This is a translation of the original German operating instructions

The operation of the stair lift Konstanz

Contents **Page**

! Important !

Please read the operator manual before using the lift.
Make certain that every user of the lift has read and understood the operator manual.
The manufacturer assumes no liability for errors in the operator manual.

EU Declaration of Conformity

The manufacturer

LIPPE Lift GmbH
Weststrasse 48, 32657 Lemgo,

hereby declares on its sole responsibility that the following product

Inclined stair lift / platform lift / type Konstanz

Serial number:

conforms to all relevant harmonising legal regulations of the following European Union product directives:

2006/42/EC Machinery Directive
2014/53/EU Radio Equipment Directive

Harmonised standards and technical specifications:

EN 81-40 (2009)	EN ISO 12100 (2010)
EN ISO 13850 (2007)	EN 60204-1 (2009)

Specific details according to the Machinery Directive 2006/42/EC:
The product was brought onto the market in accordance with Article 12 (3) b) of the Machinery Directive:
the machine falls under Annex IV of the Machinery Directive.
EU type testing according to Annex IX and internal production checking according to Annex VIII 3)
The EU type testing was carried out by TÜV AUSTRIA SERVICES GMBH, Deutschstrasse 10, 1230 Vienna, NB 0408 and the following EU type testing certificate was issued: TÜV-A-MHF/MG18-00002
Specific details according to the Radio Equipment Directive 2014/53/EU:
The product was brought onto the market in accordance with Article 17 (2) a) of the Radio Equipment Directive.

Responsible for the documentation: LIPPE Lift GmbH (Documentation Dept.)
Weststrasse 48, D-32657 Lemgo

Lemgo, 12.01.2018

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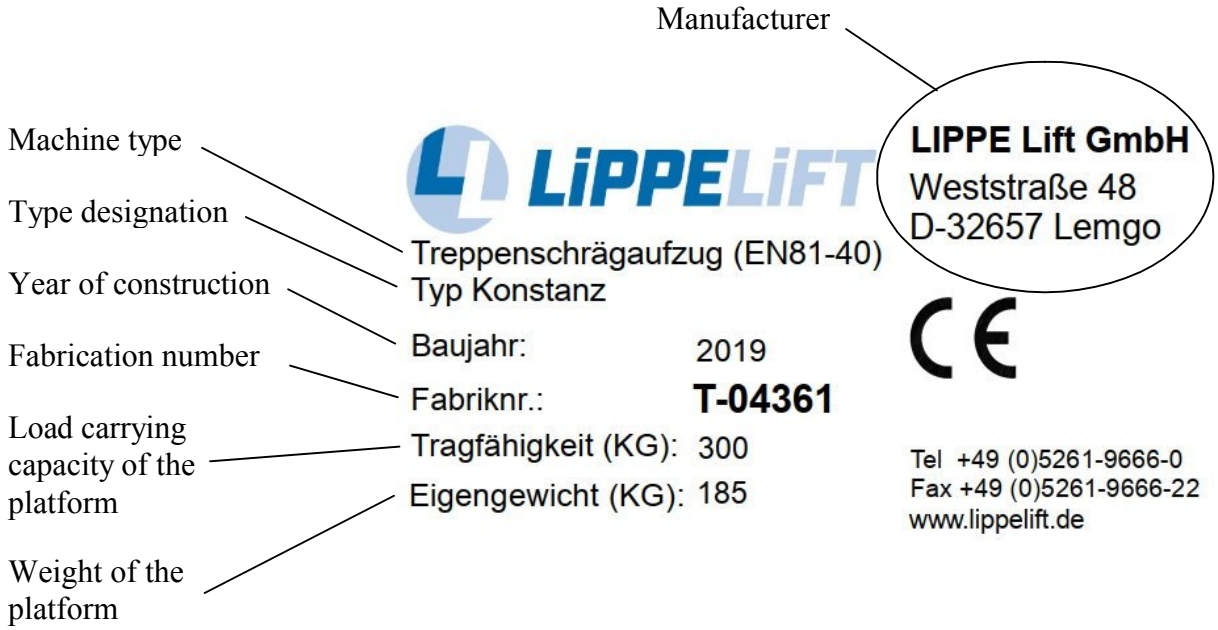
F.-W. Mueller (Managing Director)

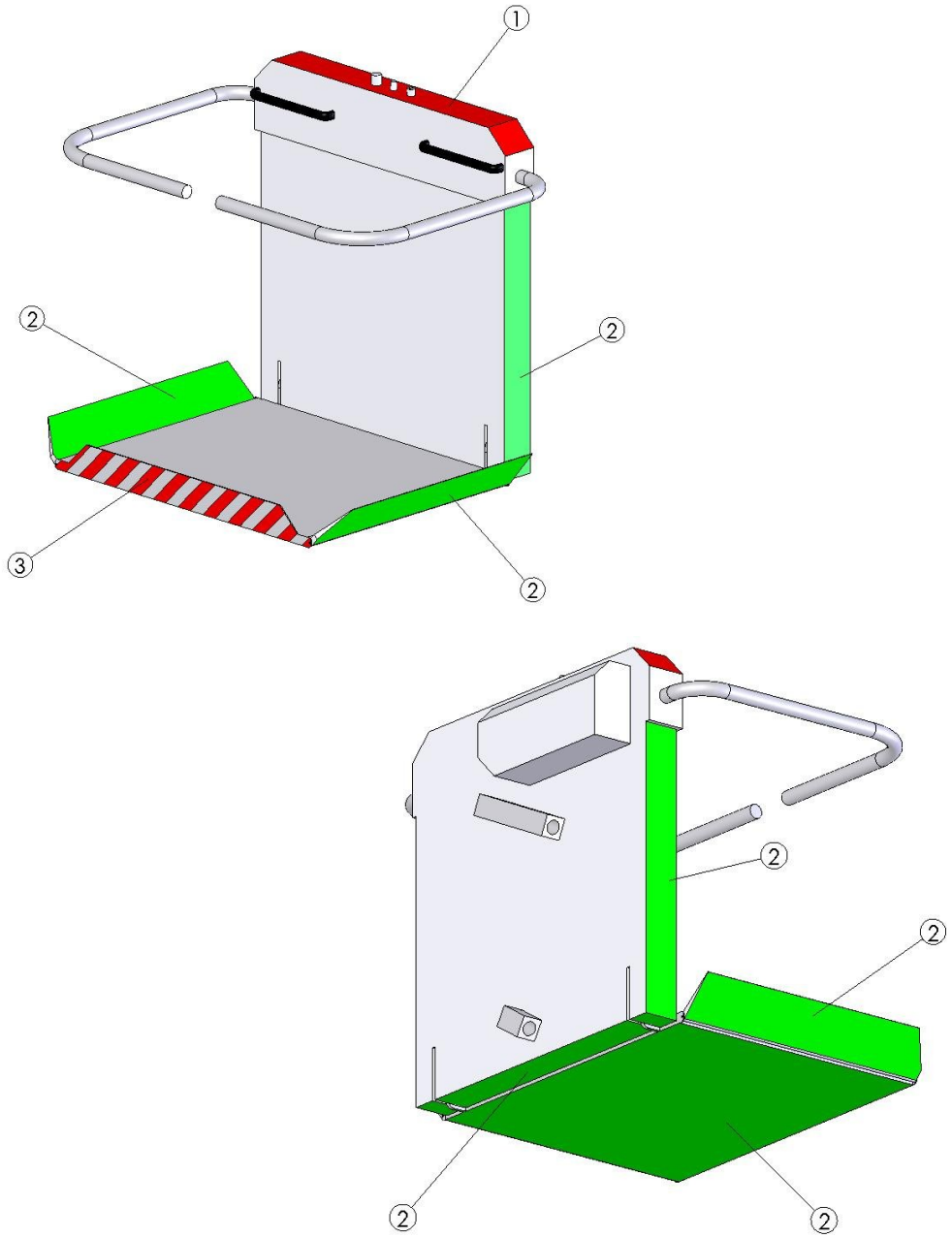
1. General

The nameplate reflects the most important information about the platform lift.



Field for the input of the importer/specialized retailer

The platform lift Konstanz is equipped with many sensitive surfaces. Here, an overview:



1 = Lies in the safety circuit (when activated, no further driving is possible)
2 = Direction-oriented switch-off (it can be driven in the opposite direction)
3 = Lies in the safety circuit (when activated, no further driving is possible)

If a direction-related sensitive surface (Pos.2 / green) is activated, the lift stops and an acoustic signal will be activated. After two seconds the platform drives, without any command, for the length of 1,5 seconds in the other direction and stops then. Only now the acoustic signal stops. The “release-travel” can only be stopped by activating another sensitive surface, activating a safety switch or with the emergency stop.
The first driving command after the “release-travel” has to be in the opposite direction as the last command.

1.1 Technical data:

Allowable load carrying capacity:	max. 300 Kg
Continuous audio pressure level:	< 70 dB (A)
Vibrations:	< 0.5 m/s² (Measurement uncertainty ± 3%)
Speed:	ca. 0.1 m/s
Platform voltage:	24VDC
Loading device voltage:	230VAC (55W)

1.2 Conditions of the surroundings:

Temperature range: -20°C to +60°C
Rel. humidity: max. 100%

1.3 Test obligations

Whether the platform lift Konstanz is subject to an obligatory test depends on the respective national regulations and lies in the responsibility of the operator. These must absolutely be checked and maintained. In Germany a test obligation applies for systems with a conveyance height $\geq 3m$.
In any case, evidence must be provided and documented before the initial usage in accordance with EN81-40.
The platform lift is subject to at least annual maintenance in accordance with the maintenance manual. We recommend concluding a maintenance agreement with your specialized company.

2. Intended purpose

The platform lift is intended for the transport of wheel chair occupants or persons with restricted mobility.
The platform travels between specified access points on a firmly installed rail, which is designed straightly. The platform is guided by the rail over a stairway or an accessible, inclined surface.
Only instructed persons may operate the system..

2.1 Following conveyer profiles are planned:

1. Transport of a person sitting in a wheel chair
2. Transport of a person sitting on a folding chair
3. Transport of a person standing on the platform insofar as sufficient head clearance exists, the person has sufficient standing stability and can securely hold onto the hand rails (separate document set required, upon request).
4. Transport of an additional person, insofar as there is sufficient space on the platform and the allowable load carrying capacity is not exceeded.

A usage profile of 10 start-ups per hour is planned (for travel distances of at least 15m per start-up). In the case of longer travel routes correspondingly (linear) fewer start-ups.

The platform lift Konstanz may only be operated if a hazard due to falling objects (e.g. flower pot) is excluded.

2.2 An improper usage must be excluded e.g.:

- Exclusive usage for loads (if in rare cases loads such as groceries or beverage crates are transported, stability must be ensured and the load carrying capacity not exceeded.
- Loads which protrude beyond the open floor may generally not be transported (e.g. large pieces of furniture).
- The platform lift Konstanz is not a toy (children)
- Operation in explosive atmospheres

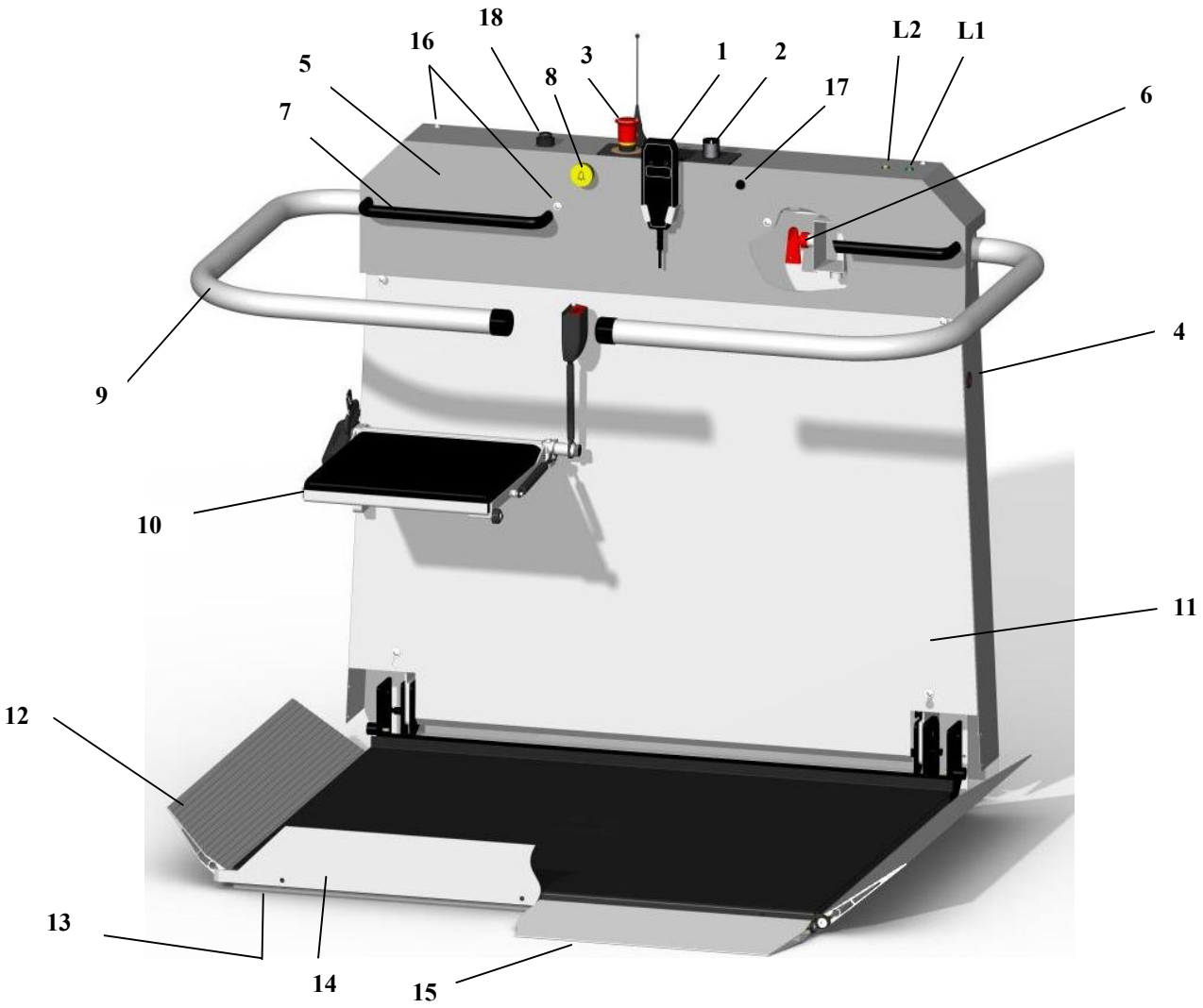
2.3 User qualification

The user of the platform lift must possess unrestricted mental faculties. Users with serious visual restriction may only be transported with an assistant, whereby the assistant gives the driving commands. Furthermore, the user must have read and understood the operator manual.

2.4 Production description

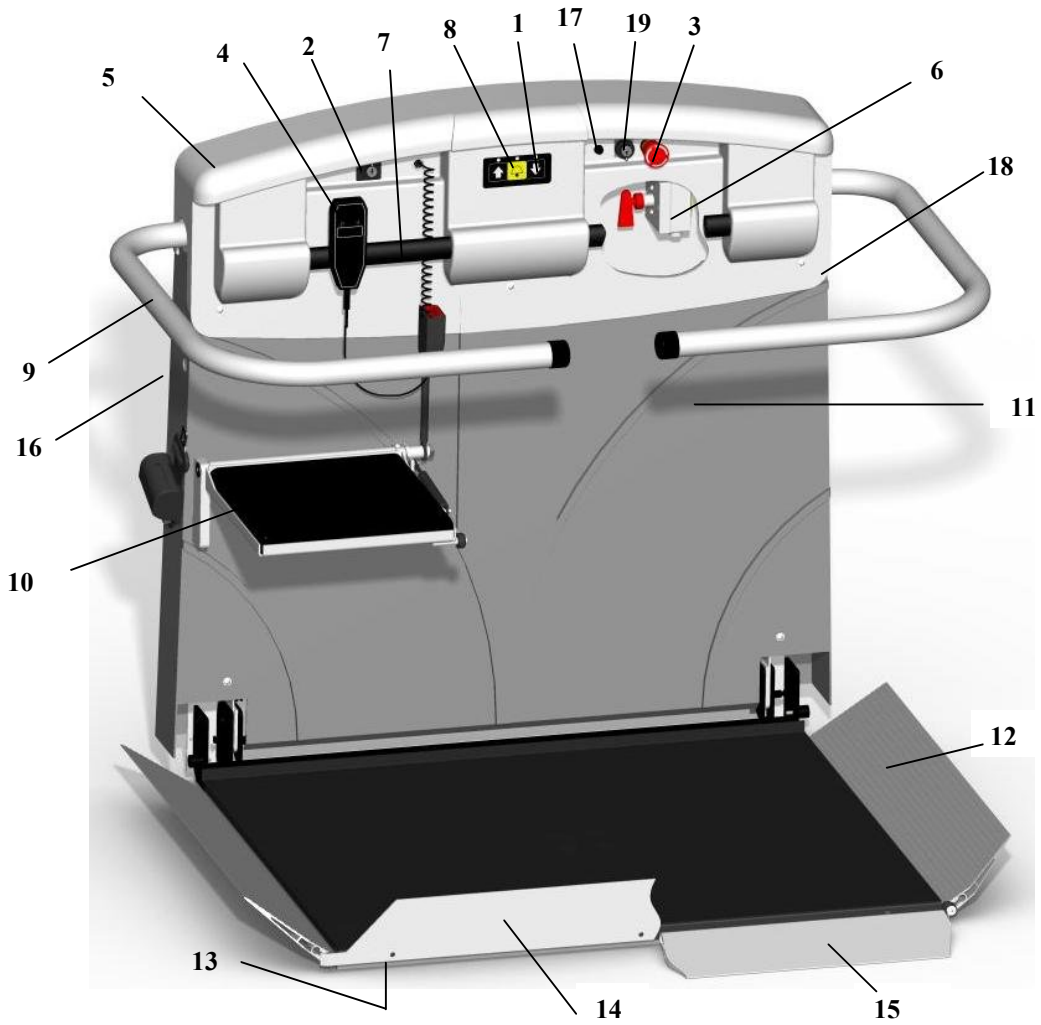
Our products combine in a suitable manner the requirements of overcoming the stairs with the outstanding integration with one's usual environment. On the one hand, the upper track pipe can be used as a hand rail, on the other hand the platform and track are painted to your desired color from an extensive RAL color pallet. The track does not need to be lubricated, whereby undesired contamination is excluded.
The allowable load carrying capacity is 300 Kg (measuring point for this is the middle of the platform floor).
The continuous sound pressure level is below 70 dB (A).
We recommend concluding a maintenance agreement. This guarantees by means of routine maintenance the technically optimal condition of your stair lift Konstanz. The maintenance interval is at least annually.

Platform lift with metal cover/front paneling



Pos.	Designation
1	Control unit
2	Key switch
3	Emergency stop button
4	Plug seal
5	Platform cover
6	*Main switch (located inside)*
7	Holding bracket
8	Emergency call
9	Left safety gates
10	Folding seat (Optional)
11	Cover for motor / controls
12	Right ascension flap
13	Contact floor
14	Safety bar
15	Side ascension flap (Alternative to item 14)
16	Screw for hood, left side
17	Fuse for the charging current
18	Key switch emergency operation (option)
L1	Lamp main switch ON
L2	Lamp overload carrying capacity

Platform lift with plastic cover / front paneling



Pos.	Designation
1	Control unit
2	Key switch
3	Emergency stop button
4	Control unit on the spiral cable (Option)
5	Platform cover
6	*Main switch (located inside)*
7	Holding rod
8	Emergency call
9	Left safety gates
10	Folding seat (optionally available with seatbelt)
11	Cover for motor / controls
12	Right ascension flap
13	Contact floor
14	Safety bar
15	Side ascension flap (Alternative to item 14
16	Plug seal
17	Fuse for the charging current
18	Screw for hood, right side
19	Key switch emergency operation (option)

3. Safety and special hints

! Caution ! Although your lift conforms to the latest safety directives, absolutely observe the following safety hints:

Commission the lift only after reading the operator manual and comply with the operating instructions.

Never exceed the allowable load carrying capacity.
(Residual hazard: breakage/failure of the breaks)

Only operate the lift when sitting (see conveyance profile for exceptions).

Do not use the lift in case of fire.

Do not bring any loose or hanging pieces of clothing into the area of the track and platform when the lift is moving.
(Residual hazard: hanging from loose clothing, etc.)

Fold the lift together when not in use.
(Residual hazard: risk of tripping)

Never place your hands near the rails when the lift is moving.
(Residual hazard: risk of crushing)

Always face the track in the travel direction during travel.
(Residual hazard: risk of crushing)

Do not remove, separate, deform or forcefully operate and lift parts, paneling parts or operator elements.

Do not operate the gates with force, either during travel or when folding up or down.
(Residual hazard: falling from the platform)

Stop travel command immediately if obstacles or objects are found in or on the track or platform or travel area.
(Residual hazard: risk of crushing)

Do not remove signs belonging to the lift.

Have repairs performed exclusively by technical specialists.

Do not allow body parts, wheel chair parts or loads to protrude beyond the platform floor.

Do not make any unnecessary motions on the platform such as teetering or swinging.
(Residual hazard: falling from the platform)

For inside and outside systems, a short-term or permanent flooding of the lift is prohibited.

Clean dirt on the lift with somewhat polish and a damp cloth, not with water spray.

Load carrying equipment and track must be sufficiently illuminated either with sunlight or electrically. The electric lighting must be independent of timers. At least 50 Lux at the entry and exit points or corresponding to the national employee protection directives.

4.1 The main switch

The main switch (red key) is located within the platform, behind the covering (*S.7.8/item 6*). Counterclockwise rotation allows the key to be removed and thus the power supply interrupted. (Opening of the covering see 4.7.2 or 4.7.3). The main switch should be operated by technical personnel.

4.2 Total discharge protection and charging

The platform lift Konstanz is equipped with automatic charging devices. The charging occurs automatically when the platform lift drives to a charging station. The batteries require no maintenance.

All platform lifts Konstanz are equipped with an acoustical total discharge protection. This acoutistical signal device should protect the batteries against total discharge.

If the battery voltage falls below 22 V, a beeping sound occurs in approx. 5-sec. intervals. In this case you should drive immediately to the nearest, if possible the lower charging station and charge the lift for several hours (this occurs automatically at the charging site). The beeping sound ceases after proper charging. The sound can be stopped by pressing the emergency-off switch. This has no influence on the loading process.

4.3 Control of the loading

The platform lift Konstanz is equipped with an overloading protection (acoustically and optically). For the metal cover, the orange lamp is extinguished on the cover. (*S.7/item. L2*) and for the plastic cover, the background lighting is extinguished.(*S.8/Pos.1*). In the case of overloading an additional continuous tone is transmitted by the internal beeper. As a basis, the entire loading process takes place in the middle of the platform floor. If the overloading protection reacts, reduce the weight. Possibly positioning closer to the direction of the track is sufficient.

4.4 **Battery charger** (indicator lamps)

The indicator lamps on the battery charger indicate the respective condition of the battery charger. Distinction must be made between different versions of the battery charger.

The meaning of the various colours or indicator lamps is shown on the battery chargers. The installer will explain this to you in detail once again during the instruction.

Note: If the Lift, outside of the stopping point, is not charged 30 seconds after the last motor motion, an acoustical signal sounds.

4.5 **Retrieving and sending of the platform** (standard design)

Make certain before every trip that the acoustical and if present, the visual (optional) warning signals are functioning. The platform lift Konstanz can be retrieved from every stopping point or sent to another stopping point. For this, the key switch at the corresponding stopping point should be inserted and turned in the corresponding direction and held firmly in this position.
The platform lift does not respond immediately, but rather after a delay of around 2 seconds.

Comment: The lift travels from the external control points only when folded together, i.e. the floor of the platform must be folded up and the safety gates must be folded down.

Note: An LED is attached to the transmitter for the retrieving and sending of the chair lift.

GREEN: Batteries are in order
ORANGE: Battery power is decreasing, replace batteries when convenient
RED: Battery power is very weak, replace batteries immediately

Retrieving and sending of the platform lift (Special design 1) [using the external control device, only with key switch with 3 settings (S.7.8 item 2) for travel with opened platform via the external control device]. This option must be activated by a technical specialist within the control system. It must be ensured that no third person can land/spring onto the travel route. **Condition: Travel area is 100% visible !!!!**
The key switch (S.7.8 item 2) must be set to position –II- otherwise as in 4.5.

Retrieving and sending of the platform lift (Special design 2) [using the internal control, only for key switch with 3 settings (S.7.8 item 2)]. This option must be activated within the control system by a technical specialist.
Using the internal controls, the platform can be driven into the folded-down position. For this, the key switch ((S.7.8 item 2) must be set to position II. Now the platform lift can be driven using the internal controls (S.7.8 item 1).
In the case of more than two stopping points: The platform lift will stop automatically at each intermediate stopping point and possible fold out, in the case of an automatic platform. If this is not desired, then a new travel command should be given and the platform lift drives on.

4.5.1 The automatic platform

With the automatic platform, the floor folds up or down electrically as well as the safety gates fold up and down electrically. This occurs by means of an UP or DOWN command from (*see also item 4.5*), or via the internal controls for special design 2. The command must be held down (so-called inching operation) until the folding process is ended.

If a malfunction is present during the folding process, then the platform must be folded together or unfolded manually (*see item 4.5.2*) and customer service must be informed.

4.5.2 The manual platform

The folding process on a step may only be carried out by an assistant.

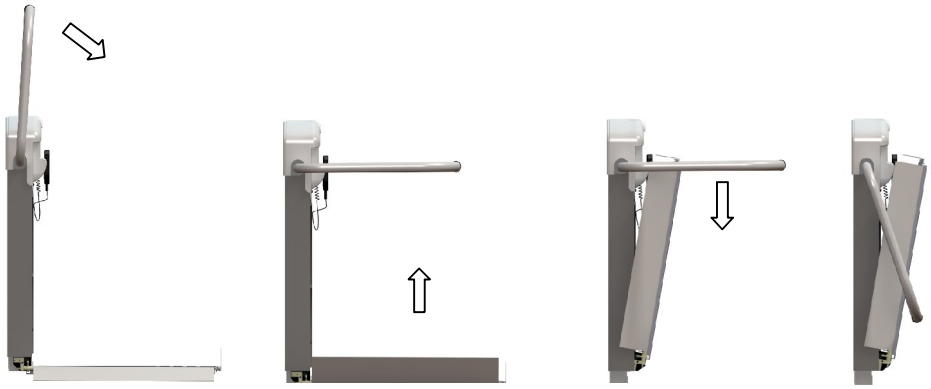
In order to fold down the platform manually, one should proceed as follows):

a) Bring the safety gates into a horizontal position.

b) Fold up the platform floors.

c) Fold the safety gates downwards, against the platform floor.

The respective gate on the lower floor is accordingly designed longer, in order to enable safe operation.



In order to unfold the platform again, one should proceed in reverse order and in conclusion fold up the safety gate of the desired access point to a completely upright (vertical) position.

4.6 **Travel with the platform lift** (standard design)

Make certain before every trip that the acoustical and if present, the visual (option) warning signals are functioning. The following control elements are located on the platform:

a) Key switch	Function -I- and -0-	(*S.7.8/item.2*)
b) Control part	Function UP and DOWN	(*S.7.8/item1*)
c) Push button	EMERGENCY-OFF (red button)	(*S.7.8/item.*3)

⇒After inspecting or accessing the platform, insert the key and turn to position -1-.

- **!** In the case of the *automatic* platform the safety gates close electrically if the pivoted lever or button is pressed and held in the travel direction. The platform lift begins moving after the gates are closed.
- **!** In the case of a *manual* platform **first** close the safety gates manually (horizontal position), then press and hold the pivoted lever or button in the desired travel direction.

⇒Upon reaching the target stopping point:

- **!** The platform lift stops automatically (the respective position is set during assembly).
- **!** For the automatic platform, hold down the pivoted lever or the button until the safety gates have opened.
- **!** For the manual platform, release the pivoted lever or button and open the safety gates upward by hand.

Travel with the platform lift (Special design 1) [using the external control device, with key switch with 3 settings (S.7.8 item 2) for travel with opened platform via the external control device]. This option must be activated by a technical specialist within the control system. It must be ensured that no third person can land/spring in the travel route. **Condition: Travel area is 100% visible !!!!**

The key switch (S.7.8 item 2) should be set to position -II-, otherwise as described in the standard design, with the difference that here only the external control device is used.

Travel with the platform lift (special design 2)

The key switch (S.7.8 item 2) should be set to -I-, otherwise as described in the standard design.

4.7 **What is to be done in the event of an unexpected downtime such as a power failure?**

We recommend installing a functional cell phone for contacting rescue workers.

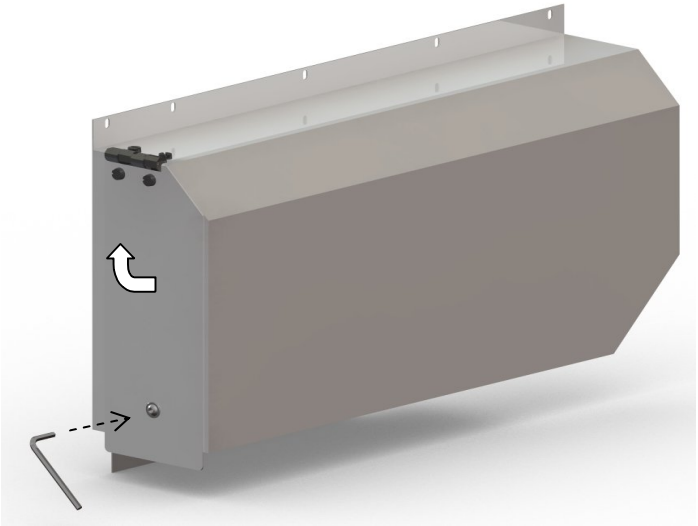
4.7.1 Manual operation / operating with hand wheel

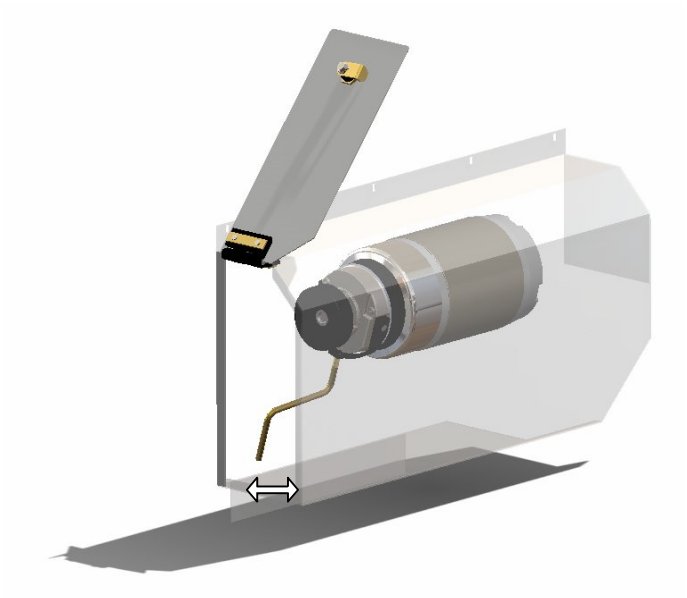
The stair lift Konstanz can also be operated manually. Manual operation should be carried out by technical specialists! Here, one should proceed as follows:

a) Press the EMERGENCY-OFF button on the platform. (*S.7.8/Item3*.)
b) The screwed connections on the motor cover should be loosened with an Allen wrench (delivered in an envelope).
c) The motor cover should be folded up(*see image below*).
d) The brake ventilation lever should be pressed forward or backwards and simultaneously the hand wheel must be rotated on the shaft end of the motor (*image below*).

In the process, the lower stopping point should always be driven up to (less force expenditure when turning the hand wheel). The respective rotational direction should be directly specified on the hand wheel.

Note: In case the cause of the downtime is not clear, one should assume, that the safety catch was triggered and its safety switch has led to the deactivation of the lift. **The safety catch may only be reset by technical personnel.** In this case, one should proceed as described above in a) to d), however the hand wheel must first be turned to UP (until the lift has moved approx. 5 cm. on the track), then the hand wheel can be turned in the direction DOWN.



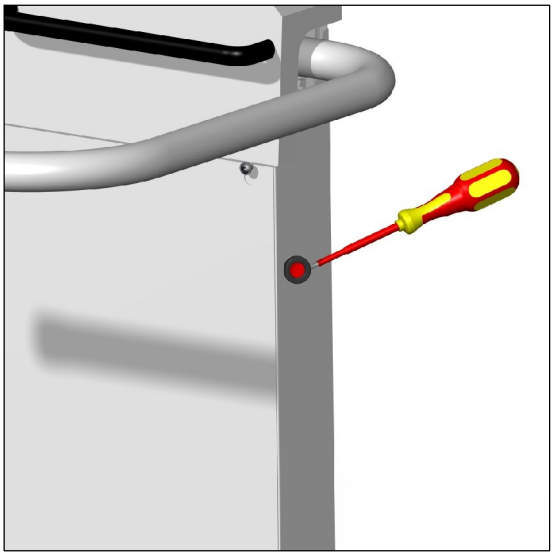


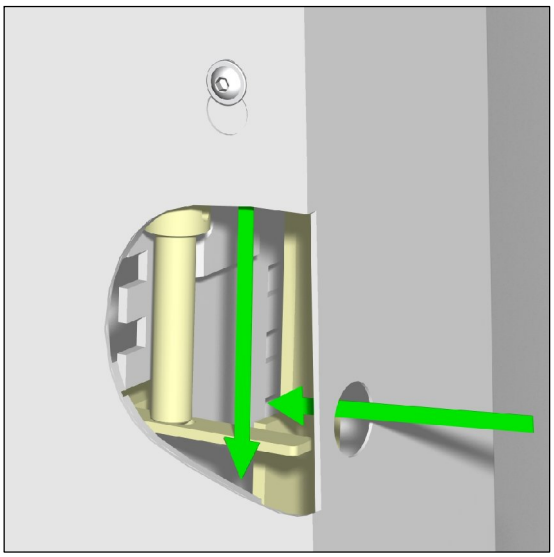
4.7.2 Evacuation / only by technical personnel

Proceed as follows in order to help the operator out of the lift:

- Press the EMERGENCY STOP button (*p.7, item 3*) on the platform.
- Remove the plug seal (for the emergency unlocking) on the front cladding on the uphill side using a screwdriver or similar.
- Press the lever shown in the picture (below right) downwards using a suitable tool.
- The operator can now be helped out at the uphill side.

The platform must be folded up by hand so that the lift does not block the staircase (*see 4.5.2*).





4.7.3 **Electrical emergency operation** (optional feature)

To activate the electrical emergency operation you need the second, red-marked key. Insert the key into the cylinder provided (marked with ) and turn the key.

Here, too, it is compulsory to hold the key the entire time in the activated position.
On activation the lift drives downwards at a much slower speed (only downwards). During this journey all switches, safety contacts or switching surfaces are disabled, therefore particular attention must be paid to the environment. Since the switches for the stopping point position are also disabled, this position must be approached somewhat carefully, because the barrier only opens within a certain range. If you drive beyond this range the barrier is locked again. The platform may be damaged if you drive past the lower stopping point.
It is best to stop about 10 cm before the stopping point and then to drive section by section (2 – 3 cm) in the downward direction. After each section, try to push the barrier upwards on the side to which you wish to exit in order to open it. If the range has been reached in which the barrier can be opened, leave the platform and inform your customer service.

If the electrical emergency operation does not function (a possible reason could be a defective motor or energy supply), see 4.7 -> hand wheel operation.
If the emergency operation has been actuated beyond the stopping point that you were approaching and the barriers cannot be opened, the lift must be moved manually upwards a little as described in 4.7 until the barrier can be opened.

5 Options / Extras

As required, the platform lift Konstanz is equipped with the following extras.

5.1 The folding seat

All of our platform lifts can optionally be equipped with a folding seat (*S.7.8/Item 10*) or retrofitted. The folding seat is for those not in a wheelchair who would like to your the platform lift as a sitting area. In the folded up condition the seat does not take up much space on the platform wall. The folding seat is equipped with a safety belt which must be worn during travel if the user is not able to hold firmly to the gate or the hand grip.

5.2 The emergency call

All platform lifts must be equipped with an emergency call system.

Besides the standard, there are other variations:

- A Gong, which is controlled by radio.. The sender, who is supplied with a separate battery is located on the platform cover and directs the emergency signal to the gong (wireless). The range is between 40m (for roofed surfaces) and at least 10 m (for uncovered surfaces).
- ***The best emergency call is however made with a cell phone***.

5.3 The lateral drive-up flap

In some cases (stairwells) it is not possible by reason of the place in front of the first step to drive onto the platform via both standard drive-up flaps. In this case, an additional drive-up flap must be mounted on the longitudinal side of the platform (*S.7.8/Item15*).

5.4 Optical warning signal

For every motor motion of the stair lift, an optical signal is activated (Orange blinking light on the cover). This increases the protection in publicly accessible areas. The signal repeats every second.

5.5 Handheld transmitter

If you've ordered a handheld transmitter, an additional manual will be attached to this manual.

6. When malfunctions occur

Malfunction	possible cause	measure
Lift does not function	Is the key on the operator panel set to -I-, and for the others to -0- or removed ?	Switch the key switch correctly (see 4.5 or.4.6)
	Are all EMERGENCY-OFF switches unlocked?	Unlock the EMERGENCY-OFF switch by turning or pulling (depending on design)
	Is the main switch for the lift Set to -I- ?	Activate main switch (see 4.1)
	Battery defective or completely discharged	Replace battery (technical personnel)
	Safety catch is engaged	Inform a technical specialist
The lift does not start up when the platform is folded down and occupied.	Are the safety gates in a horizontal position ?	Activate the safety gates one more time, possibly move them slightly up or down
	Are the drive-up flaps and the Safety bar (if present) freely mobile ?	Press the drive-up flaps and the safety Bar lightly outwards Drive in the opposite direction
	Load carrying capacity exceeded	Reduce the weight
Only for *Automatic* *system:* Lift does not fold down automatically	Are all key switches set to -0- except on the control station selected by you ?	Switch the key switch correctly (see 4.5 or 4.6)
	Are the batteries in the sender in order for radio-operated control stations?	Replace batteries in the sender

If you cannot rectify the malfunction yourself, please contact your customer service.

7. Acoustical warning signal

Duration [sec]	Pause [sec]	Reason	Rectification
0.1	5.0	Battery undervoltage *(Also see 4.2)*	Drive to the charging station and charge the batteries
0.1	0.5	Acoustical travel warning	--
0.1	0.25	"Release-travel" *(see page 4)*	--
2x short	4.0	Excess temperature of motor/electronics or fuse defective	Continued travel after about 5min. cooling time is possible (for insufficient cooling extend the cooling time by an additional 5 min.

3x short	4.0	Defect in motor/electronics	Inform customer service
Continuous tone	--	Emergency call by means of the beeper in the platform Or overloading	Release emergency button. Reduce weight or bring the center of gravity closer to the direction of the rail

Note: The acoustical warning signal can be suppressed by pressing the emergency-off button, the loading procedure remains intact (exception: continuous tone)..

8. Services to your stair lift Konstanz at a glance

Installed on:			**Version. No.:**
Installed by:			**Accepted by TÜV on:**
No.	**Date**	**Services**	**Signature**
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