independence

paragliding

Owner's manual

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Pilot Alpin

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With the harness system Pilot Alpin you bought one of the lightest and most functional harness, which is available on the market at present. Thank you for your confidence. Please read this instruction carefully and consider, that Fly market GmbH & Co. KG is not liable for accidents and damage, which result from disregarding of this operating instructions.

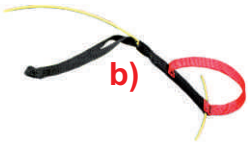
Technical Describtion:

The Pilot Alpin is a harness for the use in a non motorized paraglider. It is designed as a biplace pilot harness and has an integrated rescue system container. The Pilot Alpin is tested according EN1651 and in combination with the optional protector system Connect Pro or Connect Airbag according LTF 91/09. Certification No: AirTurquoise GZ-XXXXX/19.

technical datas	
maximum clip-in weight	120 daN
harness weight	2,0 kg
hangpoint height	37 cm
protector system	Mousse Bag or Airbag
maximum rescue system volume	8600 ccm

Overview:

a) Rescue system container
b) Rescue system release handle
c) Safety T-system with chest belt buckle
d) Lateral chest belt /adjustment buckle
e) Shoulder belt with adjustment buckle
f) Main suspension
g) Carabiner main suspension
h) Leg loops
i) Protector Connect (Pro or Airbag) (detachable)
j) Storage bag
k) fixation for protector
l) fixation ring for Connect Pro protector
m)fixation ring for Connect Airbag protector
n) channel for rescue system bridle



1. Putting on the harness:

To put on the harness, the colored leg loops (h) and the chest strap (c) have to be opened. The pilot puts on the harness by placing the shoulder straps over his shoulders and closing the two leg loops in the correct direction. Finally, the chest strap with the integrated Safe-T-System is closed.

In the further take-off preparation, the harness is connected via the carabiners (g) with a tandem suspension (spreader bar). The passenger harness, paraglider and rescue system are also attached to the spreader bar. Please refer to the tandem suspension manual.

2. Adjustment possibilities:

Adjustment possibilities are existing at the shoulder belts, the chest belt and the lateral chest belts.

By the versatile adjusting possibilities of the Pilot Alpin we recommend in any case that all adjustments and settings are done in a simulator **before** the first flight to guarantee an optimal comfort.
The clasps of the leg straps are secured against unintentional opening. To open, the button of the clasp must be pressed and the counterpart tilted and threaded out.

Adjustment of the chest belt:
The chest belt is closed together with the Safe-T-System. The length can be adjusted by the adjustment buckle.

Adjustment of the shoulder belts:
Please note that with correct adjusting the shoulder belts are felt with light pressure on the shoulders. With the shoulder belts you adjust the harness on the pilots heigh, but also you adjust the seating position between upright and lying.

Adjustment of the lateral chest belts:
Adjusting the lateral chest belts take place as the third step and offers on one side again the variation of the seating position from lying to an upright position. On the other hand you adjust with the lateral chest belts the most comfortable seating position. During the adjustment pay attention to the fact that the body load is distributed equal on shoulder belt and lateral chest belt.

Adjustment of the leg belts:
The leg belt length is fixed and cannot be adjusted.

3. Mounting of the protector:

For the Pilot Alpin, only protectors of the Connect Pro or Connect Airbag series may be used. For assembly, connect the 6 Velcro connecting points (k) to the harness as shown in the figure below.
When mounting a mousse bag protector (Connect Pro) use the lower mounting ring (l) and for an airbag protector (Connect Airbag), the upper mounting ring (m).

The protector should be mounted as close to the harness as possible to ensure a tight fit.
With the "Connect Pro", the distance to the harness has to be chosen slightly larger so that a lateral leg mobility is guaranteed.

This should be tried on both models in the simulator on the ground.

Mousse Bag
protector „Connect Pro“

Airbag protector
„Connect Airbag“

2. Mounting the rescue system into the harness:

1. Connect the rescue bridle with the harness Y-bridle (or spreader bar bridle) by looping the bridles or with a quick link (strength >2400 daN) and fix the connection to prevent slipping (for example by a neoprene sleeve).

2. Place the harness Y-bridle (or spreader bar bridle) in the channel left and right directing to the main carabiners. Excess bridle is stowed in the rescue system container.

3. Loop in the release handle on the deployment bag centered as far as possible.

4. Place excess bridle in S-loops in the container. The path of the bridle to the spreader bar is shown in the red dashed lines.
The deployment bag is placed with the loop-in point to the outside (red arrow).

5. Place the deployment bag. Depending on the volume of the rescue system loop in a packing cord in the inner or outer loop (green arrow) of flap 1. The release handle run out above (red arrow).

6. Close flap 2. Depending on the volume use the inner or outer grommet. It can be temporarily hold with a packing pin or the cable of the release handle.

7. Close flap 3 and 4 and hold it temporarily.

8. Close the container with the yellow cable of the release handle with the use of the cable guides (red arrows) . It must be ensured that the connection to the deployment bag (green arrow) is long enough so that the release cable can unlock the closed container safely.

9. Place the yellow cables of the handle in the 3 cable compartments of the harness.

10. Fix the handle with the velcro and check finally if the container is closed correct. Secure the handle by using a seal thread with 2 daN strength.

Securing the release handle:

To avoid an unintentional opening it is obligatory to use a seal thread in the opening mechanism. This defines a minimum opening force. This special thread must be put through the loop at the release handle and harness and has to be fixed by a knot. (See figure 10 red arrow)

For securing only certified seal thread is allowed as if the strength of is too high the save operation of the rescue system is not guaranteed.
The securing is only to be carried out as described above. The seal thread is supplied by Fly-market.

Attention:

After every installation of a rescue-system in a harness there must be a test if the opening force is between 2 and 7 daN.

Compatibility check:

If the harness and rescue system is combined the first time, a compatibility test must be carried out by a competent person! In addition to a test release, the audit also includes checking weather all technical conditions specified in the manuals of harness and rescue system have been met. It confirms that the installed components ensure a safe deployment of the system.

The compatibility must be confirmed in the parachute repack log book.

Operating notes:

Activation of the rescue system:

The rescue sytem is activated by pulling the rescue system release handle sideways outwards. Other pulling directions (for example forward towards the pilot) can lead to higher deployment forces, in the worst case to a blockade.

The pin unlocks through the pull and releases the deployment bag of the rescue system attached to the handle. With a powerful throw the deployment bag is thrown together with the handle in the open air space.
Depending on the emergency situation, the best throwing direction may vary for a quick opening of the rescue system.

Operation of the protector Connect Pro / Connect Airbag:

The Pilot Alpin is optionally supplied with a removable, according LTF 91/09 certified back protector. Depending on the version, the protector consists either of a foam material which is sewn into a fabric sleeve (Connect Pro) or a pressure-filled fabric sleeve (Connect Airbag).
The Connect Pro protector must be checked before each take off to see if it is completely filled with air. Especially at low temperatures and when the protector is not used for a long time, it may fill up slowly.
In the case of the Connect Airbag, the edges of the seams are reinforced so that the protector is already mostly filled with air before take-off. Before each take-off the protector must be checked wheater the air intake and the check valve is functional.

In principle, both systems work the same way: during a seatboard landing, the air in the protector is compressed and deflated via the seams to the outside. The resulting deceleration distributes the impact energy over a longer period, thus protecting the spine from extreme peaks load. The G-forces achieved in the type certification were very good. However, even the best back protection does not guarantee the prevention of back injuries!!!

For this reason, the protector should not be used for unnecessary seat board landings. With every use the protector will be less efficient and the effect of protection less - even if no damage is visible.
If a damage is visible the protector is not to be used anymore as well as after a hard landing!! Then the harness must be returned to the manufacturer for inspection.

Before use of the harness the following points should be checked:

- Outer shell of the protector and the entire belt system intact?
- Protector fully inflated / air intake and the check valve is functional?
- Rescue container and release handle properly closed and mounted?
- All harness buckles properly closed and adjusted?

Maintenance / service life of the protector:

The protectors of both systems are almost maintenance free. Before each take off the protector should be checked if undamaged and in correct position.

Visible damage (holes, cracks) must be repaired, otherwise the outer shell can break during an impact with a loss of damping.

in additon for:

- Connect Pro: check if protector is fully inflated.
- Connect Airbag: check if the air intake and the check valve is functional.

After a hard landing with the use of the protector and if a damage is visible the protector must be repaired or exchanged by the manufacturer or an authorised dealer/workshop.

Biplace flights:

The Pilot Alpin harness is designed and suitable as a pilot harness for biplace flying.

Towing:

The Pilot Alpin harness is suitable for towing if a certified biplace towing release is used. There are no separate attachment points to mount a towing release!
Before mounting a towing release, please check the towing release manual!

Behavior in particular cases

During water and strong wind landings the pilot/passenger should disconnect as soon as possible from the paraglider / harnesses after landing. For that please loosen the leg belts and then open the leg and chest buckles. We generally recommend to carry a webbing cutter!
For tree landings, etc. the pilot/passenger should first secure themself against a possible crash and should wait for professional help.
Contrary to above recommendations, it is possible that a different behavior as described is required. The variety of possible situations not allows an universal or general advise for the right behavior. The right behavior is a case-to-case decision in full responsibility of the pilot/passenger. On biplace flights there is a particular responsibility of the pilot for the passenger!

Lifetime and replacement of parts, repair advice

The Pilot Alpin is designed for high loads and stress. High demands were set in the choice of materials. The lifetime of the harness depends on a high degree of awareness and treatment of the user. We recommend to inspect the harness periodically for signs of wear. If necessary damaged components must be replaced.

Damaged components may only be repaired by the manufacturer or an authorized workshop. Only original parts are to be used!

If the harness is dirty, clean it only with water. Avoid mechanical stress as brush and rub. Chemical cleaners will damage fabric and webbing.
Except the protector, carabiners, release handle and the rescue system Y-bridle are no other single components available. Only original components may be used. An inexpensive purchase is possible through us.

Maintenance, inspection, periodic check:

The Pilot Alpin is almost maintenance free but it requires a regular check for damage. Regular inspection gives you the guarantee of a full function of the harness.

Take particulary care that no dirt gets into the mechanic of the buckles and that all moving parts of the buckle are running free and are not damaged. If needed you can oil the buckles a little bit.

The maintenence of the protector is described separate.

The harness (included the protector) must undergo at least after 24 months a complete check. The carabiner must be replaced according the carabiner manufacturer instructions, lately after 1000 hours or 5 years. Only original carabiners are to be used! The periodic check must be documented.

Storage and transport:

In order to prevent unnecessary weakening of the harness we recommend for storage and transport:

- avoid high temperatures (for example: closed car in summer)
- avoid dealing with fire, sharp objects and chemicals close the harness
- avoid unnecessary long exposure to sunlight as ultraviolet radiation destroys the molecular structure of the material
- avoid contact with salt water or acid liquids
- if the harness is not in use for a long time, especially the back protector should not be stored compressed. Store the harness in a cool, dry place.

Disposal:

The materials used in a paragliding harness require proper disposal. Please return the worn-out equipment to us. The equipment will be disposed properly by us.

Nature- and environment friendly behaviour:

Actually it's self evident, but nevertheless mentioned particularly: Please do our nature near sport in a way which do not stress nature and environment!
Please do not walk beside the marked ways, don't leave your litter, don't make unnecessary loud noises and respect the sensitive balance in the mountains.
Especially at the take-off we have to take care for the nature!