3DM V3 Oblique Camera

User Manual

V1.0 2021.12

FOXTECH

Contents

Description

Disclaimer

Thank you for purchasing this product. you can log in to the website for the latest product information, technical support and user manual. It is recommended that you download and use the latest version of the user manual. This manual is subject to change without notice.

You can also get product usage information or technical support through official customer service. Due to different production batches, the appearance or function parameters are slightly different and will not affect the normal use of the product.

Please read this statement carefully before using. Once used, it is deemed to be an endorsement and acceptance of the entire contents of this statement. Please read the instruction manual carefully and strictly follow the instructions in this manual to use this product. Foxtech will not be liable for any result or loss caused by improper use, installation, assembly or modification of users.

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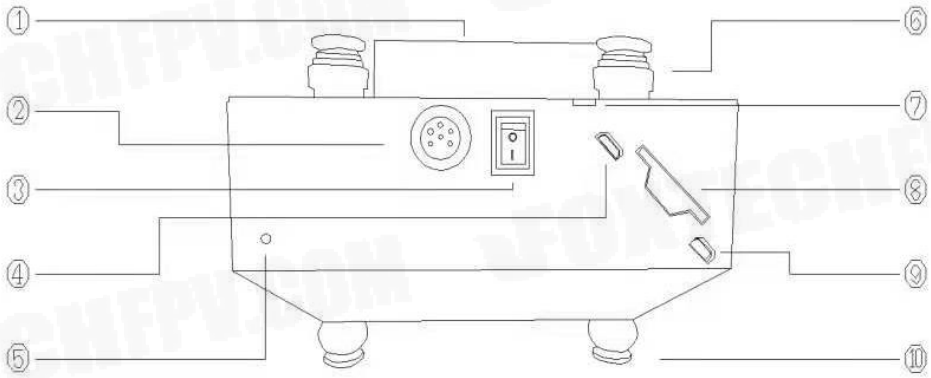
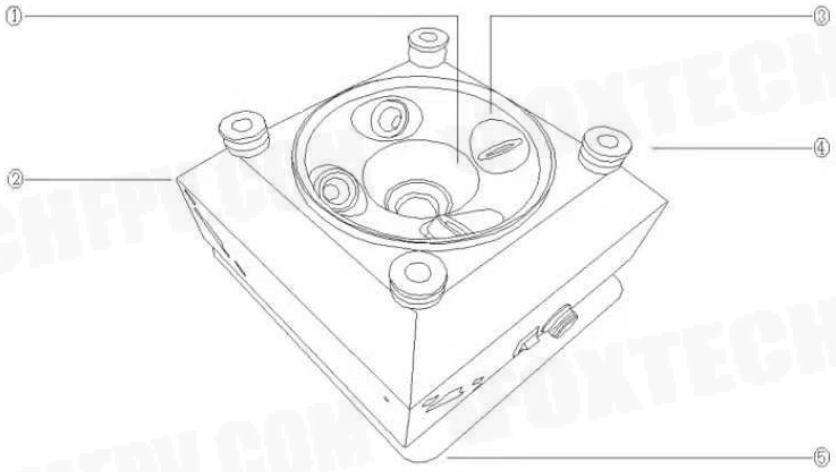
Specification

Product	3DM V3
Single pixels	24 mega pixels
Total pixels	120 mega pixels
Minimum exposure time	0.6s
Sensor size	23.5 * 15.6mm (APS-C)
Hot shoes for PPK	Support
Resolution	6000*4000
Shutter speed	30—1/8000
Size	129mm*129mm*85mm
Length	25.2mm + 35.7mm
Power	4S-6S
weight	680g
Parameter setting	APP or USB
Date reading	SD card

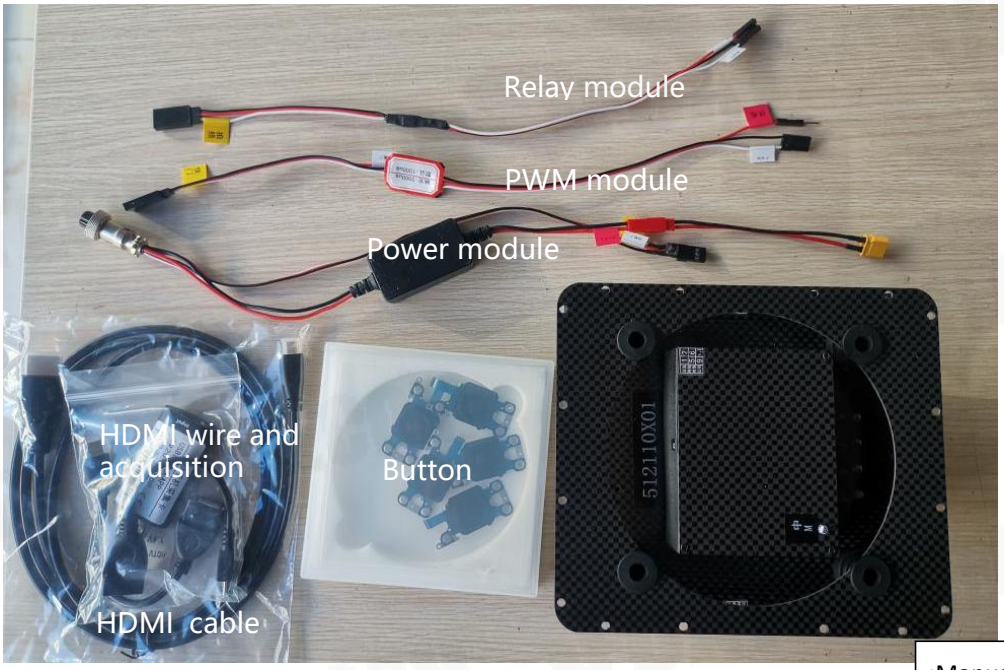
Interface Definition



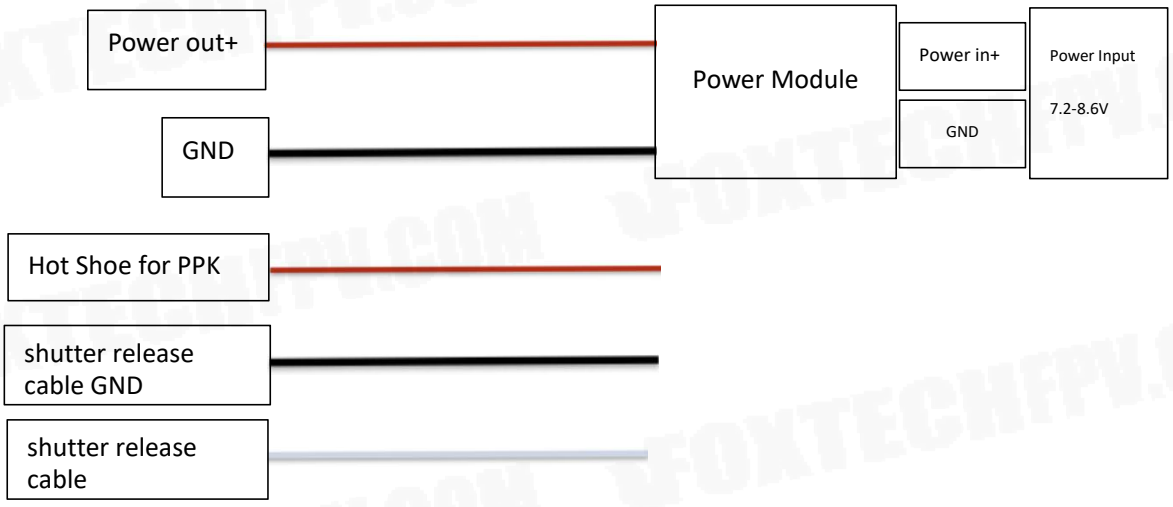
No.	Description	No.	Description
1	Orthographic camera shell	6	Upper damping ball
2	Power, shooting and hot shoe for PPK all-in-one cable	7	Button Port
3	Power on/off	8	SD card
4	Micro-USB	9	Micro-HDMI
5	Shooting indicator	10	Lower damping ball



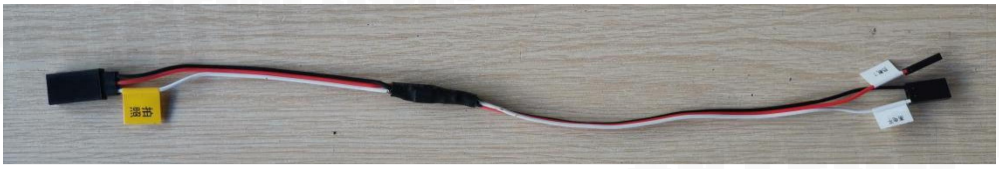
No	Notes	No	Notes
1	25.2mm lens	4	Damping ball
2	Camera shell	5	Mounting plate
3	35.7mm lens		



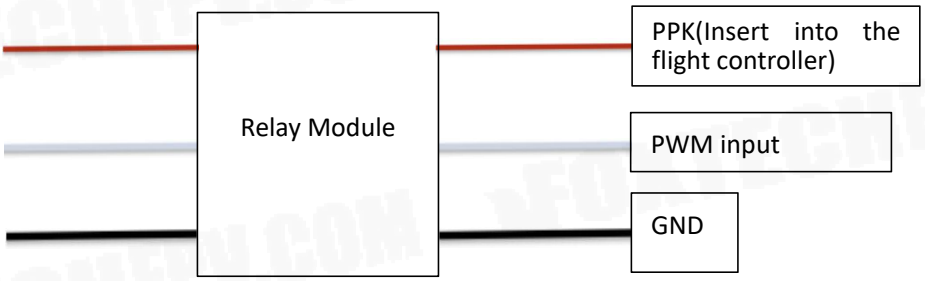
Power Module



PWM Module



Relay Module



Operating Instructions

⚠ Please connect the power cable correctly, or reverse connection and over-voltage will damage the camera!

1. Press the Power Switch to “I” to turn it on(you can power down the camera when the power supply is normal, without Pressing the Power Switch. but ensure that the shooting indicator is off before power off), and press the Power Switch to “O” to turn it off.

2. After changing the camera settings(such as shutter speed, ISO etc.), you need to press the Power Switch to turn it off and restart to save the settings. Power off the camera directly if you don’t want to save the settings.

3. The default shutter signal(white wire) is low-level short-circuit signal. A converter module is needed if the signal flight controller generates is not low-level short-circuit signal. Such as using PWM trigger or using electric relay.

4. Manual trigger is supported, by connecting the shutter release cable and GND wire.

5. The camera will take a picture automatically, then it can be used via flight controller or manually.

6. Before using a new SD card, it should be connected to the computer to format it, and then imported the camera configuration files. After safely ejecting the SD card, it can be inserted into the camera.

7. You can adjust the camera parameters on SONY software, or connecting the camera to a monitor with HDMI wire, i. e. using buttons to change setting(each button port on four sides is correspond to the camera on the left side).

8. The default setting is suitable for most tasks in different environments, so you don’t need to adjust it if you are unfamiliar with it at the beginning.

9. When debugging the camera, it is recommended to connect the camera to the monitor via HDMI or to PC(phone) using acquisition card.

10. The HDMI port and the corresponding button have the same letter label.

Camera Shutter Setting

Triggered by Relay

1. Connect the shutter release cable to AUX OUT 5 on flight controller. If there is no PPK module, connect the PPK cable to AUX OUT 6 on flight controller.
2. Connect the flight controller to the computer using USB or other data links and open the mission planner.
3. Proceed to the CONFIG > FULL PARAMETER LIST and locate the CAM_TRIGG_TYPE parameter. This parameter must show as “1”. If it is not set to 1, change this parameter to 1 before proceeding to the next step.

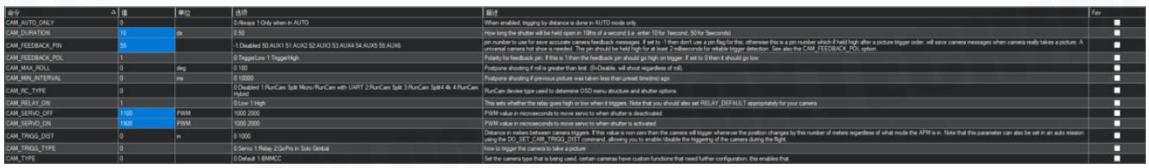
4. Locate the BRD_PWM_COUNT parameter in the same category, and set it to “4”, meaning that only the top four of AUX ports will emit PWM signal.

5. Locate the RELAY_PIN in the same category and set its value to “54” which means the shutter release cable connects to the flight controller via AUX OUT 5.

6. Locate the CAM_FEEDBACK_PIN parameter in the same category, and set it to “55”, which means the PPK module connects to flight controller via AUX OUT 6.

Triggered by PWM signal

1. Connect the shutter release cable to AUX OUT 5 on flight controller. If there is no PPK module, connect the PPK cable to AUX OUT 6 on flight controller.
2. Connect the flight controller to the computer using USB or other data links and open the mission planner.
3. Proceed to the CONFIG > FULL PARAMETER LIST and reset these four parameters:



4. Set the value of BRD_PWM_COUNT in the same category to “5”, meaning that only the top five of AUX ports will emit PWM signal.

5. Locate the SERVO13_FUNCTION in the same category and set its value to “10” which means the shutter release cable connects to the flight controller 13 port.

6. Locate the CAM_FEEDBACK_PIN parameter in the same category, and set it to “55”, which means the PPK module connects to flight controller via AUX OUT 6.

Android APP for HDMI acquisition card

https://www.foxtechfpv.com/product/cameras/3DM-V3/Android APP.apk

PC software for HDMI acquisition card

https://www.foxtechfpv.com/product/cameras/3DM-V3/PC Software.exe

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