

MIRAGE SYSTEMS : HARNESS MEASURING GUIDE

Please remember that your harness is designed to handle opening shock. Its job as safety equipment always comes first.

A rig will never be as comfortable as clothing . . . but it will definitely be more fun to wear!

If done right, measuring for a rig is actually kind of fun, so get a friend and let's go!

- A sizing worksheet is located at the bottom of this page for you to record your measurements.
 - Correct measurements are essential for getting a proper fitting harness. ***Do not measure yourself, instead have someone else measure you!***
Correct measurements are difficult to get without assistance.
 - All measurements should be taken while standing, without shoes, and without any objects in your pockets.
 - Measure around clothing of similar thickness to what you'll be jumping in with a soft measuring tape, and be sure to keep the tape snug around you when reading measurements.
 - When uncertain measure both left and right as a double check.
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1) STABILIZERS (WAIST) **REQUIRED**

Measure around your waist at the top of your belt. Do not pull your stomach in. Be certain the tape is level and snug.



Waist (in)	22	23-26	27-30	31-34	35-38	39-42	43-48	49-50
Waist (cm)	56	58-68	69-78	79-88	89-98	99-108	109-123	124-125
MZS / MXS / MOS	-1	-.5	Std	+.5	+1	+1.5	+2	+2.5
MX / MT / M0	-1	-.5	Std	+.5	+1	+1.5	+2	+2.5
M1 / M2 / M2S / M3 / M4	-1.5	-1	-.5	Std	+.5	+1	+1.5	+2
M5 / M6	-2	-1.5	-1	-.5	Std	+.5	+1	+1.5
M7 / M8	-2	-2	-1.5	-1	-.5	Std	+.5	+1

- You can go + or - .5 inch based on your preference, but not more.
- This part of the harness is NOT easy to adjust, so **you should look at this measurement first when looking at stock rigs.**
- TIP- The Mirage lumbar support elastic is only for comfort. If you would like your rig to fit tighter against your back we recommend using our small sit fly belly band. It attaches to your hip rings and can fit in your back pocket when not being used. We also offer the large swoop belly band.



2) LEG PADS **REQUIRED**

Take EVERYTHING OUT OF YOUR POCKETS. Measure around the leg, as the leg strap travels. Be sure to pull the tape SNUG. The measurement should be in the range of 27"-36" for most people.



Measurements (in)	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Measurement (cm)	56	58	61	64	66	69	71	74	76	79	81	84	86	89	91	94	97	99	102
Leg Pads	14	14	15	15	16	16	17	18	19	20	21	22	22	23	23	24	24	25	25

- Leg pad length preference varies from person to person. Some people like their pads to overlap, some like the ends to just touch, and others like a few inches of gap. All of these are safe as long as you are sitting on pad and your strap feeds through with at least 5-6 inches of tail.
 - Tip- Make sure your leg straps are high and tight when exiting the aircraft. Movement of leg straps during deployment can cause bruising - remember your student gear?
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3) MAIN LIFT WEB (MLW)

The main lift web needs more than 1 measurement to be sure of your size.

- **Use the MOST FREQUENT result.** Not the average.
 - Example 17, 16, 16, 15.5 = 16
 - Example 15, 16.5, 18, 16.5 = 16.5

3A) MLW FROM HEIGHT & INSEAM

Stand naturally. Measure from the center of your crotch down to the floor without shoes on. Gentlemen, move everything to the side.



Height (ft)	5'-5'1	5'2	5'3	5'4-5'5	5'6-5'7	5'8-5'9	5'10-6'2	6'3-6'4	6'5	6'6
Height (in)	60-61	62	63	64-65	66-67	68-69	70-74	75-76	77	78
Inseam (in)	27-27.5	28	28.5	29-29.5	30-30.5	30.5-31	31.5-33	34		
Height (cm)	152-156	157	160	163-167	168-172	173-177	178-190	191-195	196	198
Inseam (cm)	69-70	71	72	74-75	76-77	77-79	80-84	86		
MLW	14	14.5	15	15.5	16	16.5	17	17.5	18	18.5

- This is based on Joe Average. Look in the mirror. If your legs are long or your body is long then your size will be slightly off. Most people are not exactly Joe Average.

3B) MLW FROM NECK TO BELLY BUTTON

Measure from the base of the throat (same starting point as the Torso measurement), down to the belly button. Gentlemen, pull your belly in as close to 'flat' as possible.



Neck to Belly Button (in)	13	13.5	13.5	14	14	14.5	14.5	15	15	15.5	15.5	16	16	16.5	16.5	17	17	17.5	17.5	18	18
Neck to Belly Button (cm)	33	34	34	36	36	37	37	38	38	39	39	41	41	42	42	43	43	44	44	46	46
MLW	14	14	14.5	14.5	15	15	15.5	15.5	16	16	16.5	16.5	17	17	17.5	17.5	18	18	18.5	18.5	19

3C) MLW FROM TORSO

Measure from the **BOTTOM** of the dip in your collarbone at the base of your throat, diagonally over your chest, to the very **TOP** of your hip bone **AT YOUR SIDE**. The top of the hip bone is approximately the same height off the ground as your belly button. Common mistakes are measuring too low on the hip, or not enough to the outside. A typical measurement would be between 15" (38 cm.) and 20" (51 cm.), with the average being 18" (45 cm).



Torso (in)	14	15	16	17	18	19	20	21	22	23	24	25
Torso (cm)	36	38	41	43	46	48	51	53	56	58	61	64
MLW	15	15.5	15.5	16	16.5	17	17	17	17.5	17.5	18	18.5

3D) MLW FROM LONG GIRTH

Measure from the base of the throat (same starting point as the Torso measurement), down through the crotch and up your back to the base of the collar (protruding spine bone at the back of the neck).



Long Girth (in)	52-53	54-55	56-57	58-59	60-61	62-63	64-67	68-70	71-75	76
Long Girth (cm)	132-136	137-141	142-146	147-151	152-156	157-162	163-172	173-179	180-192	193
MLW	14	14.5	15	15.5	16	16.5	17	17.5	18	18.5

3E) MAIN LIFT WEB - FIT PREFERENCE

After you determine your MLW you can adjust it slightly for your fit preference.

Fit Preference	A Little Tighter	Medium	A Little Looser
MLW Adjustment	Subtract .5	No Change	Add.5
Example	16.5	17	17.5

3F) MAIN LIFT WEB - HARNESS TYPE **REQUIRED**

If you are getting a Low Hip Ring Harness or a No Ring Harness, adjust your MLW according to this chart.

Harness Type	High Hip + Chest Rings (Unisyn) 1 Piece Leg Pads	High Hip Rings 1 Piece Leg Pads	Low Hip Rings 2 Piece Leg Pads	No Rings
MLW Adjustment	No Change	No Change	Add .5	Add 2.0
Example	17	17	17.5	19

4) CHEST STRAP LENGTH

Place the measuring tape around the chest at the nipples. Be sure the tape is straight and level across the back.



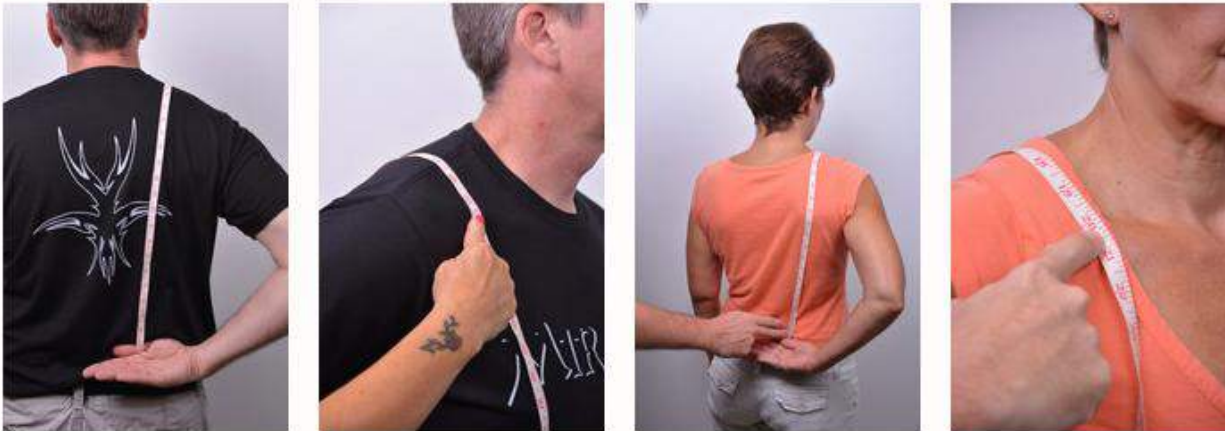
Chest (in)	32-35	36-42	43-46	47-50
Chest (cm)	81-90	91-108	109-118	119-127
Size	18	20	22	24

- Extended chest strap option, usually for swoopers, is +8in (+20cm)
 - Stock rig chest straps are sized proportionately to the MLW. It is usually not necessary to adjust it unless you request an extension.
 - Tip: Ladies, before asking to have your chest strap lowered please consider that chest straps always pull upwards during opening shock. A correctly fitting chest strap will usually go across your breasts.
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5) YOKE EXTENSION REQUIRED FOR THICK SHOULDERS

Place your hand palm up at the top of your belt (bottom of the rig location).

- Measure diagonally up the center of your back, over your shoulder to your collarbone = Back + Shoulder Length.



- Measure straight up the center of your back, to the base of the collar (protruding spine bone at the back of the neck) = Back Length.



- Stock rig yokes cannot be changed.
- If you think a yoke extension might be needed, send us these measurements for calculation.
- This is especially important if you have thick shoulders or chest.
- This measurement is also helpful for tall people wearing short rigs.
- If the rig sits too high on your back it can be too tight in the shoulders and reaching your pilot chute can be awkward.

EXTENUATING FACTORS:

Harness sizing isn't always clear cut. The further from average that a body size or shape is, the more challenging sizing can be.

- If you have thick / muscular shoulders (you may need a yoke extension)
- If you are shorter than than 5' 5" (you may prefer a short series rig)
- If you are female with D cup, or are curvy in the hips
- If you have a particularly long or short torso
- If you are shaped like an Oompa Loompa (no offense to OL's)

Then, for confirmation of sizing, you should send us:

- 1) Your measurements
- 2) A photo of you standing facing the camera (head to toe in frame)
- 3) A photo of you standing sideways to the camera

We're happy to help make your rig fit the way you like it!

MIRAGE SIZING WORKSHEET - *Print Me!* Use this worksheet when measuring yourself.

Name _____

My Reserve Canopy _____

My Main Canopy _____ = **Container Size** _____ **Required**

Male / Female (circle one) Weight _____

3) Main Lift Web (MLW) Measurements

Height _____ My Inseam _____ = MLW a: _____

Neck To Belly Button _____ = MLW b _____ to _____

Torso _____ = MLW c _____

Long Girth _____ = MLW d _____

Fit Preference: *Little Tight* -.5 / *Medium n.c.* / *Little Loose* +.5 = Fit Adjust? _____

Harness Type: *Unisyn n.c.* / *Low HipRings* +.5 / *No Rings* +2.0 = Type Adjust? _____

= **My MLW** _____ **Required**

2) Leg Pad Measurement _____ = **My Leg Pad** _____ **Required**

1) Waist Measurement _____ = **My Stabilizer** _____ **Required**

5) Back Length _____ Back + Shoulder _____ = **Yoke Extension?** _____

4) My Chest _____ + Extension? _____ = Chest Strap Length _____

~~~~~ Stock Rig Comparison ~~~~~

My Harness Size (copied from above) = MLW \_\_\_\_\_ / Leg Pad \_\_\_\_\_ / Stab \_\_\_\_\_

A Stock Rig # \_\_\_\_\_ = MLW \_\_\_\_\_ / Leg Pad \_\_\_\_\_ / Stab \_\_\_\_\_

B Stock Rig # \_\_\_\_\_ = MLW \_\_\_\_\_ / Leg Pad \_\_\_\_\_ / Stab \_\_\_\_\_

C Stock Rig # \_\_\_\_\_ = MLW \_\_\_\_\_ / Leg Pad \_\_\_\_\_ / Stab \_\_\_\_\_

\* MLW and Leg Pads are not difficult to adjust.

\*\* Stabs are difficult to adjust. You can go + or - .5 inch based on your fit preference, but generally not more.

**MIRAGE SIZING WORKSHEET - *Print Me!*** Use this worksheet when measuring yourself.

Name \_\_\_\_\_

My Reserve Canopy \_\_\_\_\_

My Main Canopy \_\_\_\_\_ = **Container Size** \_\_\_\_\_ **Required**

Male / Female (circle one)    Weight \_\_\_\_\_

**3) Main Lift Web (MLW) Measurements**

Height \_\_\_\_\_ My Inseam \_\_\_\_\_ = MLW a: \_\_\_\_\_

Neck To Belly Button \_\_\_\_\_ = MLW b \_\_\_\_\_ to \_\_\_\_\_

Torso \_\_\_\_\_ = MLW c \_\_\_\_\_

Long Girth \_\_\_\_\_ = MLW d \_\_\_\_\_

Fit Preference: *Little Tight* -.5 / *Medium n.c.* / *Little Loose* +.5 = Fit Adjust? \_\_\_\_\_

Harness Type: *Unisyn n.c.* / *Low HipRings* +.5 / *No Rings* +2.0 = Type Adjust? \_\_\_\_\_

= **My MLW** \_\_\_\_\_ **Required**

2) Leg Pad Measurement \_\_\_\_\_ = **My Leg Pad** \_\_\_\_\_ **Required**

1) Waist Measurement \_\_\_\_\_ = **My Stabilizer** \_\_\_\_\_ **Required**

5) Back Length \_\_\_\_\_ Back + Shoulder \_\_\_\_\_ = **Yoke Extension?** \_\_\_\_\_

4) My Chest \_\_\_\_\_ + Extension? \_\_\_\_\_ = Chest Strap Length \_\_\_\_\_