







# **Contents**

١.	Foreword	3
2.	EU declaration of conformity	
3.	Type certificate	5
4.	Conditions of use	6
5.	Technical specifications	7
6. 6	Safety directions	
	.2 Handling	
7.	Operating principles	12
8.	Assembly	12
9.	Starting the platform	12
10.	Operating the platform	13
11.	Operation	15
12.	Maintenance	16
13.	How to pair transmitter and receiver	17
14.	Installation and handover	18
15.	Maintenance checklist	19
16.	Service log book	21
17.	Spare parts	22
18.	Disassembly	23
19.	Disposal	23
20.	Warranty	23



### I. Foreword

Congratulations on buying your new lifting platform.

Make sure that you read through this manual before using the lifting platform.

Setup and installation MUST be performed by a service engineer trained by Liftup, in order to ensure correct assembly. Improper installation may pose unintended hazards or risks.

The FlexStep lifting platform elegantly combines normal stairs and a wheelchair lift, offering wheelchair users and those with impaired mobility easy and stylish access between two levels.

The platform is simple to operate using operating panels mounted on the wall or via an elegant remote control.



# 2. EU declaration of conformity

### **EC** declaration of conformity

Directive 2006/42/CE

<b>Manufacturer:</b> Liftup
-----------------------------

Address: Hagensvej 21, DK-9530 Støvring

**Telephone:** +45 9686 3020

Hereby declares that:

Equipment: FlexStep

Combined staircase and lifting platform

**Year:** 2006

Is in compliance with the provisions of the EC Directive on machinery according to directive 2006/42/CE

At the assessment the following has been used:

ISO 9386- I: 2000 Power operated lifting platforms.

Is in compliance with the EMC Directive 2004/108/EC of 15. December 2004 concerning the approximation of the laws of the Member States on electromagnetic compatibility.

Director	Flemn	ning Eriksen
Title		Name
Lift	up A/S, Hagensvej 21, DK-953	0 Støvring
	Company	
01-12-2009	<u></u>	( h
Date		Signature



# 3. Type certificate

COPY OF THE CE-MARK WILL BE MOUNTED HERE



### 4. Conditions of use

The platform is exclusively for the use of wheelchair users and persons with impaired mobility.

The maximum load is 250 kg evenly spread over the platform and a maximum of 2 persons.

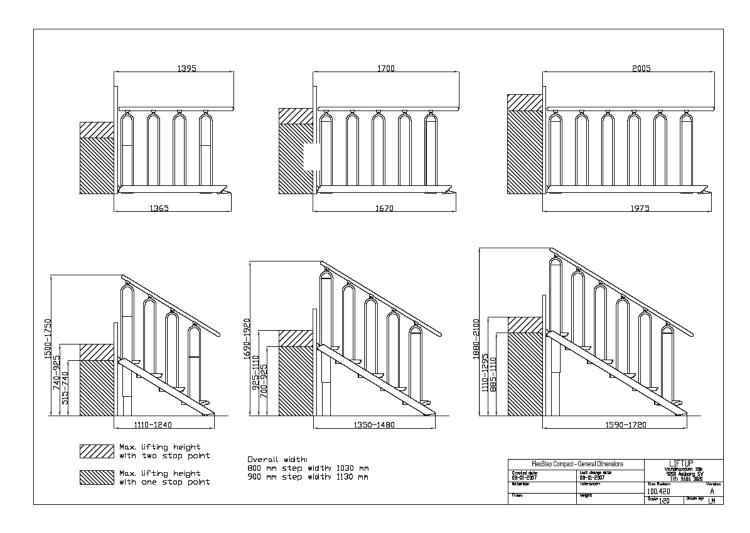
Read this user's manual in full before starting to use the platform.

The platform must NOT be used for transporting goods; do not load pallets with goods or other types of heavy loads on the platform.

The platform owner is obligated to maintain it according to the Maintenance Guide in section 12



# 5. Technical specifications



#### **Technical specifications:**

Power supply: 230V / 50 Hz / 10A. Max. load: 250 kg or 2 persons

Dimensions: W: 8/900 x L 1250-1865 mm.

Weight: I 20 kg approx. Noice: < 70 db.

Duty cycle: 2 min. / 18 min.





# 6. Safety directions

#### Important safety directions.

#### Installation and maintenance.

Do not attempt to install or maintain your FlexStep platform. These tasks MUST be performed by an authorized\* service engineer.

Do NOT remove the protective plates or safety plates as doing so may open your platform to causing unintended personal injury.

#### Unintentional movement of FlexStep.

If when using your FlexStep actions or movements occur which are not covered in this manual, stop the unit and request technical support.

If your FlexStep does not move with a level movement as a platform, calibrate it by running it down to floor level. If the problem persists, request technical assistance.

#### FlexStep movement.

Keep the area below FlexStep free of all objects or materials which may impede its downward movement. Otherwise, FlexStep cannot be moved down to the lower level and thus cannot fulfil its function as a lifting platform.

If an object/material prevents FlexStep moving in a downward direction, the platform will suspend its movement and issue an audible alarm. The object or material must be removed before the platform may be used again.

#### Avoiding personal injury.

In order to avoid personal injury, users may NOT use FlexStep when someone or something is at risk of injury through crushing, cutting, falling, tripping or the like. The user/operator shall strive to the greatest extent possible to ensure that FlexStep can move without risking injury. Be extra vigilant when small children and disabled persons are on or around the platform, since these groups cannot always be expected to be able to foresee the possible consequences of the platform's movements.

#### Overload of the platform.

In order to avoid damage to equipment due to overloading (max. 250 kg evenly spread), FlexStep is fitted with overload protection, which stops the platform and issues an audible alarm if overload occurs. In the event of overload, run the platform downward to exit.

#### Warning

Although the platform is fitted with various safety features, never operate it if persons or animals are close enough to be at risk of being crushed. Never let children play on or with the platform.

<sup>\*</sup> Has undergone product and service training by Liftup.



#### 6.1 Personal safety

FlexStep is fitted with various safety mechanisms to ensure that the user or other persons are not injured by using the platform.

#### **Squeeze protection:**

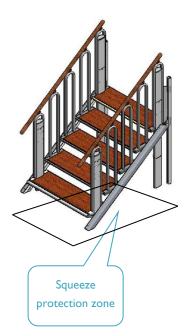
Pressure plates (squeeze protection) are fitted beneath the entire platform and these are activated if an object is compressed under it. When the squeeze protection is activated the platform stops and runs about 3-5 cm in reverse, while an audible alarm sounds at the same time.

If the squeeze protection is activated, release the push button.

Any objects under the platform must be removed before it can again be lowered to floor level. (If necessary, move the platform up a small distance so as to more easily remove objects under it).

NB! Be aware that in the case of outdoor installations, leaves, branches and snow can trigger the squeeze protection, and you should therefore regularly check whether there are objects

beneath the platform. For outdoor installations we thus recommend returning the lift to ground level after use, so as to prevent unwanted objects finding their way under the platform.



#### Avoiding personal injury.

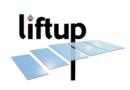
- FlexStep must NOT be switched from stairs to platform when persons or objects are on the stairs.
- In order to avoid personal injury, users may NOT use FlexStep when someone or something is at risk of injury through crushing, cutting, falling, tripping, or the like.
- It is important that the user/operator ensures that the platform's movement can be made without posing a risk to anyone or anything.
- Be extra vigilant when small children and disabled persons are on or around the platform/stairs, since these groups cannot always be expected to be able to foresee the possible consequences of the stairs'/platform's movements.

#### Infrared squeeze protection:

Infrared sensors are fitted between the steps in order to prevent crushing between them. If, when moving from stairs to platform, the IR beams are interrupted, FlexStep will stop moving and issue an audible alarm.



Infrared sensors prevent crushing between steps.



#### **Roll-off protection:**

When moving the platform up, the ramp will first pull up and lock before the platform begins to move. The ramp now acts as roll-off protection.

When the platform is returned to floor level, the ramp will automatically lower and function as a drive-on/off ramp.

If the platform is fitted with doors or a safety barrier at the upper level\*, these will close and lock in place before the platform begins to move.

These doors will always be closed and locked when the platform is off the ground level.



Ramp raised and



Ramp lowered

\* Additional equipment



### 6.2 Handling

The platform is normally supplied by your dealer, who will also perform its installation. Do not attempt to move the platform by hand as there is a risk of permanent personal injury. Move and handle the platform using the lifting equipment designed for this purpose.

Do not expose the platform to heavy bumps or jolts as this can damage its functionality.

Store the accompanying remote control\* in a dry place and do not expose it to heavy knocks (for example, by throwing it). Only clean using a firmly wrung cloth.

\* Additional equipment



# 7. Operating principles

The FlexStep platform is a so-called "dead man operated" lift, i.e. the push buttons are to be held down for the entire movement.

Platform operation is straightforward, and the user activates it using one of the push buttons on the wall or via the supplied remote control\*.

When the user is on the platform it is operated from the side panel, from which the user can choose to be transported to the upper or lower level respectively.

# 8. Assembly

Platform installation is undertaken by an authorized service engineer.

Do not attempt to move, disassemble or repair your FlexStep. These tasks MUST be performed by an authorized service engineer.

Improper assembly may increase the risk of user injury. Liftup is exempt from any liability if assembly and installation are not performed by a authorized service engineer.

For more information or assembly documentation, contact Liftup on +45 9686 3020, or via www.liftup.dk.

# 9. Starting the platform

The control unit of the platform must always be connected to a 230V power point and be powered on.

Under normal circumstances the platform remains in stand-by mode, i.e. it is ready for use as soon as one of the operating buttons is pressed.

If the emergency stop has been pushed, this must be deactivated before the platform can be operated (refer to section 10 on Operating the platform).

\* Additional equipment





### 10. Operating the platform

#### Everyday use.

Your FlexStep is operated via the two operating panels above and below it, by a joystick on the rails of the stairs/platform, or by means of the remote control\*. The remote control replaces the two button panels.







Form stairs



Form platform



\* Additional equipment

#### Operating FlexStep from the UPPER level.

In order to bring the stairs to a platform at the UPPER level, hold down the <u>1.6.1</u> button. The stairs will lift the ramp to form roll-off protection and lock it in the raised position (Fig. 1). The stairs will move to form a platform at the LOWER level, and then travel up to provide a platform at the UPPER level (Fig. 2). Carefully drive onto the platform (lock/brake the wheelchair), push the joystick down causing the platform to descend to the LOWER level. Carefully exit the platform. (Fig. 3)



Ramp raised and



Enter platform



Exit platform

#### Operating FlexStep from the LOWER level.

In order to bring the stairs to a platform at the LOWER level, hold down the button. The stairs will lift the ramp to form roll-off protection and lock it in the raised position (Fig. 1). The stairs will move into a platform at the LOWER level and the ramp lower into an exit ramp. (Fig. 4) Carefully drive onto the platform (lock/brake the wheelchair) (Fig. 5). Push the joystick up and the platform will ascend to the UPPER level after the ramp has risen to form roll-off protection. Carefully exit the platform (Fig. 6).









Ramp lowered

Enter platform

Exit platform

#### Operating FlexStep on the platform

Operating FlexStep as a lifting platform is done using the joystick fitted on the stair rails.

- To raise the platform, push and hold the joystick up until the platform stops and any doors/barriers are removed.
- To lower the platform, push and hold the joystick down until the platform stops and any doors/barriers are removed.

#### **Auto return**



By operating this \_\_\_\_\_\_ button, FlexStep can be returned to its standard position as stairs. If no buttons or IR sensors have been activated for around 60 seconds, FlexStep will automatically return to its standard position as stairs. (An audible alarm will sound during this process). This function can be disabled if the user does not wish the platform to automatically revert to

stair mode.

#### **Emergency stop**

If the platform makes an unintended or undesired movement, or if it must be stopped in order to avoid potential risks, press the EMERGENCY STOP button.

To reset the emergency stop, turn the button clockwise and the system is again ready for use.



EMERGENCY STOP



### 11. Operation

For normal operation, FlexStep must always be connected to a 230V power supply. It is very important that you do not disconnect or switch off the power because long-term power outage (I-2 weeks) can drain the battery, thus causing the system to stop working. Note that in the case of power failure an audible alarm will sound. For more information, refer to the section below on Battery Backup.

#### Battery Backup.

In the event of a 230V power failure or if the control unit is for some other reason not supplied with power, the system will automatically switch to backup mode. This means the system will continue to function as normal since it is being powered by the battery backup. Mains power

failure will be signalled by a beeping alarm sound. This alarm will cease as soon as mains supply is resumed. The system will now resume normal operation. If it is not possible to immediately re-establish the mains supply and you wish to cancel the alarm, press the emergency stop button. (Note that in such a case the system will need to be calibrated – see below).

#### **IMPORTANT!**

If both the 230V supply and the emergency stop have been disconnected at the same time, the system automatically switches to a safety mode and must then be calibrated. (See below).

#### Calibration after emergency stop/power failure

If the emergency stop has been activated and the power supply has been interrupted, or if the system registers other kinds of irregularities, it will require calibration. The platform the goes into a special safety mode which only permits it to move downwards at very low speed.

#### Safe mode

In special conditions where the FlexStep is out of synchronization, the FlexStep will go into a safe mode where the FlexStep will stop after around a 10 cm movement. Then press the emergency stop and release it, after which, the down button is again activated. Continue this procedure until the platform is completely down and the ramp lowered. Once the ramp is down and all 4 legs are on the floor the system is calibrated and will now function as normal.

#### **IMPORTANT!**



If you notice the platform not moving as expected, or stopping after only a few centimetres, there may be technical issues which need to be resolved by qualified engineers. In such a case, contact your dealer.



### 12. Maintenance

Only perform general cleaning using a firmly wrung cloth. Do NOT use high-pressure hoses or hose down the platform directly.

Any oiled wooden surfaces should be maintained regularly (approx. every 3 months) with wood oil in order to ensure long service life.

Regularly check under the platform for leaves, branches or other unwanted objects, and remove them to ensure its full and free movement.

Mechanical maintenance of the platform should normally only be undertaken in connection with the bi-annual service inspection and be performed by a authorized service engineer.

If any unexpected faults or abnormal sounds occur, contact your dealer at once to have them remedied.



### Remote control (accessory)

Two batteries are installed in the remote control. To ensure reliable function, replace these every six months. To replace the batteries perform the following steps:

- I. Undo the screw on the rear panel.
- 2. Remove the rear panel.
- 3. Undo the screw holding the batteries.
- 4. Remove the old batteries and insert the new ones.
- 5. Replace the rear panel and test the device.





If the power has been disconnected from the handset or the receiver for a long period of time, it may be necessary to calibrate the system (pair the two units). Proceed as follows:



# 13. How to pair transmitter and receiver

Used only if there is more than one remote-controlled lift installed within the operational area if the remote control.

- 1. Check that the cables in the receiver are correctly attached to the black control box.
  - a. Lower level
  - b. Upper level
- 2. Ensure there is power to the system and it is switched on.
- 3. Press the UP (↑) and DOWN (↓) buttons on the handset at the same time and hold them down for approx. 5 seconds. Until the control diode on the handset begins to flash slowly. The handset is now in installation mode for 2 minutes.
- 4. Within the 2 mins., disconnect and reconnect the power to the lift required to be connected with the handset. Do this by pressing in the red emergency stop button on the lift and releasing it again by turning the button.
- 5. When the control diode on the handset stops flashing, it is connected with the lift.
- 6. Test the system so as to ensure the pairing is undertaken correctly; if not, repeat 1-5 above.



To reset a handset so it is no longer associated with a particular lift, do as follows:

- 1. Press the UP (↑) and DOWN (↓) buttons on the handset at the same time and hold them down for approx. 5 seconds. Until the control diode on the handset begins to flash slowly. The handset is now in installation mode for 2 minutes.
- 2. Perform the following within the 2 minutes:

Press: UP ( $\uparrow$ ), UP ( $\uparrow$ ), DOWN ( $\downarrow$ ), DOWN ( $\downarrow$ ), UP ( $\uparrow$ ), DOWN ( $\downarrow$ ), UP ( $\uparrow$ ), DOWN ( $\downarrow$ )

3. When the control diode starts to flash quickly, the handset is no longer associated with a particular lift.





# 14. Installation and handover

The form below shall be filled out upon installation.

Sampl	le:
-------	-----

	phone No.: nt acceptance of installation:		Serial No.: Installation date: Installed by:
Che	cklist:		90
lo.	Description	Checke	d Any comments
1	Testing together with the client		
2	Emergency stop		
3	Safety mode		
4	Review of the manual		
5	Show anti-crushing safety feature, including alarm		
6	Overload.		
7	Ramp/gate function (switch)		
8	230V to the controls (must not be disconnected)		
9	Any change of the battery in the remote control.		
0	Any pairing of the remote control		
11			



### 15. Maintenance checklist

In addition to the general maintenance described in section 12, we recommend as the manufacturer, that routine inspections are undertaken every 6 months by an authorized service technician. The dealer you have bought the product from will offer this service, but if you wish to use another service provider, the owner of the lift is responsible for ensuring that the chosen service technician is qualified in the product in question.

For safety reasons it is very important that these inspections are maintained, since lacking or improperly performed inspections may result in personal injury.

**IMPORTANT**. Before inspecting the lift (or under it), the lift MUST be dismounted from the controls in order to secure against accidental operation. The service technician is responsible for performing this disassembly before starting servicing.

It is not enough to disconnect the 230V supply, as the system is fitted with a battery backup.

A check form like the one below shall be filled in upon each inspection. The form shall be filed by the company which has entered into the service agreement.

Sample:



# Service Report - FlexStep



Service visit pai	d 🗀		Owner/Municipality			
for by:	User/installation address	Client/Contractor				
Name/compan	у Т		7,5,5,5,5,5	To the second		
Address			- 1			
Postcode						
Telephone						
Contact person	n					
Telephone						
EAN/GLN			50			
Product		Service level				
Product type n	9	Endnu ingen affale	170.000 (100.000 a)			
Serial no		10000	-1 -5-			
Installation dat	e	Agreed date and time				
Lastservice dat	te	Agreed about the visit				
	(8)	66 90		990		
Other commen	চ:					
Checklist  D Tighten M10 screws in steps		□ Test2×12V	Test 2×12V batteries (min. 5 AH)			
Tighten screws in rail guides		<ul> <li>Check audible alarm</li> </ul>				
	en ramp suspension	Audible check of ramp motor				
40.19, 42.40.15.4	en Z-profiles	Pressure plates / Safety pans				
□ Oper	ating units	☐ Check friction on racop				
•	gency stop contact	<ul><li>User manua</li></ul>	User manual is available near the lift			
□ Load		□ Check verti	Check vertical barrier			
75.00 St. VS.	ole check of actuators	<ul> <li>Door function</li> </ul>	Door functionality.			
	-check of actuators	□ Report in cu	Report in customer's service log book			
O IR sa	fety.	Rivets in actuators				
Spare parts instal	200.40	-100	_			
	ty.   Description		Price per pce.	Price		
100455	Actuator cable		644	1,00000		
101111	TZV batteries			+1<		
- 8			H	8		
-	Senicelinspection		-	5		

Doc. Version: 20 (30307

Service engineer hours

Liftup A/S | Hagensvej 21| DK-9530 Stavring | Denmark | Tr. +45.96.86.30.20 | Mr. mail@diftup.dk | www.liftup.dk

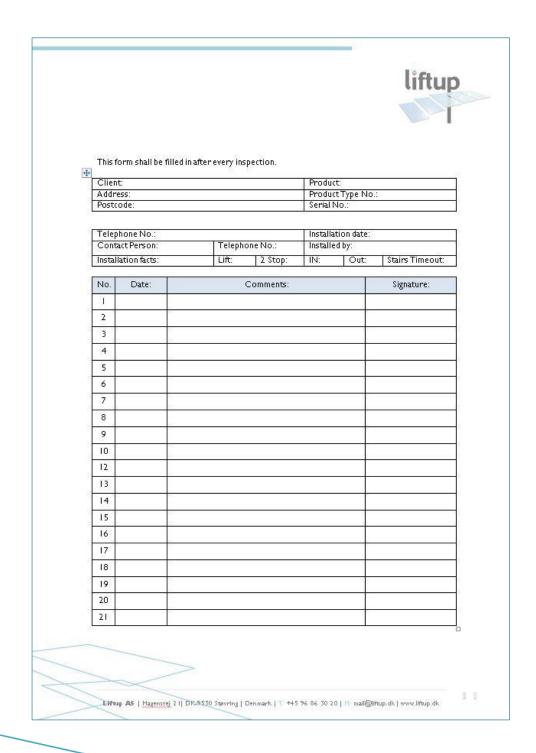




# 16. Service log book

This form (like the one below) shall be filled in after each inspection. The log book shall be kept together with the lift.

Sample





# 17. Spare parts

Original spare parts shall always be used. Replacement of parts may only be done by a qualified service technician.

If other parts are used than those prescribed, the warranty is voided, and Liftup at the same time renounces any liability for product safety.

_			
Part no.	Description		
101175	Spare parts bundle - dealer		
100255	Mounting kit for steps		
100298	Ramp_lock suspension - Compact		
100328	Plate for Lifting Column		
100336	DC motor for Ramp - Compact		
100338	Micro Switch - Safety system - V4L IP67		
100339	Emergency Stop Button		
100360	IR Safety termination board		
100361	Mainboard - CP & EL		
100363	Programming cable incl. software – Compact/EasyLift		
100409	Micromatch Cable for IR-print		
100410	SUB15 M/F extension cable		
100413	Spring for ramp lock.		
100418	Joystick w/ Rubber – 30 mm		
100419	Actuator - M/F extension cable		
100425	SUB15-7/7 Spiral Cable		
100426	DC Motor for Safety Barrier		
100429	Pushbutton - Lift		
100430	Pushbutton - Stairs		
100433	Micromatch 6-pin connector		
100455	Cable for DL4		
100487	DL4 for Compact, collected + extended		
100582	Actuator internal fittings (DB4)		
101131	Actuator sleeve valves, set		
101157	Cable with 4-pole DIN plug, 10m		



# 18. Disassembly

In order to ensure correct disassembly for any reuse in another installation, we recommend employing a authorized service engineer. Contact your dealer for disassembly assistance.

Note that there is a risk of overturning when FlexStep is detached from the building.

### 19. Disposal

It is the owner's responsibility to dispose of the product in accordance with the regulations applicable at the time.

Note, in particular, that the batteries in the control unit must be disposed of separately.

If necessary, ask your dealer for disposal assistance.

# 20. Warranty

The warranty is valid in accordance with the regulations governing warranties at the time in question. Refer to the terms of sale and delivery for further information.

The warranty is only valid if the prescribed service inspections are carried out. Should the customer decide to opt out of these inspections, Liftup is no longer liable for product safety. It is then the responsibility of the customer to ensure that the platform at all times complies with the applicable safety regulations.

We wish you much pleasure and good service from your new FlexStep!

Best wishes, Liftup