USER MANUAL

Mudoble

DOUBLE-ROPE CLIMBING DEVICE

Designed for two-rope setups in rope solo climbing: LRS (Lead Rope Solo) and TRS (Top Rope Solo), used as double or twin ropes.



Mudoble rigged on a sit harness and chest harness, with both ropes installed.

MAIN SPECIFICATIONS

2 pivots
P1: 6.9–7.4 MM / P2: 7.5–8.4 MM

161 g
TOTAL WEIGHT

7075
AEROSPACE-GRADE ALUMINIUM

OVERVIEW

One device. Two ropes. Several configurations.

Mudoble was developed to use two ropes in rope solo climbing: LRS (Lead Rope Solo) and TRS (Top Rope Solo). It keeps the essential qualities of El Mudo —safety, robustness, simplicity and functionality— in a setup that works with double or twin ropes.



Both ropes feed themselves as you climb; the climber never has to pay out rope.

Intended applications

- Lead rope solo climbing (LRS)
- Top rope solo climbing (TRS)
- Rappelling on both ropes
- Double or twin rope setups

It lets you change manoeuvre without changing the device or altering its initial setup.

WARNING

Rope solo climbing is an activity for experts.

It demands advanced technical judgement, physical preparation and the ability to manage complex rope systems without a partner. Mudoble is not a learning device, and this manual does not replace hands-on training given by a professional.

Before using Mudoble, the climber must:

- Lead confidently, efficiently and effectively.
- Have years of experience climbing on a rope with a partner.
- Be proficient at rappelling with different devices, knots and improvised means.
- Know how to rescue a partner and how to self-rescue.
- Tie every knot correctly and understand anchors and fall factors.
- Practise the complete system in a controlled environment before climbing.

Although there are many videos and tutorials on how to climb LRS, we strongly recommend taking a hands-on course dedicated to it and practising for a long time on yo-yo and top rope before committing to a full rope solo ascent.

Incorrect installation, incompatible rope diameters, worn equipment, cross-loading or failure to check the system can cause serious injury or death.

Use of this equipment is at the risk of the climber who purchases it.
Neither the manufacturer nor Stonecrag is responsible for the use of this equipment.

COMPONENTS

Mudoble at a glance



The three parts: green pivot above, red pin in the hand and the silver core open.

1 Interchangeable pivot

Green upper part. The device comes with two pivots, chosen according to the diameter of the ropes.

2 Core

Silver body that takes both ropes and forms the main working channel.

3 Retaining pin

Removable red part that lets you open, align and close the body of the device.

P1 6.9–7.4 mm
P2 7.5–8.4 mm
PIVOTS INCLUDED

7075 aluminium
MATERIAL

161 grams
WEIGHT

TWO PIVOTS INCLUDED

Choose the pivot to match the rope diameter

Mudoble comes with two interchangeable pivots. Each one is built to work with the diameter shown, and their geometry is different. Before assembly, confirm that both ropes have the same diameter and fit the matching pivot.

6.9–7.4 mm **Pivot 1**

For use with two dynamic ropes from 6.9 to 7.4 mm. Choose this pivot only when both ropes fall within the range shown.

7.5–8.4 mm **Pivot 2**

For use with two dynamic ropes from 7.5 to 8.4 mm. It is the larger of the two: a different part, not the same one adjusted.

How to change the pivot

- Always work with the device unloaded and off the wall.
- Pull out the red retaining pin and separate the silver core.
- Swap the green part for the one in the correct range.
- Close the assembly and check that the pin goes all the way in.

Important: use Pivot 1 with ropes from 6.9 to 7.4 mm and Pivot 2 with ropes from 7.5 to 8.4 mm. Never swap the pivots between ranges and never install two ropes of different diameters.

BEFORE USE

Equipment and pre-use inspection

Equipment needed

- Mudoble complete and undamaged
- Pivot 1: 6.9–7.4 mm / Pivot 2: 7.5–8.4 mm
- **Sit harness and chest harness**
- Locking carabiner of a compatible shape, pear or oval
- Two dynamic ropes of the same diameter
- Cord of 8 mm or thicker for the lower connection

Inspect before every use

- No cracks, deformation, sharp edges or corrosion
- The pin goes fully in and cannot release accidentally
- The carabiner closes properly and is not cross-loaded
- The ropes are clean, supple and undamaged in the sheath
- The pivot matches the diameter of both ropes

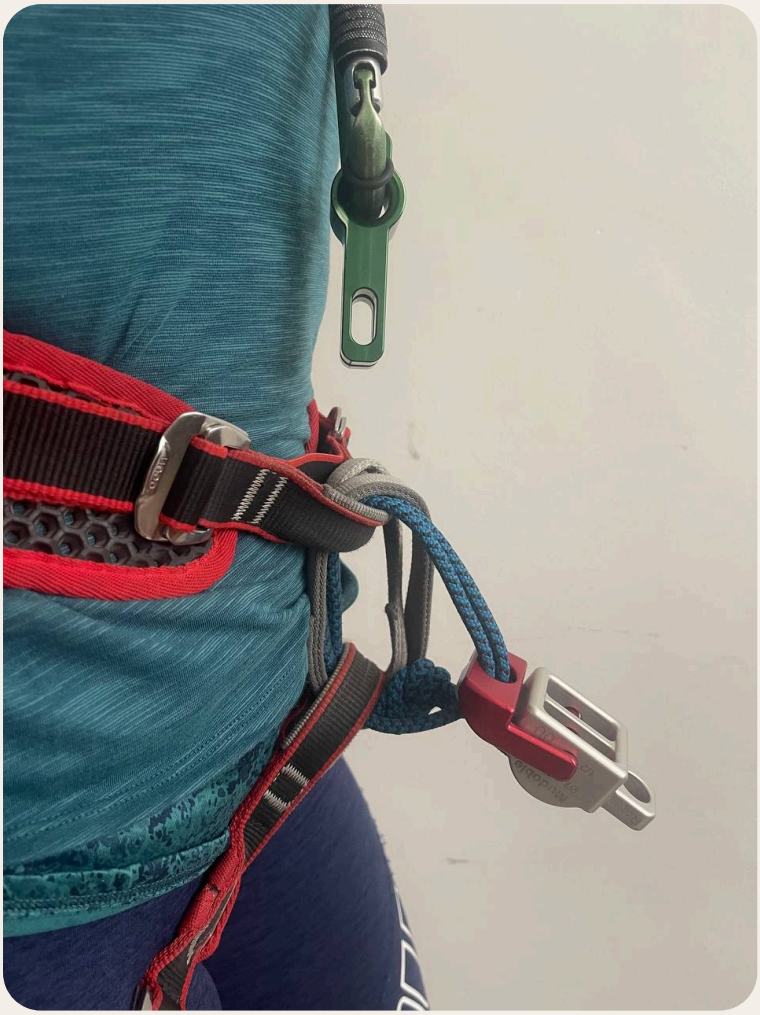
The chest harness is mandatory

It keeps the pivot in position and is what allows the system to hold a head-first fall. Attach the back of the chest harness to the haul loop of the sit harness: that keeps the distance between the pivot and the core always the same, and the adjustment is made once rather than on every climb.

A note on diameter. Over time and with use, ropes swell and lose suppleness. A rope that on paper falls inside the pivot's range may have thickened enough to bind. Check that it runs freely before you set off, not halfway up the pitch.

STEP 1

Select and fit the upper pivot



Green pivot on the chest harness carabiner, and silver core tied to the sit harness with the cord.

01

Select the pivot that matches the range of both ropes: Pivot 1, from 6.9 to 7.4 mm, or Pivot 2, from 7.5 to 8.4 mm. Connect it to a locking carabiner placed in the chest harness system.

Keep the pivot upright and stop it from turning around the body of the carabiner: restrain it with a sling, an O-ring or tape. Secure the silver core to the sit harness with the lower connection.

CHECK

The chosen pivot matches the diameter of both ropes, the carabiner is closed and locked, and the device hangs close to the body with nothing in its way.

STEP 2

Hold the device before opening it

02

The height between the chest harness and the sit harness is critical for the ropes to run through the core of the Mudoble. If the pivot sits too close to the main body there will be too much friction and it will not let you climb smoothly; if it sits too high, the same thing happens.

Try different distances until you find the one that suits you best and lets the ropes run with as little friction as possible. Keep both connection points visible: do not let the device turn behind the harness or get trapped under slings, clothing or gear loops.



The core is held in the hand, still closed and connected to the harness, before the pin comes out.

IMPORTANT

Do not start installing the ropes until you have checked that the core opens smoothly and that every component stays connected to the climber.

STEP 3

Remove the pin and open the core



Red pin pulled all the way out; the core hangs open from the cord without coming off the harness.

03

Pull the red retaining pin all the way out and separate the silver core to expose the rope channel.

Confirm that the pin, the core and the pivot are free of dirt and damage. The pin must stay connected to the system and within reach throughout assembly: never let go of it at the belay or leave it dangling out of control.

STOP IF

Any component jams, is hard to align, shows deformation or cannot be closed completely.

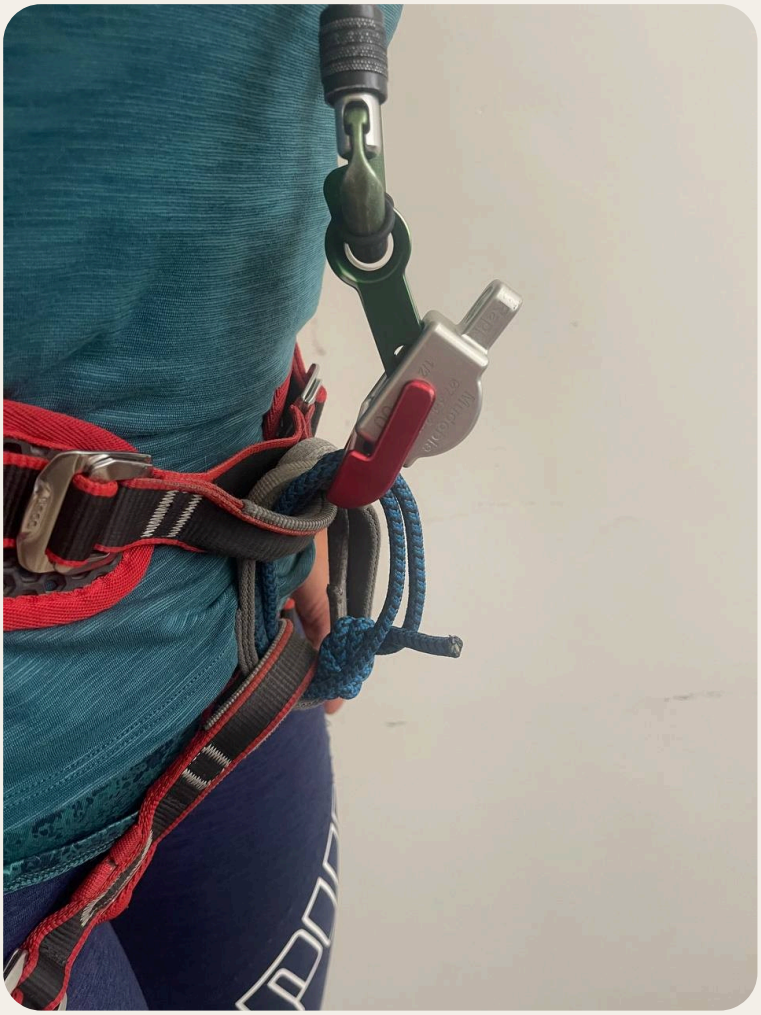
STEP 4

Align the core with the pivot assembly

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Line the silver core up with the green pivot. The parts must meet without forcing and without side-loading the assembly.

Before inserting the pin, check that the opening is clear and that the device is oriented as shown in the photograph.



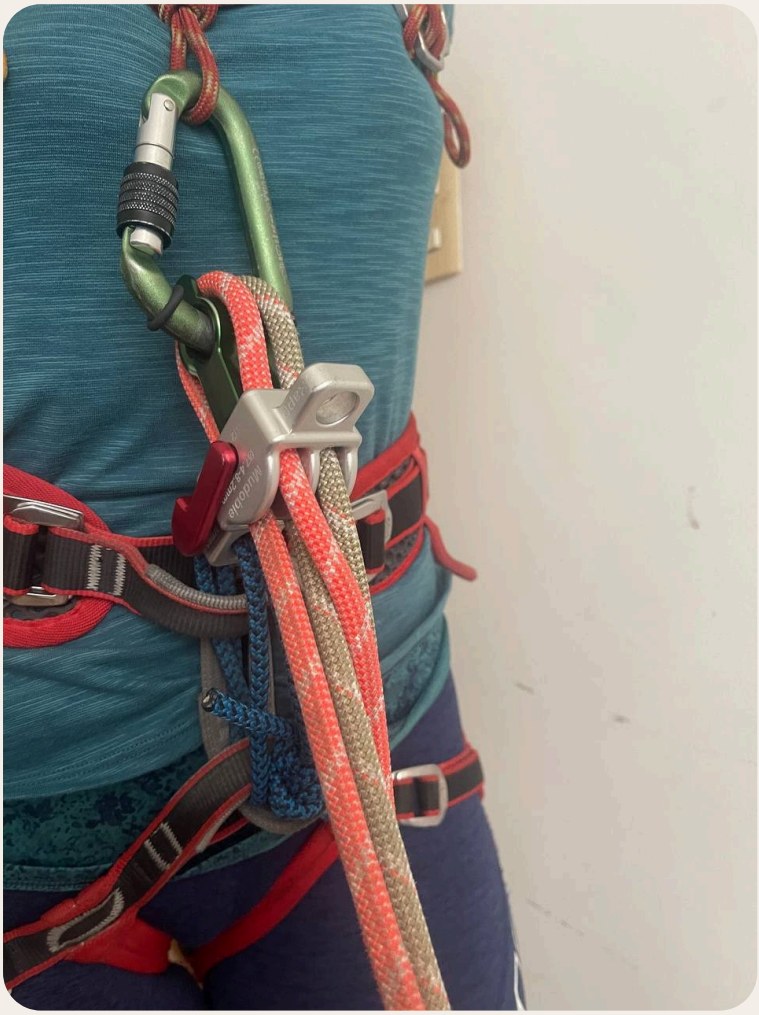
Core and pivot mated, with the red pin inserted and the lower connection cord in view.

ALIGNMENT CHECK

The holes in the core, the pivot and the pin must line up naturally. Never hammer, bend or modify any component.

STEP 5

Install both ropes in parallel



Both ropes run parallel through the channel of the core, without crossing each other.

Run both ropes through the channel of the core, parallel and without crossing. The strands running down to the Master Point are the **live ropes**; those coming out of the top are the **free** or dead ropes.

Close the core, push the retaining pin fully home and separate the strands inside the pivot carabiner. Check that the assembly stays aligned and that neither rope rubs against an edge.

LOWER CONNECTION

The core is tied to the sit harness with cord of 8 mm or thicker, passing through the belt, the leg loops and the hole in the core, and finished with a figure-eight or a double fisherman's knot. Two turns of cord are recommended.

1 Same diameter

Both dynamic ropes must have the same diameter and fall inside the range of the pivot fitted.

2 No crossing

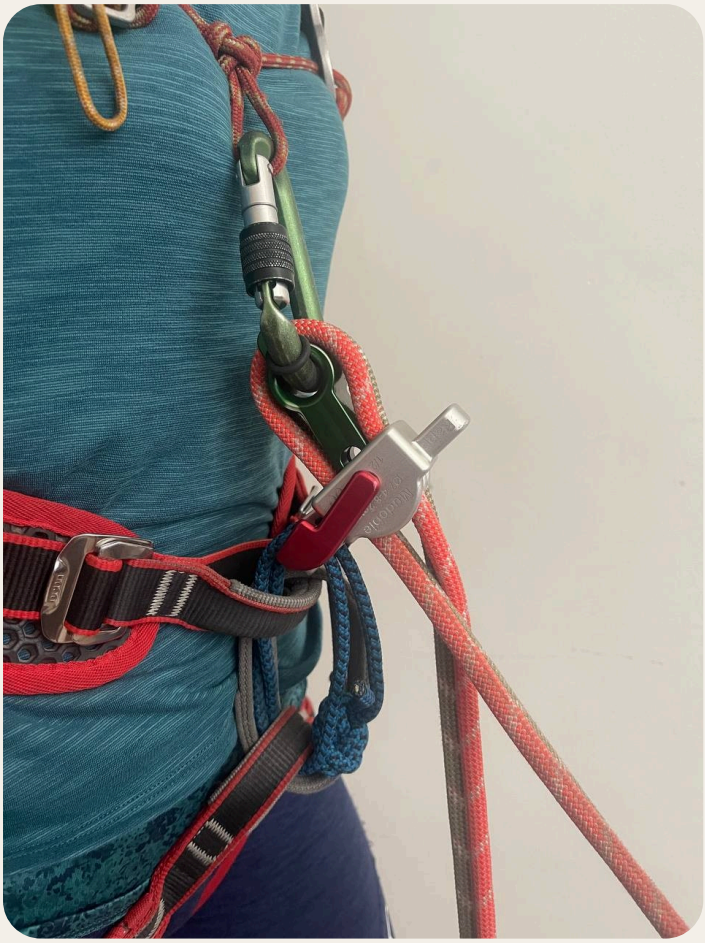
The ropes go in parallel and come out parallel, separated inside the pivot carabiner.

3 Close it fully

Push the retaining pin all the way in before applying any load.

STEP 6

Check the complete system



Final setup: pivot above, core closed to the harness and both ropes running through the channel.

Pre-climb checklist

- [ ] Carabiner closed and correctly loaded
- [ ] Correct pivot: P1 6.9–7.4 mm or P2 7.5–8.4 mm
- [ ] Pivot held in the intended position
- [ ] Core connected to the sit harness
- [ ] Chest harness fitted and tied to the haul loop
- [ ] Both ropes of the same diameter
- [ ] No crossed or twisted ropes
- [ ] Retaining pin fully inserted
- [ ] Function test carried out near the ground

Test before you leave the ground. With the system assembled, load the device with your weight close to the ground and check that it locks, that it releases when the load comes off, and that both ropes feed themselves as you move up. If anything does not work as it should, strip it down and check the assembly from step 1.

FINAL NOTES

Rope condition is critical

With time, contamination and repeated use, ropes can grow in diameter, stiffen and lose suppleness. These changes increase friction and stop them running smoothly through the Mudoble. Use only ropes in good condition and retire any rope that fails its manufacturer's inspection criteria.

Functional features

- Two-rope use for rope solo climbing: LRS and TRS
- Includes Pivot 1 for ropes from 6.9 to 7.4 mm
- Includes Pivot 2 for ropes from 7.5 to 8.4 mm
- 7075 aluminium construction
- Total weight: 161 grams
- Lead, rappel and top rope without changing devices

Care and storage

- Clean it with clean water and let it dry in the shade.
- Keep it away from solvents, acids and heat sources.
- Store it dry and away from sharp gear.
- Retire it if it shows deformation, cracking or heavy wear.

FREE SUPPORT

Stonecrag helps you with the setup

If you have any doubts about the assembly, choosing the pivot or installing the ropes, get in touch through Stonecrag's official social media. Our technical support team will give you personalised guidance while you set up your Mudoble, at no extra cost.

contacto@stonecrag.com

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