

# CP130

## Ceiling Track Hoist



## Pre-Sales Manual

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## 1 Intended Use

For internal use only.

With a safe working load of 130 kg, the Hoist is a raising and lowering aid used to transfer people safely. The Hoist makes it possible to move mobility impaired individuals with minimal strain or risk to the caregiver, while providing complete safety, dignity and comfort for the person being moved.

The easy-to-use hoist is designed to be operated by both professional healthcare workers and home healthcare workers who may not have a specific range of skills in healthcare. Typical home care users may include, but is not limited to, teachers, medics, paramedics, carers, family, and friends. Focusing on the dignity and wellbeing of the person being moved, the simple to use hoist maximises the amount of care provided to the person.

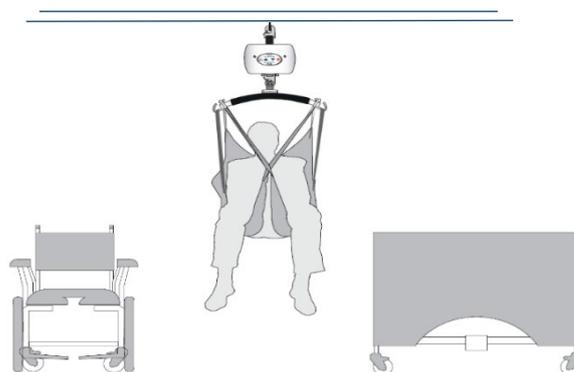


Figure 1

The Hoist is a Ceiling Track Hoist and should only be used whilst on the Ceiling Track. It can raise up an individual from one location, such as a bed, move the individual along the track to another location and finally lower the individual, such as into a chair or a bath.

The hoist is intended to be used with Mackworth manufactured slings, a carry bar and the Ceiling Track system or Free-Standing Gantry. Together these items make up the system. Please refer to any user guides supplied with the sling and track system and reference them while reviewing this manual.



A risk assessment must be performed before using any other manufactured sling, carry bar or ceiling track to ensure 'safe' use can be established.

The device is used under instruction and the operation of the aid is undertaken by a trained carer.

The accompanying carry bar associated for use with this device, incorporates three fixing point options at either end of carry bar, with a safety retaining clip on the outer hook. The fixing can be derived by the user, by means of a simple connection loop, made by the sling, to the carry bar. This connection system is used throughout the industry in various designs but all acts as the means to hold the sling and user in place through operation of the device whilst in use.

The sling is a specially designed fabric accessory that attaches to the hoist by means of a carry bar and strap system, and holds an individual while the hoist or transfer takes place. The sling is supplied separately from the hoist at the initial time of purchase.

The track, also supplied separately from the hoist at the time of purchase, is the means to operate the hoist in a defined safe route, enabling the person different uses around the "travel" of the hoist.

### 1.1 Additional Warnings and Safety Notices



Risk of strangulation: Please make sure handset cable and lift tape are always clear of all persons.

Risk of impact with carry bar: Please take care to ensure the carry bar is clear of the person in the sling when preparing to raise/lower and move them to avoid any contact with that person.

Risk of collision: The person operating the hoist should make sure that when raising, lowering, or moving the Hoist that no people or objects will obstruct, be injured, or damaged by the movement.

Serious Injury: If, during the use of this device or because of its use a serious incident has occurred, please report it to the manufacturer and to your national authority.

Electric Shock: Do not insert any objects into the hoist case or battery charging station because of potential risk of electric shock.

To reduce the risk of electric shock, do not install or operate the battery charger with a damaged cable or if the unit has been dropped or damaged.

Portable RF Communication Devices: Portable RF communications equipment (including peripherals, such as antenna cables and external antenna) should be used no closer than 30cm (12 inches) to any part of the Hoist, including cables specified by the manufacturer, otherwise degradation of the performance of this equipment could result.

Vicinity to Other Equipment: Use of this equipment adjacent to or stacked with other equipment should be avoided, as it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

Specified Accessories: Use of accessories, transducers, and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

Lay Operator: if in the case of an operator is classed as a 'Lay Operator' they should contact the Manufacturer or the Manufacturer's representative for assistance in operating the hoist in a safe/trained manner.

### 1.2 Operating Environment

The Hoist is suitable for use within the professional health care facility environment as well as the home healthcare environment.

The Hoist is not suitable for any special environments.

The Hoist is not intended to be used in environments where there are rapid changes in the environmental temperature and humidity during intended use.

## 2 Installation

The hoist has been specifically designed to be installed in both the professional and home health care environments.

No matter the environment, health and safety factors should be considered to ensure the safety and essential performance of the hoist and to avoid unnecessary damage or injuries to people within the area of the hoist.

Typical examples include radiated heat (e.g. from a heater or fireplace), excessive moisture impacting electrical performance (e.g. from a bathroom or kitchen area) and the correct storage of the hoist after use (e.g. handset position on the carry bar).

The Hoist is not intended to be used in environments where there are rapid changes in the environmental temperature and humidity during intended use.

This manual covers the safety and advice for the and moving and handling risks can be done in-house if the person is competent to identify and address the risks.

Refer to the Commissioning guide document which outlines the correct procedure to install the product. Document Number: 996135.

You may need to seek to seek specialist advice on how to assist some people with specific moving and handling needs. Sources of advice include, but is not limited to, professional bodies and organisations, occupational therapist, physiotherapists, manual handling advisers and ergonomist with experience in health and social care.



A Smirthwaite approved engineer must install the hoist.

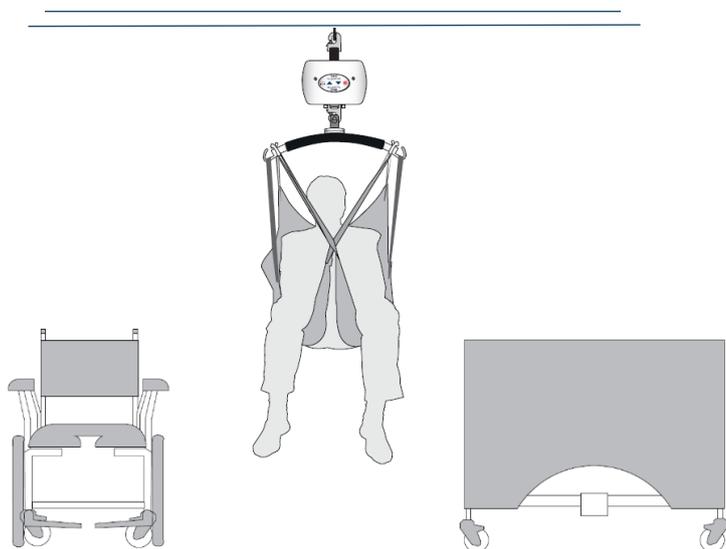


Figure 2

### 3 Frequently Used Functions

#### 3.1 Carry Bar

Attach the carry bar (type 'BF applied part) into the hook on the lift tape, located at the end opposite to the hoist, in the following way:

1. On the hook, move the locking mechanism into the hook by pressing down on the tab (Figure 3 and 4).
2. With the carry bar positioned sideways along the length of the bar, move the pin at the top of the carry bar into the hook (Figure 5).
3. Alternatively, with the carry bar positioned sideways, the pin at the top of the carry bar can gently push the locking mechanism out of the way as the pin is carefully moved into the hook.
4. Once the pin is in the hook, rotate the carry bar 90° down so the carry bar is hanging below the hook on the pin in the hook. Move the locking mechanism into place by pushing up on the tab, securing the carry bar on the hook and lifting tape. (Figure 7 and 8).



Figure 3

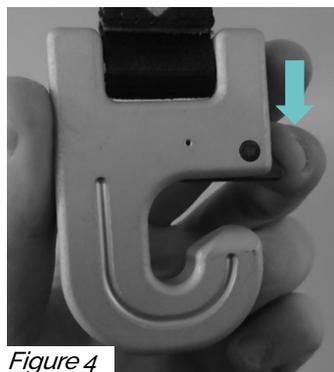


Figure 4

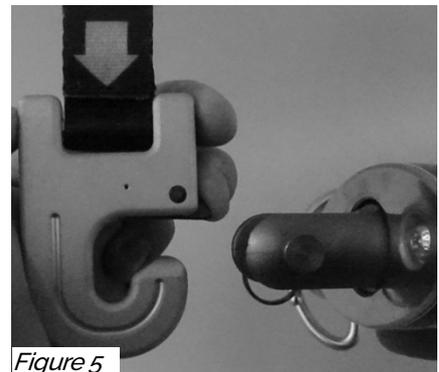


Figure 5

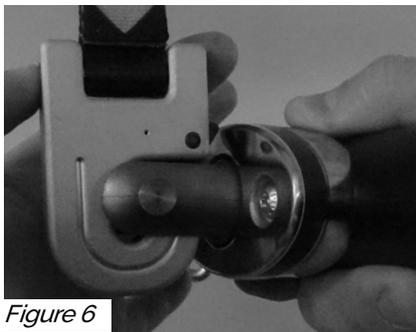


Figure 6



Figure 7

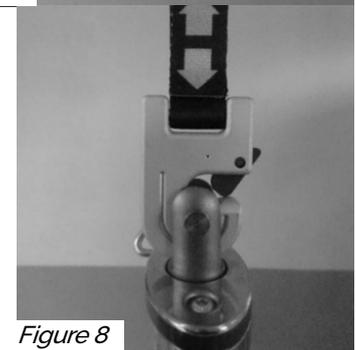


Figure 8

#### 3.2 Slings

The way the sling is attached to the carry bar needs to be assessed on individual basis and documented in the individual's care plan. Furthermore, the person attaching the sling to the carry bar should reference the user manual for the specific sling in use as attachment points vary depending on the application and type. Only after the correct attachment is fully understood should the sling loops be fitted onto the carry bar in the correct order. Sling loops should be attached as follows:

1. Put the required sling loop onto your finger and thumb and then using the same finger or thumb, pull back the spring locking mechanism on the correct hook on the correct side of the carry bar (Figure 9).
2. Slide the sling loop from your finger and thumb over the edge of the hook (Figure 10 and 11).
3. After positioning the loop below the locking mechanism (Figure 12) release the spring locking mechanism to secure the sling loop. (Figure 13)



Make sure the required loop(s) are on the correct hooks and are correctly positioned.



Figure 9



Figure 10



Figure 11



Figure 12



Figure 13

To remove the sling, simply reverse the process – pull back on the spring locking mechanism, lift the loop out of the hook and release the locking mechanism.

The manufacturer recommends the use of Smirthwaite manufactured sling range (type 'BF' applied part) to be utilised with the hoist. It is at the user's discretion to use alternative supplied product. In utilising another manufacturer's sling, checks must first be made to ensure the sling is safe to use and meets the requirements of BS EN ISO 10535 before its use and a full risk assessment to be carry out before use.



The Smirthwaite slings with a safe working load of 130 kg or more that can be used with the hoist are shown below in the below Table, complete with product codes.

Size	Smirthwaite Sling Range - Product Material and Code			
	Polyester – Blue	Mesh – Black	Mesh – Pink	Mesh – Aqua Blue
<b>Smirthwaite Universal Slings</b>				
Junior	n/a	3501	3503	3505
Child	n/a	3502	3504	3506
<b>Smirthwaite Comfort Recline Slings</b>				
Junior	n/a	3507	3509	3511
Child	n/a	3508	3510	3512
<b>Smirthwaite Dual Access Toileting Slings</b>				
Junior	3513	n/a	n/a	n/a
Child	3514	n/a	n/a	n/a

## 4 Technical Specification

### 4.1 Hoist Dimensions and Lifting Range

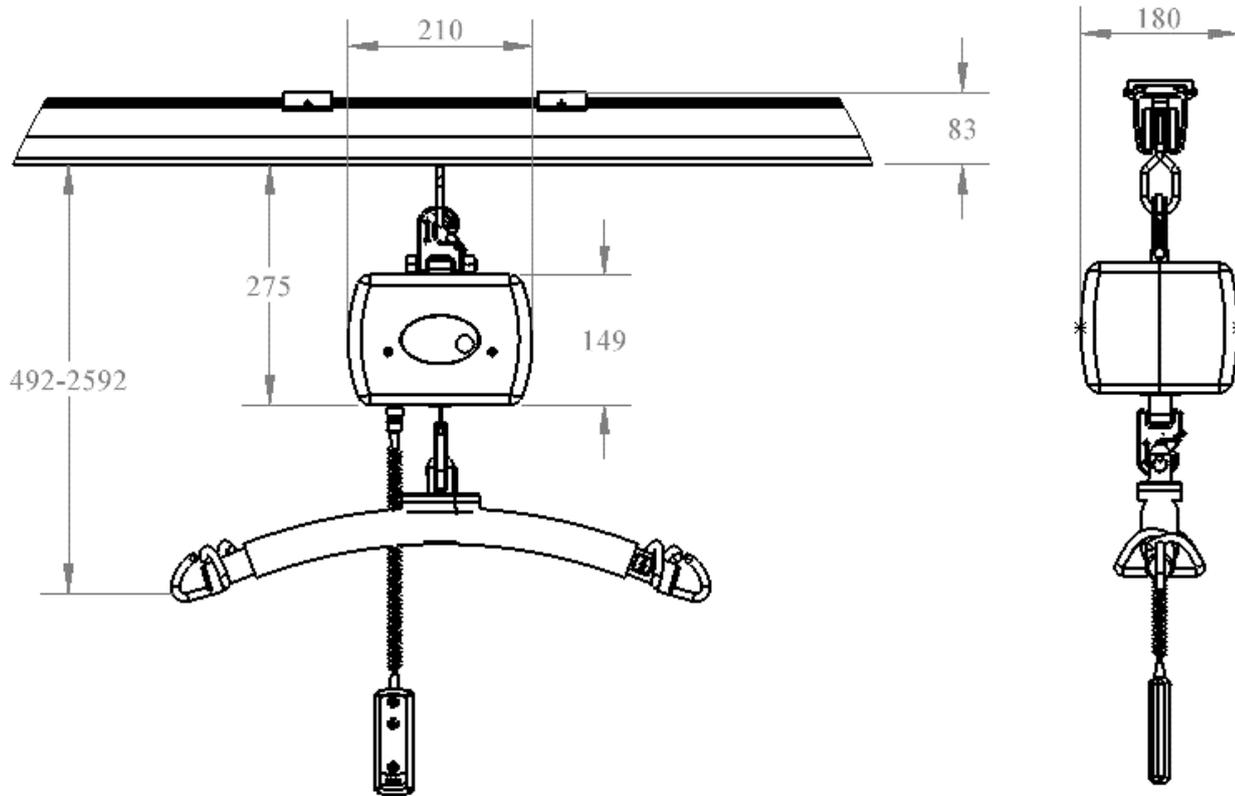


Figure 14

The diagram above (Figure 33) shows the relevant lifting ranges and dimensional sizes of the Hoist in millimetres. The direction of travel can only be made within the boundaries of where the hoist is in the track system.



There are no necessary modifications required for the device to perform its intended use. However, should the device or the installed system require modification, please consult your local Smirthwaite dealer to arrange a date and time to assess the required changes to the system.

If this equipment is modified, appropriate inspection and testing must be conducted to ensure continued safe use of the equipment.

## 4.2 Specifications

Technical specification	
Hoist Motor	24VDC
Charger Input	100-240V AC 50/60Hz 1.5A
Charger Output	24VDC/1.0A
Batteries	24 V dc (2 x 12V) 3.3Ah Nimh
Hoist Case	Flame Retardant ABS
Hoist Case Degree of Protection	IP21
Handset Degree of Protection	IP67
Lifting Capacity (SWL)	130 kg
Lifting/Range	2100 mm (82.7") Lift
Operation	Handset (Electrical)
Sound Level	54 dB
Lifting Speed (0 kg)	30.86 mm/s (1.2 in/s)
Lifting Speed (50 kg)	28.67 mm/s (1.1 in/s)
Lifting Speed (100 kg)	27.66 mm/s (1.1 in/s)
Lifting Speed (130 kg)	25.38 mm/s (1.0 in/s)
Lifting Speed (130 kg)	20.86 mm/s (0.82 in/s)
Lowering Speed (0 kg)	27.02 mm/s (1.06 in/s)
Lowering Speed (50 kg)	34.72 mm/s (1.36 in/s)
Lowering Speed (100 kg)	35.21 mm/s (1.39 in/s)
Lowering Speed (130 kg)	36.04 mm/s (1.41 in/s)
Lowering Speed (130 kg)	37.93 mm/s (1.49 in/s)
Raising/Lowering Duty Cycle	15% use, 85% rest (90 seconds use, 510 seconds rest)
Maximum Charging Time	8.5 hrs
Battery Capacity – Raising/Lowering (Top 500mm / 19.69" of Lift Tape) – (100 kg)	120 Lifts
Battery Capacity – Raising/Lowering (Top 500mm / 19.69" of Lift Tape) – (130 kg)	Up to 100 Lifts
Battery Capacity – Raising/Lowering (Top 500mm / 19.69" of Lift Tape) – (130 kg)	60 Lifts

Table 2

Weights	
Safe Working Load (SWL)	130 kg
Hoist	4.5 kg (9.9 lb)
Battery charger	0.5 kg (1.1 lb)
Carry bar	2 kg (4.4 lb)
Handset	0.2 kg (0.44 lb)

Table 3

Operational Forces	
Handset	4N
Emergency Button	4N
Hook locking mechanisms on lift tape	2.5N
Spring clips on carry bar	8N
Manually traversing fully loaded hoist (SWL)	97N
Manually traversing unloaded hoist (No weight)	6N

Table 4

## 5 Environmental - Storage and Operating Conditions

The Hoist is intended for internal use within normal environmental conditions.

It is not intended to be used in environments where there are rapid changes in the environmental temperature and humidity during intended use.

- Lint – Due to the nature of the Hoist being installed closely to the ceiling, very little lint would be likely to gain access into the hoists workings. The hoist is recommended as per Service Guide to be wiped cleaned during every hoist inspection.
- Dust – Due to the nature of the Hoist being installed closely to the ceiling, very little dust would be likely to gain access into the hoists workings.
- Light – The User controls have been designed to be easily recognisable and the use of bright colours will help the user through all ranges of lighting. The Specification of the hoist dictates that normal use would occur during ambient luminance 50 – 500 lux. Additional as the hoist is designed for indoor use only, if required the user may wish to switch on room lighting.

### 5.1 Normal operating conditions

+5°C to +40°C (41°F to 104°F) at a relative humidity between 15% to 90% RH, non-condensing but not requiring a water vapour pressure greater than 50hPa and atmospheric pressure between 795hPa to 1060hPa

### 5.2 Shipping and storage conditions

-25°C to +5°C (-13°F to 41°F) with any humidity level.

+5°C to +35°C (41°F to 95°F) at a relative humidity up to 90%.

+35°C to 70°C (95°F to 158°F) non-condensing at a water vapour pressure up to 50hPa.

12 hours are required for the hoist to cool from the maximum storage temperature until ready for its intended use when the ambient temperature is 20°C (68°F).

12 hours are required for the hoist to warm from the minimum storage temperature until ready for its intended use when the ambient temperature is 20°C (68°F).

## 6 Maintenance

No service is to be carried out on the Hoist while transferring a person to reduce the risk of injury.

Service must be completed by an authorised Smirthwaite Service Engineer.

Do not attempt to service the product yourself, or warranty is void.



To ensure the safety and continued good function of your Hoist, routine service must be performed on your Hoist.

Service should be completed by an approved service engineer every 6 months to ensure the product's required standard is maintained. The service history of the product should be documented each service in the Service Log at the back of this User Manual.



When the Hoist is serviced, the 6-month service checklist must be completed for the Hoist.

Service Manual Document Number: 995135.

Spare Parts Manual Document Number: 992135.

The manufacturer recommends that service should be completed every 6 months after installation of the Hoist.

Contact your local authorised Smirthwaite dealer if you:

- Need more information.
- Have any questions about the use or service of your Hoist.
- Notice any change in the performance.
- Want to report an unexpected occurrence.
- Want to arrange a service.
- Need to ascertain necessary information for replacement parts and components.

Contact details of your local Smirthwaite dealer are shown on the last page of this manual.

## 7 Cleaning

Please follow the cleaning guidelines below on cleaning and disinfecting the Hoist.



### 7.1 General Cleaning

It is recommended to clean the Hoist and accessories before use by a different person, reducing the risk of cross-contamination.

The exterior of the Hoist can be cleaned using a damp soapy cloth for general cleaning duties. Please ensure the cloth is damp and not wet. Ensure the exterior of the device is dry after cleaning. Dry using a clean dry cloth.

For the Handset and Lift Tape, use a dry cloth wipe only.



Care should always be taken when cleaning around electrical components to reduce the risk of electric shock or damage to the hoist.

### 7.2 Disinfecting (if necessary)

Should the Hoist require a more thorough clean, the use of the Actichlor™ disinfectant product (which is widely available in tablet form and used throughout the health care industry) is recommended.



Follow the manufacturer's safety instructions for the use of the cleaning product before use to ensure safe use for the operator and the patient.

Ensure the cloth is damp before the cleaning process.

Application is through a clean damp cloth applied to wipe the device down. Use in the following dilutions to ensure an effective clean:

- Actichlor™ dissolvable chlorine tablets provide a concentration of 1000 ppm of available chlorine (0.1%) per 1 tablet
- 1 tablet (1.7g formed tablet (x1)) will create a virucidal solution, diluted in 1 litre of water to provide effective means to clean a "dirty" device. This is also ideal for use after an outbreak of the Norovirus/winter vomiting and can be used as a precaution against Sporcidal. It is effective against viruses, bacteria, spores, yeasts and moulds.
- The contact time against the outer components of the device should be for 5 minutes to prevent any virucidal infections without a degradation to the functionality of the device. 5 minutes is a recommended contact time. The device can withstand a longer contact period but the 5-minute recommendation as a minimum must be followed to provide an effective cleaning regime.
- Blood spills should be dealt with by an increased concentration of the solution – please refer to the instructions on the manufacturer's product labelling.

**User notes:**

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**Dealer/service contact details:****Manufacturer contact details:****Prism Medical UK**

Unit 1, Tir Llwyd Industrial Estate,  
St Asaph Avenue, Kinmel Bay,  
Conwy, United Kingdom, LL18 5JZ

Telephone Number: 01924 840100

## Disclaimer

While every effort has been made to ensure the accuracy of information contained in this user manual, no liability can be accepted by Smirthwaite for any errors or omissions. Smirthwaite operates a policy of continuous improvement. Specifications and other data are subject to change without notice.

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