

# Invacare® **Birdie™** Invacare® **Birdie™ Compact**



User's Manual ΕN Manuel d'utilisation FR Manual del usuario **ES** Gebrauchsanweisung DE Brukervejledning NO Kaäyttöonje FI Gebruiksaanwijzing NLBrugermanual DA Bruksanvisning SV Manuale d'uso IT Manual de Utilização PT

Œ

This manual must be given to the user of the product. Before using this product, read this manual and save for future reference.

EN	4
FR	20
ES	36
DE	52
NO	68
FI	84
NL	100
DA	116
SV	132
IT	148
PT	164
	FR ES DE NO FI NL DA SV

## User's Manual EN

Stamp of the Distributor

## **Table of Contents**

1.	General
2.	Main parts of the hoist 8
3.	Unpacking, assembly and disassembly of the hoist9
4.	Operating the hoist
5.	Emergency lowering, emergency lifting and emergency stop . 13
6.	Accessories
7.	Maintenance and cleaning
8.	Waste disposal
9.	Trouble-shooting
10.	Technical specifications
11.	Symbols

### Birdie<sup>™</sup> and Birdie<sup>™</sup> Compact

Thank you for choosing Invacare®'s **Birdie™** mobile hoist. Invacare®'s **Birdie™** are especially designed to lift the patient to and from wheelchairs, beds, toilets and floors. **Birdie™** hoists offer easy handling and increased comfort within the nursing sector. The design of **Birdie™** provides a longer reach, wider leg span and a wider lifting range.

The choice of either electrical or manual leg span combined with the large range of spreader bars and slings available from Invacare® makes it easy to adjust the hoist for optimum patient care.

Throughout the entire production process, our materials and components are quality controlled by the operators. A final test is made when the product is fully assembled. If the product does not correspond to the quality demands of Invacare®, it will not pass quality control.

In the event of a problem in connection with the delivered product, please contact your local Invacare® supplier.

Invacare® will take no responsibility if the product is used or assembled in any way other than stated in this user manual. Only accessories mentioned in this user manual may be used on the **Birdie™** mobile hoists. This product must only be operated by qualified staff who has received the necessary instruction and training.

Please read this user manual carefully before you are using the mobile hoist.

### 1. General

- Birdie<sup>™</sup> and Birdie<sup>™</sup> Compact are CE-marked in accordance with directive 93/42/EEC concerning medical devices.
- Birdie<sup>™</sup> and Birdie<sup>™</sup> Compact have been tested and approved according to EN/ISO 10535.
- Control unit and motors have been approved according to EN 60601.
- Birdie™ and Birdie™ Compact have undergone a risk analysis according to EN/ISO 14971.
- Control unit, motors and hand control are IPX4 protected.
- Lifting capacity: Birdie™ 170 kg, Birdie™ Compact 150 kg.
- The hoist has an expected lifetime of 8 years.
- The hoist will not operate when in charge mode.

Disconnect the charger from the hoist before moving or using the hoist. Make sure the mains cable is not squeezed or damaged when assembly or disassembly of the hoist or when moving the hoist.

If the functions of the hoist change, please see the section "Maintenance and cleaning". This product must be serviced and maintained by qualified personnel.

### Please be aware of the following possible risks when using the hoists:



The hoist must be carefully supervised if the patient is a child.



Please note that it is more difficult to manoevre the hoist on carpeted or uneven/textured surfaces as opposed to wooden or flat surfaces; this is due to the starting forces required to initiate the movement that may create additional friction exerted on the castors.



It is recommended not to move the user with the jib at maximum height. Take great care when moving the hoist on carpeted, wet, slippery, rough or uneven surfaces. Never use on slopes.



**Caution!** Never attempt to lift a patient outside the base area of the hoist. When lifting a patient from the floor, the patient must always be located between the two hoist legs, and never outside this area. To avoid injury, utmost care must be taken when raising and lowering a patient.



Invacare® accepts no liability for any use, change or assembly of the **Birdie™** and **Birdie™ Compact** hoists other than as stated in this user manual.



There is a risk of squeezing and entrapment during operation and transport of the hoist. Never exceed the maximum recommended lifting capacity.



It is important that the cables do not become entrapped or jammed in moving parts and castors during operation and transport.



Important! Invacare® recommend that operation of any mobile lifting equipment is carried out by personnel with prior professional training in moving and handling techniques.



Always choose the sling design and size according to the patient's weight, size and physical ability. Always ensure, that the sling is applied correctly. Be sure to check the sling attachments each time the sling is removed and replaced, to ensure that it is properly attached before the patient is removed from a stationary object (bed, chair or commode). Never leave a patient in the sling unattended.



Please ensure that the hoist is not exposed to water, as this can cause damage.

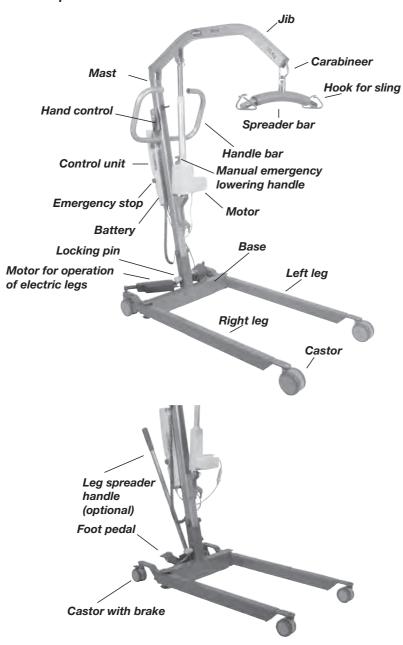


Locking pin must be located into the base position when transporting the hoist. Failure to do so may cause injury during handling.



Use handle bar on the mast at all times to push or pull the patient hoist.

### 2. Main parts of the hoist



### 3. Unpacking, assembly and disassembly of the hoist

- The packaging is developed for optimal protection of the hoist.
- If you return the hoist, it must be packed as delivered in the original box.
- You can order replacement boxes from Invacare®.

### Unpacking

- Should the packaging be damaged upon receipt, each part of the hoist must be examined for visible defects. In the event of any damage, please contact Invacare®.
- 2. Carefully take out and identify all the parts in the box.
- 3. The box contains the following parts:
  - 1 hoist
  - 1 mains cable
  - 1 user's manual
  - 1 spreader bar
  - 1 manual leg spreader handle (optional)
  - 1 sling (optional)

To prevent self-discharging of the battery or accidental operation of the hoist, the emergency stop is activated during shipping. Please remember to deactivate the emergency stop and charge the battery prior to first use.

### Assembling of the hoist

The hoists are easy to assemble without the use of tools.

- 1. Perform unpacking and assembly operation at floor level
- 2. Take out all the parts of the box (picture 1-4).
- 3. Apply castor brakes before assembling hoist.
- 4. Remove the locking pin and raise the mast of the hoist by pullingthe handle bar (picture 5-6).
- Insert the locking pin (picture 7 and 12-13 below). Ensure that the locking pin is correctly inserted as the picture 12.
- 6. Loosen the spreader bar by pulling it downwards (picture 8).
- Remove the pipe pin. Assemble the motor and the jib by using the pipe pin (picture 9-10).
- 8. Correctly assembled hoist (picture 11).



Activate the emergency stop before assembly or disassembly to prevent entrapment/squeezing.

Remove optional leg spreader handle before disassembly.



There is a possible risk of squeezing of both limbs and wires during assembly and disassembly of the hoist. Take the utmost care when lifting components during assembly some parts are heavy. Always remember to adopt the correct lifting position.



Ensure that the locking pin is correctly inserted.

Locking pin **correctly** inserted.



Locking pin incorrectly inserted.





















### Disassembling of the hoist

- Lower the jib and narrow both legs completely, and activate the emergency stop button.
- Apply castor brakes before disassembling hoist.
- 3. Remove the pipe pin and the motor piston from the jib, reinstall the pipe pin in the piston end, and lock the motor into the clips on the mast.
- 4. Attach the spreader bar into the welded fork on the mast.
- 5. Remove the locking pin from the base of the mast, release the safety latch, lower the mast, and relocate the locking pin into the mast near the suspension axle of the mast.

The hoist can now be located in the packaging box, pulled on the rear wheels, or parked in an upright position with the mast/jib assembly pointing upwards

### 4. Operating the hoist

Lifting capacity Birdie™ : Birdie™ Compact: 170 kg. 150 kg.

### Operation of the manual leg spread

The manual leg span is operated by the 2 pedals on the leg section of the hoist. The pedals are operated from one side to the other to adjust the distance between the legs of the hoist.

The hand control has 2 buttons - one to raise and one to lower the jib.

- Stand behind the hoist and take a firm hold of the handle bar using both ands. Using your foot, press the left pedal on the base to increase the distance between the legs.
- Using your foot, press the right pedal to decrease the distance between the legs.

### Operation of the electric legs

The distance between the legs is controlled by 2 electric motors controlled by the hand control.

The hand control has 4 buttons: 2 for raising and lowering the jib and 2

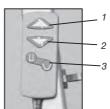
operating the electric legs.

### Using the hand control

- 1. Press "arrow up" on the hand control to raise the jib.
- 2. Press arrow down on the hand control to lower the jib.
- 3. Operation of electric legs.

Operating forces of buttons: Max. 5 N.







WARNING! When using the Birdie™ in conjunction with beds or wheelchairs, be aware of the position of the lift in relationship to those other devices so that the lift does not become entangled.

**LED diodes on the control unit Birdie™** and **Birdie™ Compact** - the upper yellow diode will blink during charging, and switch to continuous light when fully charged. The lower green diode will light continuously when the control unit is connected to the mains, and light up when any button on the remote control is pressed, or when the electric emergency lowering is activated.



#### **Brakes**

- 1. Stand behind the hoist and take a good hold of the handle bar.
- 2. Press the pedals downwards by feet on the back castors to activate the brake.
- 3. Press the pedals upwards by feet to release the brake.

### Moving the hoist

- 1. Stand behind the hoist and take a good hold of the handle bar.
- 2. Release the brakes of the back castors.
- 3. Now the hoist can be pushed or pulled to the desired location.

Note: To negotiate raised obstacles during movement of the unloaded hoist, it is recommended to pull the hoist backwards. This operation should only be performed when the hoist is in the unloaded condition.

### Tilt pedal

The tilt pedal is used for tilting when the hoist must be moved from one room to another, to force a footstep. Place one foot on the tilt pedal, and pull the empty hoist rearwards to a suitable angle.



WARNING! Never use the tilt pedal with a patient in the hoist.

### Mounting the spreader bar

The spreader bar is easy mounted and dismounted on the carabineer hook:

Open the carabineer hook with one finger, and mount or dismount the spreader bar. Use only spreader bars made for the **Birdie™** mobile hoists.

Make sure the spreader bar is suitable for the patient and the actual lift or transfer required.



Carabineer correctly positioned on the lifting arm, ready for use.



Correctly attached spreader



Easy opening of the carabineer by pushing the safety catch backwards with one finger and attachment of the spreader bar.

### Fitting the sling

Slings designed for 2- or 4-point spreader bars can be used with this mobile hoist, please refer to Invacare®'s sling brochure for details.

**Note**: The size of the sling and the width of the spreader bar should correspond.

- 1. Choose the most appropriate sling for the patient. The carer must be trained in the use of hoists before performing any transfers.
- Carefully inspect the hoist and the sling. If defective parts are found, the damaged parts must be replaced.
- 3. Only use slings suited for the hoist and the patient.
- 4. Place the patient in the sling as described in the sling manual. Pay special attention to the fact that the sling is correctly applied.
- 5. Lower the jib and mount the straps of the sling. If the patient is in a sitting position, the jib must be lowered to chest height and the hoist must be moved as close as possible to the patient.
- Make sure that there are no obstructions when raising the jib. Ensure that brakes are not engaged before lifting or lowering.



**Caution!** Do not lift or lower a patient with the brakes applied. Always let the hoist find the correct centre of gravity. Make sure that the lifting area is between the legs of the hoist. **Never** operate the hoist when the patient is outside the base and leg area. Always be careful when lifting or lowering a patient. Never exceed the maximum recommended lifting capacity.

### Charging the battery

The hoists are equipped with an internal charger. It is recommended to charge the batteries regularly to ensure optimal use of the hoist and prolong the life of the batteries. Furthermore, it is recommended to charge the batteries before first use.

The control unit is equipped with a sound signal, which will beep when operating with low battery capacity.

It is recommended to charge the batteries as soon as the sound signal is heard.

### How to charge the batteries:

- Connect the mains cable to the control unit and plug it in. It takes about 4 hours to charge
  the batteries. Charging must take place in a room with good air ventilation. The charger stops
  automatically when the batteries are fully charged.
- 2. Remember to disconnect the charger cable before using the hoist again.



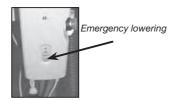
The emergency stop must not be activated - otherwise it will be impossible to charge the batteries. While charging takes place the hoist cannot be used. Do not use or move the hoist without unplugging from the socket outlet. Do not attempt to use the hoist if the battery housing is damaged. Replace a damaged battery housing before further use.

### 5. Emergency lowering, emergency lifting and emergency stop

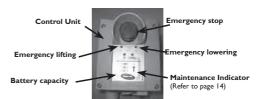
### Electric emergency lowering Birdie™ and Birdie™ Compact

If the hand control fails, the jib can be lowered by using the circular switch for emergency lowering. This is located at the front of the control unit. The jib will be lowered as long as the button is pressed.

### Birdie™ and Birdie™ Compact



#### Jumbo Care Control Unit





### Manual emergency lowering Birdie™

In case of partial or total power failure, or if the battery runs down while using the hoist, **Birdie™** is equipped with a manual emergency lowering system located at the bottom of the motor. The weight is preset for 75 kg. If the patient's weight is more or less than 75 kg, it might be necessary to adjust the manual emergency lowering.



## Adjustment of the manual emergency lowering $\mathbf{Birdie^{TM}}$

If the lowering speed has to be adjusted according to the patient's weight, then the screw in the red release handle must be adjusted. Loosen to increase the speed and tighten to decrease the speed.

**Note:** Manual emergency lowering is only possible when a patient is sitting in the hoist.



**Note!** The mechanical emergency lowering system will only operate when there is a patient in the hoist. The mechanical emergency lowering system has to be adjusted according to the patient's weight.

### Jumbo Care Control Unit



Emergency stop
In case of emergency:
Press the red button for
emergency stop.
The emergency stop
can be reset by turning
the stop button



### 6. Accessories

It is compulsary to use original Invacare® spare parts which you can buy through any Invacare® dealer. For repair, please contact your local Invacare®dealer.

Sling: See the sling brochure

### 7. Maintenance and cleaning

At normal daily operation, a service check-up should take place every year, according to the maintenance chart. When performing annual or regular maintenance, all parts designed to carry load must be as a minimum tested with maximum load. All safety features must be checked according to EN ISO 10535: 2006 Annex B.

#### LOLER statement.

The UK Health and Safety Executive's Lifting Operations and Lifting Equipment Regulations 1998, require any equipment that is used in the workplace to lift a load be subject to safety inspection on a six monthly basis. Please refer to the HSE web site for guidance www.hse.gov.uk

### Jumbo care functions.

In add for a safe maintenance, the JUMBO Care offers five (5) main functions:

- 1) Service intervals
- 2) Service information on PC
- 3) Actuator life time
- 4) Resetting of service interval
- 5) Actuator exchange

(For more information, see technical Jumbo care user manual or ask your local Invacare dealer)

It is the responsibility of the person responsible for the equipment to ensure that LOLER regulations are adhered to

The hoist must be stored at normal room temperature. If it is stored in a damp, cold or wet environment then the motor and other mounting parts may be prone to corrosion.

- The hoist have been designed so that it requires a minimum amount of maintenance.
- It is recommended that the batteries are charged frequently, if possible every night, as it will extend the lifetime of the batteries and will ensure high performance.
- It is recommended that the hoist is cleaned after use.
- Please check that the spreader bar connections, control unit and motors are in good working order and not damaged in any way. If there is any damage to the hoist, refrain from using it, and contact your local Invacare®dealer before further use.

### Wear and damage of loading parts

It is necessary to maintain and check all parts that are exposed to static or dynamic strain, such as the sling, the spreader bar and the turning points, do not have fractures, are fragile, askew or damaged.

Frequent use of the hoist will cause the carabiner to ware under the contact points of the spreader bar (b) and the mast pin (a). Do not use the hoist if the thickness of the carabineer measures less than 6 mm at these points. (See maintenance chart page 15)

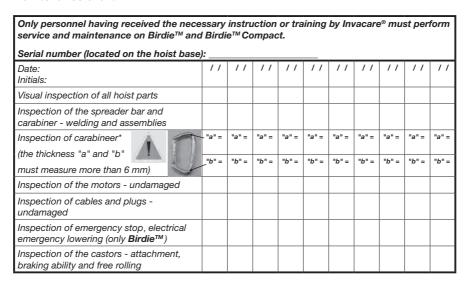
Damaged parts must be replaced before further use.

### Cleaning

- To prevent cross-infection, the hoists must be cleaned after use.
- The hoist must be wiped with a moist firmly wrung cloth with ordinary household disinfectants.
- Only use officially approved disinfection detergents.
- Dry the hoist carefully after cleaning.
- Never use acids, alkaline or solvents for cleaning the hoist.

Motors, control unit and mounting parts can be destroyed if the hoist is cleaned in any other way than stated above.

### Maintenance chart



Invacare® offers courses in service and maintenance of the hoist.

For all servicing and maintenance requirements, please contact your local Invacare®dealer.

### 8. Waste disposal

This product has been supplied from an environmentally aware manufacturer that complies with the Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/CE.

This product may contain substances that could be harmful to the environment if disposed of in places (landfills) that are not appropriate according to legislation.

The 'crossed out wheelie bin' symbol is placed on this product to encourage you to recycle wherever possible.

Please be environmentally responsible and recycle this product through your recycling facility at the end of it's life.

Battery:



X





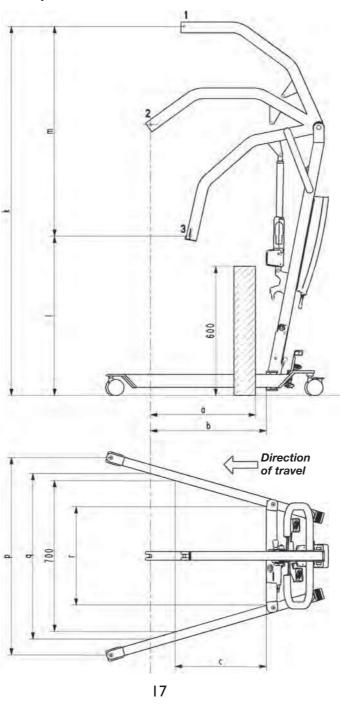
### 9. Trouble-shooting

Only personnel having received the necessary instruction or training by Invacare® must perform service and maintenance on *Birdie™* and *Birdie™Compact*.

Symptom	Possible cause	Remedy
The mast seems loose	The mast axis screw has become loose	Insert the locking pin into the mast axis screw, and tighten the screw
Castors are noisy	Dust or dirt in the castors	Clean the castors
Hinge between jib and mast is noisy during operation	Missing lubrication	Lubricate the hinge
The motor is not running	Hand control or motor is not connected	Insert the plugs fully
	No power on the battery	Charge or replace the battery
	The red emergency stop is activated	Turn the red button clockwise to deactivate
Motor noise, but no movement in the piston rod	Motor is damaged	Replace the motor
The piston rod only moves in and not out	Motor is damaged	Replace the motor
The control unit emits a beeping sound during lifting, and the jib motor stops ( <b>Birdie</b> ™ and <b>Birdie</b> ™ <b>Compact</b> ).	Max. load is exceeded	Reduce the load (and the hoist will function normally)

Contact your dealer if the above does not solve your problems. Lubricate with medically clean oil, e.g. Kemitura Kem Lub KEM-WO 50, order no. 813239.

### 10. Technical specifications



ĺ	0	14			1
	General specifikations		nd electric die™		nual Compact
100	Castor	Ø 75 mm	Ø 100 mm	Ø 75 mm	Ø 100 mm
1.5	Maximum lifting capacity	170	) kg	150	) kg
25,000	Lowest position (min. height of CSP**) <b>3</b> *	65,5 cm	67 cm	73 cm	74,5 cm
$\square \rightarrow$	Lifting area (height range)	46,5 - 168,5 cm	47,5 - 170 cm	51,5 - 158,5 cm	53 - 160 cm
700	Maximum height <b>k</b> * of CSP**	189 cm	190,5 cm	180 cm	181,5 cm
	Leg length	115 cm		100 cm	
The same of the sa	Minimum internal width 📝	58	ст	46	ст
	Total width (closed), external measure	65,5 cm	68 cm	53 cm	55 cm
-	Interal width <b>q</b> ' at maximum reach	91	cm	78	cm
	Total width (open) internal measure	104	cm	89	cm
$M \rightarrow$	Total width (open) centre <b>p</b> to centre of castor	108,	5 cm	93	cm
K 1 -	Turning radius	140	cm	107	cm
-	Weight, mast, incl. battery, excl. spreader bar	21	kg	17,5	5 kg
Â	Total weight incl. spreader bar	42	kg	36	kg
	Weight, leg section *	19	kg	16,	ī kg
	Height to upper edge of legs	10 cm	11,5 cm	10 cm	11,5 cm
	Min. free height	2 cm	3,5 cm	2 cm	3,5 cm
	Min. space for patient (to (motor) in top position	34	cm	30	cm
	Maximum reach at 60 cm a	1,.	cm	54,5	cm
	Maximum reach from base <b>b</b>	66,5	cm	54,5	cm
	Reach from base with legs spread to 70 cm	* 24	cm	41,5	i cm
	Hoisting range <b>m</b>	123,	5 cm		cm
	Voltage output			ax. 250 VA	
	Voltage supply	100 -240 V=== 50/60 Hz			
	Max. current input	Max. 2	100 mA	Max. 2	00 mA
	Operating temperature.			40° C	
	Air humidity	20%		C - not conder	nsing
	Sound pressure	<u> </u>		dB(A)	
Atmospheric pressure Protection class,		700 to 1060 hPa			
	control unit  Protection class,		IPX4		
	hand control  Protection class, motor	IPX4			
The same of	Insulation class	II - type B			
	Working ability	40 full lifts wi	10 full lifts without battery charge with batteries at 50% of full capacity		
W	Intermittens	10%, max. 2 minuttes/18 minuttes			
	Battery capacity		Ah	2,9	
	Manual emergency lowering	<del>                                     </del>	9S	N	
	Electric emergency lowering/ lifting	Yes	/No	Yes	/No
•					

All measurements are given including a 45 cm 2 point spreader bar, except dimensions marked with \*. Invacare® reserves the right to change the measurements without warning.

\*\*\* CSP: Central Suspension Point
1: Highest position, 2: Maximum reach position, 3: Lowest position

### 11. Symbols

Refer to user's manual:

The patient is not separated from the ground and the chassis:	∱
Direct current:	<del></del>
Alternating current	$\sim$
Double insulated:	
X kg max. load (SWL) = (Patient + sling + spreader bar). X = 150 kg <b>(Birdie™ Compact)</b> X = 170 kg <b>(Birdie™ )</b>	<u>^</u>
The product should be reused where possible:	<b>A</b>