

# PETZL ZigZag

by Ade Scott

Once in a while a piece of equipment arrives that revolutionises the rope industry. Denny Moorhouse did it with Clog ascenders, and actually Denny has pretty much done it with a whole slew of locking carabiners from Clog, DMM and ISC. Whillans introduced their iconic tree harness and Rock Exotica did it with their equally iconic smooth-profile cams. Petzl in the meantime have had their fair share of technical innovations with the Stop, the GriGri and the ID - all legends in our lifetimes. The ZigZag could well be their next claim to fame. you'll notice we use the name ZigZag to describe the product and the noun zig-zag to describe the thing that looks like a zig-zag...keep up.

This isn't a 'Review' because we only had our grubby mitts on the ZigZag for a day - the rest of the time it was mounted on pressure sensors in a locked glass cabinet awaiting its unveiling at an autumn arb show. Our Reviews take a little longer than that and we weren't allowed to abuse it in the way we would normally as this was the only one in the UK at the time so we're content with a 'Spotlight' to let you know what it does and our initial impressions - we'll take a sledge hammer to one when we come to do a full review early next year.

Those of you familiar with bike chains will recognise certain similarities between the ZigZag and the Rock Exotica Unicender, .....principally the thing that looks like a motorbike chain. We can thank young Mr Thompson for creating the most commercially viable product to date using that bike chain idea but you have to hand it to Petzl for refining that idea into an entirely more expansive, if diminutive product that

provides a really efficient ascender / descender primarily for Doubled Rope Technique (DdRT). To be truly efficient during ascent it requires a foot ascender/blocker so to keep it in the family we used Petzl's Pantin in conjunction with a Petzl arb harness. All we need now are shares in the company and we'll be all set.

## CONSTRUCTION

The inset Pic 1 shows a production version of the ZigZag the most obvious difference being a full dome cover over the swivel eye union. The Zig Zag is comprised of a chain link section giving rise to the product name, a 1 1/2.54cm pulley wheel, a 14mm eye for connecting the rope termination and a swivel eye connection to your harness. The zig-zag rope corridor has 5 pairs of stainless steel 'chain-links' plus a connection back to the pulley wheel axis, a sprung top eye and a free pivoting second eye in the link below. When properly stacked as in this main picture a curved groove on the inner face of the four chain 'axels' creates a tunnel through which rope of 11.5 to 13mm can be threaded.

## CONNECTING TO THE ZIGZAG

The sewn eye or low-bulk knot of your climbing rope connects to the fixed eye via a carabiner. Your harness carabiner connects into the black swivel eye.

You will have placed your rope over a suitable branch or preferably though a pulley attached to a pull-down sling on a branch to give you maximum ascent efficiency. This free end of the rope is pulled through the high directional pulley and passed through the sprung top eye on your ZigZag (which you will need to hold down as per picture 2) and



pic 1



pic 2



pic 3



## TECHNICAL SPECIFICATION

ORIGIN:	ZIG ZAG
COST (estimated):	France
WEIGHT:	\$230 / £145 exc VAT
STANDARDS:	320g 0.66lbs
WEB:	CE 1019 • EN 358 • EN 81
	<a href="http://www.petzl.fr">www.petzl.fr</a>

passed through the stainless 'tunnel' and out past the pulley wheel. This is your trailing or control rope. There is a 3-stage diagram etched on the edge of 3 links which form an arrow pointing upwards when properly stacked (pic 3).

#### IN ACTION

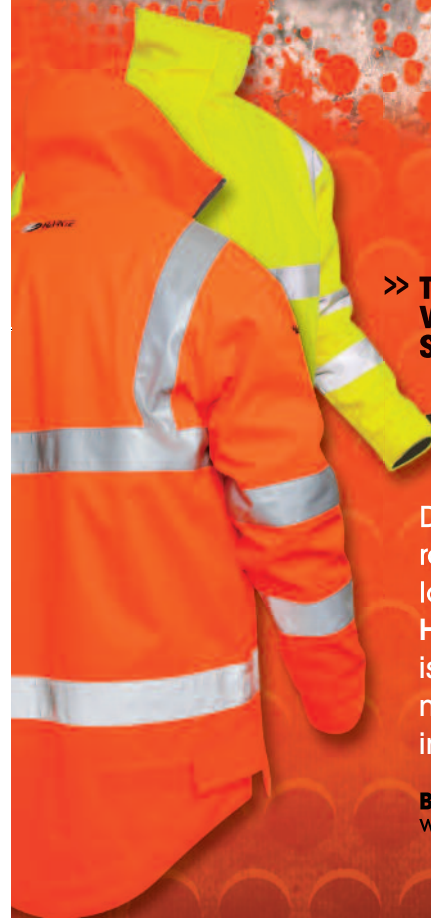
Straight off the bat the ZigZag is going to raise objections from those not wishing to thread their rope from a clean end and there is indeed a lot to be said for the mid-line convenience of the Unicender. Use of the ZigZag requires preplanning and/or single-high anchor point jobs because otherwise, rethreading following multiple repositions can become a pain-in-the-neck. Of course repositioning your top anchor doesn't necessarily mean that you have to take the ZigZag off your rope but it may limit or complicate your re-rigging. We had no problem at all fitting 13mm ropes through the ZigZag - just make sure that the chain section is properly compressed to give the maximum tunnel dimensions. To ascend the rope most efficiently use a simple foot ascender connected into the trail rope. As you push down with the foot and perhaps assist by pulling down on the trail rope above the ZigZag entry point - you go up and as soon as you let go the zig-zag concertinas upwards, extending to compress the rope and hold you firmly in position as in the main picture opposite. If you don't have or want to use a foot ascender you could use a double pulley at your anchor branch or attach a second pulley there and pass the trail rope through that second pulley wheel before it comes back to you. This is a more time-consuming set up but you can pull down on this and easily achieve upwards movement. The Zig-Zag has a very smooth and very easy action - at least it is over the short 30 or 40 foot sections we used for testing. To descend you simply detach your foot ascender (and with the Pantin this is a simple action) hold the trail rope firmly and with your other

hand cup the rope above the top of the zigzag pulling down very gently. It takes only a millimetre or two of compression of the zigzag links to commence descent and with proper trail rope control this is again a very smooth and efficient action, obviously varying with rope diameter and rope condition. When we undertake the full review we will be looking at fat, wet, dust encrusted rope to see if the action is still as smooth.

Considering its capabilities you might expect the ZigZag to be the size of small nuclear reactor but it's actually only about 60mm/2.3" across the main gold body section. This does mean that the distance between the zigzag ladder and the connecting carabiner and rope termination is limited. Sewn eyes are fine but a bulky tied-knot termination can touch the zigzag and stop the ladder from extending upwards and jamming the rope - in other words you could put yourself into a speed-reduced freefall. We tried a fisherman's (or barrel knot) termination and had no problem at all in foot ascender mode. But when we used the increased mechanical advantage of a second pulley the action of pulling down on the trail rope tended to close the gap a little more and locking was often impeded. However, this was only by a fraction and while we wouldn't recommend this as a technique it soon becomes second nature to pull the termination out just a shade and allow the zig-zag on the ZigZag to extend into its correct position.

We were quite excited by the ZigZag when we first saw it and haven't been disappointed in our initial trials. We can't yet vouch for durability and want to do considerably more tests involving more complex manoeuvres and longer ascents/descents but at first blush it seems to be a most viable and capable device. Being Petzl it is of course CE marked which will placate paperwork-concerned European users. Price is going to be around £145.00 in Europe so this will translate to around \$230+ in the US. 

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