

Lifting column system for an electrically
height-adjustable piece of furniture

LegaMove

®

(Translation)

Installation and Operating Instructions

according to the Machinery Directive 2006/42/EC, Annex VI
for the partly completed machine:

Lifting column system for an electrically height-adjustable
piece of furniture (LegaMove)

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Preface



Warning

Read these installation and operating instructions carefully to familiarize yourself with the assembly and handling of the LegaMove lifting column and its installation. Follow these instructions to properly assemble the LegaMove lifting column and to avoid personal injuries and damage to the lifting column. Do not make any assumptions when assembling the LegaMove lifting column. Store these installation and operating instructions so that they are easily accessible and always consult it if in doubt regarding the implementation of a procedure.

If you have any questions, please contact Paul Hettich GmbH & Co. KG to discuss them before assembling the lifting column LegaMove. The installation and operating instructions are a separate part of the complete documentation. The complete documentation should be made available to the installer, operator and service staff.

Customer Service

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1. Introduction

These installation and operating instructions will help you become familiar with the LegaMove lifting column system and use it according to its intended applications.

This documentation contains important information on how to install and operate the LegaMove lifting column system safely, properly and most efficiently. Observing these instructions helps avoid danger, reduce repair costs and downtimes and increase the reliability and life cycle of the system.

In addition to these instructions, the existing national accident prevention regulations and environmental protection guidelines shall apply.

The installation and operating instructions must be read and applied by any person in charge of carrying out work on the system components, including staff responsible for:

- Installation
- Operation
- including troubleshooting during operation, care, disposal
- Maintenance
- Service, inspection, overhaul, and
- Transportation

1.1 Explanation of the signs, symbols and labels used

The safety notices used in this documentation have the following appearance and meaning:

	Danger This hazard symbol indicates an immediate danger. Failure to observe the applicable safety measures will lead to death or serious personal injury.
	Warning This hazard symbol indicates a possible danger. Failure to observe the applicable safety measures may lead to death or serious personal injury.
	Caution This hazard symbol indicates a possible danger. Failure to observe the applicable safety measures may lead to minor or slight personal injury.
	Note This symbol draws attention to possible material damage or processes of special interest / importance which may arise if the applicable safety precautions are not followed.

1. Introduction

1.2 Notes for the operator

The generally recognized technical rules for safe and proper working must be observed in addition to these installation and operating instructions and the rules and regulations for accident prevention in the country and place of use of the system.

Unless approved by the manufacturer of the LegaMove lifting column system, the operator may not make any additions, alterations or modifications to the system which may impair the system safety.

Components to be used in the system must comply with the technical specifications provided by the manufacturer.



Information

Always carefully read the safety instructions before commissioning the equipment. Observe the warnings provided in the operating instructions. Always store these installation and operating instructions so that they are easily accessible. When you dispose of or transfer this unit, also hand over this instruction manual.

Always subject the final product (height-adjustable piece of furniture) to a hazard analysis to prepare yourself for possible remaining hazards (e.g. as a result of constructional measures or following the notes in the operating or safety instructions for your product).

2. General Information

2.1 Intended use

	Warning
	<p>The LegaMove lifting column system may only be operated according to its intended use and in a safe and technically faultless condition!</p> <p>The operating safety of the lifting column system cannot be guaranteed unless the system is used as intended!</p>

The LegaMove lifting column system described in this documentation is intended exclusively for the installation and subsequent operation as an electrically height-adjustable piece of furniture for private and commercial sectors. The lifting column system will solely be loaded in pull direction. Therefore, the LegaMove lifting column system has been designed exclusively for this purpose.

Any usage differing from or exceeding the intended use e.g. beyond the scope of the technical specifications (see section 4.1) will be regarded as misuse and will not be in compliance with its intended use.

The instructions provided in chapter 3, "Safety", must be observed in this context

The intended use of the system also includes adherence to the operating, maintenance and repair requirements specified by the manufacturer.

In case of unauthorized modifications to the lifting column system, the product liability will become void, and the manufacturer will not be liable for any damage resulting from such modifications.

Any use exceeding the specified purpose is an infringement of use for intended purposes. The manufacturer shall not be liable for any damage resulting from improper use. The operator shall bear the sole risk for possible damage.

2.2 Foreseeable misuse

	Warning
	<p>Any misuse of the system entails possible hazards!</p> <p>The situations listed below are regarded as foreseeable misuse:</p> <ul style="list-style-type: none">• Persons could manipulate the safeguards.• Persons could remove isolating safeguards, thus putting the LegaMove lifting column system into operation.• Persons could use the LegaMove lifting column system for lifting other persons or loads.• Persons could incorrectly install the LegaMove lifting column system and use it in push direction.• Persons could carry out maintenance, troubleshooting, etc. on the LegaMove lifting column system without disconnecting the LegaMove lifting column system from the voltage supply.• Persons could make adjustments to the LegaMove lifting column system while others are present in the danger zone.• Persons could disregard the maximum load permitted for the LegaMove lifting column system.• Persons could open, remove or damage the housing of the system components.

The cases listed above are some of the remaining hazards that may exist despite the prohibitions, and may jeopardize persons' health.

The operator must adhere to the safety requirements defined in the Ordinance on Industrial Safety and Health.

2. General Information

2.3 Scope of delivery

The following components can be combined as required for installing an electrically height-adjustable desk.

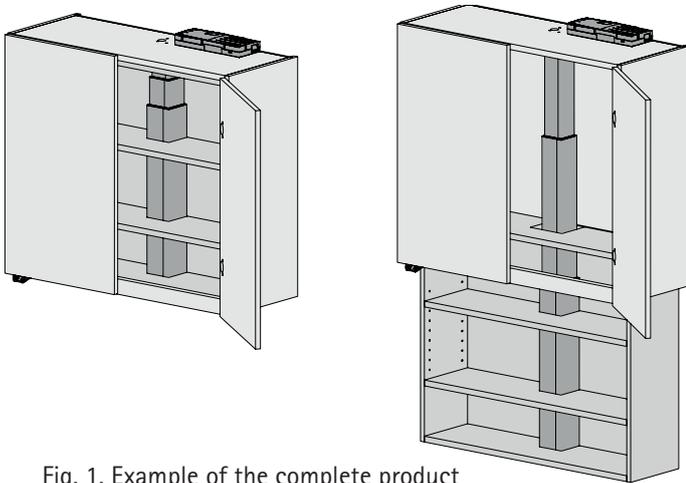


Fig. 1. Example of the complete product

The following components (incl. cabling) are available for the system:

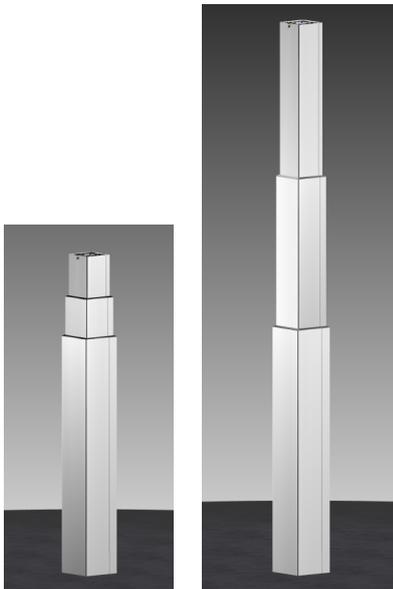


Fig. 2. LegaMove lifting column (here: retracted and extended)



Fig. 3. Example of a handset and control unit

2.4 Liability

Only competent personnel shall be allowed to carry out actions to remedy defects.

Manufacturer's liability is limited to damage arising from or in connection with the intended use of the system. The manufacturer shall not be liable for any safety defects that cannot presently be detected by the current state of technology.

Violation of –

- safety instructions for the operators
- indications of specific hazards
- the prohibition of unauthorized alterations and modifications
- the prohibition of using components not released by the manufacturer

shall indemnify the manufacturer from any liability for consequences.



Note

Please refer to the Hettich catalog for other variants of the product.

3. Safety

The following identifications of danger zones (acc. to ASR A1.3) are used in these installation and operating instructions:

	<p>Danger</p> <p>Hazard due to electric shock!</p> <p>There is a risk of fatal injury due to electric shock if improper work is carried out on live components!</p> <p>Work on electrical equipment may only be carried out by authorized and qualified specialists!</p>
	<p>Warning</p> <p>Risk of injury!</p> <p>There is a risk of injury when the lifting columns are moving. Therefore always disconnect the lifting column system from the power supply before starting any work. Also take pre-cautions to prevent the power cord from inadvertently being reconnected!</p>
	<p>Caution</p> <p>Warning: tripping hazard!</p> <p>There is a risk of tripping over the piece of furniture or the power cord.</p>
	<p>Caution</p> <p>Warning: danger of hand injury!</p> <p>There is the danger that hands may be crushed or otherwise injured.</p> <p>Never reach into moving parts!</p> <p>Always make sure that there are no persons in the danger zone before moving the piece of furniture!</p>

The following hazard signs must be attached directly to the piece of furniture where they are clearly visible:

	<p>Warning</p> <p>Warning: danger of crushing!</p> <p>Do not place any objects or body parts underneath the piece of furniture or between the crossbeams. Noncompliance may cause serious injury or death!</p>
	<p>Warning</p> <p>Warning: danger of overloading!</p> <p>Only place the maximum permissible load (including the lifting column system) on the piece of furniture. Overloading can cause breakage or lead to serious injury!</p>

3.1 Safety notices

Any person responsible for operating the lifting column system must carefully read and understand installation and operating instructions, in particular the "Safety" chapter. The safety instructions must always be followed.

	<p>Warning</p> <p>It is forbidden to:</p> <ul style="list-style-type: none"> Operate the LegaMove lifting column system when other persons and/or objects are within the danger zone. Remove covers or housings or put safeguards out of operation. Continue to operate the LegaMove lifting column system after modifications posing a safety risk have been made to it. Manipulate or bypass any safeguards. Use the system in normal operating mode without safeguards.
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3. Safety

The LegaMove lifting column system may not be put into service unless it is completely assembled and fully functional.

The generally accepted safety and occupational health regulations as well as the accident prevention regulations must always be complied with.

The LegaMove lifting column system may not be used unless all safeguards and safety-critical features such as protective covers or housings are fully functional and undamaged.

When putting the system into operation, the operator must ensure that all safety equipment and safeguards as well as the controls operate correctly and are undamaged.

Only properly instructed professional staff may carry out work on the LegaMove lifting column system. Only trained or instructed specialist staff may be deployed.

Immediately leave the environment of the piece of furniture if it inadvertently starts to move. Immediately disconnect the LegaMove lifting column system from the power supply. Have the LegaMove lifting column system repaired by our customer service or a specialized company. Do not put the LegaMove lifting column system back into service unless the repair has been completed.

Immediately take the piece of furniture out of operation if the control does not operate correctly.

Do not use the piece of furniture on an uneven surface. There is the danger of the piece of furniture toppling over. For the wall installation, take into account the overall weight of the piece of furniture (incl. the LegaMove lifting column system). The wall structure must be able to carry the weight. Only use suitable fixing material, and observe the instructions of the furniture manufacturer. An antiderail device must be used for the wall installation.

Observe the duty cycle of 10% of the LegaMove lifting column system. Maintain a break of at least 18 minutes after each height adjustment (max. 2 minutes).

Do not place a load on the lifting column system that exceeds the permissible weight (see "Specifications" in section 4.1).

A distance of less than 8mm or greater than 25mm must be maintained for adjacent elements with a relative movement between them. This applies to the entire travel range.



Warning

Children must be observed to prevent them from playing with the equipment. This device is not intended to be used by persons (including children) with limited physical, sensory or mental aptitude or lack of experience and/or knowledge unless they are supervised by a person responsible for their safety or have received instruction from this person as to how the device is to be used.

Children may not be allowed to use the device without adult supervision!

3. Safety

3.2 Safety instructions for maintenance work

Make sure that the product is always in perfect order. If necessary, have it regularly inspected by qualified personnel.

Do not carry out repairs on the LegaMove lifting column system or its component by yourself. Maintenance may only be carried out by the manufacturer's qualified personnel or under its supervision.

If the LegaMove lifting column system is completely switched off for maintenance and repair work, it must be safeguarded against inadvertently being switched on again.

Only use tool kits that are suitable for carrying out maintenance activities.

Service and maintenance work may only be carried out by qualified personnel.

Work on electrical components may only be carried out by a qualified electrician or instructed persons under the guidance and supervision of a qualified electrician in compliance with the electrotechnical regulations.

If the safeguards have to be removed for carrying out service or maintenance work, then the safeguards must be reinstalled and tested immediately after the work has been completed.

Any screw connections loosened for service or maintenance work must be tightened after the work has been completed.

Do not carry out any structural modifications on the LegaMove lifting column system.

Do not exceed the maximum duty cycle of the LegaMove lifting column system.

Always use new original manufacturer parts to replace faulty components of the LegaMove lifting column system. Follow the instructions in these operating and installation instructions when replacing any parts.

Provide for safe and environmentally compliant disposal of resources, process materials and replacement parts.

3.3 Noise

The equivalent A-weighted continuous sound level of the lifting column system is **less than 60dB(A)**.

3.4 Hazards from electrical energy

Do not connect the LegaMove lifting column system to a power supply unless it is fully assembled.

Regularly check the electrical equipment of the piece of furniture according to national standards (in Germany, the accident prevention regulations).

Do not use cables with damaged insulation, as there is the danger of electric shock. Have a specialized company immediately replace damaged cables with undamaged ones.

Do not lay feeder lines within the vicinity of heat sources, as the cables can be damaged when exposed to heat. There is the risk of fire or electric shock.

Always disconnect the LegaMove lifting column system from the power supply when it is stationary or not used for a prolonged time.



Note

Observe DIN EN 60335-1 (VDE 0700-1) when laying feeder line.

3. Safety

3.5 Specific danger areas

Ensure that no persons are within the vicinity of the piece of furniture when adjusting it. There is a risk of injury.

When setting up the piece of furniture, ensure that there is no adjustment position involving the risk of collision (e.g. structural conditions such as baseboards, power outlets, etc.). Also ensure a collisionfree position of other objects (e.g. decorative items, articles of daily use, etc.) located on or in the piece of furniture.

Maintain a lateral safety distance of at least 25mm from any other piece of furniture.

Ensure that the cables used are of sufficient length to allow safe use of the entire adjustment range.

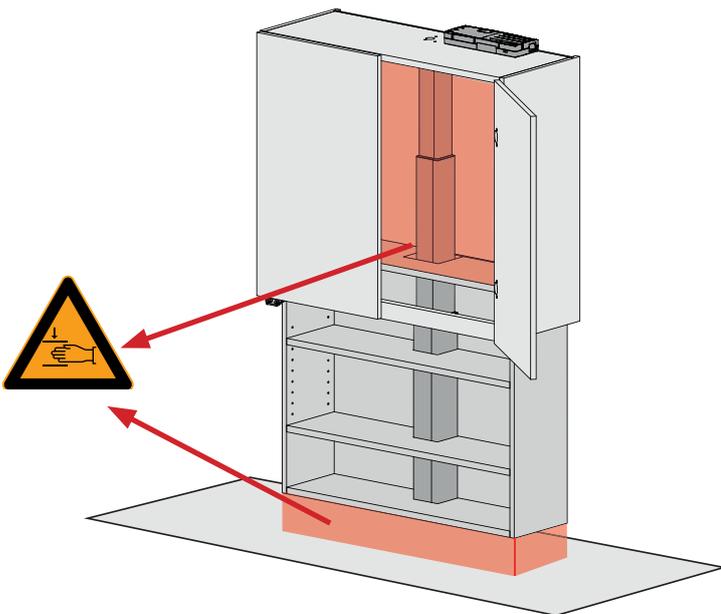


Fig. 4. Example for danger of crushing here: wall cabinet

	<p>Warning</p> <p>Despite the ISP collision detection there is a danger of crushing in as the combination of all components of the height-adjustable piece of furniture rather than the control unit is responsible for switching the motor off! In addition the switch-off sensitivity is influenced by the mechanics, the motor and the environmental conditions!</p>
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3.6 Residual risks

The LegaMove lifting column system has been built according to the state of the art and recognized safety regulations. Nevertheless, use of the system may still entail risks to the user or third party.

Only use the system:

- for its intended use, and
- in perfect technical condition in accordance with the safety regulations.

	<p>Warning</p> <p>Risk of injury!</p> <p>Never remove the safeguards or override them by manipulating the LegaMove lifting column system!</p> <p>Malfunctions impairing the system safety must be remedied immediately!</p> <p>Always switch off the LegaMove lifting column system and protect it against inadvertently being switched back on prior to carrying out any maintenance or cleaning work!</p>
	<p>Warning</p> <p>Risk of injury!</p> <p>Ensure that no unauthorized persons (e.g. small children) or objects are within the vicinity a of the height-adjustable piece of furniture and/or stay on it when it is moved.</p> <p>Make sure that there is enough room to move when operating the equipment!</p>

3. Safety

	Warning
	<p>Residual hazards!</p> <p>Handling the LegaMove lifting column system still involves certain residual hazards that could not be eliminated by design.</p> <p>Be aware of any residual hazards and observe these installation and operating instructions as well as the documentation of the final product!</p>

	Note
	<p>Always subject the final product (height-adjustable piece of furniture) to a hazard analysis to prepare yourself for possible remaining hazards (e.g. as a result of constructional measures or following the notes in the operating and/or safety instructions for your product).</p>

3.7 Training/instruction

The manufacturer of the height-adjustable piece of furniture is under the obligation to instruct the operators (e.g. installers) and the end-user on existing legal and accident prevention provisions and inform and/or instruct them about existing safeguards and their use.

4. Description of the Product

4.1 Specifications

Description:	LegaMove lifting column system for an electrically height-adjustable piece of furniture in the private and commercial sector
Type:	LegaMove
Place of installation:	Closed rooms
Min. height:	approx. 575 mm
Max. height:	approx. 1,200 mm
Max. load per column:	40kg (with centered load)
Type of load:	Pull load
Application:	dynamic load of 80kg with 2 columns; dynamic load of 120kg with 3 columns; (with centered load in both cases)
No. of lifting columns for Compact-e-2 control unit:	1 to 2 columns
Compact-e-3 control unit:	1 to 3 columns
Max. speed:	30 mm/s
Duty cycle:	10% (2 min. continuous operation / 18 min. inoperative)
Ambient temperature during operation:	5°C to 40°C
Storage / transportation temperature:	- 40°C to 70°C
Rel. humidity, during operation (non-condensing):	5 % to 85 %
Max. noise level:	60 dB (A)
Protection class:	IP 20

For safety reasons it is strictly forbidden to make unauthorized modifications or conversions to the lifting column system components. The manufacturer will not be liable for any resulting damages.

4. Description of the Product

4.2 Controls

The following sections contain a description of the controls for the LegaMove lifting column system.

4.2.1 Power cords

Depending on the operating site, the power cord is available in different versions.

	Note
	Observe the information provided in the "Scope of delivery" section.

	Danger
	Hazard due to electric shock! There is a risk of fatal injury due to electric shock if improper work is carried out on live components!
	Work on electrical equipment may only be carried out by authorized and qualified specialists!



Fig. 5. Various power cords

4.2.2 Control unit

Depending on the number of lifting columns required, the control units are available in two different variants.

	Note
	Observe the information provided in the "Scope of delivery" section.



Fig. 6. Compact-e-2 control unit



Fig. 7. Compact-e-3 control unit

4. Description of the Product

4.2.3 Handset

The manually operated switch is used to control the lifting column system.

Depending on the range of functions, the handset is available in three different versions.

	Note
	Observe the information provided in the "Scope of delivery" section.



Fig. 8. Basic handset



Fig. 9. Touch Basic inlay handset

Remote handsets:



Fig. 10. Remote handset Basic



Fig. 11. Receiver module for remote handsets

	Note
	Remote handsets must be firmly attached and used within sight of the furniture.

	Note
	Refer to the following sections for a detailed description of the handset functions.

4. Description of the Product

4.3 Safeguards

	Note
	The dead man principle using a push-key serves as essential safety function for the height adjustment.

4.3.1 Mechanical safeguards

Disconnect safeguards are installed on the LegaMove lifting column serve to protect the operator from mechanical dangers. The electrical components of the system are enclosed by insulating cases to protect the operator from electrical hazards.

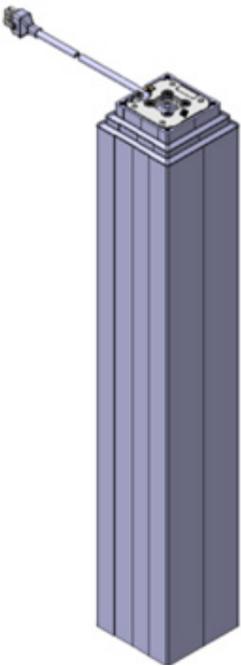


Fig. 12. Protective enclosure of the LegaMove lifting column

	Warning
	Risk of injury! The final product can cause hazards that are not foreseeable at this stage.

4.3.2 Software-related safeguards

	Warning
	Risk of injury! Despite certain software safeguards, there may be danger of crushing in exceptional cases as the combination of mechanics and electronics rather than the control unit is responsible for switching the motor off! In addition the switch-off sensitivity is influenced by the mechanics, the motor and the environmental conditions! For these reasons, the manufacturer cannot completely exclude a residual risk and shall not be liable for resulting damage!
	The control unit includes the following software-dependent safeguards: <ul style="list-style-type: none"> • ISP (intelligent system protection) collision detection • Slow travel speed ranges • Duty cycle monitoring • Safety area • Top / bottom stop position • Plug detection • Drive back (collision detection)

The control unit includes the following software-dependent safeguards:

- ISP (intelligent system protection) collision detection
- Slow travel speed ranges
- Duty cycle monitoring
- Safety area
- Top / bottom stop position
- Plug detection
- Drive back (collision detection)

	Note
	Refer to the following sections for a detailed description of the use of the functions listed.

5. Transportation and Assembly

5.1 Transportation

Only move the LegaMove lifting column / piece of furniture when not connected to the power supply (power cord disconnected from the power grid)

During installation:

- work on the electric system must be carried out by electrically qualified personnel
- work on the mechanics must be carried out by suitable specialists.

	Warning There is danger of impact and crushing when lifting and transporting the LegaMove lifting column / piece of furniture!
---	--

	Warning No persons or objects are allowed on the piece of furniture or hanging from it while the piece of furniture is being transported.
--	---

5.2 Assembly

	Danger Electric current represents a mortal danger! The housings of LegaMove components must not be opened, removed or damaged. The power cord must be disconnected from the power outlet during the installation of the control unit.
---	---

5.2.1 Installing the lifting column

Securely mount the LegaMove lifting column firmly to the piece of furniture. The following tools are required for the installation:

- 1 x Allen wrench;
- 8 x M6 hexagon socket screws per LegaMove lifting column;
- Assembly instructions of the piece of furniture

	Note Use M6 screws of a suitable length. Observe the maximum length of the screws. The screws should be inserted into the column by 8 – 12mm.
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Follow the steps described below to install the lifting column:

1. Follow the assembly instructions of the furniture manufacturer when assembling the LegaMove lifting column.
2. Use four hexagon screws to attach the LegaMove lifting column to the piece of furniture.

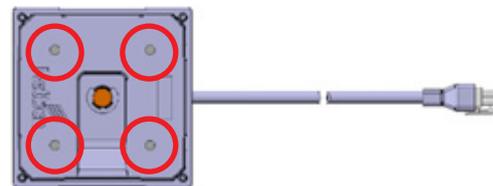


Fig. 13. Attaching the LegaMove lifting column (large end plate shown)

3. Then tighten the four screws of each LegaMove lifting column to max. 7Nm using the Allen wrench.
4. Use four hexagon screws per LegaMove lifting column to attach all the required lifting columns to the piece of furniture.

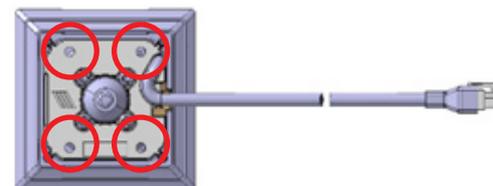


Fig. 14. Attaching the LegaMove lifting column (small end plate shown)

5. Transportation and Assembly

- Then tighten the four screws of each LegaMove lifting column to max. 7Nm using the Allen wrench.
- You can then assemble the piece of furniture.

	Note
	To ensure proper and safe setup of the height-adjustable piece of furniture, it is mandatory to place it on a level assembly surface with a sufficient load-bearing capacity. Depressions or projections in the mounting surface must be leveled out.

	Note
	In case of wall mounting, observe the manufacturer's instructions for the piece of furniture. The wall structure must be able to carry the weight of the piece of furniture. Be sure to use the mounting materials specified by the manufacturer. An anti-derail device must be used for the wall installation.

	Note
	If LegaMove lifting columns in a system are to be replaced, the control unit must first be reset to the factory defaults (refer to section 7.5.8), and a manual reset must be performed (refer to section 7.4.4).

5.2.2 Installing the control unit

	Note
	Be sure to check that the control unit is suited for the LegaMove lifting column before assembling the product. Refer to the specifications on the type plates. Observe the mains voltage.

Attach the control unit to the piece of furniture. The following tools are required for the installation:

- 1 x screw driver,
- 1 x pencil,
- 1 x drill (for pre-drilling),
- Assembly instructions of the piece of furniture.

Follow the steps described below to install the control unit:

- Follow the assembly instructions of the furniture manufacturer when assembling the control unit.
- Place the control unit / drilling jig in the required position on the piece of furniture.
- Mark the drill hole using a pencil.



Fig. 15. Fixing points at the control unit

- Pre-drill these two holes.
- Attach the control unit at the pre-drilled positions using two screws.

	Note
	The manufacturer recommends the use of 4 x 20mm raised countersunk screws. The length of the screws must match the thickness of the piece of furniture. The torque to be applied depends on the material of the piece of furniture, but it should not exceed 2Nm.

5. Transportation and Assembly

5.2.3 Installing the handset

Depending on the handset used, the following installation instructions must be observed:

	Note
	The position of the handset has to be selected in way that no damage can occur during operation. The furniture manufacturer's installation instructions must be observed!

5.2.3.1 Installing the LegaMove Basic handset



Fig. 16. LegaMove Basic handset

Attach the handset to the piece of furniture. The following tools are required for the installation:

- 1 x screw driver
- 2 screws,
- Assembly instructions of the piece of furniture.

Follow the steps described below to install the LegaMove Basic handset:

1. Follow the assembly instructions of the furniture manufacturer when installing the handset.
2. Unpack the handset.

	Note
	Dispose of the packing material in an environmentally responsible manner (plastic foil in the plastic waste container, cardboard in the container for waste paper)!

3. Place the handset in the required position on the piece of furniture. Make sure that the handset is easily and conveniently accessible.
4. Attach the handset using two screws.

	Note
	The following screw types should be used for attaching the LegaMove Basic handset: <ul style="list-style-type: none">- Cylinder head screws- Round-head screws- Flat-head screws Max. thread diameter: 5 mm Max. head diameter: 9 mm



Fig. 17. Attaching the LegaMove Basic handset

5. Transportation and Assembly

5.2.3.2 Installing the LegaMove Touch Basic Inlay handset



Fig. 18. LegaMove Touch Basic Inlay handset

Attach the LegaMove Touch Basic Inlay handset in a suitable position in the piece of furniture.

Follow the steps described below to install the LegaMove Touch Basic Inlay handset:

1. Follow the assembly instructions of the furniture manufacturer when installing the LegaMove Touch Basic Inlay handset.
2. Unpack the handset.

	Note
	Dispose of the packing material in an environmentally responsible manner (plastic foil in the plastic waste container, cardboard in the container for waste paper)!

3. Drill / mill a mounting hole. The milling pattern is shown in the figure below.

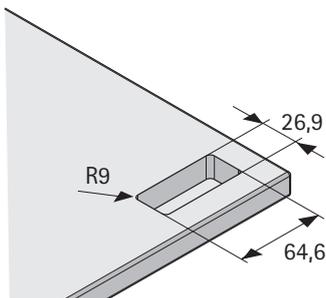


Fig. 19. Milling pattern for installing the LegaMove Touch Basic Inlay handset with rubber flaps

4. Insert the handset into the hole previously drilled from the front. There is no need to use additional screws, as the rubber flaps hold the handset in its position.

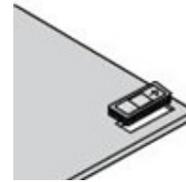


Fig. 20. Attaching the LegaMove Touch Basic Inlay handset to the piece of furniture

5. Transportation and Assembly

5.2.3.3 Installing the remote handset Basic



Fig. 21. Remote handset Basic

Attach the remote handset Basic to the piece of furniture. The following tools are required for the installation:

- 1 x screw driver,
- 2 screws,
- Assembly instructions of the piece of furniture.

Follow the steps described below to install the remote handset Basic:

1. Follow the assembly instructions of the furniture manufacturer when installing the remote handset.
2. Unpack the handset.

	Note
	Dispose of the packing material in an environmentally responsible manner (plastic foil in the plastic waste container, cardboard in the container for waste paper)!

3. Insert the battery into the handset.
 - a) To do so, you have to remove the battery cover of the handset.
 - b) Then insert the battery. Observe the correct battery polarity.
 - c) Replace the battery cover on the handset.

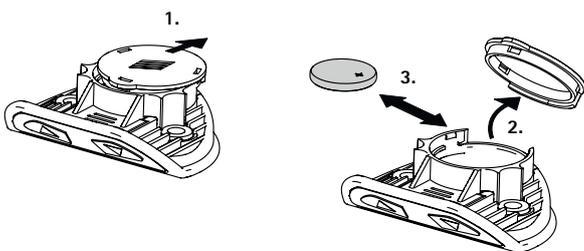


Fig. 22. Inserting / replacing the battery
Button cell CR 2032

4. Place the handset in the required position on the piece of furniture. Make sure that the handset is easily and conveniently accessible.
5. Attach the handset using two screws.

	Note
	The following screw types should be used for attaching the remote handset Basic: <ul style="list-style-type: none">- Cylinder head screws- Round-head screws- Flat-head screws Max. thread diameter: 4.5 mm Max. head diameter: 8 mm



Fig. 23. Installing the remote handset Basic

The button cell (CR 2032, included) must be inserted (see section 6.2.2.2) before installing the remote handset Basic.

Observe the correct polarity.

	Note
	Do not install the remote handset Basic unless the remote receiver has been programmed.

	Note
	The remote handset Basic must be firmly attached and used within sight of the furniture.

6. Commissioning

Commissioning covers any activity required to allow the height of the electrically height-adjustable piece of furniture to be adjusted using the LegaMove lifting column system. The following requirements must be met for commissioning:

- The control unit is installed.
- The LegaMove lifting column or columns for the height-adjustment is / are installed.
- The handset is installed.
- Section 6.1 of these operating instructions must be observed during the initial start-up.

Any maintenance or repair work required in specific technical fields (electrical engineering, etc.) may only be carried out by specialists qualified in the relevant area!

Please observe the safety instructions below!

	Danger
	<p>Danger to life!</p> <p>There is a risk of fatal injury due to electric shock if improper work is carried out on live components!</p> <p>Work on electrical equipment may only be carried out by authorized and qualified specialists! The LegaMove lifting column system must be disconnected from the power supply before carrying out any repair or cleaning work!</p> <p>Disconnect the power cord from the power grid and protect it from being inadvertently re-connected.</p>

	Warning
	<p>Attention!</p> <p>The housings of LegaMove components must not be opened, removed or damaged.</p>

	Warning
	<p>Attention!</p> <p>There is the risk of crushing from moving parts if the lifting column is not put out of operation.</p> <p>The lifting column system must be disconnected from the power supply before carrying out any repair or cleaning work!</p> <p>Disconnect the power cord from the power grid and protect it from being inadvertently re-connected.</p>

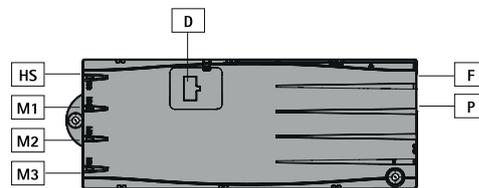


Fig. 24. Sockets at the control unit

- M1: Motor / lifting column socket 1
- M2: Motor / lifting column socket 2
- M3: Motor / lifting column socket 3
- D: DATA logic connector for sensors and cascading
- HS: Socket for handset
- P: Mains socket
- F: Cable lug for grounding the metal pieces of furniture (6.3 mm x 0.8 mm cable lug)

	Note
	<p>It is forbidden to connect self-built products to the control unit! Only use components approved by the manufacturer. Failure to observe this can lead to damage or destruction of the device!</p>

	Note
	<p>The cable lug (F) next to the mains socket is used as functional grounding. This connection is for example used to carry off electrostatic discharge from the electrically height-adjustable piece of furniture. This connection may not be used as a protective conductor!</p> <p>The cable lug is identified by the symbol \perp attached to the top side of the housing.</p>

6. Commissioning

6.1 Initial start-up

Please observe the following before starting up the LegaMove lifting column system for the first time:

- Check that the LegaMove lifting column system has been installed in compliance with the regulations specified above!
- Use the documentation of the furniture manufacturer to ensure that the piece of furniture is installed properly.
- Ensure that the piece of furniture is placed on a level surface and properly aligned. For wall mounting ensure that the piece of furniture is attached and hung up according to manufacturer specifications.
- Ensure that all moving parts can move freely within the required clearance zone and that the safety distances are maintained!
- Check the proper operation of the safeguards!
- A homing process must be carried out during initial start-up. For further information see section 7.2 "Manual reset".

	Note
	During startup, watch out for unusual noise or heating when adjusting the position of the piece of furniture!
	If this occurs, the LegaMove lifting column system must be taken out of operation. Have the LegaMove lifting column system repaired by an expert and do not commission it before the repair is completed.

6.2 Startup procedure

	Danger
	Danger to life!
	There is a risk of fatal injury due to electric shock! The power cord may not be connected unless all components have been connected to the control unit. The power supply cable must be freely accessible at all times so that the drive system can be disconnected from the mains in an emergency!

6.2.1 Connecting the drives / lifting columns

Connect the LegaMove lifting column cables to the appropriate 8-pin motor / lifting column sockets (M1 to M3).

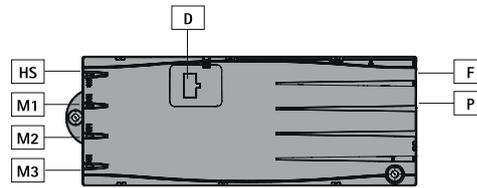


Fig. 25. Sockets at the control unit

	Note
	When connecting the lifting column cables, be sure to follow the order of the sockets M1, M2 and M3 (see fig. 25)!

6.2.2 Connecting the handset / remote receiver

Connect the handset cable to the 7-pin handset socket (HS).

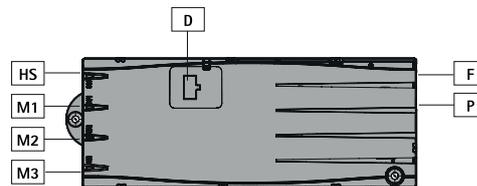


Fig. 26. Sockets at the control unit

	Note
	You can select from several handsets for the control unit! Please refer to the section "Scope of delivery" for more information on the available manual and handsets.

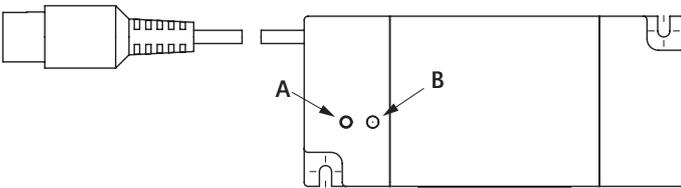
6. Commissioning

6.2.2.1 Programming the remote handset

The remote receiver must be programmed (taught) to be able to understand the radiogram from the remote handset. The teach-in procedure creates an assignment only in the remote receiver.

The distance between the remote handset and the remote receiver should not exceed 0.5 m during the programming.

The remote receiver has a "teach-in" key (A) for programming and a "control" LED (B) as an indicator.



Follow the steps described below:

1. Briefly press the "teach-in" key at the remote receiver. The "control" LED lights up.
2. Immediately send a radio signal (approx. 2 s) using the remote handset. You can press the "up" or "down" key to send the signal. The LED goes out briefly.
3. The teach-in procedure automatically ends after approx. 8 s. When the "up" or "down" key of the remote pushbutton is pressed again, the procedure ends immediately.

6.2.2.2 Replacing the battery

The remote pushbutton is energized by a lithium cell battery (CR 2032, included).



Note

Immediate remove used button cells (batteries) and dispose of them in an environmentally friendly manner. They must not be discarded with household rubbish!
Replace button cell with identical type only.

1. Open the battery compartment.
2. Remove the used button cell.
3. Insert the new button cell (CR 2032).
Observe the correct polarity and avoid contamination!
4. Close the battery compartment (must audibly engage).

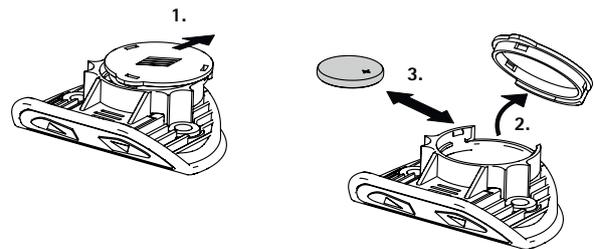


Fig. 27. Replacing the battery

6. Commissioning

6.2.3 Connecting optional components

If you have a ground cable, connect one end to a metal part of the piece of furniture and the other to socket F.

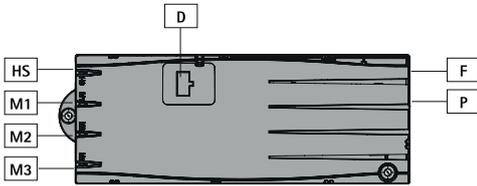


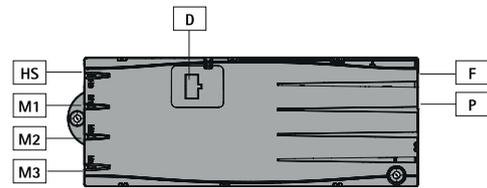
Fig. 28. Sockets at the control unit

6.2.4 Connecting the power cord



Warning
Attention!
 Verify the following again before connecting the power cord (socket P):

- The supply voltage corresponds to the rating plate of your control unit.
- All components are connected to the correct sockets.
- The ground cable is attached!



The control unit is operative as soon as the power cord is plugged in!

When installing the power supply, ensure that the control unit can be disconnected from the power supply at any time.



Note
 A manual reset may be necessary if there is a power cut or if the power supply cable is unplugged while adjusting height (see Section 7.2).



Warning
Attention!
 Take care not to squash, kink or strip the cables when laying the cables. Observe DIN EN 60335-1 (VDE 0700-1) when laying feeder line.



Warning
Attention!
 Take care not to create any tripping hazards (e.g. with the power cord) when laying the cables.



Warning
Attention!
 Take care to provide sufficient cable length for the adjustment procedure when laying the cables.

6.3 General configuration (example)

The following figure shows the socket assignment for an example configuration. This sample configuration consists of:

1. one control unit type LegaMove COMPACT-e-3
2. a piece of furniture with one LegaMove lifting column
3. a handset, type LegaMove Basic
4. a LegaMove EU power cord

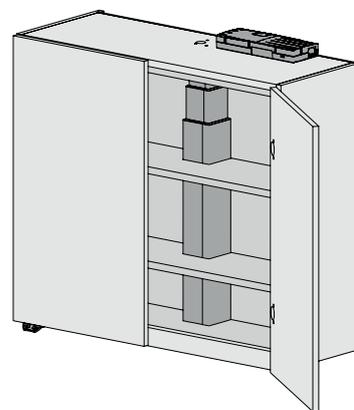


Fig. 29. Sample configuration (e.g. wall cabinet)

7. Operation

Please observe the safety instructions below to ensure safe operation of the control unit:

	Danger
	<p>Danger to life!</p> <p>There is a risk of fatal injury due to electric shock!</p> <p>Keep children away from the electrically height-adjustable piece of furniture, the motor control unit and the handset! Their voltages may cause injuries.</p>

	Warning
	<p>Attention!</p> <p>Verify that all movements of the piece of furniture are carried out correctly and without jerks. If this is not the case, disconnect the power cord from the power grid and contact the manufacturer's customer service.</p>

	Note
	<p>A manual reset (refer to section 7.2) may be required if a power failure occurs or the power cord is pulled out during the height adjustment.</p>

	Note
	<p>Disconnect the power cord from the power outlet during a thunderstorm or long periods of absence! Non-compliance could lead to damage of the device caused by overvoltages in the power grid.</p>

7.1 Basic functions

	Note
	<p>The control unit offers a comprehensive range of functions! However, the availability of certain functions depends on the handset used.</p> <p>This section describes the basic functions that can be executed with every handset provided for the control unit.</p>

7.1.1 Extending the lifting column system

This function is designed to easily raise the position of the piece of furniture. The LegaMove lifting column system is extended during this process. After installing the LegaMove lifting column system the piece of furniture can be raised or lowered.

Follow the steps described below:

	Note
	<p>The LegaMove lifting column system continues its movement until you release the key or until its top position is reached.</p>

No	Key	Function
1.		Press and hold the "lifting column up" key until the required height is reached.

	Note
	<p>When not in use, the control unit automatically switches to the standby mode to reduce power consumption.</p> <p>When the control unit is in the standby mode, the adjusting movement of the LegaMove lifting column system will start with a short delay.</p>

7. Operation

7.1.2 Retracting the LegaMove lifting column system

This function is designed to easily adjust the position of the piece of furniture. The LegaMove lifting column system is retracted during this process. After installing the LegaMove lifting column system the piece of furniture can be raised or lowered.

Follow the steps described below:

	Note	
	The LegaMove lifting column system continues its movement until you release the key or until its bottom position is reached.	

No	Key	Function
1.		Press and hold the "lifting column down" key until the required height is reached.

	Note	
	When not in use, the control unit automatically switches to the standby mode to reduce power consumption.	
When the control unit is in the standby mode, the adjusting movement of the LegaMove lifting column system will start with a short delay.		

7.2 Manual reset (homing)

If the actual position of the LegaMove lifting column system is no longer used with the position displayed or if an already configured control unit is used for another electrically height-adjustable piece of furniture of identical construction, you will have to carry out an end-of-travel adjustment of the retracted position of the lifting column system.

	Note	
	The homing process may only be carried out when the piece of furniture is unladen. Ensure that the LegaMove lifting column is capable of being retracted completely. Non-compliance leads to damage to the lifting column system!	

	Warning	
	<p>Attention!</p> <p>The collision detection (ISP) is not active during all reset procedures and during the end-of-travel adjustment. Pay attention to a possible risk of squashing!</p>	

No	Key	Function
1.	 or 	Press the arrow key for retracting the LegaMove lifting column . Hold the key until the LegaMove lifting column is retracted completely and stopped (programmed end position).
2.	 	Press the relevant arrow key again and keep it pressed. After approx. 5 seconds, the LegaMove lifting column is retracted further until it reaches the absolute bottom position.
3.	 	Release the relevant arrow key. The electrically height-adjustable piece of furniture can now be used again in the normal way.

7. Operation

7.3 Software-dependent functions

	Note
	<p>Before delivery, the control unit is parameterized using the software. The functions described below are not available unless the control unit has been parameterized accordingly.</p>

7.3.1 Low travel speed ranges

This function (low speed range) ensures that during the adjustment of the system the speed is automatically reduced before the following positions are reached:

- Top and bottom positions
- All positions saved (e.g. memory position, bottom stop position).

7.3.2 Duty cycle monitoring

The duty cycle monitoring ensures that the control unit is inactive for a defined period of time once a defined duty cycle has been reached (e.g. after 2 minutes of continuous operation, the control unit is automatically deactivated for 18 minutes).

7.3.3 Top and bottom stop position

These two features can be used to limit the travel range of the LegaMove lifting column system (and/or of the piece of furniture), e.g. when an obstacle is located within the travel area. A bottom stop position can be set within the lower half of the travel; a top stop position within the top half of the travel. Once a bottom stop position has been set, it is used as the new bottom position; the top stop position corresponds to the new top position of travel. Carry out the following steps to save a bottom / top stop position:

	Note
	<p>A handset with a cable is required for this function. The remote handset can be used once the top and bottom stop position have been set.</p>

	Note
	<p>These steps must be carried out separately for saving a bottom stop position as well as for saving a top stop position!</p>

No	Key	Function
1.	 or 	<p>Set the LegaMove lifting column system to the position that is to be defined as the bottom / top stop position. To do so, press the LegaMove lifting column system down key or the LegaMove lifting column system up key until the desired position is reached.</p>
2.	 	<p>Simultaneously press the LegaMove lifting column system up key and the LegaMove lifting column system down key and keep both buttons pressed for approx. 10 seconds. The control unit <u>clicks twice</u> when the position is saved.</p>

7. Operation

Carry out the following steps to disable a bottom / top stop position:

	Note
These steps must be carried out separately for saving a bottom stop position as well as for saving a top stop position!	

No	Key	Function
1.	 or 	Move the LegaMove lifting column system to any position within the lower half of the travel range to disable a bottom stop position, or to any position within the upper half of the travel range to disable the top stop position. To do so, press the LegaMove lifting column system down key or the LegaMove lifting column system up key until the desired position is reached.
2.	 	Simultaneously press the LegaMove lifting column system up key and the LegaMove lifting column system down key and hold both keys down for approx. 10 seconds. The control unit issues a <u>single click</u> when the position is disabled.

7.3.4 Plug detection

The control unit detects whether a lifting column is connected to the relevant socket. The control unit also detects whether a LegaMove lifting column has been replaced.

If a LegaMove lifting column is missing or has been replaced, the control unit issues a triple click. In addition, the relevant error code (see list of errors in chapter 8) appears on the display if a display is fitted to the handset.

A manual reset is necessary to clear an error (for detailed information see section 7.2).

7.3.5 Auto Detect Number of Drives

In addition to the plug detection, the control unit can automatically detect the number of LegaMove lifting columns attached. This feature is enabled whenever a control unit is put into operation for the first time and after it has been reset to the factory settings (refer to section 7.3.7).

Attached LegaMove lifting columns will not be detected after initial start-up. To modify the programmed configuration the control unit must be reset to the factory settings.

Possible situations:

- Use of the control unit for the first time
- Reset to factory settings

7.3.6 Collision detection (Drive back)

The LegaMove lifting column system automatically travels in the opposite direction by a defined distance when a safety function is triggered (by the ISP collision detection, for example, or by optional accessories such as an anti-crushing guard). This serves to prevent permanent jamming.

	Note
The collision detection function (drive back) is enabled only when collision detection (ISP, optional accessories such as switch or anti-crushing guard) is available.	

	Warning
<p>Attention!</p> Despite the ISP collision detection there is a danger of crushing in as the combination of all components of the height-adjustable piece of furniture rather than the control unit is responsible for switching the motor off! In addition the switch-off sensitivity is influenced by the mechanics, the motor and the environmental conditions!	

7. Operation

7.3.7 Resetting the control unit to factory defaults (menu S0)

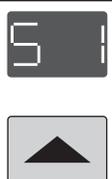
This function can be used to reset the control unit to the factory defaults.

	Note
	For this procedure a handset with display is necessary.

	Note
	When the menu is opened, the display shows S and one digit, e.g. S1. The digit displayed depends on the control unit parameters.

	Note
	If LegaMove lifting columns in a system are to be replaced, the control unit must first be reset to the factory defaults, and a manual reset must be performed (refer to section 7.2).

To be able to use the control unit again after changing a lifting column's configuration in this way, proceed as follows:

No.	Button	Function
1.		Simultaneously press memory position button 1 , memory position button 2 and the desk top down button.
2.		Keep this button combination pressed for approx. 3 seconds.
3.		Now release the buttons.
4.		The display shows S 1 . Keep pressing the desk top up button until the display shows S 0 .
5.		The display shows S 0 . Press the SAVE-button . The control unit is returned to factory settings. The control unit is reset to factory settings. The control unit is now in the same state as during initial commissioning.
6.		Handset display shows fault code E70 .
7.		Unplug the control unit's power supply and wait at least 5 seconds.
8.		Plug the control unit's power supply back in again.
9.		Carry out a manual reset (see Section 7.2 for details).

7. Operation

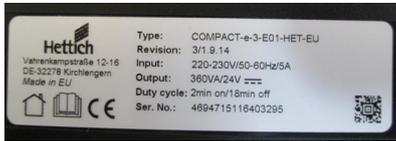
If a handset with only one up and one down button is used, proceed as follows:

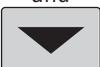
Note

This is possible for control units with Revision /1.11.3.



For control units with Revision /1.9.14 or older, resetting to factory settings is only possible with a handset with display.



No.	Button	Function
1.		Disconnect the power supply of the control unit and wait at least 5 seconds.
2.	 and 	While the control unit is disconnected from mains power, press the desk position down and desk position up buttons simultaneously. Press and hold this key combination.
3.	 and 	Keep this key combination of desk top down and desk top up pressed while reconnecting the control unit to mains power.
4.	 and 	<p>Keep this key combination of desk top down and desk top up pressed until the control unit begins to click twice per second. Release the two buttons as long as the control unit clicks twice per second.</p> <p>The control unit is reset to factory settings. The control unit is now in the same state as during initial commissioning.</p>

5.		Unplug the control unit's power supply and wait at least 5 seconds.
6.		Plug the control unit's power supply back in again.
7.		Carry out a manual reset (see Section 7.2 for details).

7.3.8 Cascading

In combination with multiple control units, cascading facilitates synchronous operation of up to twelve LegaMove lifting columns.

Note

It is necessary beforehand to specify with parameters whether a control unit can be used for cascading. Slight deviations from the functions of a single control unit are possible.

Note

Please refer to the manufacturer's separate operating manual "Kaskadierung von Motorsteuerungen" (cascading of motor control units) for detailed information on cascading.

8. Troubleshooting

Malfunctions of the LegaMove lifting column system may only be remedied by experts who have been assigned by the responsible person.

The entire environment of the LegaMove lifting column system should be taken into consideration when determining the cause of the malfunction. The system manufacturer must be notified immediately if malfunctions or defects occur during the warranty period.

8.1 Safety notices



Warning

Safety procedures when determining the cause of the malfunction/defect or eliminating it!
Observe the accident prevention regulations! In case of a mechanical malfunction, ensure that the LegaMove lifting column system is disconnected from the power supply!

The LegaMove lifting column system must be disconnected from the power supply before carrying out troubleshooting.

Disconnect the power cord from the power grid and protect it from being inadvertently re-connected.

8.2 Malfunctions

In this section you will find detailed information on the following subjects:

- Possible malfunctions and their elimination
- Error messages shown on the display of the handset
- Click codes of the control unit

8.2.1 Possible malfunctions and their elimination

LegaMove lifting columns do not work.

Possible cause	Remedy
Power cord is not connected	Connect the power cord to the control unit.
Lifting columns are not connected	Connect the lifting column cables to the control unit.
Power cord faulty (e.g. broken cable)	Replace the power cord.
Bad connector contact	Verify that the lifting column cable, the power cord and the handset cable are connected properly.
Control unit faulty	Contact customer service.
Handset faulty	Replace the handset.
Remote pushbutton faulty	a) No battery in the remote pushbutton or battery empty. (Refer to section 6.2.2.2 "Replacing the battery"). b) Remote pushbutton not programmed. (Refer to section 6.2.2.1 "Programming").
Lifting column faulty	Contact customer service.

Lifting columns only move in one direction.

Possible cause	Remedy
Power failure during movement, or power cord disconnected during movement.	Carry out a manual reset (see section 7.2).
Control unit faulty	Contact customer service.
Handset faulty	Replace the handset.
LegaMove lifting column faulty	Contact customer service.

8. Troubleshooting

Control unit or handset does not work.

Possible cause	Remedy
Power cord is not connected	Connect the power cord to the control unit.
Handset is not connected	Connect the handset.
Power cord faulty	Replace the power cord.
Control unit faulty	Contact customer service.
Handset faulty	Replace the handset.
Remote pushbutton faulty	a) No battery in the remote pushbutton or battery empty. (Refer to section 6.2.2.2 "Replacing the battery"). b) Remote pushbutton not programmed. (Refer to section 6.2.2.1 "Programming").
Bad connector contact	Verify that the lifting column cable, the power cord and the handset cable are connected properly.

8.2.2 Error messages shown on the handset display



"HOT" is shown on the display.

Possible cause	Remedy
An overheat protection is fitted to the control unit. This feature is activated when the system over-heats.	Wait until the control unit has cooled down and the message HOT disappears from the display. The control unit is then operative again.



The display shows four dashes.

Possible cause	Remedy
The display handset was connected to the control unit while the control unit was connected to mains power voltage.	Disconnect the power cable from the mains power voltage. Leave the control unit voltage-free for approx. 10 seconds. Reconnect the power cable to the mains power.



"E" and an error number are shown on the display.

Possible cause	Remedy
An internal error occurred in the control unit.	Proceed as described in the error list below.

No	Beschreibung	Remedy
00	Internal error, channel 1	Switch off the control unit. Contact customer service.
01	Internal error, channel 2	
02	Internal error, channel 3	
12	Channel 1 faulty	Disconnect the control unit. Remedy the external short circuit. Or: Connect the correct LegaMove lifting column to the relevant socket. Re-start the control unit.
13	Channel 2 faulty	
14	Channel 3 faulty	
24	Excess current motor M1	Remove any objects jammed in the travel area.
25	Excess current motor M2	If the piece of furniture is overloaded: Remove the load from the piece of furniture. Contact customer service.
26	Excess current motor M3	
48	Excess current motor group 1	
49	Excess current motor group 2	
60	Collision protection	
62	Excess current, control unit	
36	Plug detection at motor socket M1	Connect the correct LegaMove lifting column to the relevant socket. Carry out a manual reset (refer to section 7.2).
37	Plug detection at motor socket M2	
38	Plug detection at motor socket M3	
61	Motor replaced	

8. Troubleshooting

No	Beschreibung	Remedy
55	Synchronization of motor group 1 not possible	Remove the load from the piece of furniture. Carry out a manual reset (refer to section 7.2). Contact customer service if the error is displayed again after the reset.
56	Synchronization of motor group 2 not possible	
67	Voltage too high	Disconnect the power cord and contact customer service.
70	Drive configuration changed	See section 7.3.5
71	Internal error	Carry out a manual reset. Follow the steps described below: Disconnect the power cord, wait for several seconds and reconnect it. If the error occurs repeatedly, disconnect the power cord and contact customer service.
81	Internal error	Carry out a manual reset. Follow the steps described below: Disconnect the power cord, wait for several seconds and re-connect it. If the error occurs repeatedly, disconnect the power cord and contact customer service.

	Note
	<p>The PowerFail Detection identifies power failures and saves all relevant data before the voltage falls below a critical level.</p> <p>In rare situations it may not be possible to save data. In such cases the control unit displays E81 at the next power-on and issues a triple click. A manual reset is required to remedy this error (see section 7.2).</p>

8.2.3 Click codes of the control unit

As soon as power is supplied to the control unit, it uses the built-in relay to inform the user with an acoustic signal (click) about the system status and about the reason for the last shut-down. The following table explains the relation between the number of clicks and the information indicated by it.

Number of clicks	Status information
2x	Normal operation: The system operates without any problem.
1x	Emergency operation: The system is in emergency operation, the drives cannot be used. Check the error code shown on the display of the handset.
3x bis 6x	Last shut-down incomplete / forced reset: Check the error code shown on the display of the handset.

9. Maintenance and repair

- Regular inspection of the electrical system in compliance with the VDE guidelines
- Compliance with all national standards / regulations
- Cleaning of the complete piece of furniture, at least every 2 weeks (recommended)
- Replacing the battery if remote handsets are used

The operational life of the LegaMove lifting column system depends on its proper use and adherence to the regular service intervals.

	Warning
	<p>Risk of injury!</p> <p>Only properly instructed professional staff may carry out service and maintenance work.</p>

	Note
	<p>If LegaMove lifting columns in a system are to be replaced, the control unit must first be reset to the factory defaults (refer to section 7.3.7), and a manual reset must be performed (refer to section 7.2).</p>

9.1 Safety notes

	Warning
	<p>Risk of injury!</p> <ul style="list-style-type: none"> • Do not carry out service work unless the LegaMove lifting column system has stopped moving. • Ensure that the lifting column system has been protected against inadvertently being switched on. • Observe the safety instructions and accident prevention regulations provided by the relevant manufacturer when using oils/greases, cleaning agents and spare parts!

	Danger
	<p>Danger to life!</p> <p>Only qualified electricians may carry out maintenance work on the electrical connections of the LegaMove lifting column system or the auxiliary / control connectors.</p> <p>The LegaMove lifting column system must be disconnected from the power supply before carrying out troubleshooting.</p> <p>Disconnect the power cord from the power grid and protect it from being inadvertently re-connected.</p>

	Warning
	<p>Risk of injury!</p> <ul style="list-style-type: none"> • Observe the basic safety instructions in the documentation provided by the subcontractor. • The manufacturer forbids carrying out any welding, soldering or grinding on the LegaMove lifting column system.

9. Maintenance and repair

	Danger
	<p>Risk of fatal injury if the safeguards are manipulated!</p> <p>Manipulated safeguards do not provide any protection in a dangerous situation. This may lead to fatal injury of the staff and damage to the lifting column or other assets.</p> <ul style="list-style-type: none"> • Never dismantle or deactivate any safeguards when carrying out installation / disassembly / reassembly or repair work.

	Warning
	<p>Non-compliance with the safety measures may lead to injuries.</p> <p>There is the risk of serious injury to any persons located at the piece of furniture, or damage to the equipment if safety measures are not adhered to.</p> <p>Take all the applicable safety measures and adhere to them before and while performing any work relating to service, maintenance and troubleshooting of the system.</p>

	Warning
	<p>Non-compliance with the safety measures may lead to injuries.</p> <p>The housings of LegaMove components must not be opened, removed or damaged.</p> <p>Non-observance may lead to injuries!</p>

 	Warning
	<p>Risk of falling / tripping!</p> <p>Any dirt, remaining resources and process materials as well as spare parts and tools left lying about involve the risk of falling or tripping.</p> <p>Persons may suffer serious injuries when falling / tripping.</p> <ul style="list-style-type: none"> • Keep the workstation, in particular any handles, steps, etc. free from dirt. • Properly dispose of resources and process materials, and carefully store any spare parts and tools.

	Note
	<p>Inappropriate maintenance may cause damage to the piece of furniture!</p> <p>Material or consequential damage may result from improper disassembly and installation of the LegaMove lifting column system.</p> <p>Therefore, the following must always be observed during all removal and dismantling work:</p> <ul style="list-style-type: none"> • Parts that belong together should be marked accordingly. • Mark and record the fitting site and position. • Separately remove and store assemblies. <p>The following must be observed after completion of the maintenance work:</p> <ul style="list-style-type: none"> • Check all screw connections for tight fit. • Close and tighten all covers.

9. Maintenance and repair

9.2 Inspecting the safeguards

Regularly inspect all safeguards for completeness and proper function.

9.3 Labeling, information signs

The labeling / information signs must be

- cleaned with a cloth
- checked for tight fit and clear readability
- replaced if damaged

10. Taking out of Service

When the system is taken out of service, the power cord must be disconnected from the power supply.

	Danger
	Hazard due to electric shock! Work on electrical equipment may only be carried out by authorized and qualified specialists!

11. Disposal

Components should be sorted according to their materials and disposed of in an environmentally compatible manner.
Electric components should be disposed of as hazardous waste.

11.1 Environmental protection

	Caution
	<p>All legal requirements for waste avoidance and proper recycling / disposal must be observed when carrying out work on the lifting column system.</p> <p>In particular, water-pollutants such as</p> <ul style="list-style-type: none">• greases or• solvent-containing cleaning liquids <p>used during installation, repair or maintenance work must not have a negative impact on the soil and must not be drained off into the sewerage system.</p> <p>These substances must be stored, transported, loaded and disposed of in suitable containers.</p>

	Note
	<p>Immediate remove empty button cells (batteries) and dispose of them in an environmentally friendly manner. They must not be discarded with household rubbish!</p>

	Note
	<p>Observe the instructions of the furniture manufacturer when disposing the equipment.</p>

11.2 Scrapping

When the LegaMove lifting column system is to be permanently taken out of service, the laws and regulations for its disposal in force at that time must be observed and followed.

In addition, a complete de-installation of the entire power supply is required for the final de-commissioning and disposal.

In order to prevent any fatal injury due to electric shock:

	Danger
	<p>Hazard due to electric shock! De-installation of the electrical system may only be carried out by qualified electricians!</p>

It is recommended to check which materials can be recycled and then recycle the suitable materials.

12. EC Declaration of Incorporation

- Translation -

EC-Declaration of Incorporation

of Partly Completed Machinery In accordance with Annex II B of
DIRECTIVE 2006/42/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 May 2006

On behalf of the company



Paul Hettich GmbH & Co. KG
Vahrenkampstraße 12-16
32278 Kirchlengern

declares the undersigned:

For the lifting column system for an electrically height-adjustable piece of furniture

Type **LegaMove**

the following essential requirements of the directive have been applied in the risk assessment and are complied with, insofar as the condition of the equipment offered and delivered by Hettich permits for the assessment:

1.2.6; 1.3.1; 1.3.7; 1.3.9; 1.5.1; 1.5.2; 1.5.6; 1.5.8; 1.5.10; 1.5.11; 1.6.3

The product also complies with the following European directives*:

DIRECTIVE 2014/35/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 February 2014 -
Making available on the market of electrical equipment designed for use within certain voltage limits

DIRECTIVE 2014/30/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 February 2014 -
Electromagnetic compatibility

DIRECTIVE 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8 June 2011 -
Restriction of the use of certain hazardous substances in electrical and electronic equipment

Within the scope of the conformity assessment, the necessary special technical documents have been prepared and filed. The national authorities may, if they so request, be provided with specific documents in paper or electric form.

Note: The incomplete machine of type „LegaMove“ may only be commissioned when it has been established that a machine in which „LegaMove“ has been installed complies with the provisions of the machine directive.

This declaration of incorporation expires if significant changes are made to the entire system or parts of the system without the written consent of the manufacturer.

* For information on the standards applied by subcontractors see their EC declarations of conformity and incorporation.

The above mentioned special technical documents can be requested from:

Name / address of the EC documentation authorized representative:

Eckhard Meier Managing director

Paul Hettich GmbH & Co. KG
Vahrenkampstraße 12-16
32278 Kirchlengern

Name Function in the company

Address

Place, date: Kirchlengern,

21.06.2018

Eckhard Meier
Name / signature



Paul Hettich GmbH & Co. KG
Vahrenkampstr. 12-16
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Technik für Möbel

