

# INVISIO 3S io

**EN** User manual





# TRANSLATED VERSION OF THE MANUAL

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## GENERAL INFORMATION

### Safety instructions

-  **Danger**  
Indicates a danger resulting in immediate death or serious injury.
-  **Warning**  
Indicates a danger which may result in death or serious injury.
-  **Precaution**  
Indicates a danger which may result in minor or moderate injury.
-  **NB**  
Indicates a danger which may result in damage to or destruction of the product.

## 1. SAFETY INSTRUCTIONS

### DANGER

The drive must be installed and set by a professional drive and home automation installer, in compliance with the regulations of the country in which it has been commissioned.

Failure to follow these instructions may result in serious injury, e.g. due to crushing by the gate.

### 1.1. Caution - Important safety instructions

#### WARNING

For reasons of personal safety, it is important to follow all the instructions, as incorrect use can lead to serious injury. Retain these instructions.

Any failure to comply with the instructions given in this manual shall exempt Somfy from all liability, and invalidate the SOMFY warranty.

### 1.2. Introduction

#### 1.2.1. Important information

This product is a control box for hinged gates, for residential use as defined in standard EN 60335-2-103, with which it complies. The main purpose of these instructions is to satisfy the requirements of the aforementioned standard and to ensure material and personal safety. To ensure compliance with standard EN 60335-2-103, this product must be installed with a Somfy motor. The assembly is designated as a "drive".

#### WARNING

It is strictly prohibited to use this product on any other gate than the original.

The addition or use of any accessories or components not recommended by Somfy is prohibited, as personal safety cannot be guaranteed.

Somfy cannot be held liable for any damage resulting from failure to follow the instructions in this manual.

The instructions may be modified if and when there is a change to the standards or the drive.

### DANGER

The keypad for setting the parameters is locked to ensure user safety. The parameters must only be unlocked and adjusted by a professional drive and home automation installer.

Making any changes which do not comply with these instructions could risk personal injury or damage to property.

### DANGER

If one of the power supply cables is damaged, it must be replaced by the installer, its after-sales service or an individual with similar qualifications, to prevent any danger.

### 1.3. Safety instructions relating to use

#### WARNING

This drive may be used by children aged 8 and over and by persons whose physical, sensory or mental capacity is impaired, or persons with little experience or knowledge, as long as they are under supervision or have received instructions on safe use of the drive and fully understand the associated risks.

Do not allow children to play with the gate control devices. Keep remote controls out of the reach of children.

Children must not be allowed to clean or maintain the unit.

The sound pressure level of the drive is less than or equal to 70 dB(A). The noise emitted by the structure to which the drive will be connected is not taken into account.

### **⚠ WARNING**

Any potential users must be shown how to use the drive by the installer, applying all the recommendations in this manual. It is essential to ensure that no untrained persons are able to operate the gate.

The user must monitor the gate each time it moves and keep people away from it until it is completely open or closed.

Do not deliberately prevent the gate from moving.

### **△ NB**

Do not try to open the gate manually if the drive has not been unlocked.

### **⚠ WARNING**

In the event of a malfunction, cut the power supply and disconnect the battery and/or the solar kit and immediately unlock the drive to facilitate access.

Contact a drive and home automation professional installer immediately.

Manual unlocking may result in uncontrolled movement of the gate.

### **⚠ DANGER**

The drive must be disconnected from any power supply during cleaning and maintenance, and when parts are replaced.

Ensure that no natural obstacles (branches, stones, tall grasses, etc.) are able to obstruct the movement of the gate.

If the installation is equipped with photoelectric cells and/or an orange light, regularly clean the photoelectric cell optical units and the orange light.

Have the drive checked every year by a qualified technician.

### **⚠ WARNING**

Every month, check:

- the installation, looking for any signs of wear or damage to the cables and assembly.
- that the drive changes direction when the gate encounters an object measuring 50 mm positioned halfway up the leaf.

If this is not the case, contact a professional drive and home automation installer immediately.

Do not use the drive if it needs repairing or adjusting. Gates in poor condition must be repaired, reinforced or even replaced.

## 1.4. About the batteries

### **⚠ DANGER**

Do not leave batteries of any kind within reach of children. Keep them somewhere children cannot access. There is a risk that they could be swallowed by children or pets. Danger of death!

If this does occur, seek medical advice immediately or go to hospital.

Ensure that the batteries are not short-circuited, thrown in the fire or recharged. There is a risk of explosion.

## 1.5. Recycling and disposal



If installed, the battery must be removed from the drive before the latter is disposed of. Do not dispose of used remote control or other batteries with household waste. They must be taken to the relevant recycling points.



Do not dispose of the drive with household waste at the end of its life. Return the drive to its distributor or use your local authority's special waste collection services.

## 2. PRODUCT DESCRIPTION

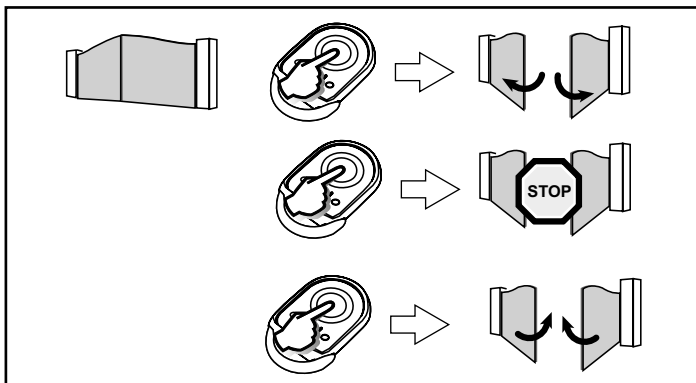
The control box is designed to control one or two Somfy 24V motors, for opening and closing gates.

## 3. USE AND OPERATION

### 3.1. Normal operation

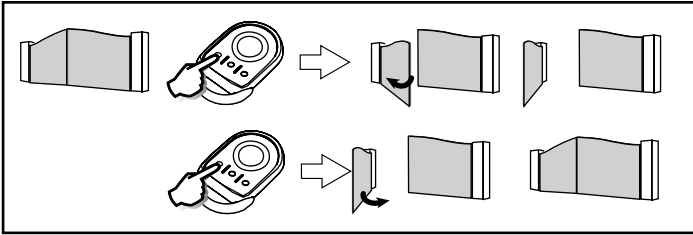
#### 3.1.1. Total opening with a 2 or 4-button remote control

Press the programmed button to open the gate fully.



### 3.1.2. Pedestrian opening with a 2 or 4-button remote control

Press the programmed button to open the gate in pedestrian mode.

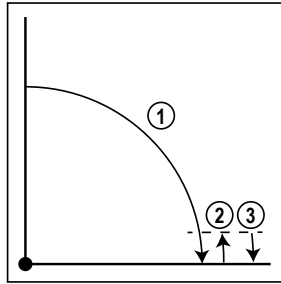


### 3.1.3. 2-stage mode on the shoe when closing

The load on the gate leaves must be taken up at the end of the gate's movement to comply with the standard in force on the risk of trapping (EN 12453). This load take-up phase (a few seconds) is part of the complete movement of the gate.

The movement can be broken down into 3 phases:

1. Gate leaves closing their stops
2. Load take-up: the load is taken up for 7 seconds to allow release if someone or something is trapped.
3. Power restored until the gate leaves reach the closing stops and the orange light goes out, if fitted.



**NB**  
 ⚠ If a radio command is sent during the load take-up phase, it will be interpreted as a movement stop command.

### 3.1.4. Obstacle detection operation

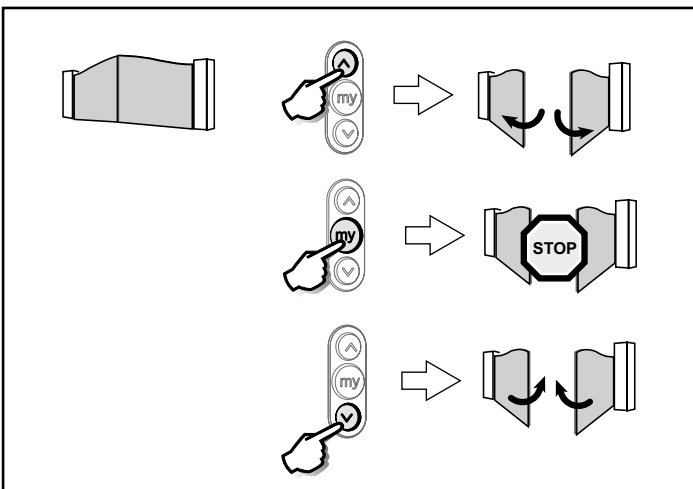
When an obstacle is detected during opening, the gate will stop and then withdraw.

If an obstacle is detected during closing, the gate will stop and then reopen.

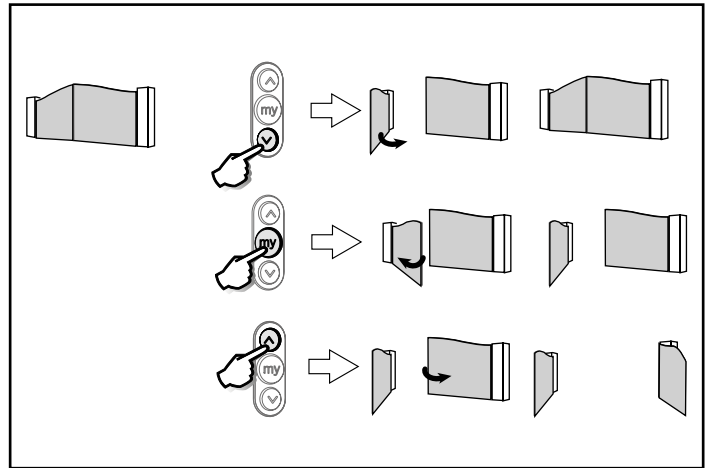
## 3.2. Specific modes

Depending on the peripherals installed and the operating options programmed by your installer, the drive may operate in the following specific ways:

### 3.2.1. Total opening with a 3-button remote control



### 3.2.2. Pedestrian opening with a 3-button remote control



### 3.2.3. Operation with safety cells

An obstacle placed between the cells will prevent the gate from closing.

If an obstacle is detected when the gate is closing, the gate will stop then open again completely or partially depending on the option programmed during installation.

If the cells are blocked for 3 minutes or more, the system switches to "wired deadman" operating mode. In this mode, a command via the wired input causes the gate to move at reduced speed. The movement lasts as long as the command is maintained and stops as soon as the button is released. The system switches back to normal mode as soon as the cells are no longer blocked.

**NB**  
 ⚠ "Wired deadman" mode requires the use of a safety contact (e.g. keyed reversing switch ref. 1841036).

### Operation with orange flashing light

The orange light is activated during any gate movement.

A 2-second pre-warning signal before movement starts may be programmed during installation.

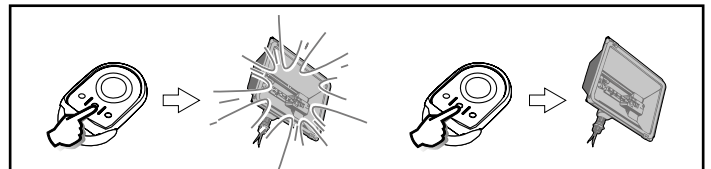
### 3.2.4. Operation of the remote lighting

Depending on the programming performed during installation, the lighting comes on each time the drive is started and remains on when it stops for the duration of the programmed time delay.

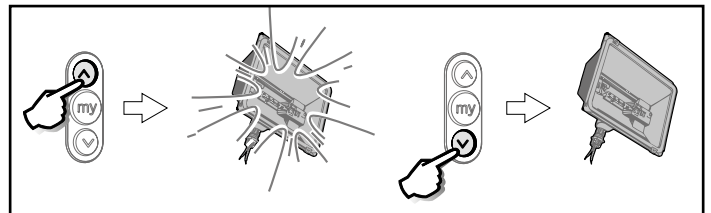
If a remote control is programmed for the remote lighting, operation is as follows:

#### With a 2 or 4-button remote control

Press the programmed button to operate the lighting.



#### With a 3-button remote control



### 3.2.5. Operation in sequential mode with automatic closing after a time-delay

The gate is automatically closed after a time-delay programmed during installation.

A new command sent during this time-delay cancels automatic closing and the gate remains open.

The subsequent command causes the gate to close.

### 3.2.6. Operation using the backup battery

If a backup battery is installed, the drive will work even during a power outage.

Operation is then activated under the following conditions:

- Reduced speed.
- The peripherals (photoelectric cells, orange light, wired code keypad, etc.) do not operate.

Battery specifications:

- Life: 24 hrs; 3 operating cycles depending on the weight of the gate.
- Recharging time: 48 h
- Service life before replacement: Approximately 3 years.

For optimum battery life, it is recommended that the main power supply be switched off and the motor operated using the battery for several cycles, 3 times a year.

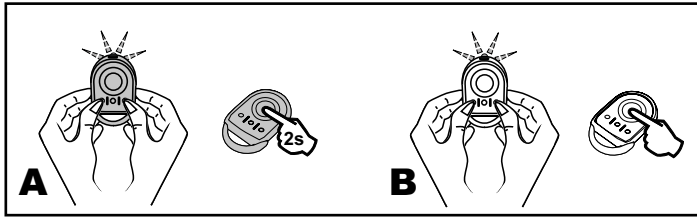
## 3.3. Adding remote controls

Remote control "A" = "source" remote control already memorised

Remote control "B" = "target" remote control to be memorised

### 3.3.1. 2- or 4-button remote controls

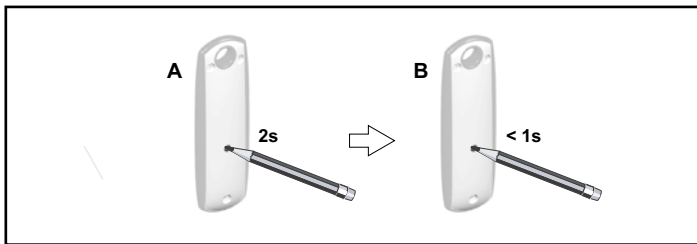
Copying the function from a memorised button on a 2- or 4-button remote control to a button on a new 2- or 4-button remote control:



For example, if the button on remote control A opens the gate fully, the button on the new remote control B will also open the gate fully.

### 3.3.2. 3-button remote controls

Copying the function from a memorised button on a 3-button remote control to a new 3-button remote control:



For example, if remote control A operates the gate's remote lighting, the new remote control B will also operate the gate's remote lighting.

## 4. MANUALLY UNLOCKING THE GATE

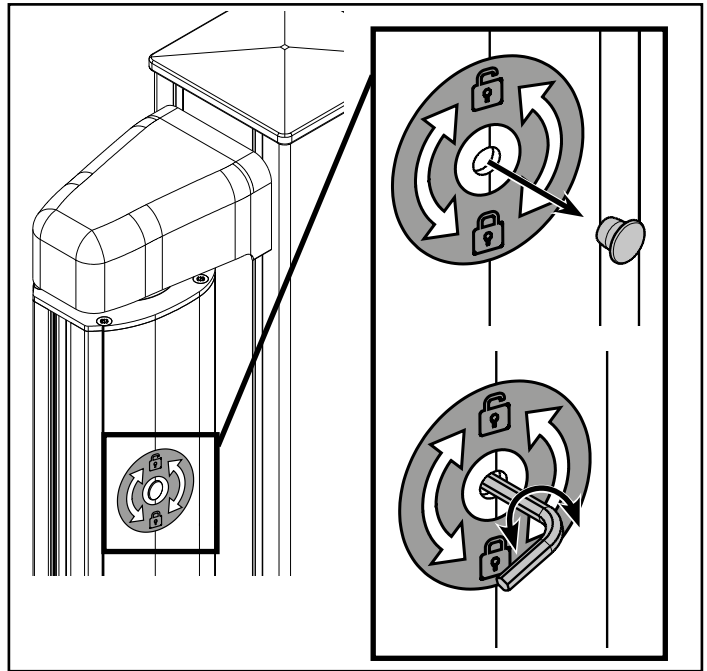
In case there is no electrical supply or a major power cut, the gate can be manually operated by unlocking the motor.

Your drive can be fitted with an unlocking system with or without a key. Follow the relevant instructions for the unlocking system that relates to your drive.

### 4.1. Unlocking without a key

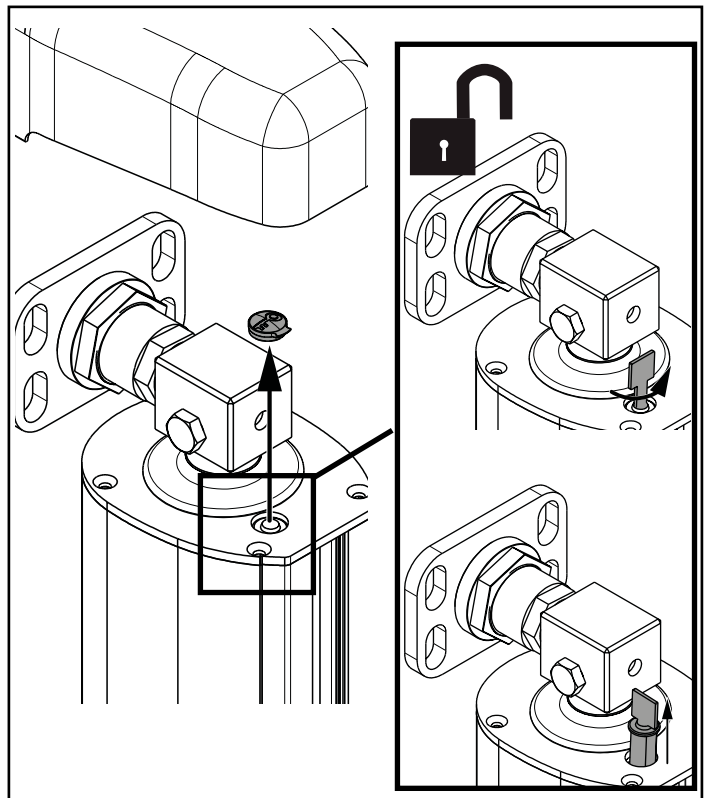
There are 3 possible types of unlocking:

#### 4.1.1. Lateral unlocking / locking



- 1) Remove the cap.
- 2) Insert the unlocking key (Allen key / 5 mm)
- 3) Turn the key about a quarter turn to unlock the motor.

#### 4.1.2. Top unlocking / locking option

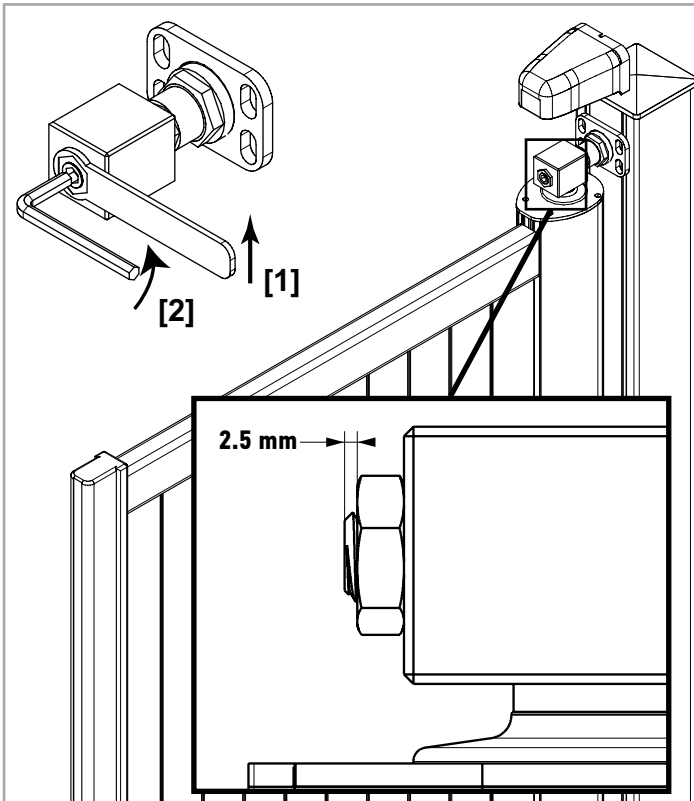


- 1) Remove the pivot cover.
- 2) Remove the cap.
- 3) Unlock with the key.
- 4) Pull the key to unlock the motor.

### Top unlocking option

Note the supplied key no.:

### 4.1.3. Unlocking / locking the pivots



#### Unlocking

- 1) Undo the lock nut.
- 2) Undo the screw until the gate is released.

#### Locking

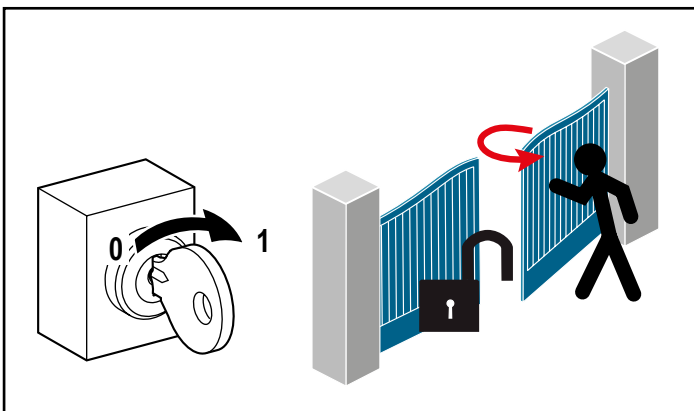
- 3) Return the gate leaves to the position they were in before unlocking.
- 4) Retighten the screw.
- 5) Retighten the lock nut.

Once complete, the distance between the locknut and the screw must be about 2.5 mm. If the distance is greater than this, the gate leaf is not correctly locked.

## 4.2. Unlocking with a key

### 4.2.1. Unlocking the motors

To unlock the motors, turn the key to the right to release the magnetic brake on the motor.



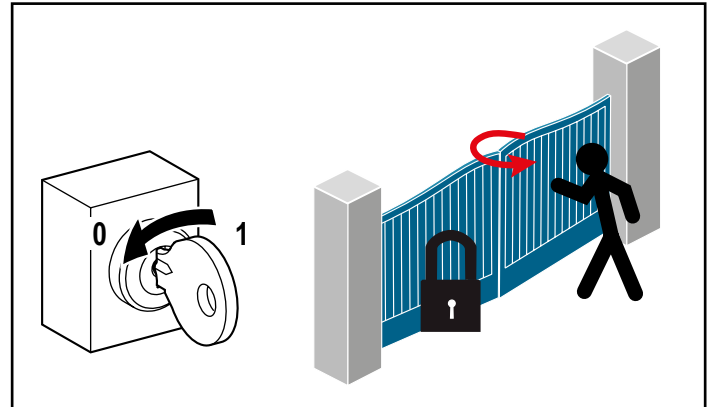
### 4.2.2. Locking the motors

**NB**



Before locking the motors, it is essential to manually close the gate to ensure correct operation when the power supply is restored.

To lock the motors, turn the key to the left to reactivate the magnetic brake on the motor.



## 5. DIAGNOSTICS

### The motor does not start

- Check the motor power supply.
- The remote control indicator light remains off; the battery is flat, replace it.
- Check that the drive has not been disengaged; re-engage it.
- Check that the photoelectric cells are neither obstructed nor dirty.
- This type of drive is unsuitable for intensive use. The thermal protection may have been activated.

If the problem cannot be fixed, please contact the drive installer.

## 6. MAINTENANCE

### 6.1. Checks

#### 6.1.1. Safety devices (cells, safety edge)

Check for correct operation every 6 months.

#### 6.1.2. Backup battery

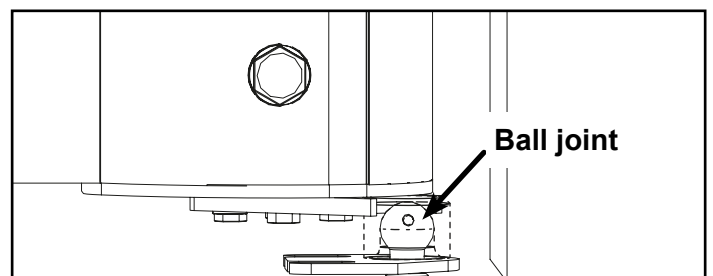
For optimum battery life, it is recommended that the main power supply be switched off and the motor operated using the battery for several cycles, 3 times a year. Contact a qualified person (installer) to have the backup battery replaced.

#### 6.1.3. Mechanical tightness

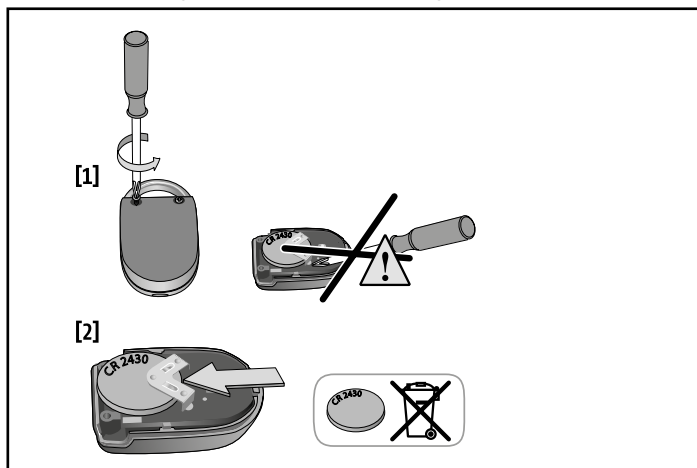
To ensure correct operation of the gate, have the tightness of all mechanical fixings checked by your installer (pivot connection, irreversible drive unlocking system, etc.)

#### 6.1.4. Ball joint greasing

If your gate is equipped with a slope lift kit, grease the ball joints of each gate leaf at least once a year with mechanical grease for outdoor use.



## 6.2.Replacing the battery - Keygo io



## 7.TECHNICAL DATA

Mains power supply	220-230 V - 50/60 Hz
Max. power consumption	800 W (with 500 W remote lighting)
Climatic operating conditions	- 20°C/+ 60°C - IP 44
Radio frequency	))) 868 - 870MHz < 25 mW
Number of memorisable channels	Complete/pedestrian opening: 30 Lighting: 4 Auxiliary output: 4
Remote lighting output	230 V - 500 W (Halogen or incandescent only)

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