

RPG IN&MOTION Airbag Vest User manual

inmotion
INTELLIGENT PROTECTION TECHNOLOGY

Welcome!

Thank you for choosing the RPG IN&MOTION AIRBAG VEST.

The RPG IN&MOTION AIRBAG VEST is composed of 2 parts:

- a certified ROSSIGNOL back protector and,
- an integrated IN&MOTION smart airbag system.

This manual explains the correct use of this product.

For any questions regarding your back protector/vest, please contact ROSSIGNOL customer service:
serviceclients@rossignol.com

For questions about the airbag system and technology, please contact IN&MOTION support service:
skisupport@inemotion.com

Stay tuned!

 In&motion

 @Inandmotion

 In&motion



The In&motion airbag system is designed to be **used for outdoor ski slopes only and only with skis.**

Do not use for other applications (sledding, snowboarding, horse-riding, motorcycling, bicycling, ski freestyle, half-pipe, ski touring...).

This system is not an avalanche airbag system. It is designed for **racing** in order to prevent injuries in case of fall.



Always turn off your airbag system in transports and on chairlift.



The use of this product shall not encourage to overpass limits or to take more risks.

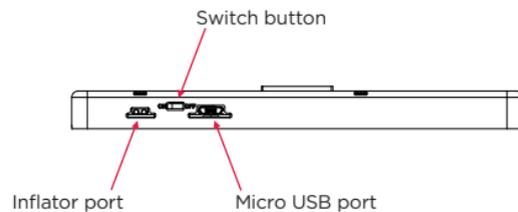
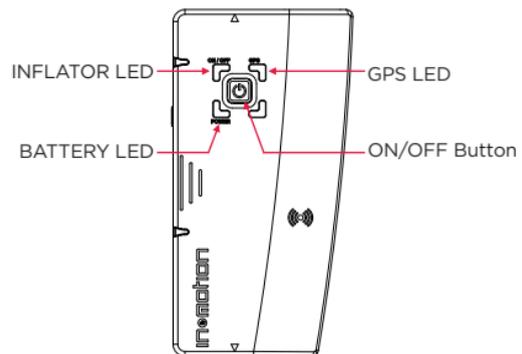
Before using your product, please read carefully the safety instructions included in this manual and all other instructions designated to correctly use the product.

RPG IN&MOTION AIRBAG VEST user manual

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Quick start guide

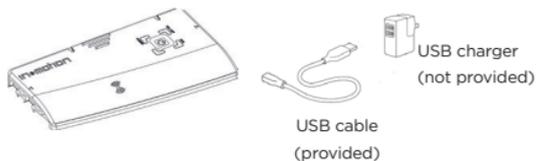
The In&box basics



Getting started

#1 Charge the In&box

Use the USB cable included in your package, with an USB charger (not provided).



#2 Create your account (before the 1st use only)

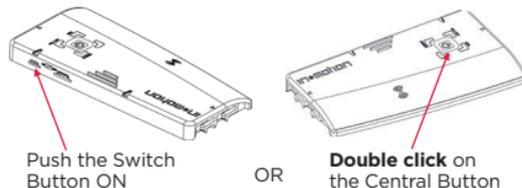
Before the 1st use, create your skier profile via the In&motion App* on your computer available on www.inemotion.com.

This app will allow you to receive the last system updates while plugging your In&box.

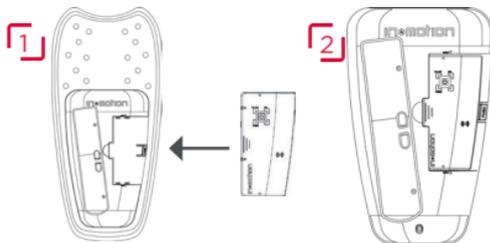


The detection system is always evolving with new updates. **Therefore, the account creation is essential in order to get the last algorithm updates!**

#3 Turn on the In&box



#4 Insert the In&box into the back protector



#5 Wear your vest



The RPG IN&MOTION AIRBAG VEST shall be worn under a ski suit. Put your vest on and zip it up.
Be sure the 2 hips bladder are not twisted: the red sign must be on the outside.

General presentation

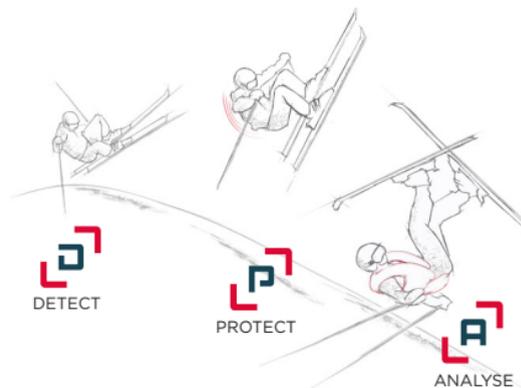
#1 The Airbag Vest, for who?

This intelligent airbag system is specifically designed for ski racing, and approved by the International Federation of Ski (FIS) for Alpine and SkiCross races.

Minimum age: 14 / Minimum size: 150cm

#2 The concept

The In&motion airbag system works on three steps.



Detect: with 1000 analyzes/second of the skier position, the system measures the skiers'every movement to detect a loss of balance during air time or major impact at high speed. Not every type of crash and accident are covered.

Protect: in less than 0.1 second, the airbag is inflated at the optimum pressure, absorbing a part of the energy of the impact and protecting the skier. The airbag starts deflated automatically few seconds after the impact.

Analyse: the system analyzes and sends data to In&motion to better understand the context of the fall. More users=more data=better detection.

#3 Protection zones

The RPG IN&MOTION AIRBAG VEST is a EN 1621-2 certified ROSSIGNOL back protector with an integrated In&motion airbag system.



#4 Package contents

In&box

The In&box is the electronic device supplied with an USB cable. It's incorporated in the back protector.

Each In&box has a unique ID, linked to a user account.



The In&box will get into standby mode if it remains motionless for 5 minutes. The In&box battery duration is approximately 20H of continuous use.

Back protector

RPG IN&MOTION AIRBAG VEST contains a certified ROSSIGNOL back protector based on NF EN 1621-2:2014. Wind tunnel testing have confirmed the non influence on the aerodynamic of the skier.



Inflator



The inflator is a gas generator.
USE WITH IN&MOTION SYSTEM ONLY

Warning ! Use with caution. This inflator is filled with pressured Argon. Keep it at temperature not exceeding 93°C (200°F). Shall be used as airbag system only. Store away from humidity. Do not repair. Do not drill. Do not refill. Do not dismantle. Do not test with any electrical equipment. Manipulation only by people above the age of 18. If the inflator presents signs of damage, please send it back to In&motion or to your local reseller to have this inflator recycled. Don't throw away a full inflator. Each inflator is guaranteed 10 years (unless other indication on the label).

Inner vest



The Inner vest is zipped under the ROSSIGNOL vest. It contains the airbag bladder. It has a unique Serial Number, required to create your account. You can find it on the label inside the vest.



← serial number

ROSSIGNOL Vest



ROSSIGNOL Vest composition:

Polypropylene 1%
Polyethylene 3%
PU Foam 52%
Polyester 16%
Nylon 18%
Rubber 6%
Dop 2%
Eva 2%

In&motion desktop App



The In&motion App is available on computer only:

go to www.inemotion.com to download the desktop application.

For the first use, you need to create your skier profile.

Then, you will just need to launch the app and connect your In&box to your computer in order to get the last system updates.

This app is for now only available for the following computers:

- Windows (64 bits) 7 / 8 / 8.1 / 10,
- MacOS (64 bits) 10.9 and higher

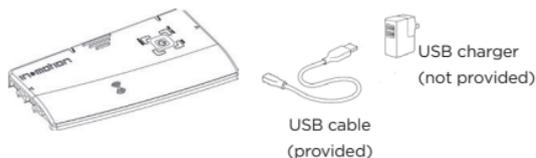


First use: airbag activation

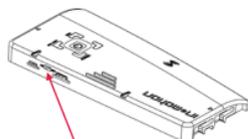
#1 Charge the In&box

Connect the In&box to the USB cable and plug the charger.

Avoid to charge it with a computer or car power charger as the charge will be very slow.

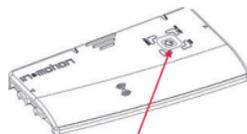


#2 Turn on the In&box



Push the Switch button ON for the first activation

OR



Double click on the Central Button if the Switch button on the side is already ON

#3 Create your account and skier profile from the In&motion App

CREATE YOUR OWN SKIER PROFILE

Year birth

Level

Discipline

Nationality

START NOW !

Before the first use, please create your In&motion account and complete your own skier profile.

Your registration allows us to link your profile to the system, and to guarantee the best traceability.

#4 Pair your airbag to your account



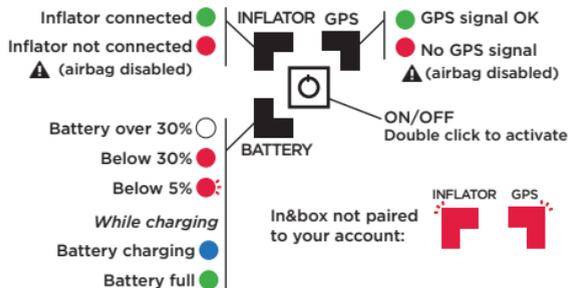
Once you have created your account, you can pair your airbag.

Launch your In&motion App and:

- Turn on your In&box
- Plug your In&box to your computer
- Enter your vest serial number S/N

(p.12)

In&box Lighting code



Led Behavior in case of connection problem:



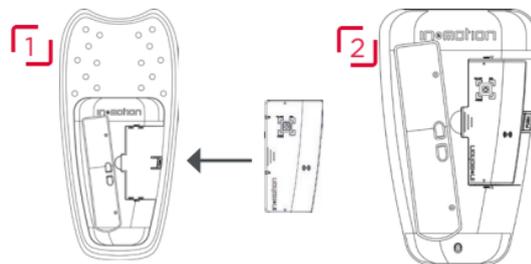
In case of connection problem, contact In&motion:
skisupport@inemotion.com

Airbag use

#1 Install the In&box

Thanks to the zipper on the ROSSIGNOL vest, access to the back protector.

Don't forget to switch ON the In&box before using and fully zip the back protector up.



#2 Put on your vest



The airbag vest shall be worn under the ski jacket. Check that the size of the airbag is correct, and fully zip your airbag vest after putting it on.

Make sure the 2 hips bladder are not twisted: the red sign must be on the outside and aligned on both sides of the legs.

If you use the belt, close it around your waist thanks to the Velcro and place the hip protection on the hips under the racing suit.

#3 Replace the inflator

If your airbag has triggered (and the bladder has been inflated), the inflator has to be replaced by a new one. Only inflators provided by In&motion and its resellers are certified. Don't use other references.

To buy a new inflator, you can contact directly In&motion on skisupport@inemotion.com or visit our website on www.inemotion.com

Warning ! Use with caution.

To replace it, watch tutorial on www.inemotion.com. When it's empty, the inflator is recyclable like any other scrap metal.

Maintenance

After a trigger, check the following points before reusing your airbag:

- Check the integrity of the inner vest's fabric
- Check the integrity of the plastics and the back protector
- Check the integrity of the inflator connector
- Take off the inflator and empty the air in the jacket by rolling its legs and squeezing the air out

Whenever there is a state of error or any other anomaly, do not use the RPG IN&MOTION AIRBAG VEST and contact the Customer Service.

Even if the system functions correctly, it must be maintained by In&motion **after 5 triggers** and after 3 years from the date of manufacture indicated on your RPG IN&MOTION AIRBAG VEST.

Example: S/N 1701 > Produced on 2017

You can order the maintenance directly on our website www.inemotion.com

Warnings

Please, read the following instructions of use

Use of the RPG IN&MOTION AIRBAG VEST

The RPG IN&MOTION AIRBAG VEST is a new, intelligent device to be used on outdoor ski slopes only and only with skies. Do not use for sledging, snowboarding, freestyling, half-pipe skiing, ski touring, motorcycling or any other use than skiing.

Ski is an intrinsically dangerous activity, which may result in personal injury or death. This product is conceived to offer comfort and high protection, though no product or protection system can offer complete protection from injury or damage to individuals or property in case of fall, collision, impact, loss of control or otherwise.

The use of this product shall not encourage to overpass limits or to take more risks.

Any modification or incorrect use can critically reduce its performance. Only parts of the body covered by the protection are protected against impacts.

The RPG IN&MOTION AIRBAG VEST cannot in any way be considered as a substitute for protective equipment such as helmets, goggles, gloves, or others.

Use of the back protector

This product contains a certified back protector designed exclusively for ski use.

Fittings instructions

To make the best use of its functionalities, the RPG IN&MOTION AIRBAG VEST must be installed and worn correctly, covering the protected area effectively. To obtain maximum protection and comfort, select the correct size and make sure that the product fits tight to your body. Close all the zippers and other fasteners carefully to prevent unwanted slipping and ensure maximum comfort.

Maintenance

The RPG IN&MOTION AIRBAG VEST is subject to wear based on effective conditions of use.

Following a shock, protective pads, back protectors or airbag system can be partially destroyed having absorbed the energy of the impact to reduce its force. Please check your protective gear regularly before using in order to verify it's in good condition and not damaged. If there is any sign or suspicion of damage, contact the customer service. Material properties may change over time.

Never modify your RPG IN&MOTION AIRBAG VEST or its components in any way. Modification of any nature could compromise its functionalities and consequently its protective functions in the case of a fall or accident.

Never add decorations, ribbons or patches above the airbag positioning area. Never connect any kind of electric equipment or external battery to the system.

RPG IN&MOTION AIRBAG VEST components can be modified only by authorized operators: ROSSIGNOL and In&motion.

Transports

Do not switch ON the RPG IN&MOTION AIRBAG VEST when the jacket is not worn.

Always put the system OFF during any transports (train, car, bus, moto, plane...) and on chairlift and **always keep this user manual with the product when travelling.**

If it's used incorrectly the RPG IN&MOTION AIRBAG VEST can trigger inappropriate inflation that could damage your belongings or even pose a risk for people's safety.

The RPG IN&MOTION AIRBAG VEST is not allowed in a hand luggage on aircraft.

In&motion and Rossignol cannot be held responsible in case of refusal of transport of the RPG IN&MOTION AIRBAG VEST by plane imposed by a flying company at any time.

Other precautions

Do not leave the RPG IN&MOTION AIRBAG VEST charging close to inflammable surfaces or objects.

Do not store or use the In&box in wet conditions.

The In&motion system can be used in snow conditions but the In&box cannot be in contact with snow unless it is set in the back protector with the zippers fully closed.

The system should be used exclusively within a temperature range between -15°C and 70°C. Prolonged exposure of the System to temperatures outside this range may compromise its correct functioning.

Keep children away from the system in order to avoid all possible risk. Minimum age requirement for using this product: 14.

Do not clean the RPG IN&MOTION AIRBAG VEST in a washing machine or by hand.

			
Only dry washing	Do not use detergent	Do not use iron	Do not use drying machine

Do not drill, cut or interfere with the integrity of the gas generator or any part of the jacket in any way.

Always store the RPG IN&MOTION AIRBAG VEST in a dry ventilated place and away from light.

This device is using under pressure gas and propergol, do not undo or interact with gas generator unless following In&motion instructions.

The use of the RPG IN&MOTION AIRBAG VEST is not recommended for:

- people who wear pacemakers or other medical devices should not use the system as electric disturbance might interfere with correct operation of these devices,
- people with back or neck problems,
- pregnant women.

General information

Warranty

By IN&MOTION

In&motion warrants that the airbag system is free of manufacturing defects in material and workmanship when it is delivered to our dealers. Unless otherwise stipulated by local law, this warranty is limited to 2 years from the date of purchase and is limited to the original purchaser.

This warranty does not apply in the event of abuse, negligence, carelessness or modification, improper transport or storage, improper installation and/or adjustment, misuse, or if the airbag system is used in any way other than is intended and not in compliance with the present manual.

Do not repair or replace with any part or accessory other than original In&motion parts and products covered by the terms of this warranty.

This warranty takes precedence over any other agreements or warranties, general or special, expresses or implied.

In&motion makes no other expressed warranties, except as otherwise specifically stated. In&motion waives all responsibility for any third party for consequences that might result from the use or handling of any In&motion product by any legal or natural person.

By ROSSIGNOL

The ROSSIGNOL vest is warranted 2 years against manufacturing defects in material and workmanship

as from the date of purchase (limited to the original purchaser).

The warranty is expressly excluded in the following cases:

- Damage resulting from improper installation and/or adjustment, misuse, negligence or abusive use, or not in accordance with the product destination,
- Damage resulting from inappropriate storage or transport,
- Damage resulting from non-compliance with the product use and maintenance guidelines described in the instructions enclosed with the product,
- Damage resulting from normal wear and tear,
- Damage resulting from shock, twisting or compression, a fall, accident or irregular impact beyond the control of Rossignol;
- Damage resulting from the modification of the product or any other reason related to appearance or color.

In addition, the warranty shall not be if the product has been modified and/or repaired by the purchaser or unauthorized third parties. Within the limits authorized by law, ROSSIGNOL shall not be liable or responsible for incidental or consequential damages, including but not limited to loss of chance, loss of profits, business interruption, and replacement costs.

Depending on the country and depending on the applicable law, certain limitations of warranty or liability mentioned above cannot be applied. The provisions of this warranty are not intended to defeat mandatory national provisions and can therefore be variable depending on the country of sale.

Certification approval and labeling

Your approved safety product comes with a visible label demonstrating its range of use, the body area for which the protector is intended, and the respective safety standard. If necessary, refer to the following table to help choose your basic size.

Height in cm	140/170	160/190	180/210
Length Waist-Shoulder in cm	40	45	50
Indicative size	S / M	M / L	L / XL

Notified body

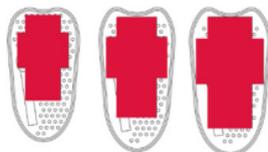
Back protector tested by the laboratory:
CRITT SPORTS LOISIRS-21 rue Albert Einstein-Zone du Sanital-86100 CHÂTELLERAULT- FRANCE-n°0501.

Declaration of conformity

In&motion under their sole responsibility confirms that the product described in this user guide complies with technical standards based on NF EN 1621-2:2014.

	CE marking to indicate that the impact protector complies with the requirements of Directive 89/686/EEC
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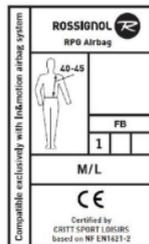
Protection testing area relative to product



Explanation of labeling

CE: European conformity symbol
EN1621-2:2014: Technical reference standard

Type of protector FB (protector for the entire back), level of protection (1); and information regarding the size range (distance between waist & shoulder).



Protection level

The protective piece in this product have been tested and certified based on NF EN1621-2:2014. The table below shows the permitted residual force values for the two levels of protection according to the standard.

LEVEL*	TOTAL AVERAGE VALUE	INDIVIDUAL VALUE
1	≤ 18 KN	≤ 24 KN
2	≤ 9 KN	≤ 12 KN

*The standard refers to two levels of protection.

Product recycling

At the end of this product's life, please do not dispose of this product in your general household waste. Instead, in order to prevent possible harm to the environment or human health from uncontrolled waste disposal, please dispose of this product separately in accordance with your local laws and regulation. For more information on the separate collection systems for waste electrical and electronic equipment that are available for consumers, near your home, free of charge, please contact your local municipality authority. You can also contact the retailer from which you purchased your airbag – he might have put in place recycling services or he may be part of a specific recycling scheme.

Registered trademark

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ROSSIGNOL[®] is a trademark owned by SKIS ROSSIGNOL



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