

**Achieving Greater Mobility
and Independence**



UNILIFT Operating Instruction

UDL 160 / UDL 160 F / UDL 160 L / UDL 160 FL / UDL 200 / UPL 160



Serial No.
HORCHER GMBH - REHA SYSTEMES

Dear customer!

We would like to thank you for your confidence in the Horcher GmbH LIFT System and congratulate you on buying the UNILIFT.

EC-Declaration of Conformation

Is done in compliance with Annex VII of the Council Directive 93/42/EWG of 14 June 1993 concerning medical devices

We, the Horcher GmbH, Philipp-Reis-Str.3, 61130 Nidderau, declare that the

CEILING LIFT SYSTEM „UNILIFT“

Serial Number.

is in compliance with the essential Requirements of the Council Directive 93/42/EG of 14 June 1993 Annex 1.

Nidderau, 04/06/1996

Horcher GmbH
Managing Director

Stefan Horcher

Please read this operating manual carefully and familiarize yourself with the instruction and safety information before utilizing the „UNILIFT“-Ceiling Lift for the first time.

Safety Instruction

Please follow those safety instructions!

Only qualified and authorized personnel which have been trained by the Horcher GmbH are allowed to install and repair the Lift.

A sight check is absolutely necessary and should be done before you use the UNILIFT. If you notice any kind of defect do not use the Lift.

To clean the UNILIFT just use a damp cloth don't use any strong detergent.

Caution has to be used when driving through tight areas such as door frames.

Before utilizing the UNILIFT please make sure that all hooks / loops are attached and secured and that the sling adjustments are of the same length.

Ignoring one or more safety instructions or improper use of the UNILIFT system other than mentioned above could result in personal injuries and will void any Warranties and Guarantees through the Horcher GmbH.

A yearly service maintenance through authorized personnel from the Horcher GmbH is recommended.

Table of contents

1.	Where the Ceiling Lift can be utilized ?	5
2	Operating Instruction for the Horcher Ceiling-Lift-Systems	6
2.1	Utilizing the Ceiling Lift	
3	Model	6
3.1	General	
3.2	Pneumatic Hand control	7
3.3	Electrical Hand control	
3.4	UPL 160	7
3.4.1	Mechanical Emergency Relief for UPL	
3.5	UDL 160	
3.5.1	Mechanical Emergency Relief for UDL	
3.5.2	Accessory for the UDL - Mechanical Emergency Relief	
4.	Accessory's for the UDL –Personal Scale	9
5.	Sling System	10
5.1	Applying the Sling in a sitting position	
5.2	Applying the Sling in a lying position	
5.2.3	Applying the Sling to the legs	11
5.3	Attaching the Sling System to the LIFT	
5.4	Sling System for the patient positioner	
5.4.1	Applying the Sling System	
5.4.2	Applying the Sling to the Lift	
5.5	Caring for the Sling	
6	Maintenance of the Ceiling Lift	12
6	Service- and Warranty Information	12
7	Technical Data	13
8.	Information about the IBS Battery System	16
8.1	Intelligent Battery System „ IBS“	16
8.2	Battery capacity	17
	Inventory Information	18-24

1 Where the UNILIFT Systems can be utilized:

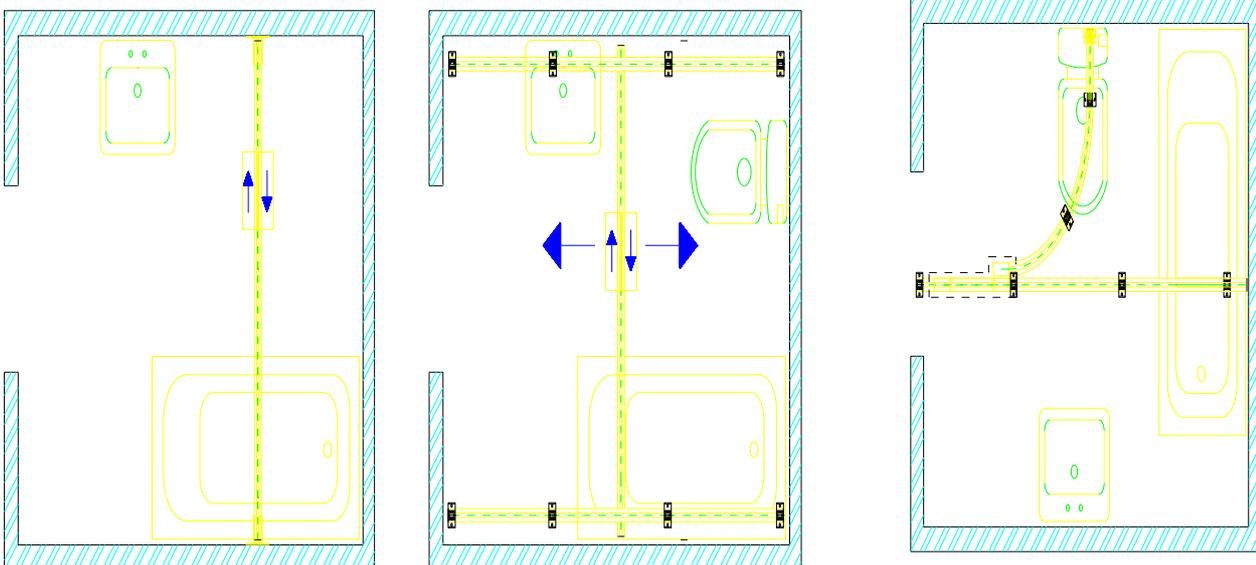
The Horcher GmbH Lift Systems have been developed over a number of years. During that time we have reached a very high technical standard of efficiency and reliability.

The UNILIFT helps you to achieve more mobility and freedom in your daily living environments especially in private area, senior citizens homes and hospitals. We have found that the UNILIFT is especially helpful in the private environment for persons with limitation in their mobility. They are the most efficient transfer devices, serving both the care-giver and the caretaker.

Because of the many possibilities the UNILIFT user can use his own creativity and imagination in exercising the usefulness of the UNILIFT. This system can be constructed and installed in many configuration to meet practically any personal lifting need imaginable.

For instance in recreational vehicles, bicycle, boats, swimming pools and almost any application imaginable can be accommodated.

Some track configurations are shown below.



2 Utilizing the Horcher GmbH UNILIFT – Systems

2.1 Operating instructions

Caution: Only trained and authorized personnel from the Horcher GmbH should repair, install and instruct the customer in the proper handling of the UNILIFT.

Only the original Horcher GmbH Sling system should be used with the UNILIFT.

Improper use of the system other than instructed or the use of unauthorized equipment or repairs could result in personal injury or accident and in the loss of your Horcher GmbH Warranty. Caution must be exercised when operating the UNILIFT.

3 Model

3.1 General

All functions can be utilized with the included remote hand control

Model:	Description
UPL	Portable ceiling Lift with water protected Housing

2 Function available with the UPL F2

UP/Down	24 Volt battery operating system two ways Movement along the track is accomplished manually.
UDL	Same as above
UDL F	Motorized Ceiling Lift
UDL FL	Motorized Ceiling Lift with pneumatic control

Six functions are available with the UDL F6

UP/Down	A six function Lift which can motor up and down with the help of the battery pack
Left / Right	move along the track with battery powered motor
Back/Forward	Backward/Forward, UP/DOWN, Left / Right , also moves horizontal along the traversal system.

Additional accessories

All UNILIFTS mentioned above can be individually ordered and are available with extra function's for your personnel need, such as additional tracks, transversals system, scissors crossing, or the carousel.

3.2 Pneumatic hand control

The pneumatic hand control is standard equipment and works on air pressure. Should it be necessary the air tube can also be controlled by mouth. The control is free of any electrical components and can be operated even in water without malfunction. Different control versions are available depending on the UNILIFT you own and on the variety of ways you like to travel.

3.3 Electrical Hand control

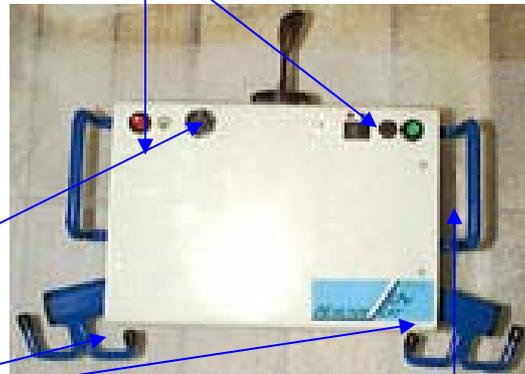
A variety of electrical hand controls are also available for all battery powered UNILIFT and are required by some multi function systems. All remote controls are water resistant and safe to use in wet areas, do not emerge in water.

3.4 UPL 160

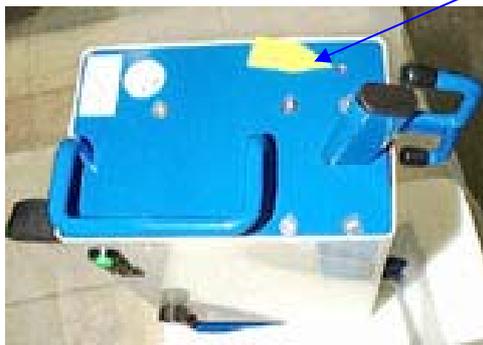
Function button to move vertical with the Lift

Plug for hand control

Sling attachment



Electrical Emergency Relief

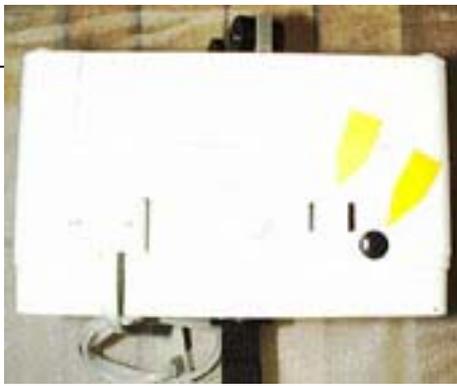


3.4.1 Mechanical Emergency Relief on the UPL

The UPL is equipped with an Emergency Relief switch. In case of an electrical break down or the hand control doesn't work you can use this switch.

A label is attached on the side of the Ceiling Lift just puncture the label at the (bull's eye) dot with a pencil or screw driver and the Lift comes down slowly. Do not use the Lift again. Call for service immediately.

3.5 UDL 160



3.5.1 Mechanical and electrical Emergency Relief on the UDL.

The UDL is equipped with two Emergency Relief switches. In case of an electrical break down or the hand control doesn't work you have two possibilities to let yourself down.

A white label is located on the side of the Lift.

The mechanical emergency relief comes in handy in case of electrical failure. A black rubber cap is located on the side of the UNILIFT just remove the black cap insert the screw driver and by turning counter clock wise will let the patient down slowly and unharmed.



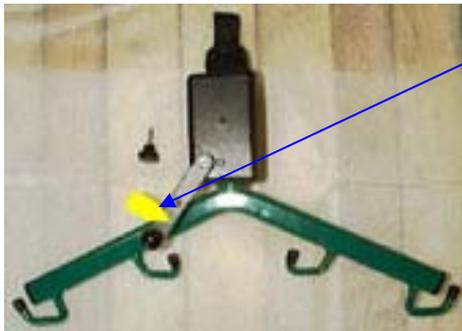
3.5.2 Additional accessory for the UDL - Mechanical Emergency Relief not a standard accessory

Mechanical Emergency Relief on the Spreader bar.

In case of an electrical break down or the hand control doesn't work you can use the switch on the

spreader bar. Remove the security nut in the middle of the spreader bar. See arrow.

Now turn the handle slowly counter clock wise. This mechanism can only be used once.



4. Additional Accessories for the UDL – Personnel Scale

Not a standard accessory

Direction for using the personnel scale Model Number 878 (UDL)

Taking the sling you have in daily use and hook onto the swivel bar.

Push the Zero button to set system to Zero. The digit 0 will pan across the display for a few seconds display will read "0.0."

On the left side of the display you will see the weight unit in either Kg stands for Kilogram and lbs. which stands for American pounds.

To change form Kg/lbs. push the Kg/ lbs. button and it will change. The scale memorizes the change. Remove sling position patient in to the sling, than

reattach the sling to the swivel bar. Carefully lift the patient and make sure he is free of obstacles. When the motion has stabilized, press the Operate button once again. Read the weight on the display of the scale and check that you have the correct setting either for Kg or Lbs.

The scale Model 878 shuts off automatically after 60 Seconds.

To activate the scale again, just push the Operate button again.

For the following weighing just repeat point four, always use the same sling.

You only have to repeat point 1-3 if you change the sling.

Point 3 only if you want to change from Kg to lbs. or vice versa.

System specification:

Measuring in Kg or lbs. changeable.

Weight Range 180,00 kg or 400 lbs. Please

regard the authorized leverage for the Lift.

Accuracy 0.1 %

Calibrated accuracy 0.1 %

Scale Size approximately 80 X 150 X 80 mm

Power supply 9 Volt Battery

Battery capacity approximately 3000 times

Display Liquid crystal display

Exchanging the battery: For safety reasons only a technician from the Horcher GmbH should exchange the battery.

When battery replacement is needed an indicator will appear on the display.

The shoulder bolt has to be removed, which holds the mast and the swivel bar together, don't lose the washers. Disconnect the scale from the mast remove the two screws on the side of the case to access the battery .

Caution: Do not apply pressure to the display.

Caution: When inserting battery watch for the polarity.

Make sure that all related hardware and washers are fully engaged and tightened again using the nylon lock nuts.

To set scale start at point one again.

5. The Sling-System

All our Lifts are equipped with our original Horcher – Sling-System. The following Slings can be used with the UNILIFT System:

Patient positioner : **UCG, UCTG**

Spreader Bar: **USB, USS, USSK, UTK, UPG, UBT**



5.1 Original - Horcher – Sling-system

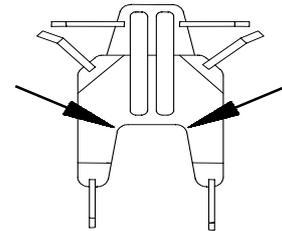
The sling can be applied either to a sitting or reclined person. The USSK sling with the head support is for patients who are unable to hold up their head on their own. The head support stays are made out of plastic and can be removed for easy washing.

5.2 Applying the sling in a sitting position

The nurse or attendant stands behind the patient's back, taking the sling (see drawing) starting at the shoulders and working your way down the patients back, past the hips and surface of the seat. The sling should be pushed down behind the back as far as possible. The top portion of the sling should end either at the shoulders or head. For a more comfortable fit push the sling all the way down to the seat, now take the straps for the legs and turn them from the outside to the inside of the thigh and move them as high as possible.

5.2.1 Applying the sling in a lying position:

Position the sling under the patient who is lying down, using the same way as mentioned above by lifting the upper body enough if that is possible to slide the sling behind the back. If this is not possible the patient can be "log rolled" onto his or her side. The sling can be fan folded and placed behind the patient's back. Roll the patient back onto the sling and the fan folded part can be pulled through to the other side.



5.2.3 Applying the sling to patients leg's:

For patient's comfort and proper positioning, the sling should be pulled to the bottom of the leg's and wrapped around and under between each of the patient's leg's. The leg straps should be applied as high and straight as possible and pulled closely up to the body. Another variation for applying the leg straps is to pull both straps under both legs and attach the straps to the outside points on the spreader bar. This holds the legs together rather than opening them.

5.3 Attaching the sling to the Lift:

The sling is attached to the swivel bar with either four or (six straps for the head support), it always depends on the sling you are using.

Attention: All straps must be attached to the lift prior to lifting the patient.

Notice: You have four straps on the USS sling. There are two straps on the shoulder portion and two on each side of the bottom by the patients leg's. The

sling can be attached to the spreader bar in three different way's. Attachment is either by Safety Clips which hook onto the swivel bar or by strap loops. Slings with strap loops have a choice of three different lengths short, medium and long. Choice of straps dependent's on the patient condition. Care must be taken to choose straps of equal lengths for the top pair and equal lengths for the bottom pair, if not the patient will be positioned unevenly in the sling when being lifted.

Attention: It is very important that you check if all strap's hooked to the swivel bar and all straps or have the same lengths.

The USSK has two additional straps on each side of the head support, so be careful that the patient's head or neck is not flexed the neck must be supported at all times.

- The head and shoulder strap's are hooked on the outside of the swivel bar.
- The leg straps are hooked to the inside of the swivel bar.

5.4 Sling Care.

Remove head support stays before washing. The Sling may be machine washed, using normal cycle, warm water, and tried on low temperature settings.

The sling should be inspected frequently for any unusual tear and wear, including the straps and where they are attached to the sling. The sling should be replaced without hesitation in the event of accidental tearing or cutting and never ever repaired.

We also recommended that the Sling is replaced every 12 month, regardless of evidence of wear.

Primary Strap Care

It is recommended that the Primary Lifting Strap is replaced every 12 month's, from the date of purchase, regardless of any evidence of wear.

Inspect the Primary Lifting Strap on a regular bases for any unusual wear or damage and replace immediately never ever repair a sling or the primary strap on your own.

6. Maintenance on the UNILIFT – Lift – System

Charge battery as soon as the light comes on.

Inspect your Ceiling Lift from time to time for loose fittings.

Check regularly to see if the Sling and the primary strap are in a good working order. Make sure the primary strap on the UNILIFT only travels straight UP/DOWN. Lifting the patient with the strap other then straight UP and

DOWN will cause the patient to swing as soon as the lifting starts. Don't pull on the primary strap, this causes damage not only to the UNILIFT but also to the primary strap.

Always lift patient with Lift directly overhead.

Attention: The Ceiling Lift should be serviced at least once a year through qualified technicians, to guaranty the high technical standards. Service agreements are recommended to ensure a yearly inspection and replacement of any parts that may have evidence of wear.

7. SERVICE AND WARRANTY INFORMATION

All mechanical and electrical components of the Horcher GmbH "UNILIFT" , excluding the primary strap and sling, have a limited two year warranty from the date of the original purchase and delivery, providing such defect is the result of poor craftsmanship or inherent defect in component material and not the result of improper use or handling.

Please fill out warranty card and send it back to the Horcher GmbH.
This will speed up any questions you may have or problems that might arise with your Lift during the warranty period. Thank you!!
Horcher GmbH, Philipp-Reis-Str. 3, 61130 Nidderrau 1

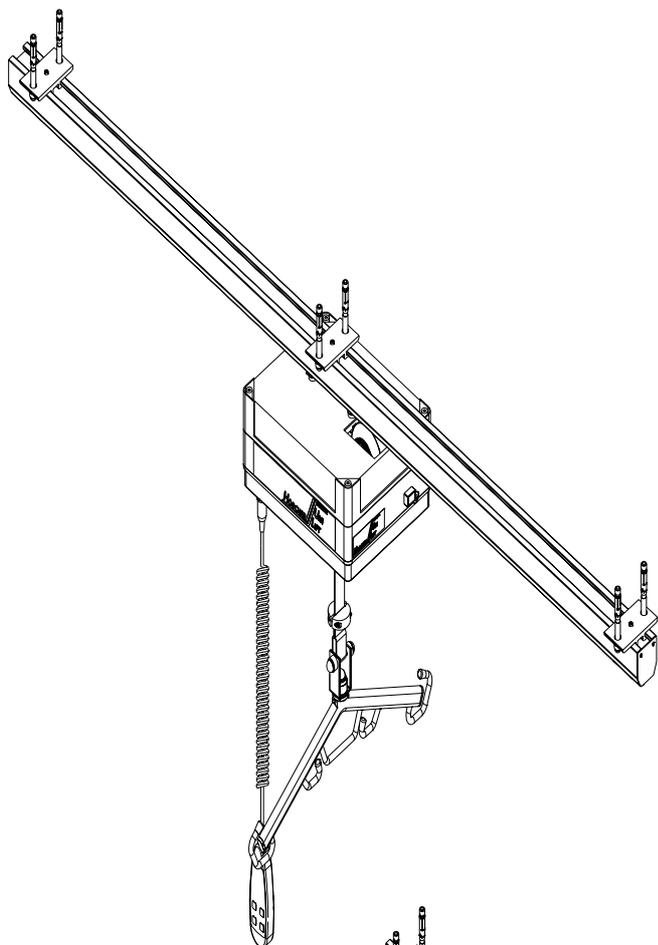


Abbildung:
UDL 160 mit Drehbügel

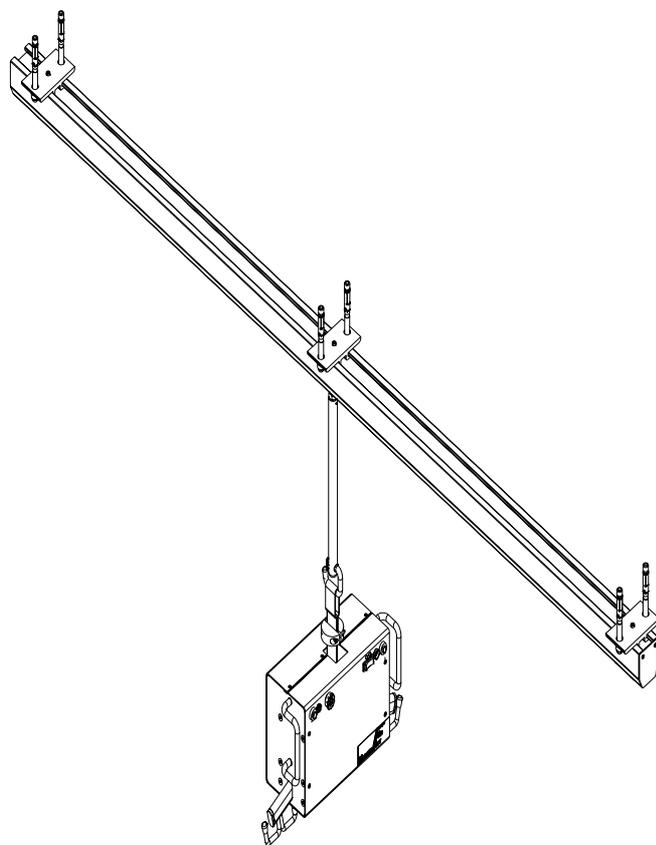
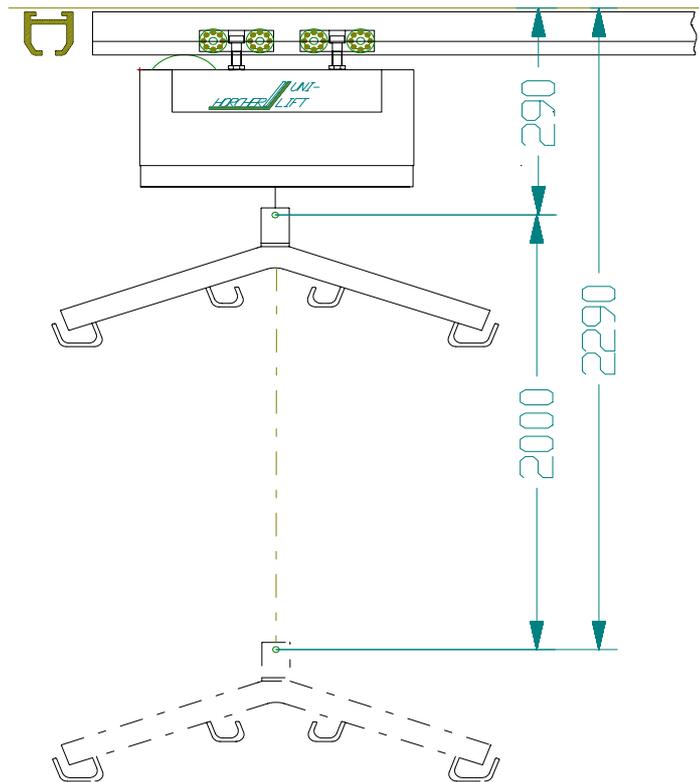
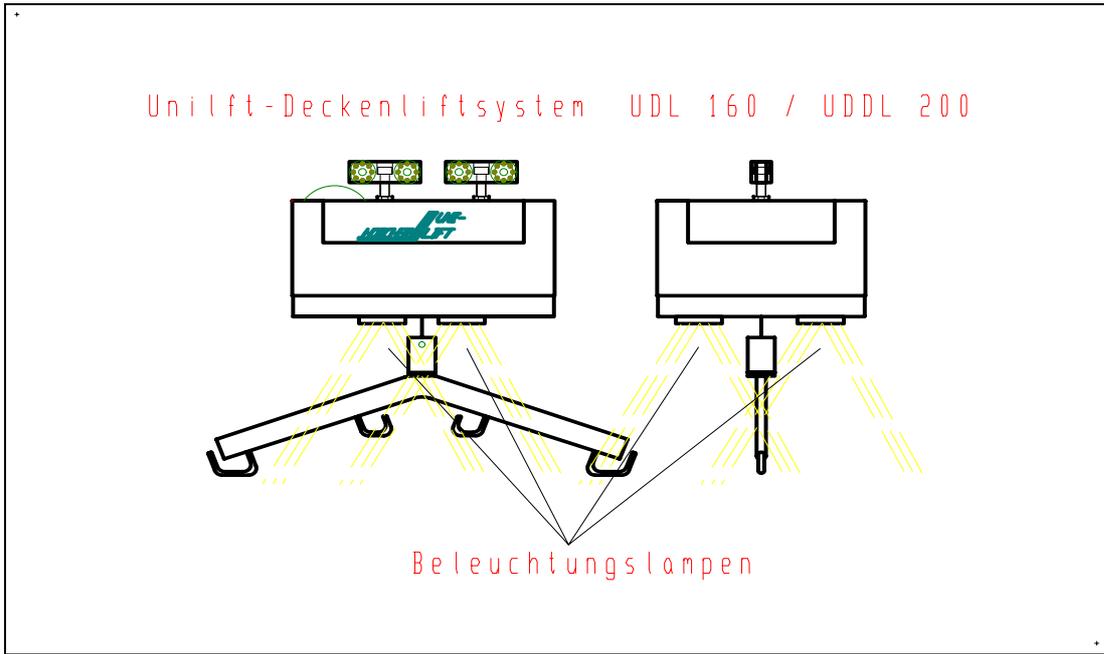
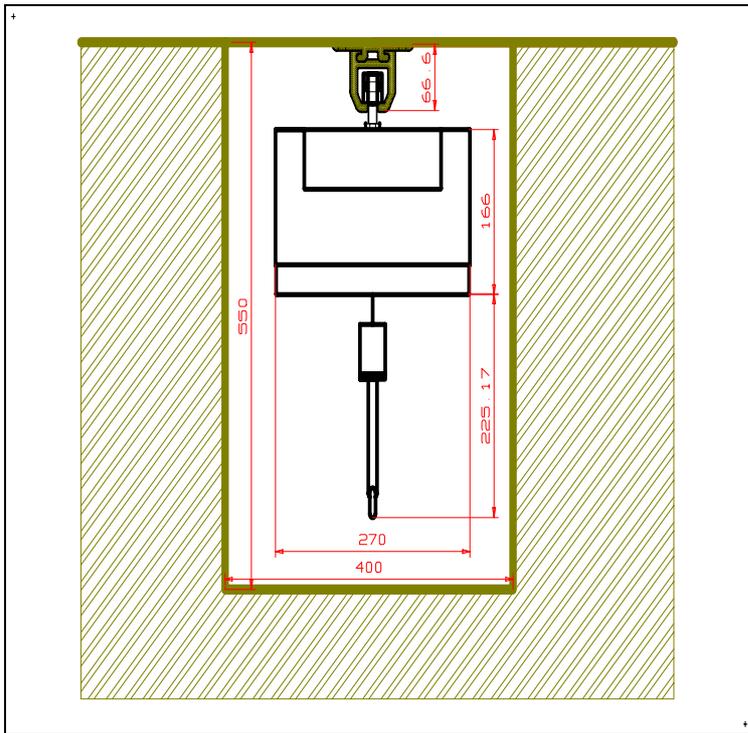
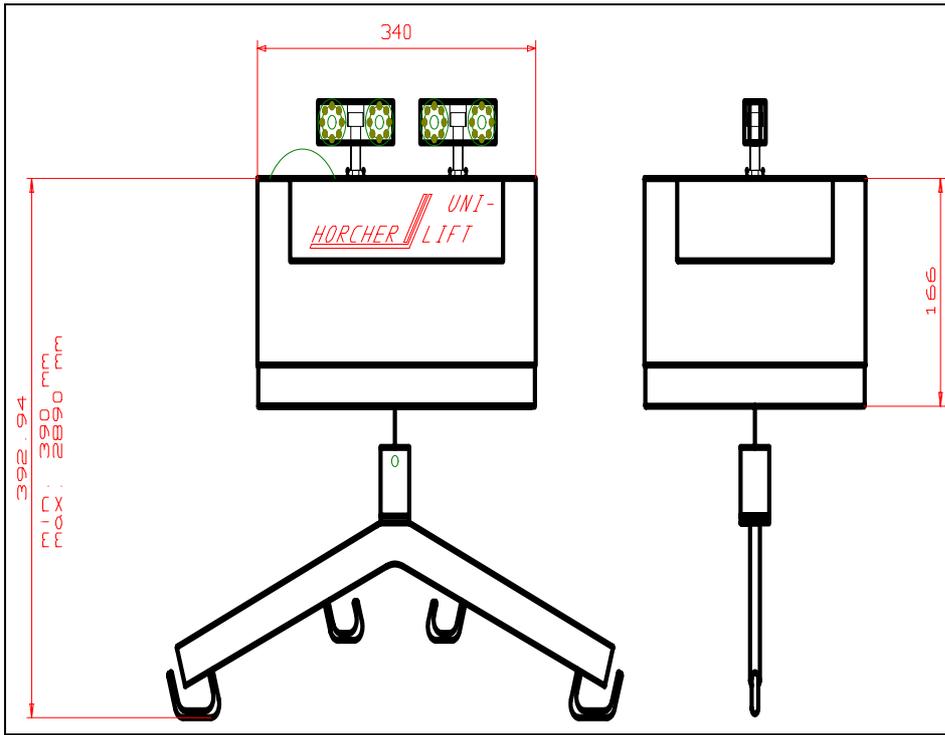


Abbildung:
UPL 160 mit Standart- Abhängung 300 mm





8.1 What is IBS

We the Horcher GmbH have developed this new Battery System for rechargeable batteries: The integrated regulated memory chip safes the battery from being handled the wrong way. Your Lift has been equipped with this new battery system.

The battery is charged before delivery.

Turns automatically to sleep modus after three minutes.

Reminds the user when battery is low through an interval tune.

If the user disregards this message then a continuous tone will remind him that the battery is low and need's to be recharged immediately.

Battery shuts off automatically when voltage is low, so no damage occurs to the battery. When not in use, the IBS battery shuts of automatically after three minutes, safe's energy.

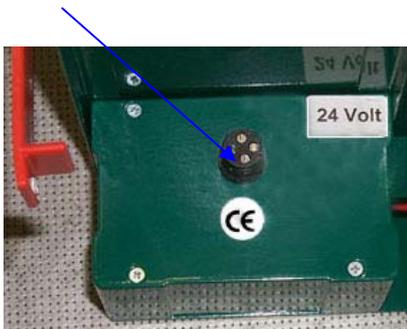
8.2 The battery capacity

This battery has a capacity of 2,7 Ah. When the lifting is in process the battery uses approximately 3.6 A.

The approximate lifting capacity of this battery is about 0.75 hours by lifting 160 kg /lbs. The battery can be used about 90 times at a lifting time of 0,5 minutes with a weight of 160 kg/lbs. If the patients weighs less then the battery has a longer using time.

8.3 Battery charger

Plug battery into charging station, make sure the charging station is plugged into the wall outlet. Charger light will glow brightly green while being charged. Your battery is



fully charged when the control light goes out.

The wall mounted battery charger should only be installed in dry areas and close to an electrical outlet. Make sure the battery charger is not installed close to a water faucet or in a damp area.

8.3 Technical Data

Max. Loading Capacity 160 kg
(UDLL 200 200 kg)
UP/DOWN 200 cm
Max. travel time 0,03 m/sec
Battery Charger: 220 V / 24 V / 1 Ah
Battery 100 Type G. 124-1
Battery 24 Volt
Battery capacity 24 V/ 6.5 Ah
Warranty 24 Months



Equipment data

Inventory-No. _____

Equipment _____

Type of Equipment _____

Factory-No. _____

Manufacturer/ Importer _____

Supplier _____

Year of purchase _____

A Inventory-No. _____

Functional Testing

on: _____
 through: _____

Instruction

Person Responsible _____

<input type="checkbox"/> Date	Manufacturer/ <input type="checkbox"/> Supplier	Name of the person responsible for Instructions	Signature

Inventory List

Type of UNILIFT:	
Serial No:	
Year of purchase:	
Manufacturer:	Horcher GmbH
Factory Id No:	
Side of location	
Yearly technical safety controls: (see label on the product)	

Service and Maintenance Contract

Between

Name
Address
Phone Number

And the Horcher GmbH

Philipp-Reis-Str. 3
61130 Nidderau

This contract is for the UNILIFT