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## RFIM-20B RFIM-40B

### Input contacts converter

Made in Czech Republic

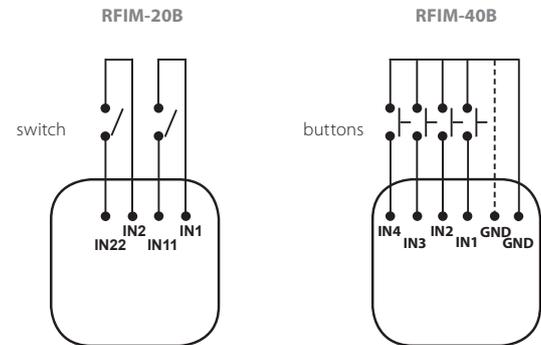
Rev.0



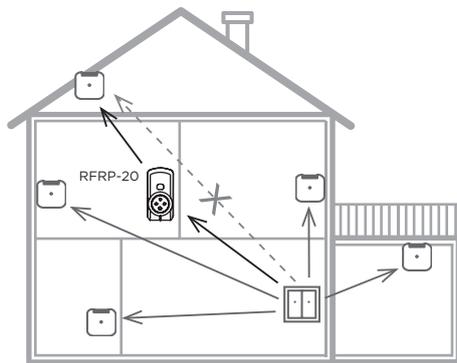
### Characteristics

- the wireless contact converter changes your existing button to a wireless one.
  - four inputs enable control of four units independently.
  - battery power supply (2x 3V/CR2032) with battery life of around 5 years based on frequency of use (included in the supply).
  - only impulse control
- It can be used to transmit information on switching on the contact (detector, button, technology, logic output).
- The BOX design lets you mount it right in an installation box under the button or switch.
- When pressing the button, it sends a set signal (ON/OFF, dimming, time switching OFF/ON, blinds up / down).
- Sending a command is indicated by a red LED.
- Option of setting light scenes, where with a single press, you can control multiple units of iNELS RF Control.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO<sup>2</sup> that support this feature.
- Communication frequency with protocol iNELS RF Control.

### Connection



### Radio frequency signal penetration through various construction materials



80 - 95 %	80 - 90 %	60 - 90 %	20- 60 %	0 - 10 %
brick walls	wooden structures with plaster boards	reinforced concrete	metal partitions	common glass



#### Safe handling

When handling a device unboxed it is important to avoid contact with liquids. Never place the device on the conductive pads or objects, avoid unnecessary contact with the components of the device.

RF controllers can control:

- switches  
RFSA-11B, RFSA-61B, RFSA-62B, RFSA-61M, RFSA-66M, RFSAI-61B, RFSC-11, RFSC-61, RFUS-11, RFUS-61, RFJA-12B
- dimmers  
RFDA-73/RGB, RFDA-11B, RFDA-71B, RFDEL-71B, RFDEL-71M, RFDS-11, RFDS-71, RFDA-71B
- lighting  
RF-RGB-LED-550, RF-White-LED-675

### Indicators, settings

After inserting the battery, the red LED lights up continuously for 3 seconds and then for 5 seconds, the selected controller function is indicated by flashing LED.

- double flash - standard RFIO<sup>2</sup> operating mode
- rapid flashing - mode of compatibility with older actuators

If you do not want to change the function of the controller, you must not press any buttons during this time

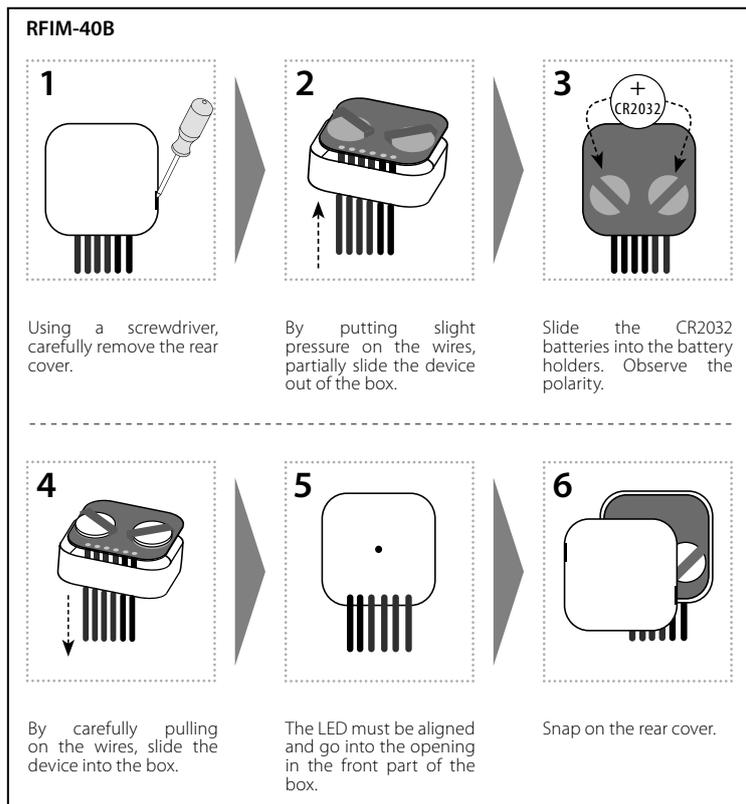
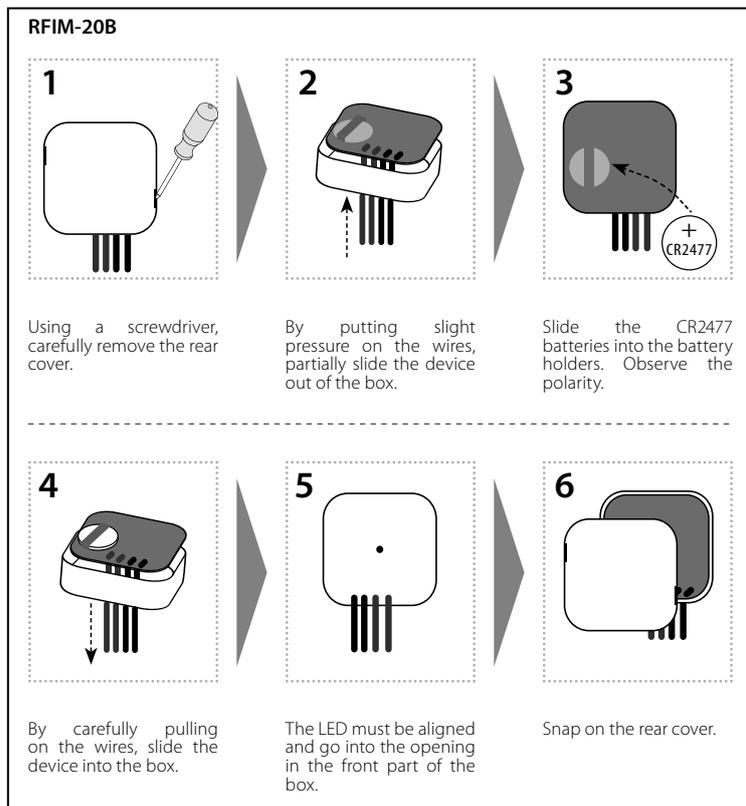
To switch between RFIO<sup>2</sup> mode and compatibility mode:

If you need to change the operating mode of the controller, after inserting the battery, when the LED is constantly lit, press buttons 1 and 3 simultaneously and hold until the LED starts to signal the changed mode (double flash or rapid flash).

Then the buttons must be released. The selected function mode is stored in memory and after replacing the battery, the controller continues to operate in the same mode.

If the controller is used in RFIO<sup>2</sup> mode, then it is necessary to instruct the controller and link to the actuators switch to learn mode not only the actuator (according to the instructions for the actuator), but also the controller in the following way: Remove the battery from the remote control, press one of the buttons several times to discharge the device, and insert the battery again. When the LED lights up, press button 1 and keep it pressed until the controller starts signaling the learning mode with short flashing LEDs. Then release the button and the button now works in RFIO<sup>2</sup> learning mode. To end the learning mode, remove the battery, press some of the buttons several times, and then replace the battery. Now we press any button and the controller will start again in RFIO<sup>2</sup> operating mode.

## Insertion and replacement of a battery



## Technical parameters

	RFIM-20B	RFIM-40B
Supply voltage:	1 x 3V battery CR 2477	2 x 3V battery CR 2032
Battery life:	5 years*	
Transmission indication / function:	orange LED	red LED
Number of inputs:	2	4
Transmitter frequency:	866 MHz, 868 MHz, 916 MHz	
Signal transmission method:	unidirectionally addressed message	
Range in free space:	up to 200 m	
<b>Other data</b>		
Operating temperature:	-10 ... +50 °C	
Operating position:	any	
Terminals (CY wire, cross-section):	4 x 0.75 mm <sup>2</sup>	6 x 0.75 mm <sup>2</sup>
Length of terminals:	90 mm	
Resist. of connection between terminals - for switched on button:	< 300 Ω	
- for disconnected contact:	> 10 kΩ	
Mounting:	free at lead-in wires	
Protection:	IP30	
Contamination degree:	2	
Dimensions:	49 x 49 x 13 mm	
Weight:	45 g	50 g
Open contact voltage:	pulse 12 V	3 V
Length of cable to contact:	max. 100 m of parallel lines	max. 5 m
Related standards:	EN 60669, EN 300220, EN 301489 R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC) /	

\* on condition, that contact is permanently closed- battery life is approx. 1 month.

### Attention:

When you instal iNELS RF Control system, you have to keep minimal distance 1 cm between each units. Between the individual commands must be an interval of at least 1s.

## Warning

Instruction manual is designated for mounting and also for user of the device. It is always a part of its packing. Installation and connection can be carried out only by a person with adequate professional qualification upon understanding this instruction manual and functions of the device, and while observing all valid regulations. Trouble-free function of the device also depends on transportation, storing and handling. In case you notice any sign of damage, deformation, malfunction or missing part, do not install this device and return it to its seller. It is necessary to treat this product and its parts as electronic waste after its lifetime is terminated. Before starting installation, make sure that all wires, connected parts or terminals are de-energized. While mounting and servicing observe safety regulations, norms, directives and professional, and export regulations for working with electrical devices. Do not touch parts of the device that are energized – life threat. Due to transmissivity of RF signal, observe correct location of RF components in a building where the installation is taking place. RF Control is designated only for mounting in interiors. Devices are not designated for installation into exteriors and humid spaces. The must not be installed into metal switchboards and into plastic switchboards with metal door – transmissivity of RF signal is then impossible. RF Control is not recommended for pulleys etc. – radiofrequency signal can be shielded by an obstruction, interfered, battery of the transceiver can get flat etc. and thus disable remote control.

ELKO EP declares that the RFIM-20B/40B type of equipment complies with Directives 2014/30/EU, 2011/65/EU, 2015/863/EU and 2014/35/EU. The full EU Declaration of Conformity is available at:  
<https://www.elkoep.com/wireless-contact-converter-rfim-20b>  
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