

Owner's Manual for all ProPlus™ Horizontal Lifelines

Thank you for selecting a ProPlus™ Horizontal Lifeline! Please read this manual carefully and retain it for future reference.

ProPlus[™] fall arrest and work positing equipment is designed by entertainment professionals for entertainment professionals and proudly made in the USA.

Caution:

- This product is part of a personal fall arrest, work positioning, suspension and/or retrieval system. Read, understand, and follow all instructions. Failure to do so may result in serious injury or death.
- Do not use unless properly trained. Users should be familiar with and comprehend the OSHA regulations, ANSI standards, and other relevant regulations and standards pertaining to fall hazards; and the selection, use and maintenance of fall protection equipment.
- It is the employer's responsibility to ensure that all users are properly trained in the proper use, inspection, and maintenance of Personal Protective Equipment including fall protection equipment.

Important:

• If you have questions on the use, care or suitability of this equipment, please call (800) 747-7271 or write safety@sapsis-rigging.com.



Uses of Fall Protection Personal Protective Equipment

Fall protection Personal Protective Equipment (PPE) fits into four functional categories.

- **1. Fall Arrest:** As a general rule, a fall arrest system is required if any risk exists where a worker may fall 6 feet or more. Fall Arrest PPE is designed to arrest a fall once it has occurred. It typically includes (but is not limited to) the following:
 - Personal protective equipment: A full body harness.
 - Connecting device: shock absorbing lanyard, lifeline, etc.
 - Anchorage: I-beam clamp or bracket, wall plate, etc.
- **2. Positioning:** Designed to hold a worker in place to allow for hands free work. A personal positioning system is NOT specifically designed for fall arrest purposes. It typically includes (but is not limited to):
 - Personal protective equipment: A full body harness with appropriate tie off D-rings/ points.
 - Connecting device: positioning strap, cable etc. to connect the positioning D-ring(s) to an anchorage.
 - Anchorage: Any compatible structural member capable of supporting twice the potential impact load or 3000 lbs., whichever is greater.

Warning: A positioning system must be used in conjunction with a fall arrest system if the user is exposed to a fall hazard.

- **3. Suspension:** Designed to support a user being raised or lowered and allows for hands-free work. Suspension system components are not designed to arrest a free fall; a backup fall arrest system must be used in conjunction with the suspension system when there is a risk of fall. It typically consists of the following:
 - Suspension device: A suspended scaffold, bosun chair, saddle or harness designed for lifting or lowering a worker.
 - Personal protective equipment: A full body harness.
 - Connecting device (for suspension): A work line specifically designed for use with the suspension system.
 - Anchorage (for suspension): I-beam clamp, bracket or other compatible object capable of supporting the intended loads.

Warning: A suspension system must be used in conjunction with a fall arrest system if the user is exposed to a fall hazard.

- **4. Retrieval:** Designed to raise and/or lower a worker into and out of confined spaces as well as emergency rescue. It typically consists of the following, but may vary:
 - Retrieval device: A block and tackle, winch, or other mechanical device designed for raising or lowering a worker.
 - Personal protective equipment: A full body harness.
 - Anchorage: A beam clamp, bracket or other object capable of supporting the intended loads.

- access. Determine which of the four uses is needed and select equipment suitable for that use.
- The forces experienced in a fall can cause significant injury. It is important that the equipment selected fits the worker's body properly.
- Consider the harness, available anchorage(s) and work to be performed when selecting connecting devices. Connecting devices consist of lanyards, self-retracting life lines (SRL), vertical lifelines, horizontal lifelines and cable grabs. The same harness may be used with different connecting device or anchorage.
- OSHA regulation 1926.501(b) requires the worker be protected 100% of the time. Select equipment that enables workers to transition from one anchor point to another while protected.

General Requirements for Fall Arrest Equipment

- Users shall be provided with all instructions and warnings. These warnings and instructions must be read and understood prior to using the equipment.
- Never use any fall arrest equipment for purposes other than what it was designed and intended.
- This equipment must only be used by trained personnel.
- Users must be physically and mentally fit, in good health, and must not have a medical history
 of conditions that could be aggravated by a fall. Users should not be under the influence of
 alcohol or drugs that may impair their performance. Pregnant women and minors should not
 use this product.
- Users should reference ANSI Z359 standards, OSHA regulations, and any other applicable regulatory standards pertaining to occupational safety.
- All equipment must be inspected prior to each use.
- A Competent Person should ensure system compatibility to eliminate the potential for accidental disengagement.
- Equipment should not be altered in any way. Repairs or modifications should be performed only by the equipment manufacturer or persons authorized by the manufacturer.
- Any products exhibiting deformities, unusual wear, deterioration, or not passing inspection should be immediately removed from service.
- Any products subjected to fall arresting forces must be immediately removed from service.
- Fall arrest systems should be rigged to limit the free fall distance to 6' or less and ensure that no lower level is struck.
- Fall arrest systems, when stopping a fall, should limit the exposure of the technician to a maximum arresting force of 900 lbs. or less.
- A rescue plan and the means at hand to implement it when using this equipment is required. We recommend the ProPlus™ Rescue Kit.
- Always check for obstructions below the work area to make sure the potential fall path is clear. Remember that shock-absorbers can elongate up to 3'-6".
- Environmental hazards should be considered when selecting fall protection equipment.
- Equipment should not be exposed to chemicals that may have a damaging effect. Consult the manufacturer if there is any doubt.
- All synthetic materials should be protected from slag, hot sparks, open flames, or other heat sources. Polyester suffers permanent damage at 180°F/82°C
- This product should not be used around moving machinery, electrical hazards, sharp edges, and abrasive surfaces.
- The maximum live load is 310 lbs., unless otherwise labeled. The maximum live load includes the technician, clothing, tools, etc.



- Fall arrest connecting devices should be attached to the dorsal (upper back) D-ring of a full body harness.
- Sternum (upper front) D-rings may be used for fall arrest but only under specific conditions and only when the fall distance is limited to no more than 2 ft.
- Read, understand, and follow all instructions supplied with equipment to be used with this product.
- Ensure all buckles are properly secured and all straps are connected and adjusted to provide a snug fit.
- Only use a full body harness for fall arrest. Never use a body belt or chest harness for fall arrest.

Connecting Devices Warnings

- **Do** tie off in a manner that will limit the free fall to the shortest possible distance (6 ft max.) and ensure that a lower level will not be struck should a fall occur. Note that shock-absorbers can elongate up to 3´-6¨ This additional elongation must be considered when choosing a tie-off point location
- **Do not** use lanyards or lifelines with non-locking snaphooks or connectors.
- Always visually check to ensure the snaphooks freely engage the D-ring or anchorage point, and that its keepers are completely closed and locked, and are never load bearing.
- **Do not** attach multiple lanyards or lifelines together or tie them back onto themselves (choke connection) unless they are specifically designed for such a connection.
- **Do not** allow synthetic materials to come in contact with high temperature surfaces, welding, heat sources, electrical hazards, lighting equipment or moving machinery.
- **Do not** tie knots in lanyards and lifelines or wrap them around sharp, rough edges, or small diameter structural members.
- Never tie off to an object that is not compatible. Make sure that snaphook keepers are never load bearing.
- Never allow a lanyard or lifeline to pass under or around the user's arms, legs, torso or head.

Anchorage Warnings

- Anchorages should maintain a minimum tensile strength of 5000 lbs. per worker, or be designed, installed and used as part of system which maintains a design factor of at least 2:1 under the supervision of a qualified person.
- The anchorage point should be compatible with the connecting device (snaphook or carabiner) and should not be capable of causing a load to be applied to the keepers. Never use an anchorage point that will not allow the snaphook or carabiner to close.



Horizontal Lifelines

By definition, a horizontal lifeline is a type of connecting device. A worker clips their lanyard or Self Retracting Lifeline (SRL) onto a horizontal lifeline that is held at each end by anchorage point(s) and may also have intermediate supports.

OSHA 1926.502(d)(8) states: Horizontal lifelines are to be designed, installed and used under the supervision of a Qualified Person and as part of a complete personal fall arrest system which maintains a safety factor of at least two.

Horizontal lifelines may be installed on a permanent or temporary basis.

Horizontal lifelines should be installed so that they are above the worker's head at all times.

Lifelines shall be protected against being cut or abraded.

Permanent Horizontal Lifelines must be installed in a manner that meets the unique needs of the venue, thus it is not possible to include instructions for those in this manual. Please call (800) 747-7271 or email sales@sapsis-rigging.com for assistance in the design and installation of Permanent Horizontal Lifelines.

Temporary Horizontal Lifelines are used in the entertainment industry to protect workers on platforms, elevated scenic pieces, truss, building steel and other locations where a worker is exposed to a fall hazard.

The ProPlus™ Temporary Horizontal Lifeline system is provided with the following:

- Sixty (60) ft of 5/8" Ø of KMIII Static Rope
- One (1) rope tensioner
- One (1) heavy duty shock absorber
- Two (2) 2 carabiners,
- Two (2) 3' synthetic roundslings
- Storage bag.

The ProPlus™ Temporary Horizontal Lifeline should be installed in accordance with ANSI E1.39 2015

If you do not have a copy of ANSI E1.39-2015, please download one from here: http://www.sapsis-rigging.com/Tech/standards/E1-39_2015.pdf

Important: Fall Protection equipment must be inspected prior to installation and by the worker before each use. Any equipment failing inspection should immediately be removed from service.

Important: Any equipment involved in a fall arrest incident should be immediately tagged and removed from service. Consult your employer for approved disposal methods.

- Do not remove the labels.
- **Do not** alter this equipment in any way without written permission from SRI.
- Do not use this equipment if it is damaged in any way.
- **Do not** use this equipment if there are any missing parts.
- **Do** record the date of first use in the inspection log.
- **Do** inspect this equipment thoroughly prior to each use.
- **Do** keep a record of any change in condition on the inspection form. A sample inspection form is available at www.sapsis-rigging.com.
- **Do** make sure you have been properly trained in the use of this equipment before you begin work.
- **Do** make sure all parts of the equipment are functioning properly.
- **Do** immediately remove this equipment from service if it is subjected to a fall.
- **Do** immediately remove from service any item not passing inspection.

Cleaning and Storage of your ProPlus™ Temporary Horizontal Lifeline

Basic care of your ProPlus™ Horizontal Lifeline will prolong its' life expectancy and maintain it's high performance. To clean and store:

- Do not use bleach or other harsh chemicals.
- Do not use high heat. Polyester suffers permanent damage at 180°F/82°C
- **Do** spot wash the line with mild detergent and water.
- Do inspect the line after cleaning.
- **Do** store your ProPlus[™] Temporary Horizontal Lifeline in the storage bag in a clean, dry area out of direct sunlight and free of fumes, corrosive materials or sharp edges,.

