




Installation and Operating Instructions (EN)

UNILIFT UNILIFT Extended





Explanation of symbols

	Important Note
	Caution
	Ban

Dear Customer,

thank you very much for purchasing our product.

Please read this installation and operating instructions carefully and keep them in a safe place.

In this manual we have endeavored to provide you with all the necessary information to enable you to have most success with the products.



Ralf Küchel
Technical Manager / CTO

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Scope of Supply

- UNILIFT / UNILIFT Extended
- Table Power Supply - Input: 100-240V AC, 50 / 60Hz. 1.5A; Output: 12V 60W
- MAX 5.A (Cable Length DC ~ 140cm)
- Power Cable 1.5m
- Installation and Operating Instructions / Manual

Description

The UNILIFT system includes an electromotive retractable carrier for e.g. LED bar lamps, digital touch pens etc., with a mounting frame for installation in a horizontal furniture surface.

In the starting position (retracted), the system is level to the furniture surface and covered by a closing flap. By pressing a button, the installed vertical device (not included in the standard scope of delivery) drives into the working position (extended). By pressing again the button, the retraction is triggered. Both movements can be paused by a short push of a button.

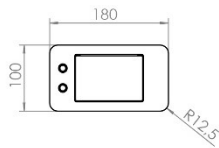
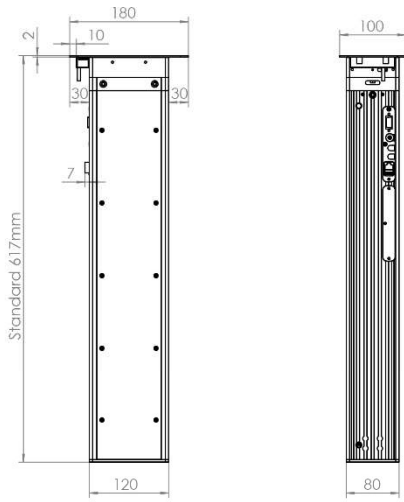
The sturdy frame and high-quality mechanical elements ensure smooth running without jerks or vibrations.

To prevent personal injury and damage, UNILIFT has been equipped with a safety control system. If counterforces of 20 N or more occur during extension or retraction, an acoustic signal sounds and the process is interrupted, and a countermovement is initiated for approx. 1 sec.

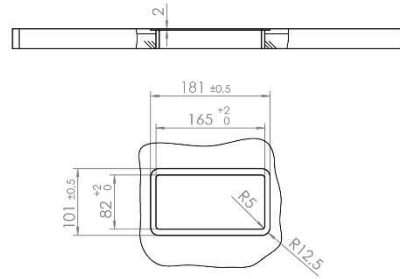
Features

- Compact housing dimensions
- Lightweight-Design
- Brushed stainless steel mounting frame and closure flap
- LowNoiseDesign & LowEnergy Design
- RJ 45 Interface for TCP/IP Remote control
- 9-pin dSub interface for remote control via potential-free switch
- DirectAxleAccess for optional, manual movement
- Digital stepper motor 12V motor, toothed belt drive
- German precision mechanism
- Electronic & Acoustic Diagnostic System
- Durable HighFlex cables
- Integrated universal mounting rails
- All-aluminum housing
- Convenient cable & connection position
- EMC + EMI protected

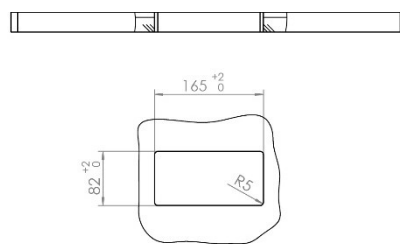
Dimensions



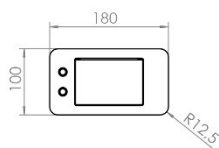
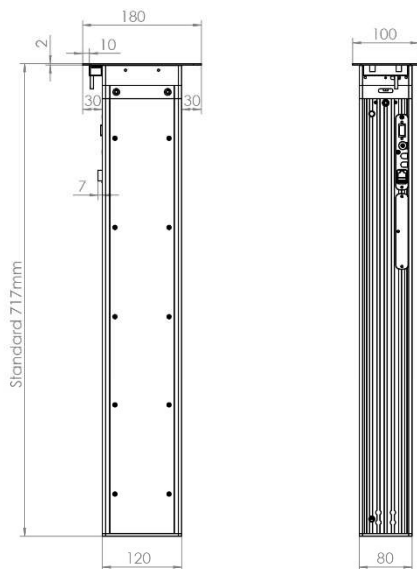
Cutout IN-table



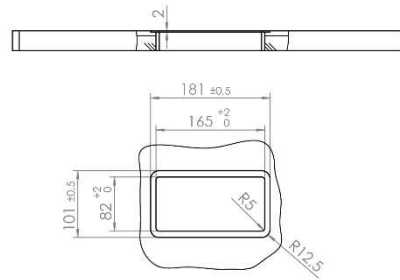
Cutout ON-table



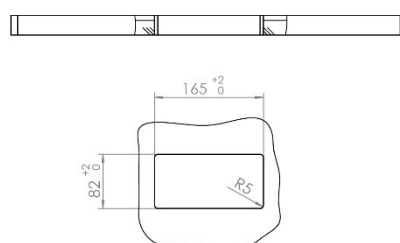
ELEMENT ONE GmbH Zum Murgdamm 5 76456 Kuppenheim Tel: 07222/96654-0 Fax: 07222/96654-29	Modell: UNILIFT	Maßstab 1:7 Stückzahl 1
	Datum Name	Schutzvermerk nach DIN ISO 16016 beachten
	Bearb. Gepr. Norm	Benennung UNILIFT
Toleranzen: Soweit nicht anders angegeben +/- 0,1 mm	Revision 1.2	Werkstoff:
		Artikel-Nummer
		Blatt 1 1 BL A-4



Cutout IN-table



Cutout ON-table



ELEMENT ONE GmbH Zum Murgdamm 5 76456 Kuppenheim Tel: 07222/96654-0 Fax: 07222/96654-29	Modell: UNILIFT Extended	Maßstab 1:7 Stückzahl 1
	Datum Name	Schutzvermerk nach DIN ISO 16016 beachten
	Bearb. Gepr. Norm	Benennung UNILIFT Extended
Toleranzen: Soweit nicht anders angegeben +/- 0,1 mm	Revision	Werkstoff:
		Artikel-Nummer
		Blatt 1 1 BL A-4

Safety Instructions



= Important Note



= Caution



= Ban



The device may only be opened by authorized personnel when it is disconnected from the power supply!



Let damage and defects be repaired immediately by authorized specialists.



Do not operate this device with any accessories other than the supplied ones.



Never open or close the housing by force!



In the event of damage caused by third-party accessories, e.g. power supply unit, or unauthorized attachments or modifications, any warranty and liability claims are excluded.



Remove all transport locks before start-up. We recommend that you keep them.



To avoid signal transmission errors, use only high-quality cables.



Do not slide sharp or hard objects over the surface, it may be damaged.



Immediately remove any liquids spilled on the surface with a cloth.



Do not load the device with more than 1.0 kg when closed.

Installation



= Important Note



= Caution



= Ban



Make sure that your furniture has sufficient load-bearing capacity and strength against deflection and warping even after it has been weakened by the cut-out!



Stresses on the mechanics due to tension, pressure or shock can lead to damage or malfunctions. Therefore, ELEMENT ONE devices should not be transported in their installed state!



In the case of mandatory transport in the installed state, the following conditions must be observed:

- Retract item carrier | Close device
- Transport and store devices vertically, i.e. according to the installation position
- Do not tilt furniture with built-in appliances
- Secure devices against slipping and falling out
- observe the permissible load on the device, do not stack it.



ELEMENT ONE units are held in the furniture by means of the decorative/holding frame. The optionally supplied clamping holders to be attached at the side are intended for horizontal alignment and fastening in the furniture. Please note that these may only be applied lightly (risk of damage to the furniture or tensioning of the device mechanics and thus possible malfunction of the movement mechanics).



For customer's mounting, ELEMENT ONE will provide an installation drawing upon request.

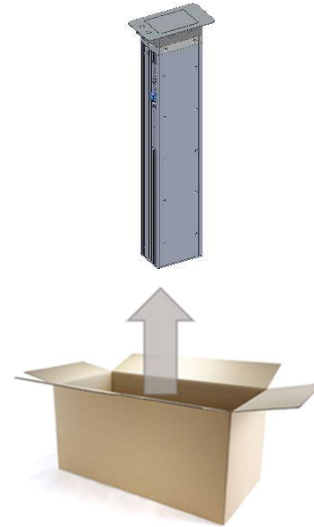
The table cutout must be milled or sawn out before mounting the unit and according to the installation drawings (see dimensions)



It is recommended to install the device with two people.

- 1 Please open the carton at the marked top and CAREFULLY place it horizontally on the floor or a clean, flat surface.

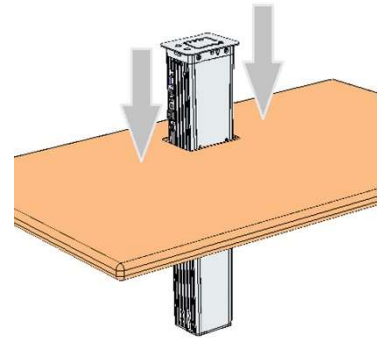
Please remove the device from the packaging by first removing the two foam pads, then the plastic protective cover



- ! Please carry the device by holding it on the right and left side of the housing.

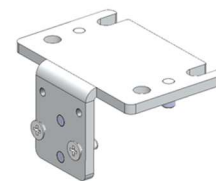
- 2 Insert the unit vertically into the previously milled table cutout.

- ! When inserting the device into the table cut-out provided for this purpose, make sure that the outgoing cables (connectors) on the side are not damaged.



- 3 Attach the two [optionally] supplied substructure clamp holders to achieve sufficient stability and secure the unit against tilting.

Alternatively, suitable own solutions can be attached to the table for secure mounting.



Commissioning



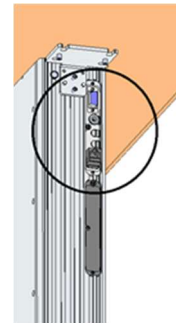
= Important Note



= Caution



= Ban



General Information



No PoE

The network used for IP-based control of the monitors must not support the PoE (Power-over-Ethernet) function!



Switch-on delay

A LAN-capable system is only ready for operation with a delay of approx. 60 seconds after power-on if a temporary or static IP address to be assigned by the network cannot be allocated, or, in the case of a device with a permanently programmed IP address, this special identifier is not set up or not available in the customer network, or if the device in question is not connected to the network via LAN cable when it is switched on.

If an IP address is not assigned or is assigned incorrectly, the device does not start until a timeout of approx. 60 seconds has elapsed. Please wait until you hear a beep signal.



Stresses on the cables caused by pulling and rubbing against components shorten the lifetime and can lead to damage and malfunctions. The cables should be fastened and laid after commissioning.

The following conditions must be observed:

- Do not fall below minimum radii
- Maintain distances to mounting points and structural elements



All edges are chamfered or rounded in the area of the cables.



Ensure that the cables are not pinched during insertion.



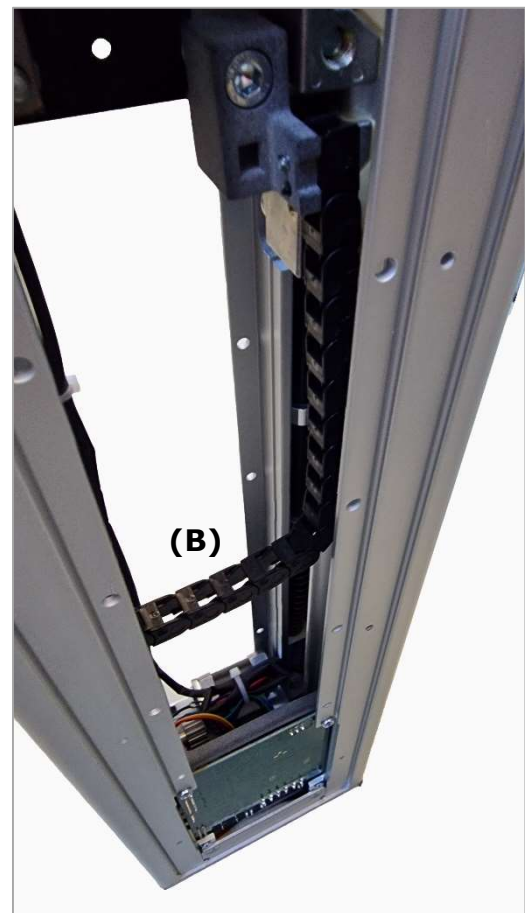
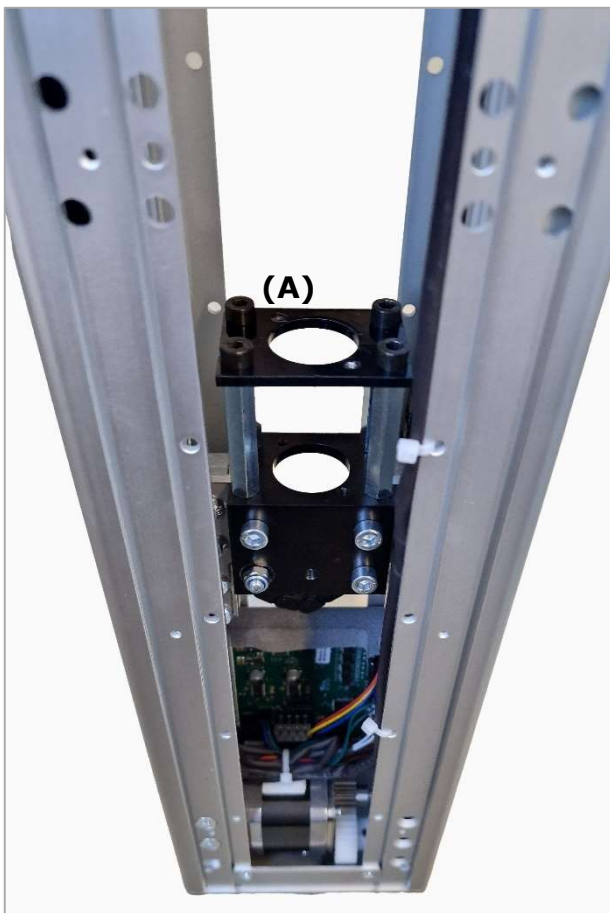
Ensure that all screw connections are secure.



Electrical connections should only be carried out when the device is disconnected from the power supply.

UNILIFT

- Open the UNILIFT front and rear cover by removing the screws (Phillips screws)
- Mount and fix the selected item on the carrier **(A)**. Use the pre-installed 4x allen screws on the carrier top and/or cable ties.
- Insert the cables into the cable chain **(B)** and close the chain carefully.
- Close the UNILIFT front and rear cover by attaching the screws (Phillips screws)



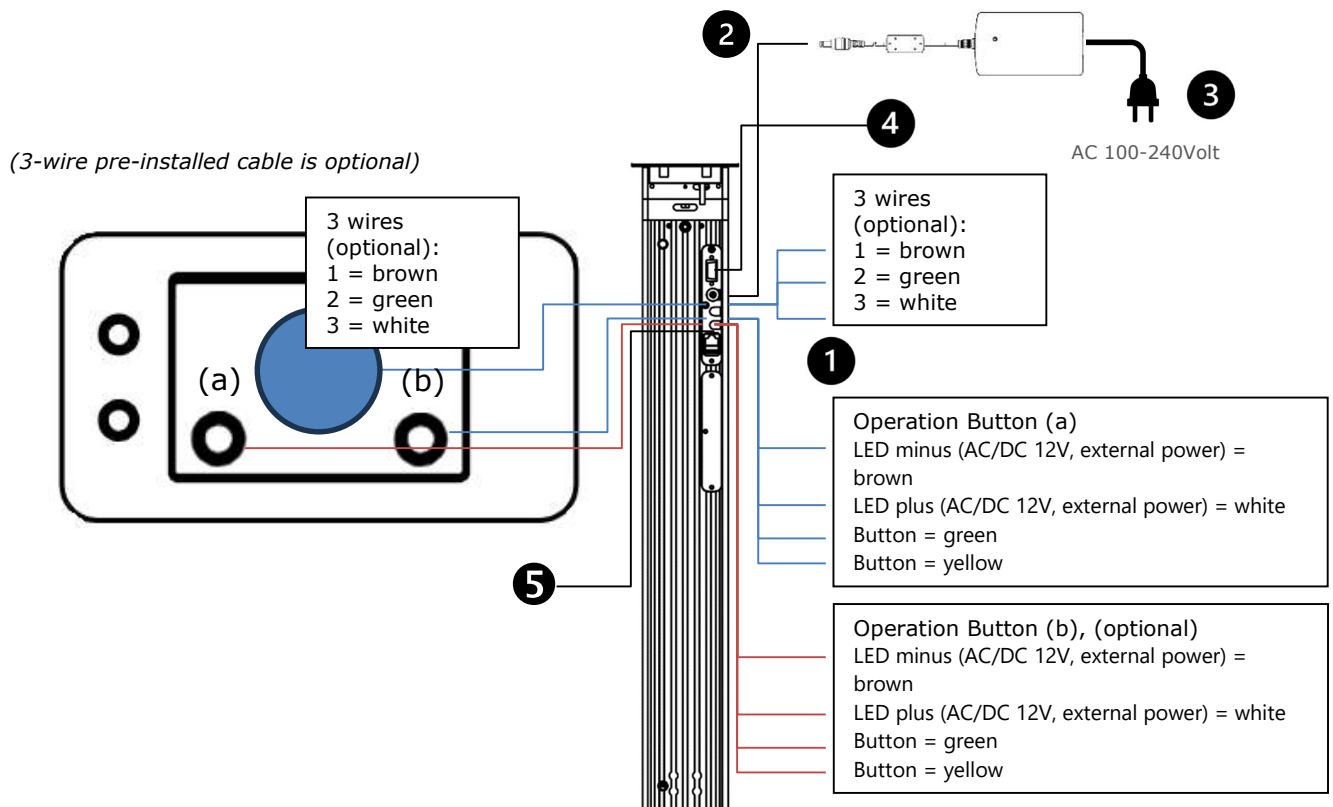
- Insert the device into the cut-out in the table.

- 1 Connect the buttons (if applied) to the cable ends according to the manufacturer's item specifications. Pre-installed 3-wire cable (optional) and operation button cables have open wire ends.
- 2 Connect the DC plug to the DC socket of the power supply.
- 3 Connect the AC plug of the power supply to the mains.
- 4 Connector for remote control instead of housing button (9pin dSub, optional. The use of the original ELEMENT ONE cable remote control or connection cable is recommended).
- 5 Connection for RJ45 / LAN

Execute a functional test and then fasten the cables.



Check that there is clearance for the movement of the cables.



Operation

General Information



Make sure that no body parts and/or objects are between the frame, item carrier and other mechanical components.



Do not reach into the device if you discover objects between the frame and installed item during closing! Interrupt the closing process by briefly pressing the A button!



Do not close the device by force!



Make sure that no objects on the surface obstruct the operation.

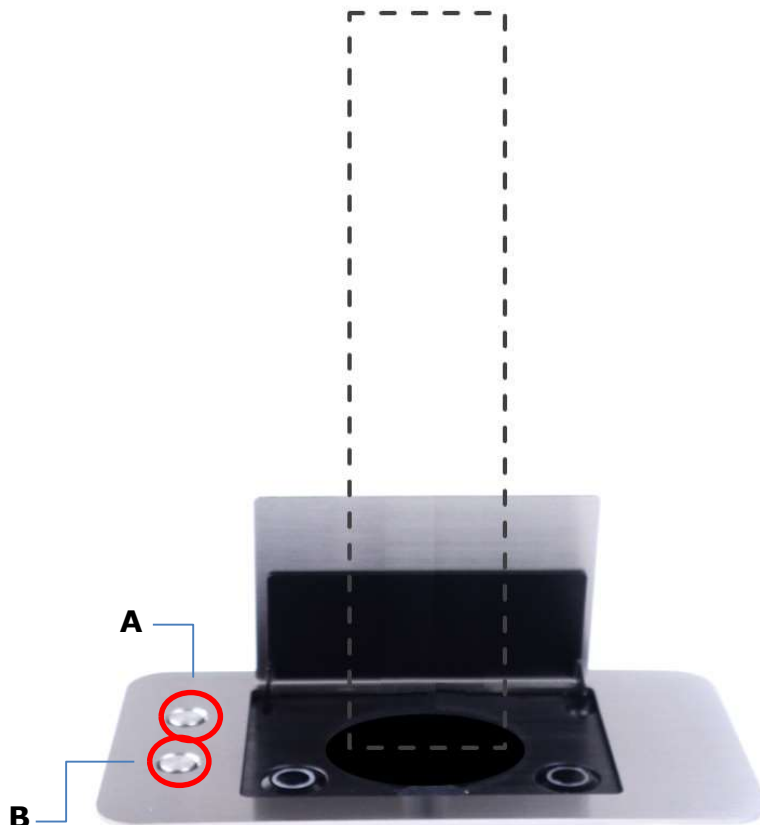


Do not place any objects in the area of the retract mechanism.

Raising

Press the **A** button on the left side of the frame and the installed item raises.

The procedure can be interrupted in any position by briefly pressing the button **B**.



Item operation

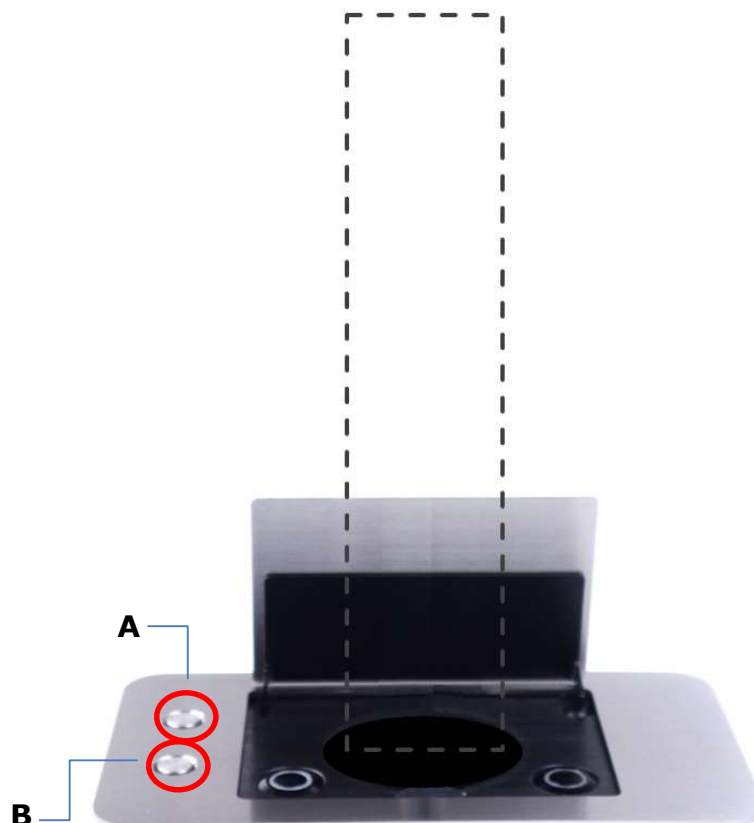


- (a) Operation on/off
- (b) Operation on/off (optional)

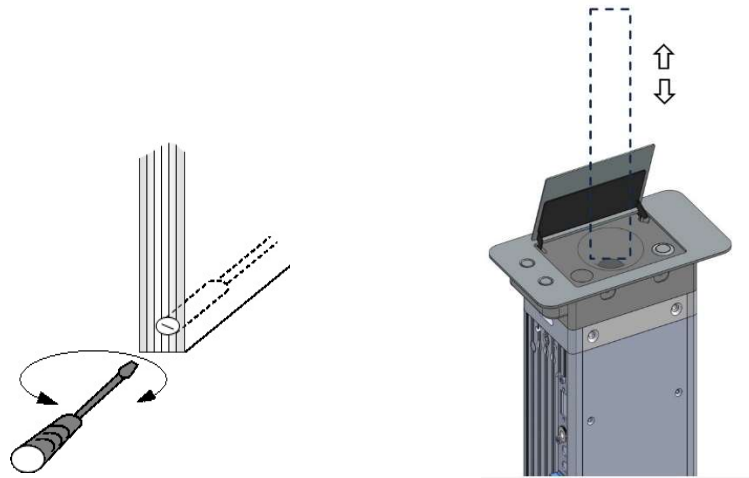
Retracting

Press the **B** button and the installed item will retract automatically.

By briefly pressing the **A** button, the extension can be interrupted in any position.



Service function DIRECT AXLE ACCESS (DAA)



UNILIFT is equipped with DIRECT AXLE ACCESS (DAA), a useful feature for installation and maintenance. This allows you to extend and retract the installed item manually, i.e. without a power supply. Access is located on the right and left bottom of the side of the case. You will need a slotted screwdriver or a cordless screwdriver to operate it.



When using the DIRECT AXLE ACCESS (DAA), follow the same safety instructions as for regular extension and retraction (see Operating, General)

Care Instructions



= Important Information



= Caution



= Ban



Disconnect the power supply plug before cleaning work!



To clean the device, use only cloths moistened with water or detergent.



Do not use abrasive cleaners, alcohol, thinners or similar chemicals.

TCP/IP - Control and Status request

Every UNILIFT is equipped with a Cat-5 LAN cable socket as a network interface. Via this interface, the device can be operated IP-based with control commands (e.g. via a media control system or via a smartphone app).

Depending on your requirements, the UNILIFT can be controlled via the network accordingly

- either via automatic / dynamic IP address allocation in their LAN network
- or via static IP address allocation, assigned in their network manually to the MAC address of each device.

For control, a TCP-based, text protocol is used. To send a command, a TCP connection must be established to the unit on port 8282.

Parameters are separated from one another by a space. Each command and each response ends with a Carriage Return (<CR>) plus a Line Feed (<LF>).

IP command list (based on Ethernet Protocol Vers. 1.00)		
Command	Function	Response/message
move up	Unit opens	OK: if item retracted or movement stopped ERROR: if item moving in or out
move down	Unit closes	OK: if item extended or movement stopped ERROR: if item moving in or out
stop	Stops item movement	always OK
status	Requests information on current position of carrier	OK open: if item extended or stopped OK closed: if item retracted
devicedetails	Requests information on type of unit	OK carrier system
protocol	Requests information on Ethernet protocol version	OK 1.00: in the case of Ethernet protocol vers. 1.00
check	To check whether connection to unit is working	OK: if item fully retracted or extended ERROR: if item in intermediate position Unit response is always OK if the unit can be contacted over the network, no response if it cannot be contacted
lock on	Blocks control of the unit with the push button <i>temporarily</i>	Temporarily = until unit is restarted Unit response always OK, even if already temporarily blocked
lock off	Cancels <i>temporary</i> blocking of push button control	Unit response always OK, even if not blocked
lock perm on	Blocks control of the unit with the push button <i>permanently</i>	Permanently = until block is cancelled by "lock perm off" command; cancellation by turning off the supply is <i>not</i> possible Unit response always OK, even if already permanently blocked
lock perm off	Cancels <i>permanent</i> blocking of push button control	Unit response always OK, even if not blocked

Control via a Media Control System with 9-pin d-sub Remote Interface



Do not apply external voltage!



Pins may not be bridged!



Current pulse for switching = approx. 15 mA at 12 V DC

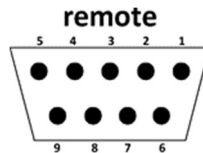


To **extend** connect Pin 1 to Pin 2



To **retract** connect Pin 3 to Pin 4

1-2 = up
3-4 = down
5 = out 12V/0,1 A max. 9 = GND



Firmware Update (Authorized Personnel only)

It is possible to update the firmware of the E1 device. To execute the firmware update, the device must be connected to a specially configured PC / laptop by means of an adapter cable.

The firmware update requires:

- a special Configurator Software (E1 product),
- a special USB adapter cable (E1 product),
- an appropriately configured PC / notebook

Detailed information is available on request on the firmware update procedure, the system requirements for the PC/laptop used and how to obtain the special hardware and software required.

Technical Specification

UNILIFT	UNILIFT Extended
Vertically retractable universal lift for flush mounting in tables. Electromotive mechanism for retracting and extending an installed vertical item. 12 V stepper motor with precise synchronization when using several UNILIFT. Maintenance-free, virtually noiseless: < 40 dB. Control via pushbutton in device frame or remote interface TCP/IP or contact. Vertical item not included in the scope of delivery.	Vertically retractable universal lift for flush mounting in tables. Electromotive mechanism for retracting and extending an installed vertical item. 12 V stepper motor with precise synchronization when using several UNILIFT. Maintenance-free, virtually noiseless: < 40 dB. Control via pushbutton in device frame or remote interface TCP/IP or contact. Vertical item not included in the scope of delivery.
Material: Milled, anodized aluminum & stainless steel; visible mounting frame and cover flap: brushed stainless steel	Material: Milled, anodized aluminum & stainless steel; visible mounting frame and cover flap: brushed stainless steel
Mass: 4.5 kg	Mass: 4.6 kg
Dimensions: 180 x 100 x 617mm (BxLxT)	Dimensions: 180 x 100 x 717mm (BxLxT)
Power consumption: typ. 15 Watt	Power consumption: typ. 15 Watt
Motion: Stepper motor, timing belt drive	Motion: Stepper motor, timing belt drive
Item length max.: 430mm	Item length max.: 530mm
Operation buttons: 1x integrated LED button (Opp. 1) or 2x integrated LED button (optional, Opp. 2); to be specified in the order LED Color: Blue Lamp voltage: 12V AC/DC 12V Switching capacity: AC220V/0.5A, DC36V/2A Contact resistance: ≤50mΩ Insulation Resistance: ≤1000MΩ Dielectric strength: 1,500V, RMS 50Hz, 1min	Operation buttons: 1x integrated LED button (Opp. 1) or 2x integrated LED button (optional, Opp. 2); to be specified in the order LED Color: Blue Lamp voltage: 12V AC/DC 12V Switching capacity: AC220V/0.5A, DC36V/2A Contact resistance: ≤50mΩ Insulation Resistance: ≤1000MΩ Dielectric strength: 1,500V, RMS 50Hz, 1min
Item Interface: according to item type which is installed	Item Interface: according to item type which is installed
Remote control: 9-pin d-sub serial + RJ45 TCP/IP for device control - and setting of extension parameters as well as firmware update (E1 cable and software required)	Remote control: 9-pin d-sub serial + RJ45 TCP/IP for device control - and setting of extension parameters as well as firmware update (E1 cable and software required)
Operating temperature: 0°C to +50°C, without direct sunlight or other heat sources	Operating temperature: 0°C to +50°C, without direct sunlight or other heat sources
Storage temperature: -20°C to +60°C, without direct sunlight or other heat sources	Storage temperature: -20°C to +60°C, without direct sunlight or other heat sources
Operating humidity: 10% to 95% RH, non-condensing	Operating humidity: 10% to 95% RH, non-condensing
Storage humidity: 10% to 95% RH, non-condensing	Storage humidity: 10% to 95% RH, non-condensing
Scope of delivery: Desktop power supply - input: 100-240V AC, 50/60Hz. 1.5A; Output: 12V 60W MAX 5.A (cable length DC~140cm) Power cable 1.5m	Scope of delivery: Desktop power supply - input: 100-240V AC, 50/60Hz. 1.5A; Output: 12V 60W MAX 5.A (cable length DC~140cm) Power cable 1.5m

Safety Standards

VESA: DPMS
DDC2B-Standard (Version 2 Level B)



FCC



For optional accessories, observe the instructions enclosed with them!

Declaration of Conformity



We declare under our sole responsibility that devices of the series UNILIFT comply with the regulations 2006/42/EG, 2006/95/EG, 2004/ 108/EG
Harmonized standards applied:
EN ISO 12000:2010
EN 60950-1+A1:2010
EN 55022:2010
EN 55024:2010
EN 61000-3-2/A1/ A2:2009
EN 61000-3-3:2008

Kuppenheim, 01.07.2023

A handwritten signature in black ink, appearing to read 'R. Küchel'.

Ralf Küchel
Technical Manager / CTO

Warranty

- (1) The warranty for ELEMENT ONE products is as follows from the date of purchase
 - 60 months on all purely mechanical components, and
 - 24 months on all electrical and electronic components.

In the case of a purchase that is a commercial transaction for both parties, the customer must report defects of any kind - except hidden defects - in writing within eight working days (Saturday does not count as a working day) after delivery; otherwise, the goods are considered approved. Hidden defects must be notified in writing within eight working days (Saturday does not count as a working day) after discovery; otherwise, the goods shall be deemed to have been approved also in view of these defects.

- (2) In the event of injury to life, limb or health for which we are responsible, as well as in cases of intent and gross negligence, the limitation period for material defect claims shall be two years. Otherwise, the limitation period for material defect claims shall be one year.
- (3) Insofar as the delivered goods have a not insignificant defect, the customer may demand, at our discretion, either the rectification of the defect (subsequent improvement) or the delivery of a defect-free item (replacement delivery) as subsequent performance. If we are not prepared or not in a position to rectify the defect/replace the delivery, in particular if this is delayed beyond a reasonable period of time for reasons for which we are responsible, or if the rectification/replacement delivery fails in any other way, the customer shall be entitled, at his discretion, to withdraw from the contract or to reduce the purchase price, provided that further attempts at subsequent performance are unreasonable for him.
- (4) There shall be no warranty obligation for normal wear and tear, in particular on parts subject to wear and tear. Furthermore, there shall be no warranty obligation if damage to or malfunctions of the delivery item occur due to improper handling or use of unsuitable operating conditions.
- (5) We shall only be liable for damage due to defectiveness of the delivery item within the limits specified in Clause 8.
- (6) Insofar as the defective delivery item is a third-party product, we shall be entitled to assign our material defect claims against our upstream suppliers to the customer and to refer the customer to their (legal) recourse. Claims may only be asserted against us under subsections 3 and 5 if the claims against our upstream suppliers cannot be enforced despite timely (judicial) recourse or if recourse is unreasonable in the individual case.



WEEE-Rg.Nr.: DE69117530

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STAND: 07/2023

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