Divo owner's manual

Icaro 2000 congratulates you on your purchase of **Divo** (IC2008-01), a new exclusive sports helmet. To give our customers the widest possible choice, we developed this full-face helmet with a fibreglass outer shell, an exceptionally wide field of vision, and new interiors to ensure the highest possible standards of performance, protection and comfort. All this is accompanied by the distinctive Italian design features with appealing style and colours, and the quality of a helmet made exclusively in Italy. We are sure that you will love your Divo!

The principal purpose of our helmets, **safety**, has been achieved without sacrificing comfort or aerodynamic performance, by virtue of the innovative technology that we have applied.

IC2008-01 is a full-face helmet certified by Italcert, obtaining **certification as a free flight helmet for hang gliding and paragliding**, in compliance with the EU standard **EN 966:2012+A1:2012**.

Icaro 2000 recommends the use of certified helmets only.

Our network of distributors worldwide ensures the availability of parts and service wherever you practice your sport.

This manual can be also viewed online.
In fact, the user manual for the helmet you have purchased can also be viewed at this web address:
https://icaro2000.com/Products/Helmets/Divo/Divo.htm#15

Or you can scan the QR code on the sheet included in the helmet box to access the helmet manual and other important information.

For further details or service, please consult your nearest Icaro 2000 retailer, or contact the company direct at:

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INDEX

GENERAL INFORMATION 4
- CHOOSING AND PURCHASING A HELMET 4
- STRUCTURE OF THE DIVO HELMET 4
- OUTER SHELL 4
- CRUSHABLE FOAM INNER SHELL 5
- COMFORT LINING 5
- VENTS 6
- MICROMETRIC CHIN STRAP 6
- VISOR 6
- TECHNICAL SPECIFICATIONS 7
- CERTIFICATION 7
- USING THE HELMET 7
- 4 THINGS THAT YOU SHOULD NEVER FORGET 7
- IN CASE OF ACCIDENT 7

HELMET MAINTENANCE 8
- PERSONALIZATION 9
- REMOVAL AND REASSEMBLY OF INTERNAL PADDING 9
- VISOR INSTALLATION AND REMOVAL 9

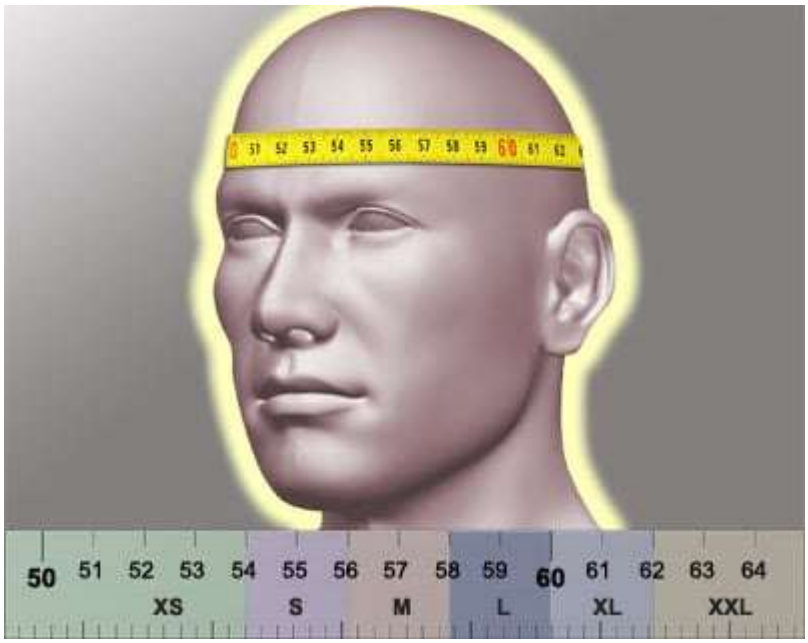
CLEANING 10
- EXTERNAL SHELL 10
- INTERNAL PARTS 10

IMPORTANT INFORMATION 10
- HELMETS AND ACTION CAMERAS 11

General information

Choosing and purchasing a helmet

When you purchase a helmet, the most important moment is choosing the **right size**. If you have never purchased a helmet, you probably don't know your own size. The size of a helmet is specified by the **inner circumference** of the internal padding. The size number therefore corresponds to the head circumference in centimetres.



Take your time when choosing a helmet. Try several, and follow these criteria:

Put the helmet on and fasten the strap:

- The helmet should not be so loose that it moves around, but neither so tight that it causes continuous pressure on your head
- A helmet that is too large may slide down and obstruct your eyes
- Try to pull it off, moving it back and forth: if it tends to slip off or move around, it is too large
- Lean your head forwards, grip the helmet's rear edge, and try to pull the helmet off. If the helmet slides off, it is not suitable for the shape of your head.

If, while trying on the helmet, it does not perform satisfactorily for just one of these criteria, you should try another size or another model.

When compared with the jet, or open-face helmet, a full-face helmet also guarantees protection for the chin area. Consider this carefully when you are choosing your helmet.

Never purchase a second-hand helmet, even if the price is good. There is no way of discerning its real conditions (whether it has been involved in an accident, etc.).

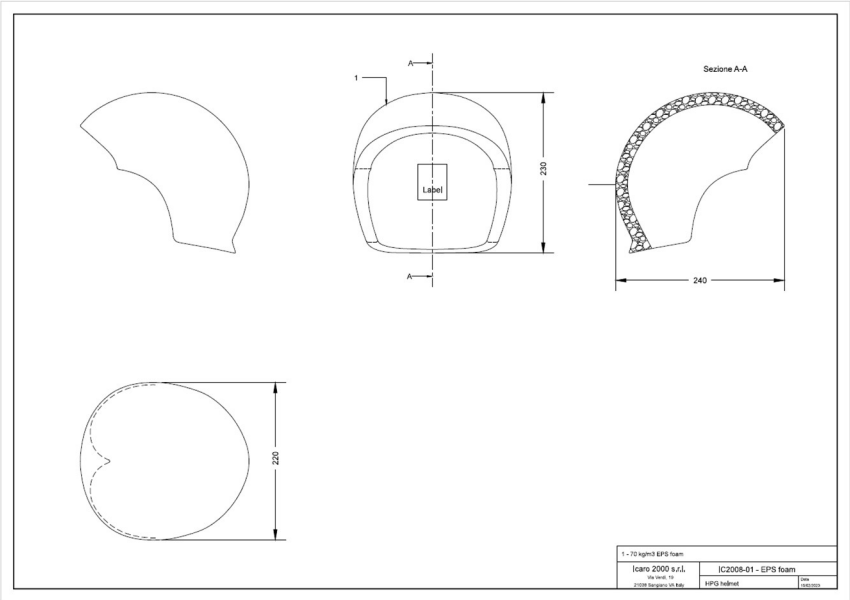
Structure of the Divo helmet

Outer shell

- Divo is made with a fibreglass outer shell, giving it **high perforation resistance, strength, elasticity, and lightness.**

Crushable foam inner shell

- Divo has an **inner polystyrene shell** of increased thickness, in order to further enhance the **safety** and **protection** provided by the helmet. This component can be damaged even by a minimal impact, and after such an event, the helmet should be replaced. This is part of the helmet's intrinsic protective role. In fact, polystyrene is easily deformable, and in this context its function is to **absorb shock** by means of deformation and/or partial destruction. A more rigid material would not have the effect of dissipating impact energy, and so it would transmit all the shock energy to the head.



Comfort lining

- **Divo** has a comfort lining comprising a **cap** in the high-technology fabric **Coolmax**, which increases comfort by wicking perspiration away from the head and enabling it to evaporate rapidly, keeping you cool and dry. Every Divo helmet has a label that guarantees the use of this famous new textile, which is also soft to touch and so makes the product even more comfortable.



- The cap is quick and easy to remove, in order to wash or replace it.

Vents

- Vents on the helmet's exterior guarantee **internal air flow**, optimizing comfort and temperature in flight.



Micrometric chin strap

- The chin strap has a **rapid fastening system**, with a slider that is inserted into the buckle, simply by pushing it into the opening. It offers a number of different positions. The strap length can be adjusted before fastening, to ensure that the final length at the buckle is correct. The strap system is designed for controlled breakage in the case of impact.
- The chin strap is padded with soft, comfortable fabric.



Visor

- For the Divo helmet, the visor is an **optional accessory**. It is made in polycarbonate, with anti-scratch treatment.
- The visor should be replaced when vision is impeded by small scratches on the surface.
- **Wind tunnel tests have shown that for a free flight helmet, a visor is essential for achieving the best possible aerodynamic efficiency.**
- **The visor increases active safety,** providing better wind protection and increasing the width of the field of vision when compared to the use of any type of sunglasses.

Visor fixing system
In order to further increase safety for paraglider pilots, we have introduced a **new visor fastening system**. It was essential to ensure that the aluminium disc does not project from the outer shell by more than 5 mm, so

that paraglider lines cannot get caught on the helmet.
This modification was also mandatory for EN 966 certification.
There is an O-ring inside the aluminium disc which provides the friction necessary to adjust visor position continuously and smoothly. The degree of braking can be adjusted as desired by tightening or loosening the screw, using the Allen key provided.
When the visor is lifted completely, it is entirely outside the field of vision.

Technical specifications

- **Weight**:
  - Divo helmet, 660 grams
  - Visor: 140 grams.

- **Sizes**:
  The Divo helmet is available in the sizes:
  - S (55 – 56)
  - M (57 – 58)
  - L (59 – 60)
  - XL (61 – 62)

Certification

- Divo was certified by the Italian authorized certification body Italcert.
- It is manufactured specifically for **hang glider**, **paraglider** and **microlight** pilots. It is designed and built to be as light as possible, while optimizing safety.
- Divo has the **EN 966 certification**.

Using the helmet

Once you have chosen the most suitable helmet, make sure that you **wear it correctly.** For safety, it should always fit snugly, and the strap should be tightly fastened.
A helmet will never be able to guarantee total protection for the head when subjected to the forces produced by certain types of impact. However this is no excuse to forego wearing a helmet. You should **always wear your helmet,** in order to exploit the protection that it provides, whatever impact may occur.

4 things that you should never forget

1. **Before using the helmet,** read all the instructions, and follow the suggestions carefully to ensure a correct fit.
2. **Do not use the helmet without fastening the strap.** An unfastened helmet will fall off during the first impact, leaving the head unprotected for successive impacts. There is also the risk of it falling off during flight.
3. **Do not** fasten the helmet **using just the Velcro.** The Velcro that may be present on the strap serves purely to stop it flapping in the wind.
4. **To ensure maximum performance, never modify your helmet, whatever the circumstances.**

In case of accident

If the accident happens to you:

- The inner shell will be deformed – though the deformation may not be visible to the naked eye – because it has absorbed the impact.
- **After an accident, even if the impact was minor, the helmet should be replaced, regardless of whether there is visible damage or not.**

If you witness an accident:

- Keep calm.
- Report the accident immediately, if possible by phoning for an ambulance (in Italy, dial the unified emergency number, 112). Only medically-qualified personnel know exactly how to deal with injuries.
- Never move an injured person, unless this is absolutely essential because of a situation of greater danger.
- If the spinal column is damaged, moving the injured person could harm the spinal cord, causing permanent paralysis.
- If the victim is wearing a helmet, do not remove it, but open the visor to facilitate breathing.
- Keep the victim calm, and, if possible, cover him/her. Shock provokes shivering and a sensation of cold.
- Do not give the victim alcoholic drinks.
- Stem the flow of blood from wounds, protecting your hands with gloves or similar, throwing them away later if they have been soiled with blood. Do not apply tourniquets: if you place a tourniquet in the wrong position, you could worsen the situation.
- Never put the victim into a private car. Wait for the ambulance. If the victim is conscious, talk to him or her and try to calm him or her down.

Helmet maintenance

The helmet protects your head, and so it should be **treated with care.**
The **visor** should be **changed** when it has **scratches** preventing satisfactory vision.

To prevent damage and errors in assembly, ask your dealer or Icaro 2000 directly to change your visor, or contact us for further information. (See contact details at the beginning of this manual).

The helmet can be **seriously damaged by:**

- Paints and varnish
- Petrol
- All types of chemical solvent
- Excessive heat (do not leave your helmet exposed to the sun)
- Inappropriate modifications

Scrupulously follow the instructions provided by the manufacturer.
If you think that the helmet that you have chosen is not right for the shape of your head, replace it… and this time choose more carefully!
A helmet does not have a fixed lifespan. However, it is a good rule to replace it after five years of normal use.

Important!

- **THE EXTERNAL SHELL OF THE HELMET SHOULD NEVER BE ALTERED IN ANY WAY.**
- **INTERNAL POLYSTYRENE PARTS SHOULD NEVER BE MODIFIED OR REMOVED.**
- **NEVER APPLY PETROL, DILUENTS, TOLUENE OR OTHER SOLVENTS OR CHEMICAL SUBSTANCES TO ANY PART OF THE HELMET.**

Personalization

Removal and reassembly of internal padding

Important: do not use sharp or pointed tools such as screwdrivers, etc., in order to not to scratch or damage the helmet and its structural components

Divo has a **comfort lining** that can be removed and re-installed in order to personalize the helmet's fit, or to wash the lining.



Divo's comfort lining, comprising a cap in **Coolmax**, is fixed to the polystyrene inner shell by means of a series of Velcro strips. It is easy to remove. Just ensure that you **detach the Velcro strips by holding and pulling the strips themselves. Don't just pull the inner cap out from the helmet**.

Assembly

To assemble the lining, reverse the removal sequence, ensuring that the Coolmax cap is positioned centrally and symmetrically.

When you are sure that the cap is in the correct position inside the helmet, press firmly over the Velcro fastening strips in order to fasten the lining.

Visor removal and installation

The visor can be removed if it has to be cleaned thoroughly or replaced, or if you have purchased a new visor for your Divo helmet.

Important: when fitting and removing the visor, be careful not to scratch the surface of the helmet or visor with a screwdriver or other sharp or abrasive objects.

Don't touch a mirror-finish visor with your hands, because it may be opacified by the acid contained in perspiration.

Removal of the visor

- Place the helmet onto a table, ensuring that it is entirely stable, and lower the visor into its position of normal use.
- Unscrew the two lateral fixing screws. When the first screw has almost been completely unscrewed, be careful not to lose the rubber O-ring, positioned inside the aluminium, and the Mylar washers between the visor and the outer shell.
- If you decide to fly without a visor, remove all the elements that are not part of the outer shell, and cover the threaded bushes in the shell using the stickers provided.
- It may be necessary to periodically replace the rubber O-rings in order to guarantee the correct damping of visor closure.

Adding or re-installing a visor:

If you bought a visor for your helmet separately, it is supplied with the two screws and separators needed for assembly.

To add or re-install the visor, follow below instructions.

Fixing the visor to the helmet
On each side of the outer shell, there is a single hole with a threaded bush.

- Place the rubber O-ring into the circular housing on the aluminium washer.
- Then place the aluminium washer with the O-ring into one of the holes on the side of the visor.
- Insert the screw into the aluminium washer and then position the Mylar washer on the inside of the visor.
- Holding the washers and the screw in their correct position in the hole in the visor, position the screw into the threaded bush on the helmet, and screw it in using the appropriate hex key.
- Follow the same procedure for the other side of the helmet.

Cleaning

External shell

- Remove the visor and other accessories. Use **only a damp microfibre cloth** for cleaning. If the external shell is soiled with mud, insects etc., soak a microfibre cloth with warm water, wring out excess water, place on the helmet and leave for a few minutes. This will loosen the grime. Use damp microfibre cloths to gently clean the outer surface of the helmet. Dry with a dry microfibre cloth. **Do not use solvents, chemicals or petroleum-based products** which may cause damage to the helmet's structure.

Internal parts

Interior polystyrene

- To clean the interior polystyrene, it will be necessary to have removed the inner lining
- Gently rub the polystyrene, **using only a damp cloth**
- **Avoid exerting concentrated pressure, even if only with fingertips**
- Leave to **dry** at room temperature, **protected from direct sunlight**.

Comfort lining

- Hand-wash carefully, using just water at **maximum 30° C** and **neutral soap.**
- Rinse in cold water.
- Leave to **dry** at room temperature, protected from direct sunlight.

Important information

Pilots who are used to flying with just sunglasses or even with no eye protection at all **may take a few flights to get accustomed to the visor.** If you don't feel comfortable with the visor to start with, just lower and raise the visor during your first flights with the helmet until you get used to it.
In conditions of high humidity and/or large temperature excursions, the visor may fog. On such occasions you will immediately appreciate the difference between flying with sunglasses and with a visor: in the latter case, you just have to open the visor slightly to obtain the complete clearance of any fogging.
A helmet with a visor produces a different air sound, and it makes it easier to hear your flight instrument.
If you rotate your head into a lateral position, the detachment of the airflow from the visor could give rise to anomalous sounds (the jet effect), which disappear immediately after the normal flight position has been resumed.

- Never fly without a helmet
  - Your life is too precious to risk losing it just because you have forgotten something.

- Use only certified helmets
  - The IC2008-01 helmet is constructed in compliance with regulation EU 2016/425, and it is certified

in compliance with the EU standards EN 966:2012+A1:2012.
  - Never trust a helmet that has no label guaranteeing this standard.

- We recommend the use of a full-face helmet
  - A full-face helmet offers optimized protection in every situation.

- Never modify your helmet for whatever reason
  - Modifications could reduce the level of protection, and could annul the helmet's certification.

- Never use headphones under the helmet
  - Any rigid components placed inside the helmet, between polystyrene lining and the head, could become percussive and damaging elements.

- Always ensure that the chin strap is tightly fastened.
  - An unfastened helmet will fall off during the first impact, leaving the head defenceless for successive impacts. There is also the risk of it falling off while using it.

- Transportation
  - During transportation keep your helmet in the protective bag provided.
  - If you keep your helmet in the backpack, don't sit on it.
  - Ensure that the helmet never falls onto the ground or the floor.
  - Handle the helmet and visor (if present) with great care at all times.

- In case of accident
  - After an accident, even when the impact is minimal, the helmet should be replaced, regardless of whether there is any visible damage or not.

Helmets and action cameras

Many pilots mount an action camera onto their helmets in order to record their adventures. It is important to remember that **any object projecting for more than 5 mm above the level of the outer shell annuls the helmet's certification**, just as for any other modification that is not specified in the user manual. The reason for this is that an object mounted onto the external shell could concentrate a percussive force onto a small area. Therefore, it is potentially dangerous and reduces the level of protection that the helmet can provide. Considering that even the most compact action camera projects at least 30/40 mm from the helmet's outer shell, there is no doubt that a helmet equipped with this sort of device can no longer be considered as compliant with its respective certification. For this reason, because we at **Icaro2000** wish to offer the highest possible level of protection for our customers, we recommend **not fitting action cameras** or other devices onto the outer shell of a helmet.

Icaro 2000 wishes you safe flying.

Icaro 2000 is committed to the ongoing development of its technology, and therefore it reserves the right to modify the characteristics of its products at any time and in any way, without prior notice.