2026-06-10 Firmware and Document

Gimbal_Upgrade_package_V4.0

Updated Content

1. Fixed the issue where the gimbal could not be controlled in FPV mode after entering tilt protection mode;
2. Added a carrier data display window to the gimbal debugging tool;
3. Set the attitude angle display during tilt protection and the motor power display during gimbal stall to red in the gimbal debugging tool.

2026-06-01 Firmware and Document

QGC_Windows_XF_V3.0.8.0415
QGC_Andriod_XF_V3.0.6.0318

Update Content

1. Added a target mark, allowing targets to be marked and recorded on the map page. For instructions on how to use this feature, please refer to the Video Center on the official website;
2. A secondary confirmation popup has been added for NIR laser illumination and green laser designation;
3. Modified the camera crosshair style;
4. Adapted for new model gimbal pods.

2025-11-19 Firmware and Document

QGC_Andriod_XF_V2.5.6.1119
QGC_Windows_XF_V2.5.6.1119

Update Content

1. Correct text errors;
2. Add Chinese-English toggle, which can be switched in Select Tool \ Application Settings \ General \ Miscellaneous \ Language;

3. Adapt to new model pods.

2025-09-09 Firmware and Document

QGC_Andriod_XF_V2.5.3.0909
QGC_Windows_XF_V2.5.3.0909

Update Content

1. Fix the issue of being unable to successfully calibrate the airspeed indicator;
2. Add reference line function. Reference auxiliary lines can be overlaid on the video display interface;
3. Expand reticle function. The overlaid reticle on the video display interface can have customizable styles, sizes, and position adjustments.

2025-08-14 Firmware and Document

QGC_Andriod_XF_V2.5.2.0814
QGC_Windows_XF_V2.5.2.0814

Update Content

1. New timezone setting feature added;
2. Optimized the display logic of the telemetry module;
3. Fixed compatibility issues with certain gimbals.

2025-08-05 Firmware and Documentation Updates

QGC_Andriod_XF_V2.5.0804
QGC_Windows_XF_V2.5.0804
GCU_Upgrade_Tool_V6.7.08

Updated Content

QGC_Andriod_XF_V2.5.0804

QGC_Windows_XF_V2.5.0804

1. Optimized the layout of controls, which solved the problem of incomplete interface display when running on some devices.
2. The main interface adds the recording time display;
3. Optimize TCP communication functions;
4. Added the function of modifying video parameters (resolution, bit rate and encoding format);

* Please use GCU firmware V6.7 or above.
* When changing the camera RTSP and recording parameters, the modified content will take effect immediately, but the previous configuration will be restored after the pod is restarted. To be permanent, click the "Save" button;
* When modifying the recording parameters, check whether the memory card you are using meets the required write rate.

GCU_Upgrade_Tool_V6.7.08

1. Make adaptive modifications to the open source flight controller ArduPilot firmware of V4.6 and above versions;
2. Added the point recording function under the ArduPilot firmware.

2025-07-14 Firmware and Documentation Updates

Gimbal_Upgrade_package_V3.8

Updated Content

1. Algorithm optimization;
2. The debugging software adds the modification function of installation method, protection inclination and other setting items.

2025-06-18 Firmware and Documentation Updates

QGC_Windows_XF_V2.4.0618

Updated Content

QGC_Windows_XF_V2.4.0618

1. Added a gimbal settings page for configuring the gimbal's network settings, camera parameters, S.BUS channels, etc.
2. Moved settings such as video stream settings, version information, and camera center point to the "General" section under gimbal settings.
3. The app will now automatically fill in the camera stream address based on the gimbal model upon startup.
4. Moved gimbal telemetry information to the bottom - right of the main screen and added information such as zoom ratio.
5. Optimized the UI for the photo - taking and video - recording functions and added a recording status indicator.

2025-06-12 Firmware and Documentation Updates

Dragonfly_XF_V4.2.0611
QGC_Andriod_XF_V2.4.0611

Updated Content

QGC_Andriod_XF_V2.4.0611

1. Added pod settings page, which is used to set the network configuration, camera parameters, S.BUS channel, etc. of the pod.
2. Moved the video stream settings, version information, camera center point, and other settings to Pod Settings - General;
3. APP will automatically fill in the camera stream address when it starts;
4. Moved the pod telemetry information to the bottom right of the home screen, and added information such as zoom magnification;
5. Optimized the UI of the photo and video recording functions, and added the video recording status.

Dragonfly_XF_V4.2.0611

1. Added support for new pod models

2025-06-11 Firmware and Documentation Updates

GCU_Upgrade_Tool_V6.6.06

Updated Content

1. Optimized the latency and frame rate of video streams;
2. When using Dragonfly and XF_QGC, support TCP mode to control the pod;
3. Added the status flag of the pod to the GCU private communication protocol;
4. The default video storage is modified to 1920 × 1080@30fps, and it can be modified in Dragonfly after waiting for subsequent updates;
5. Support HDMI output video;
6. The OSD information display is off by default and can be turned on in Dragonfly.

2025-04-30 Firmware and Documentation Updates

GCU_Upgrade_Tool_V6.6.05

Updated Content

1. Optimized the latency and frame rate of video streams;
2. When using Dragonfly and XF_QGC, support TCP mode to control the pod;
3. Added the status flag of the pod to the GCU private communication protocol;
4. The default video storage is modified to 1920 × 1080@30fps, and it can be modified in Dragonfly after waiting for subsequent updates;
5. Support HDMI output video;
6. The OSD information display is off by default and can be turned on in Dragonfly.

2025-04-03 Firmware and Documentation Updates

QGC_Andriod_XF_V2.2.0403

Updated Content

1. Changed the app name to fix the issue that some android devices can't install software due to system limitations.

2025-03-13 Firmware and Documentation Updates

Dragonfly_XF_V4.1.0312

Updated Content

1. Fixed an issue where the lighting module of individual pods could not be turned on.

2025-02-25 Firmware and Documentation Updates

QGC_Andriod_XF_V2.1.0225
QGC_Windows_XF_V2.1.0225

Updated Content

QGC_Andriod_XF_V2.1.0225

1. Optimized the data communication between the software and the flight controller.

QGC_Windows_XF_V2.1.0225

1. Added a temperature measurement function component, which can control the relevant functions of the temperature measurement pod;
2. Added calibration function, which can calibrate the pod gyroscope;
3. Added TCP connection option;
4. Added the camera center point function, after turning on, the QGC video player will superimpose a crosshair in the center of the frame;
5. Added the function of hiding pod control components in the video interface;
6. Added video stream type selection function, which can support different types of video streams;
7. For Z-1 and Z-2 series pods, please use V6.4.02 or later firmware.AOptimized the performance of pose solving.

2025-02-08 Firmware and Documentation Updates

Gimbal_Upgrade_package_V3.6

Updated Content

Gimbal_Upgrade_package_V3.6

1. GimbalConfig adds tilt protection and inverted mode setting options;
2. Optimized the adaptability of the tracking function to abnormal conditions;
3. AOptimized the performance of pose solving.

2025-01-03 Firmware and Documentation Updates

QGC_Andriod_XF_V2.0.1230
Dragonfly_XF_V4.1.1227
GCU_Upgrade_Tool_V6.5.02

Updated Content

QGC

1. Added a temperature measurement function component, which can control the relevant functions of the temperature measurement pod;

2. Added calibration function, which can calibrate the pod gyroscope;
3. Added TCP connection option;
4. Added camera center point function, after opening, the QGC video player will superimpose a crosshair in the center of the frame;
5. Added the function of hiding pod control components in the video interface;
6. Added video stream type selection function, which can support different types of video streams;

* For Z-1 and Z-2 series pods, please use V6.4.02 and above firmware.

Dragonfly

1. In order to adapt to the Z-1 and Z-2 series pods, relevant communication protocols have been added;

* For Z-1 and Z-2 series, please use V6.4.02 or later firmware.

GCU_Upgrade_Tool_V6.5.02

1. The default video stream address is updated to rtsp://192.168.144.108
2. Added the overheating protection function, when the CPU temperature of the camera is higher than 80° C, the video frame rate will be reduced to 5fps, and when the temperature drops below 75° C, the video frame rate will be restored.
3. Added the switch target recognition function, you can choose to turn on or off the target recognition in Dragonfly, and the target tracking function is not available after it is turned off;
4. Optimization of tracking effect;
5. Added the function of OSD switch with immediate effect
6. Fixed the problem that the gateway setting does not take effect;
7. Optimized the control feel of using the drag and drop function in Dragonfly;

* Please use QGC_Andriod_XF_V2.0.1230 and above;
* Please use Dragonfly_XF_V4.1.1227 and above.

2024-10-24 Firmware and Documentation Updates

GCU_Firmware_VB5.2(20241012).fgpf
Gimbal_Firmware_V3.3.cahf
Dragonfly_V4.0.1024_XF

Updated Content

Dragonfly

1. Support to modify camera IP and video stream configuration;
2. Support remote download of photos and videos in the pod memory card through the

network;

3. Added OSD coordinate switching function, which can switch OSD coordinates to target point coordinates or carrier coordinates;
4. Added the time zone setting function, which can set the time zone of the OSD time on the screen;
5. Added an automatic inverted switch, which can set whether the screen will automatically flip with the upside-down installation of the pod;
6. Added the recognition and tracking function, the pod will automatically enter the tracking after identifying the target in the screen;
7. Added automatic identification function switch, which can turn on or off the target recognition function of the pod;
8. Added the function of specifying magnification, which can zoom to the specified magnification with one click;
9. Added network reset function, which can reset the network configuration of the pod through the serial port;
10. Added the function of specifying the picture-in-picture mode, which can switch to the designated picture-in-picture mode with one click;

2024-06-17

CwGimbalZGV2Main_V3.1.cahf
CwGimbalAutoPilot_MainControl_VA3.0(20240613).cgff
CwGbCamera_MainControl_VB5.0(20240617).fgpf

Updated Content

1. Added firmware adapted to the new model pod;
2. Optimize pod control during tracking;
3. Added the pod tracking function, after the target is lost in the tracking state, the pod will automatically track a distance to the possible movement direction of the target;
4. Add pod working mode;
5. Expansion of private protocol functions.

2024-03-06

CwGimbalAutoPilot_ MainControl_V2 .9 (20240110) . cgff
Dragonfly_V3.0.0306

Updated Content

Pod display and control software Dragonfly

1. Add the configuration interface for GCU;
2. Add part of the equipment information content to the information column;
3. Add OSD switching function, which can turn on or off the OSD information of the pod screen;
4. Add the function of selecting the video resolution of the main window;
5. Add TCP communication function;
6. The image display of the small window has been changed from the real-time picture to a frame of refresh every 5s.

2023-10-27

CwGimbalAutoPilot_ MainControl_V2 .7 (20231020) . cgff
D Series and GCU Related Documentation

Updated Content

1. GCU private communication protocol modification, corresponding to the version of "GCU private communication protocol-XF(A5)V2.0.2. pdf", see "Version History" in the document for details of the modifications;
2. The default network segment of the GCU is defined by "192.168. 1.X was amended to read 192.168.144.X. The firmware upgrade operation does not modify the current network segment and configuration of the GCU.
3. You can use the pointing and panning function in lock mode only;
4. When the target is lost in tracking mode, it will automatically switch to staring mode after waiting for 5s, and switch to lock mode if there is no gaze target;
5. For document updates, please refer to "Version History" in the documentation.

2023-08-10

GCU Private Protocol-XF(A5)V2.0. pdf

Updated Content

See "Version History" in the documentation.

2023-08-01

CwGimbalZGV2 Main_V2 . 6 . cahf
CwGimbalAutoPilot_ MainControl_V2 .6 (20230627) . cgff

Updated Content

1. Optimized the self-stability performance of the pod under different platform inclination angles;
2. Add roll control, angle soft limit, platform inclination protection function;
3. The control algorithm has been optimized to improve the control accuracy of the pod;
4. Optimize the tracking algorithm;
5. Optimized the pointing and panning function;
6. Improved the problem of poor lag experience of zoom to the specified multiple, and optimized the zoom instruction;
7. Added the function that the inverted mode can be set manually;
8. Enable pointing stick in follow mode;
9. Fixed the problem of pointing and panning command;
10. Optimize the judgment of the effectiveness of the target point location;
11. Added angle control mode when using protocol control.