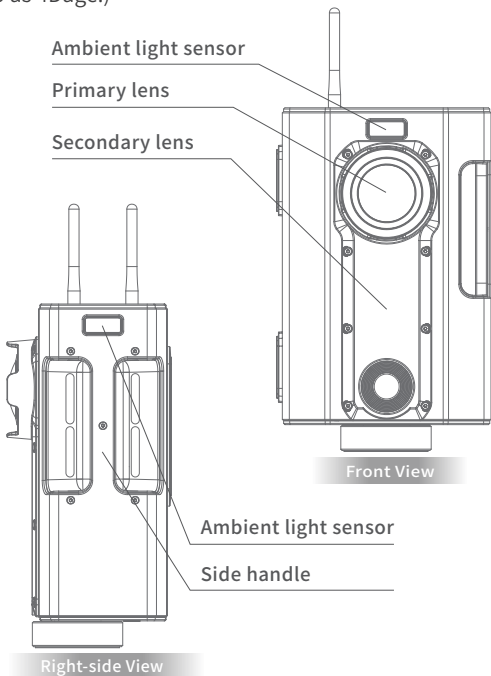
• Instructions	1
Tutorial	1
Notice before Use	1
• Product Description	4
• Use 4DKanKan Minion	6
Install and Connect	6
Shooting Mode	7
Shooting Schedule	8
◦ Select Shooting Points	8
◦ Route Planning	9
◦ Points Adjustment Mode	9
◦ Panoramic Video	10
Save and Generate 3D Tours	12
• FAQ	13
What is the difference between a 4DKanKan Minion and a panoramic camera?	13
What is the difference between a 4DKanKan Minion and traditional 3D modeling equipment?	14
How accurate is the 4DKanKan Minion?	14
How do users view the 3D Tours using VR headsets?..	14
About Account	15

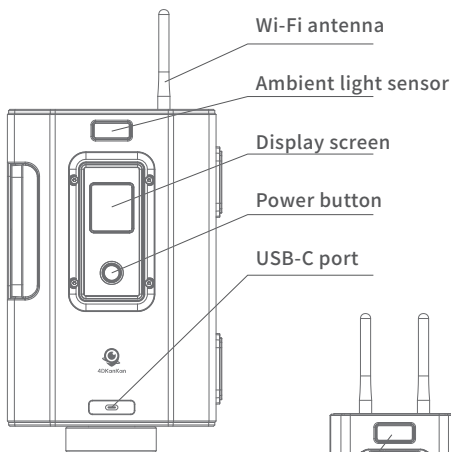
What devices can be compatible with the 4DKanKan Minion?.....	15
About Diverging Paths Shooting.....	16
About Pickup Shots	16
About Exposure	17
About the Charging Procedure	17
Others	18
• Post-sales Service	19
Terms of Service	19
Hardware Warranties	20
◦ Terms of hardware warranties	20
◦ Limited hardware warranty	21
◦ Return and refunds	22
Repair Service	22
◦ About paid repair	22
◦ Paid repair service.....	23
Disclaimer	23
◦ Copyright declaration	23
◦ Limit of Liability	23
• Specifications	24
• Contact us	25

Product Description

The 4DKanKan Minion is a professional 3D camera that can generate digital 3D Tours and compute distance measurements in real time. It has an image quality of up to 16K and supports magnifying up to four times.

Zhuhai 4DAGE Technology Co., Ltd. designed and created the 4DKanKan Minion (hereinafter referred to as 4Dage.)



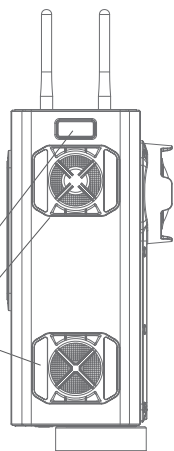


Back View

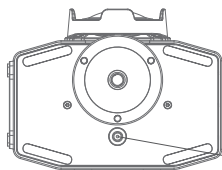
Ambient light sensor

Air inlet

Air outlet



Left-side View



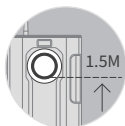
Top View

Use 4DKanKan Minion

Install and Connect

1. Install the camera

Set the camera tightly on a tripod and adjust the tripod's height and angle while keeping the camera vertical to the ground. Also, ensure that the primary lens is 1.5 meters from the ground.



2. Turn on the camera

To turn on the camera, press and hold the power button "○" on the 4DKanKan Minion. The camera is activated when the interface appears on the OLED screen as shown on the right side.



3. Connect to 4DKanKan Minion

After turning on the camera, launch the App, navigate to the 'Me' page, and search for the camera WiFi with the prefix "4DKKMI_". Then enter the password "12345678" to connect it.



When the camera is successfully connected, the user can return to the "Me" page, where the connection status of the camera is displayed. The same status will be displayed on the camera's display screen.



Shooting Modes

The 4DKanKan Minion camera features an automatic metering system that automatically adjusts the exposure coefficient based on the shooting conditions. And, through HDR processing, it can better show the details of the bright and dark parts of the image to present the best picture effect. It is equipped with 360° rotation shooting and achieves 16K seamless image stitching within only 60 seconds. Please do not touch the camera while it is operating.

Workflow

1. After using the App to connect the camera, click on the bottom navigation bar to enter the "Local" page, and click on the "+" in the lower right corner to create a new task.

2. Carry the camera to the shooting point after creating the task, and face the camera display while clicking the shooting button from the App.



3. The camera will start rotation shooting after clicking the shooting button. It will rotate in six positions, at 60 degrees each. The photographer should move by following the rotation position of the camera to avoid being captured in the frame.



In the APP, the user can see a preview of the image or Tours. When the results are satisfactory, the user can move the camera to the next point and resume shooting. The previous points must be deleted by the user, If the user wishes to reshoot the scene.

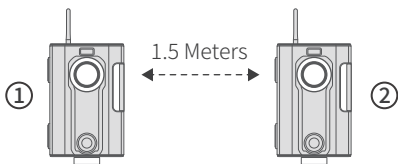


Please avoid obstructing the camera and causing rotation angle deviation during shooting.

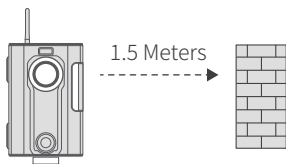
Shooting Schedule

Select shooting points

1. A distance of 1.5 m between 2 shooting points is recommended.



2. When shooting, the distance from the camera to the wall should be 1.5m.



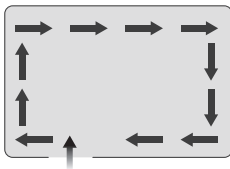
About "safe distance" of shooting

The camera's operation is based on the recognition of a point cloud. If users shoot from too close or too far away, the lens may not be able to fully recognize the point cloud data, resulting in image distortion and point misalignment. As a result, we recommend keeping the shooting distance of approximately 1.5m to 2m between the camera and the wall.

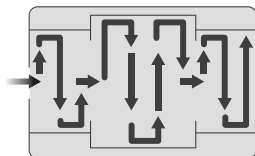
Furthermore, please avoid shooting in an environment with a lot of mirrors, as this can lead to calculation errors.

Route Planning

1. Plan your route and shoot at each point by following the route directions.



2. Please take the S route as recommended in larger spaces.



Point Adjustment Mode

This function is designed to aid in the reconstruction of Tours. When the point generated in Tours deviates from the actual position, use this function to adjust the point.

The steps are as follows:

1. Click the point setting function in the lower left corner to jump to the point setting interface.



2. The point setup interface has two function buttons: associated points and horizontal adjustment. Users can adjust the points according to the actual situation to ensure that the points fit in the correct position.

Associated point: the reference point of the scanner's shooting point position, which aids in the position calculation. As the related point, the nearest point to the shooting point is typically chosen.

Horizontal adjustment: used to alter the last point's horizontal orientation.

3. Ensure that the position is correct, then click "Save" to finish.

Panoramic Video

The panoramic video function is based on the Tours' spatial points data and supports the recording /playback of video at a specific point. The panoramic video will begin playing automatically when the user enters the virtual tours at a specific point with a video.

The process of recording panoramic video:

1. The photographer must plan ahead of time, the location and content of the panoramic video. During the recording process, pause is not supported.

2. Place the camera in a pre-planned position before shooting and adjust the camera lens to face the shooting direction.

Click the framing preview button "👁" in the App to confirm the shooting framing range, and then begin shooting once user have confirmed it's correct.



3. To begin, click the "⦿" button on the shooting page. It will automatically jump to the video preview page after the point picture is taken.



4. Click the video shooting button "⦿" to start recording after the guide has stood at the point, and then click again to stop recording. During the entire shooting process, users cannot move or adjust the direction of the camera.



5. After shooting, the user can watch the video using the App's "⏮" playback function. Click the shooting button if the user needs to record additional Tours. If users are happy with the results, they can return to shooting mode and continue shooting Tours by pressing the back button "⬅".

Save and Generate 3D Tours

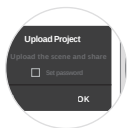
1. After shooting all of the points, the user should click "Save" in the upper right corner of the shooting frame, then follow the prompts to add a description before clicking "Save" again to save the data to the local terminal. The App will then navigate to the Tours section (Shown as on the right).



2. Press the upload button "⬆" If the camera is not connected to the Internet, the network interface will appear. Connect to the WiFi network using the WiFi interface. Once the connection is established, return to the "Local" page.



3. When the user clicks the "⬆" button again, they have the option of setting the Tours access password or not. Then, click Confirm to upload the Tours data. When a user uploads Tours data to the cloud, a 3D model is automatically generated.



4. After completing the computation, go to Tours to view the generated results in the Cloud.



FAQ

What is the difference between a 4DKanKan Minion and a panoramic camera?

A panoramic camera captures and outputs panoramic images or videos, whereas the 4DKanKan Minion captures and generates 3D Tours.

3D Tours vs Panorama

3D Tours include structural and image data from the captured space. The user can go to any point in the 3D Tours and get the length, width, and height of the space.

A panorama is a 2D image that can only be rotated by 720° at a fixed point and cannot record 3D structural data of space.

3D Tours vs Panoramic video

3D Tours include structural and image data from the captured space. In the 3D Tours, the user can choose his or her own route and duration of stay, with no time or angle constraints. A line of sight can be selected in a panoramic video, but the user can only watch the video along the fixed route provided by the photographer.

What is the difference between a 4DKanKan Minion and traditional 3D modeling equipment?

Traditional 3D modeling equipment is heavily reliant on professionals who must complete on-site scanning and then modify models. Regarding model generation speed, shooting and model calculation for a 150 m² space takes more than 300 minutes.

4DKanKan Minion generates 3D Tours autonomously, without the need for human intervention. Users with no professional background can also operate it efficiently after reading the manual.

How accurate is the 4DKanKan Minion?

The image captured by 4DKanKan Minion has a resolution of 16K and supports magnifying up to four times. After the 3D Tours is generated, the measurement function is supported.

How do users view the 3D Tours using VR headsets?

Select "VR mode" in the upper right corner of the generated 3D Tours on the user's phone. Users can leave their phones in the appropriate VR headsets to enjoy spectacular visual effects.

About Account

4DKanKan Minion has been set up as a "Camera Account" and a "User Account" to assist users in getting started quickly. The term "Camera Account" refers to the camera's initial account from the factory. Users can connect to the camera's WiFi via the App or scan the QR code on the official website's login page. The camera account can be used to manage Tours.

"User Account" refers to a user account signing up in the App or the official website. Users can log in using their username and password. Users can enjoy all of the benefits by purchasing Membership Subscription after linking their user account to a camera's SN number.

What devices can be compatible with the 4DKanKan Minion?

4DKanKan Minion requires iOS 11.0 or later to be compatible with iPhone 13/13 Pro/13 Pro Max/13 mini, iPhone 12/12 Pro/12 Pro Max, iPhone 11/11 Pro/11 Pro Max, iPhone X,iPhone XS, iPhone XS Max, iPhone XR, iPhone 8/8 Plus

The Android version of 4DKanKan App requires the following configuration or above:

1. Processor: Snapdragon 6 series 655 or above, Snapdragon 8 series 820 or above, Kirin 710 or above.

2. System requirements: Android 7.0 (64-bit OS) or above.

About Diverging Paths Shooting

Diverging paths shooting implies that after completing the first path shooting during the process, the user must return to a previous point and shoot another path. Diverging paths shooting necessitates the use of the "Point Adjustment" feature. On the "Project" page, open the "Point Adjustment Mode" by clicking the "  " in the bottom left corner.

And click the point closest to the selected shooting area. Click the shooting point, set it to the associated point, and then click the "Save" button in the upper right corner to get back to the shooting page.

About Pickup Shots

The following is the solution for Tours that need to do Pickup shots:

Locate the Tours that need to do Pickup shots in "Local," and then click "... " -> "Continue Shooting." Enter the "Shooting Project," then click the "  " in the lower-left corner to activate the "Point Adjustment Mode," and then click the point closest to the selected shooting area. Click the shooting point, set it to the associated point,

and then click the "Save" button in the upper right corner; the distance between the added and shooting points should be less than 1.5M.

The camera's workflow is derived from the recognition of the point cloud in space. If the previous point cloud cannot be recognized at the newly added shooting point, the newly added point's calculation may fail. The following are examples of common blunders: there is no location point anchoring in the Pickup shots, and the anchor point is far away from the first point of the Pickup shots.

About Exposure

Please avoid shining direct sunlight on the lens, as this will result in overexposure. Furthermore, in a dark indoor environment, overexposure may be a significant issue.

About the Charging Precedure

Please ensure that the camera has sufficient capacity during shooting to ensure the best possible performance. We do not recommend that the user use the camera while it is charging. When the battery is fully charged, the camera will shut down automatically.

Notes on long-term storage

During storage, the battery will self-discharge. If the camera is not charged for an extended period of time, the battery life may be reduced or damaged.

Others

How long does it take for the modeling calculation to be processed after it is uploaded?

A: The calculation time for a 100 m² space is approximately 10 minutes. When more than one user uploads to calculation at the same time, the server will perform the calculation in the order specified.

Where is the data kept?

A: The data is kept on cloud servers.

Is it possible for 4DKanKan Minion to perform 3D reconstruction on objects?

A: Rather than small objects, our camera is mainly used to reconstruct space.

What are the Tours' specific restrictions?

A: Each Tour can have up to 300 points and up to 30 hot spots.

Is it possible to edit the Tours after the calculation?

A: Once the model has been uploaded, the user can download it to local, make changes, and then re-upload it when they are satisfied.

Can the 4DKanKan Minion measure spatially?

A: It is, indeed, supported. By clicking on the measurement tool, users can begin measuring the spatial.

How do users create Tours with multiple floors scanning?

A: The 4DKanKan Minion can scan up to seven floors at once. Users should pay attention to shooting along the stairs to other floors while shooting. Shooting in the elevator cab is not advised.

Can users obtain model data and upload it to their own web?

A: Log in to the PC terminal, enter “My Tours”, then click the “” in the upper right corner to begin the embedded production. Then, to realize it, users can copy the code from the embedded link code and embed it in their website.

Post-sales Service

Terms of Service

Buyers who purchased 3D cameras (hardware) through 4DKanKan's official online channels (4DKanKan's official website) are eligible for warranties.

Hardware Warranties

(1) Terms of hardware warranties

1. Beginning with the second day after receipt, if a functional failure due to non-human damage occurs within seven days and is verified by 4DAGE, the user may return, exchange it for the same model with the same specifications or repair it for free.
2. Beginning on the second day after receipt, if a functional failure occurs due to non-human damage between the eighth and fifteenth days and is verified by 4DAGE, users may exchange it for the same model with the exact specifications or repair it for free.
3. If a functional failure occurs due to non-human damage within one year of receipt and is verified by 4DAGE, the user is entitled to free repair service.
4. Calculating from the date of receipt, if a functional failure occurs due to non-human damage within one year and the camera is unable to perform well after two repairs. Users can select free repair or contact customer service using the effective repair record provided by the repairer in the warranty card to see if it can be exchanged. If this is the case, users may exchange it for the same model with the exact specifications or return it.

(2) Limited hardware warranty

4DAGE will not provide warranty if:

1. The warranty has expired;
2. The user's failure to use, preserve, or maintain the product in accordance with the product manual causes the damage;
3. The damage is caused by misuse, such as falling, squeezing, or immersion in water;
4. The damage is caused by force majeure such as floods, fires, and lightning strikes;
5. Machines repaired by non-official website designated service providers;
6. The failure or accident is caused by using non-original accessories;
7. The camera was not purchased through 4DAGE's official channels, and any of the models, serial numbers, or manufacturing numbers on the product have been changed, deleted, relocated, or cannot be identified;
8. The warranty only covers the hardware. All accessories, including software, CDs, and user manuals, are not covered by warranty;

9. Any damage or scratches on the product's appearance will not be eligible for the return or replacement service.

(3) Return and refunds

1. Contact the customer service department using the phone number or email address listed on the official website;
2. Once the inspection personnel has confirmed that it can be returned or exchanged, the entire set of products (including gifts) and invoices should be mailed or delivered to 4DAGE;
3. 4DAGE will handle the case in accordance with the product maintenance list;
4. The user should pay for the shipping costs associated with the return. If the user does not pay the shipping cost, it will be deducted from the refund amount at the current rate. The refund path is identical to the payment path. The refund's arrival time is determined by the bank and payment institution.

Repair Service

(1) About paid repair

4DAGE offers qualified paid repair services for

products that have been accidentally damaged, are out of warranty, or do not meet warranty conditions.

(2) Paid repair service

1. Be patient when contacting the customer service department via the phone number or email address listed on the official website;
2. Please make payment after confirming the repair content and cost with maintenance personnel;
3. Ship the product to 4DAGE Co., Ltd. for repair.

Disclaimer

(1) Copyright declaration

Users must understand and acknowledge that the exhibition and use rights of works created with 4DKanKan are shared by the user and 4DAGE once the user voluntarily uploads the works (video, music, pictures, etc.) to 4DAGE's official website.

(2) Limit of liability

To the greatest extent permitted by applicable law, 4DAGE shall not be liable for any direct, indirect, or consequential damages resulting from users' copying or downloading of the information or materials contained in 4DKanKan's user manual.

Specifications

Image Resolution	16K (16384 x 8192)
Image Size	5472 x 3648
Function	Shoot

Function Description	A 360° rotation shooting achieves data generated on six sides, with HDR support.
Storage	64G
Sensor	1 inch sensor (2.54cm), with Aperture in f/3.2
Lens	Horizontal: 85.06°/Vertical: 133.11° Diagonal: 173.4°
Camera Body	<u>Active (switch the antenna on)</u> 343 x 166.5 x 127.5 mm <u>Inactive (switch the antenna off)</u> 265.4 x 166.5 x 127.5 mm
Type of Device Interface	Type-C 3.1 (Data Transmission) DC Plug(When Charging the Camera)
Battery Capacity	6460mAh
Voltage	14.52V

Contact us

Hotline (Mainland China) : 400-6698-025

Email (Global) : service@4dage.com

Business Cooperation

Hotline: 0756-6996796 / 6996791

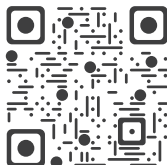
Email: sales@4dage.com

Publicity

Email: pr@4dage.com

eur.4dkankan.com

Follow 4DAGE Official Account by
scanning the QR code down below



FCC Warning Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co - located for operating in conjunction with any other antenna or transmitter.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

4DKanKan Minion