

RESQ

BY CRESTO

EN

SV

NO

DA

FI

DE

IT

FR

ET

简体中文

PL

ES

TR

PT

CS

NL

INSTRUCTIONS FOR USE &
INSPECTION CARD FOR

RESQ RED PRO III

INSTRUCTIONS FOR
USE & INSPECTION CARD
FOR
RESQ RED Pro III

FOR YOUR OWN SAFETY, IT IS
IMPORTANT THAT YOU READ
AND FULLY UNDERSTAND
THIS MANUAL!

1	INTRODUCTION	2
2	MARKING & ILLUSTRATIONS	2
3	USING THE RED PRO III	3
4	TECHNICAL DATA	4
5	EQUIPMENT	4
6	OPERATION	4
7	MAINTENANCE AND INSPECTION	6
8	SUSTAINABILITY & RECYCLING	7
9	CE	7
10	INSPECTION- AND USER LOG	7
11	EXPERT USE	8

This document gives information about the correct use of the **RED Pro III** in different situations. These instructions must be read and fully understood by all persons who are going to use the **RED Pro III**. We also recommend that all employers must read these instructions carefully, to ensure a good safety level together with a full understanding of the product and its use. Users shall be trained in the use of the equipment.

1 INTRODUCTION

This emergency equipment is designed for evacuation from height, and operates automatically, descending in a bi-directional format. It can be used for one or two persons descending at the same time with a controlled descent speed of 0,5-2m/s. It is fitted with an integrated rescue lifting function that can be used to lift one person for short distances, in accordance with the limitations for load and distances set out under "Technical data" in this user instruction.

User training with the **RED Pro III** should be under supervision of Cresto trained instructors or Instructors authorized by Cresto or Cresto partners.

This equipment is made in accordance with the European PPE Regulation 2016/425 and complies with EN341:2011 Descender device class A & class B; rescue lifting device EN1496:2017.

Applicable as evacuation equipment from Wind turbines, tower cranes, sky lifts, buildings, towers etc.

Warning! The equipment shall only be used by a person trained and competent in a safe use.

Warning! The user/s must be in good physical and mental condition. In case of known disorder, the user must be aware of possible consequences, as conditions such as cardiovascular conditions, diabetes, blood pressure deviations, epilepsy and balance problems or any other medical condition that can be hazardous to the safety using the equipment.

Warning! Equipment use must be supported by the company's own accident emergency procedures related to daily work.

Warning! Do not make any alternations or additions to the equipment without the manufacturer's prior written consent, and any repair shall only be carried out in accordance with the manufacturer's procedures and guidelines.

Warning! Do not use the equipment outside its limitations or for no purpose other than that which it is intended.

Warning! The equipment must only be used for rescue and evacuation and not intended as fall arrest equipment or as a utility crane.

2 MARKING & ILLUSTRATIONS

See figure 1 and figure 2.

1. Manufacturer
2. Compliance
3. Serial number
4. Date of manufacture
5. Weight restrictions
6. Temperature limit
7. User instruction
8. Length

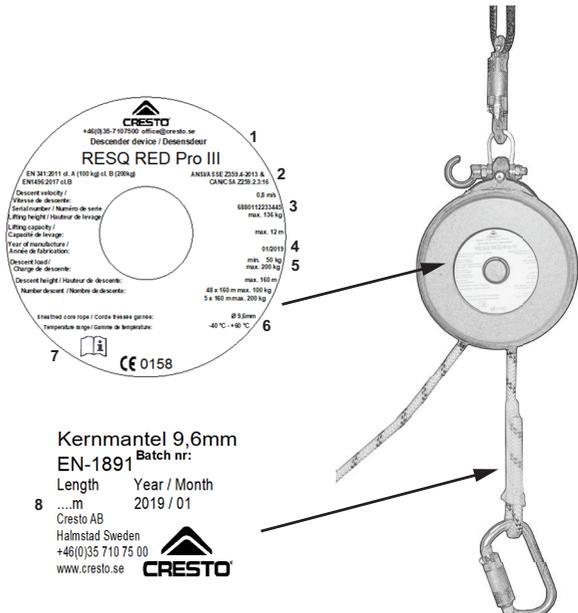
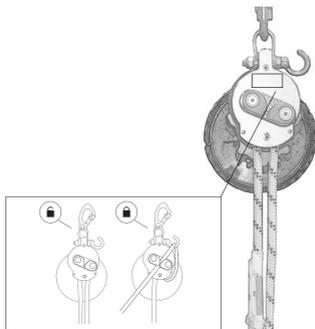


Figure 1

Figure 2



Note! Make sure that the product label is legible or that the RFID is readable.

3 USING THE RED PRO III

Note! Before use of the equipment always check the function and condition to ensure safe usage. If stored in the Cresto vacuum solution, only check that the vacuum is still intact. If punctured you must inspect the function and condition of the equipment before use.

Check the rope along its entire length for any signs of chafing, varying thickness, cuts, chemical especially acids contact, change of shape, UV-deterioration, stiffness or other deformation with permanent kinks. Check the stitches in the end terminations for any loose threads or damage. Check the carabiners in the rope and equipment for any signs of significant corrosion, wear, deformation, cracks and limited gate function. Check the descender device for any cracks, deformation or missing parts. While pulling the rope thru the device, check for any "wobble" in the handwheel. Test the brake function of the device by pulling the rope through the device hard for at least 3m in each direction (**Note:** that the brake force must increase with increased pulling power). Check the friction loop for any deformation. Check the function and spring action of the rope locking mechanism.

Warning! Withdraw the device immediately until confirmed in writing by a competent person if any doubts arises about its condition for safe use or if it has arrested a fall.

Warning! Always use a fall arrest system if there is a risk for fall when rigging the equipment.

Warning! Always ensure that in a fall-arrest system, it is essential to check for clearance below the user before each use, to avoid any impact with the ground or an obstacle in case of a fall. Make sure that the anchor point is correctly positioned, in order to limit the risk and the height of fall. When using multiple pieces of equipment together, a dangerous situation can arise if the safety function of one piece of equipment is affected by the safety function of another piece of equipment.

Warning! Extreme temperatures may affect the capacity of the device.

Warning! Protect the rope for any edges that may compromise its integrity.

Warning! Long descent distance with minimum load in high wind and trailing rope may affect the descent speed as the trailing rope will create a counter force.

Warning! Always have an operator operating the device when top mounted if entanglement of the rope will occur and block the descent. Last person-/s evacuating will have to body mount the equipment to remain in control.

Warning! The RED Pro III is equipped with a Torque limiter in the handwheel that limits the lifting force to approx. 170kg. This could affect lifting operations when lifting over edges due to increased friction between casualty and device.

Warning! During descent the handwheel will spin fast and may cause burn injuries.

Note! Always position the device so that the handwheel doesn't come in contact with any structure as this can slow down the descent or result in a complete stop.

Compatible with PPE components within EN, ANSI or CSA designed for the purpose.

Note! This must always be in conjunction with the national and local requirements.

Only connect to a structure with a minimum strength of 12kN or designed for the purpose. Strive to position as high above as possible and protect from edges that could damage the rope.

To be used with fall arrest harness EN361, Rescue harness EN1497 or rescue slings EN1498.

See user instruction of the body holding device for correct attachment of the equipment.

4 TECHNICAL DATA

Type	RED Pro III
Rope	Kernmantel rope 9,6mm EN 1891:1998 A Material: Polyamide/Polyamide; Elongation: 4%; Cover 40%; Weight: 61g/m
Certification	EN341:2011 cl.A & cl.B (cl.A 100kg, cl.B 200kg), EN1496:2017 cl.B
Compliance	ANSI/ASSE Z359.4-2013 CAN/CSA Z259.2.3:16
Max descent height	160 m
Max descent load	200 kg
Min. descent load	50 kg
Max. ambient temperature	+60°C
Min. ambient temperature	-40°C
Max. lifting capacity	136 kg
Max. lifting height	12 m
Max. height/load descending	48 x 160m with max. load 100kg 5 x 160m with max. load 200kg
Descent velocity	0,8m/s loads up to 100kg. Increasing speed when load is increased, max. speed of 2m/s
Calculation of descend energy	$W = m * g * h * n$ m= descent load (kg), g= 9,81 m/s ² , h= descent distance (m), n= number of descents Class A: $W = 7,5 \times 10^6$ J; Class B: $1,5 \times 10^6$ J

5 EQUIPMENT

See figure 3.

9. Carabiner device
10. Friction loop
11. Rope clamp
12. Handwheel
13. Carabiner rope
14. Trailing rope
15. Rescue rope
16. Accessories (Optional)

6 OPERATION

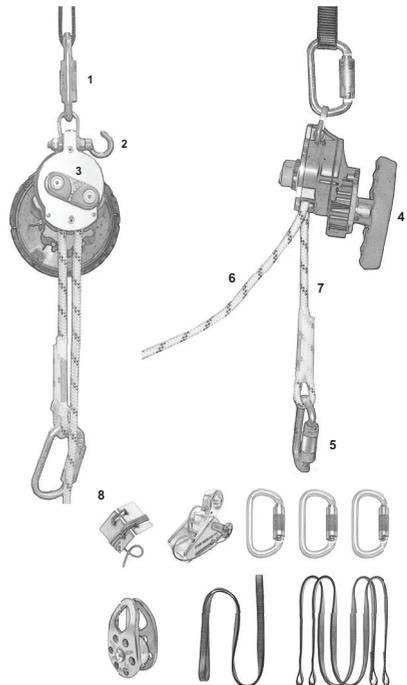
6.1. BASIC EVACUATION - GENERAL INFORMATION

Secure the equipment to the anchor point at least one meter above the platform. Check that the intended descent path is free of any obstacle that may obstruct the descent.

Throw the rope bag to the ground if this is appropriate and done responsibly. Alternatively, the bag can travel with the first evacuee or be left at the exit level*.

Note! The last evacuee MUST descend with the device (body mounted) and carry the rope bag, if the bag hasn't already been dropped to the ground).

Figure 3



Note! If not necessary, do not stop the descent until you have reached the ground to minimize the risk of having the rope come into contact with any hot surfaces of the device.

6.2. BASIC EVACUATION - TOP MOUNTED

1. Attach the rescue rope carabiner to the harness attachment point (marked with A) or approved body holding device in accordance with its user instruction. Remove any slack between you and the device by pulling the trailing rope downwards. Hold on to the trailing rope while transferring the load into the device. Carefully swing free of the platform and ease the grip around the trailing rope to begin the descent.

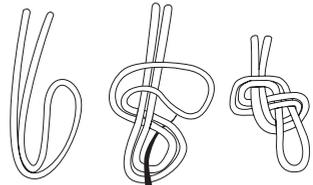


Figure 4

Note! Always keep control/grip around the trailing rope as it might be impossible to regain control if lost.

Warning! The body of the device will accumulate heat from the brake and may be HOT enough to damage the rope if not administered correctly. Always use protective gloves when operating the device and rope.

2. Once the first person/s have reached the ground and disconnected from the equipment, the next person may hook onto the trailing rope (which subsequently becomes the rescue rope) using the carabiner at the end (or making a figure of 8 knot, see figure 4, if the equipment length is not site specific depending on rope length and descent height).

Warning! If a figure of 8 knot is used instead of the end carabiner always ensure that it is placed on the correct end, if wrongfully placed the descent may be blocked by the knot. Always pull through an extra meter or two on the former rescue rope to ensure room for the knot to ensure that next evacuee reaches the ground. The lowering process described with continuous lowering of several evacuees one after the other is called "shuttling". When evacuating a lot of persons ensure that this complies with the maximum descent and load according to the specification under technical data.

6.3. BASIC EVACUATION - BODY MOUNTED

See figure 5.

1. Attach the rescue rope carabiner to the anchor point. Attach the device carabiner to the harness attachment point (marked with A) or approved body holding device in accordance with its user instruction. Remove any slack between you and the device by pulling the trailing rope upwards. Hold on to the trailing rope, see figure 6, while transferring the load into the device. Carefully swing free of the platform and ease the grip around the trailing rope to begin the descent.

Note! If possible try to position the device so that the handwheel faces away from the user/s to minimize risk of injuries.

2. To decrease or manually control the descent speed e.g. in narrow spaces, add friction by passing the rope thru the friction loop on the device. For Body mounted device, see chapter 11. Expert use.

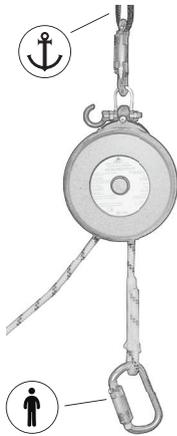


Figure 5

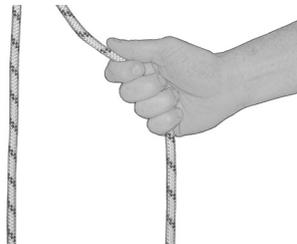


Figure 6

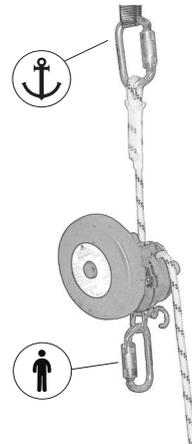


Figure 7

6.4. BASIC LIFTING

See figure 7.

1. Attach the equipment to an anchor point directly via the device carabiner or with a anchor sling at least 1 meter above the casualty.
2. Pull out the rescue rope so you can attach it to the casualty's harness (upper attachment point).
3. Remove any slack between you and the device by pulling the trailing rope downwards.
4. Pull the trailing rope through the friction loop and insert the rope into the rope clamp and tighten.
5. Start to lift by turning the handwheel in counterclockwise direction with two hands. Frequently tighten the slack between the friction loop and rope clamp. Approx. after every 5 turns on the handwheel.

Note! Secure if necessary the trailing rope around the device to eliminate the risk of unintentional descent.

6. Free the casualty from its fall arrest
7. Start the control descent by releasing the trailing rope from the rope clamp by pulling it outwards.

Warning! Never let go of the trailing rope as it could be difficult to regain control if lost.

Note! Always verify lifting progress by looking at the rope colour threads movement in and out of the device.

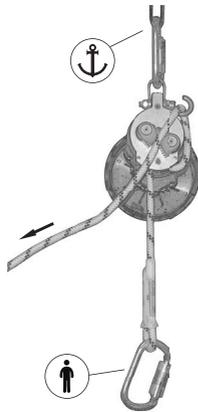


Figure 8



Figure 9

7 MAINTENANCE AND INSPECTION

The rescue and evacuation equipment is an emergency equipment and must be inspected after it has been unpacked and used. The equipment must be service and repacked by a Cresto authorized competent person.

Note! During transport and storage, keep the device dark and dry.

Inspection and service of the equipment must be carried out by the manufacturer or a partner whom is authorized by the manufacturer and in accordance with the manufacturers guidelines.

If stored, maintained as described and used in normal condition, the expected lifespan of this device is 4-6 Years. 10 Years in ResQ vacuum pack. The equipment is serviceable up to 20 Years.

Note! If the equipment is installed at a workstation and left in place between inspections it must be protected by the Cresto vacuum solution to ensure protection from environmental conditions.

Note! The device shall be stored in a dry, dark and well-ventilated location, protected against steam, sharp edges, vibration and UV-light. The device shall be kept clean for best functionality and durability. Metal parts can be blown clean with compressed air. Avoid lubricating oil! Lightly soiled devices can be washed with a brush in lukewarm water. A mild soap solution can be used. Wet devices is hung up to dry. The device shall be allowed to air-dry without being subjected to open fire or any other heat source.

The device log on the last page must be updated with all periodic inspections, service and repairs and other matters concerning the safe use of the device, if the CRESTO INSPECTOR data base is not utilized.

Warning! For the user's safety the device shall be inspected at least every twelfth month in order to ensure its functionality and durability (refer to EN 365). The inspection can be registered in Inspector online at www.cresto.se

Note! In cases of frequent usage of the device or in aggressive environments, inspections shall be carried out at shorter intervals (as decided by a trained competent person).

Warning! The inspection shall be carried out by a competent person (a person who has been trained and is competent in fall protection equipment inspection) who holds a certificate for inspection and in accordance with the manufacturer's inspection procedure as well as EN 365.

Warning! The device must not be modified or supplemented using accessories other than those supplied by the manufacturer. Repairs or replacement of parts may only be carried out by the manufacturer.

Warning! Do not make any alterations or additions to the equipment without the manufacturer's prior written consent, and any repair shall only be carried out in accordance with manufacturer's procedures.

8 SUSTAINABILITY & RECYCLING

We design and manufacture premium products, with premium materials, to be used actively and to last long. When the product is decided to be taken out of use, or its maximum lifetime has expired, it should be recycled according to your local legislations. Our products are made of polyester, polyamide or PVC and metal components. If necessary dismantle the metal components before recycling. You can also send the complete product to Cresto and we will take care of the recycling in order to reduce our impact on the environment.

9 CE

Manufacturer and expert:

CRESTO AB

Lågatan 3
SE-302 60, Halmstad, Sweden

T: +46 (0) 35 710 75 00
E: support@cresto.se
cresto.com

Type certification and approval is carried out by:

Notified Body: 0158

DEKRA Testing and Certification

Dinnendahlstr. 9
44809 Bochum
Germany

Production control by:

Notified Body: 0158

DEKRA Testing and Certification

Dinnendahlstr. 9
44809 Bochum
Germany

Warning! It is essential for the safety of the user that if the product is re-sold outside the original country of destination the reseller shall provide 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.

Download your User instruction and Declaration of conformity on <http://www.cresto.com/documentation>

10 INSPECTION- AND USER LOG

Company:		Product:	Descender device, class A and B
User:		Reference:	
Marking:	CE 0158	Length:	
Date of Purchase:		Serial Number:	
Date of manufacturing:		Date first put into use:	

2. Connect an additional carabiner to the device top anchorage
3. Pull the trailing rope through the friction loop and around the device housing. Insert the trailing rope into the carabiner. Make sure that the trailing rope is managed so no entanglement occurs.
4. Connect the rescue rope to the harness attachment point of person 1 and use an additional carabiner between the rescue rope carabiner to the harness attachment point of person 2.
5. Remove any slack between the persons and the device.
6. Hold firmly the trailing rope until the persons load is transferred to the device.

Note! This configuration requires that you have an operator operating the descent next to the equipment. See following chapter for body mounted configuration.

7. Start the descent by easing the grip around the trailing rope.

11.4. 280KG DESCENT WITH BODY MOUNTED RED PRO III

See figure 12A and figure 12B.

1. Attach the rescue rope to the anchor point directly or with the anchor sling EN795 cl B around a sufficient structure.
2. Connect an additional carabiner to the device top anchorage.
3. Pull the trailing rope through the friction loop and around the device housing. Insert the trailing rope into the carabiner. Make sure that the trailing rope is managed so no entanglement occurs.
4. Connect the device to the harness attachment point of person 1 and use an additional carabiner between the device carabiner to the harness attachment point of person 2.
5. Remove any slack between the persons and the device.
6. Hold firmly the trailing rope until the load is transferred to the device.

Warning! Make sure that any fall arrest systems are disconnected prior to the start of descending as lifting with two persons will overload and could damaged the equipment.

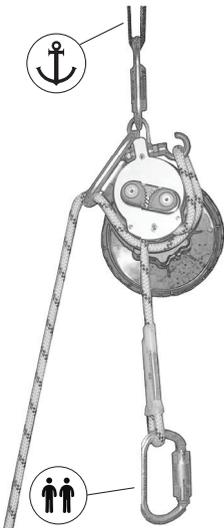


Figure 11

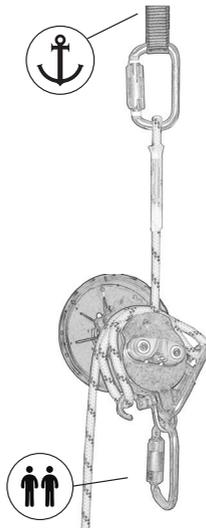


Figure 12A

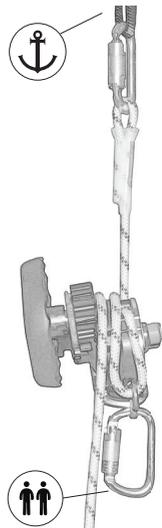


Figure 12B

