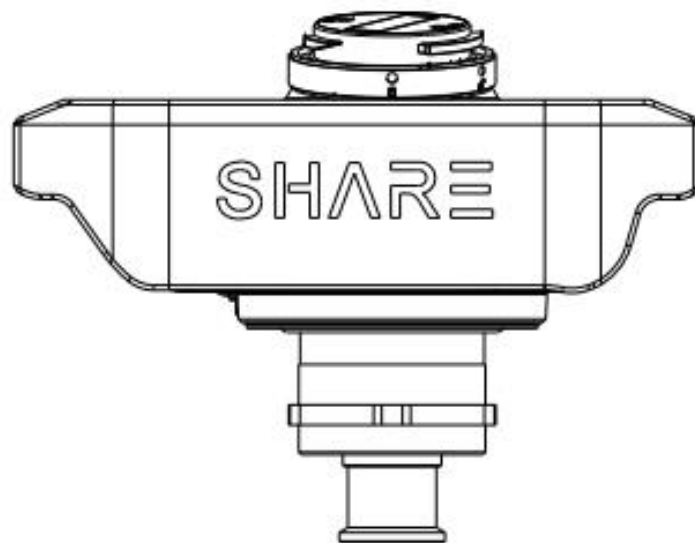# Mapping Camera SHARE 6100

User Manual V1.0

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深圳赛尔智控科技有限公司

SHENZHEN SHARE UAV TECHNOLOGY CO., LTD.

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In the Box

Mapping Camera x1
Storage Case x1
SD Card x1
Micro SD Card x1
Card Reader x1
Skyport Cap x1
Lens Cleaning Cloth x1

SHARE 6100

SHARE 6100 is equiped with a 61MP full frame sensor and a professional 40mm mapping lens, which is specially designed for aerial photogrammetry. It's seamless docking with DJI Matrice 210 RTK V2 & DJI Matrice 300 RTK. It's easily operated by DJI Pilot and it supports real-time image transmission. The integration with DJI RTK system can make sure the camera capture high-precision data for modeling. Which can realize drone surveying and mapping with no GCPs used. Besides, SHARE UAV will offer software to help user manage the flight mission and images.
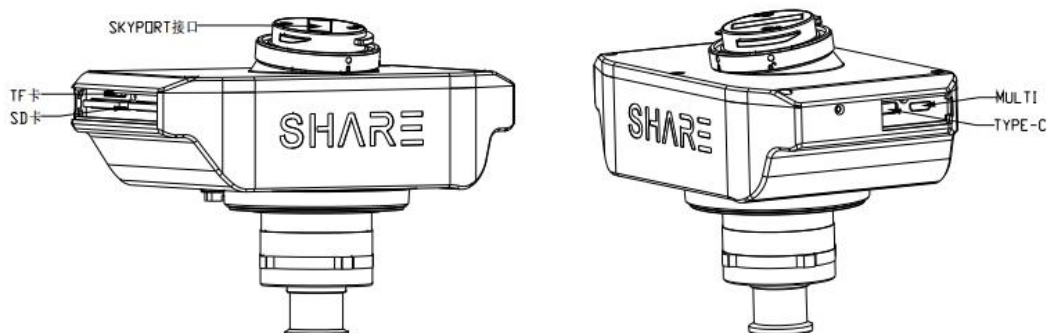
Installtion

1. Remove the Skyport cap
2. Align the white dots of the two port of the camera with the red dots on the drone, and embed them in the installation position.
3. Rotate the camera mount to the locked position, align the red dots to fix the white dots, and the camera installation is complete.
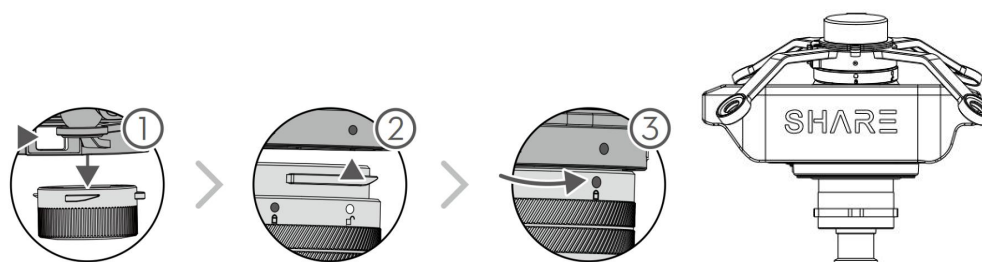

*Ensure the microSD card slot cover is firmly in place to prevent dust or moisture entering during usage or transportation.

Camera Operations

Power On

The mapping camera use drone to supply power, it power on/off in sync with the drone. Take M300 RTK as an example. Step of power on:

1) Mount the SHARE 6100 on the DJI drone, and please make sure the installation is firm.

2) Turn on the power of the drone, the camera will start to self-est. It will take about 35s to power on. When it's done, the camera beeps.

3) During camera booting, the real-time data windows on DJI pilot will show 'no photo'. After the camera is turned on normally, it will show 'photo'.
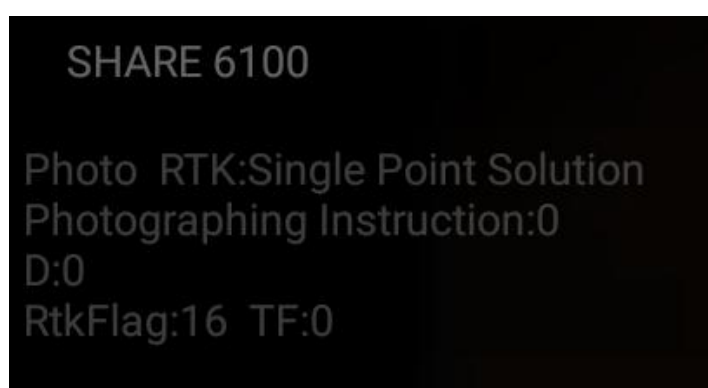

Real-time Data Display

|	Dispaly	Meaning	Remark
1	Photo	Camera is turned on, it can capture normally	
2	RTK	RTK status	
3	Photographing Instruction	The capture times that camera received	
4	D	The capature times of downward vision	
5	RtkFlag		0 -- no solution, 16 -- single point solution 34 -- floating point solution 50 -- fixed solution

Take Photo

After camera turned on, camera will be able to take photo. Since the focus is infinity, the real-time images transmission on DJI Pilot will show dark image. User can press the 'photo' button on controller to test the photo function.
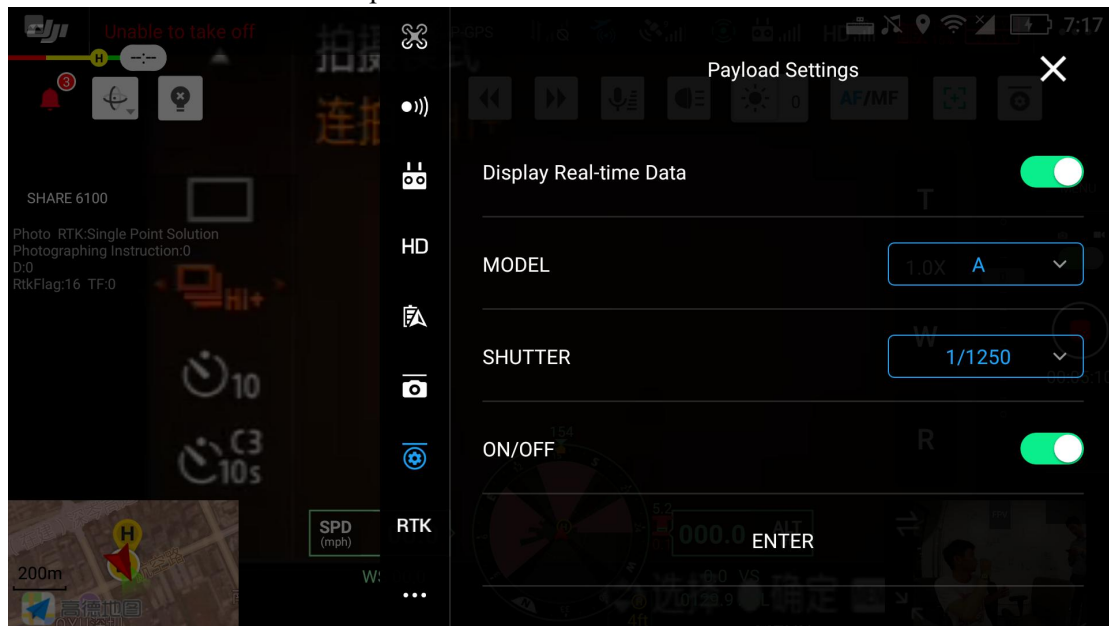
Camera Setting

Using DJI Pilot to create a route and set custom camera parameters.
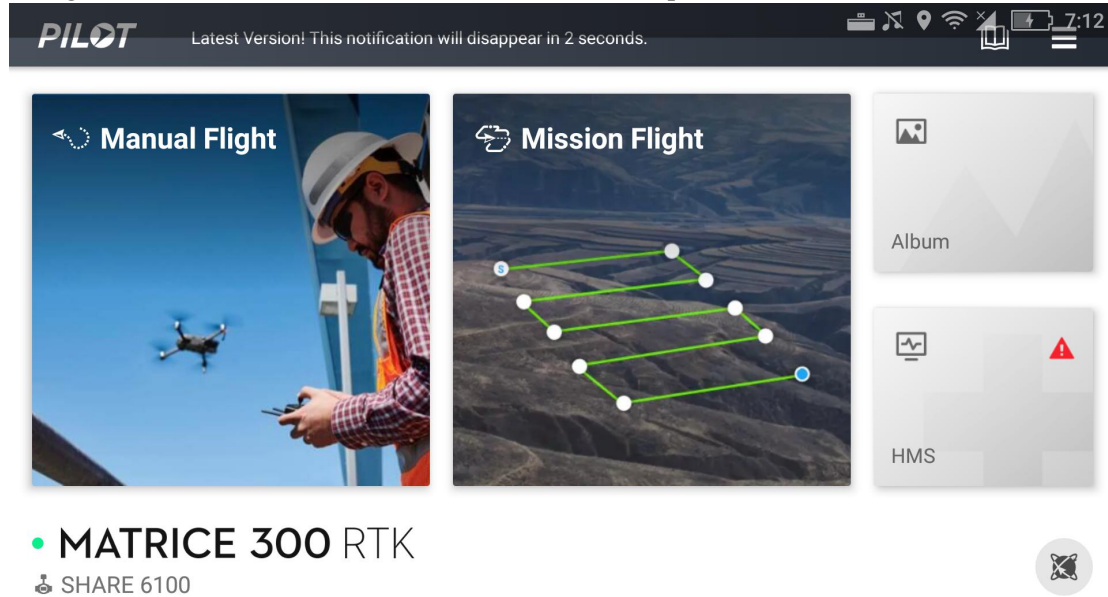
1) Camera setting on DJI Pilot

Open DJI Pilot – Mission Flight -- Create a Route -- Mapping -- Create a mapping area – Custom Camera – Add Camera – Camera Setting -- Overlap setting

2) Parameters of SHARE 6100

	Photo resolution (W)	Sensor size (W)	Focal length
SHARE 6100	9504px	35.7mm	40.0 mm
	Photo resolution (H)	Sensor size (H)	Minimum interval
	6336px	23.8mm	1.0s

Save the camera setting.
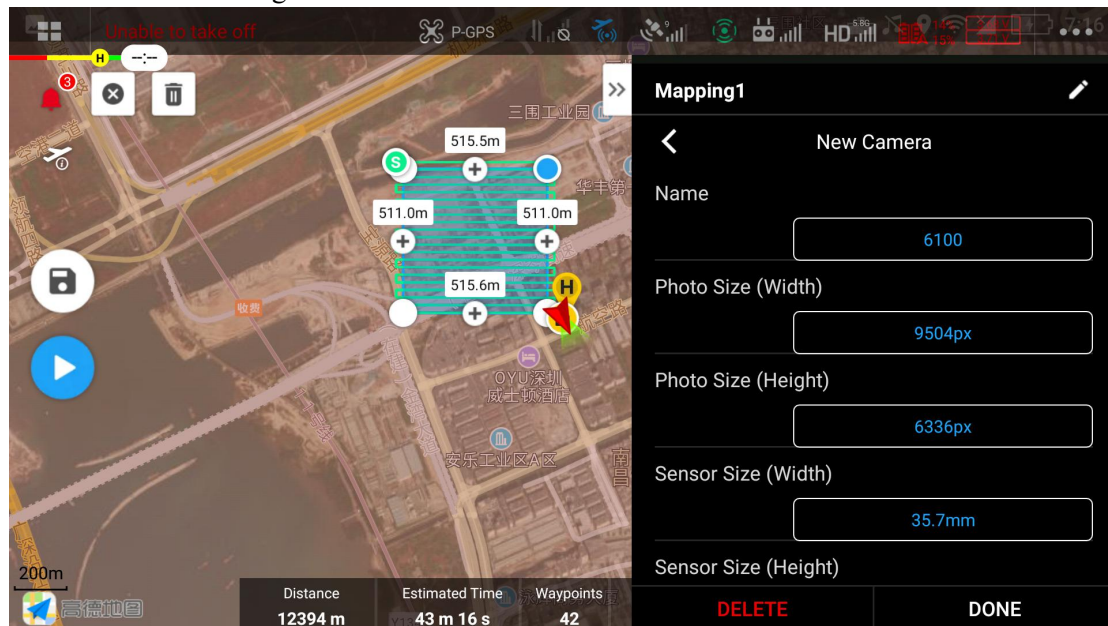
Payload Setting

	Function
Display Real-time Data	Hide or dispaly the real-time data window on DJI Pilot
Mode	Switch the photo mode (A, S, M), default setting is M
Shutter	Shutter speed (1/640, 1/800, 1/1000, 1/1250)
On/Off	Control camera powr on/off, default setting is on
Enter	The enter button, same as the button on SONY camera
Menu	The menu button, same as the button on SONY camera
Up	The up button, same as the button on SONY camera
Down	The down button, same as the button on SONY camera
Left	The left button, same as the button on SONY camera
Play	The play button, same as the button on SONY camera
Delete	The delete button, same as the button on SONY camera
Test	Camera capture test

SHARE 6100

Photo RTK:Single Point Solution
Photographing Instruction:0
D:0
RtkFlag:16 TF:0

Unable to take off

SPD
(mph)

RTK
HD

Photographing Instruction:0
D:0
RtkFlag:16 TF:0

SPD
(mph)

RTK
HD

200m

Photographing Instruction:0
D:0
RtkFlag:16 TF:0

10

C3
10s

SPD
(mph)

RTK

200m

Payload Settings

Display Real-time Data

GEAR   1.0X   A

SHUTTER   1/1250

ON/OFF

ENTER

MENU

UP

DOWN

LEFT

RIGHT

PLAY

DELETE

TEST

Specifications

General	
Product Name	SHARE 6100
Dimensions	136 x 103 x 76 mm
Weight Approx.	380 g
IP Rating	IP4X
Supported Aircraft	Matrice 210 RTK, Matrice 300 RTK
Operating Temperature	-10°C~40°C
Humidity	95%
Camera	
Sensor size	Full frame
Effective Pixels	61 MP
Pixel size	3.7 um
Photo Size	9504 x 6336
Operation Modes	Capture
Minimum Photo Interval	≥0.8 s
Shutter Speed	Mechanical Shutter Speed: (1/640, 1/800, 1/1000, 1/1250)