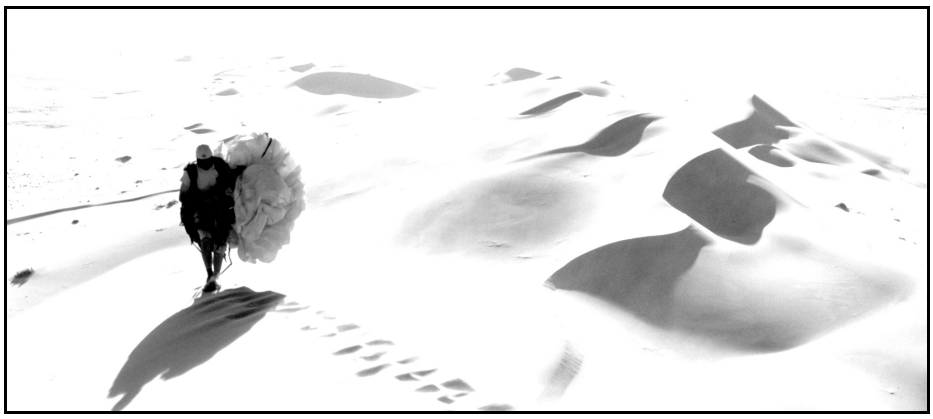
English



Welcome

Congratulations and thank you from Gin Gliders on your purchase of the **Oasis**. In this glider, designer Gin Seok Song has pooled all his knowledge from his competition glider, the boomerang, and his entry level glider, the bolero, to produce a glider that offers pilots the best of both worlds - outstanding security and top class performance. Even more remarkable is the glider's handling, which will allow you to experience the full pleasure of free flight. Being a qualified pilot, you probably know most of the techniques laid out in this manual involved in flying a paraglider. We would, however, like you to read this manual thoroughly. Safe flying starts with a good theoretical background.

For whom and why

The **Oasis** is designed for all kinds of flying, from ridge soaring to thermalling and cross country flying. It is also ideal for towing. It is best suited to a pilot with one or two years experience. It may also be flown by an experienced pilot who wants an extra safety margin, or a lesser experienced pilot of outstanding ability.

We expect the dealer and end-user to have sufficient knowledge and experience of high performance paragliders, their uses and dangers. Should this not be the case, this manual can never be the means to gain that experience.

This glider has been designed for a pilot who:

- flies more than 20 flights a year
- has previous experience of thermal flying
- can assess the conditions he/she is flying in and if necessary abort the flight
- is a competant, all round pilot

The information in this manual can under no circumstances replace a proper training in an authorized paragliding school. If a friend offers you free beginner's "lessons" with a **Oasis** or any other paraglider, don't be tempted, deny firmly.

Table of contents

Testing

The Gin Gliders **Oasis** has passed DHV 1—2 (GH). The GH signifies that the glider is tested with almost all harnesses on the market at the time of writing. It has also been shock-tested and passed with a load corresponding to more than 8G of the maximum weight in flight.

Deutscher Hängegleiterverband e. V. im DAeC

DHV/OeAeC-Technikreferat

LBA-anerkannte Prüfstelle für Hängegleiter und Gleitsegel

Gütesiegel

D HV/OeAeC

MUSTERPRÜFBESCHEINIGUNG

Gleitsegel

Musterprüfnummer ***DHV GS-01-0940-01***

Bezeichnung des Gerätemusters

Gin Oasis M

Das nachstehend bezeichnete Luftsportgerät ist als Muster geprüft im Auftrag von:

Aerosport International GmbH, Grafenstraße 26, D-83098 Brannenburg

Diese Musterprüfbescheinigung ist erteilt auf Grund der die Musterprüfung betreffenden Bestimmungen des Luftverkehrgesetzes, der Luftverkehrs-Zulassungs-Ordnung, der Verordnung zur Prüfung von Luftfahrtgerät und der Lufttüchtigkeitsforderungen in der heute geltenden Fassung sowie zu den Bedingungen der Vereinbarung über Musterprüfung und des Schreibens vom 11.12.01.

Die Musterprüfung gilt gemäß zugehörigem Geräte-Kennblatt Nr.: *DHV GS-01-0940-01*

11.12.01 — Harry Buntz DHV - Technik

Datum der Ausstellung — Unterschrift

Deutscher Hängegleiterverband e.V.
Miesbacher Straße 2, 83703 Gmund

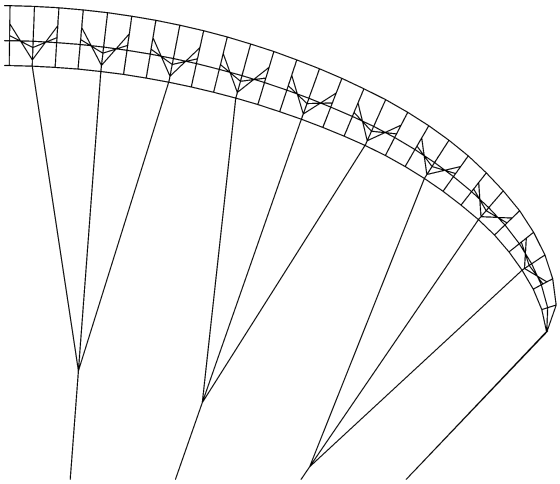
Design

The **Oasis** is at the forefront of paraglider development, and features the latest cutting edge technology. Handling is smooth; security and performance are second-to-none. This has been achieved by the introduction of several new technological features, such as new computer software to optimize the shape at the nose of the glider, and a new planform to optimize sink rate and handling.

Construction

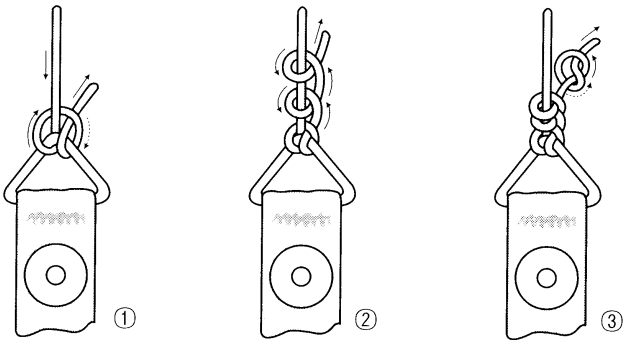
Extreme care is taken during the whole construction process of all GIN gliders. Each glider is assembled by one operator, to ensure consistency and accountability. The lines are cut under load with a specially designed robot to achieve maximum precision, and each line length is measured electronically at the end of the production process. Every cell is stitched individually, to achieve the cleanest and most aerodynamic sails.

Using these design and construction techniques, GIN has reached a new standard in glider design, manufacturing, safety and performance.



Brake line adjustment

The main brake line lengths of the **Oasis** correspond to the tested results of DHV. These line lengths have been tuned by GIN test pilots, and it should not be necessary to change them. If you need to change a brake handle, a sheepshank or a bowline knot should be used as shown in the diagram..



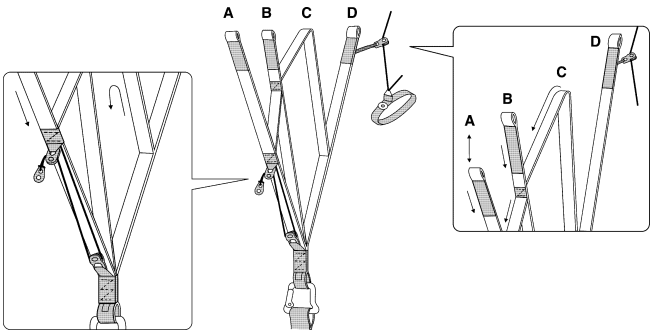
Speed system

When in use, the speed system lowers the angle of attack with a pulley-guided, foot-operated system.

The **Oasis** has a very wide speed range. In spite of its optimized airfoil and high internal stability, the highest speeds should be used with caution, especially in turbulent air.

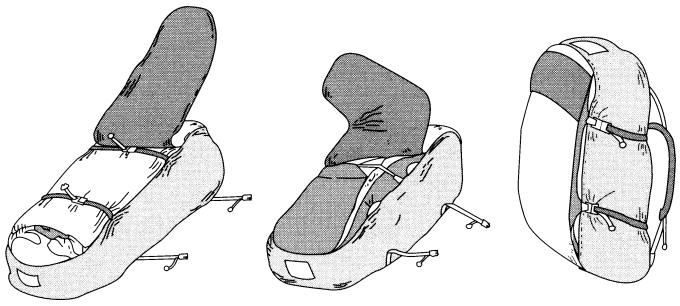
The highly effective speed system of the **Oasis** allows for approx. 12km/h gain in speed. As all testing of the glider is made with the original speed system, modifying the risers for more travel denies the glider its full safety potential and invalidates certification.

Riser	A	B	C	D
length at trimspeed	50cm	50cm	50cm	50cm
length at full speed	36cm	37.5cm	43.5cm	50cm



Rucksack

All Gin gliders are delivered with a rucksack specially designed for keeping your equipment steady on your back for ergonomic carrying comfort and ease of use. There are both internal and external compression straps. Properly tightened, they keep the bag from bouncing against your lower back when walking. There are also two storage pockets for all those small things...



Unpacking

Slip the glider out of the storage bag and take the velcro compression band off. Note the way we pack our gliders at the factory (see also packing instructions). We recommend you unpack and inflate your glider on a small training hill, or even flat ground, when doing so for the first time. It is important to get a feel for the glider's behaviour during launch and take-off. There is nothing worse than the stress of a crowded take-off and new equipment for things to go wrong. Some test pilots spend hundreds of hours every year just ground handling gliders in the wind on flat ground.

Preparation for launch

Lay the glider out, get the lines and risers sorted out. Connect the risers to your harness karabiners. We recommend a thorough line check in all wind conditions, but take some extra care on nil-wind take-offs to ensures the lines cannot become tangled during launch.

Pre-flight checklist

1. Choose a sufficiently large take-off area with even ground and no obstacles.
   Lay the glider out flat according to the planform.
   Check all lines, cloth and risers for damage.
   Check all line karabiners. If necessary, tighten with appropriate tool.
   Inspect your harness and reserve handle.
2. Pull the glider´s risers and lines gently, in groups or separately, to sort out any knots or tangles.
   Don´t forget the brake lines. Remove any branches or rocks from around the spread-out lines.
   Make sure the risers are not twisted or looped around any lines before attaching them to your harness.
3. Strap yourself into your harness and **don´t forget the leg loops**.
4. Check the weather again, thermal cycles, turbulence, wind speed and strength.
5. Visually check the air in front of launch for other gliders.

Take off

The key to a successful launch technique is to practice ground handling on flat ground whenever you can.

Then choose the appropriate day with good conditions, the appropriate take-off and do a thorough pre-flight check.

If launch conditions are windy, we recommend building a "wall" by partially inflating your glider on the ground, thus sorting lines out thoroughly. In such conditions a reverse launch is recommended, where you keep an eye on the glider during most of the take-off procedure. The **Oasis** is very easy to control in a reverse launch situation. It quickly comes up over your head without overshooting. You only need to guide the A-risers, there is no need to pull them hard. A few steps down the slope and light brake pressure while turning around will put you even more in control.

In light wind or nil-wind conditions, we recommend laying the glider out straight, according to it´s planform (no V or U shape needed). If the glider should come up sideways, run towards the lower side instead of trying to struggle against the force. Do not counterbrake too much, it may lose flying speed altogether. The **Oasis** inflates steadily in nil-wind conditions and has no tendency to stick on it´s way up. Merely guide the glider with the A-risers throughout the take-off. There is no need to pull them hard.
An impulse launch (where you start running from close to the glider with slack lines) is not needed.

Line knots or tangles

If any problems occur at the take off, abort the launch immediately by stalling the glider. On steep launches stall one side of the glider and run parallel to the hill (if you´re not yet airborne). If you´re already in the air, be sure you are clear of other gliders and the ground before you start correcting any error!

Counterbrake/ weightshift to the opposite side and pump the knotted side with your brake. Be careful not to fly too slowly to avoid a stall or spin. If the knot or tangle is too tight to pump out, immediately fly to the landing zone and land safely.

Tow launch

The **Oasis** has no tendencies towards deep stall/parachuting. Therefore we allow tow launched flights with a similar technique as described above. There is sufficient margin to countersteer the glider in a normal towing situation. Make sure you use proper equipment, experienced personnel, the recommended techniques and all relevant safety precautions for towing.

Motorized flight

The **Oasis** has not been certified for motorized flight at the time of writing. However, motorized flying has been made with great success due to it´s very easy take-off characteristics, high performance, stability and extraordinarily good handling. Always use certified combinations of engine/harness/glider and check with your federation if in doubt.

Flying the Oasis

Once in the air you can enjoy the superb handling, performance, high stability and safety of the **Oasis**. The handling in turns is direct and well coordinated in all axes. The climbing ability in thermals is as good as glide. Minimum sink is very low and useable even with a lots of brake input because of the flat polar curve. In comparisons we have found that this glider excels in overall performance against most advanced gliders from last year. It is indeed a step into the 21st century and we are proud to have you take part in it.

In turbulence

The **Oasis** has a high internal pressure, resistance to tucking and a very high degree of passive safety. However, it is highly recommended that you practice an active flying style. The key to active piloting is keeping the glider above your head at all times. If it falls back behind you, let up the brakes. If it surges in front of you, counter brake until the surge is controlled. While thermalling in strong conditions, you will sometimes find it necessary to raise the angle of attack temporarily on the outer wing to avoid a deflation because of downstreaming air on the outside of the thermal. Always let the glider regain airspeed after such an action. When thermalling in weak or broken conditions, you will find the **Oasis** a very easy glider to fly; it will support the pilot with a very well behaved and effective character in coring all those elusive thermals.

Flat spin

In normal thermal flight, you are very far from the limits of a flat spin. Nevertheless, should this occur, just let up the brakes and wait for the glider to regain forward speed. A deflation might sometimes occur exiting a spin. Take appropriate action against it according to the descriptions below.

Asymmetric deflation

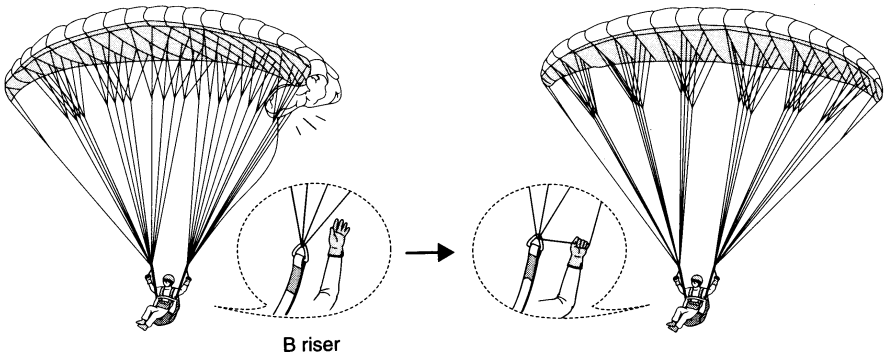
In the event of encountering strong turbulence and suffering an asymmetric deflation, the **Oasis** will promptly and easily re-inflate without interference from the pilot. It is important that the pilot keeps the flying direction by applying a little force on the opposite brake and weightshifting away from the deflated side. This is normally sufficient to allow prompt re-inflation, but in extreme cases it may be necessary to pump the deflated side. **Remember to let the glider regain its flying speed after it has reinflated**

Frontal deflation

If you feel it coming, first step off the speedbar. You may have to quickly pull both brakes briefly to avoid the deflation. Regain airspeed. If a deflation has already happened, it will come out promptly without pilot input. The glider will regain airspeed with a small surge. When counterbraking the surge, **be careful not to overdo it and stall the glider.**

Cravatte

Counterbrake/weightshift and pump the brake on the tangled side. Keep safe flying speed to avoid stall or spin. On all Gin gliders, there is a separate stabilizer/winglet main line that goes down to the B riser. **This line usually comes slack in the event of a "cravatte".** Pull it down completely until it comes tight and the "cravatte" normally comes out.



Cascade of events

Many reserve deployments are a result of a cascade of over-corrections by the pilot. Please note that over-corrections are many times worse than no input at all.
As an experienced pilot once put it: "over-correction is the mother of a spin".
If you have altitude, stay cool. If you don´t – better throw your reserve one time too many than never again.

On materials

All modern gliders are built with as much of a safety margin as possible. The **Oasis** is tested to more than 8 times its maximum load (8G´s) and passed without remarks.

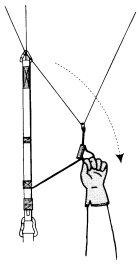
Losing altitude

IF you encounter a situation where you need to descend quickly or the lift becomes to strong, you shoud not be flying there and the best way is to find sink! Nevertheless, there are several ways of quickly getting down. We recommend you try them out under qualified supervision during a safety training course over the water. Most of these techniques place undue stress on your glider, and should be avoided if you wish to extend its lifetime.

Big Ears

Although the noise of the wind around your ears may imply it, the *groundspeed* does not improve with big ears. On the contrary, flying with your glider's "ears" in will decrease your maximum ground speed by about 6 km/h. It is however a safe method of moderately losing altitude while maintaining some forward speed.

Pull in big ears with the outer A line on each side. Reach high into the lines and pull outwards downwards. On releasing the lines, you might pump out the big ears with **Oasis** if they are coming out too slowly. If necessary, keep the big ears in until you flare for landing instead of letting them out on the approach. This is a safer method because of a possible wind gradient and your low airspeed/high wing loading with big ears in.



Spiral dive

The **Oasis** has an effective spiral dive. Weightshift and pull the brake on one side slowly. Let it accelerate for two turns and enjoy the roaring wind and high G-force..You can achieve very high sink rates this way. Once you have entered the spiral you can control your descent rate and bank angle with weight shift and the outer brake.

WARNING! A pilot not accustomed to spiralling and/or dehydrated, can quickly lose consciousness in a steep spiral dive! Practice spiralling with caution and lesser sinkrates to get a feel for the Oasis´s behaviour. When exiting a steep spiral dive, let it decelerate for one or two turns with outer brake applied and/or weight shift to the outside to avoid big pendulum effects and deflations.

B stall

To quickly lose altitude without straining your body with G-force you can use the B-stall. Reach up to the B-risers just below the maillons and twist your hands while gently pulling. It will be difficult at first, but become lighter the more you break the airfoil. Once pulled, do not release immediately. The glider needs to settle into a stable B-stall before releasing. On exiting the B-stall the **Oasis** has a very gentle dive without deep stall tendencies, even on a slow release of the risers. We advise you to release the B-stall symmetrically with both hands.

Deep stall (parachuting, stable stall)

The **Oasis** does not have a tendency to stay in a deep stall. Should this nevertheless occur, put your hands on the A risers and push forward to gain speed. On some modern harness/accelerator setups, you can operate the speedbar without using your hands. If so, push the speedbar. Never try to steer out of a deep stall.

Full stall, dynamic stall

This is an extreme manouvre and there should be no need to make a full stall in normal flight. The **Oasis** has a smooth stall without big pilot pendulum forwards. The surge upon release is moderate. The gliders are tested without wraps on the brakes. Keep your hands close to your body during the stall. Before releasing the stall, raise your hands slightly to fill the glider with air. Let the brakes up when the glider is in front of you to avoid an excessive surge. Counterbrake the dive quickly and release the brakes to regain airspeed.

Never attempt a stall and then change your mind and release the brakes, as the glider will surge and you might end up in the sail. This goes for all paragliders.

Steering without brakes

If a brake for some reason is not operational, you can steer the **Oasis** with the D-risers. Add steering input by weight-shifting in your harness. Be careful not to steer too much with the riser, as a spin might occur.

Aerobatics

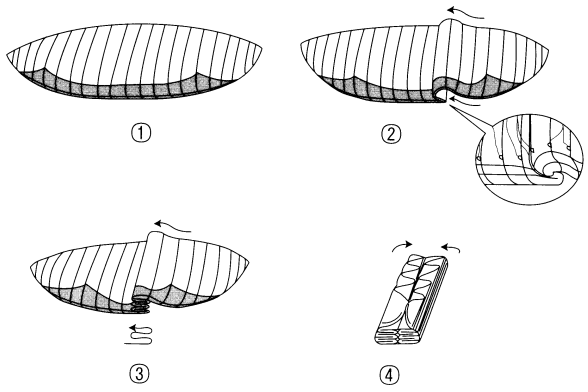
Despite its good handling, the **Oasis** is not designed for aerobatics.

Landing with the Oasis

The travel of the brakes is enough for a clean stall in normal conditions without taking wraps around your hands. The low min. sink and flyable min. speed will help you to make a soft landing in all conditions. Remember, this is a modern performance glider. Don´t do your last turn too late or too steep. It is easy to misjudge your speed and altitude.

Packing instructions

We advise you to pack the glider "accordion wise". See drawing.
This kind of packing procedure may take slightly longer, but conserves the rigidity in the profile reinforcements and is worth it in the long term. You will enjoy unadulterated performance, top speed, ease of take off and tuck resistance for years ahead.



Care and maintenance

Like any piece of high technology equipment, the **Oasis** needs care and attention. Always do a thorough pre-flight check and take extra care after any incident that may have inflicted damage.

If a line is damaged, please consult your dealer and have it replaced. The kevlar inside the sheath can take lots of pulling force without stretching, but is sensitive to bending with small radius. Damage may be difficult to see. When not in use, store the glider in a dry place out of the sun. Avoid transporting the glider together with gasoline or solvents in a vehicle.

Your **Oasis** doesn't like taking a bath in salt water. If it has, take it home and soak it in the tub immediately. Be careful if it is full of water when lifting. Let the water out first - then lift. If you want to clean spots, do so with lukewarm water and a small amount of soap if needed. No strong detergents! Use a soft sponge or cloth to avoid scratching the surface. Let it dry in a ventilated space, preferably out of the sun, any time your glider gets wet.

Inspections

Your **Oasis** should be fully inspected by an authorized Gin agent after every 100hr flying time or every year, whichever is sooner. A full inspection will give you peace of mind and extend your glider's lifetime.

Safety, liability and flying

Any activity can result in serious personal damage or even death. Remember that flying is considered a high-risk sport. Traffic rules are easy to understand because you see the road. Flying in the invisible air you have to use your judgment and experience. Lack thereof easily causes accidents.

Neither the manufacturer nor distributor for this paraglider can be held responsible for any damage you sustain to yourself and/or third parties.

To fly this equipment you should:

- Be in your right mind, unaffected by alcohol or other drugs.
- Have read and understood this owner's manual.
- Have completed appropriate training and have the required experience for this class of glider.
- Wear head protection, use a certified harness and emergency parachute.
- Only fly in conditions suitable for your level of paragliding.
- Make a thorough pre-flight check.
- Use a suitable launch and flying site.
- Have the necessary insurance and licenses.

"Designing paragliders is a personal journey of challenge and discovery, an ongoing search for perfection."

- Gin Seok Song -

While every effort has been made to ensure that the information in this manual is correct, please remember that it has been produced for guidance and information only and should not be used as a "how to fly" manual.
This owner's manual is subject to changes without prior notice.

TECHNICAL DATA

oasis

SIZE		XS	S	M	L
FLAT	AREA	23.24m²	24.76m²	26.87m²	29.06m²
	SPAN	10.81m	11.15m	11.62m	12.08m
	A.R	5.02	5.02	5.02	5.02
PROJECTED	AREA	21.19m²	22.58m²	24.50m²	26.50m²
	SPAN	9.34	9.64	10.04m	10.44m
	A.R	4.11	4.11	4.11	4.11
CHORD	ROOT	2.65m	2.74m	2.85m	2.96m
	TIP	0.53m	0.54m	0.57m	0.59
TOTAL HEIGHT		7.05m	7.27m	7.58m	7.88m
CELL NUMBER		57	57	57	57
GLIDER WEIGHT		6.35kg	6.7kg	7.3kg	7.9kg
WEIGHT IN FLIGHT		60~80kg	73~90kg	85~105kg	100~125kg
D.H.V		1-2	1-2	1-2	1-2

GIN

LINEPLAN OASIS (XS,S,M,L)