





USER MANUAL AND INSTRUCTIONS

ZÉPHYR MINI RESCUE PARACHUTE FOR AIRCRAFT LESS THAN 1KG WITH AUTOMATIC CRASH DETECTION



Summery

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CONGRATULATIONS! YOU HAVE JUST ACQUIRED YOUR Zéphyr MINI PARACHUTE...

At Dronavia, we have been developing since 2015 a wide and innovative range of accessories to secure your professional drones. Based in Remiremont we manufacture all our products in our workshop in France, in accordance with DGAC standards, ensuring unrivalled quality. The Zéphyr Mini parachute model is part of a new generation of innovative parachutes equipped with an artificial intelligence allowing to detect a crash autonomously. The Zéphyr Mini system also allows you to drop your drone on the back to protect the camera. Compatible with all drones under 1 KG DJI (Mavic 2,3,Air,Pro/Enterprise/FPV), Autel (Evo II), Parrot (Anafi USA & Anafi Ai). It is the most reliable and easy to use system to protect your drone. You will fly safely with the Zéphyr Mini.

LUDOVIC PELLETEY. DRONAVIA CEO



PRESENTATION OF THE ZÉPHYR MINI SYSTEM

Dear customer,

We congratulate you on the purchase of your new rescue parachute for drone of - 1 KG type DJI (Mavic 2 / 3 / Zoom / Pro / Enterprise / Enterprise Dual / FPV), Autel (Evo II & Evo Lite), Parrot (Anafi USA & Anafi Ai) with crash detection: Zéphyr Mini.

You have chosen the device which, we are sure, is the most efficient system of its kind. A lot of research and testing has been done on this system in order to make it as safe and efficient as possible, especially with the help of artificial intelligence crash detection. Our research into the attachment system has also made it possible, in the event of a crash, to protect the camera by allowing the drone to fall backwards. However, we would like to inform you that in the absence of a testing or certification centre for drone rescue parachute devices, we cannot claim to be in compliance with any operating standard.

Based in Remiremont, France, DRONAVIA is at your service to advise you on the purchase of your Zéphyr Mini parachute and to answer any technical or commercial questions.

The Zéphyr Mini parachute has been designed for aircraft weighing less than 1 kg, such as DJI (Mavic 2 / 3 / Zoom / Pro / Enterprise / Enterprise Dual / FPV), Autel (Evo II), Parrot (Anafi USA & Anafi Ai). It has been developed with the objective of deploying as quickly as possible while limiting the drop rate as much as possible.

Indeed, even when properly used and maintained, multi-rotor UAVs can sometimes find themselves in a critical emergency situation in which it is necessary to trigger an immediate rescue system, due to severe weather conditions, radio control transmission failure, technical failure of the propulsion system, loss of GPS signal, etc.

In such situations, parachute rescue systems with AI crash detection can make the difference between a simple scare and a more serious accident. The Zéphyr Mini parachute can be deployed in less than a second and secure your drone.

This emergency device does not preserve the integrity of the equipment, nor the damage to property or people, it is a safety element that complements other safety elements. DRONAVIA and its distributors cannot be blamed for any malfunction or operation deemed insufficient or even ineffective.

MURRNINGS AND PRECAUTIONS FOR USE

Dronavia may suspend the warranty and disclaim any responsibility to any person who does not follow the basic safety instructions given below.

Before handling the Zéphyr Mini, you must read this manual carefully. This manual will inform you about the use of the parachute. In addition to the important notes and information in this manual, the owner of the device must follow all the important instructions listed below.

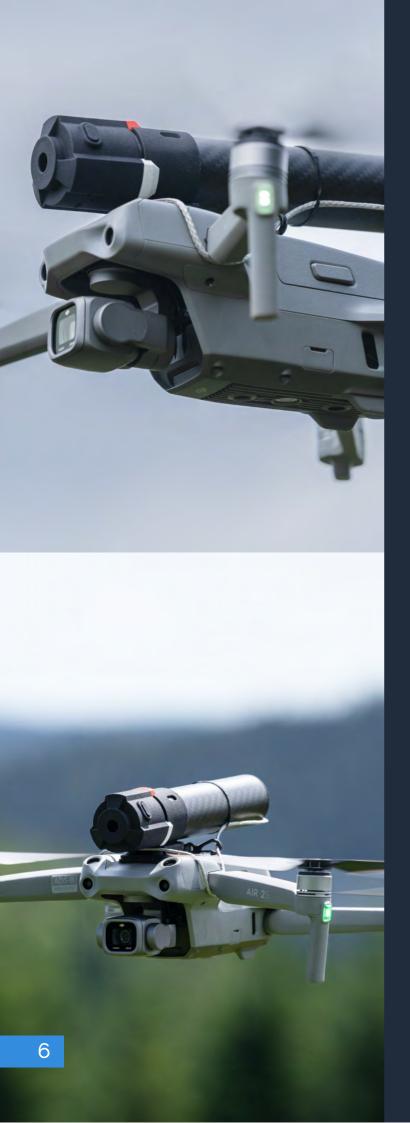
The Zéphyr Mini parachute is a safety equipment which, under certain conditions, prevents the free fall of the drone which is equipped with it. This equipment does not prevent technical problems from occurring on the drone.

Any flight with a drone implies the existence of a danger for the equipment and the people in the vicinity, independently of the equipment used. The use of the Zéphyr Mini parachute should not increase your risk taking. Therefore, please respect the rules below.



THE 15 RULES TO RESPECT

- 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 DISASSEMBLE THE VARIOUS PARTS OF THE DEVICE, EXCEPT DURING THE MAINTENANCE PROVIDED FOR THIS PURPOSE AND IN ACCORDANCE WITH THE INDICATIONS PROVIDED 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, SEVERE SHOCKS, CONTACT WITH CHEMICALS, ACIDS, LONG TERM STORAGE IN HIGH HUMIDITY OR DUST. IMPROPER USE MAY CAUSE THE CO2 CARTRIDGE TO BURST AND ENDANGER YOUR LIFE. THE MAXIMUM OPERATING TEMPERATURE IS 40°C AND THE MINIMUM OPERATING TEMPERATURE IS -15°C.
- 6. THE CONDITION OF THE ZÉPHYR MINI PARACHUTE SYSTEM SHOULD BE CHECKED BEFORE EACH USE. DO NOT USE THE DEVICE IF IT IS DAMAGED, MALFUNCTIONING OR LEAKING. IF NECESSARY, CONTACT YOUR DEALER.
- 7. THE ZÉPHYR MINI PARACHUTE CANNOT PREVENT THE DRONE FROM MALFUNCTIONING.
- 8. ANY FLIGHT WITH A DRONE IMPLIES THE EXISTENCE OF A RISK FOR THE EQUIPMENT AND PEOPLE IN THE VICINITY, WITH OR WITHOUT A ZÉPHYR MINI PARACHUTE.



THE 15 RULES TO RESPECT

- 9. THE USE OF A ZÉPHYR MINI PARACHUTE SHOULD NOT IN ANY WAY INCREASE YOUR RISK-TAKING.
- 10. THE ZÉPHYR MINI PARACHUTE ATTEMPTS TO COUNTERACT THE FREE FALL OF A MALFUNCTIONING UAV. HOWEVER, THERE ARE DROP SITUATIONS WHERE THE EFFECTIVENESS OF THE ZÉPHYR MINI PARACHUTE MAY BE LIMITED OR IMPEDED.
- 11. THE ZÉPHYR MINI PARACHUTE 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 THE EJECTION SYSTEM ONLY WORK ONCE. THEY MUST BE RETURNED TO YOUR DEALER TO BE RECHARGED TO MAINTAIN THE SYSTEM'S WARRANTY. HOWEVER, YOU CAN RECHARGE THE SYSTEM YOURSELF BY FOLLOWING THE INSTRUCTIONS IN THIS MANUAL. IT IS YOUR RESPONSIBILITY TO ENSURE THAT THE SYSTEM'S WARRANTY IS MAINTAINED.
- 13. WHEN RELOADING THE DEVICE, 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 CASE OF UNTIMELY FIRING DURING THIS STAGE OR OF BAD HANDLING, THE FIRING PIN CAN BE EJECTED AND CAUSE SERIOUS INJURIES.
- 14. AFTER THE DEVICE HAS BEEN TRIGGERED, IT IS RECOMMENDED THAT EACH COMPONENT BE CAREFULLY INSPECTED TO ENSURE ITS INTEGRITY. IF IN DOUBT, CONTACT YOUR DEALER.



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

Zéphyr MINI PARACHUTE

INTRODUCTION

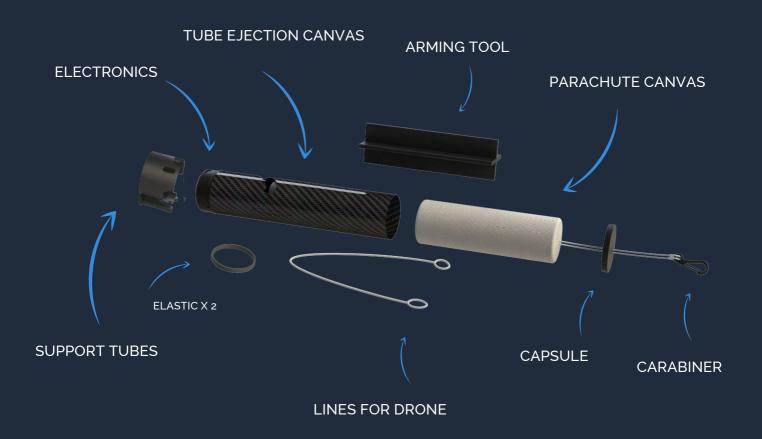
In this section you will find all the information you need to use your Zéphyr Mini parachute.

The activation of a drone rescue system is not a harmless and risk-free act. It should only be done in an emergency situation. We remind you that limiting the impact on the ground does not guarantee the preservation of the aircraft, nor the absence of damage to the ground or injuries to people.

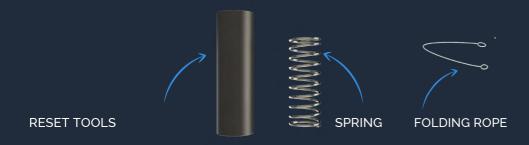
Any use on a drone weighing more than 1 kg is forbidden.

The configuration of the parachute system must not be modified (ejection mechanism, connection elements, lines, etc.) so as not to jeopardise its proper functioning.

PRESENTATION OF THE ELEMENTS



OPTIONAL RESET KIT (32.50€)







PRESENTATION OF THE ELEMENTS

TECHNICAL CHARACTERISTICS OF THE ZÉPHYR MINI PARACHUTE

TOTAL WEIGHT

115G

MAXIMUM WEIGHT OF THE DRONE

1000 G

DEVICE EJECTOR

SPRING PRESTRESSED

MODE TRIGGERING MODE AUTOMATIC
CRASH DETECTION WITH IA
(OPTIONAL MANUAL)

MINIMUM HEIGHT **EFFICIENCY**

FROM 15 METERS

AUTONOMY PARACHUTE

5 HOURS

ENERGY ON IMPACT ON THE GROUND

< 69 JOULES (DRONE OF LESS THAN 900 G)

ORIENTATION OF IMPACT

ON THE BACK OF THE DRONE TO PROTECT THE CAMERA

OPERATING TEMPERATURE

-15°C À 40°C

THE ELEMENTS OF THE SYSTEM

AIR 25

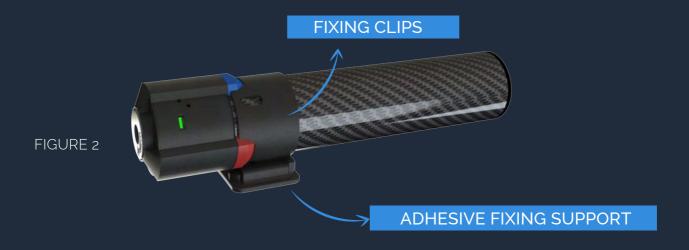
The electronic module of the Zéphyr Mini parachute, located on the top of the carbon tube, contains the electronics dedicated to the system (AI for automatic crash detection), a battery power supply independent from that of the drone and an audible alarm. This module has an ignition button, located on the top of the tube, a USB-C port for recharging the system's battery and an indicator LED on the side. The trigger module, located in the carbon tube, contains the trigger system (pre-stressed spring).



THE ELEMENTS OF THE SYSTEM

AIR 25

The Zéphyr Mini parachute consists of an attachment clip fixed to the carbon tube and an adhesive attachment bracket. (Figure 2) The carbon ejection tube contains the parachute. (Figure 3)





THE ZÉPHYR MINI PARACHUTE SYSTEM CAN BE INSTALLED IN A FEW MINUTES. TO INSTALL THE PARACHUTE, PLEASE FOLLOW THESE INSTRUCTIONS IN ORDER:

1

INSTALL THE ADHESIVE PARACHUTE MOUNT, CENTERED ON TOP OF THE DRONE (FIGURE 4)





- Ensure that the mount allows for battery replacement and that no sensor has its field of view obstructed.
- Ensure that the parachute is centred on the drone.
- Install the adhesive attachments at least 24 hours before use. Adhesive
 fasteners should only be installed on smooth surfaces. Porous or textured
 surfaces do not provide sufficient adhesion. When applying the fastener,
 apply sufficient pressure to allow full contact over the entire surface.
- Apply adhesive fasteners only to clean, dry surfaces. Wax, oil, dirt or other debris will reduce adhesion and may cause the fastener and camera to fall off.
- Install adhesive mounts at room temperature.
- The adhesive in the mounts will not adhere properly if applied in cold or damp environments or on cold or damp surfaces.



<u>Video tutorial on our Youtube channel Dronavia</u>

2

INSTALL THE PARACHUTE ASSEMBLY ONTO THE DRONE, SLIDING THE PARACHUTE MOUNTING CLIP INTO THE ADHESIVE FIXING BRACKET PREVIOUSLY INSTALLED. (FIGURE 5)



FIGURE 5



Video tutorial on our Youtube channel Dronavia

3

PASS THE PARACHUTE LINE UNDER BOTH FRONT ARMS OF THE DRONE (BEHIND THE ADHESIVE FIXING BRACKET ON THE AUDIBLE ALARM SIDE). (FIGURES 6 & 7)



FIGURE 6





Video tutorial on our Youtube channel Dronavia

ATTACH THE CARABINER TO THE LINE BY PASSING IT UNDER THE CARBON TUBE. PASS THE RUBBER BAND AROUND THE TUBE AND THE LINE. ADVANCE THE RUBBER BAND UNTIL THE LINE IS TAUT. (FIGURE 8 & 9)



FIGURE 8



FIGURE 9

YOUR ZÉPHYR MINI PARACHUTE IS OPERATIONAL!



<u>Video tutorial on our Youtube channel Dronavia</u>

WATCH OUR VIDEO TUTORIAL ON HOW TO INSTALL, RESET & PACK THE ZÉPHYR MINI PARACHUTE ON OUR YOUTUBE CHANNEL.





PACTIVATION AND RELEASE OF THE PARACHUTE WITH CRASH DETECTION

TO ENABLE AUTOMATIC CRASH DETECTION, FOLLOW THESE STEPS IN ORDER:

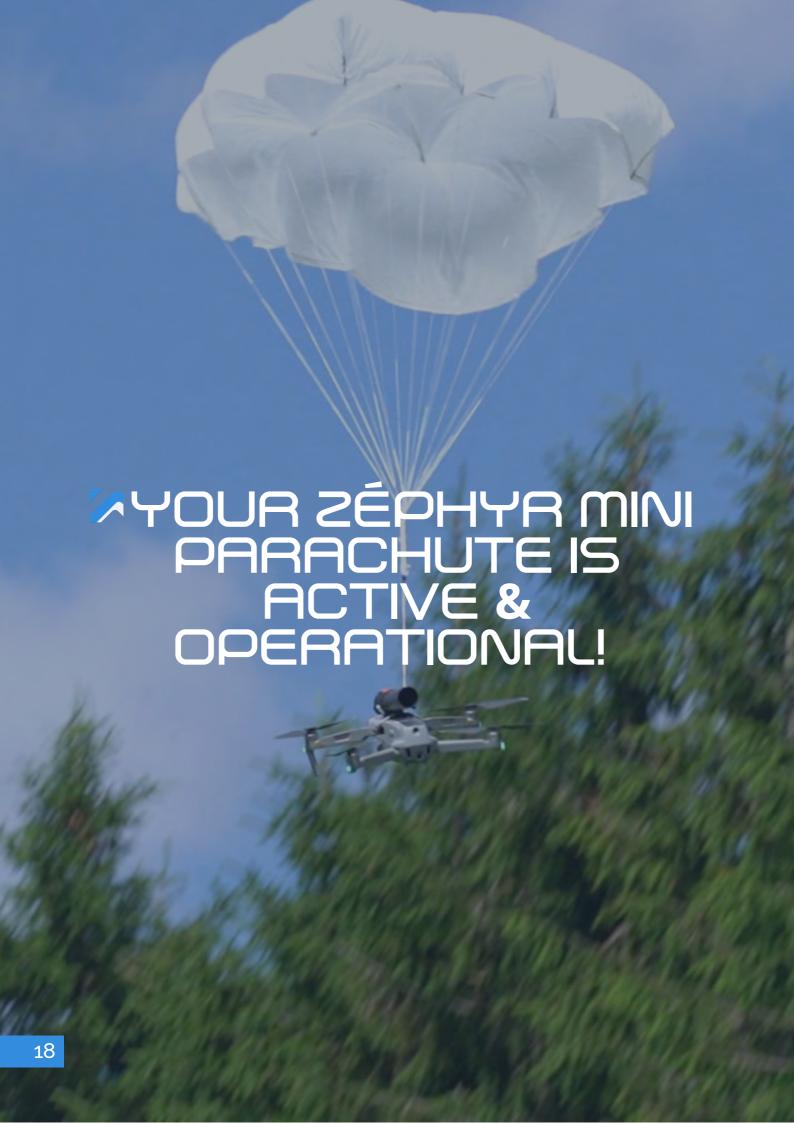
- TURN ON THE PARACHUTE BY HOLDING DOWN THE BLACK IGNITION BUTTON FOR 1 SECOND. THE LED INDICATES THE START-UP BY A COLOUR SEQUENCE, THE AUDIBLE ALARM BEEPS 3 TIMES TO INDICATE ITS CORRECT OPERATION AND THE LED INDICATES THE BATTERY LEVEL (SEE PAGE 19). THE LED WILL THEN FLASH YELLOW TO INDICATE THAT THE PARACHUTE IS POWERED.
- ACTIVATE THE CRASH DETECTION BEFORE TAKING OFF BY DOUBLE CLICKING ON THE IGNITION BUTTON. THE LED WILL TURN SOLID PURPLE DURING AN INITIALIZATION PHASE OF A FEW SECONDS. ATTENTION: THE PARACHUTE MUST BE STILL AND FLAT DURING THIS STEP. THE AUDIBLE ALARM CONFIRMS THE ACTIVATION OF THE CRASH DETECTION WITH A LONG BEEP.
- IF THE LED FLASHES YELLOW AGAIN, THE INITIALIZATION HAS FAILED (MAKE SURE THAT THE DRONE IS WELL STILL AND FLAT), IN THIS CASE START AGAIN FROM STEP 2. IF THE LED FLASHES BLUE THEN THE PARACHUTE AND THE CRASH DETECTION ARE ACTIVATED. YOU CAN TAKE OFF!

YOUR ZÉPHYR MINI PARACHUTE IS ACTIVE!

IT WILL BE TRIGGERED AUTOMATICALLY WHEN A CRASH IS DETECTED



These steps must be done with the parachute on the drone in the flying position on a flat surface. After activating the crash detection, do not handle the drone again as this may trigger the system.



PARACHUTE WITH CRASH DETECTION

TO DISABLE AUTOMATIC CRASH DETECTION, FOLLOW THESE STEPS IN ORDER:

- TO DEACTIVATE THE CRASH DETECTION, DOUBLE CLICK ON THE POWER BUTTON. THE LED WILL BLINK PURPLE TWICE TO CONFIRM THE DEACTIVATION OF THE CRASH DETECTION.
- THE LED FLASHES YELLOW TO INDICATE THAT THE PARACHUTE IS POWERED.

YOUR ZÉPHYR MINI PARACHUTE IS POWERED UP,
THE CRASH DETECTION IS DEACTIVATED!



These steps must be done with the parachute on the drone in the flying position on a flat surface.

SYSTEM SHUTDOWN

TO STOP, TURN OFF AND RESET THE PARACHUTE, FOLLOW THESE STEPS IN ORDER:

1 PRESS AND HOLD (3 SECONDS) THE BUTTON, LED INDICATES BATTERY LEVEL THEN GOES OUT. THE SYSTEM IS OFF.



DISASSEMBLY OF THE PARACHUTE

TO DISMANTLE THE SYSTEM, SIMPLY FOLLOW THE INSTALLATION INSTRUCTIONS IN REVERSE ORDER. FOR EASE OF USE, FIRST REMOVE THE TUBE AND THEN REMOVE THE CARABINER.

>SYSTEM STATES

THE LED INDICATOR HELPS YOU CHECK THE SYSTEM STATUS IN REAL TIME. HERE IS A SUMMARY OF THE DIFFERENT STATES:

1 NORMAL FUNCTIONING







After activating the crash detection, do not handle the drone anymore. To move the drone again deactivate the parachute system by double clicking the button.

CHECKING THE PARACHUTE BATTERY

A SHORT PRESS ON THE PARACHUTE MODULE'S IGNITION BUTTON INDICATES THE REMAINING CHARGE LEVEL BY THE NUMBER OF TIMES THE INDICATOR FLASHES.

LOAD LEVEL OF THE PARACHUTE MODULE:



CHARGINGTHE PARACHUTE

TO CHARGE THE PARACHUTE'S BATTERY, SIMPLY CONNECT A USB-C CORD TO THE USB-C SOCKET LOCATED NEAR THE IGNITION BUTTON AND CONNECT THIS CORD TO A COMPUTER (FIGURE 11 & 12). THE LED WILL GLOW SOLID YELLOW TO INDICATE CHARGING AND SOLID GREEN ONCE THE BATTERY IS FULLY CHARGED.

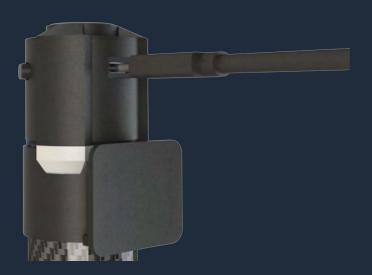




FIGURE 11 FIGURE 12

MANUAL TRISSERING WITH RADIO CONTROL CONTROL (OPTIONAL)

The Zéphyr mini parachute can be triggered manually (while retaining the ability to activate crash detection) if an optional radio control control is purchased with the system (199 € TC). pages 26 to 34 detail the use of the Zéphyr mini parachute with a radio control control.

THE COMPONENTS OF THE RADIO CONTROL

The remote control module consists of a red adhesive base, an oval ignition button on the back, a triangular parachute release button, an indicator LED, three white battery level LEDs, an extension port on the left side and a USB port on the right side for recharging (Figures 13, 14 & 15). The carbon ejection tube contains a parachute cloth (Figure 5).





MINSTALLATION OF THE RADIO CONTROL

INSTALL THE RED BASE OF THE ZÉPHYR REMOTE CONTROL ON THE DRONE REMOTE CONTROL USING THE ADHESIVE PROVIDED (FIGURE 8). THIS BASE FITS ON THE DIFFERENT RADIO CONTROLS, BEFORE GLUING THE BASE PERMANENTLY, DO A POSITIONING TEST (FIGURE 16).

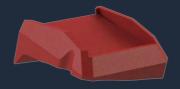


FIGURE 16

2 INSERT THE ZÉPHYR REMOTE CONTROL INTO ITS CRADLE BY SLIDING IT IN FROM THE BACK (FIGURE 17).





FIGURE 17

MANUAL RELEASE OF THE PARACHUTE

- TURN ON THE PARACHUTE BY HOLDING DOWN THE BLACK IGNITION BUTTON FOR 1 SECOND. THE LED INDICATES THE START-UP BY A COLOUR SEQUENCE, THE AUDIBLE ALARM BEEPS 3 TIMES TO INDICATE ITS CORRECT OPERATION AND THE LED INDICATES THE BATTERY LEVEL (SEE PAGE 19). THE LED WILL THEN FLASH YELLOW TO INDICATE THAT THE PARACHUTE IS POWERED.
- TURN ON THE REMOTE CONTROL MODULE BY PRESSING THE IGNITION BUTTON FOR 1 SECOND. WHEN THE LEDS OF THE PARACHUTE AND THE REMOTE CONTROL ARE FLASHING GREEN THE SYSTEM IS OPERATIONAL!

YOUR ZÉPHYR MINI PARACHUTE IS ACTIVE, THE CRASH DETECTION IS NOT ACTIVATED!

- IF YOU WISH TO ACTIVATE THE CRASH DETECTION BEFORE TAKING OFF, DOUBLE CLICK ON THE BUTTON OF THE PARACHUTE OR ON THE RADIO CONTROL CONTROL. THE LED WILL TURN SOLID PURPLE DURING AN INITIALIZATION PHASE OF A FEW SECONDS. ATTENTION: THE PARACHUTE MUST BE STILL AND FLAT DURING THIS STEP. THE AUDIBLE ALARM CONFIRMS THE ACTIVATION OF THE CRASH DETECTION WITH A LONG BEEP.
- IF THE LEDS ARE FLASHING GREEN AGAIN, THE INITIALIZATION HAS FAILED (MAKE SURE THE DRONE IS WELL STILL AND FLAT), IN THIS CASE REPEAT STEP 2. IF THE LEDS FLASH BLUE THEN THE PARACHUTE AND THE CRASH DETECTION ARE ACTIVATED. YOU CAN TAKE OFF!

YOUR ZÉPHYR MINI PARACHUTE IS ACTIVE!

IT WILL AUTOMATICALLY ACTIVATE IN CASE OF CRASH DETECTION



Steps 3 and 4 must be done with the parachute on the drone in the flying position on a flat surface. After activating the crash detection, do not handle the drone again as this may trigger the system.

MANUAL RELEASE OF THE PARACHUTE

TO MANUALLY ACTIVATE THE PARACHUTE, FOLLOW THESE INSTRUCTIONS:

- NEVER ATTEMPT TO ACTIVATE THE PARACHUTE ON THE GROUND.
 REFER TO THE "SYSTEM MAINTENANCE" CHAPTER IF NECESSARY.
- THE ZÉPHYR MINI PARACHUTE IS DESIGNED TO BE ACTIVATED AT A MINIMUM HEIGHT OF 15M / GROUND IN STANDARD ATMOSPHERIC CONDITIONS.
- FOR A FALL FROM A HEIGHT OF 50 M, THE IMPACT ON THE GROUND IS APPROXIMATELY 69 JOULES WITH THE ZÉPHYR MINI PARACHUTE SYSTEM (ON A 900 G DRONE), COMPARED TO 441 JOULES WITHOUT ANY DEVICE.

THIS DATA MAY VARY DEPENDING ON THE ALTITUDE IN RELATION TO SEA LEVEL, THE RELATIVE WIND AND MANY OTHER EXTERNAL FACTORS. THIS IS WHY WE RECOMMEND A MINIMUM HEIGHT OF 15 M / GROUND TO TRIGGER THE ZÉPHYR MINI PARACHUTE SYSTEM AND SUFFICIENTLY LIMIT THE IMPACT OF YOUR DRONE ON THE GROUND.

PARACHUTE RELEASE

IN ORDER TO KEEP THE POSSIBILITY OF TRIGGERING THE PARACHUTE AT YOUR FINGERTIPS AND TO BE AS REACTIVE AS POSSIBLE, A SIMPLE GESTURE ALLOWS YOU TO TRIGGER THE PARACHUTE SYSTEM AND TO CUT THE MOTORS (IF A FTS IS INSTALLED).

SIMPLY PRESS THE TRIANGULAR BUTTON ON THE REMOTE CONTROL. FOR SAFETY REASONS, IT IS NECESSARY TO HOLD THE POSITION FOR AT LEAST 1 SECOND UNTIL THE LED FLASHES GREEN OR TURQUOISE RAPIDLY AND TO MAKE SURE THAT THE CONTACT IS MADE CORRECTLY (FIGURE 18).



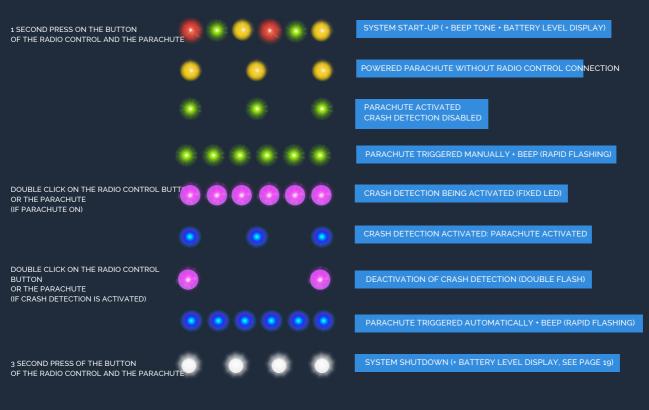
FIGURE 18

ONCE THE LED FLASHES GREEN OR TURQUOISE RAPIDLY, THE SYSTEM HAS BEEN SUCCESSFULLY TRIGGERED.

SYSTEM STATES WITH RADIO CONTROL

THE LED INDICATOR HELPS YOU CHECK THE SYSTEM STATUS IN REAL TIME. HERE IS A SUMMARY OF THE DIFFERENT STATES:

1 NORMAL OPERATION



2 SYSTEM ALERTS

3 CHARGING THE BATTERY

CHARGE DE LA BATTERIE
(LED ALLUMÉE)

SYSTEM ERROR (FIXED LED)

BATTERY CHARGED
(LED ON)



Après activation de la détection de crash, ne manipulez plus le drone. Pour déplacer le drone à nouveau désactivez le système parachute avec un double clic sur le bouton.

CHECKING THE REMOTE CONTROL BATTERY

FOUR INDICATOR LIGHTS ALLOW YOU TO CHECK THE BATTERY LEVEL OF THE ZÉPHYR REMOTE CONTROL. A SHORT PRESS ON THE REMOTE CONTROL'S POWER BUTTON INDICATES THE REMAINING BATTERY LEVEL ACCORDING TO THE NUMBER OF INDICATORS LIT (FIGURE 19).

25%

50%

75%

100%





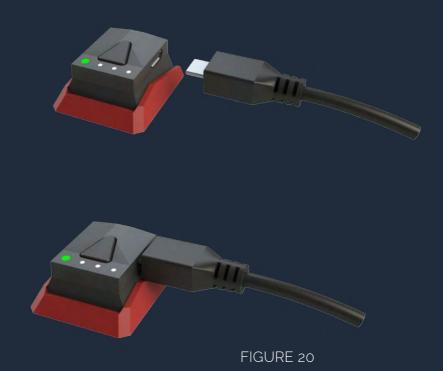




FIGURE 19

CHARGING THE REMOTE CONTROL BATTERY

TO CHARGE THE REMOTE CONTROL BATTERY, SIMPLY CONNECT A MICRO USB CABLE TO THE MICRO USB SOCKET ON THE RIGHT AND CONNECT THE CABLE TO A COMPUTER (FIGURE 20). THE STATUS LED WILL TURN SOLID YELLOW TO INDICATE CHARGING AND SOLID GREEN ONCE THE BATTERY IS FULLY CHARGED.



SAFETY BUTTON OF THE (OPTIONAL)

BUTTON. THE SAFETY BUTTON ADDS A SECOND RELEASE BUTTON TO THE SYSTEM TO PREVENT UNWANTED TRIGGERS FROM INADVERTENTLY PRESSING THE RELEASE BUTTON ON THE ZÉPHYR REMOTE. THE SECURITY BUTTON COMES WITH A CONNECTION CABLE, TO CONNECT IT TO YOUR ZÉPHYR REMOTE CONTROL, SIMPLY CONNECT THE CABLE BETWEEN THE SECURITY BUTTON AND THE REMOTE CONTROL (FIGURES 21, 22, 23 & 24).



INSTALLATION OF THE SAFETY BUTTON (OPTIONAL)







Check before each take-off that the safety button is correctly connected to the Zéphyr remote control.

SYSTEM TRIGGERING WITH SAFETY BUTTON (OPTIONAL)

IF YOUR ZÉPHYR REMOTE CONTROL IS EQUIPPED WITH AN OPTIONAL SECURITY BUTTON, SIMPLY PRESS THE TWO TRIANGULAR BUTTONS ON THE REMOTE AND THE SECURITY BUTTON SIMULTANEOUSLY.

FOR SAFETY REASONS, IT IS NECESSARY TO HOLD THE POSITION FOR AT LEAST 1/2 SECOND UNTIL THE LED FLASHES GREEN RAPIDLY AND TO ENSURE THAT THE CONTACTS ARE MADE CORRECTLY (FIGURE 25). ONCE THE LED FLASHES GREEN RAPIDLY, THE MOTORS HAVE BEEN CORRECTLY SWITCHED OFF.



PROCEDURES & MAINTENANCE

INTRODUCTION

TO KEEP YOUR PARACHUTE FUNCTIONING OPTIMALLY, IT IS NECESSARY TO CARRY OUT REGULAR CHECKING AND MAINTENANCE PROCEDURES.

REPLACING YOUR CO2 CARTRIDGE, REARMING YOUR PARACHUTE, CHECKING THE SPRING OF YOUR PARACHUTE, FOLDING THE CANVAS, ALL THESE PROCEDURES ARE TO BE CARRIED OUT EITHER IN A PREVENTIVE WAY, OR AFTER A TRIGGERING. SOME PROCEDURES BEING COMPLEX OR DANGEROUS WE ADVISE YOU TO OPT FOR THE MANUFACTURER'S MAINTENANCE SERVICE THAT DRONAVIA OFFERS.

IF YOU WISH TO DO IT YOURSELF, DRONAVIA DISENGAGES ITS RESPONSIBILITY FOR THE SYSTEM, IN ADDITION TO CANCELLING THE WARRANTY IF YOU CHOOSE TO REARM THE SYSTEM YOURSELF.

YOU CAN PURCHASE A REARMING KIT DETAILING ALL THE NECESSARY STEPS AND A SPECIFIC TOOL TO FACILITATE REARMING. THE KIT IS AVAILABLE FOR €32.50.



YOU SHOULD CARRY OUT PREVENTIVE MAINTENANCE ON YOUR PARACHUTES EVERY YEAR.

CHANGE THE SPRING EVERY YEAR. A SPRING THAT HAS BEEN LEFT IN COMPRESSION FOR TOO LONG WILL GRADUALLY LOSE ITS ELASTICITY. IT IS THEREFORE RECOMMENDED TO REPLACE IT PREVENTIVELY IN ORDER TO MAINTAIN AN OPTIMAL PERCUSSION SPEED WITH THE CO2 CARTRIDGE.

UNFOLD, CHECK, VENTILATE AND REFOLD THE CANVAS EVERY YEAR. A TARPAULIN THAT REMAINS FOLDED INSIDE THE EJECTOR BARREL BECOMES MARKED OVER TIME AND MAY TAKE LONGER TO OPEN THAN A NEWLY FOLDED TARPAULIN. IT IS THEREFORE RECOMMENDED TO UNFOLD IT, VISUALLY INSPECT IT AND REFOLD IT PERIODICALLY.

POST-TRIGGER MAINTENANCE

YOU MUST CARRY OUT POST-TRIGGER MAINTENANCE AFTER EACH ACTIVATION OF YOUR PARACHUTES.

- THE CO2 CARTRIDGE MUST BE REPLACED AFTER EACH ACTIVATION (SEE CO2 CARTRIDGE REPLACEMENT).
- CHECK THE TIP OF THE HARDENED STEEL FIRING PIN. THE IMPACT OF THE FIRING PIN ON THE LID OF THE CO2 CARTRIDGE CAN WEAR OUT THE TIP AND MAKE IT LESS PROMINENT. THE TIP MUST BE REPLACED SYSTEMATICALLY AFTER A MAXIMUM OF 4 FIRINGS.
- VISUALLY INSPECT THE CARBON EJECTION CYLINDER TO ENSURE THAT IT IS NOT DAMAGED AS A RESULT OF PARACHUTE EJECTION (E.G. BARREL CRACKS).
- VISUALLY INSPECT THE CANVAS FOR DAMAGE, HOLES OR CONTAMINATION.
- INSPECT THE LINES FOR DAMAGE.
- MORE GENERALLY, CHECK FOR EXTERNAL DAMAGE.
- VENTILATE THE PARACHUTE FOR ABOUT 12 HOURS.

MANUFACTURER MAINTENANCE OFFER

IN ORDER TO KEEP YOUR SYSTEM IN OPTIMAL WORKING CONDITION, A MANUFACTURER'S MAINTENANCE PACKAGE IS AVAILABLE. THIS MAINTENANCE INCLUDES ALL THE DIFFERENT MAINTENANCE STEPS PRESENTED IN THE SECTIONS "PREVENTIVE MAINTENANCE" AND "POST-TIPPER MAINTENANCE".

THIS PACKAGE ALSO COVERS THE RETURN TRANSPORT COSTS FOR THE PARACHUTE SYSTEM AND ITS REMOTE CONTROL.

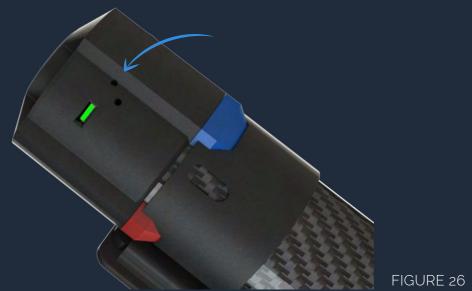
BUILDER MAINTENANCE RATE: 62.50 € EXCL.

FOR ANY MAINTENANCE REQUEST, PLEASE
CONTACT DRONAVIA AT 03 54 40 00 78 OR BY E-MAIL
AT ATELIER@DRONAVIA.COM.

PARACHUTE MODULE

RESETTING THE PARACHUTE MODULE:

TO RESET THE PARACHUTE MODULE, THE RESET BUTTON IS LOCATED ON THE BACK OF THE PARACHUTE MODULE (FIGURE 26). SLIP A PAPER CLIP OR OTHER THIN OBJECT INTO THE BUTTON AND A SHORT PRESS WILL RESET THE PARACHUTE.



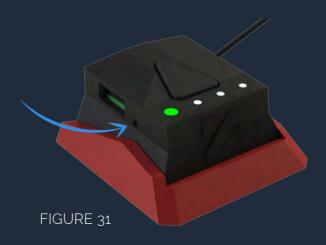
IF YOUR PROBLEM PERSISTS, CONTACT YOUR DEALER.

RADIO CONTROL CONTROL RESET

TO RESET YOUR REMOTE CONTROL, FOLLOW THESE STEPS:

IN CASE OF A MALFUNCTION, A BUG OR IF THE SYSTEM DOES NOT RESPOND ANYMORE, A RESET MANOEUVRE ON THE REMOTE CONTROL CAN SOLVE YOUR PROBLEM.

TO RESET THE REMOTE CONTROL, YOU WILL FIND A SMALL HOLE ON THE LEFT SIDE (FIGURE 30).



SLIP IN A PAPER CLIP OR OTHER THIN OBJECT, A SHORT PRESS WILL RESET THE RADIO CONTROL.

FOLDING THE CANVAS

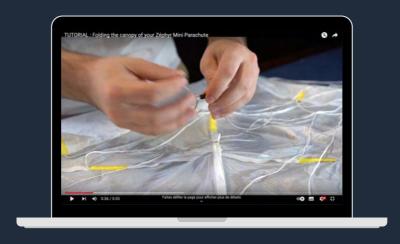
FOLDING THE CANVAS:

FOLDING THE CANVAS OF THE ZÉPHYR MINI REQUIRES METHODOLOGY AND RIGOUR AS IT IS ESSENTIAL TO FOLD THE CANVAS ACCORDING TO PRECISE CRITERIA AND A DEFINED CHRONOLOGY. IF YOU DO NOT FEEL CAPABLE OF DOING THIS, WE STRONGLY ADVISE YOU TO CALL ON COMPETENT OR SPECIALISED PEOPLE, OR TO CONTACT DRONAVIA FOR A WORKSHOP RETURN.

BEFORE FOLDING, TAKE THE OPPORTUNITY TO:

- VISUALLY INSPECT THE CANVAS FOR DAMAGE, HOLES OR CONTAMINATION.
- INSPECT THE LINES FOR DAMAGE.
- VENTILATE THE CANVAS FOR A DOZEN HOURS.

WATCH OUR VIDEO TUTORIAL FOR PACKING THE ZÉPHYR MINI PARACHUTE ON OUR YOUTUBE CHANNEL.



Watch now

MAINTENANCE & GUARANTEES

PARACHUTE STORAGE

STORE THE ZÉPHYR MINI RESCUE PARACHUTE IN A DRY, COOL, CLEAN AND UV PROTECTED PLACE.

SPECIFIC MAINTENANCE

IN CASE OF CONTACT WITH MOISTURE, YOU MUST DRY THE CANVAS IMMEDIATELY TO AVOID MOULD. CONTACT WITH PETROL OR OTHER SOLVENTS AND CHEMICALS CAN CONSIDERABLY REDUCE THE STRENGTH OF THE CANVAS. THE PARACHUTE AND LINES SHOULD BE CLEANED ONLY WITH WATER WITHOUT SOAP AND THEN DRIED.

GUARANTEE

DRONAVIA TAKES GREAT CARE IN THE DESIGN AND PRODUCTION OF ITS PRODUCTS. WE GUARANTEE OUR PARACHUTES FOR ONE YEAR FROM THE DATE OF PURCHASE AGAINST ANY DEFECT OR DESIGN FAULT THAT MAY OCCUR IN THE COURSE OF NORMAL USE OF THE PRODUCT. ANY ABUSE OR INCORRECT USE, ANY EXPOSURE TO AGGRESSIVE FACTORS (HIGH HUMIDITY, HIGH TEMPERATURE...) THAT WOULD 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 JUDGMENT. BE CAUTIOUS, TRAIN IN APPROPRIATE STRUCTURES, TAKE OUT INSURANCE AND COMPLY WITH THE REQUIREMENTS DEFINED BY THE DGAC ORDERS OF 11 APRIL 2012 AND 17 DECEMBER 2015.

ZUSEFUL LINHS



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.

WEBSITE OF THE MINISTRY OF ECOLOGY & SUSTAINABLE DEVELOPMENT AND ENERGY

http://www.developpementdurable.gouv.fr/quelle-place-drones-dans-cielfrancais

DETAILS OF THE ORDER OF 11/04/2012:

https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000025834986

DETAILS OF THE ORDER OF 17/12/2015:

https://www.legifrance.gouv.fr/eli/arrete/2015/12/ 17/DEVA1528469A/jo

MAP OF DRONE RESTRICTION AREAS BY THE IGN

https://www.geoportail.gouv.fr

THE DIRECTORATE GENERAL OF CIVIL AVIATION (DGCA)

https://www.ecologie.gouv.fr/direction-generalelaviation-civile-dgac



Remember that you are flying under your own responsibility!



MORE ABOUT DRONAVIA

AT DRONAVIA, WE HAVE BEEN DEVELOPING A WIDE RANGE OF INNOVATIVE ACCESSORIES TO SECURE YOUR PROFESSIONAL DRONES SINCE 2015. BASED IN THE EAST OF FRANCE, WE MANUFACTURE ALL OUR PRODUCTS IN OUR WORKSHOP, IN ACCORDANCE WITH THE DGAC STANDARDS, ENSURING AN UNRIVALLED QUALITY.

FROM PARACHUTES, FTS, IDENTIFICATION BEACONS, APPROVALS FOR S1, S2, S3 SCENARIOS, WE COVER ALL THE NEEDS OF PROFESSIONAL DRONE PILOTS. CURRENTLY THE LEADER IN THE FRENCH MARKET WITH A GROWTH RATE OF 45% PER YEAR & ALWAYS AT THE LEADING END OF INNOVATION IN ITS SECTOR, DRONAVIA ANTICIPATED THE FUTURE EUROPEAN REGULATIONS EN-4709 AND WILL OFFER A NEW RANGE OF PRODUCTS MEETING THIS NEW CERTIFICATION AS OF 2023.

WE HAVE ALREADY EQUIPPED & CERTIFIED NEARLY 5000 DRONES.



FIND OUR YOUTUBE PLAYLIST ZÉPHYR MINI

