

# UNICENDER USER INSTRUCTIONS

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## **WARNING!**

### **For expert use only!**

- These activities are inherently dangerous and carry a significant risk of injury or death that cannot be eliminated.
- It is the user's responsibility to obtain specific training and to use it safely. These instructions DO NOT tell you everything you need to know.
- Do not use unless you can and will understand and assume all risks and responsibilities for all damage/injury/death that may result from use of this equipment or the activities undertaken with it.
- Any device is subject to failure-carefully check before and after each use.
- You must always have a backup-never trust a life to a single tool.
- Everyone using this equipment must be given and thoroughly understand the instructions and refer to them before each use.
- You must have a rescue plan and the means to implement it. Inert suspension in a harness can quickly result in death!
- Do not use around electrical hazards, moving machinery or near sharp edges or abrasive surfaces.
- We are not responsible for any direct, indirect or accidental consequences or damage resulting from the use of our products.



WARNING: This product can expose you to chemicals including nickel acetate, which is known to the State of California to cause cancer. For information go to [WWW.P65Warnings.ca.gov](http://WWW.P65Warnings.ca.gov)

## MORE WARNINGS

This Manual assumes you have a solid understanding, and working knowledge of rope climbing techniques and the ability to judge safety risks at all times. If you do not have these skills, seek out training from someone who does, before using the UNICENDER. You must be medically fit.

This manual does NOT teach you everything you need to know! It also does NOT tell you everything that can go wrong or be dangerous as there are too many ways to explain or imagine.

The UNICENDER must be used with the proper rope. It was designed for use with ropes typically used by arborists, but you must test it with your rope. If the rope is too stiff it will not work well and if too soft or too small the UNICENDER will slip and will not hold a load.

The UNICENDER was not designed to catch a fall and must NOT be shock loaded. Keep slack out of your system at all times to avoid the possibility of shock-loading.

Do not use on icy ropes. Do not use on twist constructed rope. Use braided ropes only of the correct diameter. Remember your climbing system is only as strong as its weakest link. Check all equipment before going aloft. The UNICENDER is intended for one user. Do not load it with more than one person. Do not lend it to someone else.

Make sure all your equipment is compatible with each other. Realize that some equipment can lever against the gate of a carabiner and break it open. You must avoid this at all times. Always keep equipment properly positioned.

The UNICENDER will eventually wear out and will slip rather than hold a load, so you must be aware of this and inspect it with this in mind. When it is worn out we can rebuild it for you – contact us for current costs.

### READ & UNDERSTAND THIS MANUAL CAREFULLY

If you do not understand it, you must not use the device.

### DESCRIPTION

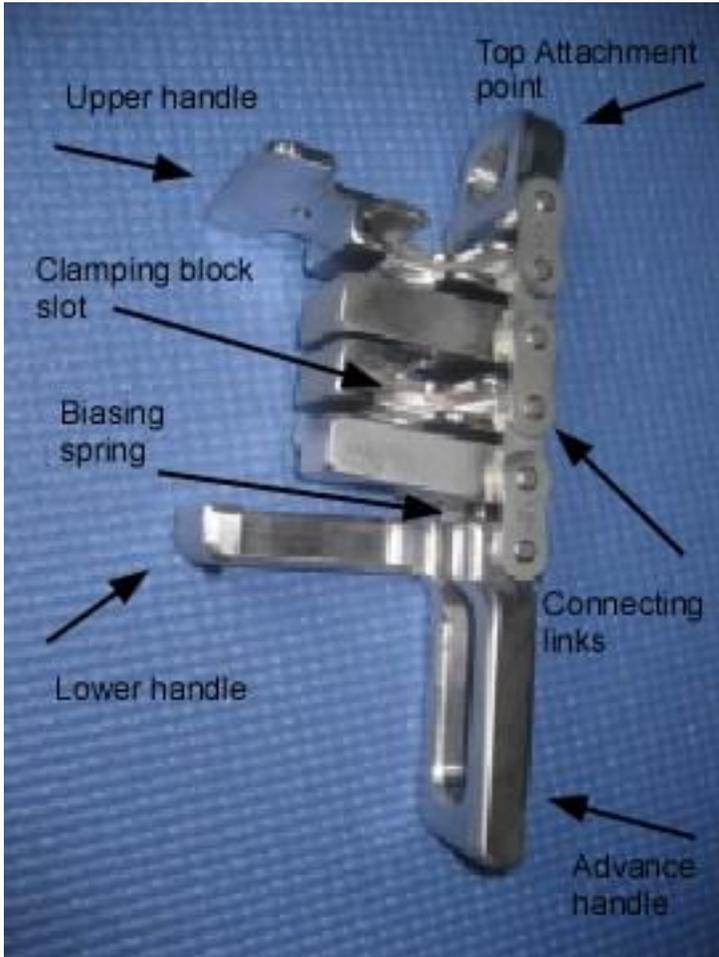
The UNICENDER is a versatile rope climbing tool that features:

- Ascending and descending with both doubled rope technique (DdRT) and single rope technique (SRT).
  - To descend, the top and bottom handles are squeezed together. There are two ways to do this (in both DdRT and SRT). :
    1. CONTROL MODE. The rope is wrapped around the handles and used to release by squeezing them together. This is the safest method because you are holding the rope under tension and this makes it harder to lose control.
    2. ADVANCED <CAUTION> MODE. You can release by squeezing the handles together with your hand. But it will release more suddenly and if you panic you will continue holding it and will fall uncontrolled, causing injury/death. You should not use this mode unless absolutely necessary. We recommend that you never use this mode; we are including the information about it because users will quickly discover it and we want them to know it is extra dangerous.
- When descending you must always control the free side of the rope with your hand just as you would when using a figure 8 or other rappel device. DO NOT depend on controlling your descent only with the UNICENDER.
- Auto advance in DdRT: When ascending using doubled rope technique you simply pull the rope exiting the UNICENDER it will automatically advance ahead of you.

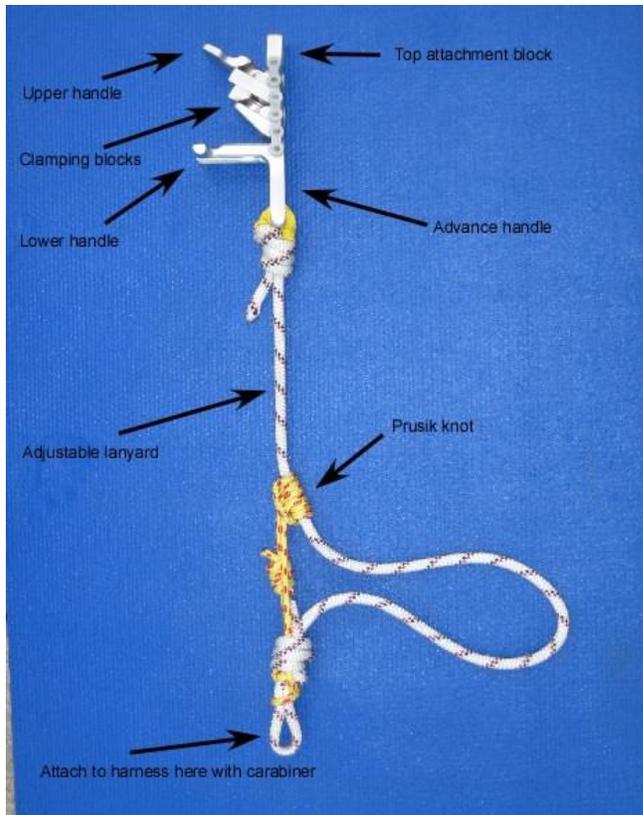
### THINK SAFETY.

Start low and slow when learning how to use your new UNICENDER climbing tool. Stay close to the ground until you are very experienced with it.

First familiarize yourself with the components of the UNICENDER climbing tool.



To use your UNICENDER climbing tool you will need a lanyard to connect it to your climbing saddle.



The lanyard in this picture is just an illustration of a simple adjustable lanyard. The UNICENDER climbing tool does not come with a lanyard

There are a myriad of options when it comes to choosing a lanyard, everything from a fixed length sling to a custom spliced adjustable lanyard.

Consider these points when selecting your lanyard:

- The lanyard is suitably strong ( Z133.1 safety standard is 5400lb breaking strength or better)
- Attached securely. Attach your lanyard to the advance handle of the UNICENDER climbing tool with a locking carabineer or suitable knot such as a figure eight.
- Ease of use. Having your lanyard easily adjustable during a climb can be helpful particularly with activities like limbwalking where a short lanyard is required to keep the UNICENDER climbing tool within reach.
- Correct length for the climber using it.

Adjust the length of your lanyard so the UNICENDER climbing tools upper handle is just within reach when you are seated in your saddle.

#### ATTACHING THE UNICENDER CLIMBING TOOL TO THE ROPE

- Hold the UNICENDER climbing tool vertical and next to the climbing line.
- Hold the top clamping block away from the others enough to expose the slot.
- Slide the rope into the slot.



- Now hold the next clamping block away from the first and third to expose its slot. This slot is on the other side of the block. Bend the rope to allow it to slide into that slot.



- Proceed in this manner inserting the rope into the alternating slots all the way to the last one.



- Then position the rope within the “L” of the bottom handle.



## DETACHING THE UNICENDER CLIMBING TOOL FROM THE ROPE

Follow the attachment process in reverse; starting from the bottom and work your way up, separating the clamping blocks enough to enable you to remove the rope from the clamping block slots. With some practice you can attach and detach the UNICENDER climbing tool from the rope in a matter of seconds.

## FIRST CLIMB WITH DOUBLED ROPE TECHNIQUE (DdRT)

The UNICENDER climbing tool is not like any other tool on the market, so don't assume you know how to use it. Start low and slow and get a feel of how the UNICENDER climbing tool works before climbing high. Doubled rope technique uses both sides of a rope over an anchor point. One side is attached to the top of the UNICENDER climbing tool at its end and the other is threaded through the UNICENDER climbing tools clamping blocks. You have made an adjustable rope loop over a secure anchor point, (such as a tree branch). The UNICENDER climbing tool allows you to lengthen and shorten the loop to move you up or down. The best part is the rope slides over the anchor point like a pulley and gives you a two to one advantage while climbing. It also halves all the forces on the clamping blocks which makes the UNICENDER climbing tool easier to control. When first learning how to use your new UNICENDER climbing tool, double rope technique is the place to start.

- With a rope through a secure anchor point, attach the working end (the bitter end) of the rope to the top attachment point of the UNICENDER with a triple locking carabineer or suitable knot such as a figure eight.
- Attach the UNICENDER climbing tool to the standing part of the rope, as described above.



- Attach the UNICENDER climbing tool to your climbing harness with an adjustable lanyard using a suitable triple locking carabiner. Adjust the lanyard so the top handle of the UNICENDER climbing tool is just within reach when you are seated in the harness.
- Now pull on the rope which is exiting the bottom of the UNICENDER climbing tool.
- The UNICENDER CLIMBING TOOL WILL AUTOMATICALLY ADVANCE sliding up the rope and then lock when you stop pulling.



- Pull yourself up off the ground using just your arms (or add a foot lock or a second ascender.) At a couple of feet off the ground, STOP.
- Now for coming down.

### FIRST DESCENT WITH DOUBLED ROPE TECHNIQUE (DdRT)

There are two modes of descending with the UNICENDER climbing tool.

-CONTROL MODE

-ADVANCED <CAUTION> MODE

We will start with CONTROL MODE because it is the safest.

#### CONTROL MODE

Take the rope exiting the bottom of the UNICENDER climbing tool and wrap it counter clockwise over the upper handle, notice that the rope runs under the arm of the lower handle. Pull down on the rope, this releases the UNICENDER climbing tools grip on the rope.



The friction of the rope over the handles holds your weight.  
Control the speed of your descent by moderating your squeeze on the rope with your hand. To return to ascending, quickly flip the rope off the top handle.  
There is a slight jerk when transitioning from ascending to descending and back again. This is normal and takes some getting used to. Practice CONTROL MODE until you are comfortable with using it.

Notice : if you weigh under 120 lbs or if there is too much friction at the anchor point, CONTROL MODE may not allow you to descend. In this case you may have to use ADVANCED <CAUTION> MODE to get down. In this case you may find certain ropes will work better, otherwise you may want to consider whether you should use this device at all.

#### ADVANCED <CAUTION> MODE

Reach up with one hand. Grab the upper handle with your fingers.



Squeeze against the lower handle with your palm while holding the rope exiting the bottom of the UNICENDER climbing tool with the other hand down by your hip.



Start by squeezing gently. Slowly squeeze harder until you find the point where the rope starts to slip.

You must ALWAYS control the free side of the rope and depend on this to provide the friction you need. NEVER release without controlling the free side or there is extreme danger of a freefall.

Use extreme caution if you have to use this mode. We recommend using CONTROL MODE instead.

Practice the descent modes close to the ground until you've mastered them. It is good to practice ADVANCED <CAUTION> MODE (close to the ground) just in case you have to use it someday.

### PANIC RESULTS IN ACCIDENTS

It is human nature to grab (squeeze) harder when surprised or panicked. With many devices, such as auto belays, rappel devices, etc., a typical accident occurs like this: The user releases and the rope releases more suddenly than expected. The user has the natural reaction and grabs even harder and the rope shoots through the device with little friction. Depending on the situation the user falls or drops his partner. If he is really lucky he may realize what is happening and let go before injury/death occurs.

This is not the device's fault. It is totally the fault of the user. Two mistakes were made. #1, the user was not ready for the very foreseeable scenario of the device releasing suddenly. #2, the free side of the rope was not controlled. If the free side of the rope is under control then a fall cannot happen.

It should be obvious that in CONTROL MODE the rope is under tension and a free fall is less likely. An added perk of the control mode is that it extends the useful life

of the UNICENDER'S clamping surfaces by concentrating the friction and abrasion on the handles.

### CLIMBING AND DESCENDING WITH SINGLE ROPE TECHNIQUE (SRT)

Before climbing with SRT you must know both modes of descent.

#### ASCENDING WITH SRT

Single rope technique uses a single rope attached to a secure anchor point with a suitable knot, such as a running bowline.

The process for ascending is the same as in DdRT, except there is no rope attached to the top attachment block of the UNICENDER climbing tool. Also there is no 2:1 advantage. This makes for a very challenging but fast and efficient climb.

For this technique, you must use a foot lock or another ascender to take your weight while you manually advance the UNICENDER climbing tool.

With a rope attached to a secure anchor point, attach the UNICENDER climbing tool to the rope as described above.

Attach the UNICENDER climbing tool to your climbing harness with an adjustable lanyard using a suitable triple locking carabiner. Adjust the lanyard so the UNICENDER climbing tool's upper handle is just within reach when you are seated in the harness.

Advance the UNICENDER climbing tool by holding the advance handle in one hand. Release your weight from the UNICENDER climbing tool by standing up on a foot lock or second ascender such as the Pantin. Push the UNICENDER climbing tool up the rope until the support lanyard is taut. Now sit and get another grip with your foot lock or ascender.

Climb a couple of feet off the ground and STOP.  
Now for coming down.

#### DESCENDING WITH SRT

Descending with SRT is the same as in DdRT except for the fact that the forces are doubled. And each of the descent modes will act a little different because of it. Start with CONTROL MODE and get a feel for it. We don't recommend ADVANCED <CAUTION> MODE with SRT! In ADVANCED <CAUTION> MODE with SRT be aware in the release point is different from doubled rope technique. This is because the UNICENDER clamping blocks are supporting all your weight, not half your weight as in DdRT.

#### PRACTICE

Climbing is a high stakes activity; you need strong safe gear and a cool head. The UNICENDER climbing tool is a high-performance tool that requires skill to operate well. The only way to gain skill is to practice.

### ROPE SELECTION

For the UNICENDER climbing tool to perform at its best, use low stretch, hard laid braided ropes.

Such as Samson's 7/16" Velocity

Or New England's 1/2" Safety blue.

Other ropes are being tested and will work well. Check with us for the latest information of rope brands.

### BEFORE CLIMB CHECKS

-Check clamping blocks for cracks or deformation or wear. Discard the tool that has suffered abuse.

-Check that the biasing spring is working properly and pushing the clamping blocks toward their Locked position.

-Check that the connecting links are in good condition and that the rivet heads look normal. Check links and rivets for cracks or deformation.

### CAUTION: POTENTIAL FOR PINCH INJURY AND OR ROPE BURN

Always wear repelling gloves when operating the UNICENDER climbing tool.

When using the UNICENDER climbing tool, restrict hand placement to the advance handle, the upper handle and lower handle. See picture above.

Avoid placing fingers between the clamping blocks. When load is applied, they squeeze together.

If your body/clothing or equipment gets sucked into the device you could be stuck. This is extremely dangerous as suspension can quickly cause death. You must be able to rescue yourself in any event.

### UNICENDER CLIMBING TOOL CARE

Keep your UNICENDER climbing tool dry. If it does get wet, dry it off as soon as possible.

Periodically lightly oil the chain links.

Inspect your UNICENDER climbing tool for damage before every climb. If damaged in any way, retire it immediately. Or send it back to us for repairs.

Do not climb on a damaged UNICENDER climbing tool.

Retire your UNICENDER climbing tool if it is subjected to a hard fall.

Avoid hard impacts such as a drop on hard ground.

If any part is broken or deformed, retire the tool.