How to rig a SIDEMOUT set

This should be learned during a course dedicated to "Sidemout". This course consists of a "dry" part and an "in the water" part. The harness must be adjusted on the ground to the morphology of each person with the help of a professional Sidemount Instructor. This is the goal of the first half day of the course. The harness should then be adjusted in shallow water where the diver can stand and again with the help of a professional Sidemount Instructor.

Under no circumstances may this manual replace the course done by a professional Sidemount Instructor and the adjustments that need to be made with the help of a professional Sidemount Instructor. After your reading, you are in no way a "Sidemout Diver". Trying to Sidemount dive without proper training is dangerous and can be fatal.

A - Scorch strap

You have 3 options depending on how and where you are diving:

A - No D-Ring

B - 1 D-Ring (Flat)





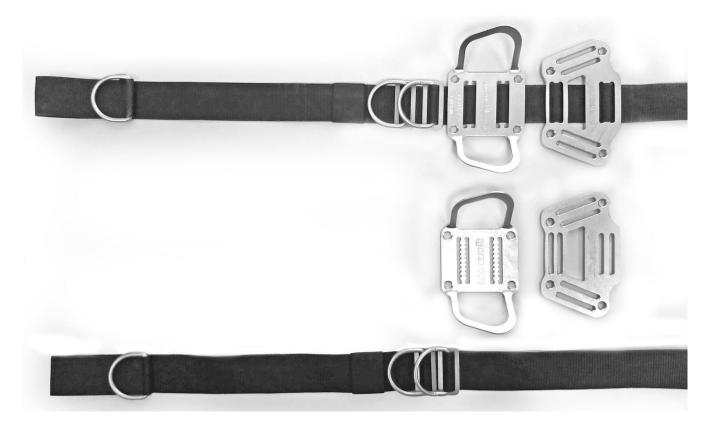
C – 2 D-Rings (1 bent and 1 flat)



Always use toothed triglidders to position D-Rings on scorch strap.



Install **417530 Sidemount Tail Plate - XR Line** and **417529 Sidemount Bottom Plate - XR Line** by inserting the strap through the openings as per the picture below.



Distance between front loop of scorch strap and first opening of **417529 Sidemount Bottom Plate - XR Line** = distance from the middle of the front to the middle of the back of your regular pants belt + the width palm of one hand.

B - Spine

After the 417529 Sidemount Bottom Plate - XR Line, the scorch strap becomes the spine of your Sidemount Set

You have then 4 options depending on how and where you are diving but also depending on your morphology:

- A No weight
- B Weight directly mounted on the strap

C – Use of **417533 Sidemount Side Weight - XR Line**, not described here, see movie *Mares XR - How to set up the Sidemount* (https://www.youtube.com/watch?v=YTvIVDu9eUQ) for details

E – Use 417532 Sidemount Back Weight - XR Line, see below

Select if you want the side straps on the right or on the left and then position your weight pocket.



Insert spine strap through the straps on the back of the pocket according to your body size (1, 2 or 3).

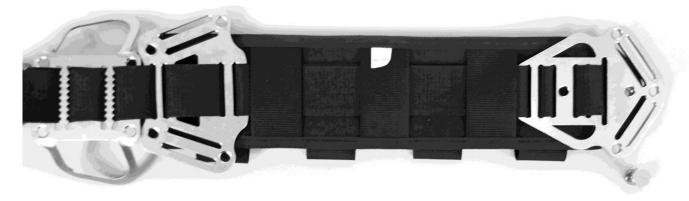
Install **417528 Sidemount Top Plate - XR Line** by inserting the strap through the openings as per the picture below.



The distance between **417529 Sidemount Bottom Plate - XR Line** and **417528 - Sidemount Top Plate - XR Line** is quite easy to determine. It is the distance between both when you position your **417529 Sidemount Bottom Plate - XR Line** in the low flat part of your lumbar region (bottom of the plate being over S2 vertebrae) and the **417528 Sidemount Top Plate - XR Line** at the base of your neck. The top of the plate should be underneath the C7 vertebrae and reachable with your fingertips.

The spine strap should not be loose when you wear the harness.

Then strap back the spine through all plate openings and 417532 Sidemount Back Weight - XR Line back straps.



C - Shoulders straps (Upper Back)

You then need to install the shoulder straps on the 417528 Sidemount Top Plate - XR Line.



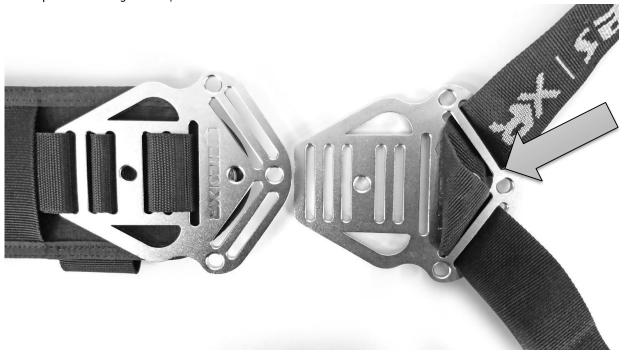
You have 2 options depending on how and where you are diving:

A – No mount (mounting the strap without the screw) not described here, see movie *Mares XR - How to set up the Sidemount* (https://www.youtube.com/watch?v=YTylVDu9eUQ) for details

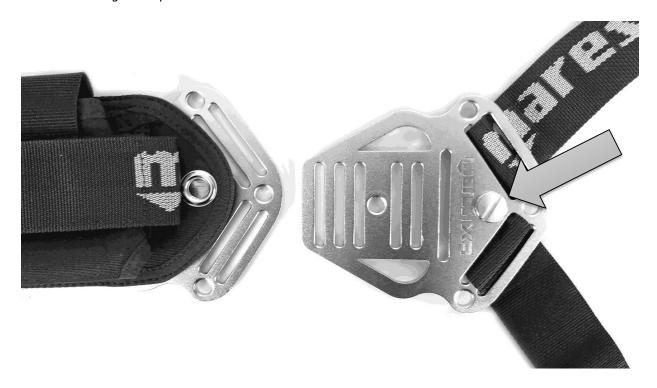
B – Classical mount using the *417538 Flat Head Dead Bolt Screw BK - XR Line*.

Strap the harness webbing through the **417528 Sidemount Top Plate - XR Line** as shown in the following pictures.

Make sure that you position the eyelet opening of the strap facing the second lower hole of the plate.



Then fix the webbing to the plate with the screw.



You will then position the top hole of the **417528 Sidemount Top Plate - XR Line** in front of the top hole of the **417528 Sidemount Top Plate - XR Line** and attach both together with a **417538 Flat Head Dead Bolt Screw BK - XR Line** as per below pictures.

Note that if you are taller than 1,90m (3,3 feet) you might want the option to use the lower hole of the **417528 Sidemount Top Plate - XR Line** for better weight pocket positioning. This is modular.





D - Bladder (Top)

You have 3 options depending on how and where you are diving:

A – No mount (the sliders can move freely) not described here, see movie *Mares XR - How to set up the Sidemount* (https://www.youtube.com/watch?v=YTylVDu9eUQ) for details

B – Weight mount (weights are placed on both shoulders and they maintain the bladder) not described here, see movie *Mares XR - How to set up the Sidemount* (https://www.youtube.com/watch?v=YTylVDu9eUQ) for details

C – Classical mount preventing the bladder to move and slide and create a camel back effect



E - Shoulders straps (Front)

You have 5 options depending on how and where you are diving:

- A No D-Ring
- B Fixed or unfixed loop bungees (not described here, just slide your rings on the strap!)
- C Rubber D-Rings (not described here, just slide your rings on the strap!)
- D 1 D-Ring (Flat)
- E-2 D-Rings (1 bent and 1 flat)



You have also the option at this stage to slide in on your shoulder strap elastic loops for back up lights.



F - Shoulders straps (Lower Back)

You have 2 options depending on how and where you are diving:

- A No mount (the strap can move freely) not described here, just do not install the triglidders,
- B Classical mount preventing the strap to move



The harness should not be too loose or too tight but allowing you, once both plates are correctly positioned in your back, to slide the palm of one hand underneath each strap. That will account for your exposure protection that you will be using during the dive. Best is to adjust the harness while wearing it.

Front



The webbing enters from inside in the inner slot and exits inside from the outter slot.



Back



G - Hip Rings

You have the option at this stage to install both right and left **417531 Sidemount Hip Rings (R&L) - XR Line** on the back of your waist belt..





Inside



The 417531 Sidemount Hip Rings (R&L) - XR Line are principally meant to attach the optional 417534 Sidemount Back Pouch - XR Line to be fixed with optional 415766 Double Ender Stainless Steel (90, 100, 120) - XR Line

H - Bladder (Waist)

You have 2 options depending on how and where you are diving:

- A No mount (the sliders can move freely) not described here, just do not install the triglidders,
- B Classical mount preventing the bladder to move and slide and create a camel back effect





I - Waist strap

Like for the shoulders, you have 5 options depending on how and where you are diving:

- A No D-Ring
- B Rubber D-Rings (not described here, just slide your rings on the strap!)
- C 1 D-Ring (Flat)
- D-2 D-Rings (1 bent and 1 flat)

Mares | XR - How to rig a Mares | XR Sidemount Set - Ultimate Guide



And then install the elastic strap ring and the waist buckle.



Make sure the waist belt is either in the middle or on the left side of the belt depending on how and where you are diving. Cut any excess webbing on the free part of the waist belt and burn gently the edge with a lighter to ensure a clean finishing.

J – Bungees

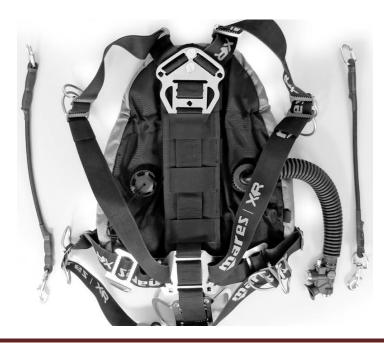
You have 3 options depending on how and where you are diving:

A - Fixed loop bungees (not described here, just make your own the way you awnt and fix it through the homes on the plate)

B – Single continuous bungee



C – 417535 Sidemount Stage Bungees - XR Line





Your set is now ready for final adjustments (size, chest and waist hardware, ...) on the ground and in the water.

Again, this manual is made for people to enjoy their diving and not struggle though lack of knowledge, understanding or poor training. At the same time, this is not a teaching but just a teaching-aid as there is no paper/video/internet teaching when it comes to practical methods on a complex subject that requires a very individual/personal and in-water approach.

As well, don't take this as gospel, there are other types of configuration used around the world that vary from country origins and dive environments.

Last, the key word about this system being **MODULARITY**, it is fully compatible with all accessories of the full XR line.

Parts list:

417547	Pure Light Sidemount compl. set – XR Line
417548	Heavy Pure Sidemount compl. set – XR Line
417536	Sidemount Pure Light Bladder - XR Line
417542	Sidemount Heavy Pure Bladder - XR Line
417501	Harness Heavy Duty Complete - XR Line
417502	Harness Heavy Light Complete - XR Line
417528	Sidemount Top SS316 Plate - XR Line
417529	Sidemount Bottom SS316 Plate - XR Line
417530	Sidemount Tail SS316 Plate - XR Line
417531	Sidemount Hip SS316 Rings (R&L) - XR Line
417543	Sidemount Top Alu Plate - XR Line
417544	Sidemount Bottom Alu Plate - XR Line
417545	Sidemount Tail Alu Plate - XR Line
417546	Sidemount Hip Alu Rings (R&L) - XR Line
417533	Sidemount Side Weight - XR Line
417534	Sidemount Back Pouch - XR Line
417535	Sidemount Stage Bungees - XR Line
417532	Sidemount Back Weight - XR Line
415765	Dead Bolt Snap Stainless Steel (75, 120) - XR Line
417520	Flat Head Dead Bolt Screw (4 pcs) - XR Line
417538	Flat Head Dead Bolt Screw BK (4 pcs) - XR Line
417524	Toothed SS316 Trigliders (10pcs) - XR Line
417525	Flat - D-Rings SS316 (10pcs) - XR Line
417526	Bent - D-Rings SS316 (10pcs) - XR Line
415766	Double Ender Stainless Steel (90, 100, 120) - XR Line
113/00	Double Linder Stairliess Steel (30, 100, 120) - AR Line