ProPlus Dual Ultra-Mini Self Retracting Devices



INSTRUCTION MANUAL



ANSI Z359.14 Class A | ANSI A10.32

This manual is intended to meet the Manufacturer Instructions as required by ANSI Z359.14 and should be used as part of an employee training program as required by OSHA

WARNING: This product serves as part of a fall protection system, which includes a ProPlus™ Full Body Harness, and a ProPlus™ anchorage connector. All users, must read, understand, and follow the manufacturer's instructions for each and every component of the system. The user must be provided with the instructions for each component of the system. The user must also read and understand these instructions before using the equipment. All instructions must be followed for proper application, installation, use, and maintenance of this product. Altering the product, misuse of the product, or failure to follow instructions may result in serious injury or death.

ATTENTION: If you have any questions concerning the application, installation, use, or maintenance of this product, please contact Sapsis Rigging, Inc.

IMPORTANT: Record the Serial Number, Model Number, and Date of Purchase in your Fall Protection Systems logbook before using this equipment.



DESCRIPTION: The ProPlus Ultra-Mini SRD is an 8 foot long web self-retracting lanyard. Multiple configurations are available including single or dual leg devices, as well as a variety of options for connectors. The Ultra-Mini will pay out and retract the lifeline during normal movement, but will automatically lock at the onset of a fall arrest event.

1. APPLICATIONS

- **1.1 PURPOSE:** ProPlus self-retracting devices are components in personal fall arrest systems (PFAS). They are to be used in situations where worker mobility and fall protection is needed.
- **1.2 STANDARDS:** The Ultra-Mini conforms to the National Standards located on the top of these instructions. Refer to local, state, federal (OSHA), and national standards (ANSI) for additional information on Personal Fall Arrest Systems.
- **1.3 TRAINING:** This equipment must be installed and used by persons trained in its correct application and use. Users must be aware of operating characteristics, application limits, and consequences of improper use.
- **2. LIMITATIONS:** The following application limitations must be considered before using this product:
- **2.1 CAPACITY:** The SRD is for use by a single person with a combined weight (person, clothing, tools, etc.) 400 Lbs. maximum. Never should more than one person connect to a single SRD for fall arrest.
- **2.2 ANCHORAGE:** The anchorage and anchorage connector used for personal fall arrest equipment shall be independent of any anchorage being used for any other purpose. The anchorage shall have a tensile strength of at least 5,000 Lbs. (22.2kN) per employee attached, or shall be designed, installed and used, as part of a complete PFAS which maintains a safety factor of at least two.
- **2.3 RESCUE:** While using this equipment, the employer must have a rescue plan and the ability to implement a rescue. The employer shall provide for prompt rescue or the ability of the employee to rescue themself.



- **2.4 INSPECTION FREQUENCY:** The SRD must be inspected before each use. A record log of all inspections and servicing must be maintained. The SRD must be inspected by a competent person on a regular basis. Use in abusive environments will necessitate more frequent inspections by a competent person.
- **2.5 FALL CLEARANCE:** Proper clearance must be present below the worker to arrest a fall and avoid striking a lower level, obstruction, or the ground.
- **2.6 STANDARD USE:** The SRD will extend and retract the full length of the lifeline while keeping some tension on the line. If a fall occurs, the retractable lifeline will arrest the fall and absorb much of the energy created during the fall.
- **2.7 FREE FALL:** Fall arrest systems must be rigged so the free fall distance is never more than 6 feet. SRDs, when mounted overhead, will limit the free fall distance to less than 2 feet. Sloped/horizontal applications will greatly affect the free fall distance. A swing fall application will also increase the vertical free fall distance.

Never knot, clamp, or fix the lifeline in a stationary position. Do not allow slack in the lifeline. The lifeline should be taut between the bottom of the housing and the connection to the user. Avoid situations where the lifeline can become entangled with other objects or workers. The lifeline should never be allowed to come under, around, or between the user's legs or around any appendage. Do not attach a lanyard or other lifeline to the retractable to extend the length of the retractable lifeline. Contact Sapsis Rigging, Inc with any questions about free fall distance.

- **2.8 ENVIRONMENTAL CONDITIONS:** Conditions in the surrounding environments can cause damage and may affect the performance of the product. Use in these environments may require more frequent inspections and service. Such environments may include chemical hazards, elevated temperatures, electrical hazards (always avoid contact with electrical hazards), corrosive environments, etc. Contact Sapsis Rigging, Inc with any questions about corrosive environments.
- **2.9 HAZARDS:** Do not allow the lifeline to come into contact with anything that will damage the lifeline including sharp, abrasive, rough, high temperature surfaces, welding, heat sources, electrical hazards, or moving machinery.



- **2.10 BODY ATTACHMENT:** The locking snap hook on the retractable lifeline must be connected to the Dorsal Fall Arrest ring on a Full Body Harness.
- 2.11 PERSONAL FALL ARREST SYSTEM COMPONENTS: ProPlus™ safety equipment is designed for use with Sapsis Rigging, Inc approved components and subsystems. Other components may be incompatible, which could directly affect the safety and reliability of the entire system and could lead to serious injury or death. Substitutions with ANSI compliant components should only be made under the supervision of a competent person and none of the components or subsystems can interfere with the intended function of the system. Substitutions or replacements made with non-ANSI Z359 compliant components or subsystems may jeopardize compatibility of equipment and may affect the safety and reliability of the complete system. Personal fall arrest components used with ProPlus™ equipment/system must meet all applicable OSHA and ANSI requirements.
- **2.12 CONNECTOR COMPATABILITY:** A connector is considered to be compatible with the connecting element when the interlinking parts will not cause the gate mechanism to open or apply force to the gate mechanism regardless of the orientation. Ensure that roll-out cannot occur. Do not use any non-locking snap hooks. Do not use any connector that is not compatible. Contact Sapsis Rigging, Inc if you have any questions about compatibility.
- 2.13 CONNECTIONS: Connections should only be made using self-locking snap hooks and carabiners. Self-locking snap hooks and carabiners must have a minimum tensile strength of 5,000 Lbs. All connections must be compatible in size, shape, and strength. All connectors must be fully closed and locked. ProPlus™ connectors are specifically designed to be used according to each product's instructions. Refer to all OSHA and ANSI standards for proper connections.

3 INSTALLATION AND USE

WARNING: Do not alter or intentionally misuse this equipment. Consult Sapsis Rigging, Inc when using this equipment in combination with components or subsystems other than those described in this manual. Some subsystem and component combinations may interfere with the operation of this equipment. Use caution when using this equipment around moving machinery, and sharp edges.



WARNING: Consult your doctor if there is reason to doubt your fitness to safely absorb the shock from a fall. Age and fitness seriously affect a worker's ability to withstand fall. Pregnant women or minors should not use this equipment.

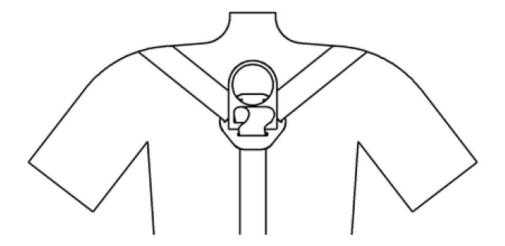
- **3.1 BEFORE USE:** This equipment must be carefully inspected according to the inspection criteria **before each and every use.**
- **3.2 FALL PROTECTION PLAN:** Plan the use of your system BEFORE installation. Consider all factors that will affect your safety during the use of this equipment. Take into account that the Ultra-Mini may be connected to the anchorage or the Dorsal Ring of the harness under most circumstances.
- **3.3 RESCUE:** While using this equipment, the employer must have a rescue plan and the ability to implement a rescue. The employer shall provide for prompt rescue or the ability of the employee to rescue themself.
- **3.4 AFTER A FALL:** Any equipment that has been subjected to fall arrest forces must be removed from service and inspected. Equipment that does not pass inspection should be disabled and discarded.
- **3.5 BODY ATTACHMENT:** A Full Body Harness with Dorsal Ring should be used with this device. A full body harness with a Sternal Ring is also acceptable. NOTE: Fall distance when using a sternal connection must be limited to 2 Ft or less.
- **3.6 ANCHORAGE:** The anchorage selected must be directly above the work area. Swing falls should be avoided. The anchorage selected must meet the strength requirements of **Section 2.2.**
- **3.7 HORIZONTAL LIFELINES:** The Ultra-Mini may be used on any horizontal system that has been designed and installed under the supervision of a qualified engineer and has compatible connections. Consult the manufacturer's instructions of the horizontal system for compatibility details.
- **3.8 HARNESS MOUNTING:** There are two ways to properly connect to a Single Leg Ultra-Mini to a Full Body Harness, and one way to properly connect a Dual Leg Ultra-Mini to a Full Body Harness. These proper means are detailed below.



3.8.1 SINGLE LEG SRD

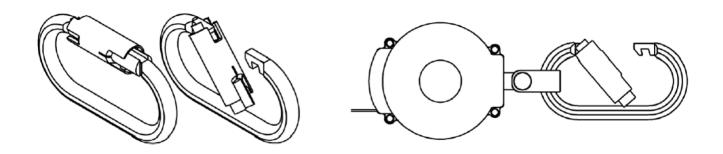
- **3.8.1.1 STANDARD ORIENTATION:** With the housing end of the retractable connected to an approved anchorage, attach the connecting device on the webbing end onto the Dorsal Ring of the Full Body Harness.
- **3.8.1.2 INVERTED ORIENTATION:** Attach the housing end of the retractable to the Dorsal Ring of the Full Body Harness. The connecting device on the webbing end is then free to connect to an anchorage that meets the requirements made in **Section 2.2**.
- **3.8.2 DUAL LEG SRD:** Mounting two Ultra-Mini SRLs on a Full Body Harness will allow for 100% Tie-Off when crossing through obstructions in the work area.

STEP 1: LOOSEN HARNESS WEBBING: Pull on the webbing beneath the Dorsal D-Ring until there is enough space to fit the Triple-Lock Carabiner between the webbing and the Back Pad or D Pad.

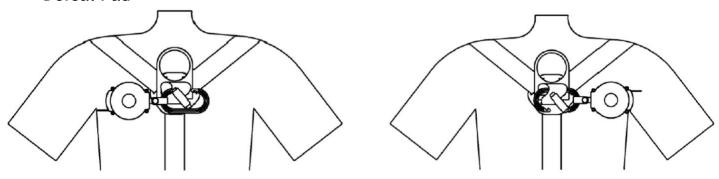




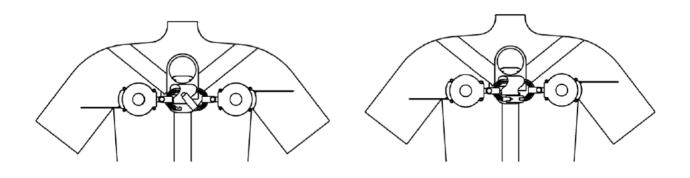
STEP 2: ATTACH THE FIRST SRD: Open the Triple Lock Carabiner and attach the carabiner to the housing shackle on one of the two SRLs. Rotate the SRL to the other side of the carabiner.



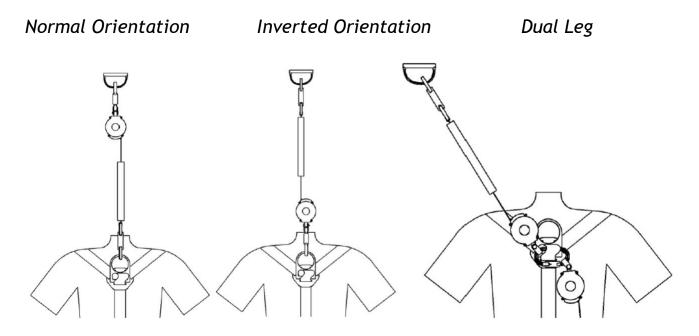
STEP 3: ATTACHING TO HARNESS: Slide the Triple Lock Carabiner beneath the webbing that was loosened in the first step, but above the Dorsal Pad



STEP 4: ATTACHING THE SECOND SRD: Once the Carabiner is threaded under the webbing, attach the housing shackle of the second SRD to the carabiner and allow the carabiner to close.



3.9 CHECKING YOUR WORK: Ensure that the locking snap is attached and fully closed and locked. Make certain that the connection made looks like the matching drawing below.



3.10 100% TIE-OFF: When using the Dual Leg SRD, both housings should be attached to the user's back. Connect one of the free legs to a certified anchorage or anchorage connector, while using the second leg to obtain 100% Tie-Off while moving from one location to another by using it in an alternating fashion with the other leg. Always ensure that at least one of the lifeline legs is attached to an anchorage at all times.

4 INSPECTION

- **4.1 GENERAL:** Before each use, the SRD and connectors must be inspected for loose fasteners, bent, cracked, distorted, worn, malfunctioning, or damaged parts. The lifeline should be inspected for cuts, frays, burns, worn, or otherwise damaged areas. The working end of the lifeline should be checked to ensure all stitching is in place and fixed properly with the locking snap.
- **4.2 LIFELINE:** Pull entire lifeline out of device and inspect the lifeline for any damage, cuts, abrasions, wear, frays, or burns. Inspect the termination of the lifeline to the shock absorber to ensure there are no loose stitches. Inspect the shock absorber, if present. If the shock absorber is deployed or not enclosed in the pack, remove from service. Ensure the gates of the snap are working properly and fully lock and close. Slowly let all of the lifeline retract into the device. It should retract smoothly without any hesitation.
- **4.3 FUNCTIONING:** Pull out approximately two feet of lifeline. While holding the lifeline, give the lifeline a sharp, quick pull. The unit should lock up and remain locked up. There should be no slippage of the braking mechanism and no more lifeline will come out of the device. Once tension is released from the lifeline, the unit should return to its retractable mode.
- **4.4 HOUSING:** Inspect the housing for loose or missing rivets. Inspect the housing for cracks, dents, bends, distortions, or any other damage. The labels and warnings should be fully present and legible. Inspect all connectors for damage and proper function. Housing swivel should rotate. If it is unable to, then the unit has likely been in a Fall Arrest situation.
- **4.5 ACTION:** If any of the above conditions exist or become apparent during the inspection process, remove the retractable lifeline from service immediately. If the retractable lifeline has been involved in a fall or if it has been exposed to the forces of fall arrest, the retractable lifeline must be removed from service immediately.

5 MAINTENANCE AND STORAGE

5.1 CLEANING: Clean the housing and lifeline with a water and mild soap solution. Rinse thoroughly and towel or air dry. Do not use heat to dry the retractable lifeline. This should be done periodically when excess dirt or other



materials build up on the retractable. Excess dirt or other materials may inhibit the function of the device.

5.2 STORAGE: Store the retractable lifeline in a cool, clean, and dry environment. Store the SRD out of direct sunlight. Inspect the SRD after any prolonged period in storage. Refer to component instructions for proper storage.

WARNING: The Ultra-Mini SRD is not serviceable. If the SRD has been deemed unusable, it must be disposed of in the manner described in **Section 3.4.**

6.0 SPECIFICATIONS

6.1 MATERIALS:

Housing: UV Resistant Nylon

Drum: Nylon

Main Shaft: Stainless Steel
Braking Pawls: Stainless Steel
Main Spring: Stainless Steel
Locking Snap: Plated Alloy Steel,

5,000 Lb. Min Tensile

Fasteners: Stainless or Zinc

Plated Steel

Lifeline: 1" x 0.05" Dyneema

& Polyester Web



Inspection and Maintenance Log

Model Number: _		Date Purchased:	
Inspection Date	Inspection Items Noted	Corrective Action Taken	Maintenance Performed
Approved By:			
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