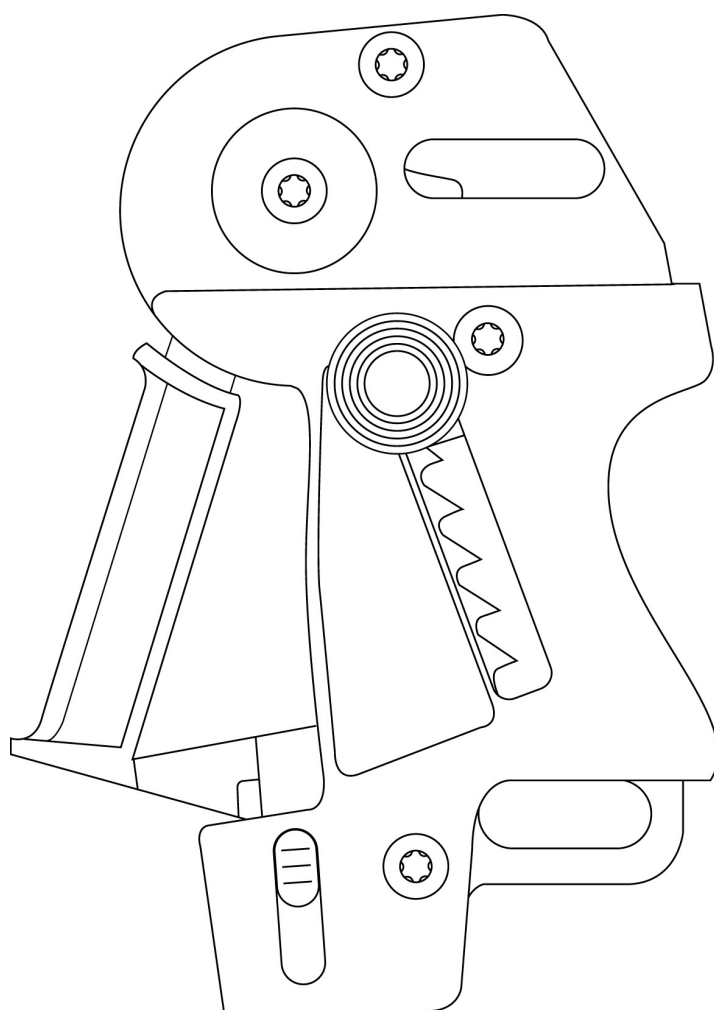




## **4.1-Tactical USER MANUAL EN341 version**

## Responsibility WARNING

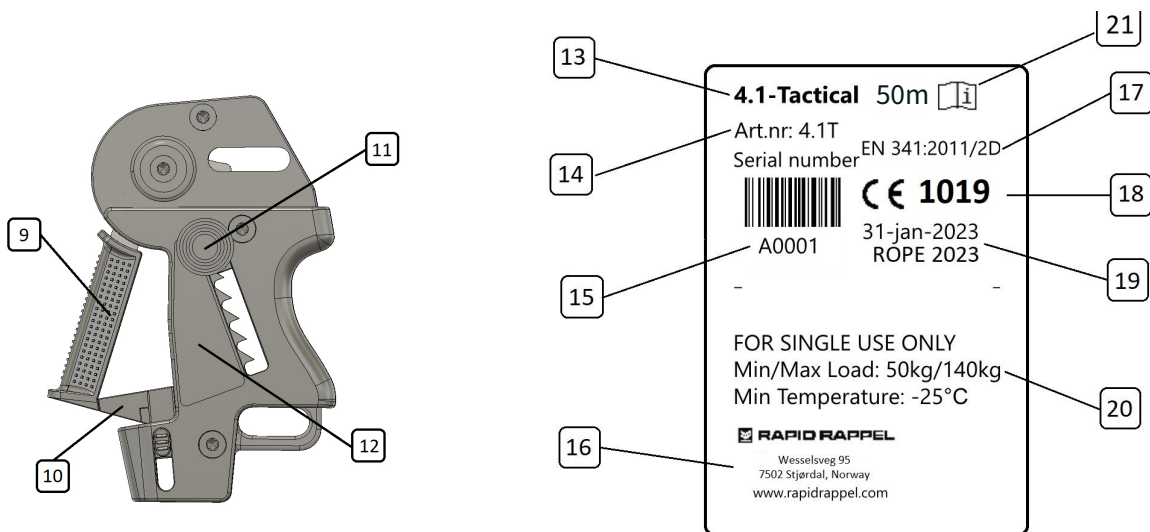
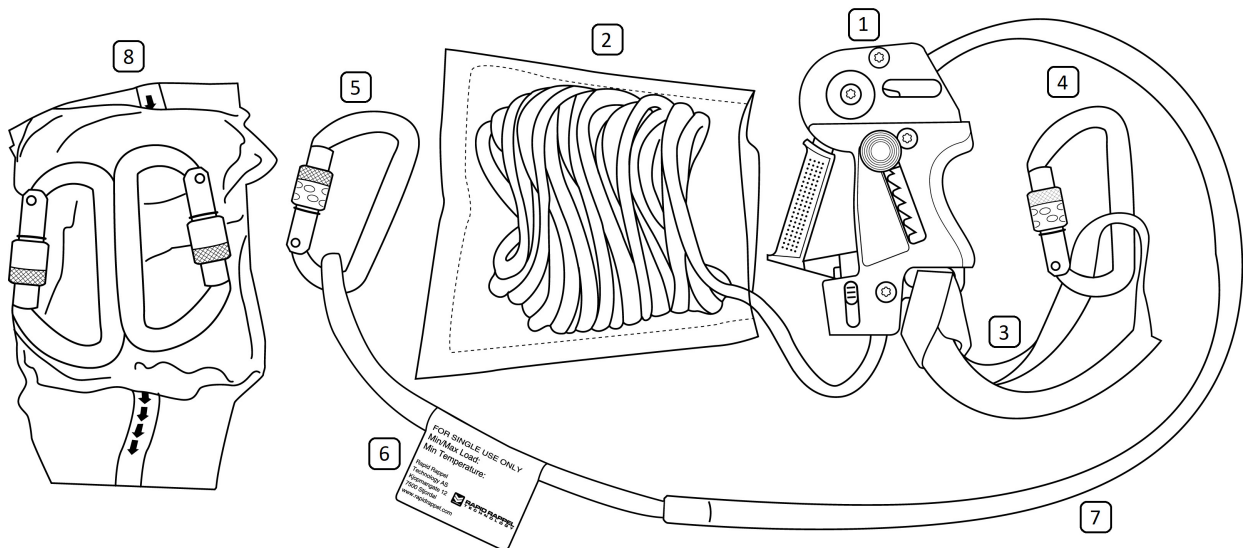
The equipment is solely dimensioned for rescue and evacuation only in accordance with the equipment's technical data, the manufacturer's instructions and relevant technical standards. Special attention must be made regarding maximum safe workload, handling and anchoring. Activities involving the use of this equipment are inherently dangerous. You are responsible for your own actions, decisions and safety. Before using this equipment, you must:

- Read and understand all Instructions for Use.
- Get specific training in its proper use.
- Become acquainted with its capabilities and limitations.
- Understand and accept the risks involved.

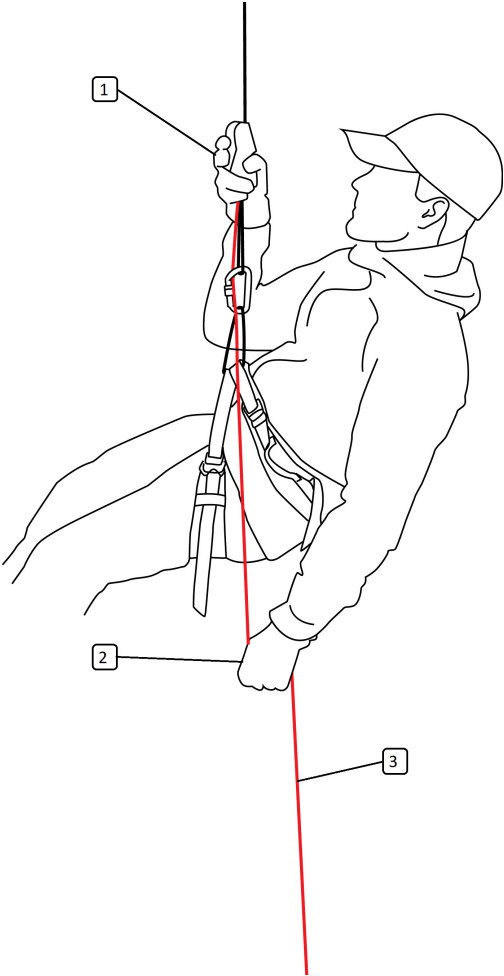
Failure to heed any of these warnings may result in severe injury or death.

This product must only be used by competent and responsible persons, or those placed under the direct and visual control of a competent and responsible person. You are responsible for your actions, your decisions and your safety and you assume the consequences of same. If you are not able, or not in a position to assume this responsibility, or if you do not fully understand the Instructions for Use, do not use this equipment. Only individuals who have received training and have been designated as competent to use this product are authorized to use the 4.1 Tactical.

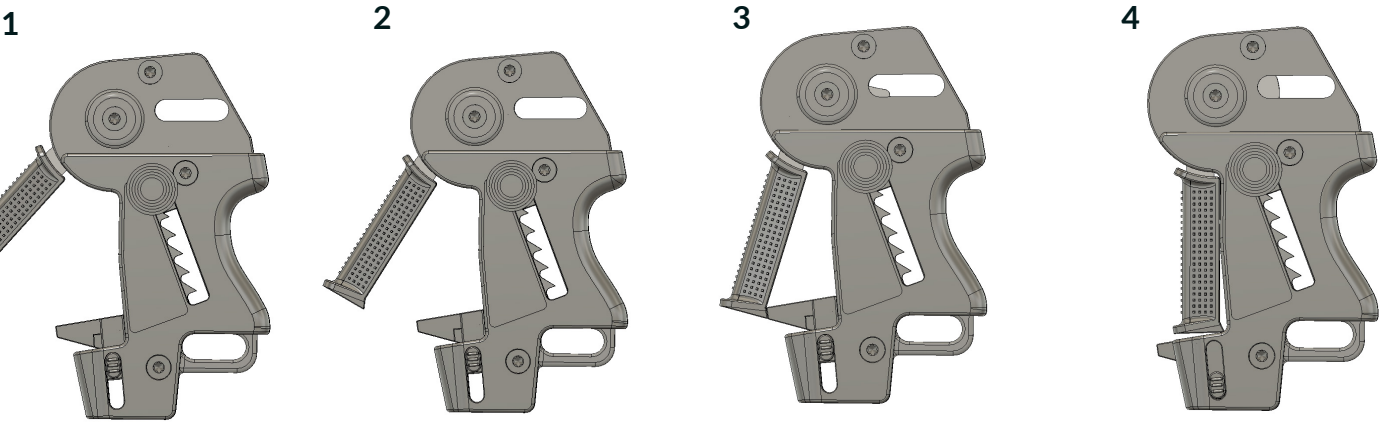
## A NOMENCLATURE



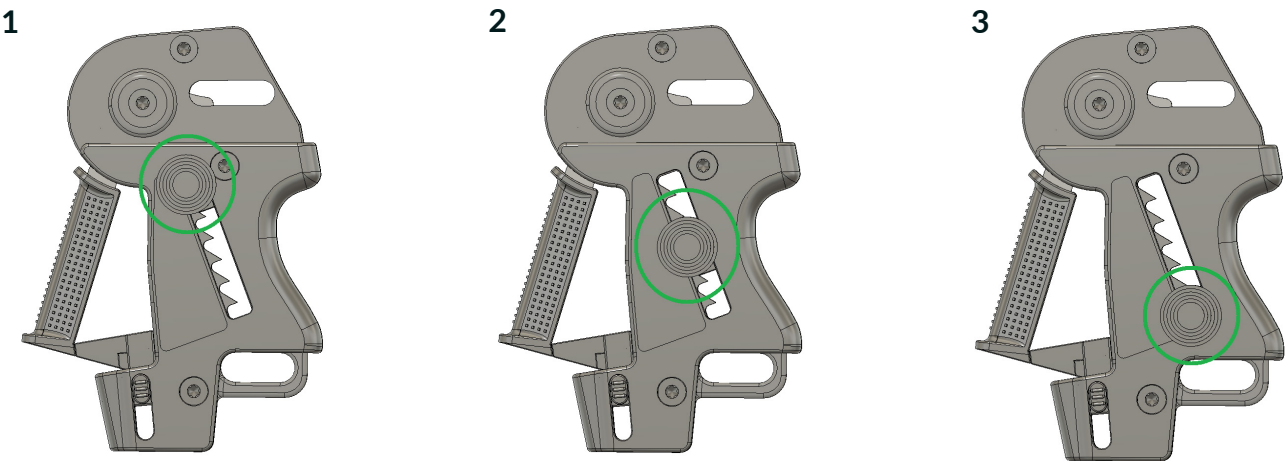
**B Terminology**



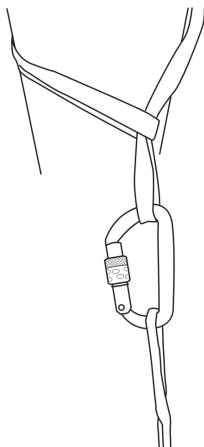
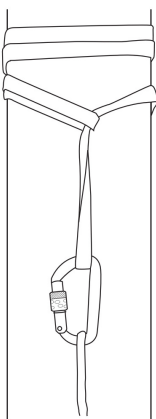
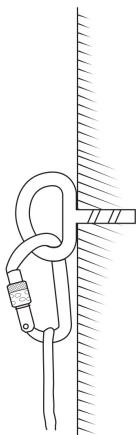
**C Handle Position**



**D Friction Mode Position**

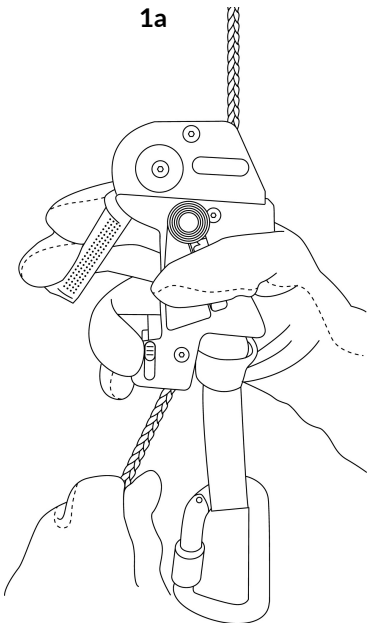


E Anchoring

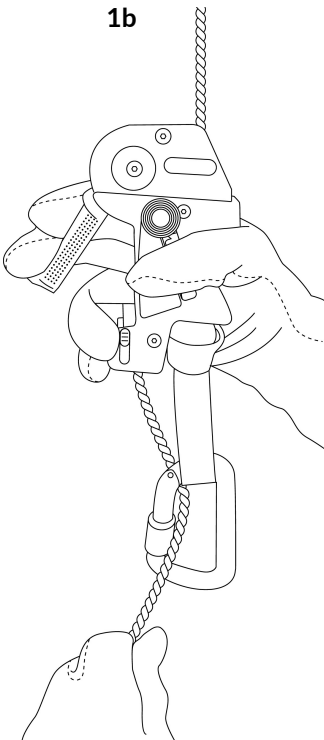


F Use

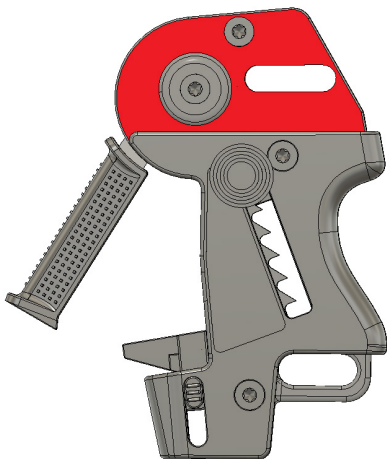
1a



1b



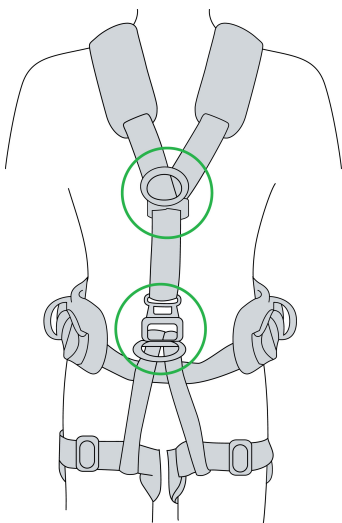
2

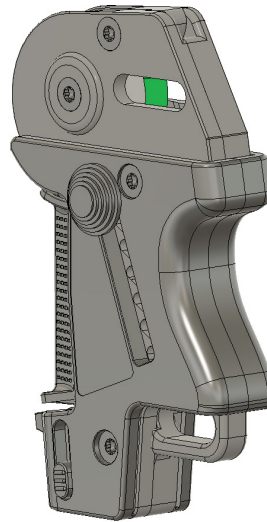
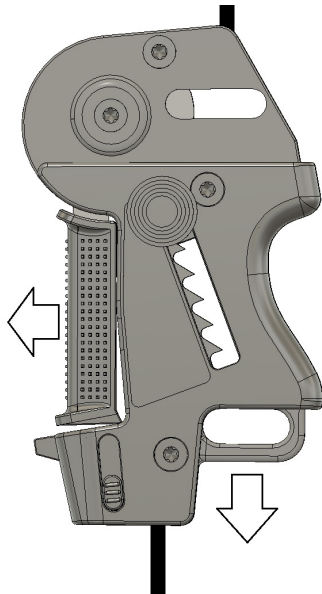


3



4





## A Nomenclature and kit content

- 1 Descender
- 2 4mm Aramid rope
- 3 Nylon connecting sling
- 4 Attachment carabiner
- 5 Anchor point carabiner
- 6 Marking label
- 7 Line protector
- 8 Kit vacuum bag
- 9 Handle
- 10 Neutral button
- 11 Friction mode button
- 12 Friction mode weight scale
- 13 Product name and rope length
- 14 Article number
- 15 Serial number
- 16 Manufacture Identification
- 17 Standards
- 18 Notified Body Controlling Manufacturer of PPE
- 19 Year of Manufacture
- 20 Weight restriction and Temperature Limit
- 21 Read instruction before use

## B Terminology

- 1: Controlling hand – Controls the brake handle and adjust the speed of the decent
- 2: Brake hand – can be used to control the rope moving in to the device during decent
- 3: Brake side rope – the device is designed for single handed operation. It is the user's decision whether to operate device with the controlling hand or in combination with the brake hand.

## C Handle Position

- 1: Locked position: the weight of the operator moves the handle in locked position
- 2: Decent start: when the controlling hand moves the handle to begin the decent.
- 3: Decent limit: when the controlling hand moves the handle all the way inn until it touches the Neutral button.
- 4: Neutral: to move the handle to this position the neutral button need to be pressed down.

## D Friction mode adjustment

- 1: Minimum friction position is used for the minimum rated load
- 2: The friction mode scale gives the operator approximate user setting for the operator weight (kg).
- 3: Maximum friction position is used in case of higher than maximum rated load and under long decent when the device gets hot.

## E Anchoring

Only use the sewn termination on the rope and the supplied carabiners for anchoring the system. The structure must be able to take a load of 12 kN (2700lbf) or be approved according to EN795.

## F Use

1a:  
To control the descender in decent your controlling hand is used to control the position of the handle. Your brake hand can be used on the braking side of the rope to give extra security, friction and fine adjustment of speed control.  
The friction mode is used for better one hand speed control of the device.  
Edge negotiation must be done at friction setting to 50kg.  
The desired friction setting must be selected when the operator is positioned to start the decent with the bodyweight hanging on the system.  
The friction can be adjusted anytime during the rappel while descending or at stand still.  
The setting depends on operator weight, device temperature, dry/wet condition etc.  
The hotter the device get while descending the higher setting (towards max) is needed.  
The scale is for reference only and the setting depends on all factors above.  
It is essential that the operator remain in control of their decent speed as it may be difficult to recover from loss of control. In this situation the operator should remove their controlling hand from the handle and wait for the device to stop. A heavy operator may need to use the braking hand on the brake side of the rope to reduce the stop distance.  
A line protector is supplied as a last resort if the line needs to travel over an edge. The line protector can slide up/down the line to the position of the edge.

### **WARNING!**

**The line protector will not protect the line from sharp edges.**

### **CAUTION!**

**The braking side of the rope must not be exposed to a force greater than 1.4 kN with the friction mode position set to other than 50kg.**

**A force greater than this may destroy the Friction Mode mechanism.**

**A likely scenario this can happen is hitting the end of the line knot at high speed.**

### **CAUTION!**

**If rappelling to the end of line knot and the device is exposed to high static or dynamic load, the lever may bypass the neutral button by braking of the plastic tip of the handle.**

**This will force the handle to neutral position and the rope will withstand higher static and dynamic loads.**

### **CAUTION!**

**The rope is square and in case of a twist on the rope the brake system may slow a light weight operator to a stop. While holding pressure on the brake side of the rope with the brake hand, move the neutral button down and press the handle further in to let the twisted rope pass thru the device. Gently release pressure on the rope with the brake hand until the twist passes thru the device, then continue as normal.**

**This is the only time the restriction button may be operated during decent.**

1b:

Extra friction

Add friction in case of difficulty controlling speed, if the rope is slippery, or for any use with a heavy load.

To add friction, pass the rope through the carabiner connected to the harness and use the brake hand in combination with the controlling hand to adjust the speed.

NOTE:

The following procedure is mandatory in case of an overweight rappel (>140kg):

Friction mode setting to maximum or a setting that allows for adequate speed.

Add friction as described in 1b.

Use the brake hand on the brake side rope in combination with the controlling hand to adjust the speed.

Increase the friction setting as the brake heats up on long descends.

The decent speed must be kept to minimum to avoid losing control.

2:

The areas on the device that is not covered in plastic may become hot.

It is recommended that the operator wears gloves to prevent skin coming in contact with hot areas.

Depending on distance, speed and load on long descends, you may experience smoke coming from the device and from the line.

3:

The neutral button is used for inhibiting the handle for moving into neutral position and cause excess speed in the decent.

The neutral button should only be used to move the handle to neutral for the purpose of horizontal movement of the operator before/after the decent.

In neutral the rope moves freely both ways through the device.

To activate neutral, pull the neutral button down while pressing in the handle.

CAUTION! The neutral button is NOT an anti-panic function.

4:

Attach the descender to a front attachment point of the harness.

Harnesses should conform to either EN361, EN813 or any other internationally recognized equivalent standard.

## G Operational Check

Conduct all pre use checks either in an area of safety or whilst attached to a back-up safety system. With the handle in neutral position and no fingers on the handle.

Pull the descender down the rope, the handle should move outwards and the descender should stop.

Gradually put your weight on the descender, with one hand on holding the braking side of the rope slowly squeeze the handle to allow the rope to slide through the descender.

Ensure smooth and controlled movement.

Releases the handle and check that the descender stops.

If it does not stop do not continue to use the descender.

### WARNING!

**Grid/ dirt / debris may affect the stopping function of the descender and therefore require the operator to manually push the handle outwards to locked position. It is essential that the device is clean and free from grid / dirt / debris before commencing the descent.**

## **H Inspection**

The kit should be inspected annually or in line with a frequency dictated by local legislation by a competent person.

When the handle is in neutral position check that the green cam seal is in place.

The descender is considered used when the seal is torn off and the cam is showing metal in the green area depicted in the figure.

Kits which are stored remotely at working stations between inspections should have suitable protection from the environmental conditions.

## **I Standards, Testing and Legislation**

Rapid Rappel 4.1 Tactical descender kit is an EN341:2011 D / EN365:2004 device for single use.

The primary function of the descender is evacuation or self-rescue of a person.

It should not be used again until confirmed safe to do so by the manufacturer or his authorized representative.

Certification testing was carried out at VVUU AS, Pikardska 1337/7, 716 00 Ostrava-Radvanice, Czech Republic. Notified body 1019.

The descender must be used with an anchor point/system located above the user that confirms with EN795, ANSI Z359 or any other specific recognized international standard or industry best practice relating to the specific use.

To reduce the risk of free fall, the rope between the device and the anchor must always be taut.

The anchor should be positioned such that the free movement of the system, and the fall path is unobstructed.

Stay as close to, direct below the anchorage point as possible to avoid swing-fall injury.

When going from wet to very cold condition the kit must be stored in a sealed vacuum bag to prevent the rope from freezing.

A rescue plan shall be in place to deal with any emergencies that could arise during use.

### **WARNING**

No alterations or additions to the equipment shall be done to the product without manufacturer's prior written consent. Any repair shall only be carried out in accordance with manufacturer's procedures.

Dangers may arise by the use of combinations of items of equipment in which the safe function of any one item is affected by or interferes with the safe function of another.

It is essential for the safety of the user that the reseller provides instructions for use, for maintenance, for periodic examination and for repair in the language of the country in which the product is to be used.

## **J Training and Practice**

Rapid Rappel recommends annual training to maintain familiarity with the use of the device.

It is recommended that practice units are kept separate from operational units and are only used for this purpose.

All training and practice operations should be carried out whilst attached to a suitable back up system.

General Instruction for use:

Do not use this product without having read carefully and understood these general instructions for use.

Use Requirements:

It is the user's responsibility to ensure understanding of the correct safe use of this equipment, to use it only for the purpose for which it is designed, and to practice all proper safety procedures, including wearing the required PPE – e.g., helmet, gloves, glasses, boots, harness.

## Lifespan

Please be aware that exposure to chemicals, extreme temperature, sharp edges, major fall or load etc. can significantly reduce the lifetime of the product.

The potential lifetime of this product is 10 years.

This product must be retired when:

- It has been used in an emergency situation.
- It has been in direct contact with flames.
- It has been subjected to a major fall (or load).
- It fails to pass inspection.
- You have any doubt as to its reliability.
- You do not know its full usage history.
- When it becomes obsolete due to changes in legislation, standards, technique or incompatibility with other equipment... Destroy these products to prevent further use.

## Cleaning

The product may be cleaned regularly with a mild detergent and allowed to dry naturally. This has no adverse effect on the PPE or the user.

## Storage and Transportation

The product should be stored in a clean, dry, environment free from corrosive chemical substances and away from all sources of direct heat. Care should be taken to protect the product against damage during transportation.

## Markings

All markings should be checked for legibility. If the information is not clear, the unit should be removed from service.

## Maintenance

4.1-Tactical is designed for single use, there is no need for maintenance.

## K Specifications

Rope Construction 12-strand (no sheath)

Rope Material 100% Aramid

Rope Weight (g/m) 14

Rope MBS 15.5kN

Lifespan 10 Years (if vac packed and stored out of UV)

Static Elongation 0,4%

Lowest operation Temp. -25`C

Max Numbers of decent Single Use

Max decent height 50m

Max rated load 140kg

Min rated load 50kg

## L Limitations on use

Mass of the operator, rappel length, speed and temperature (high heat in the brake system reduces braking effectiveness) are essential parameters to follow when using the descender. The descender functions optimally under average use conditions. It reaches its performance limits when all of these parameters approach the maximum.

Under these extreme use conditions, there is a risk of losing control of the descent and/or damaging the rope. You must be more alert and not hesitate to take special precautions (add friction, reduce speed, reduce weight...).

# Compliance

As a manufacturer, Rapid Rappel AS declares that their 4.1-Tactical device is in accordance to the PPE Regulation 2016/425 and that it is tested and approved in accordance with the European standard EN 341:2011 class D.  
Download instruction and Declaration of conformity on <http://www.rapidrappel.com>

Notified Body having  
carried out the CE  
type test

VVUÚ, a.s. (3076)  
Pikartská 1337/7  
716 00 Ostrava-Radvanice  
Czech Republic  
Phone: +420 596 252 111  
E-mail: vvuu@vvuu.cz

Notified body  
responsible  
for production  
monitoring  
and inspection

VVUÚ, a.s. (3076)  
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716 00 Ostrava-Radvanice  
Czech Republic  
Phone: +420 596 252 111  
E-mail: vvuu@vvuu.cz

## PRODUCT RECORDS

|                 |  |                      |  |
|-----------------|--|----------------------|--|
| Model & Type    |  | Serial number:       |  |
| Manufacturer:   |  | Year of manufacture: |  |
| Purchased from: |  | Date of first use:   |  |

## Inspections and logged issues

| Date | Log item | Name and signature | Next examination date |
|------|----------|--------------------|-----------------------|
|      |          |                    |                       |
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