S Dronavia

USER'S MANUAL & INSTRUCTIONS

MOC2511 EXTERNAL FTS FOR

WW.DRONAVIA.COM | +33 (0) 354 400 078 | VERSION 1.

6



INTRODUCTION

- o1 Introduction by our CEO
- 02 General presentation
- ⁰⁵ Warnings and precautions for use
- o7 11 safety instructions to follow



- 10 Components presentation
- 11 Technical specifications
- ¹² Minimum size of buffer zone for soil-related risks
- 13 System installation
- 18 System activation
- 23 Test procedure
- 25 System shutdown and reset
- 26 System disassembly
- 27 FTS resetting

²⁸ 3 MAINTENANCE & GUARANTEE



30 5 CONTACT US

Solution External FTS MOC2511 for DJI Inspire 3

Ш С L F by our

At Dronavia, we've been developing a wide, innovative range of accessories 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 result of more than 8 years of research and innovation, our new range of Kronos FTS has been developed and tested to EASA standards to comply with MOC2511.

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





Dear customer,

Congratulations on your purchase of the new MOC2511 Kronos external FTS for your DJI Inspire 3 drone.

You've chosen the device that we're confident is the best performing system of its kind. Extensive research and testing have gone into making it as safe and effective as possible.

Based in Remiremont, France, DRONAVIA is at your service to advise you on the purchase of your MOC2511 Kronos external FTS for Inspire 3 and to answer any questions of a technical or commercial nature.

GERDER Dresentation



The MOC2511 Kronos external FTS system for Inspire 3 has been developed to meet the requirements of MOC 2511 published by EASA:

"A Flight Termination 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."





The aim of these requirements is to enable the remote pilot to intervene in the event of the drone escaping due to a failure of the flight controller or its sensors. In such situations, autonomous FTS systems can make the difference between a simple scare and a more serious accident. The MOC2511 Kronos external kill switch for Inspire 3 can be activated in less than a second.

DESENTATION



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. DRONAVIA and its distributors may not be held responsible for any malfunction or operation deemed insufficient or even ineffective.

Any use on a drone other than a DJI Inspire 3 is prohibited. The configuration of the FTS system must not be modified so as not to affect its correct operation.

Triggering a drone FTS module is not a harmless, risk-free operation. It should only be carried out in an emergency situation.

DESENTATION



TO BE READ CAREFULLY

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

Before handling the MOC2511 Kronos external FTS system for Inspire 3, you must read this manual carefully. It provides information on how to use the fuse. In addition to the important notes and information given in this manual, the owner of the device must observe all the important instructions given below.

& precautions for use



TO BE READ CAREFULLY

The MOC2511 Kronos external FTS for Inspire 3 is a safety device which, under certain conditions, prevents the drone fitted with it from leaving its regulatory flight envelope by cutting its engines.

Activation of the FTS inevitably results in the drone crashing.

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. The use of the MOC 2511 Kronos external FTS for Inspire 3 should in no way increase your risk.

& precautions for use

INSTRUCTIONS

- 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 Under no circumstances should you dismantle the various parts of the device.
- Do not place the device in a damp or wet environment and keep it out of direct sunlight.
 - 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 -15°C.
- The condition of the MOC2511 Kronos external FTS for Inspire 3 should be checked before each use. Do not use the device if it is damaged or malfunctions. If necessary, contact your dealer.



5

The MOC2511 Kronos external FTS for Inspire 3 cannot prevent the drone from malfunctioning.



Any flight with a drone implies the existence of a risk for equipment and people in the vicinity, with or without a MOC2511 Kronos external FTS for Inspire 3.

TO BE READ CAREFULLY

INSTRUCTIONS

- The use of a MOC2511 Kronos external FTS for Inspire 3 should in no way increase your risk.
- 10 The MOC2511 Kronos external FTS for Inspire 3 must be actively triggered by the user. Regular training is necessary to be able to react correctly in an emergency. For the safety of the equipment and third parties, carry out a dummy ground exercise once a day.
- 11 After switching on the system, if the LED changes to a steady red, the system will not be operational. Contact your reseller for assistance.

TO BE READ CAREFULLY

0

9

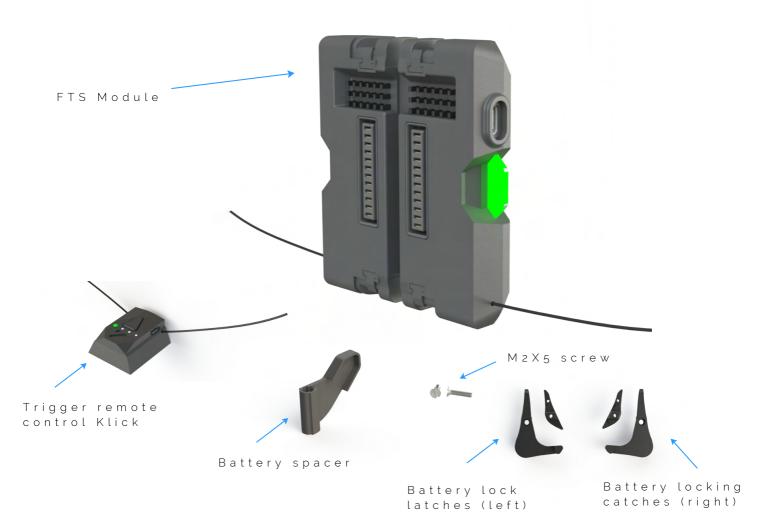


HRONOS SYSTEMS MOC2511 EXTERNAL FTS FOR

0

COMPONENTS

presentation



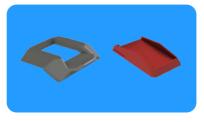
ADDITIONAL ACCESSORIES SUPPLIED



micro-USB cable



Screwdriver PHoo

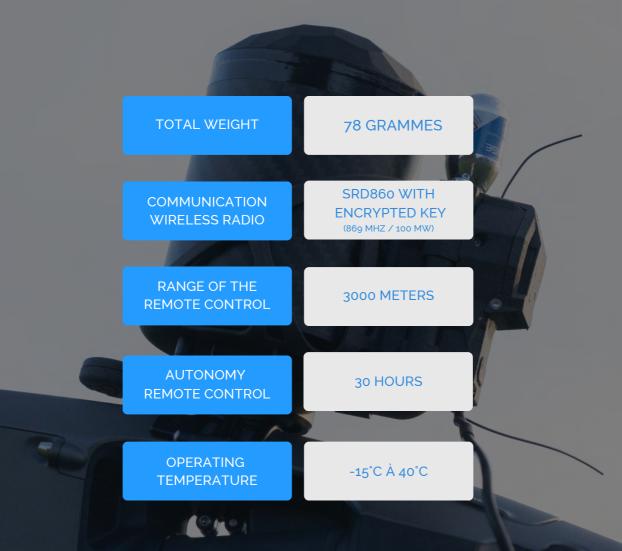


Klick Set



Klick Pin







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



Custom ground risk buffer can be calculated with different UAS parameters and assumptions. Please refer to the dedicated document ground risk buffer, if you need to calculate more precise ground risk buffers in accordance with your application.



The Kronos CC I₃ FTS system can be installed in just a few minutes. To install the FTS, please follow the instructions below in order:

Instructions



Remove the batteries from the DJI Inspire 3



2

Position the lower left-hand part of the locking catch, then the upper left-hand part of the locking catch, as shown below. Screw the two parts together using the screws and screwdriver supplied.



Position the lower right-hand part of the locking catch, then the upper right-hand part of the locking catch, as shown below. Screw the two parts together using the screws and screwdriver supplied.





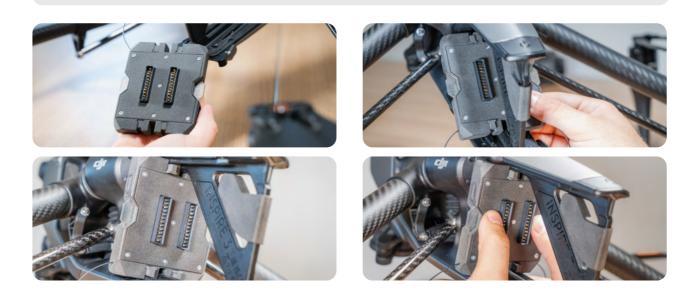
Install the battery spacer by clipping it onto the central part of the DJI Inspire 3 drone.







Insert the FTS module into the bottom of the battery compartment of the DJI Inspire 3.





Insert the DJI Inspire 3 batteries all the way into their slots.





Push the locking catches to their ends to ensure that the batteries are securely connected.





Warning

This step is essential for the correct operation of the drone and the FTS. If you do not push the latches as far as they will go, an error message may appear on your DJI radio control system.

Error notifications

DJI RC Plus remote control screen



OPTIONAL



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.



Your MOC2511 external FTS for Inspire 3 is operational.

ACTIVATION of the FTS system

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

Instructions

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







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





ACTIVATION of the FTS system

The different LED states



OPTIONAL

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

The different LED states



YOUR FTS IS ACTIVE AND OPERATIONAL!

HUCH

manual tripping of the FTS

Consult our Klick user manual



GEOCAGING

automatic triggering 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 triggered at the same time as the engine cut-out.

Instructions



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





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

PROCEDURE FTS system test



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





Stop the rotation of the motors by pressing the release button on the Klick remote control. Check that the motors stop correctly and that the green light on the Klick remote control and on the FTS flashes rapidly.







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.







Switch off your Klick remote control.



DISASSEMBLY of the FTS system

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

Instructions



To disassemble the system, simply follow the installation instructions in reverse order. The Klick remote control module can remain installed on the DJI Inspire 3 radio control 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

To reset the Klick 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.

STORAGE

GUARANTEE

Store the MOC2511 Kronos external FTS system for Inspire 3 in a dry place, at a temperature between 10°C and 30°C, clean and protected from UV light.

Dronavia takes great care in the design and production of its products. We guarantee our FTS systems 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.

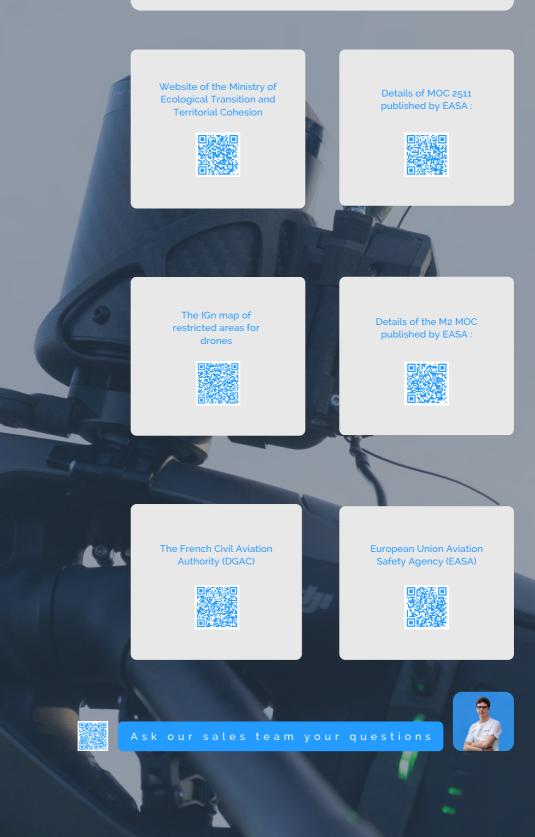
NOTICE OF LIABILITY

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.

ິ

guarantee

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.



to know

29

CONTACT US



() +33 0 54 40 00 78

🖌 distri@dronavia.com

(. M. . 1

www.dronavia.com

0



30