# SKYDIVE AND BASE GEAR

## **WINGSUIT MANUAL**

## Flying

by









**General Information** Suits categories - Starter Tracking Wahoo 2 Student WS (?) - Beginner Piranha 5 - Intermediate Barracuda 4 FIN - Advanced Power + MAKO - Expert RS Glide **RS BASE** Manta Suit features Set Up Method Safety Issues About Intrudair Care

## GENERAL INFORMATION

## **Thank You!**

for choosing Intrudair products

History more than 20 years in production

Quality Highest

Manufacturing in EU

#### WingSuit Skydiving is a high risk activity!

We can give advice but the responsibility is yours! It's important to know your skill level and your limits!

Do not use this product without the required knowledge. Listen to your coach, train, and respect physics.

You can suffer serious or even fatal accidents while using our products.

INTRUDAIR Does not take responsibility for any of those.

Select your suit according to your ability, experience and to your discipline or activity. Have FUN! Stay SAFE!

## Safety Checklist

AM I READY?



GEARCHECK



FLIGHT PLAN



TASK

10000

DEPLOYMENT



LANDING



## SUIT CATEGORIES

Intrudair develops wingsuits continuously.



### STARTER | BEGINNER | INTERM

## Actual list of Wingsuits:



IEDIATE | ADVANCED | EXPERT

## STARTER

Tracking Suits Student Wingsuit

Small surface Stable & Easy to fly Clear deploy Perfect for practice horizontal speed

### TRACKING | WAHOO | STUDENT

Discipline 1	Discipline 2	Discipline 3
Glide Ratio	Speed (mid.range)	Min. Skydive jumps



Track	Learn	BASE
1.3	160 Km/h	50



Track	Performance	BASE
1.6	220 Km/h	150

Extendable SIZE by adjustable zips on the shoulders and the booties

Learn	Turn	Deploy
1.3	160 Km/h	300

*student* 

## BEGINNER

Beginner suit Small surface Stable & Easy to fly Clear deploy

Perfect as Your First Suit

... and after as well

PIRANHA 5

Discipline 1	Discipline 2	Discipline 3
Glide Ratio	Speed (mid.range)	Min. WS jumps



Learn	Acro	Flock
1.7	150-190 Km/h	FFC Course



Recommended for Beginners, flockers, acro-flyers and FUN-Jumpers as well.

## INTER MEDIATE

Transition suits Bigger surface Stable & Easy to fly Special Grips

### BARRACUDA 4 FIN

Discipline 1	Discipline 2	Discipline 3
Glide Ratio	Speed (mid.range)	Min. WS jumps





## ADVANCED

### Monochamber Bootie/Fix System Performance Foam

### POWER + | MAKO

Discipline 1	Discipline 2	Discipline 3
Glide Ratio	Speed (mid.range)	Min. WS jumps



BASE	Acro	Flock
2.6	160-200 Km/h	FFC Course





### Perfect balance of control and performance

Learn	Acro	Flock
1.7	150-200 Km/h	FFC Course

## **EXPERT**

Strongest Performance Monochamber Shape-preserving Design

For those who want more...

### RS GLIDE | RS BASE | MANTA

Discipline 1	Discipline 2	Discipline 3
Glide Ratio	Speed (mid.range)	Min. WS jumps



Distance	Time	BASE		
2.5	200-240 Km/h	200		



Distance	BASE	XRW	_	Performance	Acro	Flock
2.5	200-250 Km/h	200	-	2.5	180-250 Km/h	100 jumps with advanced suit

## **SUIT FEATURES**

### LEADING EDGE

#### PERFORMANCE FOAM



The Leading edge is made from a special material for smoothest flights. It has reinforcement on both the front and backside (not all models)



You can choose what kind of foam you use inside the leading edge: SOFT - ACRO or HARD - PERFORMANCE



Unique shape impossible to collapse special net on the bottom Air-lock System Features 1/2 AIR INLETS

MONOCHAMBER DESIGN (not all models) All wings are fed by all of the air-inlets on both the top and the bottom surfaces of the wingsuit.





Zip-UP cord simply helps you to open your zip after deployment. The reinforced bottom of the legwing and the booty is for the long usage

ZIP-UP CORD and reinforcements

## **SUIT FEATURES**

POCKETS



Side pockets for holding your stuff, and also to set the pressure in the wings. In the front pocket you can ask special feature for belly Cam solution.

#### SAFETY FEATURES





**KNIFE POCKET** 



With the tail pocket You can set the pressure of the legwings.

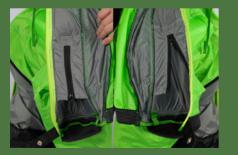
For performance it's better to use high pressure

for fun better to use less pressure

Features 2/2

> PRESSURE TUNING

> > BOOTIE





Bootie-Fix System and foam inside to reach the maximum reliability

## How to link Wingsuit & Rig

**Ct** Up

lay down the suit on the ground (front up) place your rig just under the suit, as it will be



open all shoulder zips (2+2) and upper part of the body zip







place the harnesses between the zips, inside the suit



### close the front shoulder zip, set the handle hole









### close the back shoulder zip, open the front body zip clear the thigh straps inside





## set the zip at the bottom of the rig









fix the zip | check it from outside



place your knife out

try equipment fully zipped

check: handles deployment zip holes



Set Up









## SAFETY ISSUES

HANDLES





PRACTICE OPENING





GO AROUND YOUR GRIPS



PRACTICE THE MOVEMENT



### Check all the straps!

Try your setup on the ground in different positions:

- Lie down and arch, confirm you are able to locate all your handles
- Sitting position (like you sit in the plane) make sure your handles don't slip into the suit
- Deployment position

## Always check your handles before you exit the plane!

**Special case:** Big Belly Boys – Keep in mind that your belly can pull the front surface forward with the handle openings. This may cause the handles to disappear into the suit. Double-check this situation before flight!

## SAFETY ISSUES

GEAR

**Canopy:** A Square shaped canopy, preferably a 7-cell. These canopies typically open more reliably and are less likely to dive if you encounter line-twists.

**Bridle:** Use a longer bridle than normal, 8-9ft from Pin to Pilot Chute. This helps to avoid the pilot-chute getting caught in the turbulence behind your body.

**Container:** Dynamic Corners are an advantage.

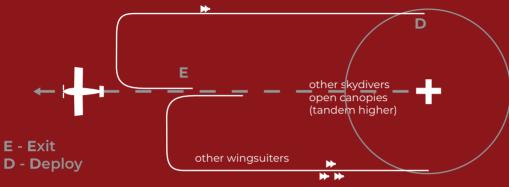
**AAD:** Wingsuit AAD is an advantage.

**Audible Altimeter:** Always use an Audible and set the alarms to desired opening and cutaway altitudes. It's helpful to have a separation alarm, but it is more important to have deployment altitude alarms!

FLIGHT

Always plan your path! Always talk with the pilot! Always plan your separation from flock! Always keep on eye on others! Be prepared to solve problems! Deploy high...

#### **BASIC** recommendation



## Safety FIRSTI FLIGHT PLAN



## WingSuit-BASE jumping is a high risk activity.

It's looks easy on YouTube, but it's NOT! It requires Respect and Humility! Be sure that you have enough experience to do it. Learn from experts and from those who know the location.

Always use a reliable rig.

BASE

## CARE

FOLDING

STORAGE

### CLEANING

Always keep the suit in a bag when not in use. To place it into the bag just follow the next steps:

- detach the rig
- close all the zips
- fold it
- lay it on the ground
- fold the armwings to the body
- fold the legwing up to the body PAY ATTENTION TO THE AIR INLETS!
- collect the material of the legwing from all over the suit and make a roll
- place the roll into the bag

If You don't use your wingsuit for a long time (like in winter) then place it on a hanger and put it in the wardrobe. The best way to store the gear is to have it open and unfolded.

Do NOT wash it in washing machine!!! Use sponge and warm water. In case of heavy soiling, add soap. Do not rub it too much on the Seam!

#### ABOUT WARRANTY

Intrudair gives warranty for the material, the quality and the lifespan of the suit if the product shows production failures. The repairs are done for free but if the suit cannot be repaired, we replace it. The warranty does not include repairs of failures and fading of colours caused by accident, misusage, carelessness, wearing away.

It is important that the problem must be reported in time, please write email or phone, because we can only solve the warranty problems in 30 days after delivering.

Intrudair does not give warranty for damages caused during delivery, please call us immediately and we will report the damage to the courier company.

The warranty does not include stains and burns. Unforseen accidents can happen with even the most carefully handled suits. We gladly take on the repairs if possible and inform you about the costs of the repairs and the delivery.

## LONG LASTING

### WARRANTY

## bout Intrudair

## What makes the Intrudair wingsuit different????

Intrudair specialises in full custom-made tailoring. Whether it's a skydiving suit, a tunnel suit or a wingsuit, Intrudair always makes them fully custom made. We believe that decades of custom-made tailoring experience cannot be exchanged by a proportionately zooming software. It can help but cannot replace the working experience of skilled tailors who have a massive knowledge of different body shapes and their characteristics. Our tailors have gained experience in making over 10,000 custom made garments since we started our operations. This solid base helps to form the backbone of our wingsuit sizing.

The human body structure can vary greatly from one size to another, so our colleagues cut and sew the prototypes needed for the basic measurements very carefully, this is ESSENTIAL before we launch a product. It may slow down the release of the product a little but it guarantees that we work with accurate fitting patterns.

When you receive an Intrudair wingsuit, you can be sure that our experts have checked your measurements and tailored your wingsuit to your size according to the closest fitting pattern to you. We cannot always be 100% accurate but we guarantee that when you order a custom Intrudair wingsuit, it will be made specially for you.

## What makes Intrudair wingsuits better:

The shape of the wingsuits is becoming more and more streamlined in each categorysee the experiments of the early 2000s (since when we talk about modern wingsuits) or the evolution of the shape of the parachute canopy.

The secret is in the details, the different profile heights and shapes determine the main flight characteristics of the suit. The most typical glide ratio and speed in each category set the direction of development.

Leading edge: Intrudair uses a special, three-layered, slightly elastic, laminated material (developed just for this purpose) for the leading edge. It keeps its shape and adapts to the position of the arm, depending on whether you use soft foam or special performance foam.

Performance foam: We use a profile-cut foam in the new Intrudair wingsuit that does not restrict free movement but holds the outside of the leading edge firmly in place while taking up and levelling the shape of your arm inside. It is easy to replace and does not break.

The amount of air entering the air intakes determines the pressure in the wings. Although this is adjustable, Intrudair puts a lot of effort into experimenting with different sizes of air intakes.

BOOTIE: The bootie is responsible for stability. Intrudair is the only company to use a bootie-fix system developed to fix the bootie in place. This system prevents the bootie from deforming during flight. The fixed shape provides extra stability and easy manoeuvrability, and the width of the stride can be adjusted when the bootie is opened.

At the moment we believe that the well-tuned wing profile, pressure and stabilisation give the main flight parameters of our suits, which make Intrudair suits more stable and easier to fly than their competitors.



## ARTWORK:

Intrudair puts a special effort into the styling of the suits, for extra custom-designed suits we offer a graphic service that crosses the boundaries of artistic suit design!

Our graphic designers can create patterns on your suit that are almost unimaginable. They match and align the graphics to the over 50 printed parts of the suit. This work is very time consuming and requires full manual work, no automatic program or pattern zooming software can do this.

For normal prints the fabric is printed in rolls and cut out, for super custom prints a "blown" image is edited onto the desired design and then proofed several times before cutting. After that, thanks to the handwork of the seamstresses, almost all the patterns fit and so there are some patterns where you will only find the air vents after a long search.

These all add to the length of the process but in the end you will have a truly unique, personalised and custom-designed wingsuit.

### Zero waste:

We pay attention to environmentally conscious manufacturing. The leftover printed materials are used in the Zero waste project so the plastics don't end up in the trash but start a new life in an extra cool customized outfit.

Why is Zero waste more expensive?

Sure, the materials are leftovers but cutting the dress nearly becomes a manual operation. Each printed part is put one by one under the laser cutter in an effort to use up all the scraps, so the extra cost of printing is invested in manual labour. We use the scraps and save nature with extra working hours.



intrudair.com

## JUMP | PLAY | LIVE

