



USER MANUAL & INSTRUCTIONS

ACCESSORY KIT MOC2511/12 FOR **dji** MATRICE 350

FLIGHT MANUAL (MOC) - PRS-FTS-MOC KRONOS AD MATRICE 350 V1.4

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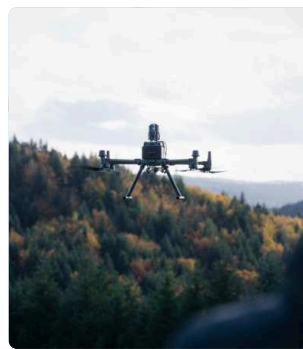
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WE MAKE YOUR DRONE SAFER



Since 2015, Dronavia has been designing innovative accessories in France to enhance the safety of professional drones. Designed and manufactured in our workshops, the Kronos range — consisting of parachutes and kill switches — is the result of eight years of research and development, and fully meets the EASA requirements for Means of Compliance (MOC) 2511 & 2512 (M2).

Thanks to these certified safety systems, drone pilots benefit from the highest levels of protection and risk management for their flight operations.

Thank you for your trust, and enjoy your flight with the DJI Matrice 350.

Ludovic Pelletay, Dronavia's CEO.



VERSION NOTE

Version 1.0

- Initial release.

Version 1.1 – 04/17/2024

- Added chapter: System Initialization for the Parachute
- 1. A new chapter has been introduced to detail the initial setup procedures for the parachute system.
- Updated chapter: Parachute System Activation.
- 1. Removed the manual calibration step previously required to enable autonomous deployment.
- 2. Introduced an automatic take-off detection process to trigger autonomous deployment activation without manual input.

Version 1.2 – 01/07/2024

- Replaced the connection cable between the PRS and FTS: switched from Micro-USB to USB-C for improved reliability and compatibility.

Version 1.3 – 05/05/2025

- Implementation of an automatic lockout for the parachute system below 20 meters altitude to prevent ineffective or accidental deployment.

Version 1.4 – 12/06/2025

- Improved power-on logic: the parachute system can now only be activated when connected to the drone, significantly reducing the risk of improper handling and accidental deployment.

TUTORIAL

Parachute Recovery System Installation



Parachute Recovery System Rearming



Flight Termination System Installation



Flight Termination System Testing Procedure



User's manual Klick trigger remote control



DRONAVIA UPDATER

Dronavia has recently launched an innovative software solution specifically designed to simplify the updating of Kronos systems. Thanks to this new software, Dronavia customers can now manage and update their systems more quickly and easily.

Download Dronavia
Updater software



GENERAL presentation

Congratulations on acquiring your Kronos M350 MOC2511/12 accessory kit, which includes a Parachute Recovery System & autonomous Flight Termination System, specifically designed for the DJI Matrice 350 drone.

The Kronos M350 MOC2511/12 accessory kit meets the technical requirements defined by EASA, and has been developed according to a rigorous research and development process, guaranteeing the highest level of safety for flight operations.

Based in Remiremont, France, Dronavia is here to support you with the use of your Kronos M350 MOC2511/12 accessory kit and to answer any technical or commercial questions you may have.



+33 3 54 40 00 78

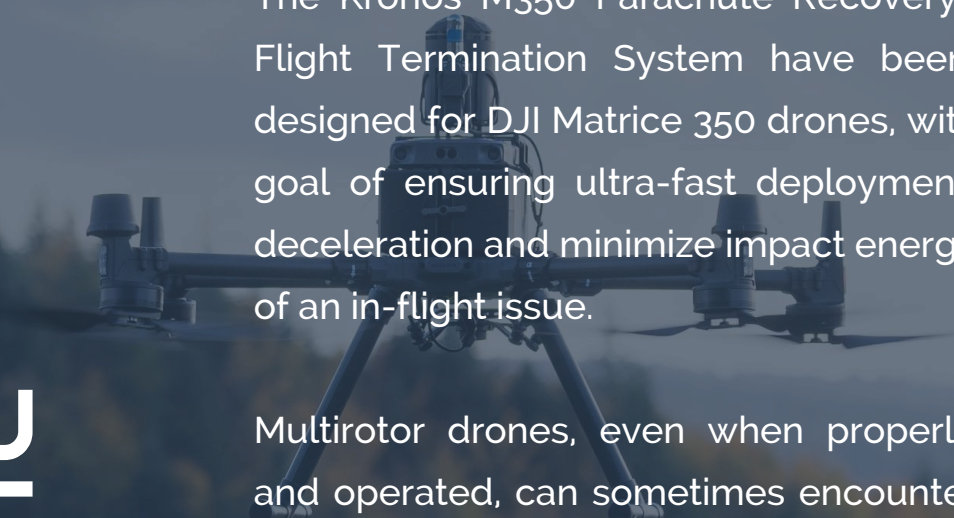


distri@dronavia.com



www.dronavia.com

GENERAL presentation



The Kronos M350 Parachute Recovery System and Flight Termination System have been specifically designed for DJI Matrice 350 drones, with the primary goal of ensuring ultra-fast deployment to optimize deceleration and minimize impact energy in the event of an in-flight issue.

Multicopter drones, even when properly maintained and operated, can sometimes encounter emergency situations—such as severe weather conditions, radio transmission failure, propulsion system malfunction, or GPS signal loss—where immediate activation of a safety system is crucial.

In such critical scenarios, the combined deployment of the Flight Termination System and Parachute Recovery System can mean the difference between a minor incident and a serious accident. Kronos M350 systems are engineered to activate and deploy in under one second.

GENERAL presentation

TO BE READ CAREFULLY

These safety devices do not guarantee the integrity of the equipment, nor the absence of damage to property or injury to persons. They are complementary safety features, designed to enhance existing safety measures. Under no circumstances shall Dronavia or its distributors be held liable for any malfunction, perceived performance shortcomings, or failure to deploy.



COMPLIANCE

with MOC2511 / 2512

The Kronos Matrice 350 MOC2512 (M2) Parachute Recovery System has been developed to meet the requirements of the Means of Compliance with Light-UAS.2512 published by the EASA:

The Light-UAS.2512 standard offers several options for complying with the SORA's M2 mitigation measures. M2 mitigation measures are designed to reduce the effect of ground impact once control of the operation is lost. This is done by reducing the effect of the UA impact dynamics (i.e. area, energy, impulse, transfer energy, etc). '



The Kronos Matrice 350 MOC2511 Flight Termination System has been developed to meet the requirements of the Means of Compliance with Light-UAS.2511 published by the EASA:

A Flight Stop System (FTS) is a system which, when activated, terminates the flight. By its very nature, it is an emergency measure and not a precautionary one. Its purpose is to ensure that an out-of-control UAS does not enter adjacent areas with an indefinite trajectory but, on the contrary and preferably, that it stops, and that its crash/debris zones are kept strictly within the ground risk buffer zone.



WARNINGS & safety precautions

TO BE READ CAREFULLY

The Kronos M350 accessory kit includes two safety accessories designed to, under certain conditions, prevent the equipped drone from exiting its regulatory flight envelope by cutting its motors, and to avoid free fall in the event of a critical failure.

Activating the Flight Termination System and/or the Parachute Recovery System will inevitably result in the drone falling.

These systems do not prevent technical failures from occurring. Any drone operation inherently involves a risk to equipment and nearby individuals, regardless of the safety systems in place. The use of the Kronos M350 Flight Termination System and Parachute Recovery System must never lead to increased risk-taking during flight operations.

WARNINGS

& safety precautions

TO BE READ CAREFULLY

Dronavia may suspend the warranty and disclaim any responsibility for anyone who fails to adhere to the basic safety instructions outlined below.

Before handling the Kronos M350 systems, you must carefully read this manual. It provides information on the deployment of the Parachute Recovery System and the Flight Termination System. In addition to the important notes and information mentioned in this manual, the device owner must comply with all the essential safety instructions outlined below.

1

It is forbidden to carry out any manipulations other than those specified in the manual.

2

The device should only be used by or under the supervision of a responsible adult. Always keep the device out of the reach of children. Do not let them play with it.

3

Do not under any circumstances dismantle the various parts of the device, except when resetting it in accordance with the instructions in this manual.

4

Do not place the device in a damp or wet environment and keep it out of direct sunlight.

5

Do not expose the system to high temperatures, strong shocks, shock hazards, contact with chemicals or acids, or long-term storage in a high-humidity or dusty environment. The maximum operating temperature is 40°C and the minimum operating temperature is -5°C.

6

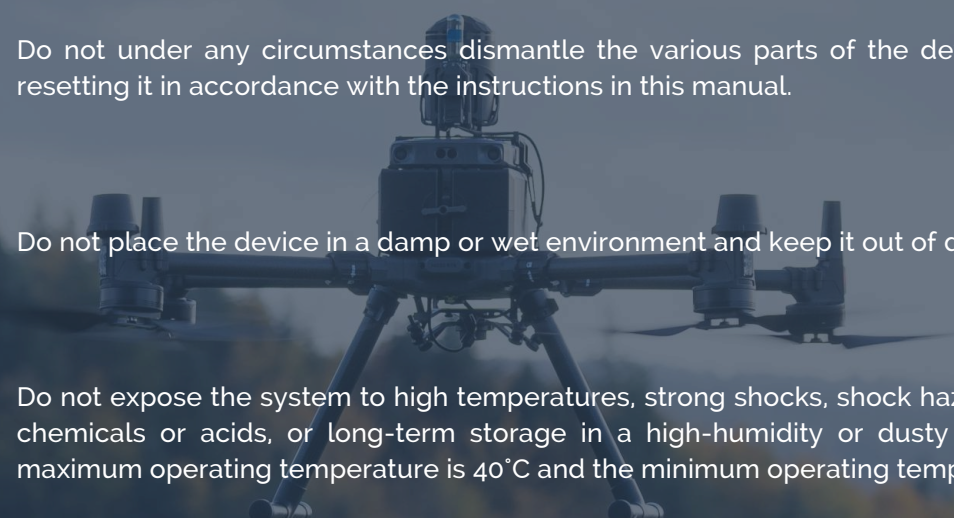
Check that the Kronos Matrice 350 Parachute Recovery System and Flight Termination System is in good condition before each use. Do not use the device if it is damaged. If necessary, contact your dealer.

7

The Kronos Matrice 350 Parachute Recovery System and Flight Termination System cannot prevent the drone from malfunctioning.

8

Any flight with a drone implies the existence of a risk for equipment and people in the vicinity, with or without Kronos Matrice 350 safety systems.



9

Using a Kronos Matrice 350 Parachute Recovery System and Flight Termination System should in no way increase your risk.

10

The Kronos Matrice 350 Parachute Recovery System and Flight Termination System attempts to prevent a drone experiencing a malfunction from free-falling. However, there are fall situations in which the effectiveness of the Kronos Matrice 350 parachute system may be limited or impeded.

11

The Kronos Matrice 350 Parachute Recovery System and Flight Termination System can be actively deployed by the user. Regular training is necessary to be able to react correctly in an emergency.

12

The spring ejection system only works once. You can recharge the system yourself by following the instructions in this manual. It is your responsibility to ensure that the system is under warranty.

13

When reloading, it is forbidden to do so with people nearby, and especially with the barrel pointing in their direction. You must take the same precautions as when handling a loaded rifle. In the event of accidental firing during this stage or mishandling, the spring could be ejected and cause serious injury. Safety glasses must be worn.

14

After deploying the device, we recommend that you carefully inspect each component to ensure its integrity. If in doubt, contact your reseller.

15

After switching on the system, if the LED changes to a steady red, do not use it and contact your dealer for assistance.

SECTION

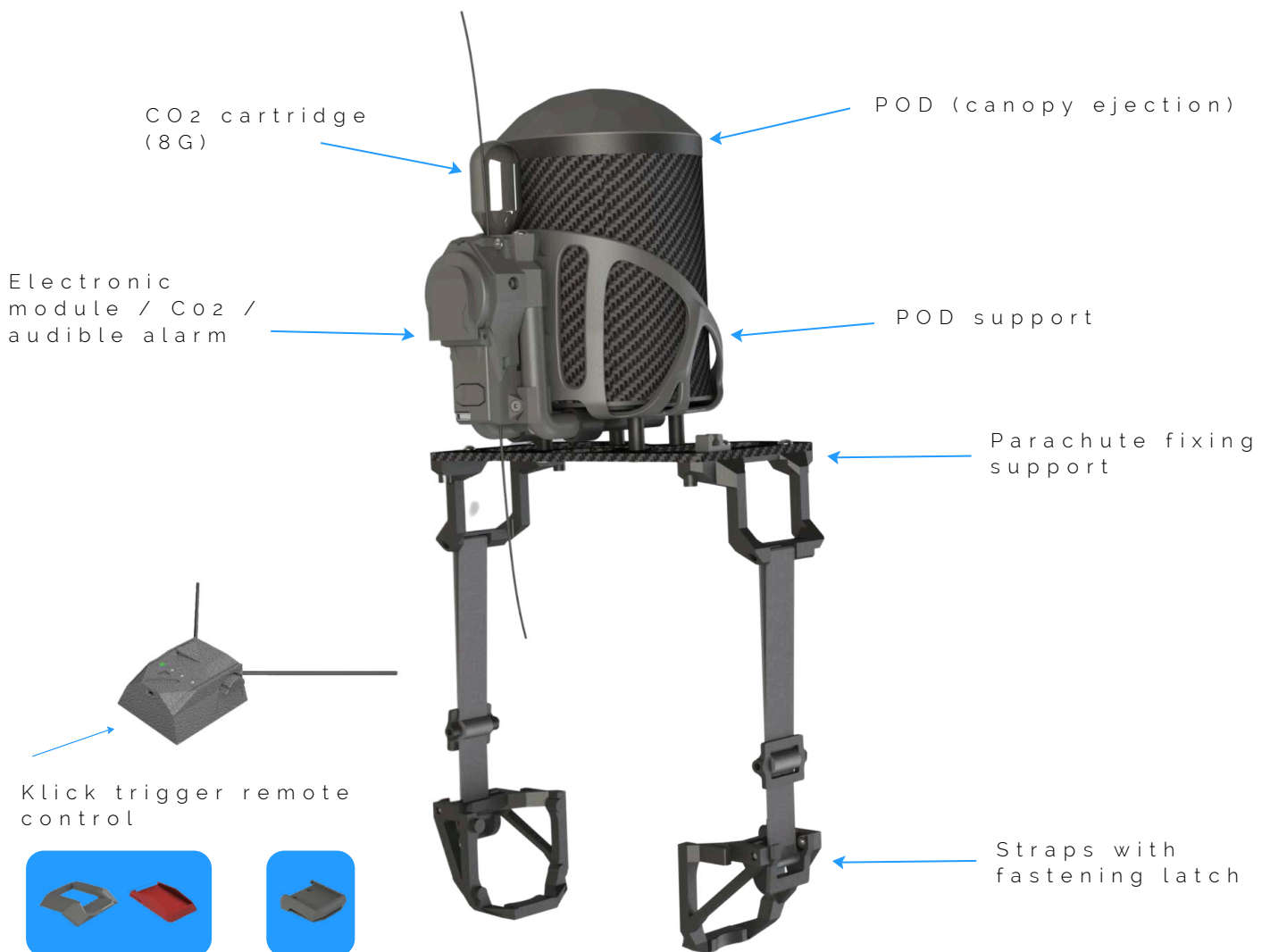
KRONOS 350

PARACHUTE RECOVERY SYSTEM FOR *dji* MATRICE 350 



COMPONENTS

presentation



ADDITIONAL ACCESSORIES SUPPLIED



USB-C
cable



Allen key
4mm



Reset tool



Threaded
reset tool



Parachute
attachments x2



USB kit

KRONOS 350

System Visual Representation

Kronos 350
Parachute Recovery
System

DJI Matrice 350 drone



KRONOS M350

System Visual Representation

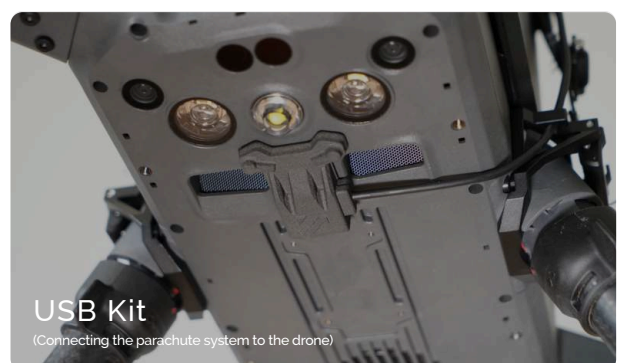
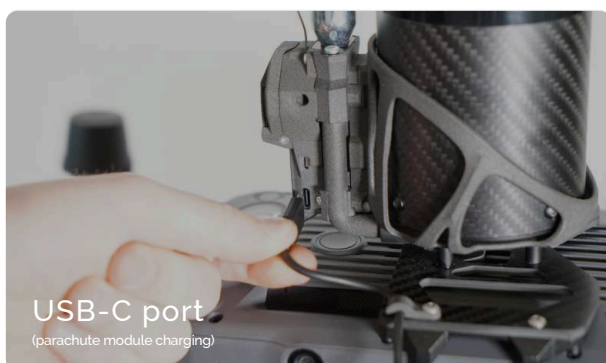
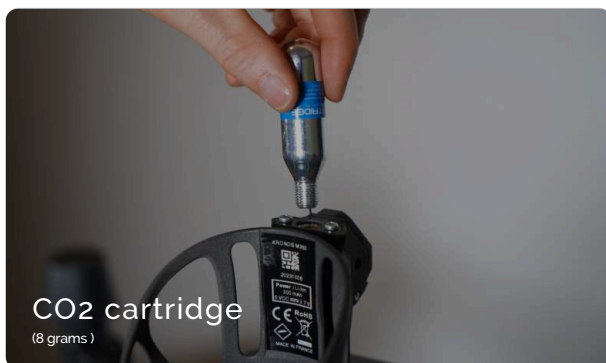


Klick trigger
remote control

DJI Matrice 350
Remote Controller

ELEMENTS

of the parachute system



KRONOS M350

Overview of Key System Figures



KRONOS M350

Technical specifications

TOTAL WEIGHT

450 GRAMMES
(WITH CARTRIDGE)

EJECTION DEVICE

CO2 CARTRIDGE
4 GRAMS

MINIMUM HEIGHT
EFFICIENCY

FROM
39 METERS

COMMUNICATION
WIRELESS RADIO

SRD860 WITH
ENCRYPTED KEY
(869 MHz / 100 MW)

RANGE OF THE KLIK
REMOTE CONTROL

1.5 KILOMETERS*

PARACHUTE
AUTONOMY

5 HOURS

KLIK REMOTE
CONTROL AUTONOMY

23 HOURS

ENERGY GROUND
IMPACT

< 77 JOULES

OPERATING
TEMPERATURE

-5°C TO 40°C

STORAGE
TEMPERATURE

10°C TO 40°C

*can reach up to 1.5 km, under optimum conditions and in an environment free of obstacles and interference.

KRONOS M350

Operational limits

MAXIMUM WIND SPEED
AT GROUND LEVEL

9,13 m/s

MINIMUM FLIGHT
ALTITUDE (AGL)

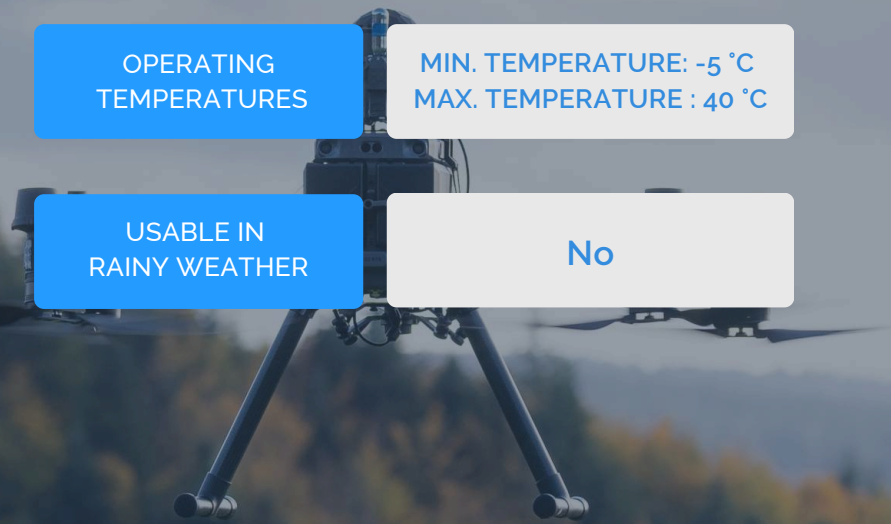
44.64 m

OPERATING
TEMPERATURES

MIN. TEMPERATURE: -5 °C
MAX. TEMPERATURE : 40 °C

USABLE IN
RAINY WEATHER

No



KRONOS M350

Dimensions and weights

DRONE



81 x 67 x 43 cm

6 470 to 9 200 g

PARACHUTE



9 X 12 X 20 cm

450 g

PARACHUTE + DRONE

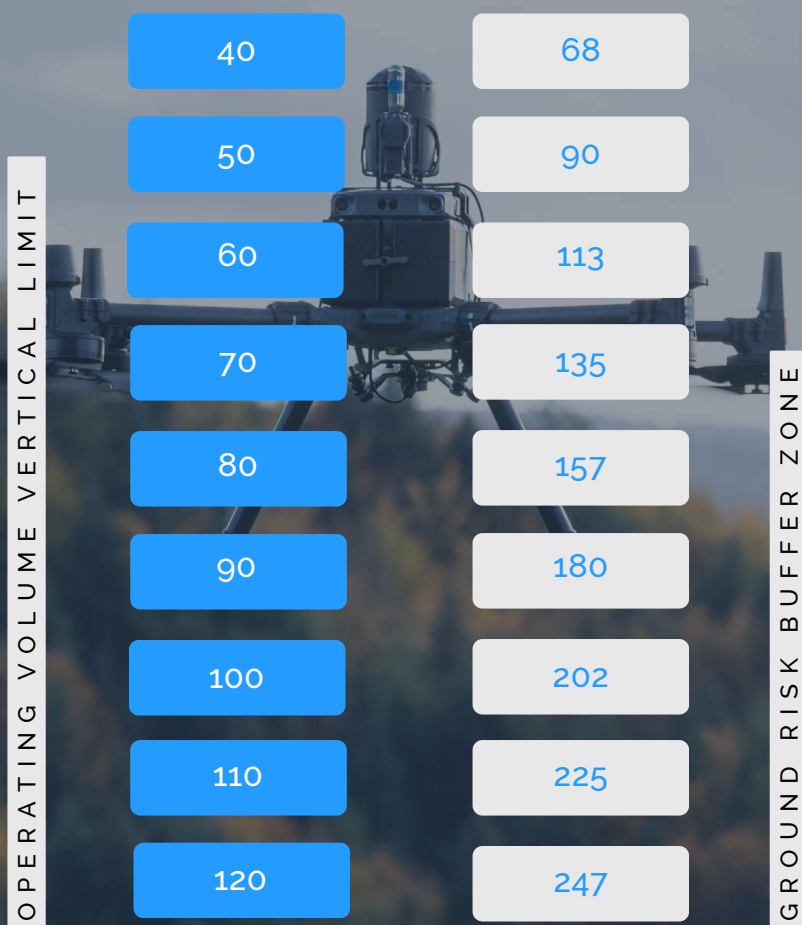


81 x 67 x 63 cm

6 920 to 9 200 g

KRONOS M350

Minimum Size of the Ground
Risk Buffer (GRB)



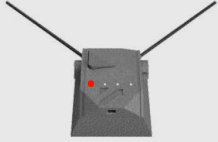
OPERATING VOLUME VERTICAL LIMIT	40	68	GROUND RISK BUFFER ZONE
	50	90	
	60	113	
	70	135	
	80	157	
	90	180	
	100	202	
	110	225	
	120	247	

The ground risk threshold can be calculated as a function of different drone parameters and different assumptions. Please refer to the document dedicated to calculating the ground risk threshold, if you need to calculate more precise ground risk thresholds for your application.

SYSTEM

states

INITIALIZATION

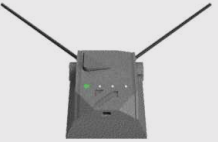
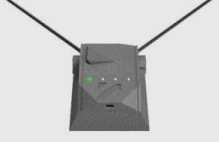
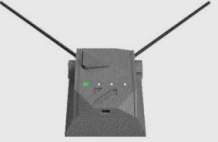
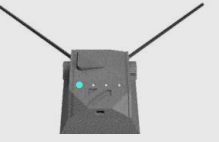


RAPID FLASHING
AUDIBLE BEEP

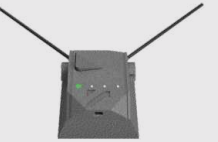
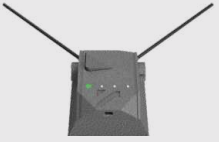
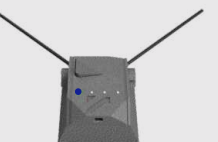
System initialization

Red, Green, Yellow, Red, Green, Yellow status lights

CONNECTION

 <p>SLOW FLASHING</p>	<p>FTS Connected</p> <p>Two green status lights</p>	 <p>SLOW FLASHING</p>	<p>FTS & PRS Connected</p> <p>Two green and two cyan status lights</p>
 <p>SLOW FLASHING</p>	<p>FTS & PRS Connected with Autonomous Deployment</p> <p>Two green and two blue status lights</p>	 <p>SLOW FLASHING</p>	<p>FTS not connected (Only the PRS is connected)</p> <p>Two cyan status lights</p>

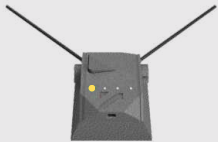
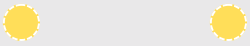
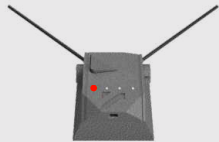
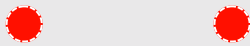
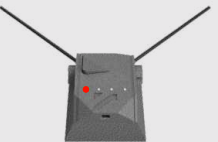



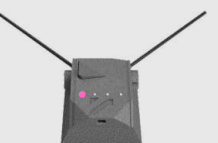
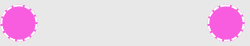
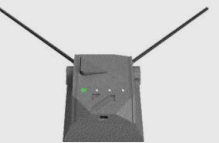

ACTIVATION AND DEPLOYMENT

 <p>RAPID FLASHING AUDIBLE BEEP</p>	<p>FTS triggered only</p> <p>Six green status lights</p>	 <p>RAPID FLASHING AUDIBLE BEEP</p>	<p>FTS triggered & PRS deployed</p> <p>Two green and four cyan status lights</p>
 <p>RAPID FLASHING AUDIBLE BEEP</p>	<p>FTS triggered & PRS deployed with Autonomous deployment</p> <p>Two green and four blue status lights</p>		

SYSTEM

states

SYSTEM & BATTERY ALERTS

 SLOW FLASHING	Signal lost with remote control (Klick) 	 SLOW FLASHING	Low battery 
 FIXED LED	System error 	 FIXED LED	Charging the battery 
 SLOW FLASHING	Signal scrambled 	 FIXED LED	Battery charged 

INSTALLATION

of the parachute system

The Kronos M350 parachute system can be installed in just a few minutes. To install it, please follow the instructions below in order:

Skills & tools required

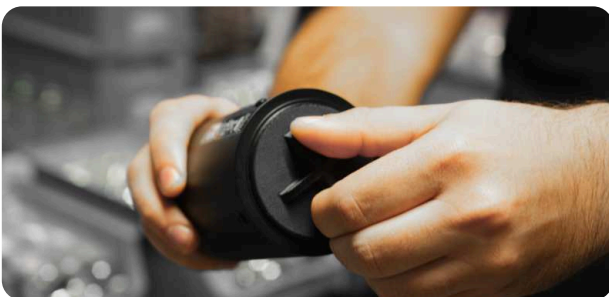
Designed to be quick and easy to use, the parachute system can be installed without any specific technical skills. A 4mm allen key (supplied by Dronavia) is required for installation.

Warning

For reasons of operational safety and to prevent inadvertent deployment, the M350 Parachute Recovery System incorporates an automatic lock that prevents deployment at altitudes below 20 metres. This limitation ensures that the parachute system can only be activated in conditions that guarantee the minimum effectiveness of the system. However, manual deployment of the parachute via the Klick trigger remote control remains possible. Be cautious when handling the powered-on parachute to avoid any unintentional ground deployment, which could cause physical injury or material damage.

Instructions

- 1 Unscrew the protective cover from your new POD. Install the POD on its central support.



Advice

Be sure to keep the POD's protective cover so that you can use it when returning the POD for annual maintenance.

INSTALLATION

of the parachute system

2

Remove the two arms from the DJI Matrice 350 drone. Insert the two parachute attachments supplied in the kit. Then reassemble the two drone arms with the parachute attachments.



INSTALLATION

of the parachute system

3

Place the fixing support on the top of the DJI Matrice 350 drone, as shown below. Let the mounting straps hang down on either side of the drone. Check that the port on the drone is accessible.



4

Attach the two attachment straps to the parachute attachments previously installed on the arms of the DJI Matrice 350 drone. It may be necessary to adjust the length of the attachment straps.

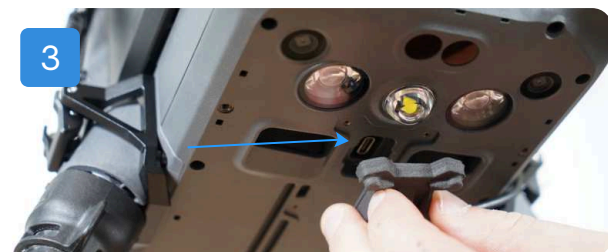
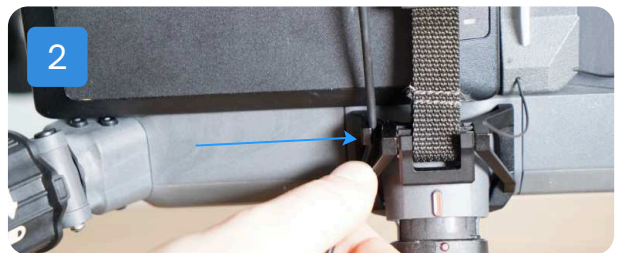


INSTALLATION


of the parachute system

5

Check that the parachute system's USB-C cable is properly connected and that it is firmly attached to the guide on the parachute's carbon support. Then pass this cable through the guide on one of the parachute attachments. Finally, plug the USB kit into the socket on the underside of the drone.



6

Your Kronos M350 parachute is now operational. 

7

Each installation must be entered in the "List of installations, de-installations and maintenance operations" section on page 55.

INITIALIZATION

of the parachute system

To initialize the Kronos M350 parachute system, follow the steps below in order:

Instructions

1

Power on your DJI Matrice 350 drone. Ensure that the USB-C cable is properly connected between the parachute system and the drone. This connection is essential to allow the automatic initialization of the parachute system.



2


Power on the Klick trigger remote. Once the connection with the parachute system is established, a cyan-blue LED flashes on the Klick trigger remote, and an initialization sequence appears on the module's LED, confirming successful startup and operational readiness of the system.



3

At the end of this sequence, the LED on the parachute module and the LED on the Klick remote flash cyan blue when a connection with the parachute system is established, and cyan blue and green when the connection is established with both the parachute system and the Flight Termination System (FTS).

4

Your Kronos M350 parachute system is now initialized. 

INITIALIZATION

of the parachute system

Warnings

For operational safety and to prevent any accidental deployment, the Kronos M350 parachute system can only be powered on when it is connected to the DJI Matrice 350 drone via the USB-C cable and the drone is powered on. The system cannot be activated without a valid USB-C connection.

The power button on the parachute module serves only two functions: checking the battery level via the LED indicator and manually shutting down the system.

The different LED states

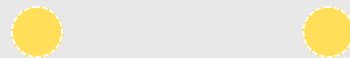


System initialization

RAPID FLASHING

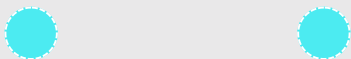


AUDIBLE BEEP



Parachute on, waiting to be activated

RAPID FLASHING

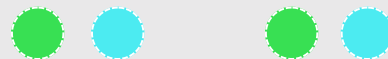


FTS & PRS Connected

SLOW FLASHING



BIP SONORE



FTS not connected (Only the PRS is connected)

SLOW FLASHING



BIP SONORE

ACTIVATION

of the autonomous deployment
function of the parachute system

To activate the Kronos M350 parachute system, follow the instructions below in order:

Warning

For operational safety and to prevent any unintentional deployment, the Kronos M350 parachute system includes an automatic lockout that prevents deployment below 20 meters altitude. This limitation ensures that the parachute can only be deployed under conditions that guarantee a minimum level of effectiveness. **Warning:** Manual deployment of the parachute system remains possible at any time via the Klick trigger remote.

Instructions


1

The Kronos M350 parachute system automatically detects the drone's takeoff. During this phase, the LEDs on both the parachute module and the Klick remote flash purple, and double audible beeps are emitted.

2

When the drone reaches an altitude of 20 meters, two distinct audible beeps confirm that the minimum threshold required for activation of the autonomous parachute deployment function has been reached. The LEDs on both the parachute module and the Klick remote then flash dark blue.

3

Your Kronos M350 parachute is now active with the autonomous deployment function enabled. 

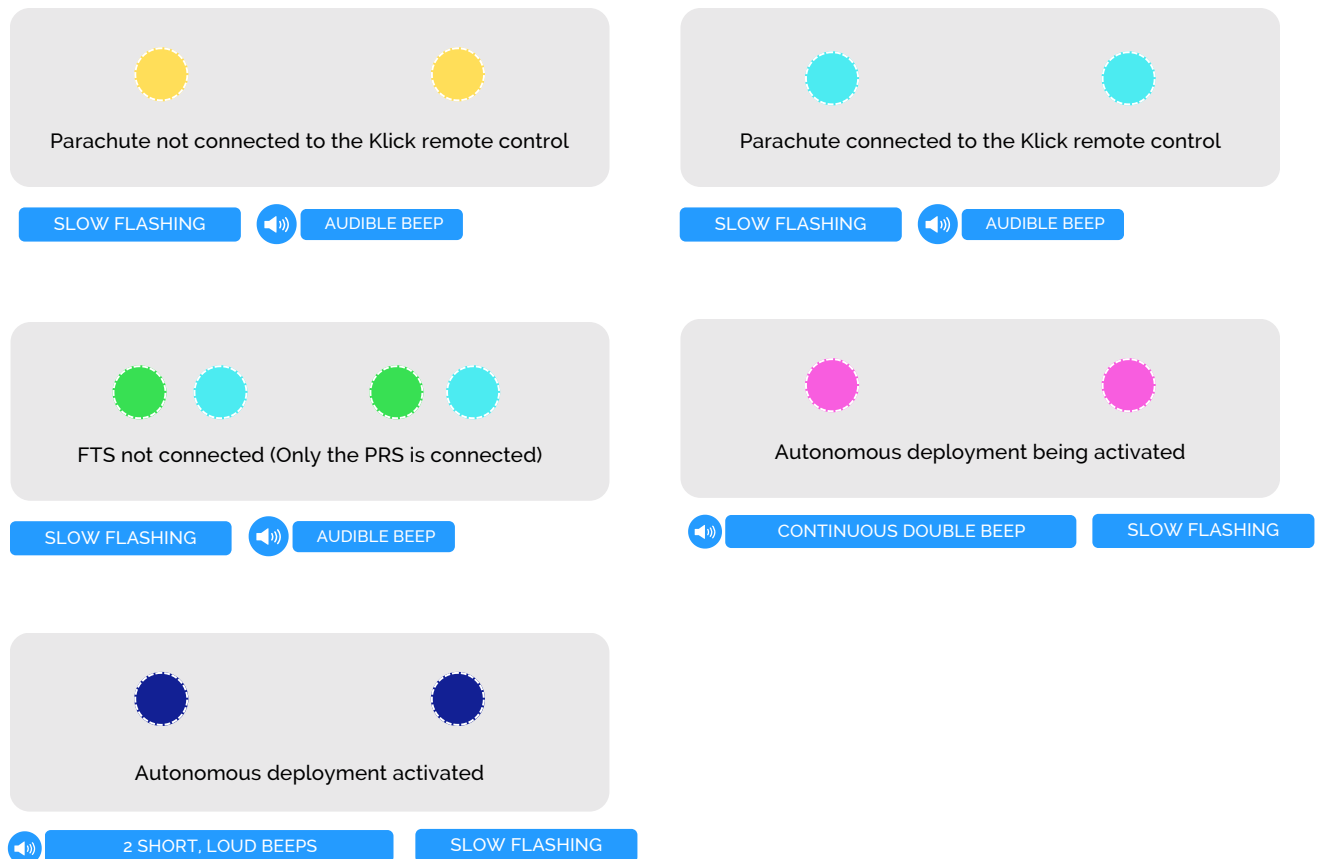
Warning

If there is no audible signal or dark blue LED, it is likely that the autonomous deployment function has not yet been activated due to insufficient altitude. A minimum altitude of 20 meters is required to enable the autonomous deployment function.

ACTIVATION

of the autonomous deployment
function of the parachute system

The different LED states



DEACTIVATION

of the autonomous deployment
function of the parachute system

To deactivate the Kronos M350 parachute system, follow the instructions below in order:

Instructions

1


The Kronos M350 parachute system automatically detects the landing of the DJI Matrice 350 drone. Approximately 5 seconds after detection, an audible beep is emitted and the dark blue LED turns off. The takeoff detection module then automatically deactivates. It will reactivate on the next flight once the drone reaches a minimum altitude of 20 meters.

Warning

If the dark blue LED on the Kronos M350 parachute system remains illuminated, it indicates that the autonomous deployment function is still active. Do not handle the drone to avoid any risk of unintentional deployment. Wait an additional 5 seconds for the system to automatically deactivate.

The autonomous deployment function of the Kronos M350 parachute system is now deactivated; however, the parachute remains active and can still be deployed using the Klick trigger remote.

2

Your Kronos M350 parachute is active without the autonomous deployment function. 

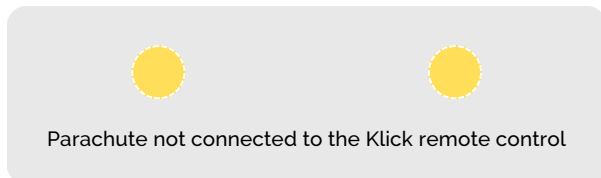
4

To completely deactivate your Kronos M350 parachute system: If the parachute system is connected to the drone using the provided cable, simply power off the DJI Matrice 350 drone and the parachute system will shut down automatically. Otherwise, turn off the Kronos M350 parachute system by pressing and holding the power button for 2 seconds.

DEACTIVATION

of the parachute system

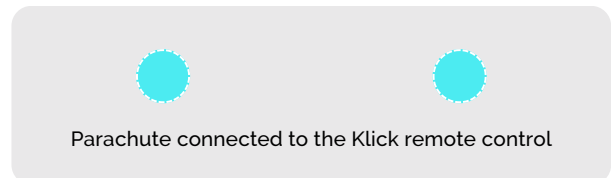
The different LED states



SLOW FLASHING



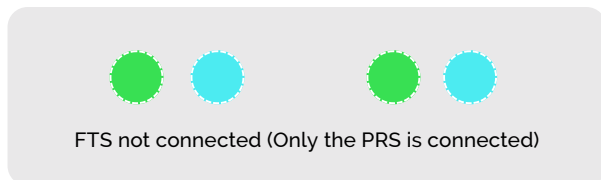
AUDIBLE BEEP



SLOW FLASHING



AUDIBLE BEEP



SLOW FLASHING



AUDIBLE BEEP

A black drone with four rotors is flying in the center of the frame. It has a camera mounted underneath and a small sensor or light on top. The background consists of a dense forest of evergreen and deciduous trees, with mountains visible in the distance under a cloudy sky.

 YOUR PARACHUTE IS
ACTIVE AND
OPERATIONAL!

DEPLOYMENT

of the parachute system

To deploy the Kronos M350 parachute system (with autonomous deployment or manually), observe the following safety instructions:

Warning

- 1 Never attempt to deploy the M350 Parachute Recovery System on the ground.
- 2 The Kronos M350 Parachute Recovery System is designed to be deployed at a minimum height of 44.64 m from the ground in standard atmospheric conditions.
- 3 For a fall from a height of 44.64 metres, the impact on the ground is less than 44 joules with the Kronos M350 Parachute Recovery System, compared with 2747 joules without any device.

Warnings

This data may vary depending on altitude above sea level, relative wind and many other external factors. That's why we recommend a minimum height of 44.64 m above ground level to deploy the Kronos M350 Parachute Recovery System and sufficiently limit the impact of your drone on the ground.

For reasons of operational safety and to prevent inadvertent deployment, the M350 Parachute Recovery System incorporates an automatic lock that prevents deployment at altitudes below 20 metres. This limitation ensures that the parachute system can only be activated in conditions that guarantee the minimum effectiveness of the system.

AUTONOMOUS

deployment of the parachute system

Instructions

1

When autonomous deployment is activated, the parachute system analyses the flight parameters (altitude, acceleration, inclination, angular velocity) in real time. If any abnormal behaviour is detected, indicating a loss of control, the M350 Parachute Recovery System is automatically triggered, without pilot intervention.

The different LED states



Parachute deployed with autonomous deployment function



AUDIBLE BEEP

RAPID FLASHING

MANUAL

deployment of the parachute system

To manually deploy the Kronos M350 parachute system, follow the instructions below in order:

Instructions

1

Find out how to deploy your Kronos M350 Parachute Recovery System manually with the help of our user and instruction manual for the Klick remote activation system.

Klick

manual deployment of the parachute

Consult our Klick user manual



STOP

of the parachute system

To stop the Kronos M350 parachute system, follow the instructions below in order:

Warning

If the dark blue LED on the Kronos M350 parachute system remains lit, this indicates that the autonomous deployment function is still active. Do not manipulate the drone to avoid any risk of involuntary deployment. Wait a further 5 seconds for the automatic deactivation.

Instructions

1

Switch off your DJI Matrice 350 drone. If you have connected the parachute to the drone using the cord supplied, the parachute and the FTS will switch off automatically.



2

If you have not connected the parachute to the drone using the cord supplied, to switch off the parachute immediately, hold down the ignition button for 5 seconds. Then switch off the DJI Matrice 350 drone.



STOP

of the parachute system

3

Remember to turn off your Klick trigger remote control.



4

Your Kronos M350 parachute system has been shut down. ✓

Advice

If the parachute system is not manually powered off, it will automatically shut down after 30 seconds. The Flight Termination System (FTS) powers off automatically when the DJI Matrice 350 drone is turned off.

DISMANTLING

of the parachute system

To dismantle the entire Kronos M350 parachute system, follow the instructions below in order:

Instructions

- 1 Disconnect the USB Kit from the socket on the underside of the drone. Then remove the cable from the guide on one of the parachute attachments.



DISMANTLING

of the parachute system

2

Untie the parachute securing straps.

1



2



3



4



3

Disengage the drone's parachute system.



DISMANTLING

of the parachute system

4

Dismantle the two arms of the DJI Matrice 350 drone. Remove the two parachute attachments supplied in the kit. Then reassemble the two arms without the attachments.



5

Each de-installation must be entered in the "List of installations, de-installations and maintenance operations" section on page 55.

CHECKING

of the parachute system battery

To check the battery status of the M350 parachute system, follow the instructions below in order:

Instructions

1

Press the parachute ignition button quickly. The number of flashes indicates the remaining charge level.



The different LED states

1X ● 25%

3X ● ● ● 75%

2X ● ● 50%

4X ● ● ● ● 100%

RAPID FLASHING

CHARGING

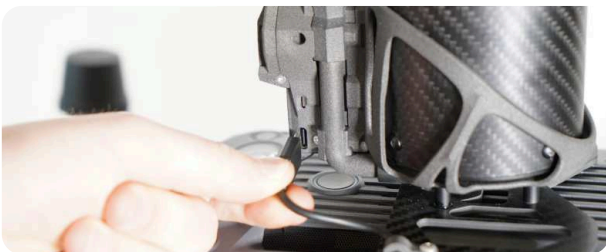
of the parachute system battery

To charge the M350 parachute system battery, follow the instructions below in order:

Instructions

1

To recharge the parachute's battery, simply connect the USB-C cable supplied to the parachute's USB-C socket located near the ignition button. Then plug the USB socket into a computer.



The different LED states



Batterie en charge

FIXED LED



Batterie chargée

FIXED LED

RESETTING

of the parachute system

In the event of a malfunction or any other bug, follow the instructions below in order:

Instructions

1

To reset the parachute system, there is a small hole in the back of the parachute. Slide a paper clip or other thin object through the hole, and a short press will reset the entire parachute system.



Warning

If the malfunction persists, contact Dronavia customer service or your reseller.

ANNUAL

maintenance of parachute



TO BE READ CAREFULLY

Like all rescue parachute systems (rescue parachutes for paragliders or parachutists, avalanche airbags, etc.) Dronavia parachutes must undergo preventive maintenance to be kept in optimum working order. The only preventive maintenance operation is to replace the POD. It's a quick and easy operation, which means that pilots never have to leave their drone standing idle.

A use-by date is set for each POD. Dronavia disclaims all liability and cancels the warranty if your POD has exceeded this use-by date.

PROCEDURES

maintenance requirements

To be kept in optimum working order, each parachute system must undergo preventive or post-deployment maintenance. Here is a summary table of the mandatory maintenance operations:

FREQUENCY	OPERATION	CAN BE MADE BY
Every year	Replacement of the POD or Repackaging of the canopy	Final user or DRONAVIA or any certified partner
Every 5 years	Mandatory manufacturer global maintenance	Manufacturer
After every deployment	Rearming of the parachute system	Final user or DRONAVIA or any certified partner
After every deployment	Inspection of the CO2 system	Final user or DRONAVIA or any certified partner
After every deployment	CO2 cartridge replacement	Final user or DRONAVIA or any certified partner
After every deployment	Replacement of the POD or Repackaging of the canopy	Final user or DRONAVIA or any certified partner
After 30 deployments	Mandatory manufacturer global maintenance	Dronavia

Warning

If you wish to carry out global maintenance yourself, Dronavia will disengage its responsibility for the system, in addition to cancelling the warranty.

LISTING

parachute deployment failures

If the Kronos Matrice 350 parachute system deployment fails during flight, record the following:

UAS Concerned with the failed activation	Accumulated Flight Hours at activation failure	Distance between Control Unit and UAS at activation attempt	Location of the operation	Presence of high power emitter in the operational volume

LISTING

voluntary and intensive parachute deployments

If the Kronos Matrice 350 parachute system is deployed during flight, record the following:

UAS Concerned with the activation	Accumulated Flight Hours at activation	Distance between Control Unit and UAS at activation attempt	Location of the operation	Was the activation commanded or un-commanded	Presence of high power emitter in the operational volume

Warning

If the probability of failure observed in service is greater than $10^{-2}/FH$ (taking into account the statistical uncertainty), the operator must inform the competent authority.

LISTING

of installations / de-installations & maintenance operations

To be kept in optimum working order, each parachute system must be monitored for installation, de-installation, firmware updates, preventive or post-deployment maintenance. The following table summarizes the operations to be listed:

Date	Operation	Issues	Operator and signature

USE-BY DATE

for the POD

Each POD has a use-by date to ensure that it remains in optimum working order:

The optimum life of a POD is 1 year. The use-by date is shown on the label on the back of the POD.



Warning

If a POD is used after its use-by date, Dronavia accepts no liability for partial or slower deployment of the parachute system.

PROCEDURE

of return of the POD for maintenance

There are several options for exchanging your POD that is past (or close to) its use-by date:

Buy 259€

1

Buy a POD in advance from your dealer. You'll be able to continue flying during the annual maintenance of your first POD.

Exchange 99€

2

Return your POD to a reseller and receive a new one at a preferential price.

Warning

Please plan in advance how long it will take to contact your reseller (order, delivery time, etc.) so as not to exceed the use-by date and jeopardise your flight missions.

DISMANTLING

of the POD system for maintenance

To remove the POD from the M350 parachute system, follow the instructions below in order:

Instructions

- 1 Unlock the POD by unscrewing it from its central support. Then remove the POD.



REARMING

of the Kronos Parachute Recovery System

TO BE READ CAREFULLY

Once the Parachute Recovery System has been deployed, Kronos systems have been designed to be rearmed quickly, enabling telepilots to resume their missions without undue delay.

Simple reactivation procedures should be followed. As some of them may present risks, it is imperative that you read the instructions in this section carefully.

A use-by date is defined for each POD. Dronavia disclaims all liability and voids the warranty if your POD has exceeded this use-by date.

REARMING

of the parachute system

To rearm your M350 parachute system, follow the instructions below in order:

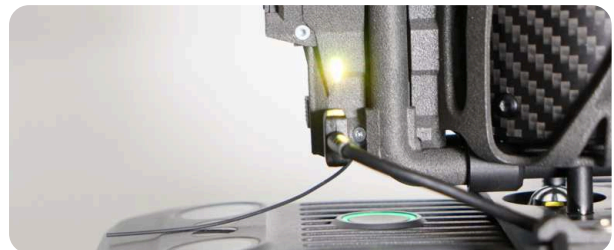
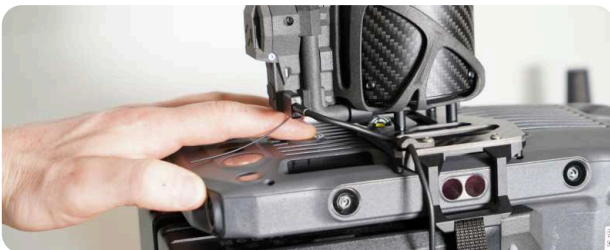
Warning

For reasons of operational safety and to prevent inadvertent deployment, the M350 Parachute Recovery System incorporates an automatic lock that prevents deployment at altitudes below 20 metres. This limitation ensures that the parachute system can only be activated in conditions that guarantee the minimum effectiveness of the system. However, manual deployment of the parachute via the Klick trigger remote control remains possible. Be cautious when handling the powered-on parachute to avoid any unintentional ground deployment, which could cause physical injury or material damage.

Instructions

1

Switch off your DJI Matrice 350 drone. If you have connected the parachute to the drone using the cord supplied, the parachute and the FTS will switch off automatically.



2

If you have not connected the parachute to the drone using the cord supplied, switch off the parachute system by holding down the ignition button for 5 seconds. Then switch off the DJI Matrice 350 drone.



REARMING

of the parachute system

3

Disconnect the supplied cable linking the parachute to the drone. Then disconnect the USB kit.



4

Unscrew the deployed POD from its central support. Then remove the POD.



Warning

When unscrewing the used POD, be careful of the sharp edges of the carbon tube, which can cause cuts and/or carbon spikes on your hands.

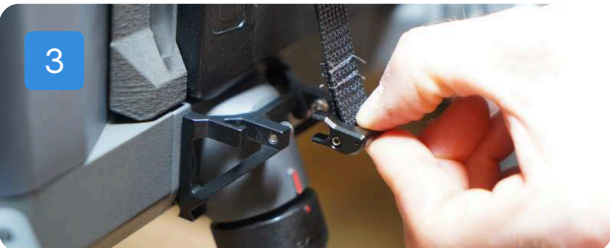
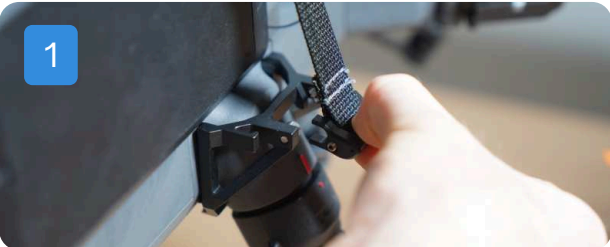
INSPECTION

of the CO₂ system

- 5 Remove the CO₂ cartridge by unscrewing it.



- 6 Untie the parachute securing straps.



INSPECTION

of the CO₂ system

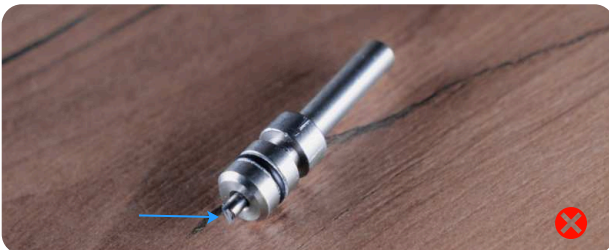
7

Disengage the drone's parachute system.



8

Turn the parachute system over to remove the firing pin and spring. Check that the firing pin is in good condition.



Warning

Check that the tip of the firing pin is not chipped. If the tip is chipped, the firing pin must be replaced. If in doubt, contact your reseller.

REPLACEMENT

of the CO₂ cartridge

Warning

Before replacing the CO₂ cartridge, please read pages 69, 70 & 71.

- 9 Reinsert the spring, then reinsert the firing pin.



- 10 Then insert the reset tool into the hole left by the CO₂ cartridge.



- 11 Push the tool in as far as it will go and hold it during step 4. There must be some force against this operation.



REARMING

of the parachute system

12

Switch on the Klick trigger remote control and the parachute system. Wait for the system to initialise. The force described above should disappear and the LED on the module should flash green and turquoise (if this is not the case, repeat steps 2 and 3 until the force disappears and the LED flashes green and turquoise).



13

Remove the tool, then install a new CO2 cartridge.



14

Each CO2 cartridge replacement must be entered in the "List of installations, de-installations and maintenance operations" section on page 55.

REPLACEMENT

of the POD system

15

Unscrew the deployed POD from its central support. Then remove the POD.



16


Unscrew the protective cover from your new POD. Insert the new POD into its central support, then screw it down until the POD locks into place.



17

For each POD system replacement, please refer to chapter "Listing of installations, de-installations and maintenance operations" on page 55.

18

Your Kronos M350 parachute is rearmed. 



 YOUR PARACHUTE IS
REARMED!

PROCEDURE

for returning a used POD

There are several options for returning your used POD:

Buy 259€

1

Buy a POD in advance from your dealer. You'll be able to continue flying during the annual maintenance of your first POD.

Exchange 99€

2

Return your POD to a reseller and receive a new one at a preferential price.

Warning

Please plan in advance how long it will take to contact your reseller (order, delivery time, etc.) so as not to exceed the use-by date and jeopardise your flight missions.

REPLACEMENT

the parachute's CO₂ cartridge

TYPE	CARTRIDGE OF CO ₂
VOLUME	8 CC
TOTAL WEIGHT	30G (+/- 2G)
CAPACITY	8G (+/- 1G)
LID	WELDED
CONTAINER	UNWELDED STEEL
RECYCLING	100% RECYCLABLE
TRANSPORTABILITY	PLANE / TRAIN /BOAT

Warning

Only cartridges officially sold by Dronavia may be used, as they are subject to specific checks. Dronavia disclaims all responsibility and voids the warranty if any other type of CO₂ cartridge is used.

12 INSTRUCTIONS

to follow

1

Keep the CO₂ cartridge at a temperature below 45°C.

2

Do not leave full cartridges in the car when the temperature is too high.

3

In the event of prolonged inactivity, store your CO₂ cartridges at normal temperatures between 10 and 20°C. CO₂ cartridges may burst at temperatures above 70°C.

4

High temperatures can increase the pressure in the cartridge and this can prevent the device from working, possibly damaging it.

5

Avoid hitting the cartridge.

6

If corrosion spots appear on the surface of the cartridges, change them immediately.

7

Make sure the used cartridge is completely empty before removing it.

8

Do not cut or puncture the cartridge.

TO BE READ CAREFULLY

12

INSTRUCTIONS

to follow

9

Only use certified CO2 cartridges sold by Dronavia.

10

Once the gas cartridge has been installed, do not attempt to unscrew or remove it.

11

Do not dispose of the cartridge in a fire.

12

Keep out of reach of children.

TO BE READ CAREFULLY

SECTION

KRONOS 350

FLIGHT TERMINATION SYSTEM FOR *dji* MATRICE 350 

COMPONENTS

presentation

Left FTS module

Right FTS module

Klick trigger
remote control

Battery latch

Adhesive antenna
supports

ADDITIONAL ACCESSORIES SUPPLIED



USB-C
cable



Allen Key
2mm / 2.5mm

KRONOS M350

Technical specifications

TOTAL WEIGHT

136 GRAMMES

COMMUNICATION
WIRELESS RADIO

SRD860 WITH
ENCRYPTED KEY
(869 MHz / 100 MW)

RANGE OF THE KLIK
REMOTE CONTROL

1500 METERS*

AUTONOMY KLIK
REMOTE CONTROL

23 HOURS

OPERATING
TEMPERATURE

-5°C À 40°C

*The range can be up to 1.5 km, under optimum conditions and in an environment free of obstacles and interference.

INSTALLATION

of the FTS

The Kronos FTS system for Matrice 350 can be installed in just a few minutes. To install the FTS, please follow the instructions below in order:

Instructions

- 1 Unlock the battery latch. Remove the batteries from the DJI Matrice 350.



- 2 Remove the battery latch using the Allen key supplied. When dismantling, take care to retain the 4 washers fitted to the original screw and the 2 springs.



INSTALLATION

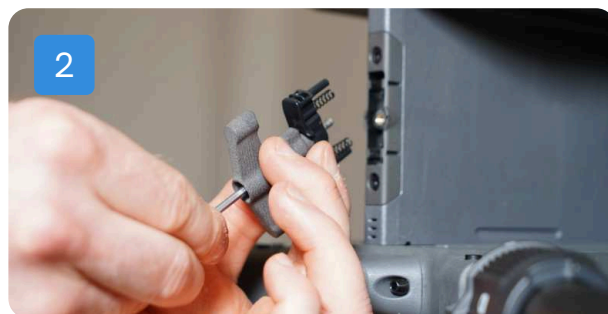
of the FTS

Warning

A white washer may be stuck inside the original battery latch. Remember to check that you have all the parts before reassembling the latch supplied by Dronavia.

3

Replace the original latch with the one supplied and reassemble the assembly, checking as below that the 2 springs and 4 washers are correctly repositioned.



4

Place the right-hand FTS by sliding it in from the back in the same way as a battery, with the LED pointing outwards and the flat part facing the battery. Then insert your right-hand battery.



INSTALLATION

of the FTS

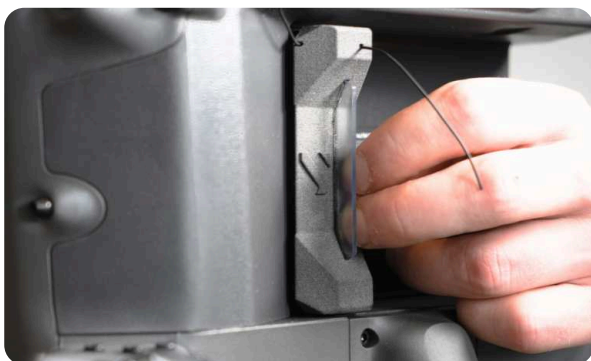
5

Attach the adhesive antenna support, as shown below, to ensure optimum connection between your module and your Klick trigger remote control. Then insert the FTS module's antenna into the bracket.



6

Place the left-hand FTS by sliding it in from the back in the same way as a battery, with the LED pointing outwards and the flat part facing the battery. Then insert your left battery.

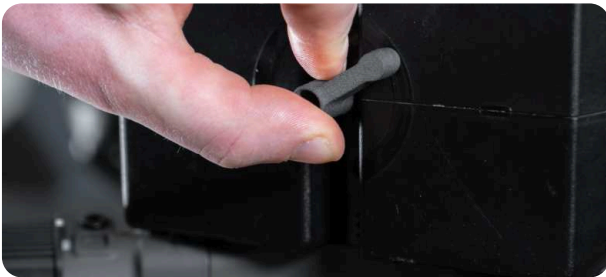
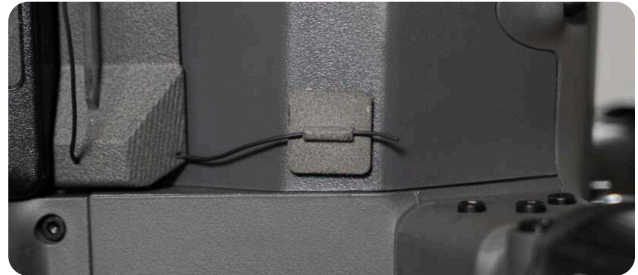
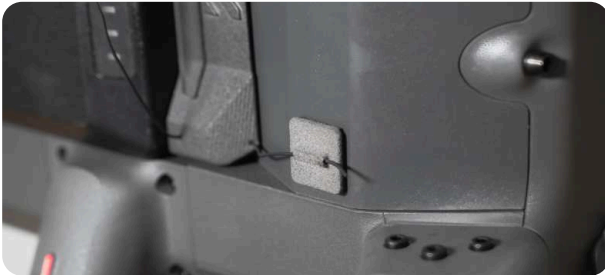


INSTALLATION

of the FTS

7

Attach the adhesive antenna support, as shown below, to ensure optimum connection between your module and your Klick trigger remote control. Then insert the antenna of the FTS module inside the support. Lock the batteries by turning the latch.



Warning

This step is essential for the correct operation of the drone and the FTS. The latch must be locked and the batteries must be fully inserted. If the FTS is incorrectly installed, an error message may appear on your DJI remote controller.

Error notifications


DJI RC Plus remote controller screen



INSTALLATION

of the FTS

8

Your external Kronos M350 FTS is operational. 

Warning

It is forbidden to replace the batteries in the DJI Matrice 300/350 drone when it is switched on (Hot Swap), as this may damage the system. To change the drone's batteries, first switch the drone off.

INITIALIZATION

of the FTS

To switch on the M350 FTS, follow the instructions below in order:

Instructions

1

Switch on your DJI Matrice 350 drone. The FTS system will switch on automatically.



2

Switch on your Klick trigger remote control. When the FTS system is properly connected, a green LED flashes on the Klick trigger remote control and on the FTS module.



3

Your external FTS Kronos M350 is initialization started. ✓

INITIALIZATION

of the FTS

Warning

If your Flight Termination System module is connected to a Kronos parachute system for DJI Matrice 350 a green and turquoise LED flashes on the Klick trigger remote control and on your parachute module.

The different LED states



Warning

If the Klick trigger remote control flashes purple, one of the two FTS modules (right or left) has malfunctioned. If the problem persists, contact your reseller or Dronavia.



 YOUR FTS IS ACTIVE
AND OPERATIONAL!

ACTIVATION

manual of the FTS

To activate the FTS manually, observe the following safety instructions:

Instructions

1

Find out how to activate your Kronos Matrice 350 FTS system manually using our user and instruction manual for the Klick trigger remote control.

Klick

manual deployment of the parachute

Consult our Klick user manual



AUTONOMOUS

activation of FTS

To automatically activate your M350 FTS, follow these instructions in order

Instructions

1

Switch on your DJI Matrice 350 drone. The Flight Termination System will switch on automatically.



2

Switch on your Klick trigger remote control. When the M350 Flight Termination System is properly connected, a green LED flashes on the Klick trigger remote control and on the FTS module.



3

When the parachute is deployed, the Flight Termination System is automatically activated via a secure wireless link, established beforehand by Dronavia experts through precise pairing between the two modules.

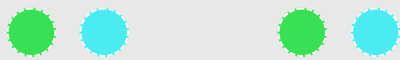
AUTONOMOUS

activation of FTS

4

Your external FTS Kronos M350 has been triggered. ✓

Les différents états LEDs



FTS & PRS connected

RAPID FLASHING



AUDIBLE BEEP



FTS triggered & PRS deployed

RAPID FLASHING



AUDIBLE BEEP



FTS triggered & PRS deployed with Autonomous deployment

RAPID FLASHING



AUDIBLE BEEP

PROCEDURE

of FTS testing

Before the flight or before the first flight of the day, you can test the FTS. Follow the instructions below in order:

Warning

If your drone is fitted with a parachute system, remember to disconnect the cable linking the parachute system to the FTS before carrying out the test. Otherwise, the parachute system will be deployed at the same time as the engine cut-out.

Instructions

1

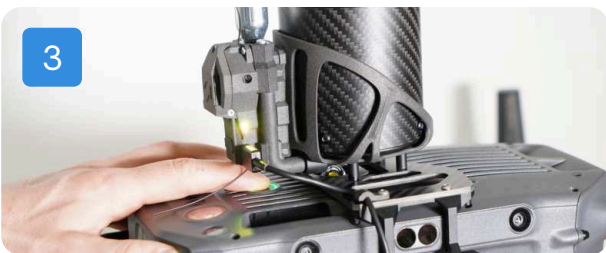
Disconnect the cable linking the parachute system to the drone. Switch on your DJI Matrice 350 drone. Switch on your Klick trigger remote control.



2



3



4



2

If your drone is fitted with a parachute, check again that it is switched off.

PROCEDURE

of FTS testing

3

Arm the motors and initiate rotation while keeping the drone on the ground.

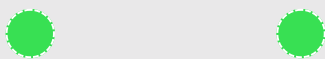


4

Stop the rotation of the motors by simultaneously pressing the trigger buttons on the Klick trigger remote control. Check that the motors stop correctly and that the green light flashes rapidly on both the Klick trigger remote control and the FTS.



The different LED states



FTS only connected

SLOW FLASHING



AUDIBLE BEEP



FTS triggered

CLIGNOTEMENT RAPIDE



AUDIBLE BEEP

STOP

of Flight Termination System

To stop, switch off and reset the M350 FTS, follow the instructions below in order:

Instructions

- 1 Switch off your DJI Matrice 350 drone and the FTS system will shut down automatically.



- 2 Switch off your Klick trigger remote control.



- 3 Your external FTS Kronos M350 has been switched off. 🟢

DISMANTLING

of Flight Termination System

To dismantle M350 FTS, follow the instructions below in order:

Instructions

1

To dismantle the system, simply follow the installation instructions in reverse order. The Klick trigger remote control module can remain installed on the DJI Matrice 350 remote controller without affecting its operation.

RESET

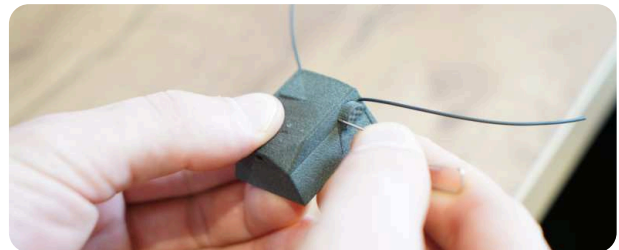
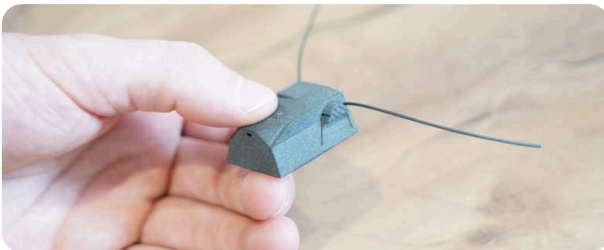
of Flight Termination System

In the event of a malfunction or bug, follow the instructions below in order:

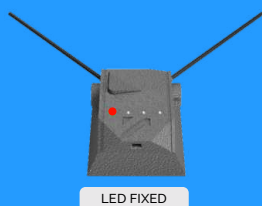
Instructions

1

To reset the Klick trigger remote control, you'll find a small hole on the left-hand side. Insert a paper clip or other thin object into the hole and press it down briefly.



If the malfunction persists



Contact Dronavia customer service
or your reseller.

MAINTENANCE & warranty

STORAGE

Store the Kronos Matrice 350 accessory kit for DJI Matrice 350 in a dry place, at a temperature between 10°C and 30°C, clean and protected from UV light.

SPECIFIC MAINTENANCE

In the event of contact with moisture, chemicals or other substances, the POD must be replaced immediately.

WARRANTY

Dronavia takes great care in the design and production of its products. We guarantee our accessory kit for one year from the date of purchase against any defect or design fault that may arise during normal use of the product. Any abusive or incorrect use, or exposure to aggressive factors (high humidity, excessively high temperatures, etc.) that could lead to damage will invalidate this warranty. It is strictly forbidden to replace the batteries in the DJI Matrice 300/350 drone when it is switched on (Hot Swap), as this may damage the system and invalidate the warranty.

NOTICE OF LIABILITY

Flying a drone, whether manual or automatic, is an activity that requires attention, specific knowledge and good judgement. Be cautious, get trained in appropriate structures, take out insurance and comply with the requirements defined by the DGAC decrees of 11 April 2012 and 17 December 2015 and the EASA.

Ask our sales team your questions



LINKS to know

For France, we recommend that you consult the website of the Ministry of Ecology, Sustainable Development and Energy if you have any doubts or questions. For Europe, we recommend that you consult the EASA website. Remember that you are flying under your own responsibility.

Website of the Ministry of
Ecological Transition and
Territorial Cohesion



Details of class C5
published by EASA :



The IGN map of
restricted areas for
drones



European Union Aviation
Safety Agency (EASA)



The French Civil Aviation
Authority (DGAC)



Ask our sales team your questions





CONTACT US



+33 3 54 40 00 78



distri@dronavia.com



www.dronavia.com

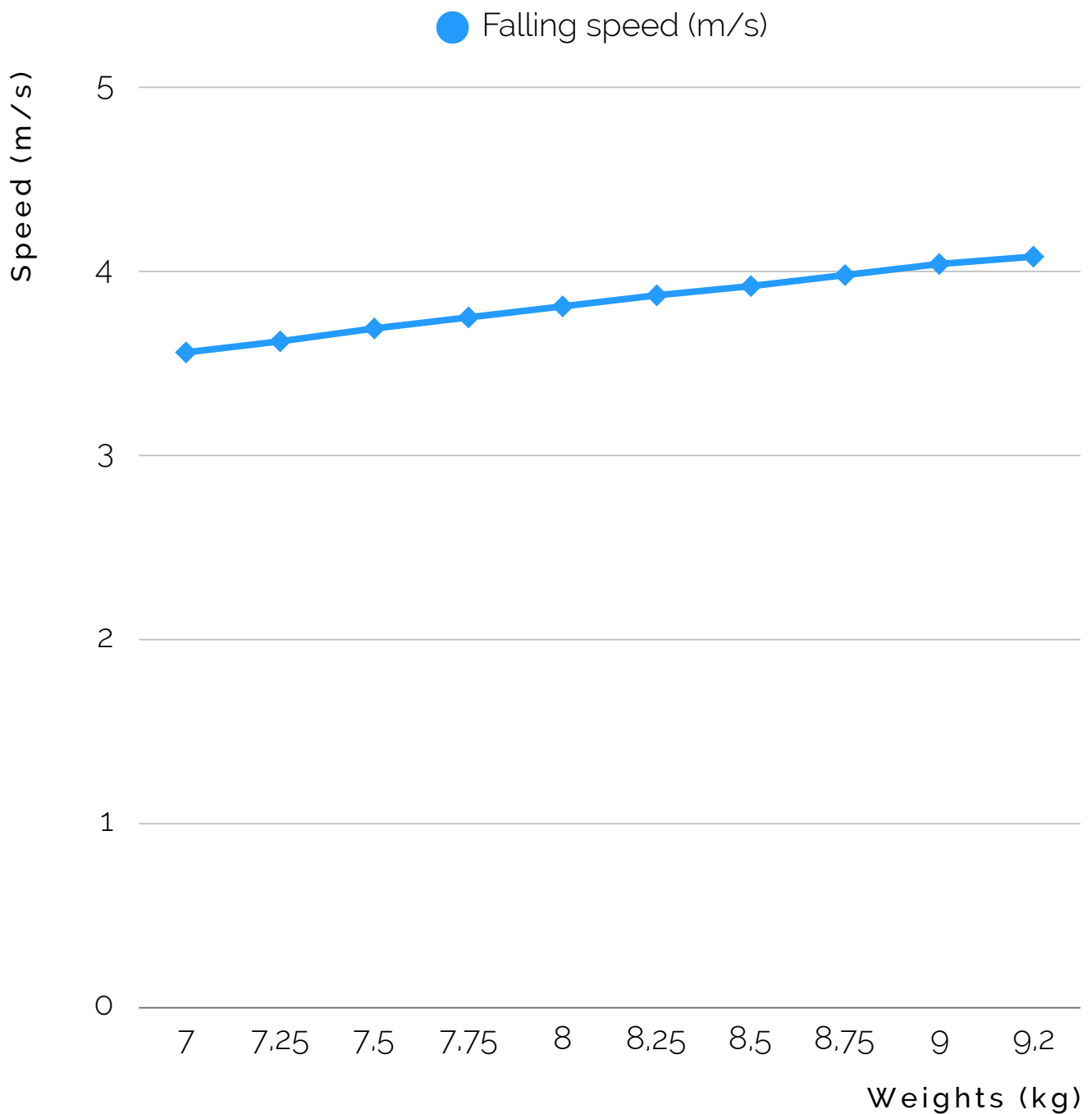


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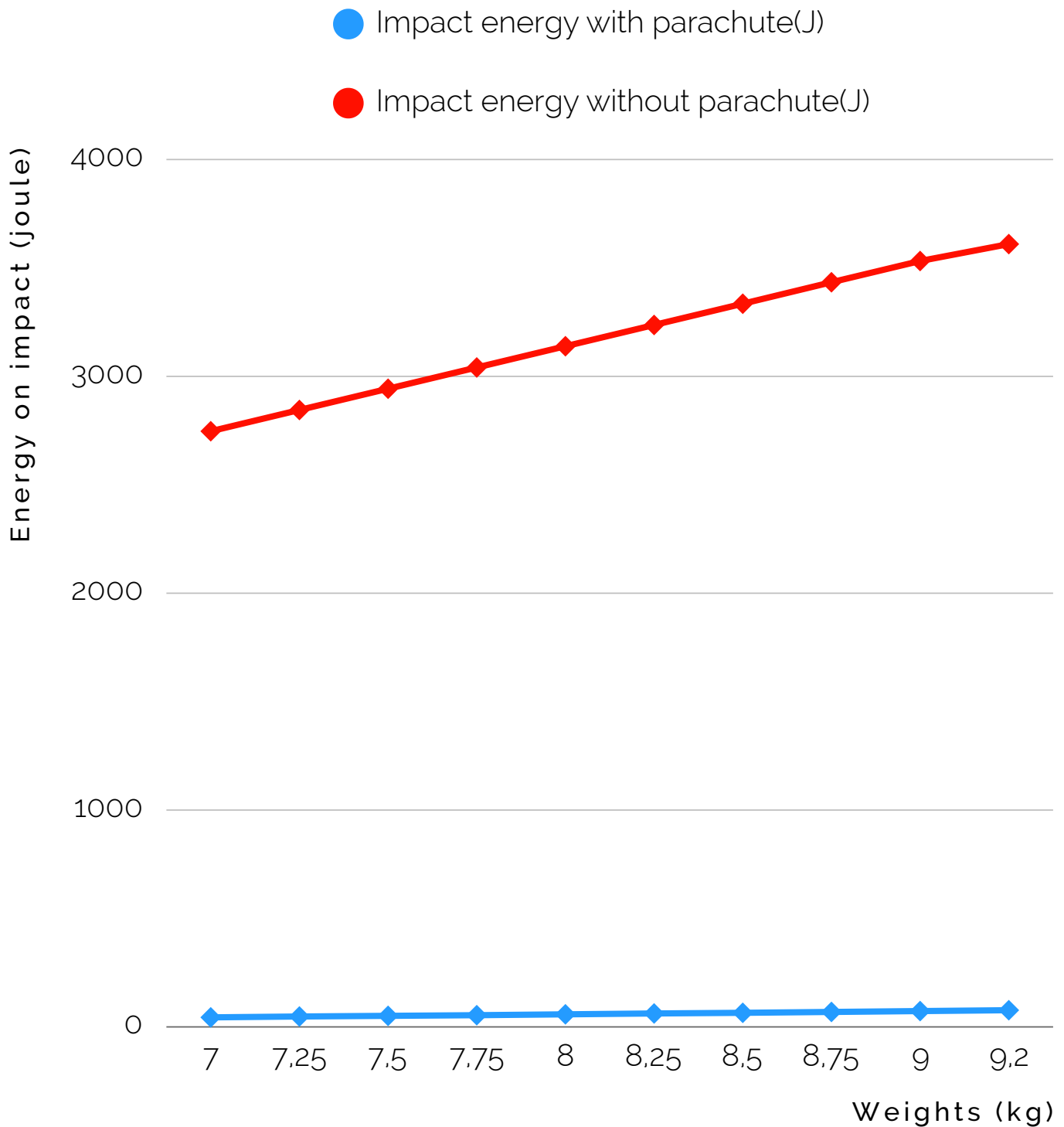
APPENDICES

Falling speed (m/s)) X Weight (kg)



APPENDICES

Impact energy (joule) X Weight (kg)



APPENDICES

Minimum extent of buffer zone for ground-related risks (m) X
Weight (kg) X Deployment height (m)

