



D-air®

D-air racing 1

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INTEGRATED INFLATABLE PROTECTORS INFORMATIVE NOTE





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D-AIR®

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D-AIR RACING 1 Intelligent Protection System

NOTES



Thank you for choosing Dainese!

The product you have chosen was designed with advice from the greatest motorcycle racing champions in the world. Their advice and precious cooperation at national and international levels combined with tests conducted constantly at the Dainese laboratories have enabled the production of a product studied to offer comfort and performance.



SAFETY SYMBOLS AND SIGNAL WORDS

In this Operation Manual and on the product, safety symbols and signal words are used to indicate important safety information. This section is provided to improve understand of these signal words and symbols.

	This is the safety alert symbol. It is used to alert you to potential physical injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
 WARNING or WARNING!	WARNING indicates a hazardous situation that, if not avoided, could result in death or serious injury.
NOTE	NOTE is used to address miscellaneous practices not related to personal injury.



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1. IMPORTANT SAFETY INFORMATION

Follow the instructions in the Important Safety Information section and always use the D-AIR RACING 1 I.P.S. properly to reduce the risk of improper activation or failure to activate in the event of an accident. Contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service (see Attachment B) if you have any problems regarding use of the D-AIR RACING 1 I.P.S.

Inform Dainese of changes in ownership of the D-AIR RACING 1 I.P.S. so that we may contact the new owner for any important updates, communications, or recalls.

UNDERSTANDING THE D-AIR RACING 1 I.P.S.

The D-AIR RACING 1 I.P.S. does not eliminate the risk of motorcycle crashes.

The D-AIR RACING 1 I.P.S. is designed to work with other components of protective motorcycle gear. It is not intended to replace other types of protective equipment, or to be the only protective equipment you wear while riding. However, if you plan to ride fully geared up (e.g., helmet, boots, gloves), the D-AIR RACING 1 I.P.S. can provide you with additional protection. Dainese recommends that all riders wear a helmet with the D-AIR RACING 1 I.P.S.

No protective equipment can prevent injury in all motorcycle accidents. The D-AIR RACING 1 I.P.S. serves to reduce the risk of injury by limiting the impact force transferred in the event of a fall and impact against an obstacle in certain accident scenarios. However, no protector is able to protect from twisting, bending, or extreme movements.

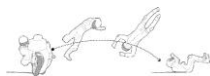
When does the D-AIR RACING 1 I.P.S. activate?

Every motorcycle crash is different. The D-AIR RACING 1 I.P.S. uses a system of sensors to monitor speed and acceleration of the rider. A computer algorithm determines whether the rider's movements appear to be associated with a crash. This means that there may be some situations where you can be in a crash without meeting the conditions that will cause the D-AIR RACING 1 I.P.S. to inflate.

The D-AIR RACING 1 I.P.S. only activates in certain types of crashes. It is only designed to identify and respond to a rider highside event and a rider lowside event with tumbling. The D-AIR RACING 1 I.P.S. is designed NOT to identify and respond when rider lowside events without tumbling occur (e.g., if the rider is sliding along the road), or during moderate events such as small wheelies or slight wobbling.



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(Highside)



(Lowside with tumbling)



(Lowside with no tumbling)

The D-AIR RACING 1 I.P.S. will not activate:
If it is not turned on or if the battery is not charged.
At speeds below 50 km/h (31 MPH).

You should not expect the D-AIR RACING 1 I.P.S. to inflate immediately upon motorcycle impact. The protection offered by the D-AIR RACING 1 I.P.S. is most effective for “second rider impacts.” For example, if a motorcycle collides with a barrier, the system may not inflate before the rider strikes the barrier, but is designed to inflate before the rider strikes another object such as the ground. It has been designed to remain inflated for about 5 seconds after being triggered. Whenever slight collisions occur between racers, as is common during racing, the system should not inflate. However, if a collision leads to a fall, the system should inflate.

If the GPS signal is unavailable or is temporarily lost while riding (e.g., while travelling through a tunnel), the D-AIR RACING 1 I.P.S. will stay either disabled or enabled, based on the last speed value detected via GPS.

What does the D-AIR RACING 1 I.P.S. protect?

The D-AIR RACING 1 I.P.S. incorporates an airbag that contains a gas canister for inflation of the airbag around the neck area, also covering part of the shoulders and the upper chest. The D-AIR RACING 1 I.P.S. gives extra airbag protection in the shoulder area, reduces the risk of direct impact between the helmet and collarbone, and limits bending of the neck during tumbling. The D-AIR RACING 1 I.P.S. does not protect areas that it does not cover, and does not provide additional protection during events that do not cause it to inflate.

You should be aware that there are other types of inflatable protective devices available for motorcyclists. Carefully consider your needs in an inflatable protective device before choosing one. The different types have different features that you will need to consider in accordance with your riding protection needs.

Hazards from inflation.

If you have any special medical concerns about neck or chest pressure, consult your physician before use or do not use the D-AIR RACING 1 I.P.S. When the airbag inflates, you will feel pressure in your neck and chest.



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Do not use the D-AIR RACING 1 I.P.S. if you:



- wear pacemakers or other medical devices—electric disturbance might interfere with correct operation of these devices,
- have back or neck problems,
- have recently undergone abdominal/chest surgery,
- have breast implants, or
- are pregnant.

If you have body piercings in the chest or neck area, you may experience additional pain when the D-AIR RACING 1 I.P.S. triggers.

Unexpected inflation.

The D-AIR RACING 1 I.P.S. can be sensitive to sudden motorcycle or body movements. Do not perform maneuvers not associated with normal riding (such as wheelies or side skidding) while wearing the D-AIR RACING 1 I.P.S. These movements can cause unexpected inflation of the D-AIR RACING 1 I.P.S.

D-AIR RACING 1 I.P.S. is designed for track use.

The D-AIR RACING 1 I.P.S. is designed to be used exclusively on racetracks—i.e., circuits closed to traffic. Under no circumstances should it be used on public roads or in normal traffic. The computer algorithm is specifically tuned to racing conditions and is not suited for use in traffic or during normal driving.

PREPARATION

Make sure your D-AIR RACING 1 I.P.S. is properly sized to fit you.

Make sure your D-AIR RACING 1 I.P.S. fits you properly. If your D-AIR RACING 1 I.P.S. is too large, it can interfere with your helmet when triggered. Helmet interference could increase your risk of injury in an accident or could cause you to lose control of your motorcycle. In addition, if your D-AIR RACING 1 I.P.S. is not the correct size, it can cause unexpected inflation. If you have questions about the fit of your D-AIR RACING 1 I.P.S., contact your Dainese dealer.

Avoid extreme temperatures.

Only use the D-AIR RACING 1 I.P.S. in temperatures between 0°C – 40°C (32°F – 104°F). The D-AIR RACING 1 I.P.S. might not work properly with prolonged exposure to temperatures outside of that range.



USE RIDING

Always wear the D-AIR RACING 1 I.P.S. with all protectors. Wearing the suit without the protectors could increase the risk of injury in the event of a fall.

Perform a pre-ride check.

Perform a pre-ride check before each use to make sure the D-AIR RACING 1 I.P.S. is ready to activate properly. Make sure that:

- There are no signs of wear, breakage, or damage. If you have questions, contact your nearest Authorized Dainese Service Center or the Dainese Technical Assistance Service or an authorized Dainese dealer.
- The D-AIR RACING 1 I.P.S. is fully charged. Charge if necessary.
- The D-AIR RACING 1 I.P.S. has correctly identified the GPS signal. The D-AIR RACING 1 I.P.S. will not switch on, function, or be triggered if it has not identified the GPS signal.
- All protectors are correctly positioned.
- All fasteners of the suit into which the D-AIR RACING 1 I.P.S. is integrated are closed. In particular, if you do not close the front zip, the D-AIR RACING 1 I.P.S. might not protect you.
- Make sure that there are no items in pockets or in backpacks that could perforate or damage the air bag.

Use with other garments.

Never wear any other item or device outside or inside the D-AIR RACING 1 I.P.S. in the areas to be inflated. Cumbersome or blunt objects positioned near the body or in the areas to be inflated might cause damage in the event of a fall or trigger the inflation of the system. The D-AIR RACING I.P.S. must be the last garment to be put on by the rider, with the exception of the D-AIR RACING I.P.S.-compatible rain cover.

Never wear any accessories (e.g., rainwear, backpacks, buttons, patches, bandanas, ribbons) over the D-AIR RACING 1 I.P.S., unless they have been specifically designed to be compatible with the D-AIR RACING 1 I.P.S. The interaction of accessories with the airbag during inflation may be dangerous.

Riding in light rain.

In light rain, do not use the D-AIR RACING 1 I.P.S. without the specifically designed Dainese rain cover. This cover will allow the airbag to inflate if necessary. If necessary, leave the device to dry in a ventilated place at room temperature after use. Do not use hair dryers or other heating devices to dry the D-AIR RACING 1 I.P.S.

Do not use the D-AIR RACING 1 I.P.S. if there is more than light rain. D-AIR RACING 1 I.P.S. may be damaged by exposure to rain.



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Turn off your D-AIR RACING 1 I.P.S. when you are not riding.

Make sure that the D-AIR RACING 1 I.P.S. is turned off when you are not wearing it, or when not riding a motorcycle. Use the provided safety button cover to make sure that you do not accidentally trigger the D-AIR RACING 1 I.P.S. Make sure that the On/Off switch located on the neck strap is in the Off position until you are ready to ride.



Never ride with passengers.

Never use the D-AIR RACING 1 I.P.S. when carrying a passenger.

CHARGING

Always remove the D-AIR RACING 1 I.P.S. before charging it. Never charge the D-AIR RACING 1 I.P.S. while you are wearing it. Charging the D-AIR RACING 1 I.P.S. while wearing it could lead to injury from fire or electric shock.

Keep the D-AIR RACING 1 I.P.S. away from flammable surfaces or objects when charging. If the D-AIR RACING 1 I.P.S. overheats while charging, it could catch on fire.

AVOID DAMAGE WHEN CLEANING

To avoid damaging the D-AIR RACING 1 I.P.S., always follow proper procedures when cleaning it.

- Do not immerse the D-AIR RACING 1 I.P.S. in water or other liquids. Do not wash it under running water.
- Do not use solvents or other chemical substances for cleaning.
- Do not iron the D-AIR RACING 1 I.P.S.

1		2		3		4		5	
1- THIS PRODUCT CANNOT BE WASHED IN WATER 2- THIS PRODUCT CANNOT BE TREATED WITH CHLORINE 3- THIS PRODUCT CANNOT BE IRONED					4- THIS PRODUCT CANNOT BE DRY CLEANED 5- THIS PRODUCT CANNOT BE TUMBLE DRIED				

STORAGE

To avoid damage when storing the D-AIR RACING 1 I.P.S.:

- Store the D-AIR RACING 1 I.P.S. in a dry, well-ventilated place where it will not be subject to impact or pressure.
- Do not store the device with its weight concentrated in only a few points. Always use a hanger.



- Avoid exposure to direct sunlight as much as possible.
- Do not expose the device to high or low temperatures.
- Do not bend or twist the device.
- Do not keep the D-AIR RACING 1 I.P.S. in transport crates subject to heavy vibrations and sudden changes in temperature.
- Keep the D-AIR RACING 1 I.P.S. far away from intense magnetic fields.

To avoid accidental inflation or other damage, keep the D-AIR RACING 1 I.P.S. away from children.

Charge the D-AIR RACING 1 I.P.S. at least once every 2 months, even when it has not been used, in order to prevent deterioration of battery performance.

MAINTENANCE

Regularly inspect your D-AIR RACING 1 I.P.S.

Always check your D-AIR RACING 1 I.P.S. for signs of wear or damage before using it or putting it away. In the event of damage, contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service.

The D-AIR RACING 1 I.P.S. is subject to wear based on conditions of use.

Have your D-AIR RACING 1 I.P.S. serviced once every 5 years.

Even if your D-AIR RACING 1 I.P.S. is operating correctly, contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service once every 5 years for a maintenance check and the servicing of any components subject to wear. Dainese cannot guarantee the proper operation of the D-AIR RACING 1 I.P.S. for units that have not been serviced after 5 years.

If your D-AIR RACING 1 I.P.S. is triggered or if there is a system malfunction, contact Dainese.

If your D-AIR RACING 1 I.P.S. has been triggered, do not use the D-AIR RACING 1 I.P.S. again until you have had the airbag replaced by the Dainese Technical Assistance Service. The D-AIR RACING 1 I.P.S. will not function if it has been triggered. In the event of malfunction, which is indicated by the red flashing LED on the user interface, do not use the D-AIR RACING 1 I.P.S. Contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service if signs of malfunction appear.

Spare parts may be required for the D-AIR RACING 1 I.P.S. For example, the airbag must be replaced with new airbags after triggering. Original Dainese spare parts of the same size and model must always be used to replace these parts. To obtain original Dainese spare parts, contact your Dainese retailer or visit www.dainese.com.



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Dispose of your D-AIR RACING 1 I.P.S. properly.

The D-AIR RACING 1 I.P.S. contains electronic components and a pressurized gas canister that cannot be disposed of in the same way as traditional waste.

In order to dispose of the product correctly at the end of its working life, contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service. Dainese will take care of disposal, arranging for collection and correct disposal of the product. Important: incorrect disposal of the product can create dangerous situations or cause environmental pollution.



BATTERY MAINTENANCE

Observe the following general precautions to care for the Lithium-Ion Polymer (Li-Po) batteries in your D-AIR RACING 1 I.P.S. so that it will work properly. Failure to observe these precautions may result in fire. In the event of problems related to the battery, contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service immediately.

- Never leave the D-AIR RACING 1 I.P.S. charging unattended.
- Stop charging the battery once it has reached a full charge.
- Stop charging the battery if you notice any problems, and do not continue to use the battery.
- Charge the D-AIR RACING 1 I.P.S. at least once every 2 months, even when it has not been used, in order to prevent deterioration of battery performance.
- Do not disassemble the battery.
- Do not short circuit the battery.
- Do not replace the battery.
- Do not store the battery at temperatures exceeding 50°C (122°F).
- Do not dip the battery in fresh or salt water and do not expose it to moisture.
- Do not charge the battery at environmental temperatures exceeding 35°C (95°F).
- Do not use chargers other than those provided with the D-AIR RACING 1 I.P.S.
- Do not modify the charging process or the charging hardware.
- Do not expose the battery to naked flames.
- Do not use the battery for uses other than that for which it was designed.
- Do not allow children near the battery.
- Do not place the battery in a microwave oven or in a pressurized container.
- Do not expose the battery to abnormal electrostatic charges.



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Never touch a leaking battery directly. Should leakage occur, contact a Dainese dealer or your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service immediately.

MODIFICATION

Never sew or modify your D-AIR RACING 1 I.P.S. or its components in any way, and never tamper with any part of the device. Modification could compromise the D-AIR RACING 1 I.P.S. and affect its function in the event of a fall or accident.

- Never place decorations, tapes, or patches over the area in which the airbag is positioned.
- Do not paint the D-AIR RACING 1 I.P.S. or use dyes of any kind on it.
- Never connect any kind of electric equipment or external battery to the existing cables.





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2. INTENDED USE OF THE D-AIR RACING 1 I.P.S.

2.1. Protection offered by the D-AIR RACING 1 I.P.S.

In view of the particular protection offered by the D-AIR RACING 1 I.P.S., it must be considered as Personal Protective Equipment (PPE) and therefore subject to the requirements established by Directive 89/686/EEC (and subsequent amendments), transposed in Italy with Law Decree 475/92. The D-AIR RACING 1 I.P.S. mentioned in this Informative Note must be considered Level 2 PPE as per Decree Law 475/92, or in other words, PPE for which the EC mark can be applied by DAINESE only after first subjecting the device to an "EC Type Test" by a Notified Body.

Conformity with the essential health and safety requirements established by Directive 89/686/EEC has also been achieved on account of the D-AIR RACING 1 I.P.S. compliance with the following technical document:

- DOLOMITICERT - Technical disciplinary for inflatable protectors with electronic activation Revision n°0 of the January 16, 2014

These technical specifications are based, among others, also on the following document:

- EN 1621-4:2013 Motorcyclists' protective clothing against mechanical impact – Part 4: Motorcyclists' inflatable protectors – Requirements and test methods.

The Notified Body that certified your DPI D-AIR RACING 1 I.P.S. is;
NOTIFIED BODY UE N. 2008 DOLOMITICERT Scarl, Zona industriale Villanova – 32013 LONGARONE (BL), better specified in Attachment D to this Informative Note.



2.1.1 Protective performance of the D-AIR RACING 1 I.P.S.

The System to which this Informative Note refers must be considered **Class 2** Personal Protective Equipment (PPE) as it has been designed and produced to provide limited protection against the risks of mechanical impact in the event of a fall.

For the performance levels achieved by the Personal Protective Equipment D-AIR RACING 1 I.P.S. in tests to determine the Level of protection offered refer to Table 1.

Table 1: Performance of the Device

Force transmitted with impact energy of 50 Joule, in accordance with EN1621-4:2013 . Test performed in the shoulder area, with the D-AIR RACING 1 I.P.S. inflated, in combination with the shoulder protector PA EG PRO L1 Type-A level 1.		
Product identification code	Results Average/Maximum Value	(Level 1/2) Requirements: Lev.1 Average value ≤ 4.5 kN, Value of single blow ≤ 6 kN Lev.2 Average value ≤ 2.5 kN, Value of single blow ≤ 3 kN
D-AIR RACING 1.1	Average: 1.9 kN Maximum: 2.7 kN	2
D-AIR RACING 1.2	Average: 1.9 kN Maximum: 2.5 kN	2
D-AIR RACING 1.3	Average: 1.9 kN Maximum: 2.2 kN	2

In particular the D-AIR RACING 1 I.P.S.:

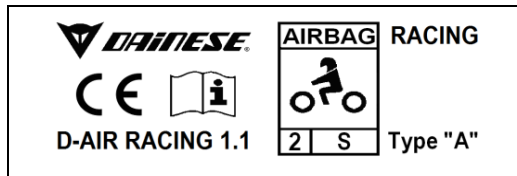
- gives extra airbag protection in the shoulder area;
- reduces the risk of direct impact between helmet and collarbone
- limits the neck bending movements during tumbling
- gives "invisible" protection: comfort and ergonomics "



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2.2. Instructions for understanding the marking of the D-AIR RACING 1 I.P.S.

Protector marking envisaged both by Directive 89/686 and by EN 1621-4:2013



The Marking is indicated on a label stitched to the protector.

The label contains the following information:

	Manufacturer's Name and Trademark
	CE marking certifying that the protective garment complies with the requirements of Directive 89/686
	Pictogram indicating the need to read the Instructions for Use attached to the protector
D-AIR RACING 1.1	(D-AIR RACING 1) Product identification code; each protector model is allocated a different in-house code. (1) The numeric extension of the code .1 .2 .3... identifies a different airbag size. The value can range from 1 to 3 (1 small, 2 medium and 3 large size)
AIRBAG	Indicates that the protector is inflatable
RACING	Indication of the specific type of use for which the inflatable protector was designed. RACING: designed exclusively for use on racetracks
	Pictogram indicating the exclusive use of the protector for motorcycle riders
2	Indication of the performance level of the inflatable protector, according to Standard EN1621-4:2013



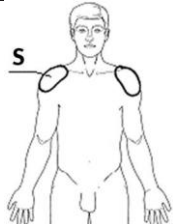
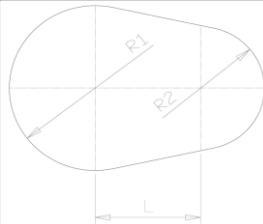
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S	Specification of the body area protected, as established by Standard EN 1621.1 (S - Shoulder).
TYPE A	Specification of the size of the protected area, as established by Standard EN 1621.1, TYPE A or TYPE B (smaller for TYPE A). To find the size of the protected area, refer to table 2

In addition to this information provided on the CE marking, coded information that Dainese uses for product traceability may also be provided. Such coding is provided in smaller letters and numbers in a lower position. Such coding may also appear in other versions of the marking.

Table 2 below shows the position of the body area protected and indicates the minimum dimensions of the area protected by the D-AIR RACING 1 I.P.S.

Table 2: Position and minimum dimensions of the protected area

Protector	Type A [mm]			Type B [mm]		
	r1	r2	l	r1	r2	l
S	55	32	64	70	40	80
						



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2.3. Protectors integrated with the D-AIR RACING 1 I.P.S.



Always wear the D-AIR RACING 1 I.P.S. with all protectors. Wearing the suit without the protectors could increase the risk of injury in the event of a fall.

The use of all the protectors supplied (e.g. back protector, shoulder protectors, etc.) with the garment specifically designed and certified with the integrated D-AIR RACING 1 I.P.S., with which the inflation system has been designed to interact, is obligatory.

The airbag protector does not in any way replace the traditional protectors that also make vital contributions to its efficacy.

Positioning of the integrated protectors is dependent on choosing the correct size of garment designed and certified with the integrated D-AIR RACING 1 I.P.S. from those produced by the manufacturer, following the instructions provided in the informative note supplied together with the garment. In order for the protective inflatable device to perform its protective action correctly, the body area to be protected must remain free from any other accessories.

2.4. Information on the materials used

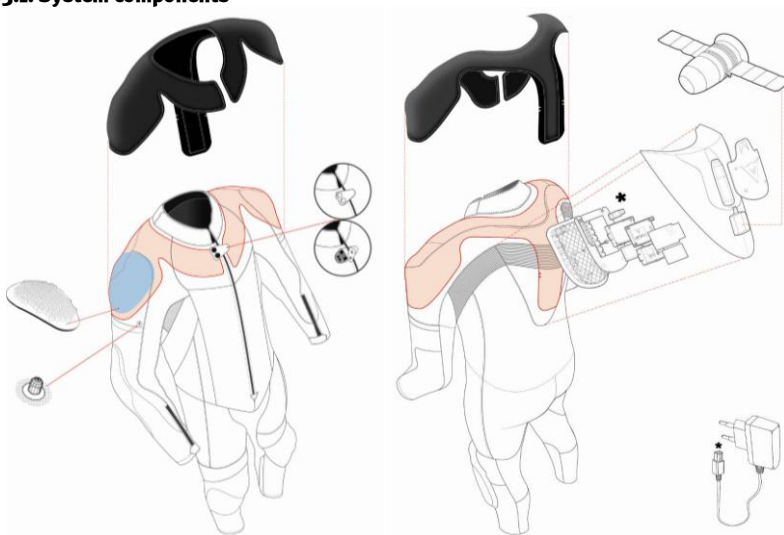
It is hereby certified that the materials that come into contact with the wearer have been produced with suitable non-toxic and non-harmful products, as established by EC Regulation 1907/2006 (REACH) - Annex XVII. It is specified that as established by Regulation EC 1907/2006 (REACH), such materials have no azo colorants capable of releasing dangerous aromatic amines through the cleavage of one or more azo groups - Annex XVII. Moreover, the articles marketed do not contain any Substances of Very High Concern (SVHC), identified according to Article 59 and listed in the Candidate List published by the ECHA (European Chemical Agency), in concentrations greater than 0.1% weight/weight.



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3. OPERATION OF THE D-AIR RACING 1 I.P.S.

3.1. System components



D-Air® Intelligent Protection System

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3.1.1. Electronics



WARNING

If your D-AIR RACING 1 I.P.S. has been triggered, do not use the D-AIR RACING 1 I.P.S. again until you have had the airbag replaced by the Dainese Technical Assistance Service. The D-AIR RACING 1 I.P.S. will not function if it has been triggered. In the event of malfunction, which is indicated by the red flashing LED on the user interface, do not use the D-AIR RACING 1 I.P.S. Contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service if signs of malfunction appear.

The D-AIR RACING 1 I.P.S. is controlled by micro-electronics that trigger inflation of the system whenever one of the pre-set conditions arises. The system has an internal diagnostics routine and whenever malfunction occurs, the user interface LED will begin flashing red. The electronic unit is powered by a Li-Po rechargeable battery whose charge level is indicated whenever the device is switched on/off by a series of flashes. See paragraph 3.1.4. "Batteries and battery life of the System".

3.1.2. User interface

The user interface is a small LED positioned on the right forearm. The purpose of the interface is to communicate the information required by the user. Notes for the correct comprehension and use of the D-AIR RACING 1 I.P.S. user interface are provided below.

3.1.3. Airbag

The D-AIR RACING 1 I.P.S. incorporates an airbag that contains a high-pressure gas canister for inflation of the airbag around the cervical area, also covering part of the shoulders and the upper chest.

3.1.4. Batteries and battery life of the System

When completely charged, the system should be capable of staying on for around 8 hours of racetrack use. Whenever the rider makes no significant movements for more than 5 minutes (static electronic system), the System automatically enters stand-by status in order to minimize consumption. As soon as significant movements resume, the System switches back on.

The battery is not subject to memory effect, and therefore the System can be completely charged in any moment.

For more information on battery operation and charging, see paragraph 4.1. "Checking the battery charge level and charging".





3.1.5. USB battery charger

The D-AIR RACING 1 I.P.S. comes with a USB battery charger. This battery charger must be connected to a 100-240V 50-60Hz outlet. Whenever a 100-240V 50-60Hz outlet is not available, the battery can be charged by using the USB cable to connect the System directly to a computer.

Once the USB cable is connected to the charging source, the user interface LED will light up red. When 90% of the full charge has been reached, the LED will turn green. When the system is fully charged, the LED will turn blue.

3.2. Checking correct functionality of the D-AIR RACING 1 I.P.S.

⚠ WARNING

Perform a pre-ride check before each use to make sure the D-AIR RACING 1 I.P.S. is ready to activate properly. Make sure that:

- There are no signs of wear, breakage, or damage. If you have questions, contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service or an authorized Dainese dealer.
- The D-AIR RACING 1 I.P.S. is fully charged. Charge if necessary.
- The D-AIR RACING 1 I.P.S. has correctly identified the GPS signal. The D-AIR RACING 1 I.P.S. will not switch on, function, or be triggered if it has not identified the GPS signal.
- All protectors are correctly positioned.
- All fasteners of the suit into which the D-AIR RACING 1 I.P.S. is integrated are closed. In particular, if you do not close the front zip, the D-AIR RACING 1 I.P.S. might not protect you.
- Make sure that there are no items in pockets or in backpacks that could perforate or damage the air bag.

Always check System functionality before use. Use of the system when signs of anomaly appear must be considered as being performed at the user's own risk.

After putting on the System, switch it on and step outside where the GPS signal can be correctly received. When you see a blue LED signal every two seconds, this means that the System is ready for use. "For more details, check the flashing codes in the previous paragraph "Guide to user interface LED sequences during use of the D-AIR RACING 1 I.P.S."."



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4. INSTRUCTIONS FOR USE OF THE D-AIR RACING 1 I.P.S.

⚠ WARNING

Perform a pre-ride check before each use to make sure the D-AIR RACING 1 I.P.S. is ready to activate properly. Make sure that:

- There are no signs of wear, breakage, or damage. If you have questions, contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service or an authorized Dainese dealer.
- The D-AIR RACING 1 I.P.S. is fully charged. Charge if necessary.
- The D-AIR RACING 1 I.P.S. has correctly identified the GPS signal. The D-AIR RACING 1 I.P.S. will not switch on, function, or be triggered if it has not identified the GPS signal.
- All protectors are correctly positioned.
- All fasteners of the suit into which the D-AIR RACING 1 I.P.S. is integrated are closed. In particular, if you do not close the front zip, the D-AIR RACING 1 I.P.S. might not protect you.
- Make sure that there are no items in pockets or in backpacks that could perforate or damage the air bag.

At the time of purchase, make sure that your local dealer correctly registers your D-AIR RACING 1 I.P.S. and also carefully checks that your D-AIR RACING 1 I.P.S. is the correct size, as indicated in the paragraph below. The D-AIR RACING 1 I.P.S. must be put on correctly before use on the racetrack. All the obligatory protectors must be put on and positioned correctly. Check that all fastening systems, zips, velcro, buttons, etc. of the garment in which the system is integrated are closed correctly and in the safety position. Take care to close the switch-on/switch-off button located on the neck strap to make sure that the System is switched on correctly. Incorrect connection could cause the System to switch off. Always check that the functionality of fastening systems, zips, velcro, buttons, etc. of the garment in which the system is integrated has not been compromised by dirt, dust or foreign bodies.

4.1. Checking the battery charge level and charging

⚠ WARNING

Always remove the D-AIR RACING 1 I.P.S. before charging it. Never charge the D-AIR RACING 1 I.P.S. while you are wearing it. Charging the D-AIR RACING 1 I.P.S. while wearing it could lead to injury from fire or electric shock.

Always remove the D-AIR RACING 1 I.P.S. before charging it. Never charge the D-AIR RACING 1 I.P.S. while you are wearing it. Charging the D-AIR RACING 1 I.P.S. while wearing it could lead to injury from fire or electric shock.

Keep the D-AIR RACING 1 I.P.S. away from flammable surfaces or objects when charging. If the D-AIR RACING 1 I.P.S. overheats while charging, it could catch on fire.



Observe the following general precautions to care for the Lithium-Ion Polymer (Li-Po) batteries in your D-AIR RACING 1 I.P.S. so that it will work properly. Failure to observe these precautions may result in fire. In the event of problems related to the battery, contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service immediately.

- Never leave the D-AIR RACING 1 I.P.S. charging unattended.
- Stop charging the battery once it has reached a full charge.
- Stop charging the battery if you notice any problems, and do not continue to use the battery.
- Charge the D-AIR RACING 1 I.P.S. at least once every 2 months, even when it has not been used, in order to prevent deterioration of battery performance.
- Do not disassemble the battery.
- Do not short circuit the battery.
- Do not replace the battery.
- Do not store the battery at temperatures exceeding 50°C (122°F).
- Do not dip the battery in fresh or salt water and do not expose it to moisture.
- Do not charge the battery at environmental temperatures exceeding 35°C (95°F).
- Do not use chargers other than those provided with the D-AIR RACING 1 I.P.S.
- Do not modify the charging process or the charging hardware.
- Do not expose the battery to naked flames.
- Do not use the battery for uses other than that for which it was designed.
- Do not allow children near the battery.
- Do not place the battery in a microwave oven or in a pressurized container.
- Do not expose the battery to abnormal electrostatic charges.

Never touch a leaking battery directly. Should leakage occur, contact a dealer or your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service immediately.

Always check the battery charge level before using the suit.

Every time the System is switched on, the battery charge level is shown by two consecutive sequences of 5 flashings that indicate the System's current charge level.

Five green flashings indicate a full charge; every red flash indicates a loss of roughly 20% in charge. "Each flashing lasts around 0.2 seconds; each flashing sequence is separated from the next by a pause of around 2 seconds."



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Figure 1: example of flashing sequence indicating battery charge level

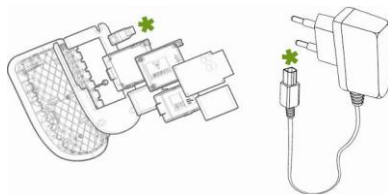


When the charge level is low, connect the USB charger using the charging cable provided to the connector located in the upper part of the aerodynamic hump.

To access the internal USB connector, open the clip button located in the top part of the lining (close to the neck). Locate the small hole covered by a silicone insert in the internal fabric of the hump and connect the USB cable to the internal USB connector.

Then connect the battery charger to the 100-240V 50-60Hz outlet as shown in figure 5.

Figure 2: illustration of charger with USB connector



If a 100-240V 50-60Hz outlet is not available, the battery can be charged by connecting the USB cable directly to a personal computer. Once the USB cable is connected to the charging source, charging is indicated by the user interface by flashing of the LED at the frequency of two flashes per second.

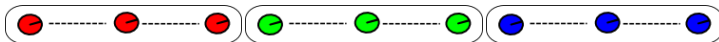
The LED will initially be red to indicate that the system needs charging.

When sufficient charge has been reached (around 90%), the LED will turn green.

When the System is completely charged, the LED will begin flashing blue.



Figure 3: example of flashing sequence indicating charge status



Never overcharge the battery, as this might shorten its working life and even damage it.

4.2 Transportation

Whenever necessary during transport, fold the garment with the integrated D-AIR RACING 1 I.P.S. at the height of the abdomen and the knee, folding the forearms under the chest so that the latter is not folded or wrinkled. Due to the presence of the gas generator and triggering system, air transport might be prohibited or subject to special transport procedures. Before sending your garment with integrated D-AIR RACING 1 I.P.S. by air check with the airport authorities and flight operator to find out the correct procedure to follow.

4.3. Guide to user interface LED sequences during use of the D-AIR RACING 1 I.P.S.

The user interface is composed of a three color LED positioned on the right forearm of the D-AIR RACING 1 I.P.S. (see diagram of the System in Figure 7). The three colors possible are: red, green and blue.

- After closing the switch-on/switch-off button on the neck strap and consequent switch-on/switch-off of the System, the user interface will show the charge level remaining in the System's battery through a sequence of 5 green or red and flashings repeated twice. Five green flashings indicate a full charge; every red flash indicates a loss of roughly 20% in charge. Each flashing lasts around 0.2 seconds, each flashing sequence is separated from the next by a pause of around 2 seconds.

Figure 4: example of flashing sequence indicating battery charge level

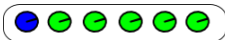


- After the battery's charge level has been indicated, the status of the system will be indicated through another sequence of six flashings. A blue flashing followed by green flashings indicates that the signal is operating correctly and that it is now awaiting the GPS signal. This might happen inside a building, for example, or where the GPS signal is not available.



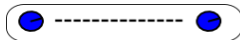
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Figure 5: example of flashing sequence indicating waiting period for GPS signal, first blue flashing



3. After the GPS signal has been found, the D-AIR RACING 1 I.P.S. is ready for use on the racetrack, and the flashing will become a single cyclical blue flashing.

Figure 6: example of flashing sequence indicating that the System is ready for use



4. Once the speed limit of 50km/h has been exceeded, this flashing will disappear completely in order to avoid creating distraction during driving.

Figure 7: no flashing



Figure 8: error sequence, first red flashing



5. Red flashing indicates that a system error has occurred; switch off the D-AIR RACING 1 I.P.S. and switch it back on again using the switch-on/switch-off button on the neck strap. If the error persists, memorize the colors in the system status indication sequence and report them to a Dainese technician.
6. Opening the switch-on/switch-off button on the neck strap starts the System switch off procedure. The user interface will signal system switch-off with a rapid sequence of red flashings for sixty seconds.



Figure 9: switch-off sequence (60sec) or sudden error, fast red flashing



In the event of sudden malfunction of the D-AIR RACING 1 I.P.S. during use with the switch-on/switch-off button closed, the same type of persistent flashing will be seen.

4.4. D-AIR RACING 1 I.P.S. switch-on procedure

Make sure that the System's batteries are fully charged, the battery charge has a duration of around 8 hours; make sure that you charge your D-AIR RACING 1 I.P.S. before the battery charge runs down completely.

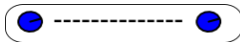
- After putting on the garment with the integrated D-AIR RACING 1 I.P.S. (see paragraphs above) and closing the zip located on the abdomen completely, carefully close the two parts of the switch-on/switch-off button, as shown in Figure 10 below. Both parts must be closed simultaneously.

Figure 10: switch-on/switch-off button



- Before mounting your motorcycle, check system status by using the user interface. The system must find the GPS signal and be ready as shown by the flashing blue LED (see user interface chapter). One single blue LED flashing cycle confirms the reception of the signal.

Figure 11: sequence indicating that the System is ready for use





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- After you have finished using the System, deactivate the D-AIR RACING 1 I.P.S. immediately by opening the switch-on/switch-off button. During transport, connect the safety button cover provided with the System. **WARNING! Make sure that the D-AIR RACING 1 I.P.S. is turned off when you are not wearing it, or when not riding a motorcycle. Use the provided safety button cover to make sure that you do not accidentally trigger the D-AIR RACING 1 I.P.S. Make sure that the On/Off switch located on the neck strap is in the Off position until you are ready to ride.**

Figure 12: safety button cover



4.5. What to do if the D-AIR RACING 1 I.P.S. is triggered

⚠ WARNING

If your D-AIR RACING 1 I.P.S. has been triggered, do not use the D-AIR RACING 1 I.P.S. again until you have had the airbag replaced by the Dainese Technical Assistance Service. The D-AIR RACING 1 I.P.S. will not function if it has been triggered. In the event of malfunction, which is indicated by the red flashing LED on the user interface, do not use the D-AIR RACING 1 I.P.S. Contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service if signs of malfunction appear.

When triggered, the system will inflate and subsequently deflate completely in around 30 seconds. The airbag can only inflate once, and must be replaced after each inflation. Contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service for the replacement procedure (see Attachment B). Alternatively, contact your nearest Dainese dealer for more information.



5. INSTRUCTIONS FOR MAINTENANCE OF THE D-AIR RACING 1 I.P.S.

5.1. Looking after the D-AIR RACING 1 I.P.S.

When the D-AIR RACING 1 I.P.S. is not to be used for a lengthy period of time, carry out the following operations:

- Charge the batteries every two months in order to keep the charge level from dropping too low.
- keep your D-AIR RACING 1 I.P.S. in a dry, well-ventilated place within a temperature range of 10 - 30°C whenever possible.
- never fold or wrinkle the D-AIR RACING 1 I.P.S. and keep it hanging full length to avoid breakage.
- do not keep the D-AIR RACING 1 I.P.S. in transport crates subject to heavy vibrations and sudden changes in temperature.
- keep the D-AIR RACING 1 I.P.S. far away from sources of heat, such as radiators or hot pipes.
- keep the D-AIR RACING 1 I.P.S. far away from intense magnetic fields.

5.2. CLEANING, MAINTENANCE AND STORING

▲ WARNING

To avoid damaging the D-AIR RACING 1 I.P.S., always follow proper procedures when cleaning it.

- Do not immerse the D-AIR RACING 1 I.P.S. in water or other liquids. Do not wash it under running water.
- Do not use solvents or other chemical substances for cleaning.
- Do not iron the D-AIR RACING 1 I.P.S.

Figure 1: international care symbols



5.3. D-AIR RACING 1 I.P.S. service

The Dainese D-Air Racing I.P.S. is a very complex innovative product; even if the System is functioning correctly, it must be serviced by DAINESE after five (5) years from the date of manufacture indicated on your D-AIR RACING 1 I.P.S. Correct maintenance is essential for the correct operation of the system. At the end of this period, contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service immediately.



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5.4. Updating the electronic system of the D-AIR RACING 1 I.P.S.

As described above, the D-AIR RACING 1 I.P.S. comes with built-in electronic control that manages airbag inflation as required. The electronic system's control *firmware* may be updated from time to time for improved performance or new functions. New functions may regard an expansion of the fall recognition functions, or also the addition of new functions.

The firmware can only be updated by an Authorized Dainese Service Center or by the Dainese Technical Assistance Service. In the future there may be other ways of updating the *firmware*; in this case consult the DAINESE website.

Users who wish to contribute to the expansion of the DAINESE road safety database can place their system records at disposal; read the additional information provided in the website in this regard.

5.5. Change of ownership



Inform Dainese of changes in ownership of the D-AIR RACING 1 I.P.S., so that we may contact the new owner for any important updates, communications, or recalls.

The D-AIR RACING 1 I.P.S. is supplied integrated in a garment according to body measurements corresponding to "predetermined sizes" or is made to measure, and proper sizing is necessary for the correct operation of the System. Should you intend to sell your garment with integrated D-AIR RACING 1 I.P.S. to a third party, you must first inform DAINESE, to allow it to check the suitability of the new potential wearer of the System, and provide this person with important safety instructions regarding the System. For this reason, in these circumstances we would ask you to contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service at the email address indicated in ATTACHMENT C depending on the country from which the request is being sent, providing the information indicated below.

Alternatively, the same procedure can be carried out by ordinary mail, sending a letter to DAINESE S.p.A. Via dell'Artigianato 35, Molvena (VI) ITALY, Servizio Clienti, with the following indications:



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New owner

1.	First name:
2.	Surname:
3.	Address:
4.	City:
5.	Nation:
6.	Tel.
7.	e-mail

Former owner

1.	First name:
2.	Surname:
3.	Address:
4.	City:
5.	Nation:
6.	Tel.
7.	e-mail
8.	D-Air Code (on the label accompanying the D-AIR RACING 1 I.P.S.)

5.6. Disposing of the product**WARNING**

The D-AIR RACING 1 I.P.S. contains electronic components and a pressurized gas canister that cannot be disposed of in the same way as traditional waste.

In order to dispose of the product correctly at the end of its working life, contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service. DAINESE will take care of disposal, arranging for collection and correct disposal of the product. Important: incorrect disposal of the product can create dangerous situations or cause environmental pollution.





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6. TELEMETRIC CONTROL

The D-AIR RACING 1 I.P.S. includes an advanced telemetric control with recording of the GPS trace, capable of recording continuously for up to 8 hours.

Monitoring of:

- Lap time
- Speed
- Acceleration/Deceleration
- Banking
- Position

To use the telemetric control included with the D-air racing 1 I.P.S., download and install the software from the D-Air dedicated page in the website http://www.dainese.com/us_en/d-air/racing/, under the INFO/DOWNLOAD THE DATA ACQUISITION SOFTWARE section.

After installing the software on your PC (Windows compatible) you can connect it to the D-AIR RACING 1 I.P.S. to download your telemetric control data and make use of the various options offered by the software.

For further information on the telemetric control consult the specific documentation available on the website http://www.dainese.com/us_en/d-air/racing/.



7. POSSIBLE MALFUNCTIONS OF THE D-AIR RACING 1 I.P.S. AND SOLUTIONS

Table 3: possible malfunctions

Problem	Possible cause	Possible Solution
When the switch-on/switch-off button is closed, the LED remains off	The battery is completely run down	Charge the System for at least 3 hours.
During use, the LED starts flashing red	The switch-on/switch-off button is open or the unit has recorded a malfunction	Try switching the system off and back on again. If the problem continues, contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service.
After putting on the D-AIR RACING 1 I.P.S. the LED continues flashing, alternating from green to blue without changing to single blue flashing	The GPS signal is not received correctly.	Try going outdoors. Under certain weather conditions or in the presence of strong radio disturbance, the GPS signal may be hard to receive. In these conditions, correct operation of the System will be impossible. If the problem continues, contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service.
The LED suddenly starts flashing red and then returns to correct operation during use.	This occurs when the switch-on/switch-off button is opened temporarily.	Check that the switch-on/switch-off button is closed correctly. If problem persists, the cables may be damaged. Contact your nearest Authorized Dainese Service Center or directly the Dainese Technical Assistance Service.

8. F.A.Q. (FREQUENTLY ASKED QUESTIONS)

Q: Is the D-AIR RACING 1 I.P.S. completely safe?

A: No. No protective system can protect the wearer from every possible risk or under every possible condition of use. All protective equipment has its limits and injury and even death can occur even while wearing the D-AIR RACING 1 I.P.S.

Q: Has the system been tested by an authorized certification agency?

A: Yes. The NOTIFIED BODY UE N. 2008 DOLOMITICERT Scarl, Zona industriale Villanova – 32013 LONGARONE (BL) participated in the Certification process and issued the Certification (see Attachment D to this Informative Note).



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Q: Does the system operate without need for any connection to the motorcycle?

A: Yes. The system works in complete autonomy in regard to the motorcycle. No component need be connected to the motorcycle.

Q: Is the system designed for updating?

A: Yes, the System has firmware that can only be updated by an Authorized Dainese Service Center or directly by the Dainese Technical Assistance Service. In the future there may be other ways of updating the *firmware*; in this case consult the DAINESE website.

Q: Does the System offer the possibility for telemetrically-based racetrack functionality?

A: Yes. The software provided also permits telemetrically-based functionality.

ATTACHMENT A: PRODUCTS THAT CAN BE COMBINED WITH THE GARMENT WITH INTEGRATED D-AIR RACING 1 I.P.S.

- Rain cover for garments with integrated D-AIR RACING 1 I.P.S. "Rainwear professional Body"
- Specific summer underwear for garments with integrated D-AIR RACING 1 I.P.S.
- Specific windproof thermal underwear for garments with integrated D-AIR RACING 1 I.P.S.

ATTACHMENT B: AUTHORIZED DAINESE SERVICE CENTERS AND DAINESE TECHNICAL ASSISTANCE SERVICE

AUTHORIZED DAINESE SERVICE CENTERS

DAINESE NORTH AMERICA

1001 Brioso Dr. | Costa Mesa | CA 92627 | USA

E-mail: dainese.usa@dainese.com

Tel: +1 949 645 9500

Fax: +1 949 645 9501

DAINESE TECHNICAL ASSISTANCE SERVICE

DAINESE S.p.A, Via dell'Artigianato 35, Molvena (VI), Italy

Fax: +39 0424 410700



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ATTACHMENT C: DAINESE TECHNICAL ASSISTANCE SERVICE AREA DIVISION

Italy	EMAIL	d-air.racing.customercare1@dainese.com	d-air.racing.customercare2@dainese.com
		Lazio Umbria Abruzzi Molise Basilicata Campania Calabria Puglia Sicily Sardinia	Marche Tuscany Emilia Romagna Triveneto Lombardy Valle D'Aosta Piedmont Liguria
Abroad	EMAIL	d-air.racing.customercare1@dainese.com	d-air.racing.customercare2@dainese.com
		Spain and Andorra Portugal France Belgium Holland Eastern Europe Balkans Russia Baltic States Scandinavian Peninsula Far East Greece Turkey	Germany Austria Switzerland Great Britain Ireland

ATTACHMENT D: D-AIR RACING 1 I.P.S. CERTIFICATION

The Notified Body that certified your D-AIR RACING 1 I.P.S. is NOTIFIED BODY UE N. 2008 DOLOMITICERT Scarl, Zona Industriale Villanova – 32013 LONGARONE (BL).



Dainese S.p.A.

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36060 Molvena (VI), Italy

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