



HELITE Turtle 2 Airbag Vest User Guide

[Home](#) » [HELITE](#) » HELITE Turtle 2 Airbag Vest User Guide 

Contents

- 1 HELITE Turtle 2 Airbag Vest
- 2 Product Information
- 3 Product Usage Instructions
- 4 CERTIFICATIONS
- 5 FCC Statement
- 6 PRODUCT PRESENTATION
- 7 PRECAUTIONS FOR USE
- 8 BEFORE FIRST USE
- 9 DAILY USE
- 10 REUSING THE AIRBAG SYSTEM AFTER INFLATION
- 11 MEANING OF LEDS AND BEEPS
- 12 SERVICING AND MAINTENANCE
- 13 WARRANTY AND AFTER SALES SERVICE
 - 13.1 DISCLAIMER
- 14 Documents / Resources
 - 14.1 References



HELITE Turtle 2 Airbag Vest



Product Information

Airbag e-Turtle 2 (TURTLE II ELECTRONIC)

The Airbag e-Turtle 2 is a protective airbag vest designed for use while riding motorcycles. It comes with two cartridge options: e-60 cc and e-100 cc. The size of the cartridge varies depending on the size of the vest. The airbag vest is available in the following sizes:

Size	Height	Chest Circumference	Cartridge Size
XS	145-165 cm	80-95 cm	e-60 cc
S	155-170 cm	85-95 cm	e-60 cc
M	165-178 cm	90-100 cm	e-60 cc
L	170-185 cm	95-105 cm	e-60 cc
L-L	170-185 cm	100-120 cm	e-100 cc
XL	180-195 cm	100-110 cm	e-60 cc
XL-L	180-195 cm	105-140 cm	e-100 cc

The airbag vest provides protection in specific areas and has a rechargeable battery.

Product Usage Instructions

Pairing the Fork Sensor SDU with the Airbag Vest (optional)

1. Turn on the airbag vest by quickly pressing the ON/OFF button three times. A beep will sound, and a green LED will flash.
2. Install the Fork Sensor SDU on your motorcycle (optional).

Charging the Airbag Vest Battery

If the battery is low, an orange LED will flash. To recharge the battery:

1. Connect the airbag vest to a standard USB charger (5 VDC). Use a charger with a current output of 1A (symbol for direct current).
2. Plug the USB charger into a power outlet.
3. The orange LED will remain steady to indicate that the battery is charging.

Storing and Transporting the Airbag Vest

When not in use, properly store and transport the airbag vest to protect it from damage.

Reconditioning the Airbag Vest

Refer to the CDU (Control and Display Unit) for instructions on reconditioning the airbag vest.

LED and Beep Functions

LED + Beeps	Status	Action
Flashing green LED + No beep	Normal Operation	The airbag vest is active and functioning correctly. It can be used.
Flashing orange LED + No beep	Low Battery	Recharge the airbag vest. Approximately 2 hours of battery life remaining.
Steady orange LED + No beep	Battery Charging	The airbag vest is being charged.
Steady blue LED + 1 beep every 5 seconds for 30 seconds	Fork Sensor SDU Pairing in Progress	You have 30 seconds to place the magnet on the Fork Sensor SDU.
Steady blue LED + 2 beeps	Fork Sensor SDU Pairing Active	The airbag vest and Fork Sensor SDU are successfully paired.

Maintenance and Care of the Airbag Vest

Refer to the user manual for instructions on washing, maintenance, and recycling of the airbag vest.

Warranty and Customer Support

For warranty information and customer support, refer to the user manual.

THANK YOU FOR YOUR PURCHASE

In order to correctly use your product, please read this user guide carefully. It concerns the airbag TURTLE II ELECTRONIC (e-Turtle 2) using an electronic trigger system made by Helite. This user guide may change over time, please refer to the product section of the website www.helite.com for the latest version. The pictures and images used in this user guide are not contractual and can be modified without any prior notification. Please make sure to store your user guide in a safe place.

CERTIFICATIONS

The product TURTLE II ELECTRONIC (e-Turtle 2) is CE certified by ALIENOR CERTIFICATION (Zone du Sanital, 21 Rue Albert Einstein CHATELLERAULT-France) notified body n° 2754 following the CRITT-SL protocol n° AMC-012 : 02/2020. This product complies with the requirements of the EU regulation 2016/425. The EU declaration of conformity can be consulted on the helite.com website.

The CDU electronic card is certified IEC 62368-1 / EN-62368-1 / UL62368-1 / CSA62368-1 by TÜV Rheinland (Tillystr. 2, 90431 Nürnberg, Germany) notified body no. 0197.

Helite declares that the CDU electronic card complies with the essential requirements and other relevant provisions of the RED (Radio Equipment Directive) 2014/53/EU and RoHS 2011/65/EU.

ISED Statement:

For general products, this device contains licence-exempt transmitter(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. this device may not cause interference ;
2. this device must accept any interference, including interference that may cause undesired operation of the device.

FCC Statement

For general product, this device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference;
2. this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:—Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

WARNINGS

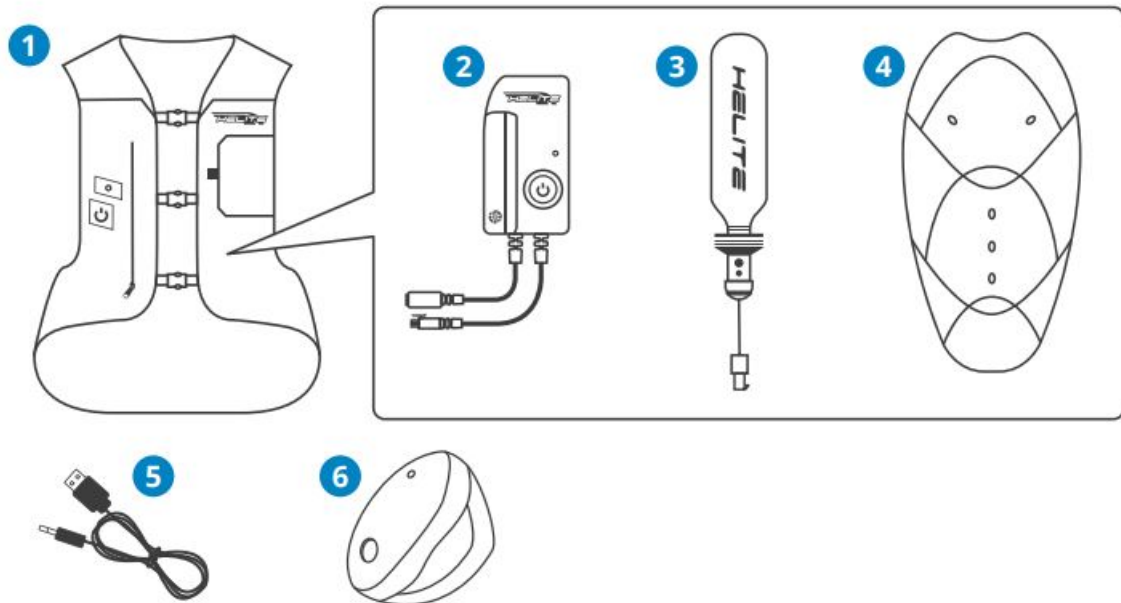
- The user must ensure that the airbag is functioning properly before using it.
- Improper use of the airbag can dangerously reduce its performance or even prevent it from functioning.
- The airbag is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the airbag system.
- The airbag has been designed to be used for urban motorcycle use only. It must not be used for any other application including: motocross, trial, freestyle, pit bike, race track, acrobatic tricks (rearing, wheeling, swerving), bicycle, horse riding, skiing,... and other sports.
- Wearing an airbag should not encourage you to exceed your limits or take additional risks.
- The user must respect the speed limits and traffic regulations in force in the country where he or she is driving.
- The airbag can in no way be considered a substitute for protective equipment such as helmet, gloves, motorcycle clothing, etc.

RESTRICTIONS: PEOPLE WHO CANNOT WEAR THE AIRBAG

- People with pacemakers or other medical devices should not use the airbag without consulting their doctor. The risk of interference with these devices has not been tested.
- People with medical conditions or who have recently undergone surgery in the areas covered by the airbag (abdomen, thorax, back, cervicals, etc.) should not use the airbag without consulting their doctor.
- People with breast implants should not use the airbag without consulting their doctor.
- Pregnant women are not allowed to use the airbag.
- Children who are too young or too small and who do not have the required size (no corresponding size) must not wear the airbag. Otherwise, for proper use of the airbag, a child must always be accompanied by a responsible adult.

PRODUCT PRESENTATION

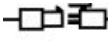
a) The elements of the TURTLE II ELECTRONIC (e-Turtle 2)



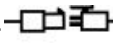
1. Airbag vest

- It integrates the CDU electronic card, the e-cartridge, the airbag system, and the SAS-TEC back protector level 2. It is worn over your motorcycle garment.

2. CDU electronic card

- It analyzes the situation in real time (position of the rider in space, movement, speed, etc.) and detects accidents or falls. It incorporates a non-removable Lithium Ion Cylindrical Battery 3.70V 2600mAh. It has 2 cables: a cable to recharge the battery and a cable to connect the e-cartridge  (locking connector). The CDU electronic card must be used exclusively inside the airbag vest. You must not remove it from the airbag vest, or use it outside, alone, or in another textile.
- RF characteristics: 868MHz -916MHz (0dBm).
- GPS reception frequency: 1565.42 – 1585.42MHz (GPS) / 1602 – 1610 MHz (GNSS).

3. E-cartridge with pyrotechnic triggering system

- It consists of pressurized CO2 gas, a pyrotechnic triggering system, and a locking connector . The airbag vest comes with a new cartridge already installed and ready to use. If a fall or accident is detected, the pyrotechnic triggering system integrated in the cartridge will pierce its cover and release the gas that will inflate the airbag. The cartridge can be replaced easily and quickly by the user (see page 33). It is recommended to always have a spare cartridge.
- The TURTLE II ELECTRONIC (e-Turtle 2) has 2 cartridge references: e-60 cc and e-100 cc. The size of the cartridge varies according to the size of the airbag vest for an optimal protection volume that adapts to your body type. To find out the reference of your cartridge, please refer to its label, to the marking next to the cartridge on the airbag vest or by consulting the size chart of your product

PRECAUTIONS FOR USING THE CARTRIDGE

- The cartridge is for single use only and must be replaced after each inflation with a new cartridge of the same reference.
- Use only Helite brand cartridges available from your dealer or on the helite.com website.
- Gas cartridges are considered hazardous materials and should be kept out of reach of children and used with care.

- Never plug in the cartridge until it is completely screwed into its slot.
- If rust stains or signs of deterioration appear on the cartridge, replace it immediately and contact your dealer or Helite at sav@helite.com.
- The cartridge should be stored at temperatures between 0°C (32°F) and 45°C (113°F). It should be stored away from moisture and light.
- If the cartridge has been stored at temperatures below 0°C (32°F), we recommend keeping it at ambient temperature for several minutes before using your airbag vest to avoid malfunction of the airbag.
- Do not expose the cartridge for a long period of time to high temperatures (in full sun in a car, near a radiator, etc.) near a surface or flammable objects.
- Do not hit the cartridge, do not drop it, do not cut or pierce it, and do not throw it into fire.
- Caution, the gas inside the cartridge is compressed to a very high pressure.
- Find more information about the annual verification of the cartridge on its recycling and its warranty

SAS-TEC back protector level 2

- It is integrated into the airbag vest and provides a big improvement in protection (TURTLE Technology).

USB cable

- It allows to recharge the battery of the airbag vest CDU electronic card (see page 31). Please note: only the USB cable is supplied, you will then have to connect it to a standard USB charger (5 VDC).

SDU fork sensor (optional)

- It detects abnormal movements of the motorcycle and communicates with the CDU electronic card by radio frequency. It is installed under the fork of the motorcycle. Under optimal conditions, the SDU fork sensor has an autonomy of about 5 years. It is not rechargeable. We advise you to check its working condition at least once a month. It is supplied with the SDU fork sensor. A magnet is provided to pair the airbag vest with the SDU fork sensor (see page 28) and for regular checks. To learn more about the SDU fork sensor and its conditions of use, please refer to its dedicated user guide.

b) Size of the airbag vest

For optimal protection, be sure to choose the right size of the airbag vest for your body type. This chart (in cm) shows the area of protection covered by the airbag and the cartridge references to be used.

Airbag vest	XS	S	M	L	L-L	XL	XL-L
Height	145-165	155-170	165-178	170-185	170-185	180-195	180-195
Chest line	80-95	85-95	90-100	95-105	100-120	100-110	105-140
Shoulder-to-weight distance	38-46	40-50	43-53	47-57	47-57	51-61	51-61
Cartridge reference	e-60 cc	e-60 cc	e-60 cc	e-60 cc	e-100 cc	e-60 cc	e-100 cc

c) Airbag protection areas



The airbag protects vital areas in the event of a fall or accident (thorax, abdomen, neck, back, hips, sacrum). Its protection volume effectively absorbs shocks and its shape stabilizes the chest, thus limiting the risk of hyperflexion of the spine.

CAUTION

The airbag cannot provide total protection against injury but it reduces the risk. Body parts that are not covered by the airbag are not protected. The protection of the airbag is only guaranteed in the inflated state.

d) Detection of accidents and falls

The Helite electronic system detects several configurations of accidents or falls. It analyzes movements, speed, impacts and uses a GPS signal.

- When the motorcycle is stationary or moving at a speed of less than 18 km/h when using the SDU fork sensor: motorcycle being hit (front, side or rear).
- **WAR-NING**, if you have not installed the SDU fork sensor or if you do not use it correctly, then you will not be protected at a standstill or at a speed lower than 18 km/h.
- When the motorcycle is moving at a speed greater than 18 km/h: motorcycle being hit (front, side or rear), motorcycle hit a significant obstacle (vehicle, wall, pole, etc.), loss of control of the motorcycle, slipping, high side, low side.

CAUTION

- In case of alteration or absence of GPS signal (tunnel, underground parking, etc.) the detection of an accident or fall cannot be guaranteed.
- In cases of falls or accidents that are too slow or of a too low amplitude, it is possible that the detection is not done in time or not at all.
- The electronic system is sensitive to sudden movements. Do not intentionally perform movements that do not correspond to normal urban riding.
- It is important not to intentionally cause shocks to the SDU fork sensor, as this could damage it and cause unexpected triggers.
- In some extreme situations, the electronic system could be triggered without the user falling.

e) Autonomy

- Under optimal conditions, the airbag vest has an autonomy of approximately 25 hours when it is switched on and active (excluding sleep mode). It switches to sleep mode automatically when no movement is detected for about 45 seconds and wakes up at the first movement. It is recommended to recharge it every week.

- Under optimal conditions, the SDU fork sensor has a battery life of about 5 years. It is not rechargeable. We advise you to check its working condition at least once a month, please refer to its manual for further information.

f) Update

- The Helite electronic system may be subject to change. In case of an important update, you will be contacted by your dealer or Helite.

PRECAUTIONS FOR USE

- The airbag vest should only be used in temperatures between -10 °C (14 °F) and + 45 °C (113 °F). Prolonged exposure of the airbag vest to temperatures outside this range may damage it and affect its function.
- Do not modify or remove any part of the airbag vest.
- Do not sew or glue anything to the airbag vest.
- Do not apply heat transfer to the airbag vest.
- Do not leave objects in the pockets of the airbag vest, especially if they are sharp or pointed. In case of inflation, this could damage the airbag or your objects.
- Anything worn on the airbag vest can slow down or prevent the airbag from inflating, as well as put a lot of pressure on the areas covered by the airbag.

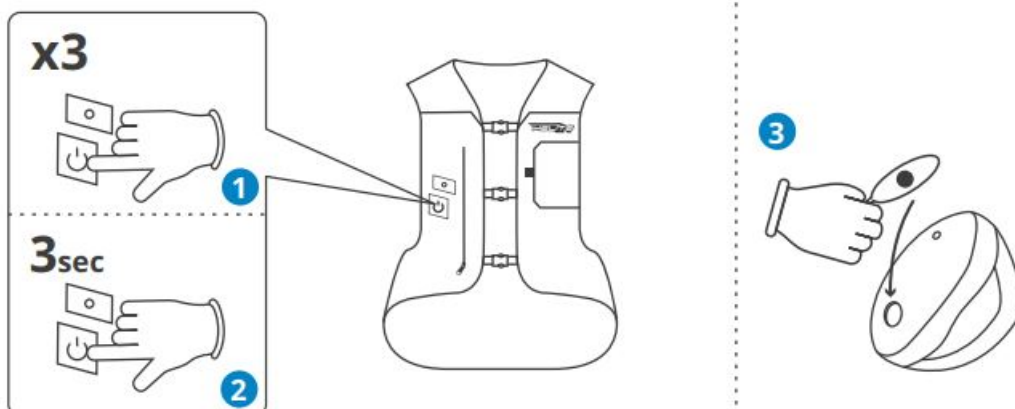
BEFORE FIRST USE




a) Pairing the SDU fork sensor with the airbag vest (optional)

- Before using the airbag vest for the first time, you must pair it with the SDU fork sensor. To complete the pairing procedure you will need the SDU fork sensor, the magnet and the airbag vest. If you have lost the magnet you can use a similar magnet (of the same type). If you have other airbag vests that are associated with this SDU fork sensor they must be turned off.

GOOD TO KNOW

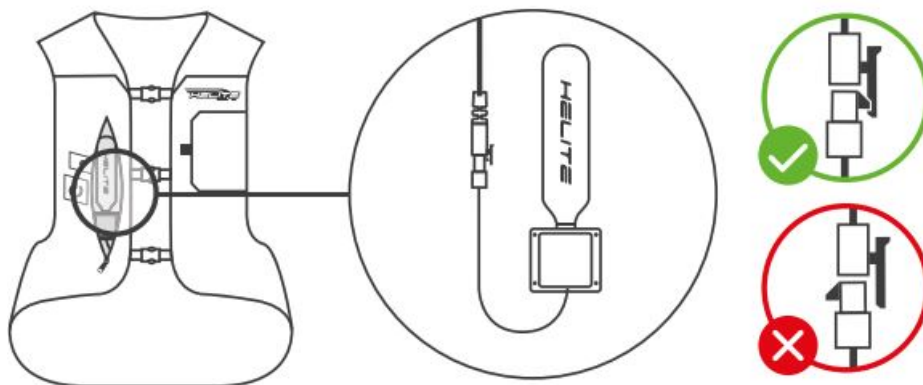
- Up to 5 SDU fork sensors can be paired to the airbag vest (i.e. if you have several motorcycles). For each one, you will need to complete the pairing procedure.
- An unlimited number of airbag vests can be paired to a single SDU fork sensor.



1. Turn on the airbag vest by pressing the ON/OFF button 3  times quickly. A beep will sound and a green LED will flash.
 2. Press and hold the ON/OFF button  for 3 seconds, the LED will turn blue and a beep will sound. Release the button and go to the next step.
 3. Place the magnet on the SDU fork sensor over the round sign. Be careful, you have 30 seconds for this operation.
- If you hear 1 long beep: the pairing was successful.
 - If you hear 2 short beeps: the airbag vest and the SDU fork sensor are already paired. No need to repeat the procedure.
 - If the LED turns red and you hear a series of short beeps: the pairing has failed. Either you have taken more than 30 seconds to place the magnet on the SDU fork sensor. In this case please restart the pairing procedure. Or you have too many SDU fork sensors paired (5 maximum). In this case you need to delete the SDU fork sensors paired with the airbag vest. To delete all the SDU fork sensors paired with the airbag vest, turn on the airbag vest and press the ON/OFF button  for 8 seconds.

CHECK THE PAIRING

- We recommend that you check the pairing of the airbag vest to the SDU fork sensor at least once a month. If you have lost the magnet, you can use a similar magnet (of the same type).
- Turn on the airbag vest Simply place the magnet on the SDU fork sensor over the round sign:
- On the CDU electronic card located on the airbag vest, the LED turns blue and 2 short beeps sound: pairing active.
- On the CDU electronic card located on the airbag vest, nothing happens: pairing inactive. Please complete the pairing procedure.
- **b)** Install the SDU fork sensor on your motorcycle (optional)
- For optimal accident or fall detection, we recommend that you install the SDU fork sensor on your motorcycle. Please follow the instruction of the manual provided with the SDU fork sensor to install it correctly.
- **c)** Recharge the battery of airbag vest
- Before using the airbag vest for the first time, we recommend that you fully re-charge the battery
- **d)** Check the e-cartridge connection



- Before using the airbag vest for the first time, please check that the cartridge is connected to the CDU electronic card. Open the pocket on the right side of the air-bag vest. Check the connection: connector in the right direction and locked. Close the pocket.
- If you encounter a problem before the first use, please refer to the section «Meaning of LEDs and Beeps» or

to the section «After Sales Service» .

DAILY USE

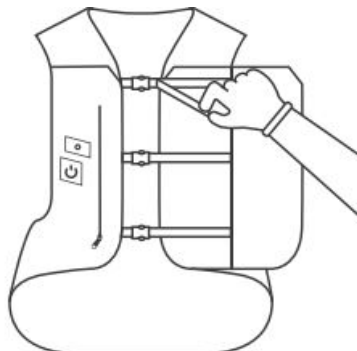
a) Quick check before use

- Please check the following points before each use of the airbag vest to be properly protected:
- The airbag vest is in good condition with no tears or wear.
- The e-cartridge is new and connected
- The airbag vest is properly fitted and closed
- The airbag vest battery is sufficiently charged
- The airbag vest is switched on, a green LED is flashing
- **Optional** : the SDU fork sensor is paired with the airbag vest

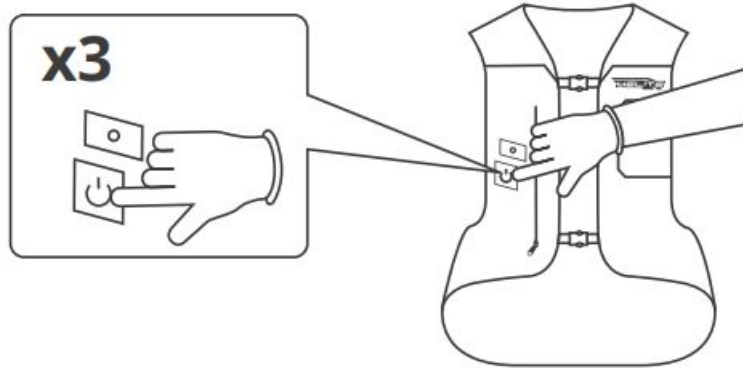
b) Wearing the airbag system



CAUTION

- The airbag vest must be worn over your motorcycle equipment (jacket, vest, ...).
- You must adjust your airbag vest according to the motorcycle equipment you are wearing. Open the large pocket located on the left side of the airbag vest (velcro pocket). Adjust the width of the airbag vest with the 3 straps (velcro).
- Close the pocket. To check if the airbag vest is correctly adjusted, you must have enough space to put your fist under it.
- You must close the airbag vest properly by locking its 3 central buckles in order to keep the airbag inflated. If you do not close the airbag correctly, we cannot guarantee the protection.
- The airbag vest is water repellent, so you can use it in rain or snow. Be sure to dry the airbag system properly after use
- It is possible to wear a backpack over the airbag vest provided that the shoulder straps are loosened sufficiently to leave the necessary space for the airbag in case of inflation.
- **Caution:** incorrect positioning of the backpack shoulder strap could interfere with the CDU electronic card (on the side or underneath the CDU electronic card) and cause unexpected triggers. We recommend that you place the backpack strap flat on the CDU electronic card.
- The airbag vest can be worn by the motorcycle driver and passenger.



c) Switching the airbag vest on and off





- **Switching on the airbag vest:** press the ON/OFF button  located on the right side of the airbag vest 3 times quickly, you will hear 3 beeps and a green LED will flash.
- **Sleep mode:** after 45 seconds of inactivity, the airbag vest automatically goes into sleep mode. It wakes up at the slightest movement.
- **Switching off the airbag vest:** press the ON/OFF button  located on the right side of the airbag vest 3 times quickly, you will hear 3 beeps and the LED will turn off.


WHEN DO I NEED TO SWITCH THE AIRBAG VEST OFF?

- When you take a means of transport other than the motorcycle with the airbag vest (car, metro, streetcar, train, bus, plane, boat, etc.) to avoid causing any unexpected triggering.
- When you are not using the airbag vest to avoid draining the battery.

d) Recharging the battery of airbag vest

- Under optimal conditions, the airbag vest has a battery life of approximately 25 hours when it is switched on and active (excluding sleep mode). It is recommended to recharge it every week and to check its battery level before each use.

	<p>Battery low The LED flashes orange.</p>	<p>Recharge the airbag vest, 2 h of battery remaining.</p>
	<p>Battery very low ⇒ 3 beeps when switching the airbag on/off. ⇒ When the airbag is active, the LED flashes orange.</p>	<p>Recharge the airbag vest, 30 min of battery remaining.</p>

- The airbag vest can be recharged with the supplied USB cable. Only the cable is supplied, then you have to connect it to a standard USB charger (5 VDC).
- You must use an IEC 62368-1 / EN-62368-1 / UL62368-1 / CSA62368-1 certified USB charger. Electrical characteristics: 5 VDC  1A (is the direct current symbol).

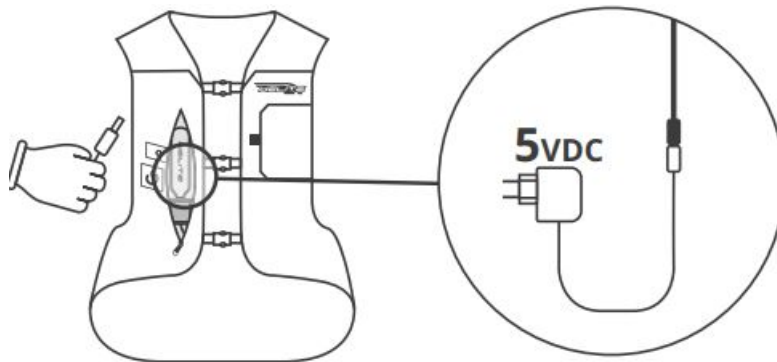
CAUTION

- Do not use a fast charge charger as this could damage the electronic system.





- Never connect to the airbag vest an electrical device or an external battery with a voltage of more than 5VDC.
- The charging time, between 5h and 7h, is approximate and varies according to the charging conditions.
- During charging, the airbag vest is not functional. You must not recharge it while riding.
- You need to charge the airbag vest at temperatures between 0 °C (32°F) and 45°C (113°F).
- Do not charge the airbag vest near flammable surfaces or objects, or in direct sunlight.
- You must recharge the airbag vest indoors.

HOW TO RECHARGE THE BATTERY OF THE AIRBAG VEST?

- You must switch off the airbag vest before charging it



1. Open the pocket located on the right side of the airbag vest.
2. Take out the battery charging cable connected to the CDU electronic card (be careful not to confuse it with the cartridge cable). Connect the charging cable to the USB charger (not supplied).
3. Connect the USB charger to a power socket.

 	<p>Battery is charging The LED turns orange.</p>	<p>Between 5h to 7h of charge under optimal conditions.</p>
 	<p>Battery is charged The LED turns green.</p>	<p>Unplug the charger. You can use the airbag vest.</p>

4. When charging is complete, unplug the USB charger, put the cables back into the airbag vest pocket and close it.

e) Storing the airbag vest

After each use, store the airbag vest according to the following instructions:

- Switch the airbag vest off.
- Store the airbag vest at temperatures between 0 °C (32 °F) and 30 °C (86 °F).
- Store the airbag vest in a place protected from moisture and light.
- Do not leave the airbag vest near flammable surfaces or objects.
- Do not place heavy objects on the airbag vest.
- Do not leave the airbag vest folded or rolled up.
- Put the airbag vest on a hanger or coat rack.
- Do not leave the airbag vest within the reach of rodents or other animals.
- Keep the airbag vest out of the reach of children.

f) Carrying the airbag vest

CAUTION

- You must not use the airbag vest if you are using any means of transportation other than a motorcycle.
- When carrying the airbag vest, it must be switched off to prevent unexpected triggering.
- By car, subway, streetcar, train, bus, boat, etc.: you can carry the airbag vest but switched off. From a regulatory point of view, there are no particular restrictions.
- **By airplane:** you can carry the airbag vest but switched off. From a regulatory point of view, there are restrictions. For the latest recommendations, please consult the documentation available on helite.com in the FAQ section. We recommend that you include the user's manual and the IATA document on the transport of dangerous goods in airplane with the airbag vest. We advise you to ask the airline for prior written approval. Helite cannot be held responsible if the airline or airport security refuses to transport the airbag vest. The transport of the airbag vest is always subject to their approval.


REUSING THE AIRBAG SYSTEM AFTER INFLATION

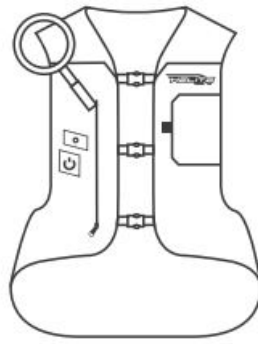
- After an inflation, please check the condition of the airbag vest (airbag visible, important tear, abrasion,...). The airbag vest will gradually deflate by itself in a few minutes. Damage to the airbag vest can be detected by a very rapid deflation (less than 5 seconds). If you have any problems or doubts about the condition of the airbag vest, contact your dealer or Helite customer service at sav@helite.com.

CAUTION

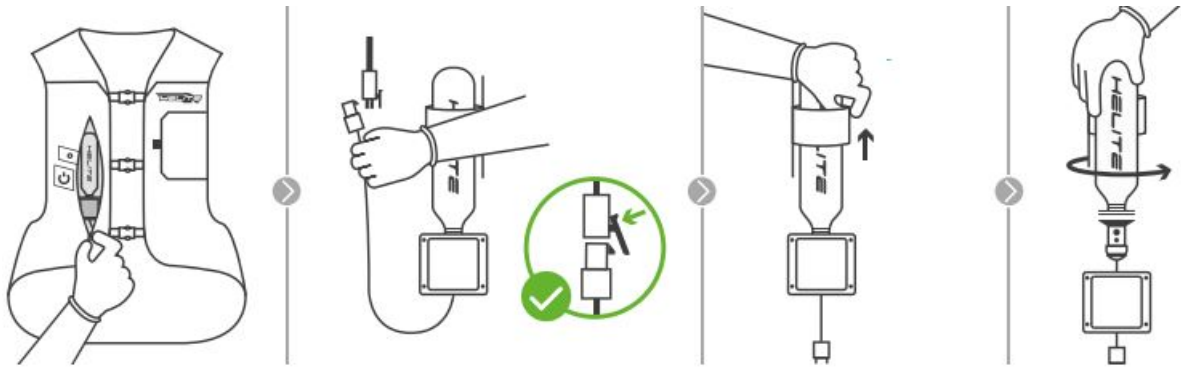
- Improper reconditioning of the airbag vest could prevent it from working properly. You must carefully follow the order of the steps below.
- The airbag vest must be reconditioned in a clean environment (away from dust, not on the floor, etc).
- After an inflation, the cartridge is pierced and therefore empty. You must not reuse it. It must be replaced by a new Helite cartridge with the same reference.
- Persons (including children) with reduced physical, sensory or mental capabilities wearing the airbag vest should always be accompanied by a responsible adult when repacking it to avoid any mistakes.

HOW TO RECONDITION THE AIRBAG VEST?

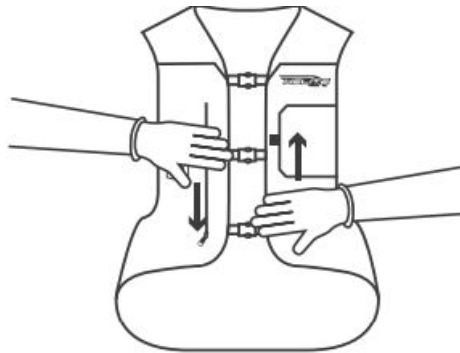
- You will need the airbag vest and a new Helite cartridge of the same reference (e-60 cc or e-100 cc depending on the size of your airbag vest,
1. The airbag vest has just inflated. A red LED will flash and you will hear beeps. The airbag vest will automatically switch off after 30 seconds. If it does not, switch it off by pressing the ON/OFF button  3 times. As soon as you are safe, you can remove the airbag vest. Check the condition of the airbag vest, especially in case of impact with a sharp object: tear, hole.



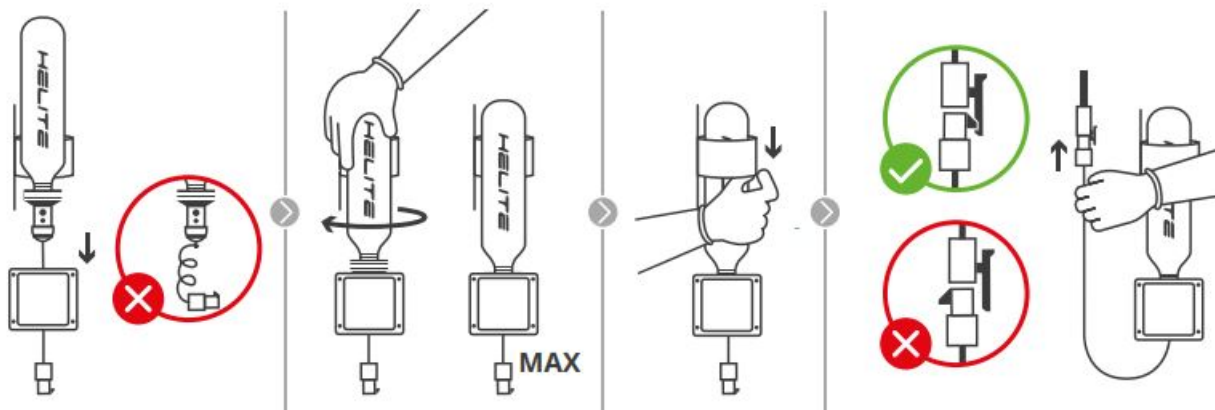
2. Remove the empty cartridge. To access it, open the pocket located on the right side of the airbag vest. Unplug the cartridge (CAUTION, unlock the clip), remove the elastic band and unscrew the cartridge.



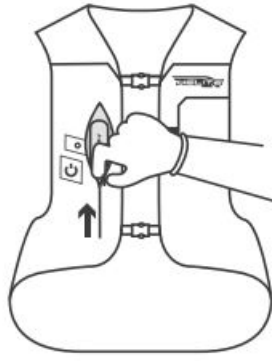
3. Remove the gas. Flatten the airbag vest with your hands.



4. Install a new Helite cartridge of the same reference. Insert the cartridge cable into the cylinder. Be careful not to twist or bend it while screwing it in, as this could damage it. Screw the cartridge as far as possible. Be careful not to screw it in crooked. Put the elastic band back on the cartridge. Connect the cartridge to the CDU electronic card (locking connector), caution plug in the connector in the right way .

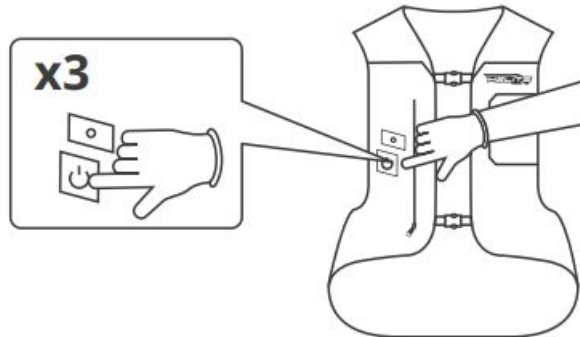


5. Put the elements back in place and close the pocket.



6. Switch the airbag vest on Press the ON/OFF button  3 times

- If a green LED flashes, the cartridge is correctly installed. You can use the airbag vest.
- If a red LED is flashing and you hear beeps, something is wrong (empty cartridge, cable not properly connected, etc). In this case, recheck the cartridge installation and the condition of the air-bag vest. If the problem persists, contact your dealer or Helite customer service at sav@helite.com.























MEANING OF LEDS AND BEEPS

- If you have any doubts or problems with the operation of the airbag vest, please refer to the table describing the LEDs and beeps coming from the CDU electronic card.
- If you cannot find a solution, please contact your dealer or Helite Customer Service at sav@helite.com.

GOOD TO KNOW

- A loss of GPS signal can change the speed of the LED flashing (faster flashing).

LED + Bips	Statut	Action
 	Proper functioning The LED flashes green + no beep.	The airbag vest is active and works properly, you can use it.
 	Battery low The LED flashes orange + no beep.	Recharge the airbag vest, 2 h of battery remaining.
 	Battery very low ⇒3 beeps when switching the airbag on/off. ⇒When the airbag is active, the LED flashes orange.	Recharge the airbag vest, 30 min of battery remaining.
 	Battery is charging The LED turns orange + no beeps.	Wait until the airbag vest is completely charged.
 	Battery is charged The LED turns green + no beep.	Unplug the charger, you can use the airbag vest.
 	<i>With SDU fork sensor option</i> Pairing in progress The LED turns blue + 1 beep every 5 s. during 30 s.	You have 30 s. to place the magnet over the SDU fork sensor.
 	<i>With SDU fork sensor option</i> Pairing successful The LED turns blue + 1 long beep for 2 s.	The airbag vest and the SDU fork sensor are now paired.
 	<i>With SDU fork sensor option</i> Pairing active The LED turns blue + 2 beeps.	The airbag vest and the SDU fork sensor are correctly paired.
 	<i>With SDU fork sensor option</i> Pairing failed The LED turns red + 4 beeps.	Repeat the pairing procedure or delete all the SDU fork sensors already paired.
 	Airbag not working The LED flashes red + series of beeps. ATTENTION, a problem has occurred.	- Cartridge disconnected: connect the cartridge. - Empty cartridge, damaged cable: replace with a new cartridge. - Other cases: please contact the customer service.

SERVICING AND MAINTENANCE

a) Washing the airbag vest

- Please follow these instructions to avoid damage to the airbag and the electronic system. Do not machine wash, do not immerse in water or dry clean. The only way to clean the airbag vest is with a soft cloth slightly soaked in soap. Do not use detergents or bleach. Do not put in the dryer or on a radiator. Do not iron. We recommend that you dry them on a hanger in a dry place.

b) Annual e-cartridge check

- We recommend an annual check of the weight and condition of the cartridge. The airbag vest must be switched off. Unplug the cartridge and unscrew it. Weigh the cartridge on an accurate kitchen scale. Make sure the weight of the cartridge is within +/- 3 grams for e-60 cc and +/- 5 grams for e-100 cc of the weight indicated on the cartridge label. Check the appearance of the cartridge: connector wire in good condition, no corrosion, no dents. If nothing to report, reinstall the cartridge. If you encounter any problems, contact your dealer or Helite Customer Service at sav@helite.com.

c) Duration of life of the airbag vest

- The airbag vest does not have a maximum number of inflations or a limited duration of life. It all depends on the conditions of use and maintenance. Even if the airbag vest is functioning properly, we recommend that you have it serviced every year after its first use. To have the airbag serviced, please contact your dealer or the Helite customer service department at sav@helite.com.

d) Recycling

- The symbol on the right means that, in accordance with local laws and regulations, you must not dispose of your airbag vest and/or its components with your household waste. To avoid any harm to the environment or health, please consult your local waste sorting rules (electronic, metal, plastic, textile, etc). If your airbag vest and/or its components are at the end of their life, bring them to a collection point designated by the local authorities (municipality, waste disposal center, etc). You can also return your airbag vest and/or its components to Helite, 1 rue de la Petite Fin, 21121 Fontaine-Lès-Dijon, FRANCE.

WARRANTY AND AFTER SALES SERVICE

a) Warranty

- The airbag vest and its components are covered by a 2-year legal warranty against any manufacturing defect from the date of purchase.
- Helite offers you a free 2 year warranty extension on the airbag vest (excluding textile, CDU electronic card and SDU fork sensor) from the date of purchase by registering on the my [helite.com](https://www.helite.com) website.
- Helite offers a 10 year warranty on its e-cartridges.
- These warranties do not apply in the event of abuse, neglect, carelessness, intentional damage, alterations, improper storage, improper maintenance, improper transportation, improper installation, improper adjustment, misuse, or use contrary to this manual.

b) After sales service

- If you encounter any of the problems described below or have any doubts about the proper use of the airbag vest, please contact your dealer or Helite Customer Service at sav@helite.com:
- if you have just had an accident or fall and are unsure if the airbag vest is still in good condition;
- if the airbag vest shows signs of deterioration (visible, pierced or torn);
- if the cartridge, the CDU electronic card or the SDU fork sensor show signs of deterioration (cracks, breaks, corrosion);
- if the airbag vest no longer switches on even though the battery is sufficiently charged;
- if the airbag vest battery stops charging;
- if you detect any abnormal wear of the airbag vest.

CAUTION

- If you use an unauthorized service technician, the airbag vest and its components will no longer be under warranty and Helite will not be responsible for its proper functioning. Do not repair or replace the airbag vest and/or its components with any other non-original part or accessory.


DISCLAIMER

- Please read the user guide carefully in order to use the airbag TURTLE II ELECTRO-NIC (e-Turtle 2) correctly:
- The airbag must only be used for its intended purpose.
- No airbag can provide complete protection against injury, serious harm or death to the user.
- The airbag does not cover 100% of the risks and does not guarantee 100% detection of falls or accidents.
- Parts of the body that are not covered by the airbag are not protected.
- The protection of the airbag is only guaranteed in the inflated state.

HELITE WILL NOT BE HELD RESPONSIBLE:

- If the airbag fails to inflate.
 - For injuries and their consequences in accidents, whether or not the airbag has inflated, for whatever reason.
 - If the airbag is damaged or pierced during a fall (e.g. if it hits a sharp object).
 - Unexpected triggering of the airbag: in certain situations the system could be triggered without the user falling.
 - Improper reconditioning of the airbag after inflation.
 - Improper installation, improper use and improper maintenance of the airbag.
 - Damage to property that may occur when using the airbag.
 - Malfunction of the airbag due to modification, replacement or repair of the airbag not performed by an authorized service provider.
 - **HELITE SAS**
 - **1 rue de la Petite Fin 21121 Fontaine-Lès-Dijon FRANCE**
 - **Tel.: +33 (0)3 80 35 48 26 www.helite.com**
 - **1A-1028-01**
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Documents / Resources

	<p>HELITE Turtle 2 Airbag Vest [pdf] User Guide e-60 cc, e-100 cc, Turtle 2, Turtle 2 Airbag Vest, Airbag Vest, Vest</p>
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References

- [Helite - Site Officiel - Expert en protection airbag](#)
- [My Helite](#)
- [Helite - Site Officiel - Expert en protection airbag](#)
- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)