



Commercial Surveying R.P.A.S

SCANLIFT 800 Checklist



SL-800 Pre-Flight Checklist

Aircraft

- Inspect the airframe for any structural anomalies.
- Check all fasteners are showing no signs of becoming loose
- Check all 8 propulsion motors spin freely and have no excess movement in the bearings.
- Folding props open with nominal friction. Ensure the blades are not loose or over tight.
- Landing gear tubes are firmly fastened to the SL-800 mounts.
- GPS stand/s are correctly aligned and free from any damage.
- Battery tray is securely latched at the front mount and both thumb bolts are installed.
- RF communications antenna attached and pointing down.

Optional Items

- Parachute is clamped firmly to the SL-800 side mount.
- Parachute is connected to the lemo 0B Connector and the main XT60 Power Connector.
- Parachute shock cord is attached to the SL-800 positive locking clip.
- Parachute SUL-84 canopy moves freely inside the X68 carbon tube to allow smooth ejection.
- Parachute XT60 arming plug is removed for pre-flight test.
- FPV Camera is in correct position and lens free from dirt/ obstructions.



Pre-Flight Check

- Batteries are of adequate charge (50v+)
- XT90 Battery connectors are firm to connect (No sign of bullet compression).
- RPS is enabled and checked to be functioning correctly.
- Payload is attached and functioning as per the manufacturer's suggestions.
- GCS has suitable charge to complete the mission.
- GCS is powered on and connected the SL-800.
- Parachute activation tested. Power cycle required.
- GCS re-connected to SL-800.
- All telemetry data nominal.
- Red compass heading correct relation to RPAS and real-world heading.
- Waypoint mission loaded and written to the SL-800.
-
-
-
-



Flight

- Required permissions granted for flight location.
- Weather/ Environmental conditions within specifications of the SL-800 RPAS.
- Area clear of any magnetic objects or obstacles that may interfere with the flight controller.
- People are in safe distance locations from the SL-800 for lift off.
- Final telemetry checks complete.

In-Flight

- SL-800 is tracking correctly.
- Telemetry nominal.
- Always maintain LOS.

Landing

- SL-800 motors of acceptable temperature (warm but not hot).
- No loose fasteners.
- SL-800 is free from any defects.
- Disconnect main batteries.
- Confirm RPS is functioning.
- Shutdown RPS.



Emergency Procedures

SL-800 crabbing on an angle.

- Disengage Navigation mode
- Hover and observe if the SL-800 will hover controllably
- If the aircraft continues to have heading issues press and hold the attitude button to disable the compass data
- Land immediately
- Check declination is correct and perform a compass calibration

RTL activates during flight Lost Link

- Check that the GCS telemetry data is live and there is a positive connection to the SL-800
- Maintain LOS between the SL-800 and the GCS antenna
- Press the attitude button for 1 second to cancel the RTL
- Continue mission from the last waypoint if the issue was LOS related
- Land and check the antenna and SL-800 aircraft for issue if the RTL continues to happen

RTL activates during flight Low Battery Stage 2

- Check the GCS telemetry voltage for the SL-800 flight batteries
- Press the attitude button for 1 second to cancel the battery low RTL mode
- Land immediately

Parachute activation

- Monitor the GCS screen for GPS location of landing zone
- Access the SL-800 as soon as possible
- Remove power to the SL-800 and payloads
- Disconnect the SUL-84 parachute canopy
- Notify INF and download the Autopilot log for data analysis

Disclaimer

The above checklist does not replace the full operations manual in any way. The operation manual is to be followed for all SL-800 flights. The checklist is designed to refresh the critical points of the manual to assist the flight crew with safely operating the SL-800.