



# Smartbox II

User Manual

Mounting Instructions

**Keep this manual with the product at all times!**



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# 1. Application

To avoid unnecessary jamming risk in connection with the installation and use of the Ropox height-adjustable kitchen frame systems the installation of the Smartbox II is the ideal solution. This intelligent safety system is used in situations when several electrically adjustable Ropox systems have been installed close to each other. In these situations, the system will reduce the risk of getting jammed between the individual units, as a supplement to the normal safety strips and safety stop plates.

The Smartbox should only be used in connection with Ropox products such as FlexiElectric, Vertilinside or 4Single, and only when installation and operation follow the instructions of this manual and other Ropox manuals for the products mentioned above. In these situations, always use one Smartbox per product.



This manual **MUST** always accompany the product and be read by and available to the user

Correct use and operation are decisive for efficient and safe work.

**Mounting must always be carried out by competent personnel**

Before mounting, check the list of components to ensure that all parts are available. See list of components, page 4.

## 2. Description of the Smartbox system

The purpose of the Smartbox is to combine all kitchen products in a safety network.

This means that all safety stops of all Ropox products communicate, whereby dangerous jamming zones are eliminated.

After installation of all the Ropox products in the kitchen, all Smartboxes must be connected via a communication cable.

After that, the system will register any activation of a safety stop in the network and stop all upward and downward movements until the jamming situation has been eliminated.

In this situation only the product with the jammed safety stop is able to move in the opposite direction of the jamming, i.e. the system may move clear of the jamming.

When a safety stop is activated in the system, the Smartbox to which the safety stop is connected, will start flashing.

If the jamming situation has not been eliminated after approx. 2 minutes, the Smartbox will start beeping.

Thus, it is easy to identify the activated safety stop and to solve the problem.

### 3. List of Components

*Included are:*

1. Smartbox 98002102:

1 (one)



2. Extension cord 96000597:

1 (one)



3. Communication cable 98002105:  
L=250 cm male/male plug

1 (one)



4. Communication cable 98002107:  
L=50 cm DIN 7-pole plug

1 (one)



5. Extension cord 98002008:  
L=250 cm (black)

1 (one)



6. Spiral cord 98002016:  
L =25-100 cm (black)

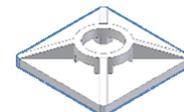
1 (one)



#### Mounting parts:

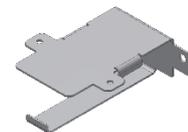
96000155 Adhesive mount

5 (five)



97702-460 Mounting bracket

1 (one)



95010610 M6x10

1 (one)



30-65500-008 Plate nut

1 (one)



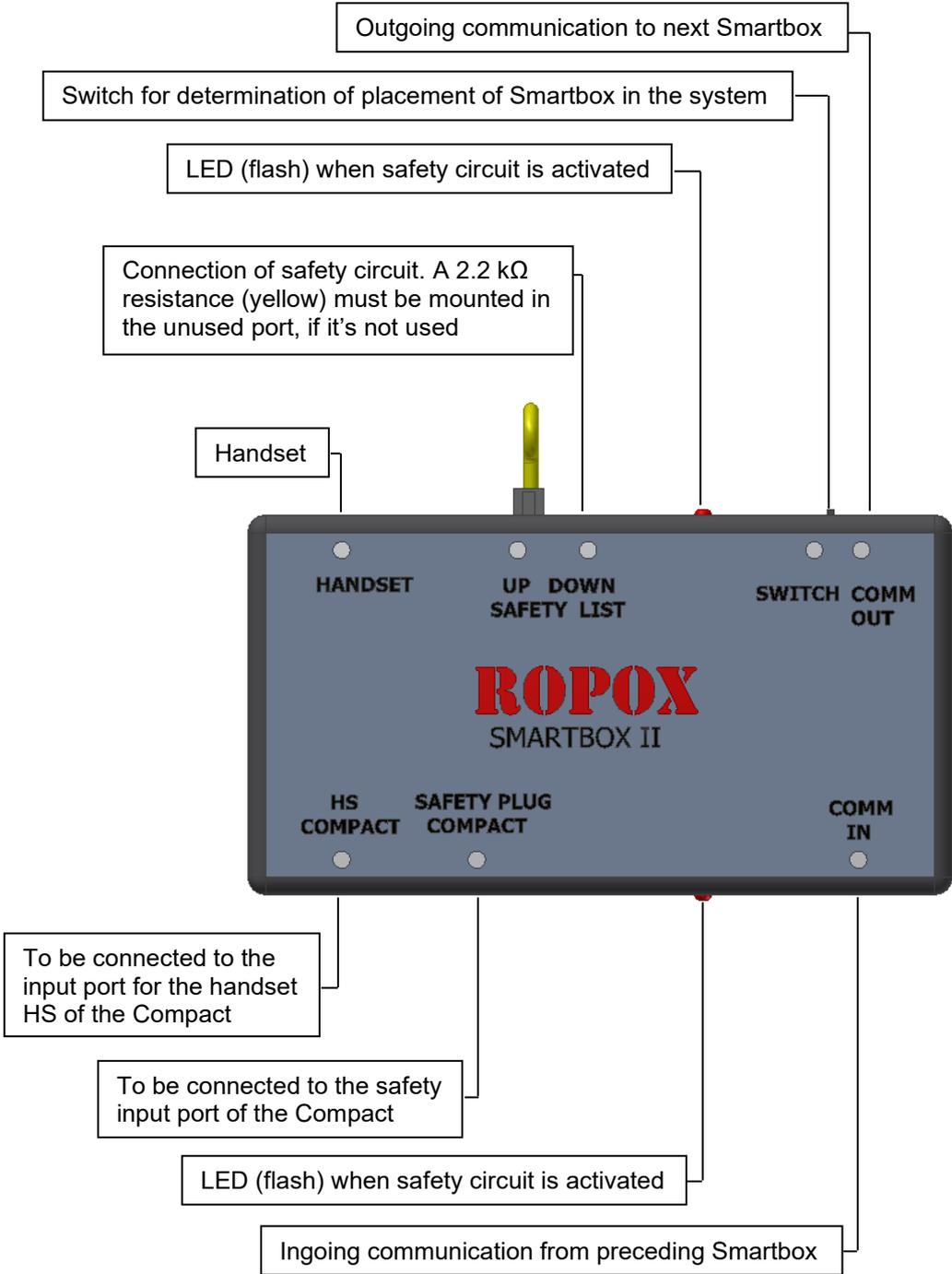
Cable tie

10 (ten)



# 4. Connection of Smartbox

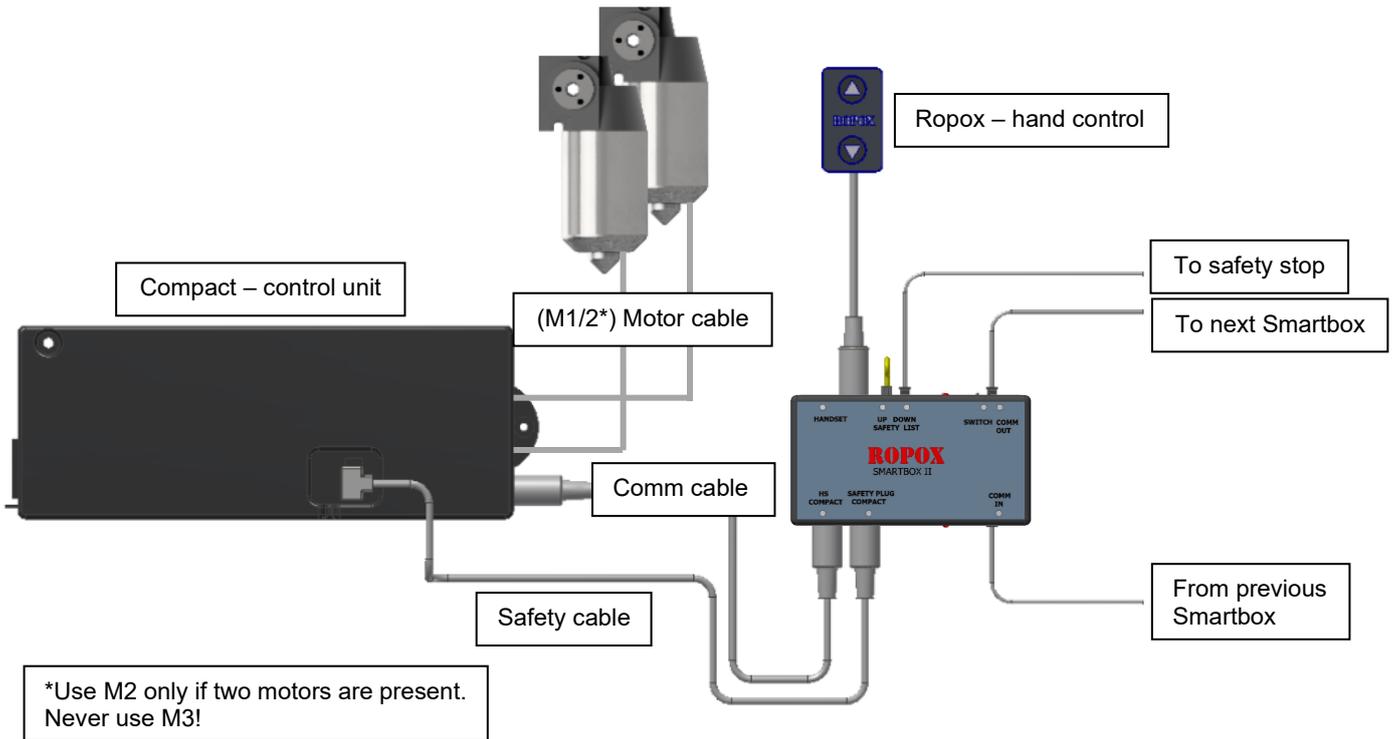
## 4.1 Explanation of Smartbox



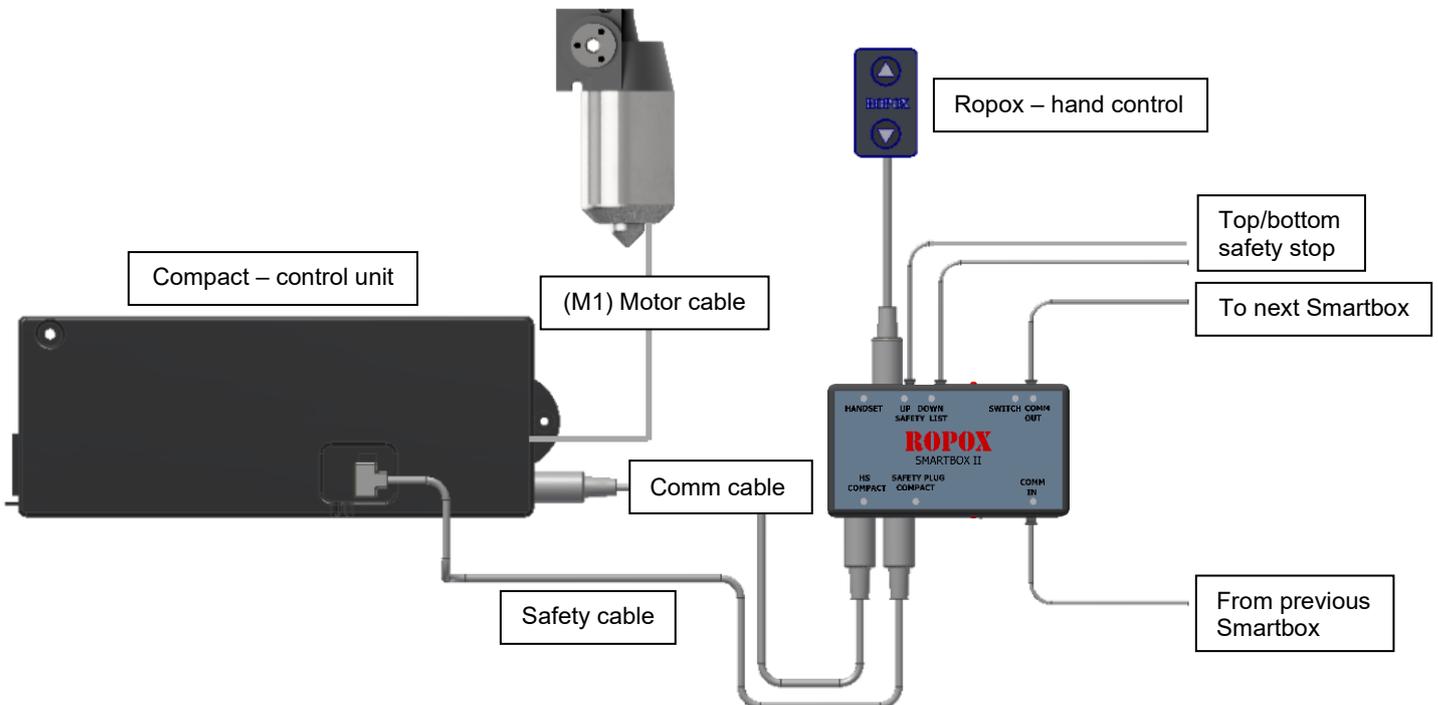
## 4.2 Connection of Smartbox to Compact

Remove the split cable from the control box before continuing the mounting.

### 4.2.1 FlexiElectric/Diagonal

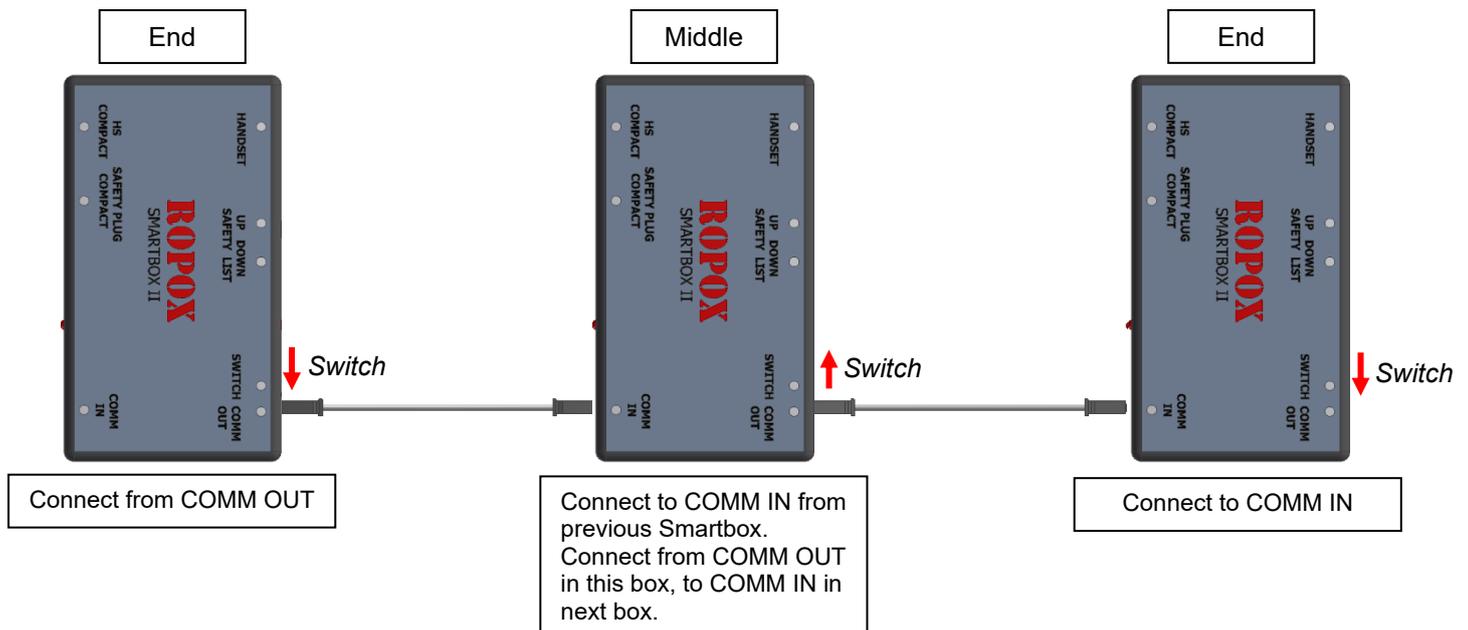


### 4.2.2 Vertilinside



### 4.3 Connection between several Smartboxes

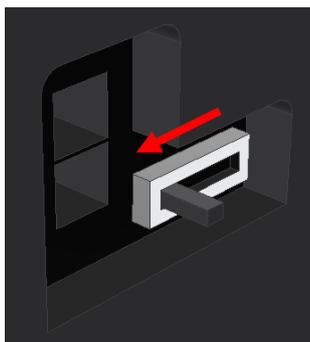
This example shows an installation with 3 Smartboxes in the system.



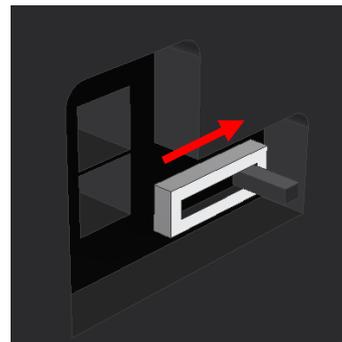
### 4.4 Setting up the Smartbox switch

To make the Smartbox network operate, it is necessary to set each Smartbox depending on its location in the system.

The reason is that the system must know where the network starts and where it ends.

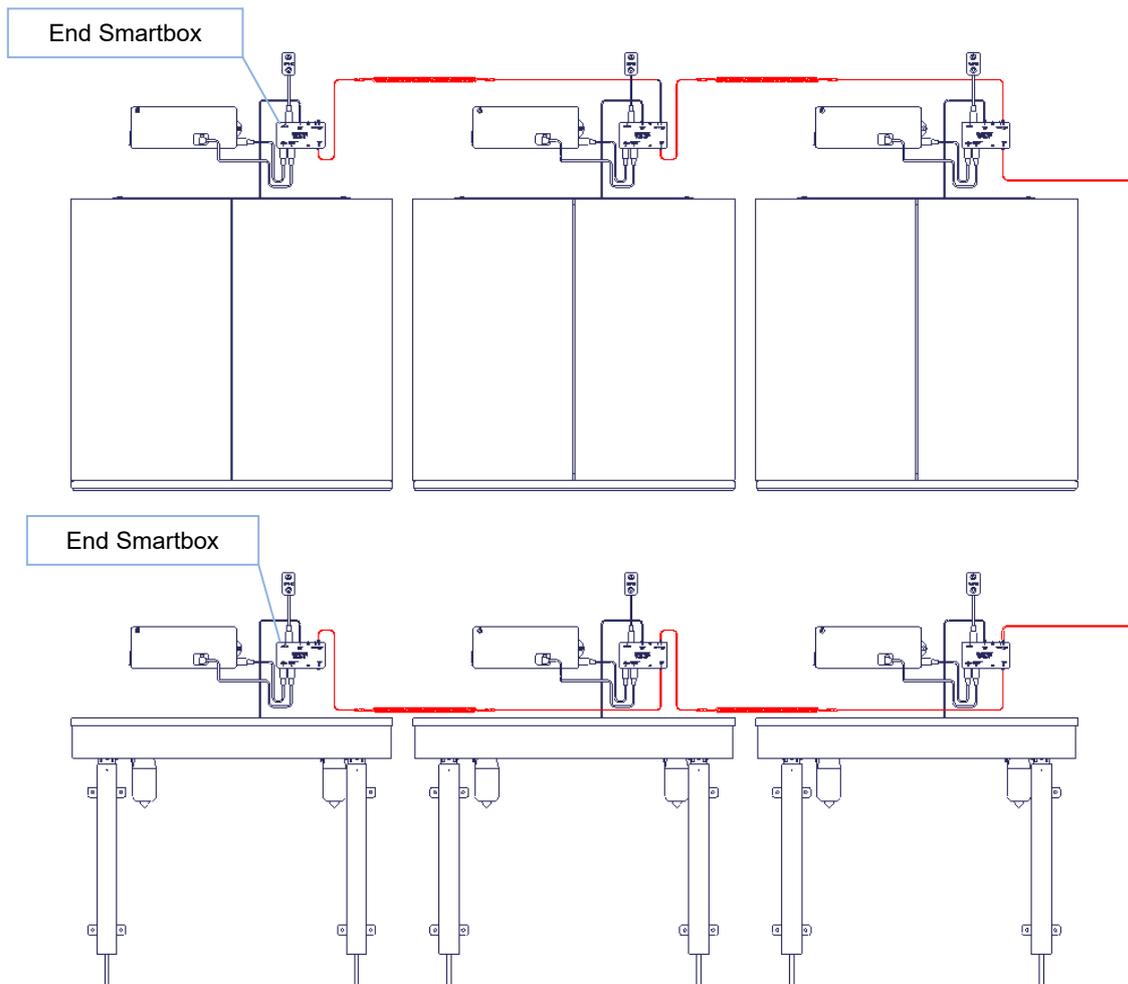


1. **End**  
The Smartbox is either the **first** or the **last** in the system. The slide switch must be set **towards** the port



2. **Middle**  
The Smartbox is between the end-boxes **in the middle** of the system. The slide switch must be set **away** from the port

## 4.5 Connecting the Smartboxes



The above illustration shows an example of an installation with 3 tabletops and 3 cabinets.

When all products have been correctly mounted, all Smartboxes of the system must be connected by means of a communication line. This is the **red line** of the illustration.

Note that the Smartboxes must be connected **IN SERIES**. This means that you proceed from one Smartbox to the next.

Between each moving part/product a spiral cord is inserted allowing the products to move independently of each other.

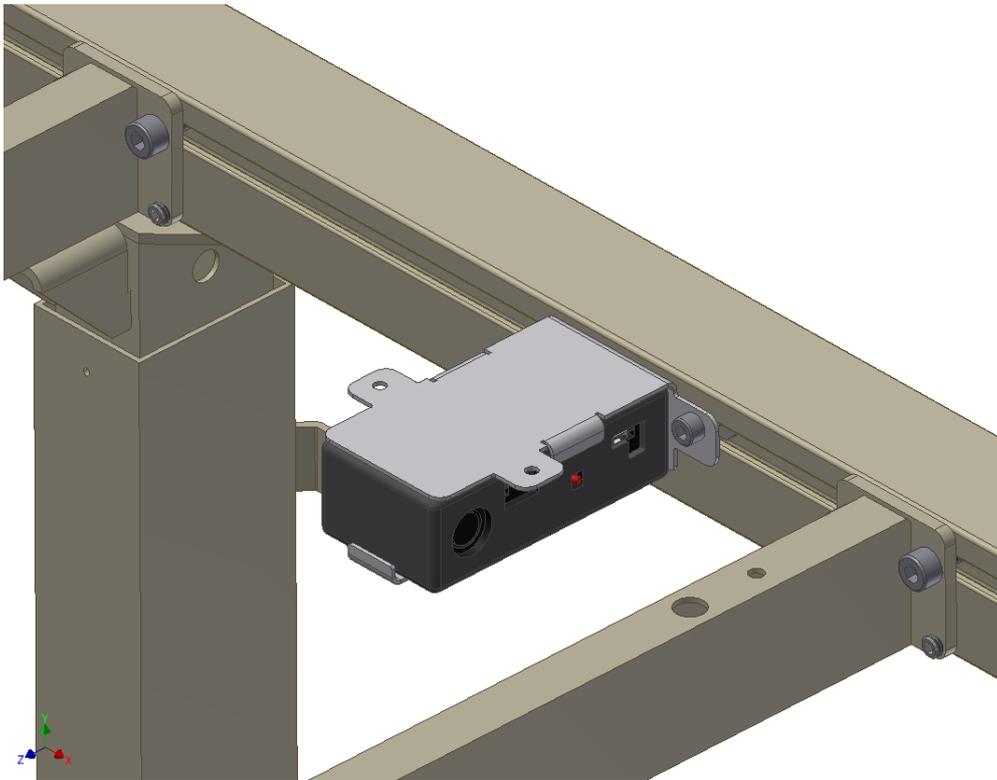
Before connecting mains voltage to the system, ensure that all contacts have been set to **the middle** (see description page 7).

Now connect mains voltage. The Smartboxes will start beeping.

Set the two **End-Smartboxes** (see description page 7). The Smartboxes will stop beeping.

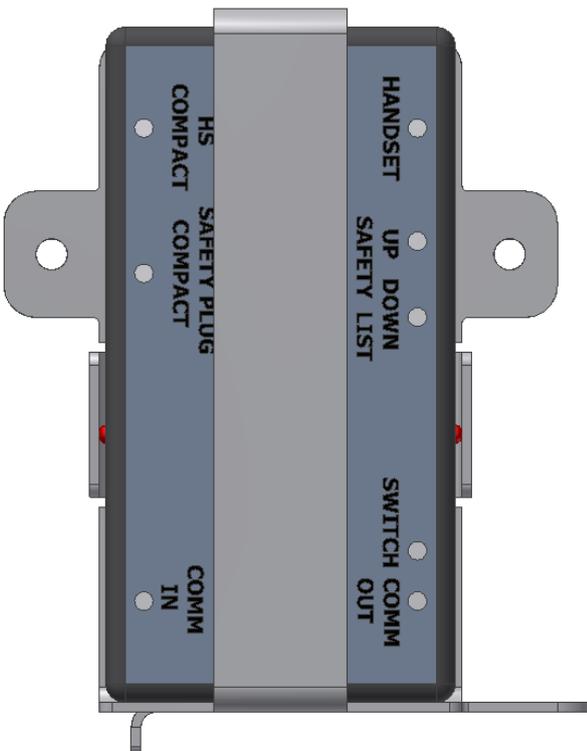
## 5. Mounting of Smartbox

### 5.1 FlexiElectric – Mounting on aluminum profile

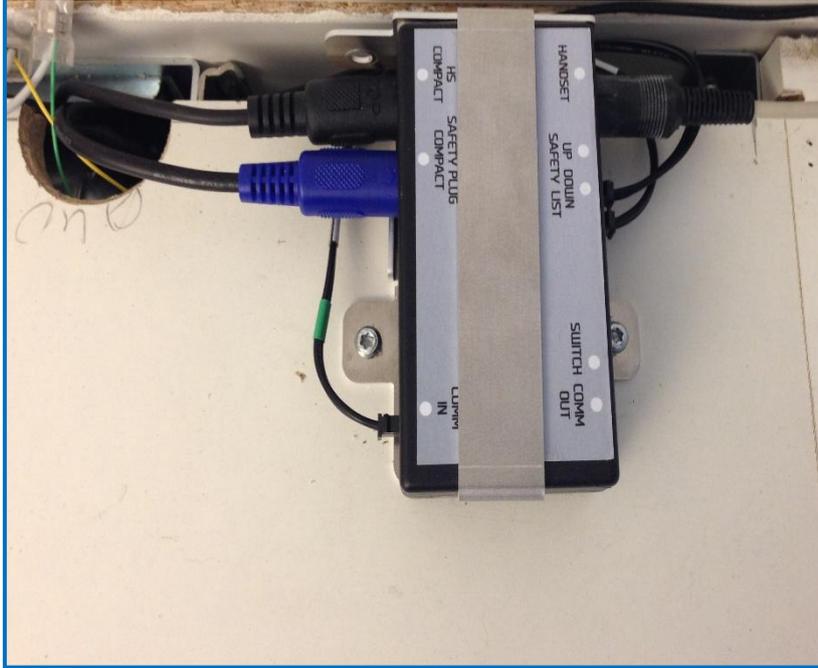


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### 5.2 Vertilinside/Diagonal – Mounting on wall (Screws not included)



When mounting the Smartbox on Vertilinside, place it on top of the cabinet as shown:



When mounting the Smartbox on a Diagonal, place it on the front plate as shown:



# 6. Performance test

## 6.1 Performance test

After correct installation and before use, all functions of the Ropox systems must be tested. After that, a performance test must be carried out at least once a year by competent personnel. Please also see corresponding manuals.

### Testing before connecting mains voltage:

1. Check that the mounting instructions have been followed.
2. Check that all cables have been correctly connected and that the plugs have been pressed in.
3. Check that there is no load on the frames.
4. Check that there are no objects preventing the frame from moving freely within the range of height adjustment.
5. Check that all Smartboxes have been correctly set to suit their location in the network.

### Now connect mains voltage to the control unit and proceed with the testing:

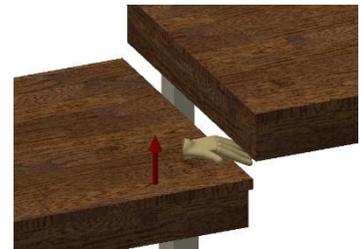
6. Check that no Smartbox is flashing or beeping. If so, the setting of the slide contact is not correct, or a safety stop has been activated/got jammed.

### Carry out the following test for each FlexiElectric:

7. Press the DOWN button and adjust the frame to bottom position. Make sure that the movement is even and smooth.
8. Now press the UP button and adjust the frame to top position. Check that the movement is even and smooth.

### Now test the safety between the FlexiElectric frames:

9. For all Flexi frames check that the safety strips work in downward direction, i.e. while the frame is adjusted downwards, the safety stop under the tabletop is activated. The frame must stop immediately and move approx. 2 cm upward (clear of the obstacle).
10. Now check that an upward moving tabletop stops when it meets the safety stop of the neighboring tabletop.



### After that, test the safety between FlexiElectric and VertilInside/Diagonal:

11. First carry out a performance test of VertilInside/Diagonal according to its manual.
12. For each FlexiElectric, test whether they stop the upward movement when the safety stop plate of the cabinet is activated. When the safety stop plate is activated, FlexiElectric must stop its upward movement. (Here it will not move in the opposite direction after the stop).
13. Follow the above instructions to ensure that all combinations of jamming risks have been tested and found to be in order.

## 7. Adding additional Smartboxes to an existing system

1. Disconnect mains voltage from all control units and Smartboxes
2. Set contacts of all Smartboxes to middle (see description page 7)
3. Proceed according to item 4.3 on page 7 and item 4.5 on page 8

## 8. Maintenance/Cleaning

### 8.1 Cleaning

	<b>WARNING</b> The Smartbox must NOT be connected to the mains voltage during cleaning, and electrical components must NOT be rinsed with water.	
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Simply wipe the Smartbox with a dry cloth.

## 9. Fault finding

### 9.1 Possible errors

1. **After installation and connection of the whole system, one or more boxes beep**
  - a. One of the boxes does not communicate with the remaining system. Check the communication line from one end.
  - b. The slide contacts have not been set correctly. Check that the slide contact of the Smartboxes have been set correctly, according to 4.4.
2. **The system has been working without problems, but now none of the frames move**
  - a. Check that no Smartbox is flashing. In case of flashing, the safety stop of the specific Smartbox has been activated.
  - b. The mains to one or more frames has been disconnected, and the safety network does not allow the other frames to move.

# 10. Complaints

See General Terms of Sale and Delivery on [www.ropox.com](http://www.ropox.com).



## **ROPOX A/S**

Ringstedgade 221  
DK – 4700 Næstved  
Tel.: +45 55 75 05 00  
E-mail: [info@ropox.dk](mailto:info@ropox.dk)  
[www.ropox.com](http://www.ropox.com)