V12292015

PROACTION CG04

USER MANUAL

TABLE OF CONTENTS

01 INTRODUCTION
01 SPECIFICATIONS
02 GENERAL WARNINGS
03 SAFETY PRECAUTIONS
03 OVERVIEW
04 SD CARD INSTALLATION

AERIAL IMAGING SYSTEM

04 INSTALLING THE CGO4 DAMPING PLATE
05 ATTACHING CGO4 GIMBAL CAMERA TO MULTICOPTER
05 BINDING CGO4 GIMBAL CAMERA TO THE ST24 (SINGLE MODE)
06 CAMERA CONTROL ON MULTI-COPTER(SINGLE MODE)
07 BINDING CGO4 GIMBAL CAMERA TO THE ST24 (TEAM MODE)
07 BINDING H920 MULTI-COPTER TO THE ST12 (TEAM MODE)
08 CAMERA CONTROL ON MULTI-COPTER (TEAM MODE)
09 CGO4 INTERFACE(ST24)
09 PHOTO TAKING AND VIDEO RECORDING
10 CAMERA MODE INTRODUCTION
11 ADJUSTING THE WHITE BALANCE
11 SETTING THE LIGHT SENSITIVITY
11 COMPENSATING THE EXPOSURE
11 SPECIFYING THE APERTURE/ SHUTTER SPEED
12 MENU SETTING INTRODUCTION

GROUND IMAGING SYSTEM

15 APP DOWNLOADING
15 ATTACHING CGO4 GIMBAL CAMERA TO PROACTION
15 BINDING CGO4 GIMBAL CAMERA TO APP
15 GIMBAL CONTROL ON PROACTION
18 APP INTERFACE
18 PHOTO TAKING AND VIDEO RECORDING
19 CAMERA MODE INTRODUCTION
20 ADJUSTING THE WHITE BALANCE
20 COMPENSATING THE EXPOSURE
20 SETTING THE LIGHT SENSITIVITY
20 SPECIFYING THE APERTURE/ SHUTTER SPEED
21 ADJUSTING THE FOCAL LENGTH
21 CONTROL MENU INTRODUCTION
21 CAMERA-S
21 MENU SETTING INTRODUCTION
24 LED STATUS INDICATION
25 DISCLAIMER
26 FCC STATEMENT

INTRODUCTION

The TORNADO ProAction™ is a ground imaging system designed to extend your Panasonic® camera GH4, CGO4 and SONY® α7 with real-time imaging transmission. The system includes the ProAction™ ground handle and gimbal of your choice. The ProAction™ features pitch control, allowing for precise camera angle control. The GB603 gimbal, 3-axis self-stabilizing gimbal, enables you to capture smooth and fluent photographs and video footage.

The CGO4 is an independent high end professional all in one gimbal camera module, specially developed for professional users who require ultra-high aerial imaging quality and resolution. The dream of a flight adjustable, 3-axis stabilized, m 4/3 sensor and aerial capturing system is now a reality.
CGO4 incorporates a true Panasonic GH4 camera with a 3x optical zoom lens and an integrated 5.8GHz video link module all housed in purpose designed casing. It can be installed on both the TORNADO H920 copter and the ProAction™ ground SteadyGrip system. All the regular Panasonic GH4 camera settings can be freely and remotely adjusted through Yuneec ST24 transmitter which totally transforms and reshapes the boundaries of aerial imaging creation. Through the user friendly control app interface in the ST24, the CGO4 becomes an incredible tool to realize the highest levels of aerial photographic and video graphic imagery.

SPECIFICATIONS

PROACTION™

DIMENSIONS: 14.17x10.04x14.57in (360x255x370mm)
WEIGHT (without battery: 52.91oz (1.5kg)
BATTERY WEIGHT: 7.72oz (219g)
INCLUDED BATTERY: 4S/14.4V 0.3C 2600mAh 37.44 Wh Lithium-Ion Battery
RUNTIME: 2.5 Hours
WORKING VOLTAGE: 13.5~16.8V
WORKING CURRENT: 0.68~1.0A
COMPATIBLE DEVICE: GB603 / CGO4

CGO4

DIMENSION: 6.5 x 8.6 x 7.7 in (165 x 219 x 196 mm)
WEIGHT: 1200 g
GIMBAL AXES: 3
CONTROL ANGLE ACCURACY: ±0.01°
MAXIMUM CONTROL RANGE:
Pitch [-90° to 0° (for H920) /- 90° to 30° (for ProAction™)] Yaw [360° limitless]
MECHANICAL RANGE: Pitch [-120° to 45°] Roll [-40° to 40°] Yaw [360° limitless]
MAXIMUM CONTROL SPEED: Pitch: 30° /s Yaw: 30° /s
INPUT/OPERATING VOLTAGE: 24V
CURRENT CONSUMPTION/OPERATING CURRENT: 1A
STORAGE TEMPERATURE: 10°C - 30°C
WORKING TEMPERATURE: -5°C - 45°C
IMAGE SENSOR: m 4/3 Live CMOS Sensor
EFFECTIVE PIXELS: 16Megapixels
MAX VIDEO RESOLUTION: 4K 30FPS, 100 Mbps
DIGITAL VIDEO DOWNLINK: Integrated
COMPATIBLE LENS: [3x Optical zoom 14-42mm (standard configuration)]
[OLYMPUS M.ZUIKO DIGITAL ED 12mm f2.0] [OLYMPUS M.ZUIKO DIGITAL 45mm f1.8]
[OLYMPUS M.ZUIKO DIGITAL ED 14-42mm F3.5-5.6 EZ]
FOCUS MODE: AFS/MF
SHUTTER SPEED: 1/8000s to 60s
ISO RANGE: 100 to 25600

GENERAL WARNINGS

IMPORTANT NOTE: All safety precautions and warnings, instructions, warranties and other collateral information is subject to change at the sole discretion of Yuneec. For the most up-to-date information please visit the corresponding product page at www.Yuneec.com or contact the nearest Yuneec office or authorized distributor.

The following special language terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

NOTICE: Procedures, which if not properly followed, create a possibility of property damage and/or little to no possibility of injury.

CAUTION: Procedures, which if not properly followed, create the probability of property damage and/or a possibility of serious injury.

WARNING: Procedures, which if not properly followed, create the probability of property damage, collateral damage and/or serious injury or create a high probability of superficial injury.

WARNING: Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, property and/or cause serious injury.

WARNING: This is a sophisticated consumer product. It must be operated with caution and common sense, and requires some basic mechanical ability. Failure to operate this product in a safe and responsible manner could result in damage to the product, property and/or cause serious injury. This product is not intended for use by children without direct adult supervision. Do not use with incompatible components or alter this product in any way outside of the instructions provided by Yuneec. The instruction manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings prior to assembly, setup and/or use in order to operate the product correctly and avoid damage or serious injury.

WARNING: Failure to use this product in the intended manner as described in instruction manual can result in damage to the product, property and/or cause serious injury. This product is not a toy!

WARNING: As the user of this product you are solely and wholly responsible for operating it in a manner that does not endanger yourself and others or result in damage to the product or the property of others.

SAFETY PRECAUTIONS

PROACTION

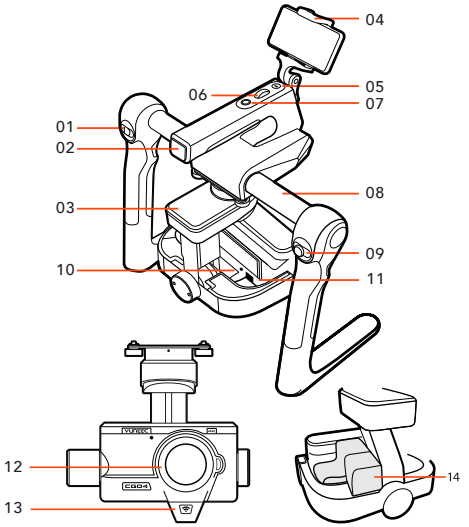
Do not touch or move the ProAction™ within about 12s until the initialization is completed.
Do not operate the ProAction™ in the rain!
Do not expose the ProAction™ to fire sources!
The ProAction™ can't be operated after the second level low voltage battery warning!

CGO4

Do not expose the CGO4 gimbal camera to water, including rain and moisture.
Do not expose the lens of the CGO4 gimbal camera to excessive light sources.
Do not operate the CGO4 gimbal camera in environments with extremely high or low temperatures and high humidity.
Do not press the lens with excessive force.
Do not leave the camera with the lens facing the sun as rays of light from the sun may cause it to malfunction. Also, be careful when placing the camera outside or near a window.
Do not try to repair the CGO4 gimbal camera by yourself.
Do not attempt to operate CGO4 gimbal camera in areas with potential magnetic and/or radio interference including areas nearby broadcast towers, power transmission stations, high voltage power lines, etc.
Do not operate the Gimbal in the rain!
Do not expose the Gimbal to fire sources!
Do not touch or move the Gimbal until the initialization process has been completed.
In need of repair, send the CGO4 gimbal camera to an authorized service center.

OVERVIEW

01 Power/Mode Selection Switch
02 Battery Indicator
03 CGO4 Gimbal
04 Phone Holder
05 Control Status Indicator
06 Pitch Control Wheel
07 Function Switch Button
08 ProAction™ Hand Holder
09 Gimbal Control Stick
10 CGO4 Camera LED Indicator
11 T Card Upgrade Port
12 CGO4 Camera Lens
13 CGO4 5.8G Antenna
14 Fix Foam Pad (2 pieces)



IMPORTANT NOTE: Remove the fixed foam pad from the CGO4 gimbal camera before proceeding. Reinstore the fixed foam pad to the CGO4 gimbal camera after using.

SD CARD INSTALLATION

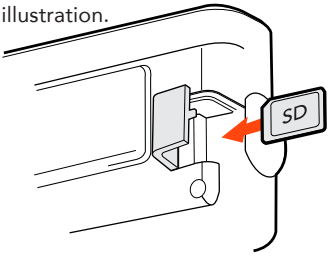
NOTICE: Before using the CGO4, a SD card should be installed into the camera. (A SD card is not included in the package.)

CAUTION: Power off the camera before inserting or removing the card.

STEP 1: Remove the rubber SD card cover as shown in the illustration.

STEP 2: Slide the memory card into the card slot in accordance with the direction indicated by the sticker.

STEP 3: When fully inserted, the card clicks into place. To remove the card, place your fingernail against the edge of the memory card and lightly press it further into the camera. The card springs out far enough to be removed.



CAUTION: Keep the Memory Card out of the reach of children to prevent swallowing.

NOTICE: When recording 4K motion pictures, use a card rated as UHS Speed Class 3.

CAUTION: The use of adapter card is not allowed.

REC FORMAT	BIT RATE IN [REC QUALITY]	SPEED CLASS	LABEL EXAMPLE
MP4	100 Mbps	UHS Speed Class 3	U3
	28 Mbps or lower	Class 4 or higher	CLASS 4 4
[MP4(LPCM)] /[MOV]	100 Mbps or higher	UHS Speed Class 3	U3
	50 Mbps	UHS Speed Class 1 or higher	U1
	50 Mbps	Class 10	CLASS 10 10

AERIAL IMAGING SOLUTION

INSTALLING THE CGO4 DAMPING PLATE

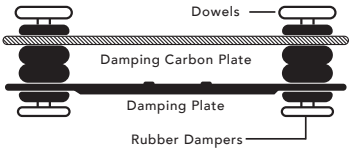
STEP 1: Install the CGO4 rubber dampers(4 pcs) into the four outermost ends of the damping carbon plates.

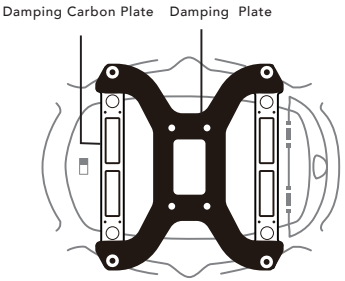
STEP 2: Place the damping plate right below the damping carbon plate. Make sure the flat surface facing towards the damping carbon plate.

STEP 3: Install the four CGO4 rubber dampers (previously mentioned) into the damping plate.

STEP 4: Screw the four dowels on the corresponding rubber dampers to fix the entire damping device.

CAUTION: Make sure the damping plate is installed correctly, otherwise it might fall off from the aircraft.





ATTACHING CGO4 GIMBAL CAMERA TO MULTICOPTER

NOTICE: Remove the fixed foam pad from the CG04 gimbal camera before proceeding.

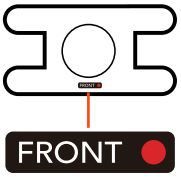
STEP 1: Insert the gimbal connection cord to the inner side of gimbal damping plate (relative to the direction of H920 power connection port).

STEP 2: Mount the gimbal thumb screws and lock washers (4 pcs) to the gimbal and rotate the screws until they're secured into the gimbal damping plate.

NOTICE: The front of the gimbal should be installed in the direction of the nose of H920.

NOTICE: Use the dedicated lock washers when rotating the screws.

STEP 3: Connect the gimbal power cord to H920 power connection port.

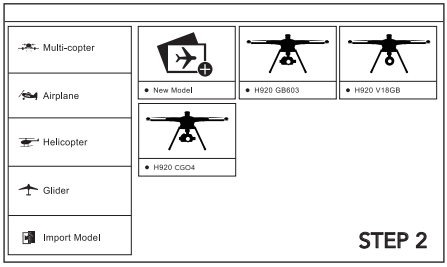


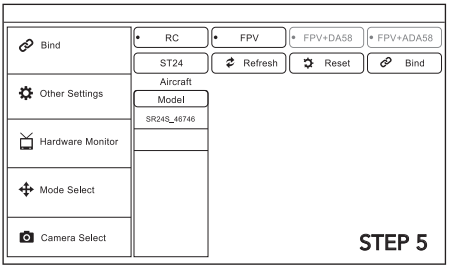
BINDING CGO4 GIMBAL CAMERA TO THE ST24 (SINGLE MODE)

NOTICE: The build number of ST24 should be b94 or above. The user can view the build number in the 'About Device' column.

STEP 1: Power on the ST24, press [⮌] button to go to the main interface. Choose FPV, and enter Model Select.

STEP 2: The default Model type is Multi-copter. Tap the "H920 CGO4" icon and press OK to enter the flight control interface.



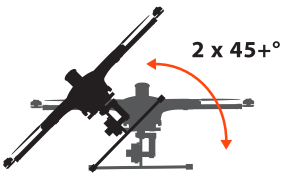


NOTE: The pre-set model in the "Model Select" interface cannot be deleted.

NOTE: The pre-set model can only be bound to one multi-copter. If the user wants to bind to the other copters, press and hold the "H920 CGO4" icon, select "copy" on the pop-up menu. Wait for a few seconds and then tap the newly created icon. Press OK to enter the flight control interface.

STEP 3: Switch on the TORNADO H920. Wait for a moment until the H920 Main LED indicator blinks blue, the CGO4 LED indicator blinks green and then start the binding procedures.

STEP 4: Lean the H920 in the forward direction twice (45°), until the Main LED indicator blinks yellow.



STEP 5: Tap'System Settings' and then tap 'Bind' on the left side of the screen.

STEP 6: Tap the Refresh icon, and the codes of the H920 and CGO4 will be shown on screen.

Choose the right codes and press Bind.

STEP 7: If it is the first time to bind your CGO4 to the ST24, you need to insert the password: 1234567890. Press OK on the pop-up window to continue.

STEP 8: Press Camera Select and choose CGO4. Press Select, then press OK.

NOTICE: We recommend users to power on the aircraft in the angle mode.

NOTICE: When returns back to the FPV interface, you will hear two long beeps. That means the binding is complete. The Real-time images can now be seen on the screen.

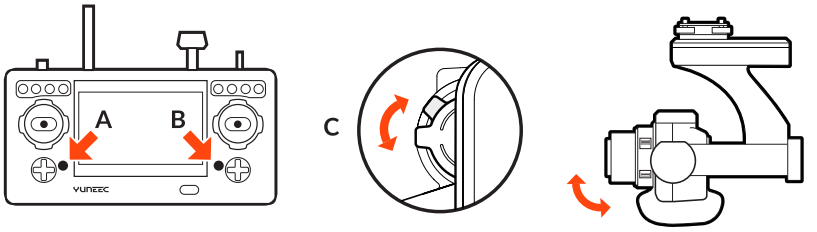
CAMERA CONTROL ON MULTICOPTRER (SINGLE MODE)

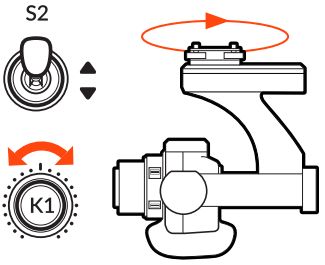
CAUTION: The gimbal can only be controlled through ST24 When being attached to H920.
Gimbal Pitch Control

Gimbal Pitch Control

There is a gimbal pitch mode switch on ST24---S1. When the switch is in up/middle position, the CGO4 gimbal camera is in Angle Mode. Use the slider on the left side of the ST24 to set the pitch/tilt position of the gimbal camera. When the S1 is in bottom position, the gimbal camera is in Velocity Mode. When the slider is in the middle position, it means the velocity rate is 0 for the CGO4 gimbal camera, and it will stop pitching up/down. When the slider is above the middle position, the CGO4 will start pitching up. When the slider is below the middle position, the CGO4 will start pitching down. The distance between the slider and the middle position decides the velocity rate, the further distance, the higher velocity it would be.

Button A = Take Still Photo
Button B = Start/Stop Recording Video





Gimbal Yaw Control

There is a gimbal yaw mode switch on ST24---S2. When the switch position is up and middle, the gimbal camera is in Follow Mode. The yaw control of the gimbal camera is now disabled. The gimbal camera will adjust its yaw direction according to the aircraft's movements. When the switch position is down, the gimbal camera is in Global Mode. The Gimbal Yaw control knob (K1) is now activated.

When the user rotates the knob in the right direction, the gimbal camera will rotate to the right side, and vice versa.

BINDING CGO4 GIMBAL CAMERA TO THE ST24 (TEAM MODE)

STEP 1: Power on the ST24, tap [⮌] to go to the main interface.

STEP 2: Switch on the TORNADO H920. Wait until the gimbal LED blinks green. That means the Wi-Fi has started up.

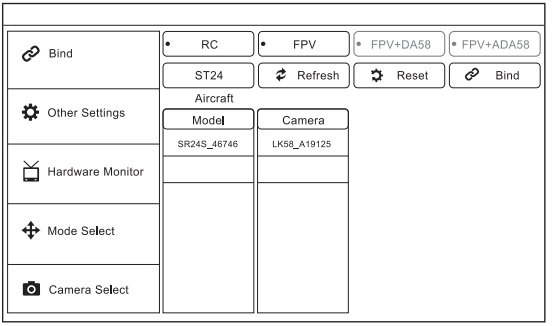
STEP 3: Tap System Settings icon to enter the Bind interface.

STEP 4: Tap the Refresh icon, and the code of the Aircraft Model (it indicates the code of the CGO4 receiver) and Camera will both be shown on the screen. Select the right codes and tap the Bind icon. Tap OK when a pop-up window comes out.

NOTICE: If it is the first time to bind your CGO4 gimbal camera to the ST24, you need to insert the password: 1234567890. Press OK on the pop-up window to continue.

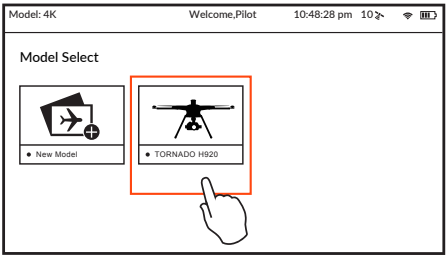
STEP 5: Tap Camera Select and select CGO4, and then tap Select.

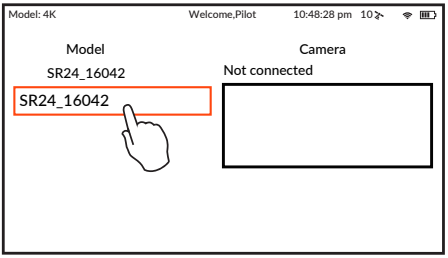
STEP 6: Tap "OK" to confirm the setting and tap [⮌] to go back to the flight control interface.



BINDING H920 MULTICOPTER TO THE ST12 (TEAM MODE)

STEP 1: Power on the ST12 and tap "RC" on the main interface
STEP 2: Tap Model Select and if required press "OK" to bypass any pop up warning/alerts.
STEP 3: Tap to create a new model and if required press "OK" to bypass any pop up warnings/alerts.
STEP 4: Tap Flight Settings and if required press "OK" to bypass any pop up warnings/alerts.
STEP 5: Lift the H920 back end upward approximately 45° , then back down to "level" twice till the main LED indicator blinks yellow.
STEP 6: Tap the Refresh icon. Select the code of the H920 listed in the column under "Model" and tap Bind ,then tap "OK" after the connection has been established
STEP 7: When tapping, you will hear two long beeps from the aircraft. That means the ST12 is bound to the H920 successfully.





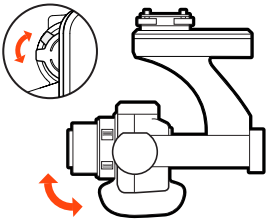
STEP 8: Tap [⮌] twice to return to the main screen and the model /receiver should automatically connect to ST12

NOTICE: The H920 main LED indicator will blink red and white if the TORNADO loses GPS signal /lock. The H920 main LED indicator will be solid color of the current mode if the GPS signal/lock is acquired.

CAMERA CONTROL ON MULTICOPTER (TEAM MODE)

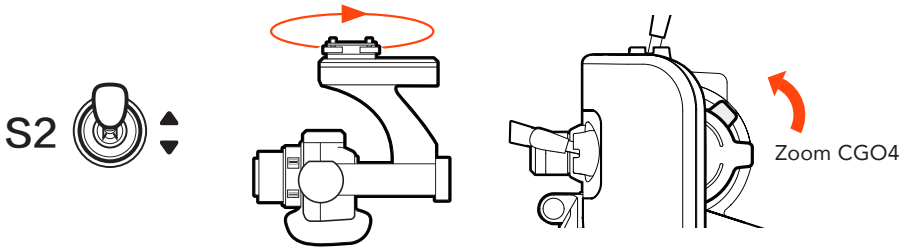
GIMBAL PITCH CONTROL

There is a gimbal pitch mode switch on ST24---S1. When the switch is in up/middle position, the gimbal camera is in Angle Mode. Use K5 to set the pitch/tilt position of the gimbal camera. When the S1 is in bottom position, the gimbal camera is in Velocity Mode. When the right-hand stick is in the middle position, it means the velocity rate is 0 for the CGO4, and it will stop pitching up/down. When the right-hand stick is above the middle position, the CGO4 will start pitching up. When the right-hand stick is below the middle position, the CGO4 will start pitching down. The distance between the right-hand stick and the middle position decides the velocity rate, the further distance, the higher velocity it would be.

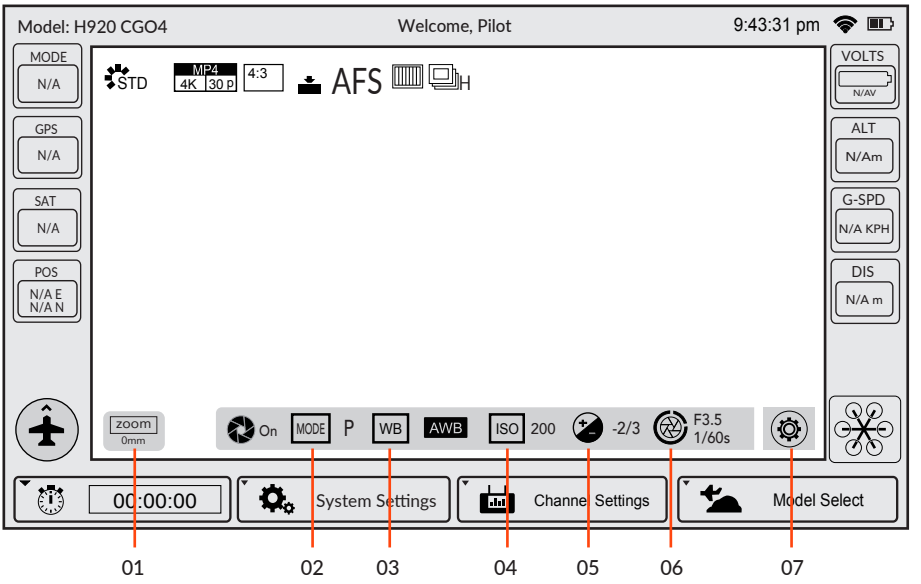


GIMBAL YAW CONTROL

There is a gimbal yaw mode switch on ST24---S2. When the switch position is up, the gimbal camera is in Follow Mode. The yaw control of the gimbal camera is now disabled; when the switch is in the middle position, the gimbal camera is still in Follow Mode, however, at this time, the yaw control is activated. The gimbal camera will adjust its yaw direction according to the aircraft's movements. When the switch position is down, the gimbal camera is in Global Mode. The Aileron/Roll Control and Elevator/Pitch Control of the right-hand stick take control of the CGO4 in yaw and pitch directions.



CGO4 INTERFACE (ST24)



01. ZOOM IN / OUT 02. CAMERA MODE 03. WHITE BALANCE 04. ISO SENSITIVITY
05. EXPOSURE VALUE 06. APERTURE/SHUTTER SPEED 07. MENU SETTING

PHOTO TAKING AND VIDEO RECORDING

ST24 seamlessly integrates control of CGO4 gimbal camera so that you can easily take still photos and start/stop video recording through corresponding buttons.

CAUTION: If CGO4 is carried on H920, it can only be controlled through ST24. Phone App is disabled.

TO TAKE PHOTOS

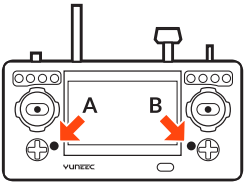
Press the button located on the left side of ST24. You'll hear an audible 'shutter' sound from ST24 and it will take approximately 5 seconds to capture the photo before you can take another photo.

NOTE: You cannot take still photos during video recording.

NOTE: You must stop video-recording in order to take photos.

TO START/STOP VIDEO-RECORDING

Press the button located on the right side of ST24. You'll hear an audible indication from ST24 each time the recording starts/stops. And while video is recording, there will be a red dot next to the video-recording timer near the upper right-hand corner of ST24.



(A) = To take photos
(B) = To record videos

CAUTION: If the video is being recorded on ProAction™ , repress the video recording button to end the process; otherwise, the video is unable to be saved.

WARNING: Tap the [ ] icon to turn off the CGO4 gimbal camera before powering off CGO4, in case that the camera lens won't return back to the original position and can't be packaged into the aluminum case.

CAMERA MODE INTRODUCTION

The CGO4 gimbal camera has eight camera modes in total,providing photographers with multiple choices for different shooting scenes.

INTELLIGENT AUTO MODE: The subjects are recorded using settings automatically selected by the camera.

NOTE: In this mode, the camera makes the optimal settings for the subject and scene, so we recommend it when you wish to leave the settings to the camera and record without thinking about them.

NOTICE: [iA] is set if none of the scene are applicable, and the standard settings are set.

INTELLIGENT AUTO PLUS MODE: Allows you to adjust the brightness and color hue when in Intelligent Auto Mode.

	IA+ (INTELLIGENT AUTO PLUS MODE)	IA (INTELLIGENT AUTO MODE)
Changing the brightness	Available	Not Available
Changing the hue	Available	Not Available

PROGRAM AE MODE: The camera automatically sets the shutter speed and the aperture value according to the brightness of the subject.

You can take picture with greater freedom by changing various settings in the Menu Settings.

CAUTION: The Aperture and Shutter Speed cannot be adjusted separately under P mode; it can only be controlled through the Union Picker.

APERTURE-PRIORITY AE MODE: The shutter speed is automatically determined by the aperture value you set.

SHUTTER-PRIORITY AE MODE: The aperture value is automatically determined by the shutter speed you set.

MANUAL EXPOSURE MODE: The exposure is adjusted by the aperture value and the shutter speed which are manually adjusted

The following two modes are under Creative Movie Mode:

PROGRAM AE MODE: Records at the aperture value and shutter speed set by the camera. The camera automatically sets the shutter speed and the aperture value according to the brightness of the subject during video-recording.
You can take picture with greater freedom by changing various settings in the Menu Settings.

SHUTTER-PRIORITY AE MODE: When you set the shutter speed, the camera automatically optimizes the aperture value for the brightness of the subject during video-recording.

ADJUSTING THE WHITE BALANCE

In sunlight, under incandescent lights or in other such conditions where the color of white takes on a reddish or bluish tinge, this item adjusts to the color of white which is closest to what is seen by the eye in accordance with light source.

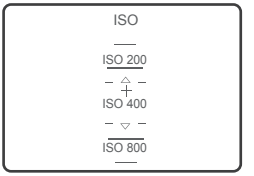
AWB: Automatic Adjustment **Daylight:** When taking pictures outdoors under a clear sky **Cloudy:** When taking pictures under a cloudy sky **Shade:** When taking pictures outdoors in the shade **Halogon:** When taking pictures under the incandescent lights

NOTICE: It will operate as [AWB] during motion picture recording.

SETTING THE LIGHT SENSITIVITY

This allows the sensitivity to light (ISO sensitivity) to be set. Setting to a higher figure enables pictures to be taken even in dark places without the resulting pictures coming out.

Auto / Intelligent ISO (i-ISO) /100 (Extended) /200/400 /800/ 1600/3200/6400/12800/25600(changeable to 1/3 EV STEP)(Up to ISO 6400 in motion picture recording)(ISO Auto in M mode)



COMPENSATING THE EXPOSURE

Exposure Value (EV) is a number that represents a combination of camera's shutter speed and f-number.Use this function when you cannot achieve appropriate exposure due to the difference in brightness between the subject and the background.

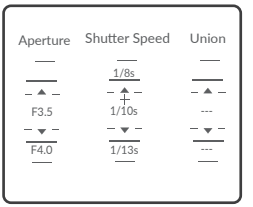
Exposure Compensation	1/3 EV STEP +/-5EV(+/-3 EV for motion picture
Exposure Accuracy	+/- 1/3 EV

SPECIFYING THE APERTURE/ SHUTTER SPEED

NOTICE: The effect of the set aperture value and shutter speed will not be visible on the recording screen.

NOTE: If the photographer wants to highlight the background, set a relatively high aperture value; if the photographer wants a soft background, set a relatively low level.

Maximum Aperture	F3.5(Wide)~F5.6(Tele)
Minimum Aperture	F22



Mechanical Shutter Speed	[Still image] Bulb(Max. 60minutes),1/8000-60 [Motion picture]: 59.94Hz: 1/16,ooo-1/30; 50.00Hz: 1/16,ooo-1/25; 23.98Hz: 1/16,ooo-1/24
Shutter Life	Approx.200,000 images
Burst speed	MECHANICAL SHUTTER: H: 12 frames/sec(AFS), 7 frames/sec(AFC) M: 7 frames/sec(Live View) L: 2 frames/sec(Live View) Electronic shutter: SH: 4O frames/sec

NOTE: If the photographer wants to capture fast-moving subjects, set a relatively high shutter speed; if the photographer wants to track-shooting, set a relatively low shutter speed.

When CGO4 gimbal camera is in Aperture-Priority AE Mode, the camera automatically optimizes the shutter speed for the brightness of the subject.

When CG04 gimbal camera is in shutter-priority AE Mode, the camera automatically optimizes the aperture value for the brightness of the subject.

When CGO4 gimbal camera is in Manual Exposure Mode: the photographer can determine the correct settings first, tap Mode button on the lower portion of the screen and a virtual mode dial will pop up on the screen and then set the mode dial to [M].Slide the aperture value picker and shutter speed picker to set the appropriate aperture value and shutter speed.

MENU SETTING INTRODUCTION

VIDEO SYSTEM

This allows you to set different system frequency. In different system frequencies, the video qualities are different.

NTSC	4K/100M/30P; FHD/28M/60P; FHD/20M/30P; HD/10M/30P; VGA/4M/30P
PAL	4K/100M/25P; FHD/28M/50P; FHD/20M/25P; HD/10M/25P; VGA/4M/25P
CINEMA	C4K/100M/24P; 4K/100M/24P; FHD/ALL-intra/200M/24P; FHD/50M/24P

VIDEO ENCODING

This allows you to set different video formats.

MP4	The MP4 data format is suitable for playback on a PC, etc.
MP4(LPCM)	The MP4 data format for image editing
MOV	Data format for image editing.

VIDEO QUALITY

This sets up the picture quality for motion pictures:

OPTIONS: MP4 30P 100Mbps 4K; MP4 24P 100Mbps 4K; MP4 60P 28Mbps 4K; MP4 30P 20M

IMAGE SIZE

This sets the number of pixels. The higher the numbers of pixels, the finer the detail of the pictures will appear even when they are printed onto large sheets. (16M/8M/4M)

IMAGE FORMAT

This sets the file format for the pictures you take.
(Fine / Standard / RAW+ fine / RAW+ / standard RAW)

PHOTO STYLE

This selects effects to match the type of image you wish to record and adjust the color and image quality of the effects.(Standard / Vivid / Natural / Monochrome / Scenery / Portrait)

ASPECT RATIO

This allows you to select the aspect ratio of the pictures to suit printing or the playback method.

4:3	[Aspect Ratio] of a 4:3 TV	4608x3456 (16M) ; 3264X2448 (8M); 2336X1752 (4M)
3:2	[Aspect Ratio] of a 35mm film camera	4608X3072 (14M); 3264X2176 (7M); 2336X1560 (3.5M)
16:9	[Aspect Ratio] of a high-definition TV, etc	4608x2592; 3804x2156; 1920X1080
1:1	Spare aspect ratio	3456X3456; 2448X2448; 1744X1744

NOTICE: The ends of the recorded pictures may be cut at printing so check before printing.

FOCUS MODE

By setting the optimum Focus Mode for the subject or recording condition, you can let the camera automatically adjust focus in various scenes.

Focus Mode	Continuous AF	Description of settings
AFS	ON:	The camera automatically keeps focusing on subjects during recording.
	OFF:	The camera maintains the focus position at the start of recording.
MF	ON / OFF:	You can focus manually. A focus bar will pop up on the left side of the screen for users to adjust the value.

MANUAL FOCUS MODE

Use this function when you want to fix the focus or when the distance between the lens and the subject is determined and you do not want to achieve Auto Focus.

Angle of view	Wide(f=14mm:75°~Tele(f=42mm:29°
Focal Length	F=14mm-42mm

NOTE: The maximum/minimum/current value will be displayed on the up right corner of the screen.

AF MODE

This allows the focusing method that suits the positions and number of the subjects to be selected.

1-Area: The camera focuses on the subject in the AF area on the center of the screen.Position and Size of the AF area can be changed.

49 point: Up to 49 AF areas can be focused.This is effective when a subject is not in the center of the screen. You can select areas to be in focus.

Touch the eye to be in focus: touch the eye in the yellow frame. If you touch any other location, the AF area setting screen will be displayed.

IMAGE FORMAT

CAUTION: If you delete a RAW file from the camera, the corresponding JPEG image will also be deleted.
NOTICE: It is fixed to maximum recordable pixels [L] for each image aspect ratio.

PHOTO STYLE

You can select effects to match the type of image you wish to record. You can adjust the color and image quality of the effects.

STANDARD / VIVID / NATURAL / MONOCHROME / SCENERY / PORTRAIT

DRIVE MODE

Slide the menu and select Drive Mode. A menu will pop up with two menu items: Normal, Burst for the photographer to select with.

NORMAL	When the shutter button is pressed, only one picture is recorded.
BURST	Recordings are made in succession while the shutter button is pressed

Taking pictures using Burst Mode

Pictures taken with a burst speed of [SH] will be recorded as a single burst group.

Slide the Menu and Select Driving Mode. Focus on the subject and take a picture.

Changing the burst speed

Pictures taken with a burst speed of [SH] will be recorded as a single burst group.

Slide the Menu and Select Driving Mode. Focus on the subject and take a picture.

	[H] (High Speed)	[M] (Middle Speed)	[L] (Low Speed)
BURST SPEED(PICTURES/SECOND)	12(AFS) 7(AFC)	7	2
LIVE VIEW DURING BURST MODE	None	Available	Available

LIGHT METERING

The photographer can set the light metering method for still for measuring brightness.

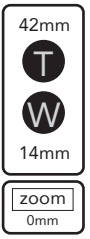
[Multiple] This is the method in which the camera measures the most suitable exposure by judging the allocation of brightness on the whole screen automatically. Usually, we recommend using this method.

[Center Weighted] This is the method used to focus on the subject on the center of the screen and measure the whole screen evenly.

[Spot] This is the method to measure the subject in the spot metering target.

ZOOM IN / OUT

The photographer can zoom in/out through the following two methods:



Method I: The [ZOOM] icon located on the lower portion of the screen is in charge of zooming in/out the camera, tap it and a zoom picker will pop up on the screen, tap 'T' to zoom in and 'w' to zoom out.

CANTION: Once the [ZOOM] icon is activated, K6 is disabled.

Method 2: When the CGO4 is attached to the TORNADO H920, the control knob (K6) is activated. Users can zoom in by rotating the knob (K6) in the clockwise direction (the movement speed of the CGO4 gimbal camera in pitch and yaw directions will become slow in the velocity mode), and vice versa (the movement speed of the CGO4 gimbal camera in pitch and yaw directions will become fast in the velocity mode).

CAUTION: Each time the K6 is pushed to a certain position, it should be pushed back to the middle position to confirm the setting. Otherwise, the gimbal camera will continue to zoom in/out until it achieves the maximum/minimum value.

GROUND IMAGING SOLUTION

APP DOWNLOADING

Download the free APP named CGO4 to smart device at the APP Store or Google Play Store. Install the APP to your 5.8GHz Wi-Fi capable device. Make a note of the network name and password located on the top of the gimbal assembly.

CGO4 APP COMPATIBLE DEVICES:

APPLE IOS: IOS 7.0 or above
ANDROID: Android 4.2 or above

ANDROID APP ON Google play

Available on the App Store

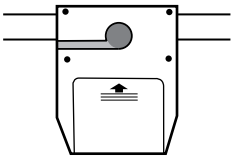
ATTACHING CGO4 GIMBAL CAMERA TO PROACTION

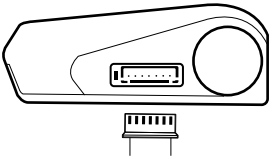
STEP 1: Securely attach CGO4 gimbal camera to ProAction™ with Gimbal Thumb Screws, then withdraw the Gimbal Cord from the left side.

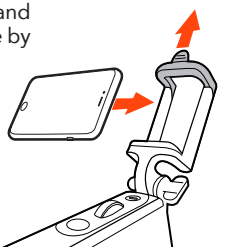
STEP 2: Insert the Gimbal Cord into the center carrying handle socket.

STEP 3: Install the ProAction™ Battery and engage the connector properly.

STEP 4: Erect the phone holder and install the mobile phone into it, and then you can make Wi-Fi connection between CGO4 and mobile device by joining the CGO4 network in your phone's Wi-Fi setting.







BINDING CGO4 GIMBAL CAMERA TO APP

The APP seamlessly integrates control of CGO4 gimbal camera so that you can see exactly what your camera sees with a live HD video feed right on your mobile device. It makes you feel as though the camera is right in your hands.

CAUTION: If the user wants to take photos or videos with the ProAction™ , the CGO4 APP should be downloaded beforehand.

STEP 1: Make Wi-Fi connection between your mobile device: Select the correct Wi-Fi SSID and enter the password: "1234567890"

STEP 2: Tap the CGO4 icon on your mobile device and enter the APP interface.

GiMBAL CONTROL ON PROACTION™

There are two modes to control the Gimbal through ProAction™ : Follow Mode and Global Mode.

Switch on the ProAction™ on a flat and stable surface. Do not move, sway or shake the ProAction™ during initialization. After initialization, the gimbal will boot up normally in either Follow or Global Mode, depending on user settings on the left-hand switch of the ProAction™ . Once the gimbal is on, it begins an automatic self-check by rotating about the yaw axis. At this time, the power indicator will be on as well. At the same time the control status LED will blink green and blue alternately.

When the self-check (start-up) process is complete, the Control Status LED will grow solid blue. The user can switch freely between Follow Mode and Global Mode without powering off the gimbal.

FOLLOW MODE

In Follow Mode, the camera lens moves in the direction of ProAction™ . The user can only manipulate the pitch direction through Gimbal Control Stick on the right.

If the Gimbal Control Stick moves upward, the camera lens will trim itself up. If the Gimbal Control Stick moves downward, the camera lens will trim itself down.

NOTICE: In Follow Mode, the camera lens will move in the direction of the Gimbal. At this time, the Gimbal will take control of itself in the Yaw direction and the user can only control the Gimbal in the Pitch direction.

NOTICE: The Yaw Axis inside the Gimbal will rotate in the direction of ProAction™ Frame. Any manipulation in the Yaw direction is invalid, in other words, the user can only control the Pitch direction.

GLOBAL MODE

In Global Mode, the camera lens sticks to a fixed direction instead of following the movement of the ProAction™ Frame. The user can control the Yaw and Pitch Direction through Gimbal Control Stick.

If the Gimbal Control Stick moves upward, the camera lens will trim itself up. If the Gimbal Control Stick moves downward, the camera lens will trim itself down. If the Gimbal Control Stick turns right, the camera lens will trim itself to the right. If the Gimbal Control Stick turns left, the camera lens will trim itself to the left.

DOUBLE HANDS OPERATING:

Grip the left and right handles of the ProAction™ with both hands. The Power and Mode Selection Switch is on the left side, while the Gimbal Control Stick is on the right side.

NOTICE: Once the ProAction™ is started up, no matter which mode it is in, the default mode is Double Hands Operating. The Control Status Indicator on center carrying handle will be solid red. The user can ONLY take control of the gimbal through Gimbal Control Stick on the right side.

Double Hands Operating Method

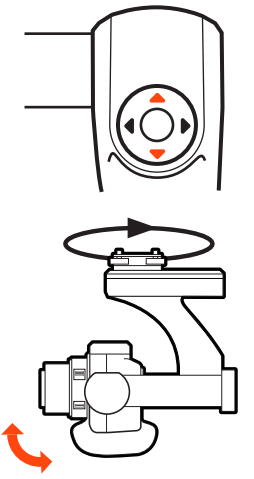
In the Follow Mode, the camera lens track the ProAction™ in Yaw axis. The user can only control the pitch direction through Gimbal Control Stick on the right.

Move the Gimbal Control Stick upward to trim the camera lens up. Move the Gimbal Control Stick downward to trim the camera lens down.

In the Global Mode, the camera lens does not move in the direction of the ProAction™ Frame but sticks to a fixed direction. The user can control both the Yaw and Pitch directions through Gimbal Control Stick.

Move the Gimbal Control Stick upward/downward to trim the camera lens up/down. Move the Gimbal Control Stick to the left/right to trim the camera lens left/right.

NOTICE: When in the Follow Mode, the Gimbal Control Stick can't control the CGO4 in Yaw axis. When in the Global Mode, the Gimbal Control Stick can control the CGO4 in Pitch and Yaw axes.



SINGLE HAND OPERATING:

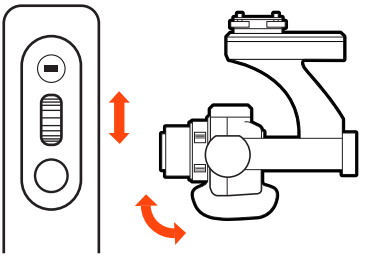
Lift the center carrying handle with one hand. When holding the ProAction™ with single hand, press and hold the Function Switch Button in the rear of the Pitch Control Wheel. The Control Status Indicator will glow solid blue when successfully switched.

The control has been switched to the Pitch Control Wheel on the center carrying handle. The Gimbal Control Stick on the right side of the ProAction™ is disabled in Pitch direction.

NOTICE: When the user holds the ProAction™ with single hand in the Global Mode, the user can control the camera in the Yaw direction through the Gimbal Control Stick.

Single Hand Operating Method

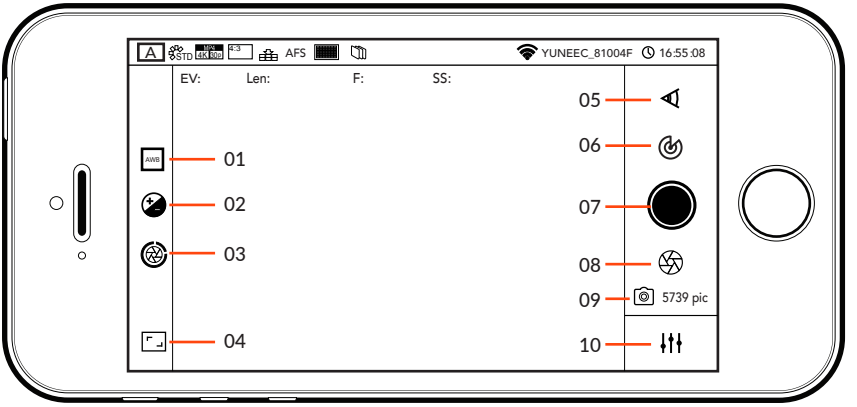
Roll the Pitch Control Wheel forward to move the camera pitch/angle downward, and roll the Pitch Control Wheel backward to move the camera pitch/angle upward.



ANGLE LIMITS

When operating the ProAction™, it is suggested to hold it horizontally for better photography experience, or at least to make sure the roll angle is less than 40 degree.

APP INTERFACE



01. WHITE BALANCE **02.** EXPOSURE VALUE/ISO SENSITIVITY **03.** APERTURE/SHUTTER SPEED
04. FULL SCREEN DISPLAY **05.** FOCAL LENGTH **06.** CONTROL MENU **07.** VIDEO-RECORDING
08. BUTTONPHOTO-TAKING BUTTON **09.** LEFT STORAGE **10.** SETTING MENU

WARNING: Turn off the camera through APP before powering off the CGO4 camera, in case that the camera lens won't return back to the original position and can't be packaged into the aluminum case.

PHOTO TAKING AND VIDEO RECORDING

TO TAKE PHOTOS

STEP 1: Before you start to use the APP, you should make sure that the Wi-Fi connection has been successfully made. Go to your Wi-Fi settings and select the CGO4 network.

STEP 2: Tap the APP icon on your mobile device and you'll come to the Camera Control Interface.

STEP 2: Press "Camera" and CGO4 gimbal camera will be ready to work.

STEP 3: Press the [ ] button and you can start to take photos.

NOTICE: If you have successfully entered photo-taking, an audible 'shutter' sound will be heard and a notice will pop up on the screen, reading "picture of success"

CAUTION: You cannot take photos while recording video. You must stop recording video in order to take still photos.

TO START/STOP VIDEO RECORDING

Press [ ] button and you can start to record the video.

If you have successfully entered video-recording, the button will turn red and a video recording timer will appear on the top right corner of the screen.

CAUTION: If the video is being recorded, repress the video recording button to end the process before powering off the gimbal, or the video is unable to be saved.

CAMERA MODE INTRODUCTION

The CGO4 gimbal camera has eight camera modes in total,providing photographers with multiple choices for different shooting scenes.

INTELLIGENT AUTO MODE: The subjects are recorded using settings automatically selected by the camera.

NOTE: In this mode, the camera makes the optimal settings for the subject and scene, so we recommend it when you wish to leave the settings to the camera and record without thinking about them.

NOTICE: [iA] is set if none of the scene are applicable, and the standard settings are set.

INTELLIGENT AUTO PLUS MODE: Allows you to adjust the brightness and color hue when in Intelligent Auto Mode.

	IA+ (INTELLIGENT AUTO PLUS MODE)	IA (INTELLIGENT AUTO MODE)
Changing the brightness	Available	Not Available
Changing the hue	Available	Not Available

PROGRAM AE MODE: Records at the aperture value and shutter speed set by the camera.

The camera automatically sets the shutter speed and the aperture value according to the brightness of the subject.

You can take picture with greater freedom by changing various settings in the Menu Settings.

CAUTION: The Aperture and Shutter Speed cannot be adjusted separately under P mode; it can only be controlled through the Union Picker.

APERTURE-PRIORITY AE MODE: The shutter speed is automatically determined by the aperture value you set.

SHUTTER-PRIORITY AE MODE: When you set the shutter speed, the camera automatically optimizes the aperture value for the brightness of the subject.

MANUAL EXPOSURE MODE: The exposure is adjusted by the aperture value and the shutter speed which are manually adjusted

The following two modes are under Creative Movie Mode:

PROGRAM AE MODE: Records at the aperture value and shutter speed set by the camera. The camera automatically sets the shutter speed and the aperture value according to the brightness of the subject during video-recording.
You can take picture with greater freedom by changing various settings in the Menu Settings.

SHUTTER-PRIORITY AE MODE: When you set the shutter speed, the camera automatically optimizes the aperture value for the brightness of the subject during video-recording.

ADJUSTING THE WHITE BALANCE

In sunlight, under incandescent lights or in other such conditions where the color of white takes on a reddish or bluish tinge, this item adjusts to the color of white which is closest to what is seen by the eye in accordance with light source.

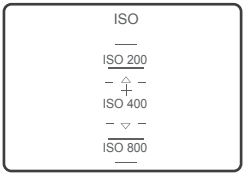
AWB: Automatic Adjustment **Daylight:** When taking pictures outdoors under a clear sky **Cloudy:** When taking pictures under a cloudy sky **Shade:** When taking pictures outdoors in the shade **Halogon:** When taking pictures under the incandescent lights

NOTICE: It will operate as [AWB] during motion picture recording.

SETTING THE LIGHT SENSITIVITY

This allows the sensitivity to light (ISO sensitivity) to be set. Setting to a higher figure enables pictures to be taken even in dark places without the resulting pictures coming out.

Auto / Intelligent ISO (i-ISO) /100 (Extended) /200/400 /800/ 1600/3200/6400/12800/25600(changeable to 1/3 EV STEP)(Up to ISO 6400 in motion picture recording)(ISO Auto in M mode)



COMPENSATING THE EXPOSURE

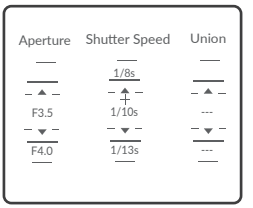
Exposure Value (EV) is a number that represents a combination of camera's shutter speed and f-number.Use this function when you cannot achieve appropriate exposure due to the difference in brightness between the subject and the background.

Exposure Compensation	1/3 EV STEP +/-5EV(+/-3 EV for motion picture
Exposure Accuracy	+/- 1/3 EV

SPECIFYING THE APERTURE/ SHUTTER SPEED

NOTICE: The effect of the set aperture value and shutter speed will not be visible on the recording screen.

NOTE: If the photographer wants to highlight the background, set a relatively high aperture value; if the photographer wants a soft background, set a relatively low level.



Maximum Aperture	F3.5(Wide)~F5.6(Tele)
Minimum Aperture	F22

Mechanical Shutter Speed	[Still image] Bulb(Max. 60minutes),1/8000-60 [Motion picture]: 59.94Hz: 1/16,ooo-1/30; 50.00Hz: 1/16,ooo-1/25; 23.98Hz: 1/16,ooo-1/24
Shutter Life	Approx.200,000 images
Burst speed	MECHANICAL SHUTTER: H: 12 frames/sec(AFS), 7 frames/sec(AFC) M: 7 frames/sec(Live View) L: 2 frames/sec(Live View) Electronic shutter: SH: 4O frames/sec

NOTE: If the photographer wants to capture fast-move subjects, set a relatively high shutter speed; if the photographer wants to track-shooting, set a relatively low shutter speed.

When CGO4 gimbal camera is in Aperture-Priority AE Mode, the camera automatically optimizes the shutter speed for the brightness of the subject.

When CG04 gimbal camera is in shutter-priority AE Mode, the camera automatically optimizes the aperture value for the brightness of the subject.

When CGO4 gimbal camera is in Manual Exposure Mode: the photographer can determine First, tap Mode button on the lower portion of the screen and a virtual mode dial will pop up on the screen and then set the mode dial to [M].Slide the aperture value picker and shutter speed picker to set the appropriate aperture value and shutter speed.

ADJUSTING THE FOCAL LENGTH

Use this function when you want to fix the focus or when the distance between the lens and the subject is determined and you do not want to achieve Auto Focus.

Angle of view	Wide(f=14mm:75°~Tele(f=42mm:29°
Focal Length	F=14mm-42mm

CONTROL MENU INTRODUCTION

FIXING THE FOCUS AND THE EXPOSURE (AF/AE LOCK)

This is useful when you want to take a picture of a subject outside the AF area or the contrast is too strong and you cannot achieve appropriate exposure.

[AE LOCK] Only the exposure is locked. When the exposure is set, [AEL],the aperture value, the shutter speed are displayed.

[AF LOCK] Only the focus is locked. When the subject is focused,[AFL],the focus indication, the aperture value and the shutter speed are displayed.

[AF/AE LOCK] Both focus and exposure are locked. [AFL],[AEL],the focus indication, aperture value and shutter speed are displayed when the focus and the exposure are optimized.

[AF-ON] Auto Focus is performed.

CAMERA-S

This allows you to switch on/off the camera when operating CGO4 on ProAction™ .

STEP 1: Tap [⚙] icon on the right-hand column and tap “Camera-S”

STEP 2: A camera setting bar will pop up on the screen.

STEP 3: Slide the Camera ON/OFF switch to the right to turn on the camera.

STEP 4: Slide the Camera ON/OFF switch to the left to turn off the camera.

GUIDELINESS:

When there are obstacles, the position judgment of the photographer may be biased. The guidelines function can help to correct their judgment in the horizontal and vertical direction and to create a better photo composition.

STEP 1: Tap [⚙] icon on the right-hand column and tap “Guidelines”.

STEP 2: A guideline status menu will pop up on the screen.

STEP 3: Slide the guideline switch to the right to turn on the camera.

STEP 4: Slide the guideline switch to the left to turn off the camera.

MENU SETTING INTRODUCTION

VIDEO SYSTEM

This allows you to set different system frequency. In different system frequencies, the video qualities are different.

NTSC	4K/100M/30P; FHD/28M/60P; FHD/20M/30P; HD/10M/30P; VGA/4M/30P
PAL	4K/100M/25P; FHD/28M/50P; FHD/20M/25P; HD/10M/25P; VGA/4M/25P
CINEMA	C4K/100M/24P; 4K/100M/24P; FHD/ALL-intra/200M/24P; FHD/50M/24P

VIDEO ENCODING
This allows you to set different video formats.

MP4	The MP4 data format is suitable for playback on a PC, etc.
MP4(LPCM)	The MP4 data format for image editing
MOV	Data format for image editing.

VIDEO QUALITY
This sets up the picture quality for motion pictures:
OPTIONS: MP4 30P 100Mbps 4K; MP4 24P 100Mbps 4K; MP4 60P 28Mbps 4K; MP4 30P 20M

IMAGE SIZE
This sets the number of pixels. The higher the numbers of pixels, the finer the detail of the pictures will appear even when they are printed onto large sheets. (16M/8M/4M)

IMAGE FORMAT
This sets the file format for the pictures you take.
(Fine / Standard / RAW+ fine / RAW+ / standard RAW)

PHOTO STYLE
This selects effects to match the type of image you wish to record and adjust the color and image quality of the effects.(Standard / Vivid / Natural / Monochrome / Scenery / Portrait)

ASPECT RATIO
This allows you to select the aspect ratio of the pictures to suit printing or the playback method.

4:3	[Aspect Ratio] of a 4:3 TV	4608x3456 (16M) ; 3264X2448 (8M); 2336X1752 (4M)
3:2	[Aspect Ratio] of a 35mm film camera	4608X3072 (14M); 3264X2176 (7M); 2336X1560 (3.5M)
16:9	[Aspect Ratio] of a high-definition TV, etc	4608x2592; 3804x2156; 1920X1080
1:1	Spare aspect ratio	3456X3456; 2448X2448; 1744X1744

NOTICE: The ends of the recorded pictures may be cut at printing so check before printing.

FOCUS MODE
By setting the optimum Focus Mode for the subject or recording condition, you can let the camera automatically adjust focus in various scenes.

Focus Mode	Continuous AF	Description of settings
AFS	**ON:**	The camera automatically keeps focusing on subjects during recording.
	OFF:	The camera maintains the focus position at the start of recording.
MF	**ON / OFF:**	You can focus manually. A focus bar will pop up on the left side of the screen for users to adjust the value.

MANUAL FOCUS MODE
Use this function when you want to fix the focus or when the distance between the lens and the subject is determined and you do not want to achieve Auto Focus.

Angle of view	Wide(f=14mm):75°~Tele(f=42mm):29°
Focal Length	F=14mm-42mm

NOTE: The maximum/minimum/current value will be displayed on the up right corner of the screen.

AF MODE

This allows the focusing method that suits the positions and number of the subjects to be selected.

Focus and exposure will keep on following the subject even if it moves.

1-Area: The camera focuses on the subject in the AF area on the center of the screen.Position and Size of the AF area can be changed.

49 point: Up to 49 AF areas can be focused.This is effective when a subject is not in the center of the screen.You can select areas to be in focus.

Touch the eye to be in focus: touch the eye in the yellow frame. If you touch any other location, the AF area setting screen will be displayed.

IMAGE FORMAT

CAUTION: If you delete a RAW file from the camera, the corresponding JPEG image will also be deleted.
NOTICE: It is fixed to maximum recordable pixels [L] for each image aspect ratio.

PHOTO STYLE

You can select effects to match the type of image you wish to record. You can adjust the color and image quality of the effects.

STANDARD / VIVID / NATURAL / MONOCHROME / SCENERY / PORTRAIT

DRIVE MODE

Slide the menu and select Light Metering. A menu will pop up with three menu items: Multiple, Center Weighted, Spot for the photographer to select with.

NORMAL	When the shutter button is pressed, only one picture is recorded.
BURST	Recordings are made in succession while the shutter button is pressed

Taking pictures using Burst Mode

Pictures taken with a burst speed of [SH] will be recorded as a single burst group.

Slide the Menu and Select Driving Mode. Focus on the subject and take a picture.

Changing the burst speed

Pictures taken with a burst speed of [SH] will be recorded as a single burst group.

Slide the Menu and Select Driving Mode. Focus on the subject and take a picture.

	[H] (High Speed)	[M] (Middle Speed)	[L] (Low Speed)
BURST SPEED(PICTURES/SECOND)	12(AFS) 7(AFC)	7	2
LIVE VIEW DURING BURST MODE	None	Available	Available

LIGHT METERING

The photographer can set the light metering method for still for measuring brightness.

[Multiple] This is the method in which the camera measures the most suitable exposure by judging the allocation of brightness on the whole screen automatically. Usually, we recommend using this method.

[Center Weighted] This is the method used to focus on the subject on the center of the screen and measure the whole screen evenly.

[Spot] This is the method to measure the subject in the spot metering target.

LED STATUS INDICATION

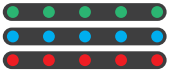
PROACTION™ (Control Status Indication)

Boot Self-inspection: LED blinking red and blue alternately
Double Hands Operating: LED solid red
Single Hand Gimbal Gripping: LED solid blue

PROACTION™ (Power Status Indication)

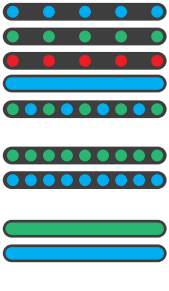
First Level Low Voltage Battery Warning: LED blinking green slowly
Second Level Low Voltage Battery Warning: LED blinking green quickly

CGO4 (CAMERA)



ST24 and gimbal camera not connected: LED blinking green.
ST24 and mobile device connected: LED blinking blue
CGO4 Wi-Fi malfunction: LED blinking red

CGO4 (GIMBAL)



Firmware update in progress: LED blinking blue
Firmware update succeeds: LED blinking green
Firmware update Fails: LED blinking red
Powering On: LED solid blue for 7 seconds
Initializing: LED blinking blue and green alternately
Connecting Between the Gimbal and Aircraft Fails:
In the Follow Mode: LED blinking green
In the Global Mode: LED blinking blue
NOTICE: We suggest that the user restart H920/ProAction™ in such conditions.
Connecting Between the Gimbal and Aircraft Succeeds:
In the Follow Mode: LED solid green
In the Global Mode: LED solid blue

CGO4 (RECEIVER)

Receiver and ST24 connected: LED blinking orange (2 times per second)
Receiver binding to ST24: LED solid orange
Signal loss: LED blinking orange (1 flash per second)

DISCLAIMER

Yuneec Electric Aviation cannot be held liable for any damage, injury or for use of the product in violation with legal regulations, especially in the following circumstances:

Damage and/or injury as well violation of legal regulations resulting from a failure to comply with the operating instructions or the instructions at www.yuneec.com, product information, user manual and other legally binding information.

Damage and/or injury as well violation of legal regulations brought about by the influence of alcohol, drugs, medication or other narcotics which may impact on the concentration of the user.

The same applies to illnesses effecting the concentration of the user (dizziness, tiredness, nausea etc.) or other factors compromising mental and physical capabilities.

Intentionally caused damage, injury or violation of legal regulations.

Any request for compensation caused by an accident resulting from use of the product.

Damage and/or injury as well as violation of legal regulations caused by use of the product in a no-fly zone, e.g. next to an airfield, above a motorway or a natural conservation area.
Malfunction of the product caused by retrofitting or replacement with components which did not come from YuneecElectric Aviation.

Damage and/or injury caused by the use of replica parts (non-original parts).

Damage and/or injury as well as violation of legal regulations caused by incorrect operation or misjudgement.

Damage and/or injury caused by damaged spare parts or not using original Yuneec Electric Aviation spare parts.

Damage and/or injury as well as violation of legal regulations caused by ignoring the low voltage battery warning.

Damage and/or injury caused by knowingly and negligibly flying with a damaged model or one which is unfit to fly, e.g. due to dirt, water penetration, coarse particles, oil or a model which has not been correctly or completely assembled or if the main components exhibit visible damage, defects or missing parts.

Damage and/or injury as well as violation of legal regulations caused by operating the model in a magnetic field (e.g. high voltage lines, electricity/transformer stations, radio towers, mobile phone masts etc.), a strong wireless signal environment,no-fly zones, poor visibility and in the event of vision impairments or other impacts on the pilot which are left unchecked etc...

Damage and/or injury brought about through a violation of the legal regulations for operating the model, in unsuitable weather conditions, e.g. rain, wind, snow, hail, storms, hurricanes etc.

Damage and/or injury as well as violation of legal regulations caused by force majeure, e.g. collision, fire, explosion,flooding, tsunami, landslide, avalanche, earthquake or other forces of nature.

Damage and/or injury as well as violation of legal regulations caused by the illegal or immoral use of the model, e.g. capturing videos or recording data which infringes upon/harms the privacy of other people.

Damage and/or injury as well as violation of legal regulations caused by incorrect use of the batteries, protection systems, chargers or aircraft.

Consequential damage caused by the incorrect operation of any kind of system components and accessory parts, especially memory cards, whereby image or video material from the camera can become defect.

Any non-compliance with legal obligations, personal injury, material damage and environmental damage caused by use and a failure to comply with the local laws and regulations.

Damage and/or injury as well as violation of legal regulations caused by hazardous use without sufficient practical experience.

Damage and/or injury as well as violation of legal regulations caused by flying in legally defined no-fly zones.

Further losses which do not fall within the scope of use defined by Yuneec Electric Aviation as improper.

This product is designed for both professional use and personal, private use. The national and international laws and regulations in force as the time of taking off must be adhered to.

FCC STATEMENT:

This equipment has been tested and found to comply with the limits for Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates , uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a
particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.
CAUTION: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

RF EXPOSURE WARNING
• This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

IC RADIATION EXPOSURE STATEMENT FOR CANADA
This device complies with Industry Canada licence-exempt RSS standard(s).
Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause

undesired operation of the device.
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
This equipment complies with IC RSS-102 radiation exposure limit set forth for an uncontrolled environment.

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