Dronavia

MADE IN FRANCE

USER'S MANUAL & INSTRUCTIONS

C5 ACCESSORY KIT (PARACHUTE RECOVERY SYSTEM & FLIGHT TERMINATION SYSTEM) FOR DJI INSPIRE 3

PRS-FTS-MOC KRONOS AD INSPIRE 3 (C5)

WWW.DRONAVIA.COM | +33 (0) 354 400 078 | VERSION 2.2

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INTRODUCTION
by our CEO

"At Dronavia, we've been developing a wide, innovative range of accessory to secure your professional drones since 2015. Based in France, we think up all our products in our design office, before bringing them to life in our workshop, with unique technological know-how.

The fruit of more than 8 years of research and innovation, our new range of Kronos Parachutes Recovery Systems (PRS) and Flight Termination System (FTS) has been developed and tested in accordance with the standards imposed by the EASA and the DGAC, to make your drones compliant with C5 class label.

Thanks to its standardised safety accessories, Dronavia ensures that remote pilots have the best risk management and safety measures at their disposal during their flying missions. You'll be flying your DJI Inspire 3 in complete safety.

Thank you for your confidence & enjoy your flight!

Ludovic Pelletey, Dronavia's CEO.

GENERAL
presentation

Dear customer,

Congratulations on the purchase of your new C5 accessory kit, including a CO2-deployed Parachute Recovery System (PRS) & a autonomous external Flight Termination system (FTS) for your DJI Inspire 3 drone.

You've chosen what we're sure are the best performing systems of their type. Extensive research and testing have gone into making them as safe and effective as possible.

Based in Remiremont, France, DRONAVIA is at your service to advise you on the purchase of your C5 accessory kit for DJI Inspire 3 and to answer any questions of a technical or commercial nature.

GENERAL presentation

The Kronos PRS for Inspire 3 and the Kronos external FTS for Inspire 3 have been designed for DJI Inspire 3 aircraft with the aim of deploying as quickly as possible while keeping the sink rate to a minimum.

Multi-rotor UAVs, even when properly used and maintained, can sometimes find themselves in a critical emergency situation where immediate rescue is required, due to severe weather conditions, radio transmission failure, technical failure of the propulsion system, loss of GPS signal, and soon.

In such situations, the FTS coupled with the quick-release PRS can make the difference between a simple scare and a more serious accident. The Kronos PRS Inspire 3 and the FTS Kronos external Inspire 3 can be activated & deployed in less than a second.

GENERAL
presentation

TO BE READ CAREFULLY

These emergency devices do not protect the integrity of the equipment or prevent damage to property or persons; they are a safety feature that complements other safety features. Neither DRONAVIA nor its distributors may be held responsible for any malfunction or operation deemed insufficient or even ineffective.

CERTIFICATION by EASA

The Kronos Inspire 3 Parachute Recovery System and the Kronos Inspire 3 Flight Termination System together form an accessory kit developed to transform a C3 class drone into a C5 class drone, while meeting the requirements published by the EASA:

(8) A class C5 UAS may consist in a class C3 UAS fitted with an accessories kit that ensures the conversion of the UAS C3 into a class C5 UAS. In this case, the class C5 label shall be affixed on all the accessories.

An accessories kit may only ensure conversion of a class C3 UAS that complies with point (1) and provides the necessary interfaces to the accessories.

The accessories kit shall not include changes to the software of the class C3 UAS.

The accessories kit shall be designed, and each accessory shall be identified, to ensure a complete and correct installation by a UAS operator on a class C3 UAS following the instructions provided by the manufacturer of the accessories kit.

The accessories kit may be placed on the market independently from the class C3 UAS for which they ensure the conversion. In this case, the manufacturer of the accessories kit shall place on the market a single conversion kit that shall:

(1) not alter the compliance of the class C3 UAS with the requirements of Part 4

(2) ensure compliance of the UAS fitted with the accessories kit with all additional requirements defined in this Part with the exception of point (3) above

and(3) be accompanied by manufacturer's instructions providing:

(i) the list of all class C3 UAS to which the kit can be applied

and(ii) instructions on how to install and operate the accessories kit.

EASA
European Aviation Safety Agency

WARNINGS & precautions for use

TO BE READ CAREFULLY

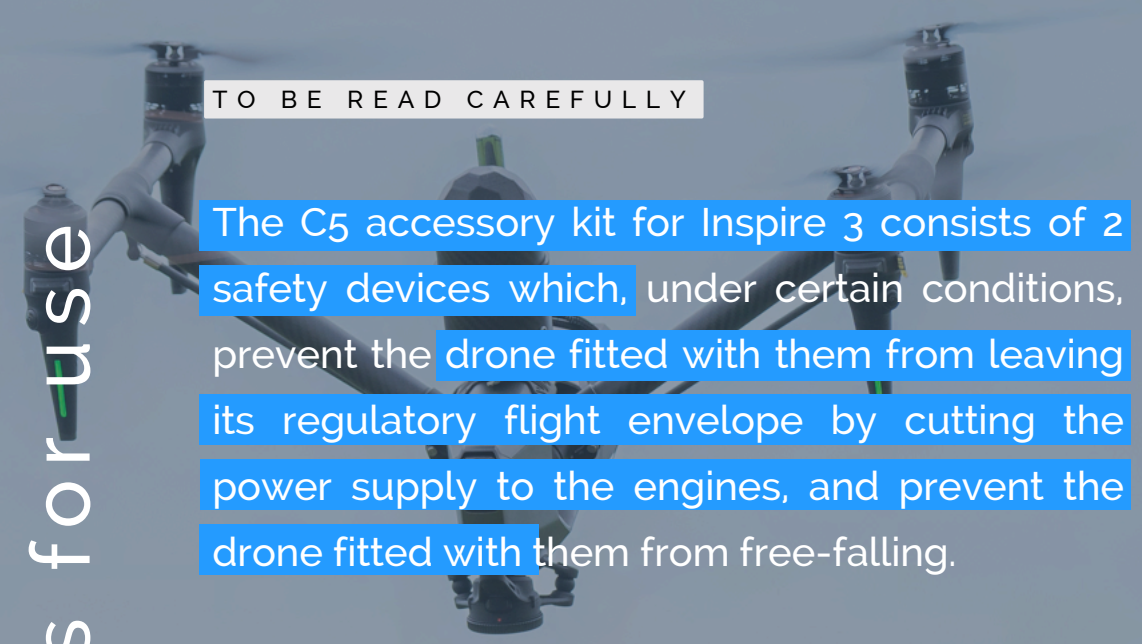
Dronavia may suspend the warranty and disclaim all liability to any person who fails to comply with the basic safety instructions set out below.

Dronavia accepts no responsibility for damage or injury caused directly or indirectly by the use of CO2 cartridges or by the use of CO2 cartridges that do not comply with safety requirements and standards.

Before handling the Kronos systems for Inspire 3 you must read this manual carefully. It provides information on how to use the parachute. In addition to the important notes and information mentioned in this manual, the owner of the device must comply with all the important instructions set out below.

WARNINGS & precautions for use

TO BE READ CAREFULLY



The C5 accessory kit for Inspire 3 consists of 2 safety devices which, under certain conditions, prevent the drone fitted with them from leaving its regulatory flight envelope by cutting the power supply to the engines, and prevent the drone fitted with them from free-falling.

Activation of the FTS and/or PRS inevitably involves the drone falling.

This equipment does not prevent technical problems occurring on the drone. Any flight with a drone implies the existence of a danger for the equipment and people in the vicinity, regardless of the safety equipment used. Using the Kronos FTS and PRS for the DJI Inspire 3 should in no way increase your risk.

15 INSTRUCTIONS

to follow

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. Incorrect use could cause the CO_2 cartridge to burst, endangering your life. The maximum operating temperature is 40°C and the minimum operating temperature is -5°C.

6. The condition of the Kronos PRS and FTS for Inspire 3 should be checked before each flight. Do not use the device if it is damaged. If necessary, contact your reseller.

7. The Kronos PRS and FTS for Inspire 3 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 the Kronos safety systems for Inspire 3.

TO BE READ CAREFULLY

15 INSTRUCTIONS
to follow

9 The use of a Kronos PRS and FTS system for Inspire 3 should in no way increase your risk.

10 The Kronos PRS system for Inspire 3 attempts to prevent a malfunctioning drone from free-falling. However, there are fall situations in which the effectiveness of the Kronos PRS system for Inspire 3 may be limited or impeded.

11 The Kronos PRS and FTS system for Inspire 3 must be actively activated by the user. Regular training is necessary to be able to react correctly in an emergency.

12 The CO2 cartridge and ejection system work only once. You can recharge the system yourself by following the instructions in this manual. It is your responsibility to ensure that the system is covered by 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 firing pin could be ejected and cause serious injury. Safety glasses must be worn.

14 After the device has been deployed, it is advisable to inspect each component carefully 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 reseller for assistance.

TO BE READ CAREFULLY

LISTING

& accessories identification

PART	QUANTITY	IMAGE	C5 LABEL	DESCRIPTION
PRS	1			The Kronos Inspire 3 plug & play Parachute Recovery System for the DJI Inspire 3 makes your flights safer by slowing your drone's rate of descent and impact energy in the event of a problem. The parachute can be deployed automatically or manually using the Klick trigger remote control.
FTS	1			The Kronos Inspire 3 plug & play Flight Termination System, developed for the DJI Inspire 3, prevents the drone fitted with it from leaving its regulation flight envelope by cutting (manually or automatically) the drone's power supply in less than a second.
KLICK	1			The Klick trigger remote control offers a fast and secure means of remotely deployment your Kronos safety accessories (PRS / FTS). Totally independent of the drone, this lightweight, ergonomic remote control is equipped with LED status indicators and a secure wireless connection. Designed to adapt to the different uses of professional drone operators and different DJI radio controllers, the Klick trigger remote control is supplied with 3 fixing supports.
Accessories: Extending the drone's landing gear	4			The landing gear extensions on the DJI Inspire 3 drone prevent damage to the drone during an emergency landing. The drone's undercarriage extensions are quick and easy to replace.

PART	SOFTWARE VERSION	VERIFICATION METHOD	DIMENSIONS	MASS
PRS	Para_MOC_IA_v1.2	See "System states" on page 17	8 X 12 X 20 cm	376 G
FTS	CC_MOC_I3_v1.0	See "System states" on page 17	7.5 x 9 x 2 cm	78 G
KLICK	Radio_MOC_v1.1	See "System states" on page 17	32 x 28 x 13 mm	20 G
Accessories: Extending the drone's landing gear	/		49 x 24 x 18 mm	3 G

LISTING

of drones compatible with the accessory kit

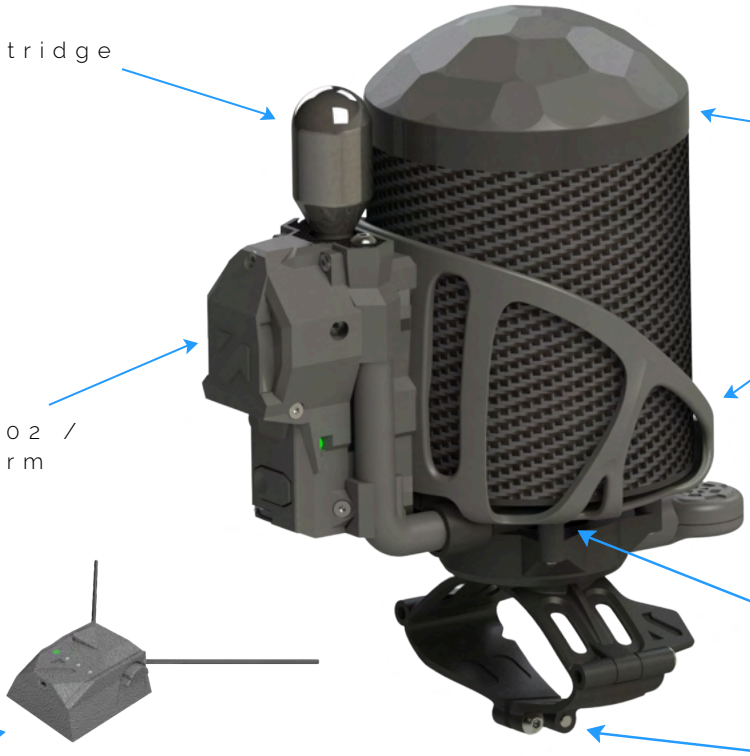
MODEL	MANUFACTURER	CONFIGURATION	TESTED SOFTWARE VERSION	ORIGINAL C3 DECLARATION OF CONFORMITY
Inspire 3	DJI	Any payload if take-off weight is less than 4.31 KG, kit included	/	See appendix

KRONOS SYSTEMS

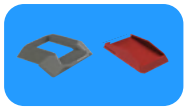
PARACHUTE RECOVERY SYSTEM FOR DJI INSPIRE 3

COMPONENTS

presentation



Klick trigger remote control



Klick Set

Klick Pin

ADDITIONAL ACCESSORIES SUPPLIED

Micro USB cable

Allen key 2mm / 2.5mm

Reset tool

Threaded reset tool

Mounting bracket cover

Landing gear extensions

KRONOS I3

System image

KRONOS B

System image

DJI remote controller
for DJI Inspire 3

Klick trigger remote control

ELEMENTS

of the parachute system

Electronic module

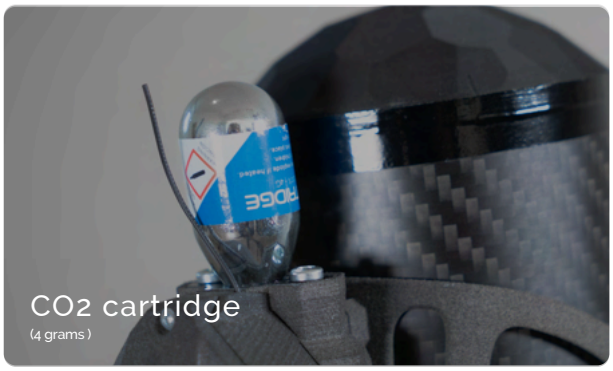
(autonomous deployment / communication module / audible alarm)

Power supply battery

(LEDs indicating system status)

Fixing support

Ignition button



CO2 cartridge

(4 grams)

CO2 device

USB-C port

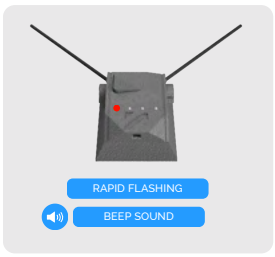
(charging of the parachute module)

USB-C cable

(Connection with FTS)

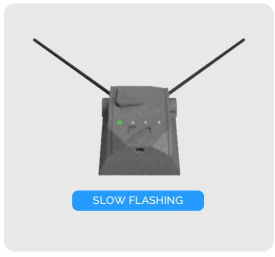
THE STATES
system

STARTING

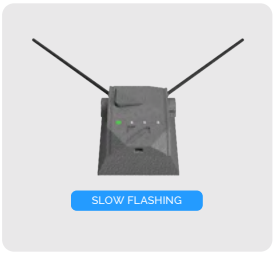


System start-up

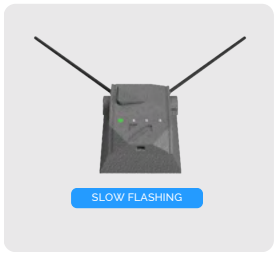
CONNECTION



FTS only connected



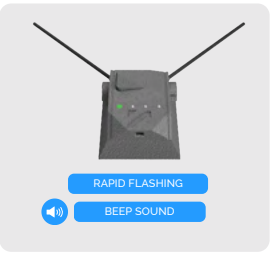
FTS & PRS connected



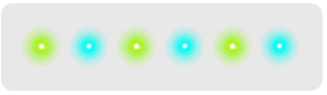
FTS & PRS connected with autonomous deployment

ACTIVATION AND DEPLOYMENT

Single FTS triggered



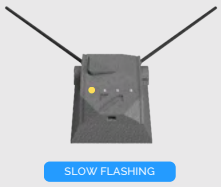
FTS triggered & PRS deployed



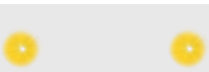
FTS triggered & PRS deployed with autonomous deployment

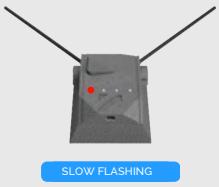
THE STATES
system

SYSTEM & BATTERY ALERTS

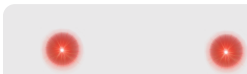


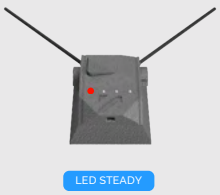
No remote control signal (Klick)





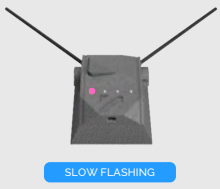
Low battery



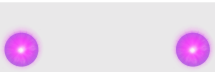


System error

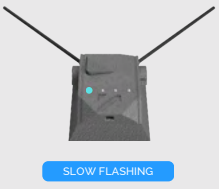
Battery charging



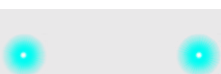
Signal scrambled



Battery charged



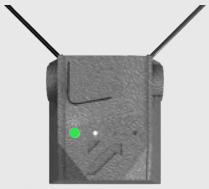
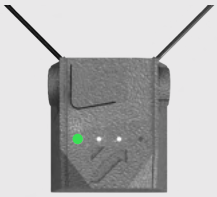
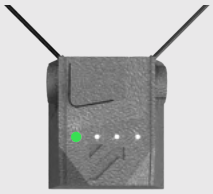
FTS not connected (Only PRS connected)



THE STATES
signal

Four indicator lights let you check the signal level between the Klick trigger remote control and the accessory kit (PRS and FTS). Signal level is defined by the number of indicators lit.

The different LED states

Lost signal	Low signal	Medium signal	High Signal
			
LED STEADY LONG BEEP	SLOW FLASHING DOUBLE SHORT BEEP	SLOW FLASHING	SLOW FLASHING

Warning

In the event of signal loss, manual deployment of the parachute system and FTS is impossible. Reduce the distance between your drone and your Klick trigger remote control.

KRONOS 13

System figures

KRONOS B

Technical specifications

TOTAL WEIGHT	376 GRAMS (WITH CARTRIDGE)
EJECTION DEVICE	CO2 CARTRIDGE 4 GRAMS
MINIMUM HEIGHT EFFICIENCY	FROM 24 METERS
COMMUNICATION WIRELESS RADIO	SRD860 WITH ENCRYPTED KEY (869 MHZ / 100 MW)
RANGE OF THE KLICK REMOTE CONTROL	1500 METERS*
PARACHUTE AUTONOMY	5 HOURS
KLICK REMOTE CONTROL AUTONOMY	30 HOURS
ENERGY GROUND IMPACT	< 24 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 B

Operational limits

MAXIMUM WIND SPEED AT GROUND LEVEL	9,46 m/s
MINIMUM FLIGHT ALTITUDE (AGL)	30 m
OPERATING TEMPERATURES	MINIMUM TEMPERATURE : -5 °C MAXIMUM TEMPERATURE : 40 °C
USABLE IN RAINY WEATHER	No

KRONOS B

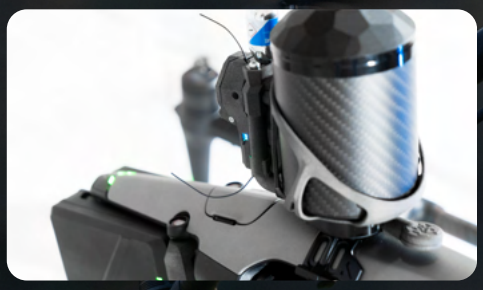
Dimensions and weights

DRONE

50 x 71 x 35 cm

3 995 g

PARACHUTE



8 X 12 X 20 cm

376 g

PARACHUTE + DRONE

50 x 71 x 35 cm

4 311 g

KRONOS B

Minimum size of buffer zone for ground-related risks (in metres)

OPERATING VOLUME VERTICAL LIMIT	GROUND RISK BUFFER ZONE
30	76
40	104
50	132
60	160
70	188
80	216
90	244
100	272
110	300
120	328

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.

INSTALLATION
of the parachute system

The Kronos Inspire 3 parachute system can be installed in just a few minutes. To install the parachute, please follow the instructions below in order:

Skills & tools required

Installing the parachute requires no special technical skills. A 2/2.5 mm allen key (supplied by Dronavia) is required for installation.

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 Fit the parachute attachment bracket to the top of the DJI Inspire 3 drone, then attach it to the drone by screwing the two ends together using the 2 screws supplied, as shown below.

Warning

Be sure to observe the tightening torque of 0.8 Nm.

The fixing support is installed with the Dronavia logo towards the front of the drone.

INSTALLATION
of the parachute system

3 Place the parachute in its fixing support and lock the system by turning it a quarter turn.

4 Connect the USB-C cable linking the parachute to the FTS.

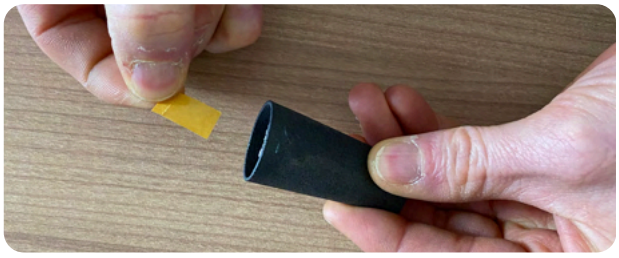
Advice

The connection between your parachute system and your FTS system provides unlimited autonomy for the parachute system. The parachute system recharges when the drone is switched on. This connection also enables the parachute system to be switched on automatically when the DJI Inspire 3 drone is switched on.

INSTALLATION
of the parachute system

5 A protective cover for the fixing support is supplied for transporting and using the DJI Inspire 3 without a parachute.

6 In order to protect the drone's feet in the event of an emergency landing, 4 DJI Inspire 3 landing gear extensions are supplied in the kit. Remove the self-adhesive tab before inserting the extensions on the 4 landing gear of the DJI Inspire 3 drone.



7 Your Kronos Inspire 3 parachute is operational.

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

START-UP
of the parachute system

To start-up the parachute system, follow the instructions below in order:

Instructions

1 Switch on your DJI Inspire 3 drone. If you have connected the parachute to the FTS using the cord supplied, the parachute and FTS will switch on automatically.

The installation of the FTS on the DJI Inspire 3 drone is detailed on page 75.

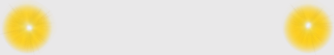
2 If you have not connected the parachute to the FTS using the cord supplied, switch on the parachute system by pressing the ignition button for 2 seconds.

3 Your Kronos Inspire 3 parachute is switched on.

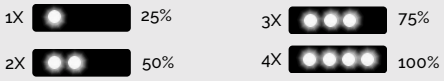
START-UP
of the parachute system

The different LED states

System initialisation



Parachute on, awaiting activation



Battery level indicator

ACTIVATION
of the parachute system

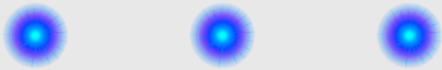
To activate the parachute system, follow these steps in order:

1 The parachute automatically detects the ignition of your drone's engines (or any other movement), during this phase double beeps are emitted. Once take-off has been detected, 2 beeps are emitted and the LED on the parachute and on the Klick trigger remote control now flash dark blue to indicate that autonomous deployment is active.

The different LED states

Autonomous deployment being activated

CONTINUOUS DOUBLE BEEP



Autonomous deployment activated

2 SHORT, LOUD BEEPS

Warning

If you notice that the parachute system does not detect the take-off correctly (no beep and no dark blue LED), this may be due to a slow take-off or a low take-off height. We advise you to launch quickly from a height of at least 5 metres.

If you are not about to take off with your DJI Inspire 3 and you hear continuous double beeps (purple LED), your parachute system has detected vibrations. A risk of autonomous deployment activation may exist. Switch off your parachute system, otherwise the autonomous deployment may be activated and your parachute system unintentionally deployed.

2 Your Kronos Inspire 3 parachute is active with autonomous deployment.

DEACTIVATION
of the parachute system

To deactivate the parachute system, follow these instructions in order:

1 The parachute automatically detects a landing. After a period of approximately 5 seconds. 1 beep is emitted by the parachute and the parachute LED is no longer dark blue. The take-off detection module is deactivated (it will reactivate automatically if you take off again).

The different LED states

Parachute on and not connected to Klick trigger remote control

BEEP SOUND

Parachute on and connected to Klick trigger remote control

BEEP SOUND

Warning

If you notice that the parachute system does not detect the landing correctly (no beep and no purple LED), do not handle the drone as this could deployed the parachute. Wait a further 5 seconds.

2 Autonomous deployment of the parachute system is deactivated, but your parachute remains active and can be deployed using the Klick trigger remote control.

3 To deactivate your parachute system completely, switch off the parachute system by holding down the black ignition button for 1 second, or by switching off the DJI Inspire 3 drone.

YOUR PARACHUTE IS
ACTIVE AND
OPERATIONAL!

DEPLOYMENT
of the parachute system

To deploy the Kronos I3 parachute system (with autonomous deployment or manually), observe the following safety instructions:

Warning

1. Never attempt to deploy the parachute on the ground.

2. The Kronos I3 parachute is designed to be deploy at a minimum height of 15m from the ground in standard atmospheric conditions.

3. For a fall from a height of 24 m, the impact on the ground is less than 21 joules with the Kronos I3 parachute system, compared with 1177 joules without any device.

This data may vary according to altitude above sea level, relative wind and many other external factors. That's why we recommend a minimum height of 24 m above ground level to deploy the Kronos I3 parachute system and sufficiently limit the impact of your drone on the ground.

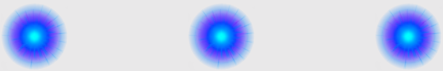
AUTONOMOUS
system deployment

1 When autonomous deployment is activated, no manual action is required to deployed the parachute. Our autonomous deployment technology implemented in our parachutes enables the parachute to be deployed automatically, should the drone find itself in a critical loss-of-control situation.

Warning

If you find that the parachute system does not detect take-off correctly (no beep and no dark blue LED), this may be due to a slow take-off or a low take-off height. We advise you to launch quickly from a height of at least 5 meters.

The different LED states



Autonomous deployment enabled

BEEP SOUND

MANUAL
system deployment

To deploy the parachute manually, observe the following safety instructions:

Instructions

1. Find out how to deploy your Kronos I3 parachute system manually using our Klick trigger remote control instruction and user manual.

KLICK

manual deployment of the PRS

Consult our Klick user manual

new version

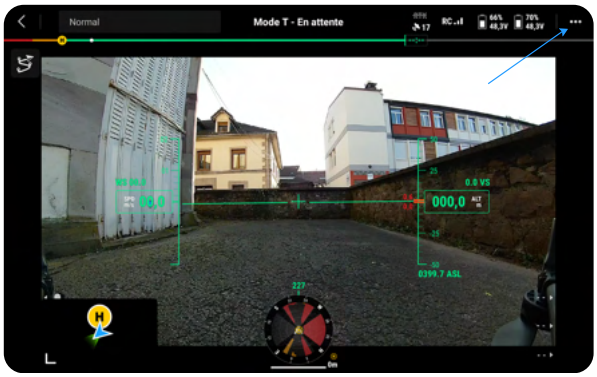
MODE
low speed

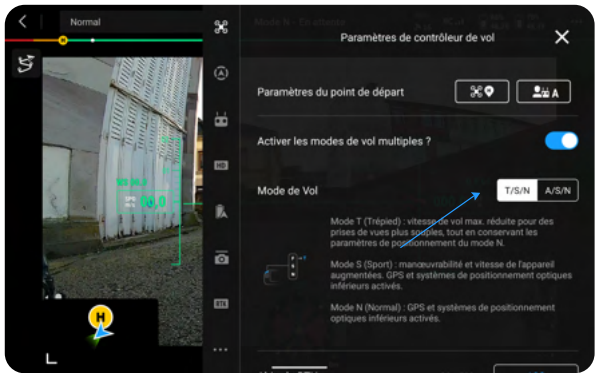
European EASA regulations require the inclusion of a low-speed mode that can be selected on the drone and activated manually by the drone operator. When low-speed mode is activated, the drone cannot exceed a speed of 5 m/s. To activate the low-speed mode (Mode T), follow the steps below in order:

Instructions

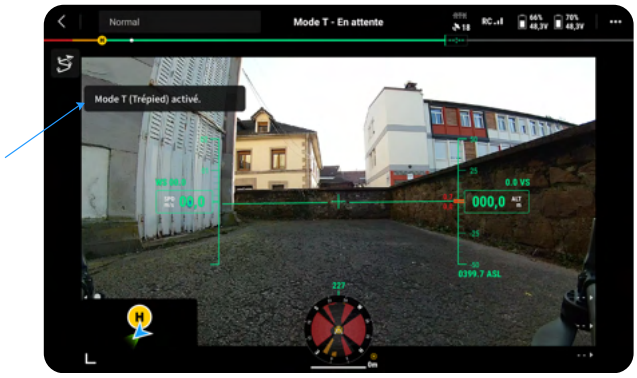
1 Switch on your DJI RC Plus remote control.

2 Access the camera view, then click on the menu represented by the 3 dots in the top right-hand corner of the screen. Check that the T/S/N flight mode is selected.





3 Toggle the flight mode selector on the DJI RC Plus radio control from mode N to mode F. Mode F corresponds to mode T.



MODE
sport

The use of mode S (Sport) when using the C5 accessory kit on the DJI Inspire 3 drone is prohibited. All tests carried out on the Kronos Inspire 3 accessory kit were performed in N (Normal) mode.

Warning

When using the SPORT mode, Dronavia accepts no responsibility for the parachute system not deployment, partially deployment or deployment more slowly.

STATES
of DJI remote controller

Indicators on the DJI RC Plus remote controller allow you to check the signal status between the DJI Inspire 3 drone and the DJI RC Plus remote controller during a flight.

Strong signal

Low signal

STATES

of DJI remote controller

Lost signal

STOP
& resetting the parachute system

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

Instructions

1 Switch off your DJI Inspire 3 drone. If you have connected the parachute to the FTS using the cord supplied, the parachute and FTS will switch off automatically.

2 If you have not connected the parachute to the FTS using the cord supplied, to switch off the parachute immediately, hold down the ignition button for 5 seconds. Then switch off the DJI Inspire 3 drone.

STOP
& resetting the parachute system

3 Switch off your Klick trigger remote control.

Advice

If you forget to switch off the parachute system manually, it will switch off automatically after 10 minutes. The FTS system automatically switches itself off when the DJI Inspire 3 is switched off.

DISASSEMBLY

the complete parachute system

To disassemble the entire parachute system, follow the instructions below in order:

Instructions

1 Disconnect the USB-C cable linking the parachute to the FTS. Then release the locking pin by pulling on it.

2 Turn the parachute system a quarter turn to unlock it.

DISASSEMBLY

the complete parachute system

3 Disengage the parachute system from its support.

4 Unscrew the two screws on the parachute module mounting bracket. Then remove the fixing support from the DJI Inspire 3 drone.

DISASSEMBLY

the complete parachute system

Advice

The support for fixing the parachute system can be kept on the DJI Inspire 3 drone and does not interfere with the storage of the drone in its flycase. A protective cover is supplied. Only the parachute needs to be removed for transport.

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

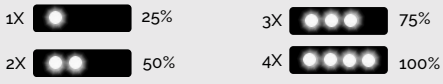
CHECKING
of the parachute system battery

To check the battery status of the 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.

Les différents états LEDs



Battery level indicator

CHARGING
of the parachute system battery

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

Instructions

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

The different LED states

Battery charging

Battery charged

RESETTING
of the parachute system

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

Instructions

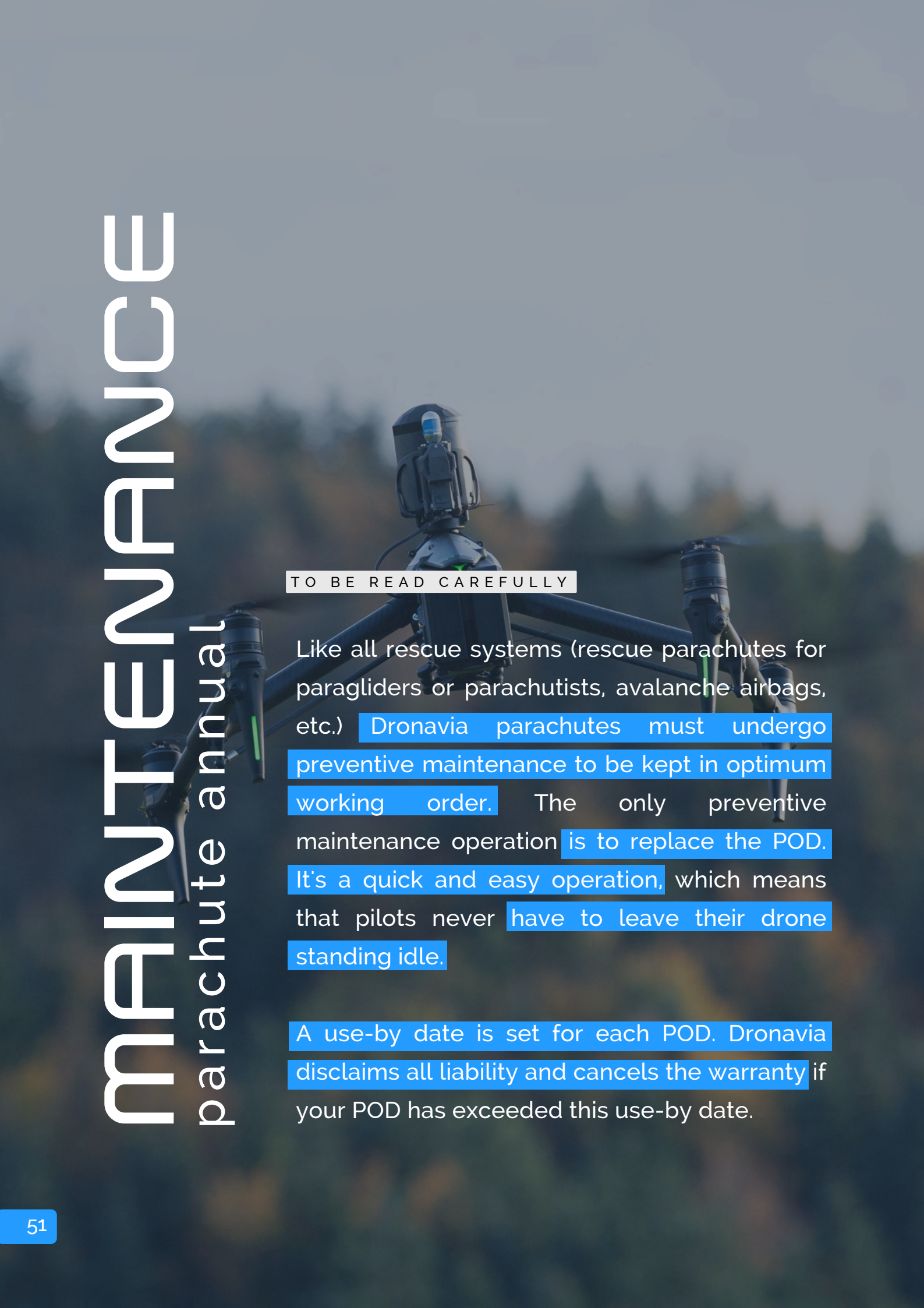
1 To reset the parachute system, there is a small hole in the back of the parachute. Slide a paper clip or other thin object through the hole, and a short press will reset the entire parachute system.

Warning

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

MAINTENANCE

parachute annual



TO BE READ CAREFULLY

Like all rescue 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 CO_2 system	Final user **or** DRONAVIA or any certified partner
After every deployment	CO_2 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 I3 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 I3 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.

Warnings

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

PROCEDURE

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 reseller. 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 special price.

Warnings

Plan in advance the time needed to contact your reseller (order, delivery time, etc.) so as not to exceed the expiry date and compromise your flight missions.

DISASSEMBLY
of the POD system for maintenance

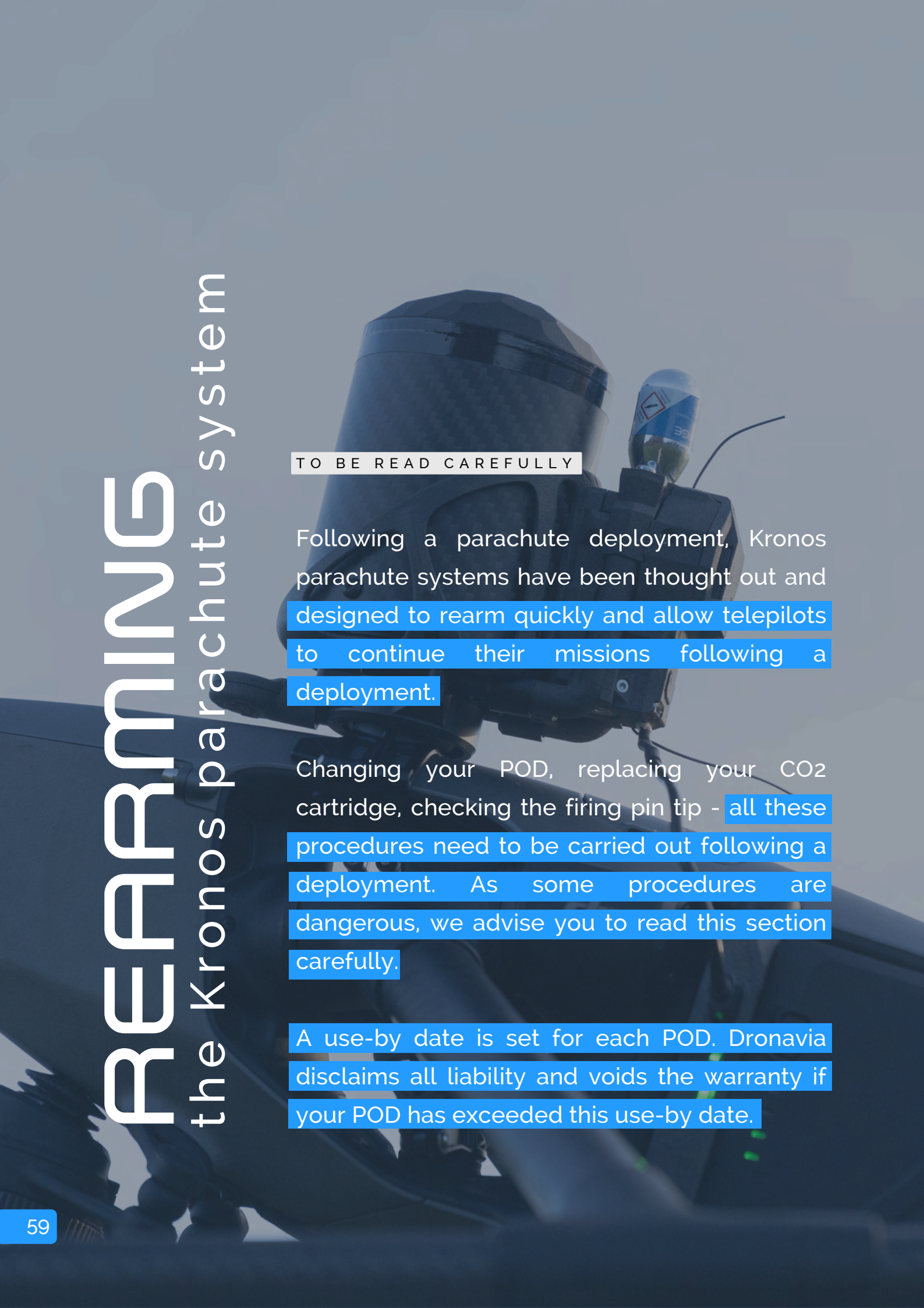
To remove the POD from the parachute system, follow the instructions below in order:

Instructions

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

REARMING

the Kronos parachute system



TO BE READ CAREFULLY

Following a parachute deployment, Kronos parachute systems have been thought out and designed to rearm quickly and allow telepilots to continue their missions following a deployment.

Changing your POD, replacing your CO2 cartridge, checking the firing pin tip - all these procedures need to be carried out following a deployment. As some procedures are dangerous, we advise you to read this section carefully.

A use-by date is set 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 reset your parachute system, follow the instructions below in order:

Instructions

1 Switch off your DJI Inspire 3 drone. If you have connected the parachute to the FTS using the cord supplied, the parachute and FTS will switch off automatically.

2 If you have not connected the parachute to the FTS using the cord supplied, switch off the parachute system by holding down the ignition button for 5 seconds. Then switch off the DJI Inspire 3 drone.

REARMING
of the parachute system

3 Disconnect the USB-C cable linking the parachute to the FTS.

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

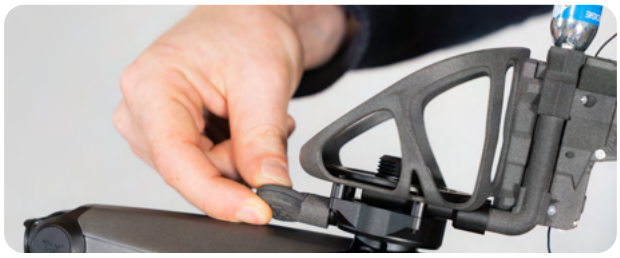
Warning

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

1 Remove the CO2 cartridge.

2 Unlock the locking pin by pulling on it.



3 Turn the parachute system a quarter turn to unlock it.

INSPECTION
of the CO2 system

4 Disengage the parachute system from its fixing support.

5 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 68, 69 & 70.

1 Reinsert the spring, then reinsert the firing pin.

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

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

REPLACEMENT
of the CO2 cartridge

4 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).

5 Remove the tool and install a new CO2 cartridge.

6 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

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

2 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.

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

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 from your reseller. Then carry out maintenance on your used POD.

Exchange 99€

2 Return your used POD to a reseller and receive a new POD at a special price.

Warning

Plan in advance the time needed to contact your reseller (order, delivery time, etc.) so as not to exceed the expiry date and compromise your flight missions.

REPLACEMENT

the parachute's CO2 cartridge

TYPE	CARTRIDGE OF CO2
VOLUME	4 CC
TOTAL WEIGHT	18G (+/- 2G)
CAPACITY	4G (+/- 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 CO_2 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 CO_2 cartridges at normal temperatures between 10 and 20°C. CO_2 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 CO_2 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

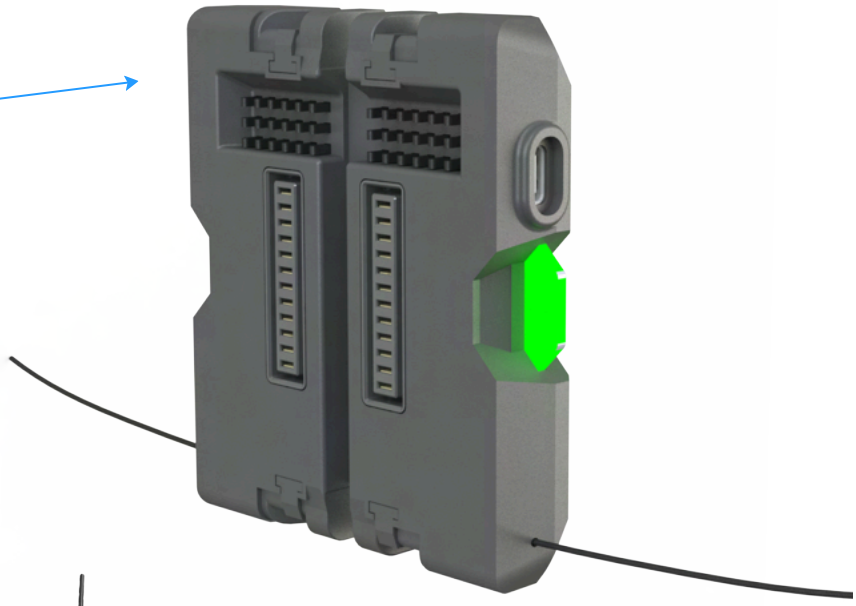
KRONOS SYSTEMS

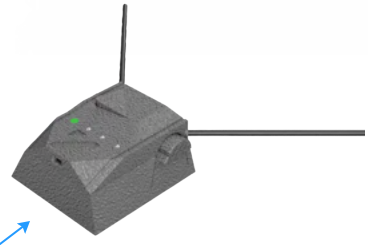
EXTERNAL FLIGHT TERMINATION SYSTEM FOR DJI INSPIRE 3

COMPONENTS

presentation

FTS Module



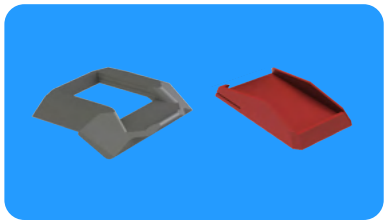


Klick trigger
remote control

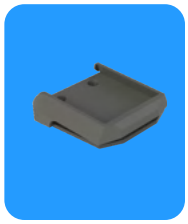
Battery latch

ADDITIONAL ACCESSORIES SUPPLIED

Micro-USB
cable



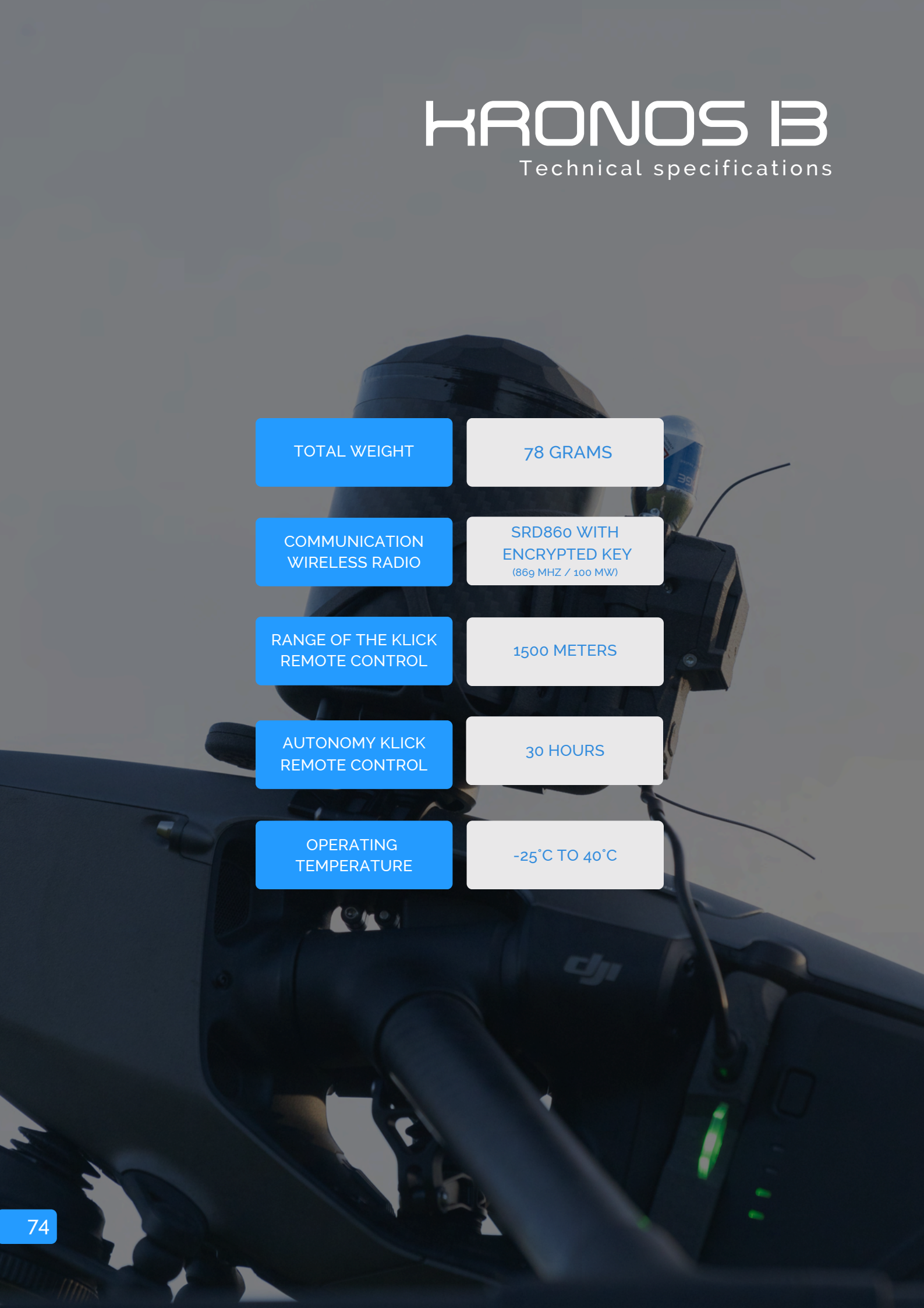
Klick Set



Klick Pin

KRONOS B

Technical specifications



TOTAL WEIGHT	78 GRAMS
COMMUNICATION WIRELESS RADIO	SRD860 WITH ENCRYPTED KEY (869 MHZ / 100 MW)
RANGE OF THE KLICK REMOTE CONTROL	1500 METERS
AUTONOMY KLICK REMOTE CONTROL	30 HOURS
OPERATING TEMPERATURE	-25°C TO 40°C

DESCRIPTION
of the FTS system

Description

The Kronos Inspire 3 FTS, developed for the DJI Inspire 3, prevents the drone equipped with it from leaving its regulation flight envelope by cutting (manually or automatically) the drone's power supply in less than a second.

Installation

The Kronos Inspire 3 FTS is installed between the drone and the drone batteries. Simply insert the module into the battery slot, then insert the drone batteries. The only modification made by installing the FTS on the drone is the battery latch, which must be changed to ensure that the drone's batteries are held securely. Installation is detailed on page 76.

Start-up

To start the Inspire 3 FTS system, switch on your DJI Inspire 3 drone and the FTS system will switch on automatically, then switch on your Klick trigger remote control by pressing and holding the start button on the Klick trigger remote control. When the FTS is properly connected, a green LED flashes on the Klick trigger remote control and on the FTS module. Activation is detailed on page page 81.

Activation

In order to keep the possibility of activation at your fingertips and to be as reactive as possible, a simple gesture allows you to cut the motors and deploy your parachute if your drone is equipped with one. Simply press the triangular button on the Klick trigger remote control for at least 1 second. How to activate the FTS is described in detail in the Klick trigger remote control user manual.

INSTALLATION
of the FTS system

The Kronos Flight Termination System for Inspire 3 can be installed in just a few minutes. To install the FTS, please follow the instructions below in order:

Instructions

1 Remove the batteries from the DJI Inspire 3.

2 Position the battery latch by clipping it onto the centre of the drone.

INSTALLATION
of the FTS system

3 Insert the Flight Termination System module into the bottom of the battery compartment of the DJI Inspire 3.

4 Then insert the two batteries into the DJI Inspire 3 drone, and lock the battery latch by turning it half a turn to the right.

INSTALLATION
of the FTS system

Warning

This step is essential for the correct operation of the drone and the FTS. If you do not lock the attachment latch, an error message may appear on your DJI radio control system.

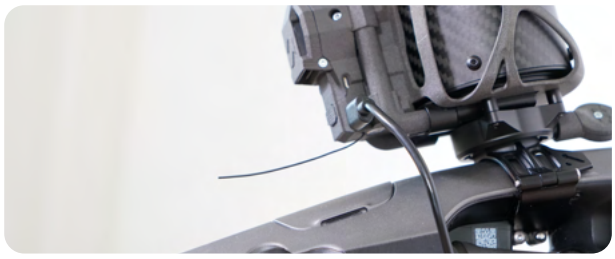
Error notifications

DJI RC Plus remote controller screen

INSTALLATION
of the FTS system

OPTIONAL

5 If you also have a Kronos parachute for Inspire 3, you can connect the FTS module to the parachute module using the USB-C cable supplied.



The connection between your parachute system and your FTS system provides unlimited autonomy for the parachute system. The parachute system recharges when the drone is switched on. This connection also enables the parachute system to be switched on automatically when the DJI Inspire 3 drone is switched on.

6 Your external Kronos Inspire 3 FTS is operational.

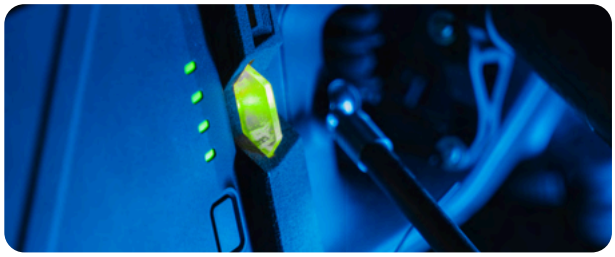
START-UP
of the FTS system

To start the FTS, follow the instructions below in order:

Instructions

1 Switch on your DJI Inspire 3 drone. The FTS system will switch on automatically.

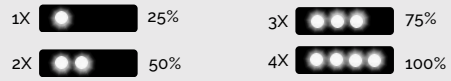
2 Switch on your Klick trigger remote control. When the FTS system is properly connected, a green LED flashes on the Klick trigger remote control and on the FTS module.



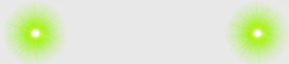
START-UP
of the FTS system

The different LED states

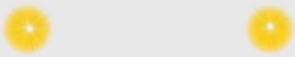
System initialisation



Battery level indicator



FTS only connected

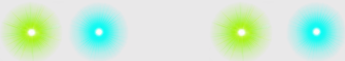


FTS on, waiting for connection

OPTIONAL

If your FTS module is connected to a Kronos parachute system for DJI Inspire 3 a green and turquoise LED flashes on the Klick trigger remote control and on your parachute module.

The different LED states



FTS & connected parachute

YOUR FTS IS ACTIVE
AND OPERATIONAL!

ACTIVATION

manual of the FTS system

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

Instructions

1. Find out how to activate your Kronos Inspire 3 FTS system manually using our user and instruction manual for the Klick trigger remote control.

KLICK

manual activation of the FTS

Consult our Klick user manual

new version

ACTIVATION

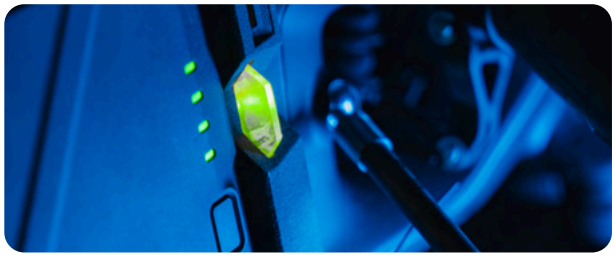
automatic of the FTS system

To automatically activate your FTS, follow these instructions in sequence

Instructions

1 Switch on your DJI Inspire 3 drone. The FTS will switch on automatically.

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



3 When the parachute system is deployed, the FTS system is also automatically activates, thanks to a wireless connection and pairing between the two systems by Dronavia's experts.

GEOCAGING
automatic activation of the FTS
Discover our solutions now
INCLUDING THE SCALEFLYT GEOCAGING SOLUTION DEVELOPED BY THALES

PROCEDURE

FTS system test

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

Warning

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

Instructions

1 Disconnect the cable connecting the parachute to the FTS. Switch on your DJI Inspire 3 drone. Switch on your Klick trigger remote control.

2 Check that the LEDs on your FTS and Klick trigger remote control are flashing green. If your drone is fitted with a parachute, check again that it is switched off.

PROCEDURE

FTS system test

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.

STOP
& resetting FTS system

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

Instructions

1 Switch off your DJI Inspire 3 drone and the FTS system will shut down automatically.

2 Switch off your Klick trigger remote control.

DISASSEMBLY
of the FTS system

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

Instructions

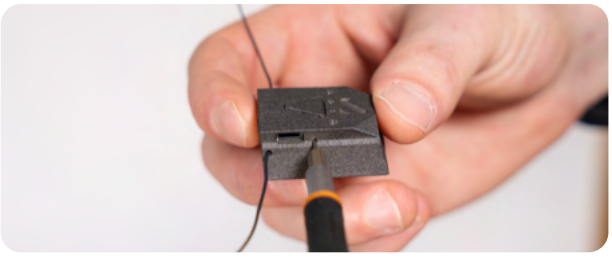
1 To disassemble the system, simply follow the installation instructions in reverse order. The Klick trigger remote control module can remain installed on the DJI Inspire 3 remote controller without affecting its operation.

RESETTING
of the FTS system

In the event of a malfunction or any other 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.



Warning

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

MAINTENANCE & guarantees

STORAGE

Store your C5 Kronos Inspire 3 accessory kit for DJI Inspire 3 in a dry, cool, clean place away from UV light.

SPECIFIC MAINTENANCE

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

GUARANTEE

Dronavia takes great care in the design and production of its products. We guarantee our accessory kit for a period of 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.

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

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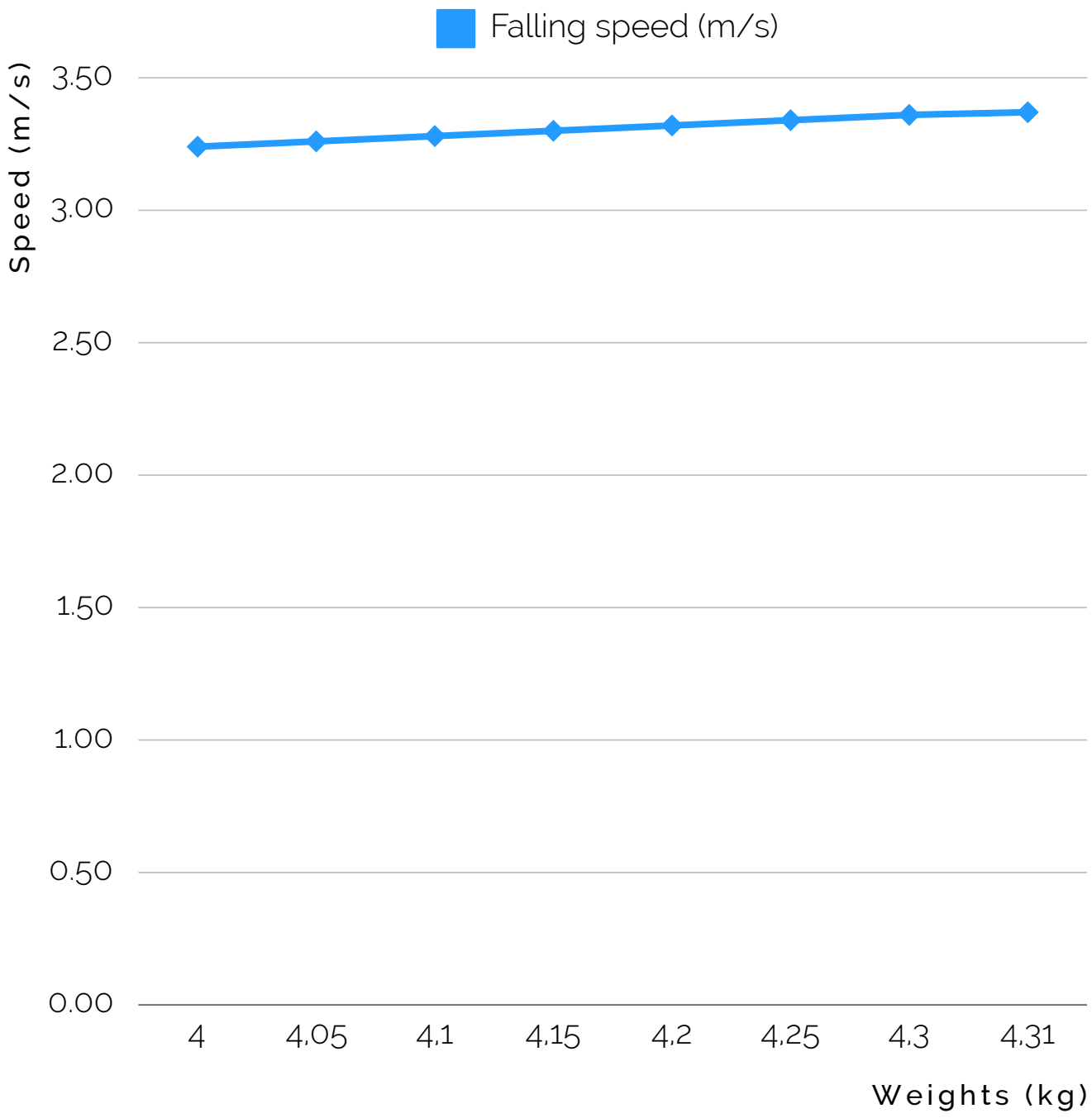
| Dronavia Channel

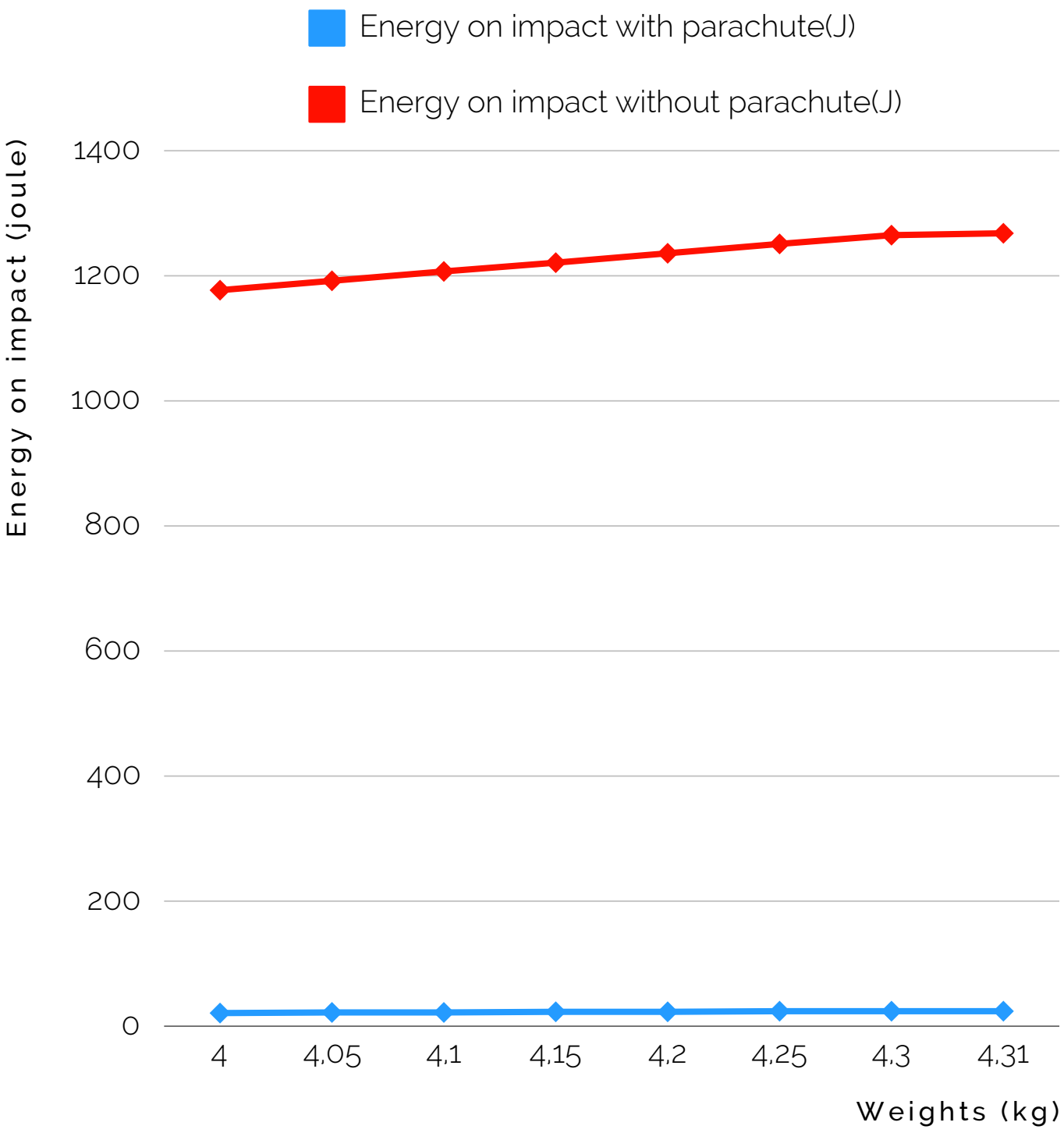
APPENDICES

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



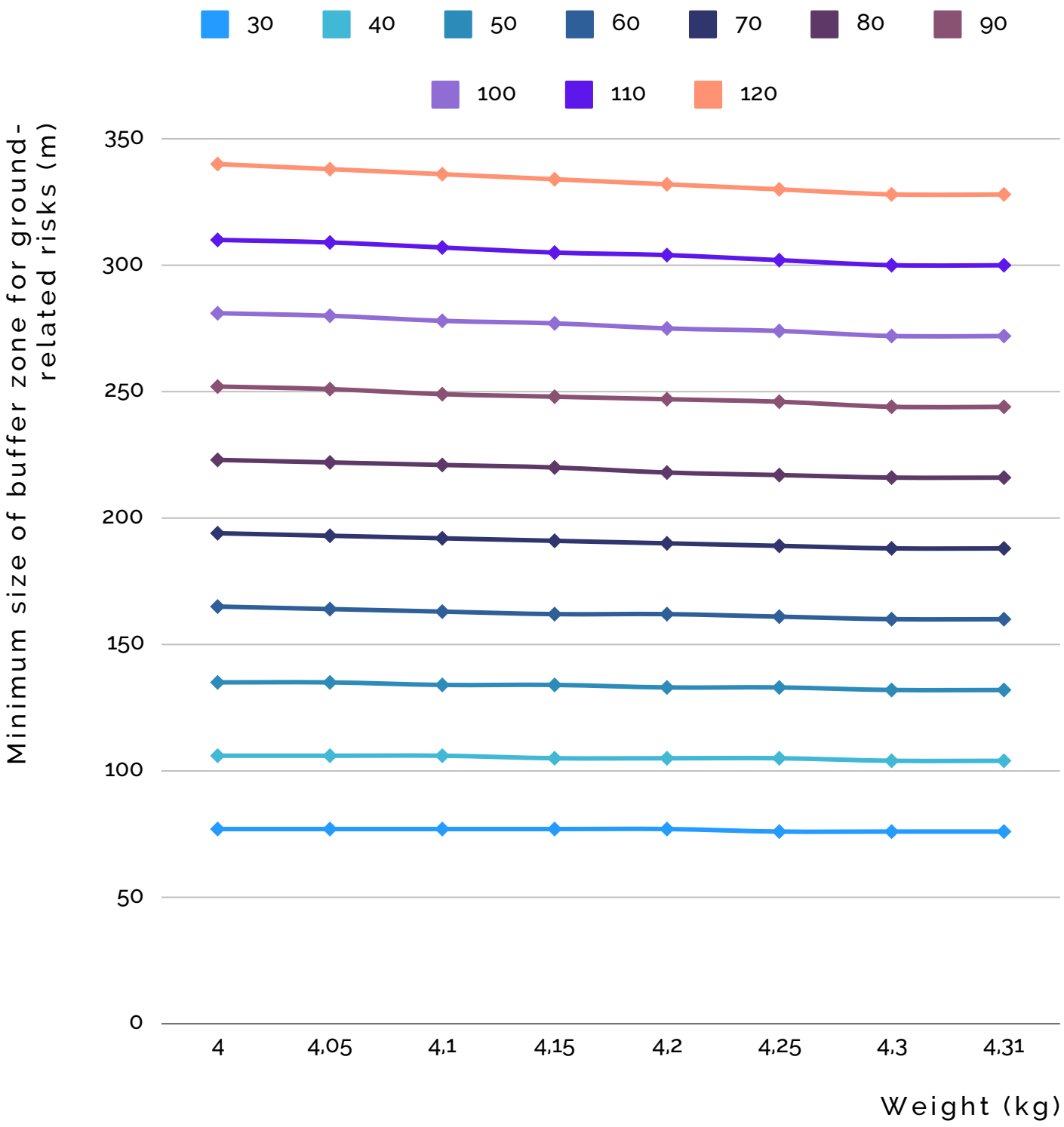
APPENDICES

Impact energy (joule) X Weight (kg)



APPENDICES

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



VERSION NOTE

Version 2.0

Version 2.1 (07/01/24):

"Changed the cable (USB-C instead of Micro-USB) connecting the PRS to the FTS"

Version 2.2 (04/03/25)

"New battery latch for the installation of the Flight Termination System."