ZENMUSE Z3

User Manual

DJI

Using this manual

Legends

⊘ Warning ⚠ Important

Before Use

Read the following documents before using the ZENMUSE™ Z3:
1. Zenmuse Z3 Safety Guidelines and Disclaimer
2. Zenmuse Z3 Quick Start Guide
3. Zenmuse Z3 User Manual

Check that all of the items are included in the package. We recommend that you read the Disclaimer and Safety Guidelines before you use the product. Refer to the User Manual for more detailed information.

Contents

Product Profile

Overview

The Zenmuse Z3 gimbal and camera features an optical zoom lens. It provides a 3.5 optical zoom and 2x digital zoom. The Type 1/2.3 CMOS sensor supports 4K video recording and 12MP still photos. As with other DJI 3-axis gimbal systems, the Zenmuse Z3 can be mounted onto a DJI aircraft and stream live HD video to the DJI GO app.
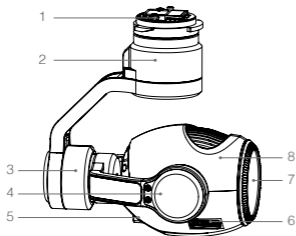
In the Box

Gimbal and Camera ×1

16GB Micro SD Card ×1

Components

1. Gimbal Connector
2. Pan Motor
3. Roll Motor
4. Tilt Motor
5. Micro USB Port
6. Micro SD Slot
7. Lens
8. Camera

Installation

Getting Started

The Zenmuse Z3 can be used with the following DJI aerial platforms:

DJI Inspire 1 series

Matrice 100

Matrice 600

Supported Micro SD Cards

The Zenmuse Z3 comes with a 16GB Micro SD card, but also supports Micro SD cards with a capacity of up to 64GB. We recommend using a UHS-1 Micro SD card to minimize the delay when reading and writing high resolution video data.

⊘   DO NOT remove the Micro SD card from the Zenmuse Z3 when it is powered on.

Installing the Zenmuse Z3

1. Remove the Gimbal Cap.
2. Rotate the Gimbal Lock on the Inspire 1 to the unlocked position. Align the white lines and insert the gimbal.
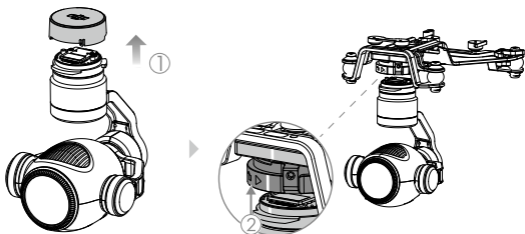
3. Rotate the Gimbal Lock to the locked position.
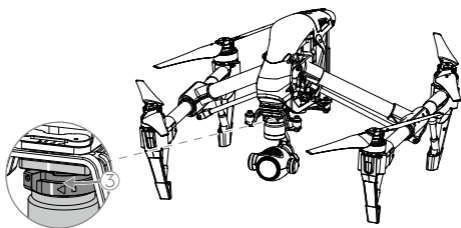
Remote Controller Controls

To adjust the zoom, press the C2 Button and rotate the Left Dial. Press the Shutter Button to capture photos or the Record Button to record video. Adjust the camera's tilt using the Left Dial.

1. Left Dial
2. Record Button
3. Shutter Button
4. Playback Button
5. C2 Button

[1] Left Dial
Turn to adjust the camera's tilt or pan.

[2] Record Button

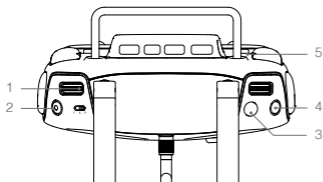Press to start/stop recording video.

[3] Shutter Button

Press to take photos.

[4] Playback Button

Press to view photos and videos on your Micro SD card. Press again to exit.

[5] C2 Button

To adjust the zoom, press the C2 Button and rotate the Left Dial.

DJI GO App Controls

Downloading DJI GO

Search for 'DJI GO' on the App Store or Google Play and download the app to your mobile device.

⚠️ DJI GO supports iOS 8.0 (or later) or Android 4.1.2 (or later).

Connecting to DJI GO

1. Turn on the aircraft and the remote controller.
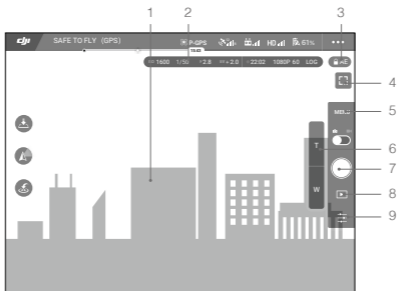2. Connect your mobile device to the remote controller using a USB cable.
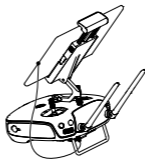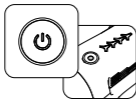
3. Launch DJI GO and enter Camera View. You will see real-time video from the camera when a connection is established.

Operating the Camera

Camera Panel

The touch interface can be used for capturing photos, recording videos and playback. Professional photography controls are also available.

1. Live HD Video
2. Photography Configurations Display
3. AE Lock
4. Focus
5. Parameter Settings (e.g. Photo and Video Size, Format, White Balance and Color)
6. Optical Zoom
7. Shutter / Record Button
8. Playback
9. Photography Controls (e.g. ISO, Shutter and Photometry)

Basic Shooting

Taking Photos

Slide the Photo/Video Switch to the 📷 position. Tap the ● button to take a single photo. Choose from one of the shooting modes by tapping "MENU" -> 📷 -> Photo.

1. Burst Mode

   Take 3, 5, or 7 shots in a row.

2. AEB (Auto Exposure Bracketing)

   Take 3 or 5 bracketed photos with ±0.7 EV steps for exposure compensation.

3. Time-lapse

   Take photos in 10, 20 or 30 second intervals.

Recording Videos

Slide the Photo/Recording Switch to the ▇◀ position. Tap the ● button to start or stop recording video.

Advanced Settings

Exposure Modes

Tap ⵘ to choose from the following exposure modes:

1. AUTO

   The shutter speed and aperture are set automatically to obtain the correct exposure.

2. S (Shutter Priority)

   Set your desired shutter speed, while the camera chooses the aperture automatically. This mode is ideal for freezing action, creating motion blur or low-light shots.

3. M (Manual Exposure)

   In general, increase the ISO for low light environments, and decrease the ISO if the surrounding is very bright.

Photo Styles

Tap MENU -> ⟨◎⟩> Style to choose from the following styles:

1. Standard

   A general-purpose style for most scenes.

2. Landscape

   The camera will focus on as much of the scene as possible by using a large depth of field.

3. Soft

   Suitable for scenes with natural or soft colors.

4. Custom

   Sharpness: -3 to +3

   Contrast: -3 to +3

   Saturation: -3 to +3

White Balance

Tap MENU -> ⟨◎⟩ ->White Balance to choose from the following modes:

1. Auto

   The camera adjusts the white balance automatically.

2. Sunny / Cloudy / Incandescent / Neon

   Choose one of these modes if natural-looking colors cannot be achieved by setting Photo Style.

3. Custom (2000K - 10000K)

   Set a value between 2000K and 10000K to compensate for a specific light source.

Optical Zoom

Tap Buttons "T" and "W" for optical zoom.

List of Settings

Photo	
Shooting Modes	Single Shot, HDR Shot, Burst Mode (3/5/7), AEB (3/5 bracketed frames), Timelapse (10s/20s/30s)
Image Format	JPEG, DNG, JPEG+DNG
Image Size	4: 3, 16: 9
White Balance	Auto, Sunny, Cloudy, Incandescent, Neon, Custom (2000K - 10000K)
Style	Standard, Landscape, Soft, Custom (Sharpness / Contrast / Saturation)
Color	D-LOG, D-Cinelike, None, Art, Black White, Vivid, Beach, Dream, Classic, Nostalgia
Video	
Video Size	UHD: 4K(4096×2160)24/25p 4K(3840×2160)24/25/30p 2.7K(2704×1520)24/25/30p FHD: 1920×1080 24/25/30/48/50/60p
Video Format	MOV, MP4
NTSC/ PAL	PAL, NTSC
White Balance	Auto, Sunny, Cloudy, Incandescent, Neon, Custom (2000K - 10000K)
Style	Standard, Landscape, Soft, Custom (Sharpness / Contrast / Saturation)

| Color	D-LOG, D-Cinelike, None, Art, Black White, Vivid, Beach, Dream, Classic, Nostalgia
General	
Histograms	Supported
Video Captions	Supported
Over Exposure Warning	Supported
Grid	Off, Grid Line, Grid + Diagonal
Center Point	None, Circle, Cross, Narrow Cross, Square (No Center Point), Square (w. Center Point), Bracket (No Center Point), Bracket (w. Center Point) Center Point Color: White, Yellow, Red, Blue, Green
Anti-Flicker	Auto, 60Hz, and 50Hz
File Index Mode	Reset, Continuous
Format SD Card	Supported
Reset Settings	Supported

Managing your Photos and Videos

Playback

Tap ▶ in the DJI GO app to review photos and videos that you have captured. Press the same button again to return to capturing images.

Downloading your Files

Download your photo and video files to your PC via the Micro USB Port or using a Micro SD card reader.
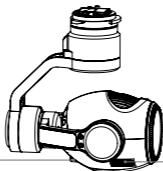
Micro USB Port ———————————————— Micro SD Slot

⚠ The camera must be powered on to access the files.

Specifications

General	
Name	Zenmuse Z3
Dimensions	105×115×85 mm
Weight	262 g
Gimbal	Gimbal
Angular Vibration Range	±0.02°
Mount	Detachable
Controllable Range	Tilt: +30° to -90°, Pan: ±320°
Mechanical Range	Tilt: +50° to -140°, Pan: ±330°, Roll: +90° to -50°
Max Controllable Speed	Tilt: 120°/s, Pan: 180°/s
Camera	
Sensor	CMOS, 1/2.3" Max Pixels: 12.76 M, Effective Pixels: 12.4M
Lens	3.5x Optical Zoom, 22 - 77mm Equivalent F2.8 (Wide) - F5.2 (Tele), FOV 92° (Wide) - 35° (Tele)
Photo Resolutions	4:3, 4000×3000 16:9, 4000×2250

Video Resolutions	UHD: 4K (4096×2160) 24/25p
	        4K (3840×2160) 24/25/30p
	        2.7K (2704×1520) 24/25/30p
	FHD: 1920×1080 24/25/30/48/50/60p

Photo Quality	Superfine
Video Quality	Superfine
Photo Formats	JPEG, DNG, JPEG+DNG
Video Formats	MOV, MP4

Video Repair Feature	Supported
Working Modes	Capture, Record, Playback
Still Photography Modes	Single shot, Burst shooting: 3/5/7 frames, Auto Exposure Bracketing (AEB): 3/5 bracketed frames at 0.7EV bias, Timelapse
Exposure Mode	Auto, Manual, Shutter
Exposure Compensation	±3.0 (1/3 increments)
Metering Mode	Center-weighted metering, Average metering, Spot metering (Area option 12x8)
AE Lock	Supported
Electronic Shutter Speed	8 - 1/8000s
White Balance	Auto, Sunny, Cloudy, Incandescent, Neon, Custom (2000K - 10000K)
ISO	100 - 3200 (Video) 100 - 1600 (Photo)
Video Captions	Supported
Anti-flicker	Auto, 50Hz, 60Hz
PAL / NTSC	Supported
Supported SD Cards	Micro SD (SD / SDHC / SDXC) Max. Capacity: 64 GB, Class 10 or UHS-1
Supported File Systems	FAT32 (≤ 32 GB) exFAT (> 32 GB)
USB Port	USB 2.0 Host / Device
Environmental	
Operating Temperature	14 to 104°F (-10 to 40°C)
Non-Operating Temperature	14 to 140°F (-10 to 60°C)

DJI Support
www.dji.com/support

This content is subject to change.

Download the latest version from
http://www.dji.com/product/zenmuse-z3