







MOZA Air 2 Release Notes

Date	2019/9/2
Firmware	V1.0.0
MOZA Master for Android	V2.0.2
MOZA Master for iOS	V2.0.2
MOZA Master for Windows	V1.0.5
MOZA Master for Mac OS	V1.0.5
iFocus	V1.0.0
iFocus M	V2.0.5

What' s New?

1. Added smart wheel modes for tilt axis, roll axis, and pan axis control. Updated icons for the smart wheel modes.

Icon						
Smart Wheel Modes	Focus Channel 1	Focus Channel 2	Electronic Focus Channel	Tilt axis	Roll axis	Pan axis

How to Change Modes: Press the M button on the smart wheel to switch modes.

2. Added a new feature called FPV mode. This feature can follow 360° for all three axes.



How to Access: Triple press the Fn button to enter the FPV Mode. Triple press again to exit the FPV Mode.

3. The improved Inception Mode 3.0 now features angle speed control and the optimized button definition.

How to use Inception Mode:

Move the joystick to the left or right: The gimbal turns to the left or right. When release or turn to a specified angle the gimbal stops.

Rotating the dial wheel: Adjust the rotation speed

Press the left button on the dial wheel once: The gimbal will start rotating to the left automatically. To stop the gimbal from rotating, press the button again.

Press the right button on the dial once: the gimbal will start rotating to the right automatically. To stop the gimbal from rotating, press the button again.

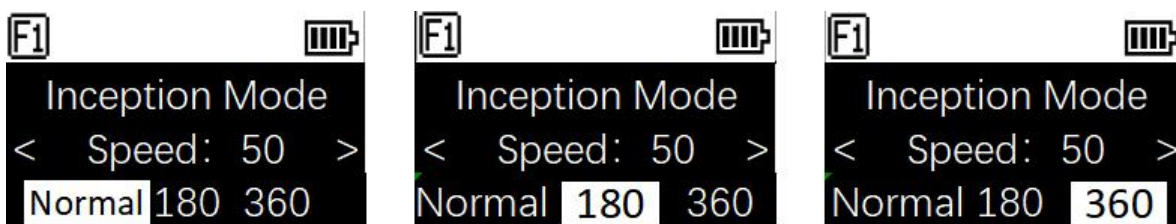
Press up/down button on the dial wheel: select rotation angle.

The Rotation Angle Selection:

Normal: The gimbal will continuously rotate.

180°: The gimbal rotates only 180° and then stops automatically.

360°: The gimbal rotates 360° and then stops automatically.



Access Inception: Double press the Fn button to enter the Inception Mode and double press again to exit.

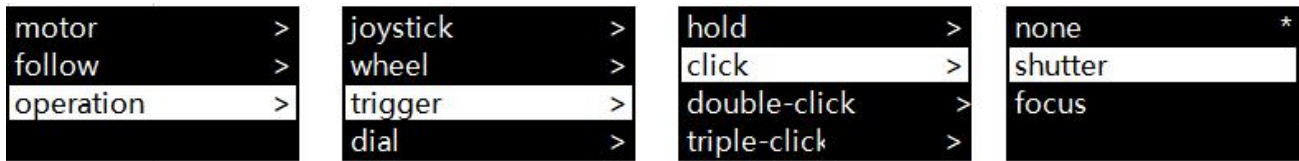
4. Improved balance check algorithm. Once completed, the balance check algorithm will display a guide on how to correct the balance of the camera setup.



How to Access: Enter the menu, select advance>balance chk, and the gimbal' s system will start to check the balance of each axis.

Note: After balance check, the gimbal will automatically enter the sleep mood for balance adjustment. After adjustments are made to balancing the camera' s center of mass, long press the menu button to wake up the gimbal.

5. Single Press the Smart Trigger to re-center the camera automatically



Access Trigger Settings: Single press to enter the menu, select the OLED Display> operation>trigger> click> shutter

6. Added Button Functions

Double press the TV button: Turning on/ off the tilt follow

Double press the IOS button: Turning on/ off the roll follow

Double press the AV button: Turning on/ off the pan follow

7. Completely Revised Menu

L1	L2	L3	L4	L5	Value	Function	
camera		Shutter Cable			*	set the connection type to universal shutter cable	
		M3SC-Multi			*	set the connection type to Sony-Multi port	
		M3SC-Multi/C			*	set the connection type to Sony-Multi port and power supply	
		M3SC-Remote			*	set the connection type to Panasonic-Remote port	
		M3SC-USB			*	set the connection type to USB port	
		ISO				32-106400	Set the camera ISO
		TV				30--1/8000	Set the camera shutter
gimbal	motor	power	level	autotune		? /ok	turn on/off motor
						? /ok	tuning/tuned
				ultra light	*	set motor level to the minimum	
				light	*	set motor level to light	
				medium	*	set motor level to medium	
				heavy	*	set motor level to heavy	
			ultra heavy	*	set motor level to ultra heavy		
			custom	tilt	0-100	set tilt motor power	
		roll		0-100	set roll motor power		
		pan		0-100	set pan motor power		
		filter	tilt	0-100	set tilt motor filter		
	roll		0-100	set roll motor filter			
	pan		0-100	set pan motor filter			
	follow	switch	tilt		on/off	enter/exit tilt follow mode	
			roll		on/off	enter/exit roll follow mode	
			pan		on/off	enter/exit pan follow mode	
		speed	tilt		0-100	set the following speed of tilt motor	
			roll		0-100	set the following speed of roll motor	
			pan		0-100	set the following speed of pan motor	
		deadband	tilt		0-100	set the following initiation angle of tilt motor	
roll				0-100	set the following initiation angle of roll motor		
pan				0-100	set the following initiation angle of pan motor		
operation	joystick	function	left-right		tilt/rol/pan	move the joystick left/right to control the tilt/roll/pan rotation	
			up-down		tilt/rol/pan	move the joystick up/down to control the tilt/roll/pan rotation	
		sensitivity	left-right		0-100	set sensitivity level of left-right movement	
			up-down		0-100	set sensitivity level of up-down movement	
		habits	left-right		+/-	set the control habit of joystick left/right movement	
			up-down		+/-	set the control habit of joystick up/down movement	
	wheel	function	focus-1		*	control the external focus motor 1	
			focus-2		*	control the external focus motor 2	
			focus-e		*	control the electronic focus	
			tilt		*	control the pan axis	
			roll		*	control the tilt axis	
			pan		*	control the roll axis	
	trigger	sensitivity			0-100	wheel sensitivity	
			habits		+/-	set the control direction of wheel rotation	
		hold	none		*	none	
			follow		*	enter pan-tilt follow mode	
			lock		*	enter all lock mode	
			quick		*	enter sport gear mode	
FPV			*	enter FPV mode			
click	none		*	none			
	shutter		*	take photo			
	focus		*	auto focus			
double-click	none		*	none			
	re-center		*	re-center			
	selfie		*	rotate the gimbal 180° for selfie			
triple-click	none		*	none			
	re-center		*	re-center			
dial	habits	selfie		*	rotate the gimbal 180° for selfie		
				+/-	rotate the dial clockwise to increase/decrease value		

	autotune			? /ok	auto tune		
	balance chk				check the balance state of camera		
	iFocus	F1	switch	? /ok/err	turn on/off the focus motor 1		
			set A	? /ok/err	set the point A of focus motor 1		
			set B	? /ok/err	set the point B of focus motor 1		
			Clear AB	? /ok/err	Clear the calibration information		
			Guidance	>	Enter the guidance mode		
		F2	switch	? /ok/err	turn on/off the focus motor 1		
			set A	? /ok/err	set the point A of focus motor 1		
			set B	? /ok/err	set the point B of focus motor 1		
			Clear AB	? /ok/err	Clear the calibration information		
			Guidance	>	Enter the guidance mode		
	Dolly Zoom			>	Enter the dolly zoom mode		
advanced	inception	speed		0-100	set the rotation speed of inception mode		
	motion sensing	switch	tilt	? /on/off	turn on/off the motion control of tilt axis		
			roll	? /on/off	turn on/off the motion control of roll axis		
			pan	? /on/off	turn on/off the motion control of pan axis		
	tracking	speed			0-100	set the rotation speed of motion control	
		speed			0-100	set the max speed of tracking	
	manual pos	tilt			on/off	turn on/off the manual positioning of tilt axis	
		roll			on/off	turn on/off the manual positioning of roll axis	
		pan			on/off	turn on/off the manual positioning of pan axis	
	calibration	gyro			? /ok	calibrating/calibrated the gyroscope	
		acc			? /ok	calibrating/calibrated the accelerometer	
		angle offset	tilt			0-100	set the offset value of tilt axis
			roll			0-100	set the offset value of roll axis
pan					0-100	set the offset value of pan axis	
general	language	English		*	switch display language to English		
		中文		*	switch display language to Chinese		
	config	config1	save		? /ok	save to configuration 1	
			load		? /ok	load configuration 1	
		config2	save		? /ok	save to configuration 2	
			load		? /ok	load configuration 2	
		config3	save		? /ok	save to configuration 3	
			load		? /ok	load configuration 3	
	reset			? /ok	restore default parameter settings		
	about					device name and firmware information	

Marks description and operation

- If there is a “*” mark at the right side of the selected item, the current list is the final option. Press the right button of dial wheel to launch the selection.
- If there is a “>” mark at the right side of the selected item, press right button of the dial wheel to see the next menu.
- If there is a “[]” which contains a number mark at the right side of the selected item, rotate the dial wheel to adjust its value.
- If there is a “[]” which contains an option mark at the right side of the selected item, press the right button to switch among options

Note:

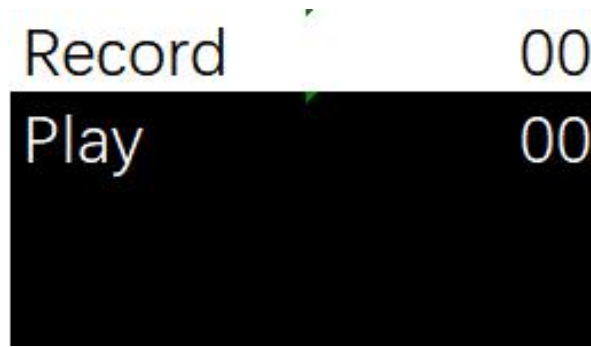
1. If there is no mark on the right side of the selected item or other items in the menu list, press the right button of the dial wheel to start the option. During the process ‘?’ is displayed, 'OK' is displayed after the process is completed, and ‘ERR’ is displayed if the option fails.
2. The above display rules do not apply when balance checking or using special functions.
3. Filtering parameters: If the motor vibrates and admits high-frequency sound, the motor power values need to be reduced. When the motor vibrates and admits low-frequency sound, the motor power values need to be increased.
4. The manual positioning function has a lower priority than the follow function. When using the manual positioning of an axis, the follow function of the axis should be turned off.

8. Optimized Camera Control

- Fixed the 'err' issue related to connecting the control cable to some models of Canon cameras
- Added electronic focus function for Sony cameras (Sony camera' s focus mode needs to be set to MF)
- Added camera functions through USB control for Panasonic GH5 and GH5S. Supported functions, shutter control, video rec/stop, parameter adjustments, and electronic focus control. Note: Requires M3C-Micro+Micro to Type-C adapter.

Brand	Model	Select	Cable	Shutter	Record	ISO	TV	AV	Auto Focus	Focus Control	Power Supply	
CANON	EOS R	M3C-USB	M3C-Micro+Micro to Type-C Adapter (optional)	✓	✓	✓	✓	✓	✓	✓	—	
	EOS RP			✓	✓	✓	✓	✓	✓	✓	—	
	EOS 6D Mark II		M3C-Mini	✓	✓	✓	✓	✓	✓	✓	—	
	EOS 6D			✓	✓	✓	✓	✓	✓	✓	—	
	EOS 60D			✓	✓	✓	✓	✓	✓	✓	—	
	EOS 77D			✓	✓	✓	✓	✓	✓	✓	—	
	EOS 80D			✓	✓	✓	✓	✓	✓	✓	—	
	EOS 5D2			✓	✓	✓	✓	✓	✓	✓	—	
	EOS 5D3			✓	✓	✓	✓	✓	✓	✓	—	
	EOS 800D			✓	✓	—	✓	✓	✓	✓	—	
	EOS 5D Mark IV			M3C-Micro	✓	✓	✓	✓	✓	✓	✓	—
	EOS 200D II				✓	✓	✓	✓	✓	✓	✓	—
	EOS M50		✓		✓	✓	✓	✓	✓	✓	—	
	EOS M5	✓	✓		✓	✓	✓	✓	✓	—		
EOS 750D	MCSC-C1	C1 Shutter Cable (optional)	✓	—	—	—	—	—	—	—		
SONY	Alpha 7S	M3C-USB	M3C-Micro	—	✓	✓	✓	✓	✓	—	✓	
	Alpha 7R			—	✓	✓	✓	✓	✓	—	✓	
	Alpha 6300			—	✓	✓	✓	✓	✓	—	✓	
	Alpha 6400			—	✓	✓	✓	✓	✓	✓	—	✓
	Alpha 6500			—	✓	✓	✓	✓	✓	—	✓	
	Alpha 7S II			—	✓	✓	✓	✓	✓	—	✓	
	Alpha 7R II			—	✓	✓	✓	✓	✓	—	✓	
	Alpha 7 II			—	✓	✓	✓	✓	✓	—	✓	
	Alpha 7 III			—	✓	✓	✓	✓	✓	✓	—	✓
	Alpha 7R III			—	✓	✓	✓	✓	✓	✓	—	✓
	DSC-RX100M3			—	✓	✓	✓	✓	✓	—	✓	
	DSC-RX100M4	—	✓	✓	✓	✓	✓	—	✓			
	DSC-RX100M5	—	✓	✓	✓	✓	✓	—	✓			
	Alpha 7S	MCSC-Multi	MCSC-Multi	✓	✓	—	—	—	✓	—	✓	
	Alpha 7R			✓	✓	—	—	—	✓	—	✓	
	Alpha 6300			✓	✓	—	—	—	✓	—	✓	
	Alpha 6400			✓	✓	—	—	—	✓	—	✓	
	Alpha 6500			✓	✓	—	—	—	✓	—	✓	
	Alpha 7S II			✓	✓	—	—	—	✓	—	✓	
	Alpha 7R II			✓	✓	—	—	—	✓	—	✓	
	Alpha 7 II			✓	✓	—	—	—	✓	—	✓	
	Alpha 7 III			✓	✓	—	—	—	✓	—	✓	
Alpha 7R III	✓			✓	—	—	—	✓	—	✓		
DSC-RX100M3	✓			✓	—	—	—	✓	—	✓		
DSC-RX100M4	✓	✓	—	—	—	✓	—	✓				
DSC-RX100M5	✓	✓	—	—	—	✓	—	✓				
Panasonic	DMC-G7KGK	MCSC-Remote	MCSC-Remote	✓	✓	—	—	—	✓	—	—	
	DMC-G85GK			✓	✓	—	—	—	✓	—	—	
	DMC-GH3			✓	✓	—	—	—	✓	—	—	
	Lumix GH4			✓	✓	—	—	—	✓	—	—	
	DC-S1GK-K			✓	✓	—	—	—	✓	—	—	
	Lumix GH5	M3C-USB	M3C-Micro+Micro to Type-C Adapter (optional)	✓	✓	✓	✓	✓	✓	✓	—	
DC- GH5SGK-K	✓			✓	✓	✓	✓	✓	✓	—		
Nikon	Z6	M3C-USB	M3C-Micro+Micro to Type-C Adapter (optional)	✓	✓	✓	✓	✓	✓	✓	—	
	Z7			✓	✓	✓	✓	✓	✓	✓	—	
	D850			✓	✓	✓	✓	✓	✓	✓	—	
FUJIFILM	X-T2	MCSC-C1	C1 Shutter Cable (optional)	✓	✓	—	—	—	✓	—	—	
	X-T3			✓	✓	—	—	—	✓	—	—	
	X-T20			✓	✓	—	—	—	✓	—	—	
	X-T30			✓	✓	—	—	—	✓	—	—	
	X-T30			✓	✓	—	—	—	✓	—	—	

9. Added Record and Repeat Follow Focus Movement for iFocus and iFocus M



Instructions on How to Operation: Enter the menu, select 'Advanced> 'iFocus'> 'F1'> 'Guidance', then select 'Record' and click the right button. The gimbal will start recording the movement of the smart wheel, recording time is limited one minute. Click the right button on the dial to stop recording. After the recording is completed, select 'Play', and then click the right button on the dial to repeat the recorded motion.

Note: To use this function, the firmware of the follow focus motor must be updated to the latest version.

10. Added Mimic Motion Control and Object Tracking Function (MOZA Mater App is needed)

Access Mimic motion Control: Remote control >Mimic motion control

How to Use Mimic Motion Control: Through the MOZA Master app enter mimic motion control, click the 'Start' button, then rotate the phone. The gimbal will mimic the direction and speed of the phone' s movement. The sensitivity of mimic motion control can be adjusted on the left. On the right, each axis' s movement can be turned off or on.

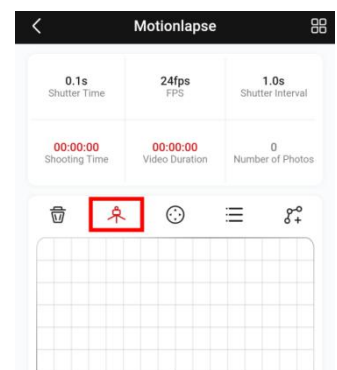


11. Added Tripod Mode Option for Time-lapse to Stabilize Longer Exposures

Select: Creative video > Motionlapse

How to access Tripod Mode: Enter motionlapse, then tap the Tripod Mode icon to select.

Note: Before starting the tripod mode, the stabilizer needs to setup at desired location. Once the tripod mode is activated, the stabilizer cannot be moved again. If moved the gimbal will fail to follow preset path.

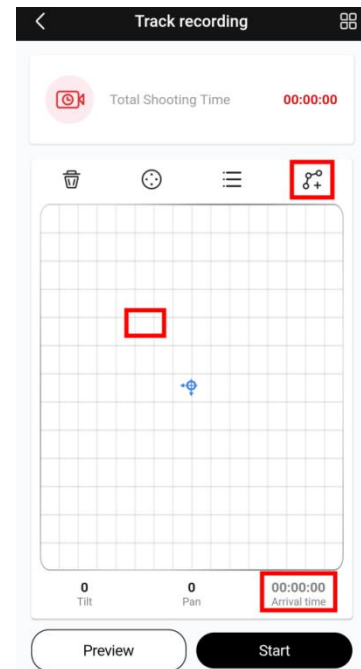


The tripod mode cannot be used, when shooting a hyperlapse.

12. New Motion Track Recording Function (MOZA Mater App is needed)

Access Track Recording: Creative video > Track Recording

How to Record a Track: After opening track recording, set at least 2 key frames, drag the key frames to adjust the position of the gimbal, and then set the timing of each key frame. Click the 'Start' button, the gimbal will return to the starting key frame and then move according to the track. To repeat the scene for cloning, click the start button to repeat the track.

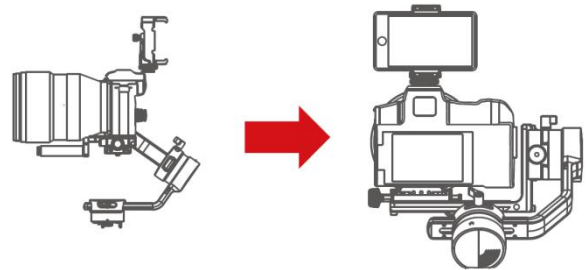


13. New Object Tracking Function (MOZA Master APP is needed)

The object tracking function requires a smartphone to be mounted above the camera and running the MOZA Master App. (Phone Holder is available for purchase) The App will use your phone's camera to track a subject/object and direct the movement of the gimbal to follow that subject/object.

Access Object Tracking: Creative video > Object tracking

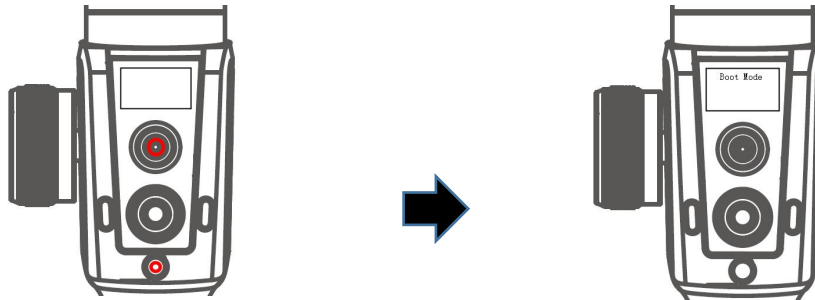
How to Setup: Mount the smartphone holder to the camera's hot shoe adapter, attach the phone, and open the app to enter object tracking. Note: Under the object tracking interface, the text prompt must not be upside down. If the text direction is incorrect, reinstall the app or restart the app. After mounting the phone, adjust the phone's camera to keep the viewfinder interface consistent with the viewfinder of the camera. Check the the balance of your camera setup, if needed re-balance the gimbal. From the phone's screen, select subject/object to be tracked. The gimbal will automatically rotate to keep the subject/object in the middle of the screen.



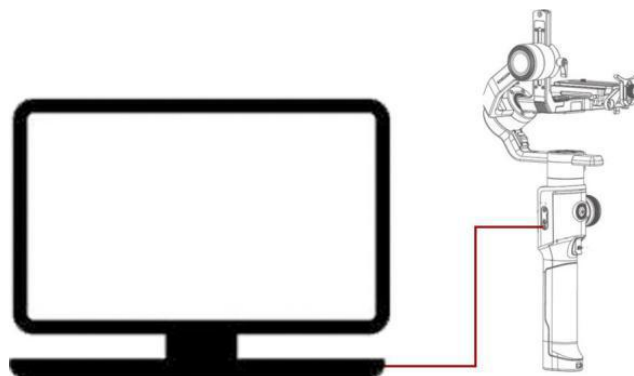
14. Power Management System, Optimize Voltage Usage to Extend Battery Life.

How to Upgrade the Firmware

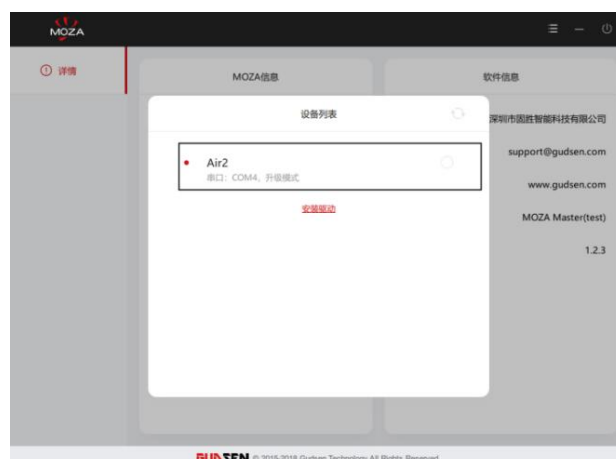
1 Powered off the gimbal. Press in and hold the joystick in and also press the power button. The screen will display 'Boot Mode' , now release the joystick, and power button. Simultaneous upgrade of the iFocus/iFocus-M. Boot mode for follow focus. Long press the follow focus power button until the light is white, and then connect the follow focus with the Multi-CAN cable to the gimbal for simultaneous firmware upgrade.



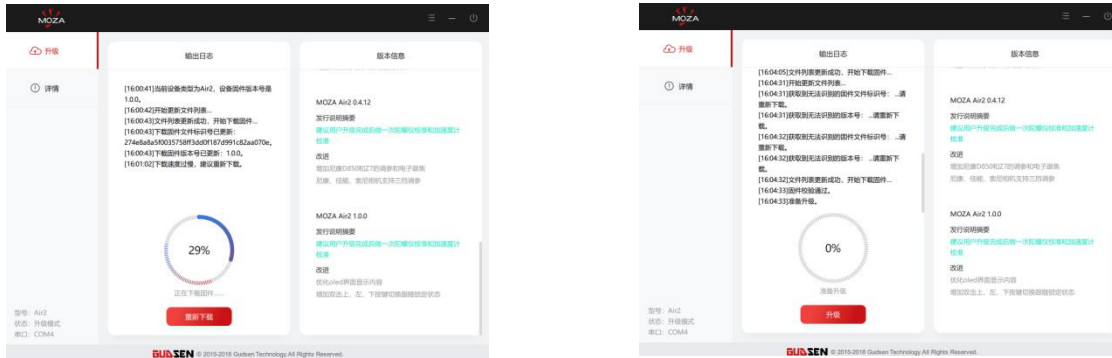
2. Connect the Air 2 to the USB port of your computer using the USB-C cable



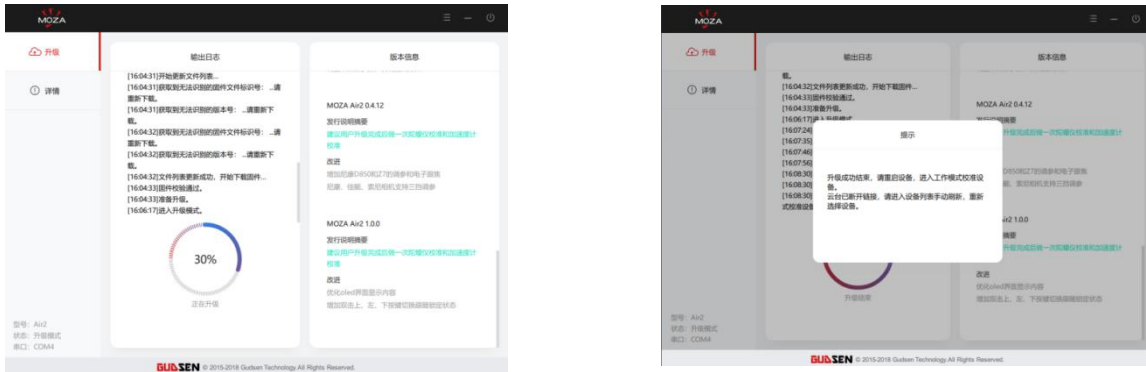
3. Launch the **MOZA_Master_1.2.5** software. After the Air 2 device appears, click to connect the device. After the connection is successful, The Air 2' s screen will display 'Connected'



4. MOZA_Master_1.2.5 App will read the Air 2' s firmware status and automatically download the latest firmware, when download is completed, click the 'Upgrade' button to get the latest firmware.



The upgrade process takes about 3 minutes to complete, please be patient. When upgrade is completed the message "Upgrade" will be displayed on the screen. The software will prompt you to disconnect the gimbal and restart it.



After upgrade is completed, unplug the USB cable, and restart gimbal. Calibrate the Gyro and Acce before the using the gimbal. The current version of the firmware is 01.00.00. Check the gimbal' s version of firmware by selecting the 'About' option in the menu.



Connect the iFocus-M to the computer by using USB Type-C cable. Open the MOZA_Master_1.2.5 App, After the iFocus-M is shown on the screen click to connect the device. After a successful connection the software will recognize the iFocus-M is in firmware upgrade state, and download the latest firmware. When the download is completed, click the 'Upgrade' button to install the firmware.

Note: If it is the first time you have connected a MOZA product to your computer, you will need to install a driver to identify MOZA products such as Air 2, AirCross 2, Air 2, iFocus-M, etc.

Notes:

- Firmware for MOZA products must be updated to the latest version in order for them to be used together. Such as, Air 2, iFocus, iFocus M, APP, GUI.
- After firmware upgrade, the iFocus/iFocus-M will not connect to the wireless remote controller. A new firmware for remote controller will be updated later, the estimated release date is 15th September.
- Windows/Mac OS MOZA Master App does not support Air 2 with/under V1.0.0, after connection, the firmware upgrade prompt will be popped up.
- Please do not use this version to upgrade Air 2 if you keep MOZA Master with V1.1.X version in your computer, the firmware of Air 2 will be downgraded to/under V1.0.0.

MOZA Air 2 Release Notes

Date	2019/1/14
Firmware	V0.4.12

What' s New?

Added photo capture, video recording support for Nikon D850, Z6 and Z7 cameras. Camera parameter adjustment is not yet supported.

Notes:

- 1.Nikon D850 camera uses a Micro USB3.0 port. Users can directly use a M3C-Micro cable to connect the camera with the gimbal;
- 2.Nikon Z6 and Z7 use Type-C port. Users need to purchase a Micro USB to Type-C adapter (MCG21) to use with the M3C-Micro cable.

MOZA Air 2 Release Notes

Date	2018/12/24
Firmware	V0.4.11
MOZA Master Software for Windows	V1.0.1
MOZA Master Software for Mac	V1.0.1

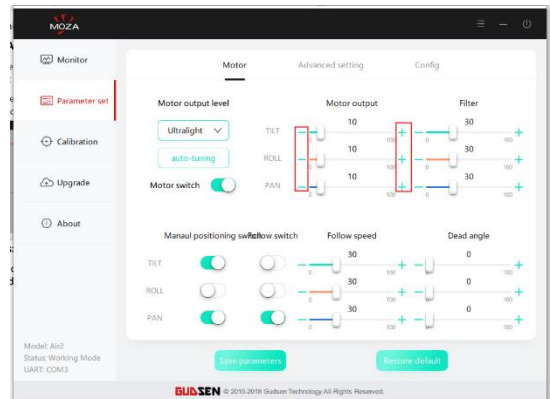
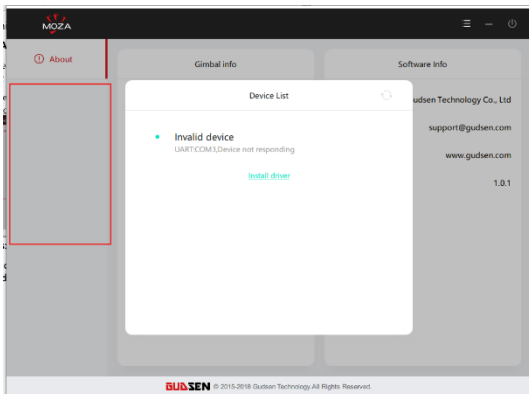
What's New?

Air 2:

Optimization of iFocus rotation speed control.

MOZA Master software:

1. Interface optimization: upgrade option will not show on the navigation bar when gimbal is not connected.
2. Operation optimization: when click the "-" or "+" icon to adjust the parameters, the reaction will be swifter.



Notes:

1. The download link for MOZA Master software is: <http://www.gudsen.com/moza-air-2-downloads>

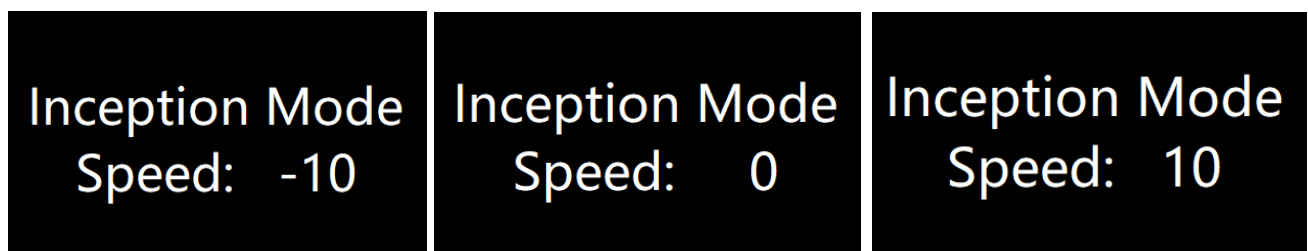
MOZA Air 2 Release Notes

Date	2018/12/18
Firmware	V0.4.10
MOZA Master Software for Windows	V1.0.0
MOZA Master Software for Mac	V1.0.0

What' s New?

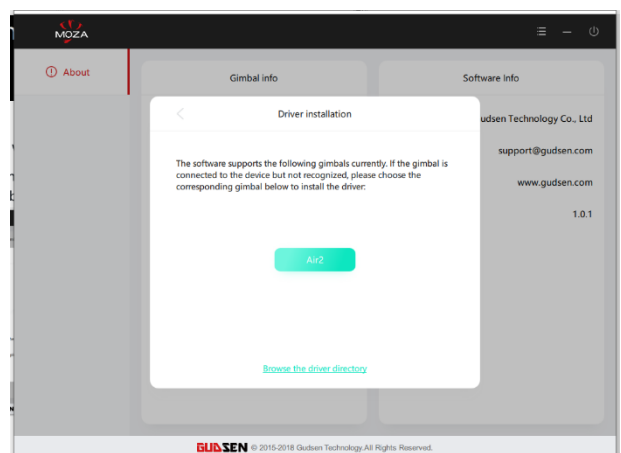
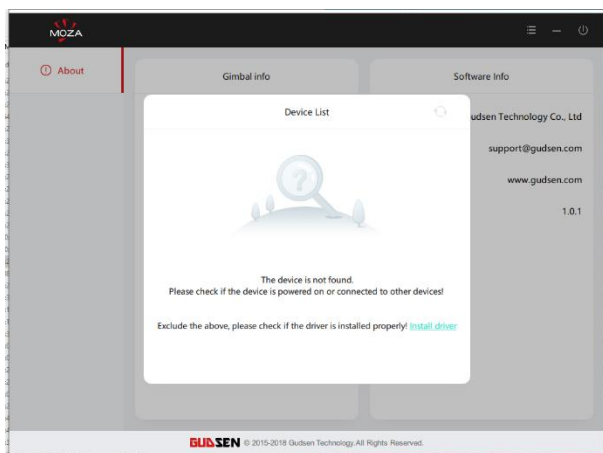
MOZA Air 2:

1. Inception Mode optimization; The speed value can be displayed on the screen and the rotation speed (-10—10) can be adjusted through the dial.
2. The direction of Air 2 will not change after exiting the Inception Mode, ensuring continuous shooting.

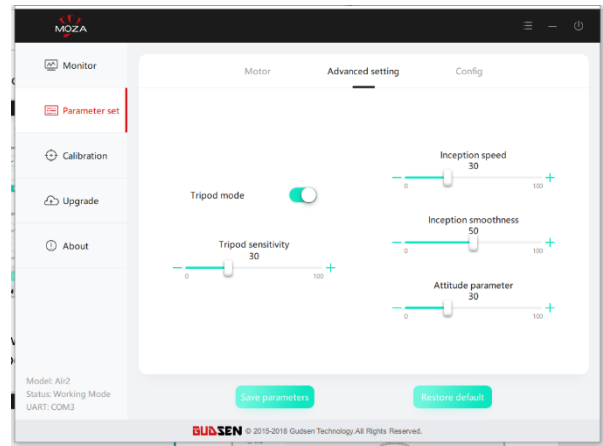
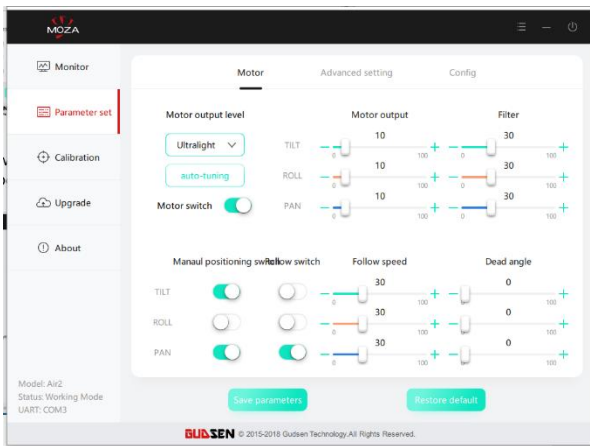


MOZA Master software:

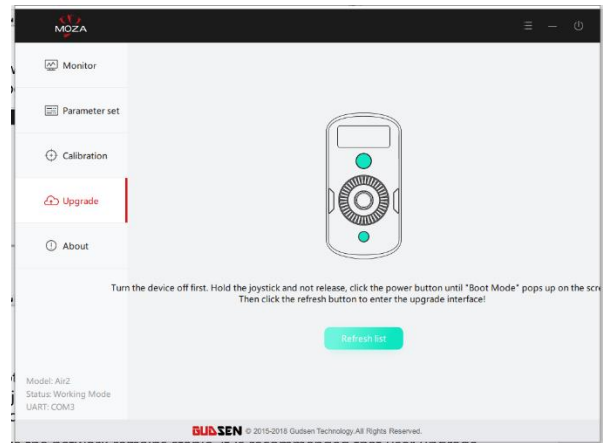
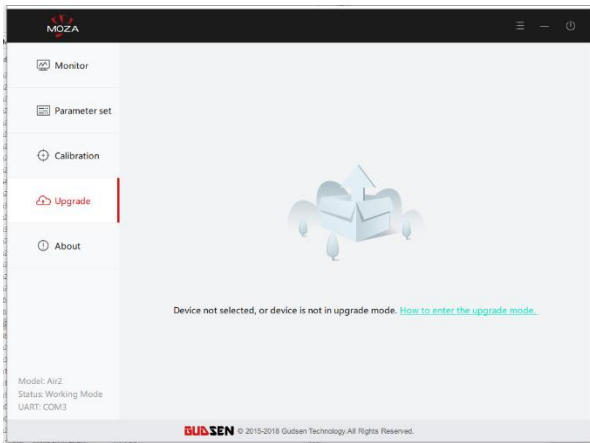
1. The interface was redesigned;
2. A new drive instruction is added. This instruction will guide drive installation when no MOZA device could be found.



3.The realization of MOZA Air 2 monitoring, parameters adjusting and upgrading functions;



3. A new firmware upgrade instruction is added. This will guide user how to enter firmware upgrade mode for Air 2.



Notes:

1. In the Inception Mode, the joystick remains functional. User could control Air 2 rotation by joystick. The speed of rotation is related to the speed of the joystick. User could check the rotation speed showed on the screen;
2. To make sure the network remains stable, it is recommended that user upgrade Air 2 firmware on a computer;
3. The download link for MOZA Master software is: <http://www.gudsen.com/moza-air-2-downloads>

MOZA Air 2 Release Notes

Date	2018/11/30
Firmware	V0.4.9

What' s New?

- 1. Add the Chinese menu, triple press the menu button to switch languages.**
- 2. Fix the problem of gimbal shaking in wide-angle roll movement.**
- 3. Extend the endpoint range of roll follow to $\pm 70^\circ$.**
- 4. Restrict the rotation range of roll axis in underslung mode**

Notes:

1. Firmware upgrading by App:

- a. Turn off the MOZA Air 2.**
- b. Hold the joystick and not release, click the power button until "Boot Mode" pops up on the screen.**
- c. Launch the App to connect the device, it will enter the upgrade interface automatically.**
- d. Click" Upgrade" to start.**

MOZA Air 2 Release Notes

Date	2018/11/19
Firmware	V0.4.6
User Manual	3.0

What' s New?

- 1. Fix the malfunction problem of Canon cameras after multiple operation.**
- 2. Change the function that photo taking control of Sony cameras by USB cable to Multi cable.**
- 3. Fix some known errors in the user manual, and update the menu list and camera compatibility list.**

Notes:

1. Firmware upgrading by App:

- a. Turn off the MOZA Air 2.**
- b. Hold the joystick and not release, click the power button until "Boot Mode" pops up on the screen.**
- c. Launch the App to connect the device, it will enter the upgrade interface automatically.**
- d. Click" Upgrade" to start.**

2. Connect the Sony camera and MOZA Air 2 with M3C-Micro cable, select the Sony-USB mode. Then the MOZA Air 2 can control video recording, adjust parameters and charge the USB-powered cameras, but can' t control the photo taking.

3. Connect the Sony camera and MOZ Air 2 with MCSC-Multi cable, select the Sony-Multi mode. Then the MOZA Air 2 can control photo taking and video recording, but can' t adjust parameters and charge the camera.

MOZA Air 2 Release Notes

Date	2018/11/14
Firmware	V0.4.5
MOZA Master App Android	1.0.0
MOZA Master App iOS	1.1
MOZA Master Software for Windows	0.1.0
MOZA Master Software for Mac	0.1.0
User Manual	2.0

What' s New?

- 1.Release the first version of Air 2 firmware**
- 1.Release the first version of Android App**
- 2.Release the first version of iOS App**
- 3.Release the first version of Windows software**
- 4.Release the first version of Mac OS software**
- 5.Release the first edition of the instruction manual**

Notes:

- **Android 4.0+ and supports Bluetooth 4.0**
- **iOS 7 and above**
- **Please install the driver first when using MOZA Master (Windows) for the first time**
- **Download link: <http://www.gudsen.com/moza-air-2-downloads>**