



USER INSTRUCTIONS

Synergy™ Casualty Harness

Code
LSYNCH



EN 1498:2006 Class A & B

lyon.co.uk/user-instructions



For more detailed user information and to download a PDF copy of these instructions follow the link above or scan the QR code with your smart phone

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UI_LSYNCH_15139

This information to be read and kept for the lifetime of the product in conjunction with the Lyon General User Instructions.

All users must have appropriate training, knowledge and experience of casualty care and work and rescue at height, or be working under the direct supervision of such a person.

Maximum rated load

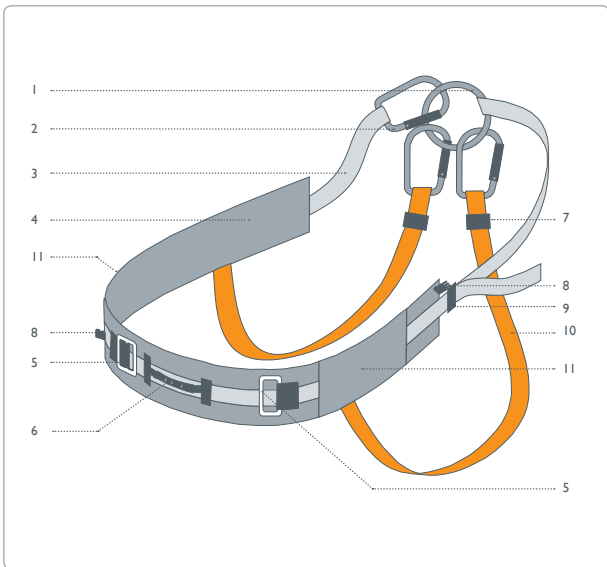
150 kg

Certification

EN 1498:2006 Class A & B.

Nomenclature of parts

- | | |
|---------------------------------|----------------------------------|
| 1. Attachment point (main ring) | 7. Leg strap adjustment buckles |
| 2. Connectors | 8. Fastening clip |
| 3. Chest strap (blue) | 9. Chest strap adjustment buckle |
| 4. Belt | 10. Leg straps (red) |
| 5. Child-size adjustment buckle | 11. Leg strap storage pockets |
| 6. Handle | |



Limitations

The casualty harness has passed EN 1498:2006 with a test mass of 150 kg, and may be used for casualties up to this weight. When working with loads over 100 kg, take care not to exceed the load-bearing capacity of other components in the system.

Due to the nature of this product it is not possible to make it personal issue.

Use

This casualty harness is for rescue purposes only. It may be used for lifting or suspending an injured or stranded person in an emergency, within the guidance set out in these instructions and by trained and competent users. All other uses are forbidden without the written approval of Lyon Equipment Ltd.

Do not use this casualty harness if spinal injuries are suspected.

The casualty harness must not be used in a fall arrest system.

The casualty harness may be used in conjunction with compatible items of personal fall protection equipment of suitable specification, with due consideration to the limitations of each individual piece of equipment in the safety chain.

Planning a rescue

Taking into consideration the casualty's injuries and the intended extraction system, assess whether this casualty harness is suitable for the particular application.

Before commencing the rescue, a plan must be in place as to how to deal with any emergencies which may arise during the rescue.

The time that a casualty is held in the casualty harness must be kept as short as possible to minimise risks to respiration and circulation (suspension intolerance).

Fitting the rescue harness

Before fitting the rescue harness to a casualty, consider any medical conditions and take care to ensure the casualty is not further injured by poor fitting, trapping parts of the body, adjustment of straps, or by displacement of straps during the rescue. Do not allow the casualty harness or any components to come into contact with any open wounds. Ensure that the casualty is not endangered by contact with other components of the rescue system, for example a connector striking the head of the casualty during an unintended incident such as a short fall.

Release the fastening clip to unfold the harness.

1. With the main ring in front of the casualty, pass the casualty harness around the body under the arms. Clip the connector into the main ring.
2. Adjust the blue chest strap so that it fits securely.

THE CASUALTY HARNESS MAY NOW BE USED TO SUSPEND THE CASUALTY USING THE DESIGNATED ATTACHMENT POINT

If possible, and unless contraindicated by the casualty's injuries, the leg straps should be fitted to increase the comfort and security of the casualty.

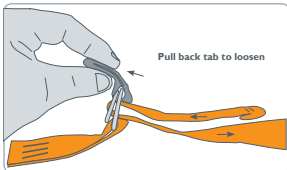
3. Release one of the red leg straps by pulling open the leg strap storage pocket. Pass the leg strap under the casualty's leg and clip the connector into the main ring.
4. Adjust the leg strap so that it provides support.
5. Repeat the procedure with the other leg strap.

Adjust the straps to achieve the required casualty position while ensuring the security and comfort of the casualty. By adjusting the straps, the angle at which the casualty is suspended can be adjusted to suit the circumstances, for example if the casualty is unconscious the knees can be lifted to above waist level to give a more horizontal position.

DO NOT OVERTIGHTEN THE STRAPS

This is particularly important when fitting the casualty harness to a casualty in the sitting position. Adjusting the leg straps as far as the "Adult Stop" label will be more than sufficient in most cases.

Leg strap adjustment buckles may be tightened by pulling on the slack end of the strap, and loosened by tilting the buckle backwards whilst pulling the strap back through the buckle.



Do not fit the casualty harness backwards, with the main ring behind the casualty.

The connectors are self-locking but care should be taken to verify that the locking mechanism is operating correctly and the connectors are fully closed.

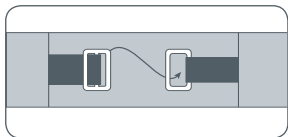
It is essential to regularly check fastening and adjustment elements during use.

If at any stage the casualty shows signs of distress or potential injury from use of this casualty harness, cease use immediately and review its suitability and / or adjustment.

Fitting the casualty harness to a child

If required, the casualty harness may be adjusted to fit children.

To do this, close the child-size adjustment buckle as shown by bringing the two parts together and twisting the smaller part through the larger part.



Ensure the buckle is correctly fastened. Fold the handle and loop of padding flat against the inside of the belt. Fit to the casualty as described above. The red leg straps will adjust down to as small a size as required, however the “Adult Stop” label on each strap may require feeding through the leg strap adjustment buckle.

Lifting or suspension of the casualty

Rope rescue system anchors must be unquestionably reliable, situated above the user and of sufficient strength for the anticipated load. Ensure all other components in the system are compatible and of sufficient strength.

All connections to the rope rescue system must be made via the main ring, using a suitable locking connector or by tying in directly.

Do not suspend the casualty from the rear handle. The rear handle is solely to assist with control and positioning of the casualty.

Tension must be maintained in the suspension system to ensure that the casualty harness is held in place on the casualty.

Training in the use of this casualty harness

It is essential that all potential users receive training in the use of this casualty harness.

This casualty harness is classed as rescue equipment and not PPE. It is only for use as the sole means of suspension in an emergency situation.

If training with live casualties, the use of a back-up safety system (including an additional fall arrest harness) is strongly recommended.

Inspection

The casualty harness should be subject to:

- Pre-use checks
- Thorough inspections
- Interim inspections (as appropriate)

All parts of the casualty harness should be checked. Unpack the leg loops, loosen all straps and move connectors and buckles to allow all parts to be fully inspected. Do not dis-assemble the casualty harness.

Check for correct operation and legibility of markings of all components.

The checks should be undertaken in good light. Remove from service and destroy the casualty harness if it fails inspection, has arrested a fall or reaches 10 years of age regardless of use. Connectors may be replaced – please contact Lyon Equipment to discuss.

It is recommended that the casualty harness is marked with the date of the

next or last inspection. This can be done on the label, with an indelible laundry marker.

Metal items – main ring, buckles, connectors

Check all metal items for any signs of wear, corrosion or deformity. Check that connectors open easily and lock when closed.

Straps and belt

Check the webbing visually and by passing the straps slowly through the hands (e.g. to detect small cuts in the edges, abrasion or cuts across the face of the webbing, softening or hardening of fibres, ingress of contaminants, broken, cut and worn threads in the stitching). Pay particular attention to areas where the webbing is in contact with connectors and buckles. Check the webbing for discoloration, which could be the result of chemical or UV damage.

Chemicals

Avoid all contact with chemical reagents that could affect the performance of the casualty harness, e.g. acids, caustic substances and oxidising agents. Discard this product immediately if contamination is even suspected to have occurred.

Materials

All webbing is polyamide (Nylon) stitched with polyamide thread. Buckles are stainless steel. Connectors are aluminium alloy. The main ring is aluminium alloy. The fastening clip is polyamide.

Obsolescence

The maximum lifetime of this casualty harness is 10 years from date of manufacture.

Cleaning and storage

See General User Instructions.

Before storage, adjust all straps out to their full extent before repacking. Fold up each leg strap into the leg strap storage pocket, then secure the flap by tightly closing the Velcro tabs. Ensure the casualty harness is completely dry before repacking the leg straps.



If contaminated by biohazard, dispose of immediately.

Note to resellers

If this product is re-sold outside of the UK and Eire, but within the EU, the reseller is responsible for providing instructions for use, maintenance, periodic examination and for repair in the language of the country in which the product is to be used.

Markings

Marking, on the label, can be made with an indelible laundry marker.

	Manufacturer's logo
	Refer to user instructions
EN 1498:2006, Class A & B	Standards to which the item conforms
idN	Individual serial number will be in the format YYDDD I2345. The first two digits give the year of manufacture, the next three digits the day of the year from 001 to 365 and the five digits after is the number in the series
Max rated load 150 kg	Maximum rated load the casualty harness has been tested to in accordance with EN 1498:2006
ADULT STOP	Normal limit of adjustment when fitted to an adult
LSYNCH	Product code

End of document



General user instructions

Lyon Equipment Limited
Units 3-7, Tebay Business Park,
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For more detailed user
information and to
download a PDF copy
of these instructions
follow the link above or
scan the QR code with
your smart phone



WARNING

Make sure that you have read and understood these instructions before using this equipment. These user instructions are to be read and kept along with any other user information provided.

Activities at height are hazardous and may lead to injury or death. It is the user's responsibility, at all times, to ensure that they understand the correct use of any equipment supplied by or through Lyon Equipment, use it only for the purposes for which it is designed, and practice proper safety procedures including having a rescue plan in case of emergency.

This product must not be used outside its limitations, or for any purpose other than those described in the user instructions. Misuses forbidden in these instructions are examples only; many other misuses may exist which could lead to injury or death.

Please note, the information in these user instructions is not exhaustive, and is not a substitute for comprehensive instruction and training by a competent person.

Lyon Equipment is not responsible for any consequences, whether direct, indirect or accidental, resulting from the use of its products. If you are unsure about the correct use of this product, please contact us.

Who can use this equipment

This equipment should only be used by trained, competent and responsible persons, or the user should be under the direct supervision of a trained, competent and responsible person.

Activities at height should not be undertaken by persons affected by alcohol or drug dependence, diabetes, epilepsy, fits, blackouts, fear of heights, vertigo / dizziness / difficulty with balance, heart disease / chest pain, high or low blood pressure, impaired limb function, obesity, psychiatric illness, musculoskeletal issues, e.g. a bad back.

General instructions for use

Equipment must be checked before each use, to ensure it is serviceable and operates correctly. Checks should also be carried out during use. In addition, a thorough inspection by a competent inspector should be carried out in strict accordance with these user instructions, and a record kept of these inspections.

This product may be used with any compatible item of Personal Protective Equipment (PPE) which conforms to the European Union Directive 89/686/EEC, keeping in mind the limitations of each item in the safety chain. It should be noted that a full body harness is the only type of harness which may be used in a fall arrest system.

The anchor device or anchor point is of primary importance and should be unquestionably reliable. It should be strong enough to withstand the

foreseeable maximum load that could be applied e.g. in the event of a fall.

When selecting an anchor, the anticipated directions of loading and potential loads should be taken into account.

Anchors should be selected and positioned to allow work to be carried out in such a way as to minimise the potential for a fall and potential fall distance, for example by keeping the anchor point / device above the user.

Anchors should not have sharp or rough edges which could damage equipment (use edge protection if necessary).

On each occasion of use, verify the free space required beneath the user in order to avoid an impact. Always try to place protection so that any fall will be stopped before the user hits the ground or any other obstruction. Remember to allow for rope stretch and slippage in the belay device or rope ascender / descender. In a fall arrest situation, the user must be protected from dynamic forces of greater than 6 kN in the event of a fall, e.g. by use of a fall arrest system incorporating an EN 355 energy absorber.

Maintaining your equipment

Wash in clean water not exceeding 30°C with pure soap and rinse in clean cold water. Do not use chemical products, solvents or detergents – these should be regarded as harmful.

Due to the difficulties in effectively disinfecting equipment, we recommend

that any contaminated equipment should be withdrawn from use and disposed of in a suitable manner.

Equipment must be clean and dry before storing. Always allow to dry naturally, away from direct heat. Equipment should be stored in a cool, dry, well-ventilated area, away from excessive heat, high humidity, sharp edges, corrosives, sunlight or other sources of ultraviolet light (UV) and other possible causes of damage.

During transport, this product should be protected from abrasion, mechanical damage, chemical contamination, UV and heat.

Textiles

Always keep textile items at temperatures between -30°C and +50°C.

Metal items

Always keep metal items at temperatures between -20°C and +60°C.

No alterations, additions or repairs may be made to this product without the manufacturer's prior written consent; if done, the repair must be carried out by a competent person for repair authorised by Lyon Equipment to make the repair, and in accordance with specified procedures.

These instructions must be strictly adhered to.

Inspection

A thorough inspection should be carried out at least every 6 months by a competent inspector in accordance with these user instructions. A record of these checks should be kept with the product along with these user instructions. In addition, interim inspections should be carried out where products are used intensively, or in particularly harsh environments where damage is more likely to occur, or where legislation or the type of equipment make it necessary.

Pre-use and thorough inspections are essential because the user's level of protection depends on the continuing correct performance of this product.

PPE (Personal Protective Equipment) inspection training is available from Lyon Equipment.

Lifetime, and when to withdraw your equipment from use

Withdraw your equipment from use if any one of the following applies:

- It shows sign of wear and tear / damage that may affect performance
- Markings on the product are no longer legible
- You suspect it may have been exposed to chemical contamination or extreme temperatures
- It fails a periodic examination
- It has been used to arrest a fall or has been excessively loaded

- It is more than 10 years after the date of manufacture (textile items or items with textile components). Metal items have a potentially indefinite lifespan if stored correctly.
- If you have any reason to doubt that it is safe to use.

It is the responsibility of the competent inspector to decide whether the equipment should be put back into use, or permanently withdrawn from use. Equipment permanently withdrawn from use must be destroyed, and should be recycled where facilities exist.

Certain environmental elements will considerably accelerate wear: salt, sand, dust, snow, ice, moisture, chemicals, sunlight (UV radiation) – list not exhaustive.

Warning: the safe working life of this product may be as short as its first use in extreme circumstances.

If in doubt, do not hesitate to scrap this product.

Guarantee

In the event of any defect in materials or workmanship please return the product to the dealer, distributor or manufacturer within 3 years of purchase for inspection. We will replace or repair as required. This guarantee does not cover normal wear and tear or accidental damage.

Note to resellers

If the product is re-sold outside the UK and Ireland, but within the EU, the reseller is responsible for providing instructions for use, maintenance, periodic examination and for repair in the language of the country in which the product is to be used.

If you require the Intrastat commodity code / customs tariff code or NATO stock number (where applicable) for this product, please contact us via lyon.co.uk










Inspection records

A record must be kept for each component, subsystem and system, including name and contact details of the manufacturer or supplier, product description, serial number, year of manufacture, date of purchase, date of first use, any other relevant information, and history of periodic examinations and repairs, the name and signature of the competent inspector and the next due date for inspection. An example of a suitable equipment record is shown on this user instruction and can also be downloaded at lyon.co.uk

Local jurisdiction may dictate that extra information be recorded in the inspection record – check your country's legal requirements. Some products may have features which need special monitoring during periodic inspections, e.g. wear indicators, in which case this information should also be recorded on the inspection record.

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Explanation of symbols

	Refer to user instructions
	Permitted use
	Caution
	Danger of death
	Telephone number
	Anchor point
	Rope diameter
	Cable
	SWL (Safe Working Load)

Lyon Product Inspection Record

Product code		Product description		Year of manufacture		Purchase date	
Length if applicable		Individual serial number		Date of first use		Certificate of conformity number	
Manufacturer Lyon Equipment Ltd.	Address Unit 3-7 Tebbay Business Park Old Tebbay Penrith CA10 3SS UK		Tel. +44 (0)15396 24040 Fax. +44 (0)15396 26330 info@lyon.co.uk lyon.co.uk		Other relevant information		

Record of inspection and repair

Date	Comments	Name and signature of competent inspector	Next due date

All user instructions supplied with this product must be kept as part of the product inspection record