

# Operation Manual

## Lighting Lifts

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**REEL TECH**  
Lighting-Lifts

# General

Thank you for choosing this product.

Please read this user manual carefully before installing or handling the product!

This manual was created and published under the supervision of ReelTech Vertriebs GmbH. The installation and operating instructions contain the technical data and product information according to the current status before publication.

ReelTech Vertriebs GmbH reserves the right to make changes to specifications and the materials contained herein.

ReelTech assumes no liability for obvious printing and typographical errors.

The manufacturer accepts no liability for damage due to:

- Failure to follow this manual
- Improper use
- Improper assembly or repairs
- Opening the device (breaking the seal)
- Technical changes
- Use of unapproved spare parts

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# Safety Instructions and Warnings

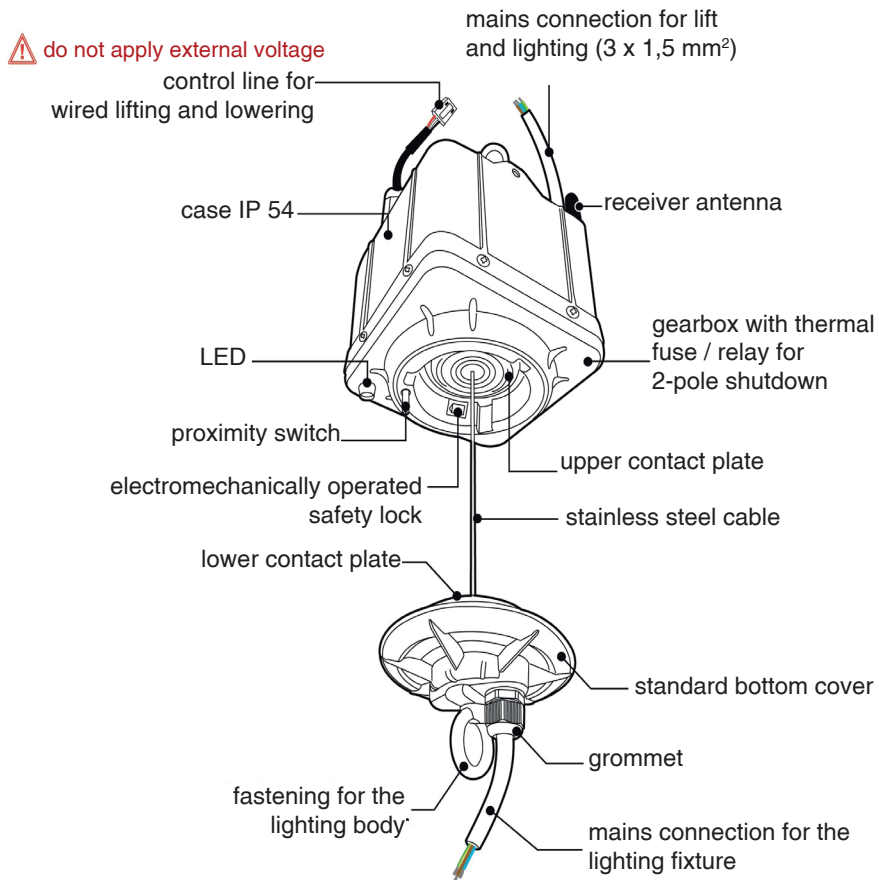


We expressly point out that people are not allowed to stay in the effective area of the lifts during operation. This must be ensured by the operating personnel before each start-up!

- It is forbidden to transport persons or animals with a lift.
- The operator must always act in accordance with the manual.
- The operator must provide the necessary instruction of the operating staff.
- Lowering without energy is not possible.
- Excessive jogging (e.g. giving the motor short pulses) is to be avoided.
- It is forbidden to carry loads in excess of those on the nameplate specified carrying capacity.
- The lighting lifts may not be operated without the minimum weight specified on the type plate.
- It is not permitted to move fixed or jammed loads.
- Loads must not be lifted or lowered at an angle.
- Visual contact with the load is essential during operation being held.
- A visual rope inspection must be carried out with every operation.
- If damage is found to the steel cable, the light lift must be taken out of service immediately.
- The steel cable must be replaced after 100 cycles (excluding LSI series).
- In the case of multi-contact lifts, before lowering the lifts, the power supply to the auxiliary contacts must be disconnected!
- If the weight of the load plate has been removed, before the load is lifted, the load plate is initially approx. 0.5 m to lower! This avoids the formation of unwanted loops on the suspension cable.

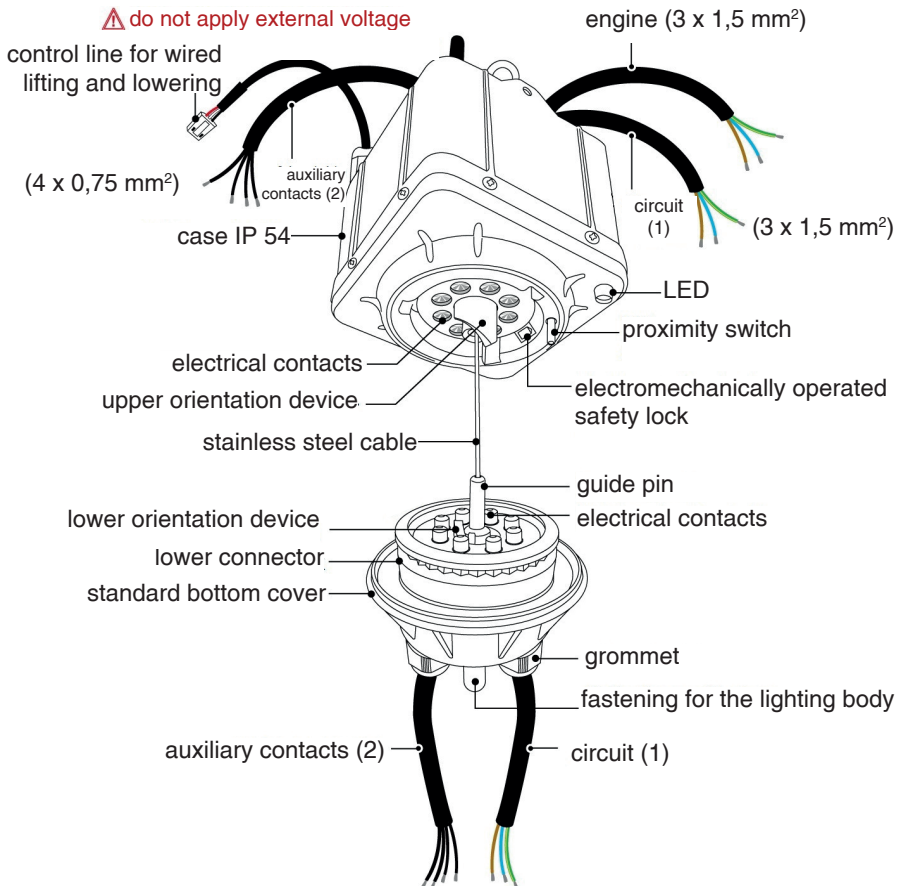
# Products

## Standard Lighting Lift



## Products

### Multicontact Lighting Lift



# Schematics

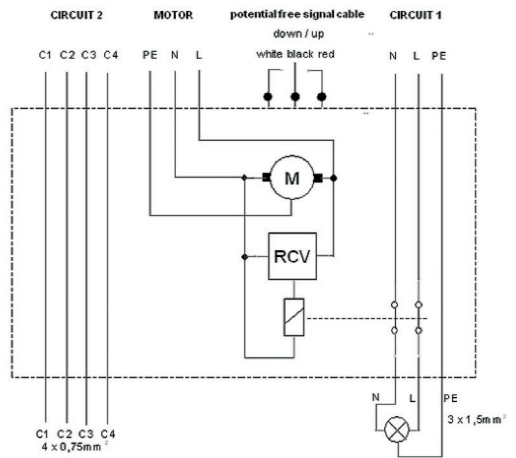
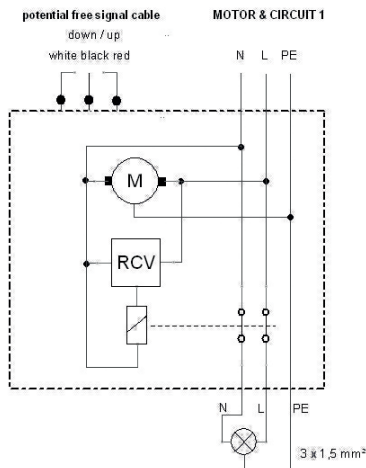


## Motor circuits not dimmable!

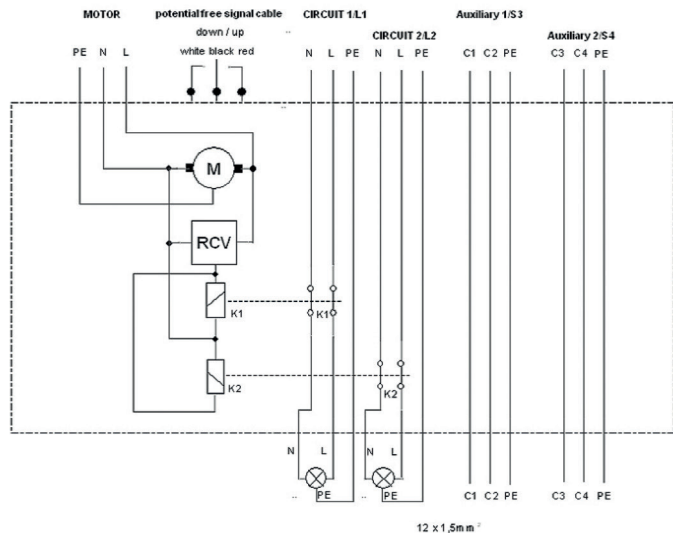
Caution with building control and soft start systems

Standard Lighting Lifts:  
Mini, Compact, Hook-Up, Heavy Duty

Multicontact Lighting Lifts:  
Mini, Compact, Hook-Up, Heavy Duty

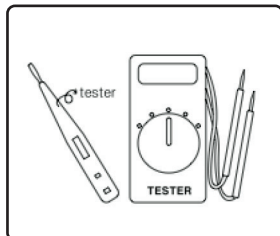


Super Heavy  
Duty Lifts:

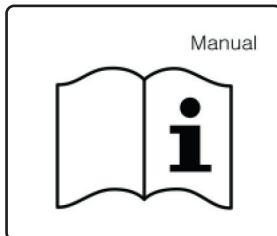


## Safety regulations

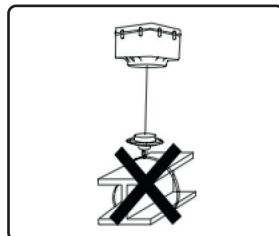
The following safety regulations must be observed:



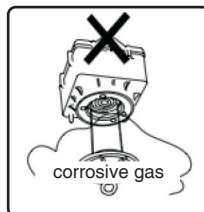
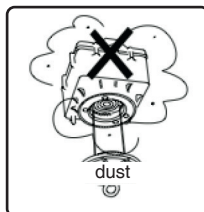
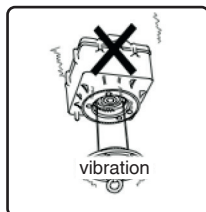
Before using a device connect, make sure the main power switch is turned off.



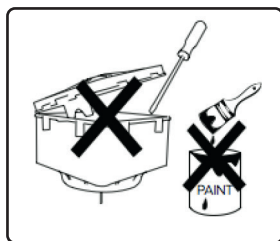
Installation must be in accordance with local regulations. The instructions provided by the manufacturer must be observed.



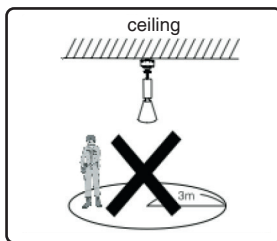
Lighting lifts must not be used to raise or lower objects that are not specified by the manufacturer.



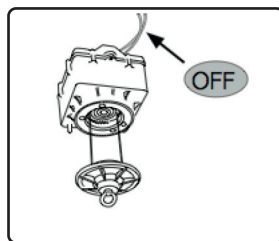
The remote control must be kept closed before and after operation to prevent accidental activation. Protect both the remote control and the light lift from moisture, vibration, dust and corrosive gases.



Changes or manipulations to the system are life-threatening and lead to a system error. The guarantee expires.

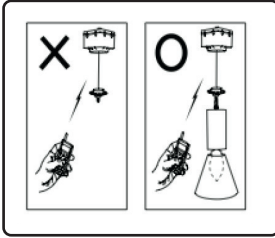


During installation and operation, staying under the load within a radius of 3 m is prohibited.

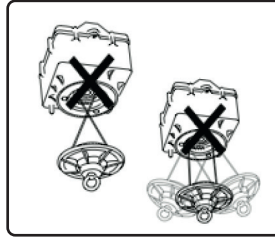


Be sure to turn off the power during installation. Install only when de-energized.

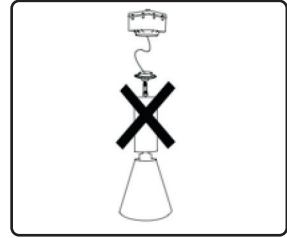




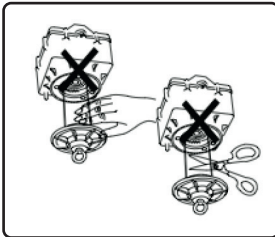
Do not operate the system without a weight on the load plate. The weight information on the type plate must be observed.



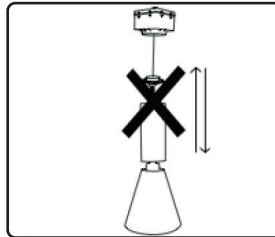
Make sure the ropes of the light lift are not twisted or tangled before operating.



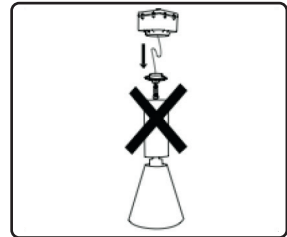
The product must not be operated with loose cable.



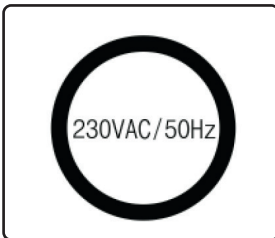
Do not place limbs or objects between the top and bottom contacts during operation as this may result in personal injury and/or system failure.



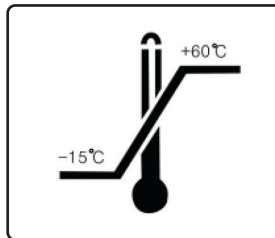
Do not operate the device for more than 10 minutes at a time. If the device overheats, wait at least an hour before using it again. (accumulated heat)



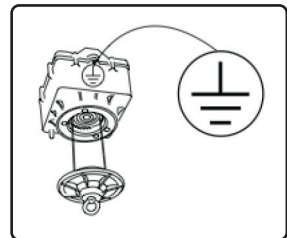
Excessive rocking or impact of the load plate must be avoided.



Use the correct power source indicated on the rating plate, otherwise a system failure may occur.



Operating temperature – 15°C to + 60°C.

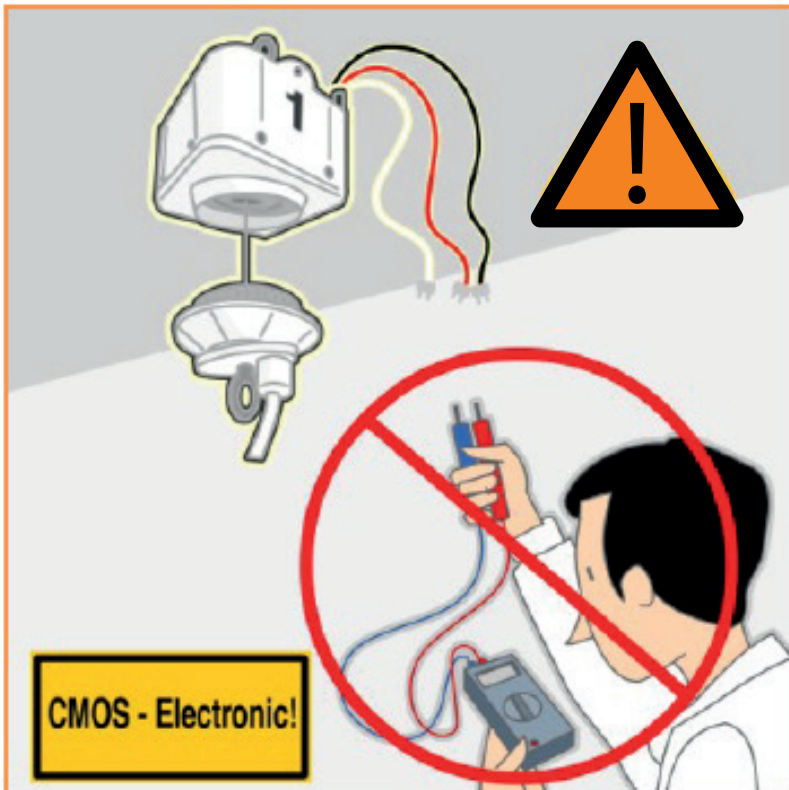


Make sure the device is properly grounded.



**No external voltage may be applied to the control line!**

Caution: For measuring devices with auxiliary voltage, e.g. ohmmeter etc.! It is also not allowed to measure with a multiple measuring device (multimeter) on the control line!



# Installation

The installation must be carried out by authorized specialist personnel in accordance with local regulations.

## Mechanical fastening

Lift types: MSI, MDI, CSI, CDI, HDI, HSI, PSI, PDI, LSI

The attachment to the supporting structure must be designed for the forces that actually occur, taking into account the required safety factors, and must be checked by a structural engineer if necessary.

The appropriate ReelTech mounting bracket must be used to attach the lift to the ceiling (please refer to the separate operating instructions).

If the upper eyelet is used for attachment (not recommended), a second safeguard (e.g. safety rope) may have to be installed for the lift, depending on local regulations.



The lifts must be fixed absolutely horizontally in order to ensure proper function.

## Mechanical fastening

Lift type: PFI

The attachment to the supporting structure must be designed for the forces that actually occur, taking into account the required safety factors, and must be checked by a structural engineer if necessary.

The appropriate ReelTech mounting bracket MB-D must be used to attach the lift to the ceiling (please refer to the separate operating instructions).

The upper eyelet is loosely screwed in upon delivery and is only used to help lift it out of the packaging. The eyelet must not be used as a permanent attachment. The eyelet must be removed before assembly and the opening sealed with the enclosed plastic plug.

The eyelet on the load plate is also loosely screwed in when delivered. If this is to be used to attach the load, the screw adhesive provided should be used and the eyelet screwed in as far as it will go.

### Electrical connection

Be sure to turn off the power during installation.  
Only install in a voltage-free state!



For the electrical connection, please note the circuit diagrams for the various lift types on page 7!



When the power supply is turned on, voltage is applied to the cable ends of the load plate!



An additional electrical fuse must be installed between the lift and the lamp!

### Control line (RED / WHITE / BLACK)



No external voltage may be applied to the control line!

The control line may only be used **potential-free!**

A double-shielded cable must be used for the control line!

Control via the control line may only be carried out in dead man's mode! For safety reasons, key switches (dead man's control) are to be used.

Only one lift may be controlled per key switch, several lifts on one key switch are not permitted!

These must be installed in visual contact with the lift or the load and their functions must be clearly identified (lifting, lowering).

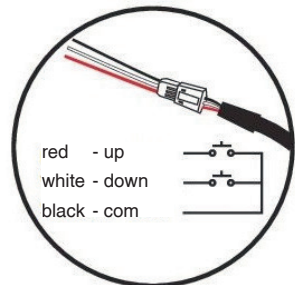
During operation, eye contact with the load must be maintained.

### Function:

Lower: Connect the BLACK and WHITE lines

Raise: Connect the BLACK and RED lines

Stop: Disconnect control lines



Caution: potential-free!  
Do not apply external voltage!

### Standard lift

The standard lifts have one electric circuit (see page 7). This is used for both the lift and the lamp. (BLUE = neutral, BROWN = phase, YELLOW/GREEN = protective earth)

### Multicontact lift

The multicontact lifts have 2 circuits (see page 7).

One for the lift (marked "Motor") and a second for the lights (marked "Circuit 1"). (BLUE = Neutral, BROWN = phase, YELLOW/GREEN = Protective Earth) "Circuit 1" is automatically disconnected 2-pin before lowering.

The auxiliary contacts (marked "Circuit 2") can be used for DALI, emergency power or other applications.



The power supply of "Circuit 2" (with lift type PFI: Aux1/S3 and Aux2/S4!) must be disconnected manually before lowering.

### Installation of the luminaire

Depending on the installation situation or lighting fixtures, it can be advantageous to only install the lift at first. Instead of the lighting, a weight must be hung on the light lift. The lamp is then installed with the load plate lowered.

The min. and max. information on the type plate must be observed.

### Installation of the luminaire in the retracted state

- Switch off the voltage for the lift and the light, if necessary also the auxiliary contacts.
- Attach the lighting fixture to the load plate. The center of gravity of the light must be centered under the suspension point. If the weight distribution is asymmetrical, counterweights must be used.
- Connect the power supply to the lamp. If necessary, connect the auxiliary contacts. Observe the circuit diagrams on page 7.
- Switch on the voltage for the lift and the lamp, if necessary also the auxiliary contacts.
- If there is an LED on the underside of the lift (opt.), this indicates when voltage is present at the cable ends of the load plate.

### Installation of the luminaire in the lowered state

- Hang a weight on the load plate, observing the min and max information on the nameplate
- Lower the lift to the desired working height (control of the light lift with radio remote control on page 14, control via control line on page 15)
- Attach the lighting fixture to the load plate. The center of gravity of the light must be centered under the suspension point. If the weight distribution is asymmetrical, counterweights must be used.
- Connect the power supply to the lamp. If necessary, connect the auxiliary contacts. Observe the circuit diagrams on page 7.



Before lifting the load, the load plate is initially approx. 0.5m to lower! This avoids the formation of unwanted loops on the carrying cable.

### Initial commissioning with radio remote control (RCU)

When ordering with WSE (factory system setting and programming), the light lifts are already programmed into the RCU and thus synchronized on delivery. When ordering without WSE, programming must first be carried out (see RCU manual).

For safety reasons, all light lifts have the programmed automatic stop point after approx. 40cm. This can be changed as desired from the first start-up.



Visual contact with the load plate or the load must be maintained during the entire operation.

The functions of the RCU can be found on page 17 and in the separate RCU manual.

- Switch on the RCU by pressing the "Power" button.
- Select the desired lift by entering the device address.
- Press the "Light Off" button and observe whether the LED (opt.) on the underside of the lift and the lighting go out.

- Make sure that there is no voltage on the auxiliary contacts (only for multi-contact lifts and lifts of the PFI series).
- Lower the lift to the desired working height.
- Program the automatic stop point by pressing and holding the stop button for about 5 seconds. RCU and lift confirm the programming with an acoustic signal.
- Before lifting the load after installation or maintenance, the load plate must first be lowered by approx. 0.5m! This avoids the formation of unwanted loops on the carrying cable.
- Only then move the load plate all the way up again.
- A stop command is not necessary! The load plate automatically moves to its end position and switches the lighting back on.



If the maximum lowering height of the lift is reached and no stop point is set, the steel cable winds up in the wrong direction in the lift and the load plate begins to rise. In this situation, stop the lift immediately and then press the "UP" button. The load plate will first lower until the steel cable is completely unwound again and will then rise as desired and wind the steel cable in the right direction.

- After using the RCU, make sure that it is stored in such a way that unintentional or unauthorized operation is excluded.

To avoid damage to the RCU from leaking batteries, we recommend removing the batteries during storage.

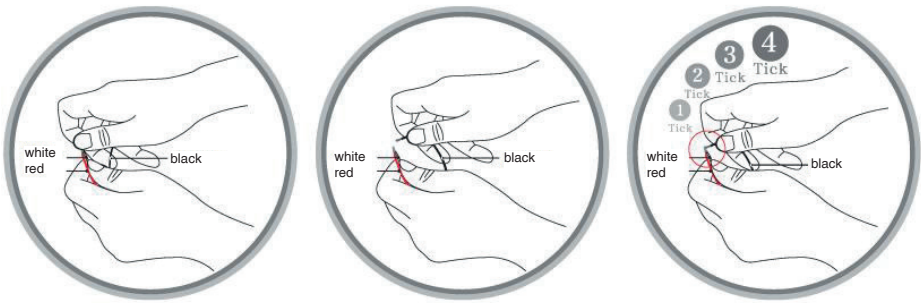
The programming remains during this time.

#### Initial commissioning with the control line (without RCU radio remote control)

For safety reasons, all light lifts have the programmed automatic stop point after approx. 40cm. This can be changed as desired from the first start-up.

Visual contact with the load plate or the load must be maintained during the entire operation.

- Make sure that there is no voltage on the auxiliary contacts (only for multi-contact lifts and lifts of the PFI series).
- Lower the lift to the required working height by connecting the BLACK control line to the WHITE line. By separating the connection stops the lift (dead man's control).
- Program the automatic stop point by entering the Connect the WHITE and RED control lines together. Now tap the connected lines four times with the black line, repeated clicking of the lift acknowledges the programming.



- Before lifting the load, the load plate must first be lowered by approx. 0.5m! This avoids the formation of unwanted loops on the carrying cable. Only then drive the lift all the way up again (connection of the control lines BLACK with RED)



When retracting the load plate, it is particularly important not to end the command to raise the lift too early. Hold the Connection (BLACK with RED) after the lighting has switched on automatically for about 5 - 10 seconds. This ensures that the load plate reaches the rest position.



If the maximum lowering height of the lift is reached and no stop point is set, the steel cable winds up in the wrong direction in the lift and the load plate begins to rise. In this situation, stop the lift immediately and connect the control line BLACK to RED, the load plate will first lower until the steel cable is completely unwound again and will then rise as desired and wind the steel cable in the right direction.



# Radio remote control RCU



We expressly point out that there is always a risk of interference with radio connections.

## Notice:

The detailed functions can be found in the manual enclosed with the RCU.

**POWER** Switches the radio remote control on or off

**LIGHT ON** Turns on the lights

**CLEAR** Clears the entry on the display

**LIGHT OFF** Turn off the light

**UP** Raise the load plate

**DOWN** Lowers the load plate

**STOP** Stops the load plate

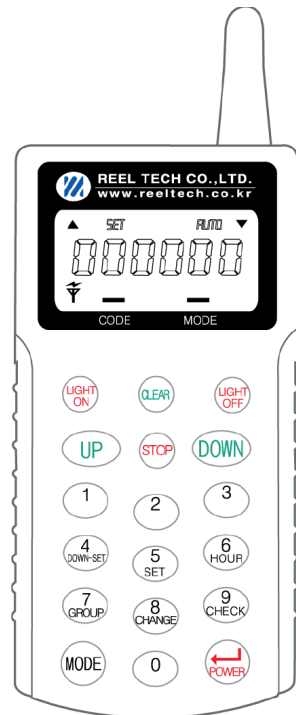
**5 SET** Programming menu

**7 GROUP** Group mode

**8 CHANGE** Selection via the lift serial number

**9 CHECK** Display of the stored lift serial number

**MODE** Used together with the following keys



# Synchronous, deco or banner lift

Synchronous lifts are supplied in pairs with the same serial number. When assembling, make sure that the Serial numbers (Main & Sub) of both lifts agree. The synchronous lifts must be connected to each other with the supplied cable.

MAIN		SUB	
UNIT	Remote Lifting Lighter	UNIT	Remote Lifting Lighter
MODEL	PSI-30 (main)	MODEL	PSI-30 (sub)
TATED SFEO	AC 230 V~/50Hz/2A	TATED SFEO	AC 230 V~/50Hz/2A
RATED CURRENT (LIGHT)	16A	RATED CURRENT (LIGHT)	16A
LIFTING WEIGHT	30kg	LIFTING WEIGHT	30kg
LIFTING DISTANCE	15m	LIFTING DISTANCE	15m
SERIAL NO.	700129	SERIAL NO.	700129
THE DATE OF MANUFACTURE	2008.00.00	THE DATE OF MANUFACTURE	2008.00.00

Synchronous lifts can only be controlled via the RCU radio remote control



All commands are first synchronized between the two lifts before they are executed. The reaction or execution of the commands therefore takes significantly longer than with a single lift.

This must be observed during operation, because a new command also triggers a new synchronization!

If the system reacts asynchronously when lifting or lowering, stop the process with the "STOP" button.

With the following command, the load plates are automatically synchronized.

This process can take up to 30 seconds due to the large amount of data.

During this time, no further commands may be given to the lifts.

The devices automatically ensure a balance.

When installing the load, it is necessary to pay attention to:

- that there is no rigid connection between the load and the two lifts. This can damage the lifts.
- that the connection is both rotational and lateral movement of the lower load plates (e.g. swivel shackles).
- that the weight is evenly distributed on both load plates.
- that the load on the load plate is within the minimum and maximum weight values specified on the rating plate.

## EU-Declaration of Conformity

We, Manufacturer/Importer  
(full address)

**ReelTech Vertriebs GmbH**  
**Berliner Straße 8, 61137 Schöneck**  
**Germany**

Declare under our own responsibility that the product  
(description of the apparatus, system, installation to which it refers)

**Remote Lighting Lifter**

**Model No.: HSI-12**

**Additional Model No.:**

HSI-15, HSI-18, HDI-25, HSI-12M, HSI-18M, HDI-25M, HSI-12CH, HDI-25CH, PDL-2, PSI-20, PDI-35, PSI-20M, PSI-25M, PDI-35M, BDI-2, FSI-2, LSI-10L, CDI-15, CSI-5, CSI-7, CSI-10, CSI-12, CSI-7M, CSI-12M, CDI-12M, CDI-15M, CSI-7CH, CDI-12CH, SSI-10, SDI-20, LSI-7, LSI-10C, MSI-1, MSI-3, MSI-5, MDI-3, MDI-5, MDI-6, MDI-9, MDI-3H, MDI-6H, MDI-9H, MDI-1C, MSI-3C, MSI-5C, MSI-1CH, MSI-3CH, MDI-5CH, MSI-1M, MSI-3M, MSI-5M, MDI-3M, MDI-5M, MDI-6M, MDI-9M, FSI-1, GFL-2, PSI-30, PDI-50, PFI-100, PFI-200, PFI-300, PFI-500, PFI-1000, PFI-1500, PSI-30M, PDI-50M

To which this declaration refers conforms with the relevant standards or other standardizing documents

EMC:	EN 61000-6-2: 2005
	EN 61000-6-4: 2007/A1:2011
	EN 61000-3-2:2006/A2:2009
	EN 61000-3-3:2013
LVD:	EN 60335-1:2002+A11:2004+A12:2006
	EN 62233:2008

According to the regulations in

**Directive 2014/30/EU (EMC).**

**Directive 2014/35/EU (LVD).**

**Manufacturer / Importer**



Signature: \_\_\_\_\_



Date: 10.05.2023

Name: Michael Vinson

Tested by



Accredited test lab by NVLAP  
NVLAP LAB Code.: 200723-0

Date: December 1, 2016

Ref. No.: LR500121612A (EMC)  
Ref. No.: LR500121612E (LVD)  
Ref. No.: LR500121612B (EMC)  
Ref. No.: LR500121612F (LVD)  
Ref. No.: LR500121612C (EMC)  
Ref. No.: LR500121612G (LVD)



Authorized Signature

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