



Sky-Watch Drone Manager

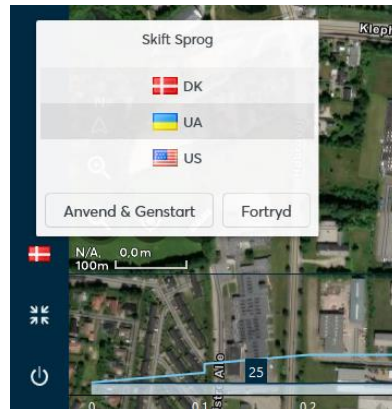
Release Notes



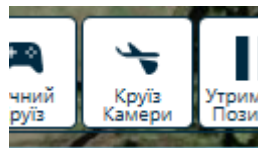
Sky-Watch Drone Manager 4.3.0 & Sky-Watch Camera Controller 1.3.0

Released: March 2024

Added Ukrainian language support. Change language by clicking the flag in the menu bar.



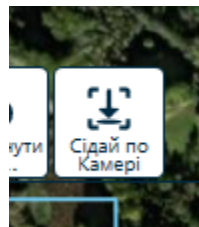
Added new "Camera Cruise" Flight Mode. The UAV flies towards the centre of the video feed. Use this mode to control the UAV by the camera.



INFO: When the UAV reaches the objective in the centre of the video feed, it will start to circle around it.

INFO: The On-screen joystick allows you to increase/decrease altitude when the UAV is in "Camera Cruise" mode.

Added new "Camera Land" flight mode. The UAV flies towards the centre of the video feed as in "Camera Cruise", but when reaching the objective it initiates a deep stall landing!



Two circles and the altitude above ground is displayed in the video feed when in "Camera Land"-mode. When the two circles meet, the UAV initiates the deep stall procedure to land.





Added new "Flight Area" Loiter pattern. The UAV moves freely within the green area. The flight trajectory is automatically calculated based on the camera direction to avoid reaching gimbal end points. The UAV takes factors like wind and calm maneuvering into account to provide the best and most stable video feed. The UAV respects the green outline, hence increasing the size of the area provides a steadier flight and video feed.



Use this flight mode whenever you want the UAV to hold a position while moving the camera freely in any direction.

ATTENTION: The flight path is not optimized for looking at objects inside the flight area. To loiter around an object of interest, use the circular loiter pattern or the camera cruise mode.

INFO: This flight mode replaces the capabilities of the "figure 8". However, figure 8 can still be selected as loiter type in the fly to options.

Added "Hold Position" now uses the last loiter configuration. By combining the new "Camera Cruise" and "Loiter Area" pattern, you will be able to fly the UAV solely from the video feed.

Added Manual cruise now flies towards the Course Over Ground (COG) instead of the yaw when the joystick is released.

Added Improved indication of when the UAV is in GNSS denied flight:

- Position information in the video feed is displayed with red background.
- The view cone is displayed in red.

Changed SDM offline maps:

- Reworked the Map engine in SDM to improve performance and stability of map data when flying UAVs in SDM.
- The list of offline maps and the map extensions are now shown on the main map in SDM.
- Improved download stability.
- Multiple maps can be added to the download queue and maps in the queue can be paused and started.
- Added options to import and export maps.



ATTENTION: The new map engine in SDM requires the elevation data to be reached locally. This requires an additional "processing" step after downloading the data from the server. Compared to earlier releases of SDM, the combined download and processing time is longer in the new SDM. However, the processing only needs to be done ONCE. Use the export functionality in SDM to share already processed maps between devices.

Maps downloaded in older versions of SDM must be converted to the new map format. After installing the SDM 4.3.0 this conversion is automatically started. The conversion can take considerable time for large maps and must be done pre-mission!

Changed SK-42 coordinate format order of X and Y coordinate.

Fixed various minor issues and stability improvements, including:

- Added Alert IDs in the alert manager and improved UI for copying alert ID and descriptions.
- Added "Bearing from take-off to UAV" in the status list and top bar.
- Documentation such as the manual is now located in the documents folder and now includes the changelog & UKR manual.
- Improved stall detection in GNSS denied flight.
- The centre coordinate of the video feed is now shown as video overlay information. And The video information is sorted by UAV and Camera.
- Improved video roll stabilization.
- Other stability improvement

Sky-Watch Drone Manager 4.2.1 & Sky-Watch Camera Controller 1.2.1

Released: February 2024

Added Support for more Flight Beacon blinking patterns (if supported by the payload).

Added Access to "Maintenance and Service Schedule" from SDM Settings.

Added Logging of Silvus interference cancelation values.

Updated Unmanned Flight Manual



Fixed issue where the system does not record onboard. The issue occurred with recordings longer than 1 hour.

Fixed various minor issues and stability improvements.

Sky-Watch Drone Manager 4.2.0 & Sky-Watch Camera Controller 1.2.0

Released: 07/12/2023

Added Option to turn on flight beacon LED, if supported by payload.

Added Support for SK-42 coordinates.

Added Radio diagnostic check for radios with specific serial numbers.

Fixed various minor issues and stability improvements.

Sky-Watch Drone Manager 4.1.2

Released: 09/11/2023

Fixed camera rotation issue on specific camera firmware versions

Sky-Watch Drone Manager 4.1.1

Released: 27/10/2023

Changed The UAV is no longer required to be level with horizon when updating GNSS denied position before launch.

Sky-Watch Drone Manager 4.1.0

Released: 06/10/2023

Added support for Triple Lens EO Camera (x80 zoom)

Added configurable video overlay. Toggle individual overlay options on/off.



Added option to encrypt flight logs (this is enabled from UAV options in System Overview)

Added SDM log exporter which makes it easy to collect and export all types of logs to a single .zip file.

Added option to enable/disable SDM update checks from settings.

Added GNSS denied flight options are now automatically shown in SDM if UAV loses GNSS signal while in air.

Added Sky-Watch Camera Controller can now be downloaded either from SDM Settings or System Overview.

Improved position estimate when UAV loses GNSS fix while in air.

Improved camera stability in camera position control.

Improved general system and flight stability. And various bug fixes.

Improved UAV descent speed.

Changed Video files recorded on tablet are now stored in .ts format instead of .avi, which preserves metadata and improves performance.

Changed License folder location moved and now shared by all Sky-Watch applications.

Sky-Watch Drone Manager 4.0.10

Released: 14/09/2023

Improved altitude estimates.

Improved GNSS denied operation to prevent the UAV from oscillating under certain conditions.

Improved robustness against drift in GNSS denied operation.

Sky-Watch Drone Manager 4.0.9

Released: 04/09/2023

Changed: UAV now turn less abruptly towards "fly to" and "observe" points, when receiving position corrections in GNSS denied flight.



Sky-Watch Drone Manager 4.0.8

Released: 24/08/2023

Fixed Issue with GNSS denied drift estimate not converging correctly in rare cases.

Fixed Issue with SDM main menu sometimes not responding.

Fixed Issue with compass calibration in rare cases being reported successfully completed without data for external mag.

Fixed Issue where GNSS altitude could affect altitude in GPS denied flight.

Added Warnings when flying in GPS failsafe mode or RAL while in GPS denied flight (as these modes are not recommended without GNSS coverage).

Removed OSD (Onscreen Display) is temporarily removed from the video feed for security reasons. This feature will be reintroduced with options to toggle the information on/off at a later stage.

Sky-Watch Drone Manager 4.0.7

Released: 04/07/2023

Added Support for new battery.

Sky-Watch Drone Manager 4.0.6

Released: 14/07/2023

Changed Reset camera button now triggers a hardware reboot of the on-board Processor.

- Makes the "reset camera button" able to fix an issue with lost video.

Sky-Watch Drone Manager 4.0.5

Released: 26/06/2023

Added New flight controller firmware v 17.0.3



- Added requirement for compass calibration after firmware update.
- Fixed issue with UAV not being able to launch due to inconsistent sensor readings.

Sky-Watch Drone Manager 4.0.4

Released: 20/06/2023

Added New flight controller firmware v 17.0.2

- Fixed overheating problem sometimes preventing launch.