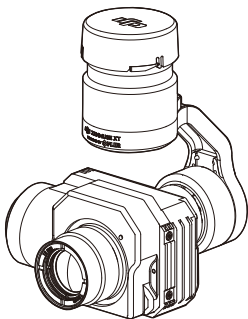


ZENMUSE XT

POWERED BY 

Quick Start Guide

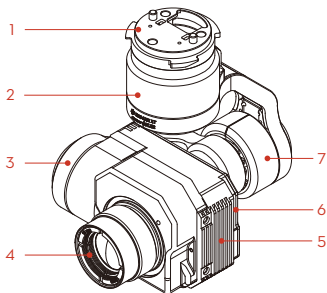
V1.0



Zenmuse XT

The Zenmuse XT gimbal and camera features the FLIR Longwave Infrared Thermal Camera. It provides high-sensitivity (<math><50\text{ mK}@f/1.0</math>) infrared scanning at 640/30 fps or 336/30 fps (depending on the camera model), and comes with 6.8 mm, 7.5 mm, 9 mm, 13 mm and 19 mm lens options.

As with other DJI 3-axis gimbal systems, the Zenmuse XT can be mounted onto the Inspire 1, Inspire 1 v2.0 or Matrice 100 aircraft and stream live HD video to the DJI GO app. This makes it excellent for aerial thermal applications such as inspection and maintenance, search and rescue, and precision agriculture.



1 Gimbal Connector

2 Pan Motor

3 Tilt Motor

4 Lens

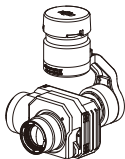
5 Camera

6 Micro SD Slot

7 Roll Motor

In the Box

Gimbal and Camera ×1



16GB Micro SD Card ×1



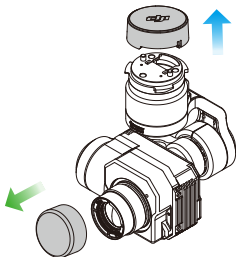
For more information, read the User Manual:
<http://www.dji.com/product/zenmuse-xt>



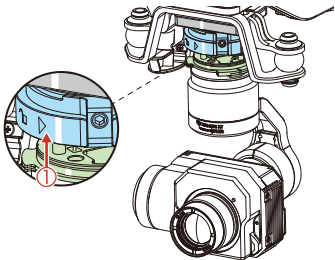
※This Quick Start Guide is subject to change without prior notice.

Installation

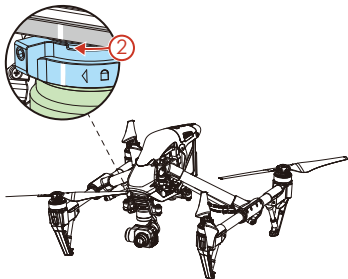
Remove the gimbal cap and lens cap.



Rotate the Gimbal Lock on the Inspire 1 to the unlocked position. Align the white lines and insert the gimbal.



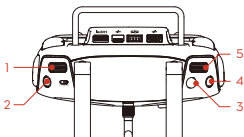
Rotate the Gimbal Lock to the locked position.



Camera Controls

Remote Controller

To select a Palette or adjust digital zoom, press the right dial. Press the Shutter Button or Record Button to capture photos or record video. Adjust the camera's tilt using the left dial.



1 Left Dial

2 Record Button

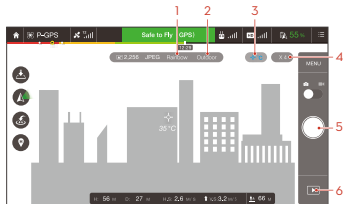
3 Shutter Button

4 Playback Button

5 Right Dial

DJI GO App

The touch interface can be used for capturing photos, recording videos and playback. The Palette, Scene, Digital Zoom, Spot Meter and Isotherm functions can all be configured in the app.



- | | |
|--------------|-------------------------|
| 1 Palette | 4 Digital Zoom |
| 2 Scene | 5 Shutter/Record Button |
| 3 Spot Meter | 6 Playback |

Specifications

• General

Name	Zenmuse XT
Dimensions	103 mm × 74 mm × 102 mm
Weight	270 g

• Gimbal

Angular Vibration Range	±0.03°
Mount	Detachable
Controllable Range	Tilt: +30° to -90°; Pan: ±320°; Roll: ±15°
Mechanical Range	Tilt: +45° to -135°; Pan: ±320°; Roll: ±45°
Max Controllable Speed	120°/s

• Camera

Thermal Imager	Uncooled VOx Microbolometer
FPA/Digital Video Display Formats	640 × 512; 336 × 256
Analog Video Display Formats	720 × 480 (NTSC); 720 × 576 (PAL)
Pixel Pitch	17 μm

Spectral Band	7.5 - 13.5 μm
Full Frame Rates	30 Hz (NTSC); 25 Hz (PAL)
Exportable Frame Rates	7.5 Hz (NTSC); 8.3 Hz (PAL)
Sensitivity (NE Δ T)	<50 mK at f/1.0
Scene Range (High Gain)	640 \times 512: -13° to 275° F (-25° to 135° C) 336 \times 256: -13° to 212° F (-25° to 100° C)
Scene Range (Low Gain)	-40° to 1022° F (-40° to 550° C)
Spot Meter	Temperatures measured in central 4 \times 4
File Storage	Micro SD Card
Photo Format	JPEG, TIFF
Video Format	MP4
Video Recording Bitrate	2 Mbps
Support SD Cards	Micro SD, Max capacity: 32 GB

• Image Processing & Display Controls

NTSC/PAL (Field Switchable)	Yes
Image Optimization	Yes
Digital Detail Enhancement	Yes
Polarity Control (Black Hot/White Hot)	Yes
Color & Monochrome Palettes (LUTs)	Yes
Digital Zoom	640 \times 512: 2x, 4x, 8x 336 \times 256: 2x, 4x

• Lens Models

Lens Models		6.8 mm	7.5 mm	9 mm	13 mm	19 mm
17 μ 640 \times 512	FoV	/	f/1.4 90° \times 69°	f/1.4 69° \times 56°	f/1.25 45° \times 37°	f/1.25 32° \times 26°
	iFoV	/	2.267 mr	1.889 mr	1.308 mr	0.895 mr
17 μ 336 \times 256	FoV	f/1.4 49.1° \times 37.4°	/	f/1.25 35° \times 27°	f/1.25 25° \times 19°	f/1.25 17° \times 13°
	iFoV	2.519 mr	/	1.889 mr	1.308 mr	0.895 mr
Min Focus Distance		2.3 cm	2.5 cm	3.2 cm	7.6 cm	15.3 cm
Hyperfocal Distance		1.2 m	1.2 m	2.1 m	4.4 m	9.5 m
Hyperfocal Depth of Field		0.6 m	0.6 m	1.1 m	2.2 m	4.8 m

• Environmental

Operating Temperature	14° to 104° F (-10° to 40° C)
Non-Operating Temperature	-22° to 158° F (-30° to 70° C)
Temperature Shock	5°C/min
Humidity	5% to 95%

ZENMUSE XT

POWERED BY  FLIR