



inELs RFSC-61N Switching Socket Instruction Manual

[Home](#) » [inELs](#) » inELs RFSC-61N Switching Socket Instruction Manual 

inELs

RF Control

02-158/2021 Rev.0

RFSC-61N



Switching socket



Contents

- [1 RFSC-61N Switching Socket](#)
- [2 Characteristics](#)
- [3 Assembly](#)
- [4 Compatibility](#)
- [5 Technical parameters](#)
- [6 Warning](#)
- [7 Documents / Resources](#)
 - [7.1 References](#)
- [8 Related Posts](#)

RFSC-61N Switching Socket



WARNING

- Newly produced drivers work in the RFIO 2 data protocol mode. These drivers are loaded in the actuators in a different way than before. Among other things, it eliminates the risk of inadvertently loading another randomly occurring controller within range.
- Drivers can still be switched to so-called compatibility mode, and loaded in a simpler (older way)
- The mode in which the controller is located is indicated after inserting the battery and after 5 seconds have passed, at which the LED is lit by subsequent different intervals of flashing of the LED.

RFIO 2 mode

= Double flash (flash, flash, gap, flash, flash)

Compatibility mode

= Flash fast (flash, flash, flash, flash, flash)

- If you do not want to change the function of the controller, you must not press any buttons during this time.
- If we need to change the operating mode of the controller, after inserting the battery, when the LED is permanently lit, we press at the same time:
 - button 1 and 3 on RF KEY-40/60
 - button 1 and 2 on RFWB-20/40
 - button 1 and 2 on RFGB-20/40
 - button 1 and 2 on RF KEY

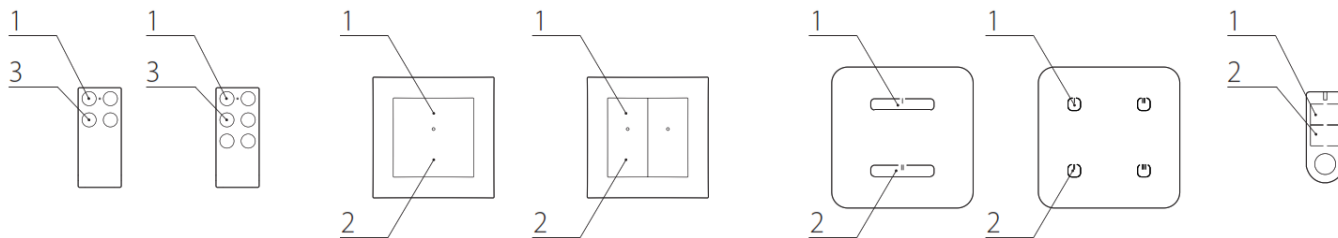
you hold the buttons until the LED starts to signal the changed mode (double flash or fast flash).

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

NOTE: after each removal of the battery, we press one of the buttons several times to discharge the device and reinsert the battery

UPDATE THE CONTROLLER ACTUATORS IN RFIO MODE

If the controller is used in RFIO 2 mode, then to update the controller actuators, it is necessary to switch not only the actuator to the update mode (according to the instructions for the actuator), but also the controller in the following way: You remove the battery from the controller, press some of the buttons several times to discharge the device, and reinsert the battery. At the moment when the LED lights up, you press the 1 button and hold it down until the controller starts signaling the updating mode with a short flashing of the LED. Then you release the button and the controller now works in RFIO 2 update mode. To end the update mode, you remove the battery, press one of the buttons several times, and then reinsert the battery. Now you do not press any button and the controller starts again in RFIO 2 operating mode,



Characteristics

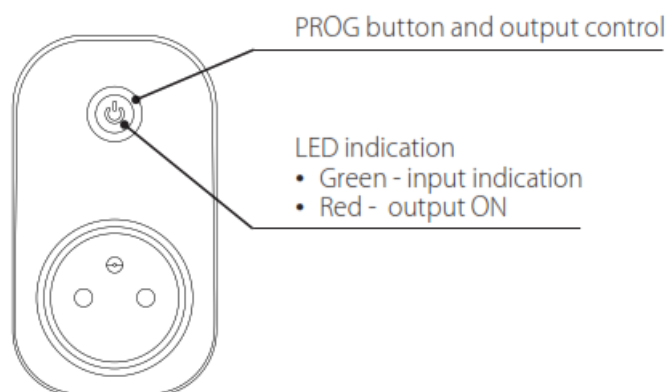
- The switched socket with 1 output channel is used to control fans, lamps, heaters and appliances, which are connected by a power cord.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- Thanks to the socket design, installation is simple by direct insertion into the existing socket.
- It enables connection of the switched load up to 16A (4.000 W).

- Multi-function design – button, impulse relay and time function of delayed ON or OFF with time setting of 2s-60 min.
- The switched socket may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the socket is also used for manual control of the output.
- Memory status can be pre-set in the event of a power failure.
- 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 2 that support this feature.
- Communication frequency with bidirectional protocol iNELS RF Control 2 (RFIO 2).

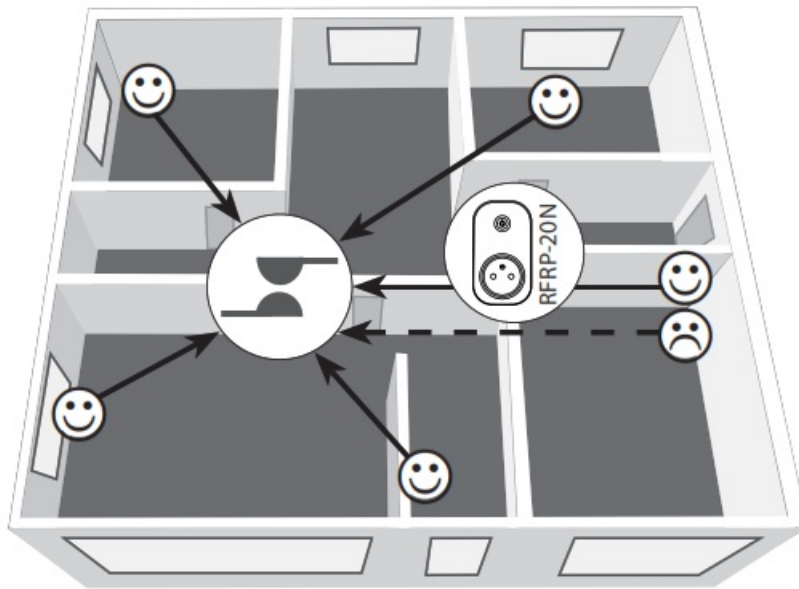
Assembly


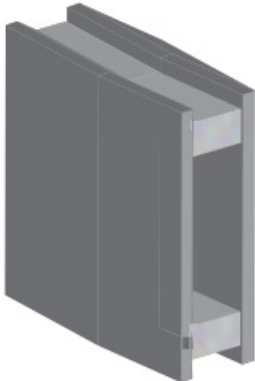
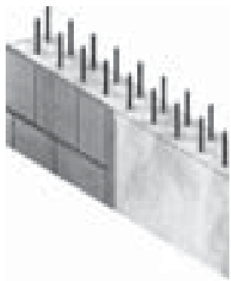
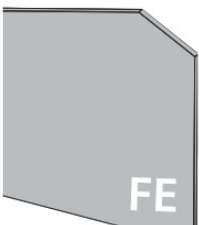



Indication, manual control



Radio frequency signal penetration through various construction materials



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

Compatibility

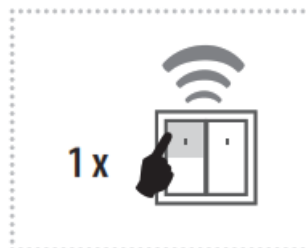
The device can be combined with all system components, controls and devices of iNELS RF Control and iNELS RF Control 2 .

The detector can be assigned an iNELS RF Control 2 (RFIO 2) communication protocol.

Functions and programming with RF transmitters

Function button

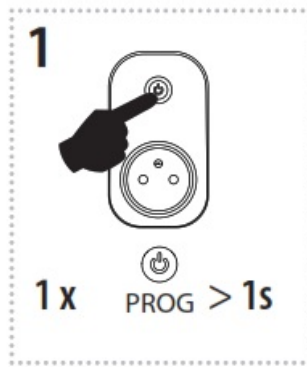
Description of button



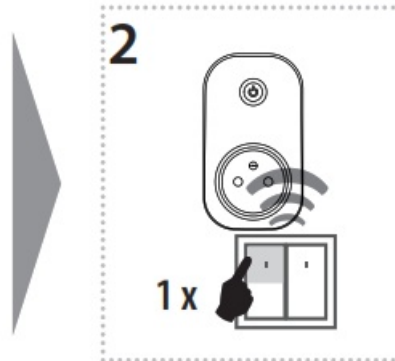
The output contact will be closed by pressing the button and opened by releasing the button.

For the correct execution of individual commands (press = closing / releasing the button = opening), the time delay between these commands must be a min of . 1s (press – delay 1s – release).

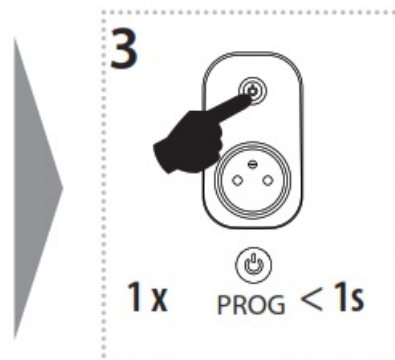
Programming



Press of programming button on receiver RFSC-61N for 1 second will activate receiver RFSC-61N into programming mode. LED is flashing in 1s interval.



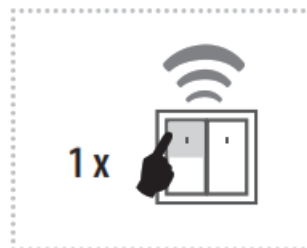
Select and press one button on wireless switch, to this button will be assigned function Button.



Press of programming button on receiver RFSC-61N shorter than 1 second will finish programming mode. The LED lights up according to the preset memory function.

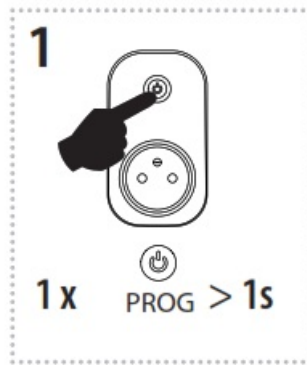
Function switch on

Description of switch on

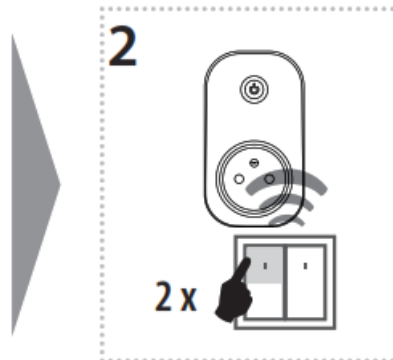


The output contact will be closed by pressing the button.

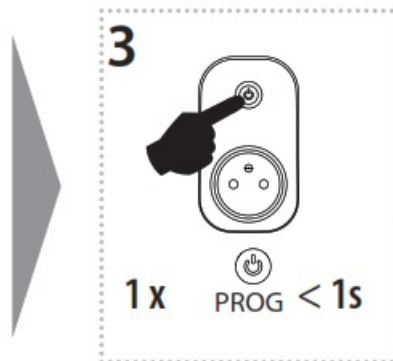
Programming



Press of programming button on receiver RFSC-61N for 1 second will activate receiver RFSC-61N into programming mode. LED is flashing in 1s interval.

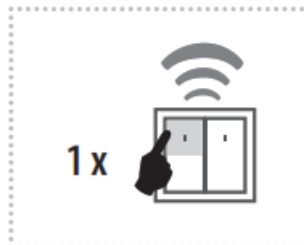


Two presses of your selected button on the RF transmitter assigns the function switch on must be a lapse of 1s between individual presses).

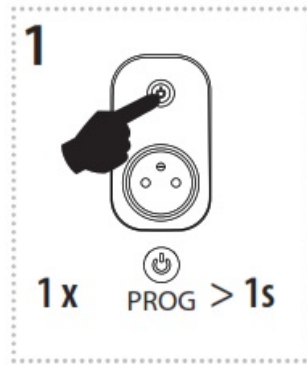


Press of programming button on receiver RFSC-61N shorter than 1 second will finish programming mode. The LED lights up according to the preset memory function.

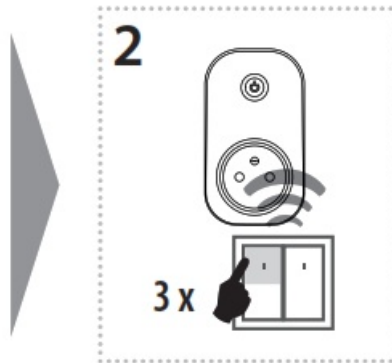
Function switch off



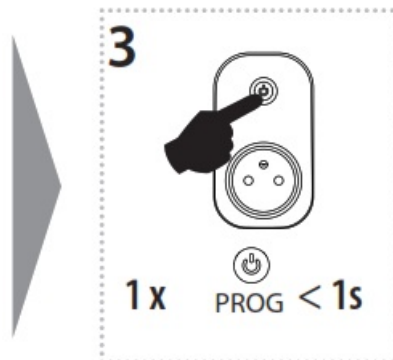
Programming



Press of programming button on receiver RFSC-61N for 1 second will activate receiver RFSC-61N into programming mode. LED is flashing in 1s interval.



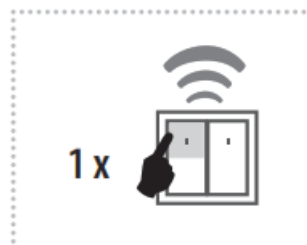
Three presses of your selected button on the RF transmitter assigns the function switch off (must be a lapse of 1s between individual presses).



Press of programming button on receiver RFSC-61N shorter than 1 second will finish programming mode. The LED lights up according to the preset memory function.

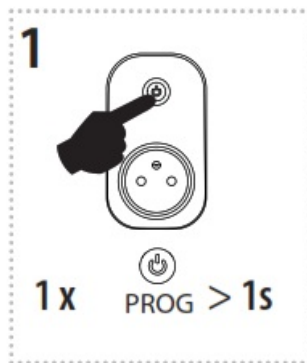
Function impulse relay

Description of impulse relay

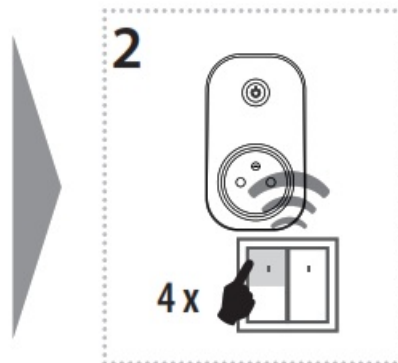


The output contact will be switched to the opposite position by each press of the button. If the contact was closed, it will be opened and vice versa.

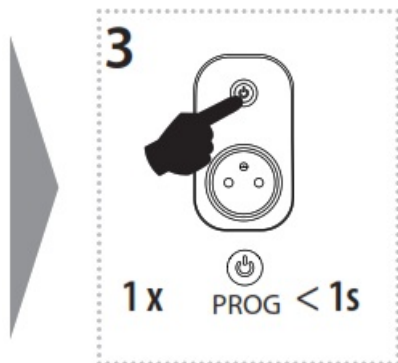
Programming



Press of programming button on receiver RFSC-61N for 1 second will activate receiver RFSC-61N into programming mode. LED is flashing in 1s interval.



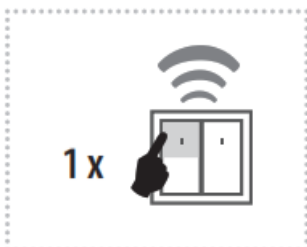
Four presses of your selected button on the RF transmitter assigns the function impulse relay (must be a lapse of 1s between individual presses).



Press of programming button on receiver RFSC-61N shorter than 1 second will finish programming mode. The LED lights up according to the preset memory function.

Function delayed off

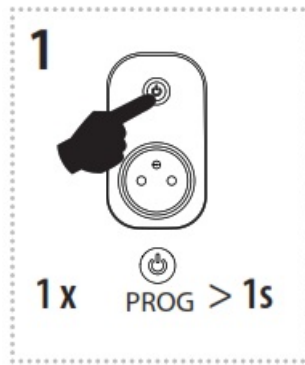
Description of delayed off



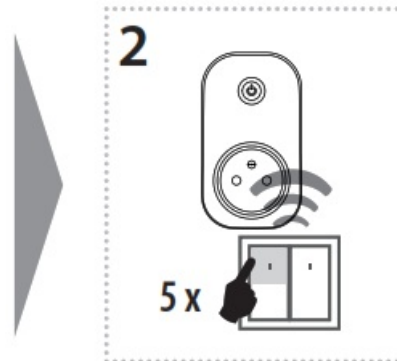
The output contact will be closed by pressing the button and opened after the set time interval has elapsed.

Programming

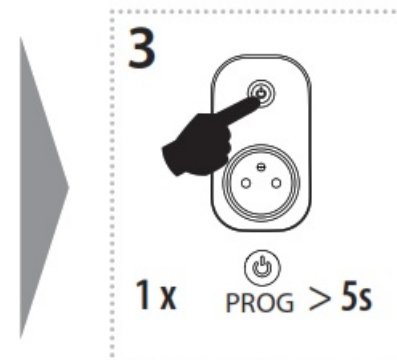
setting time delay 2s ... 60min.



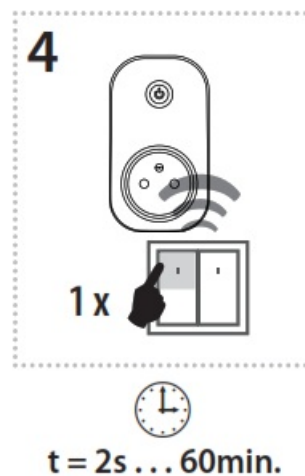
Press of programming button on receiver RFSC-61N for 1 second will activate receiver RFSC-61N into programming mode. Red LED is flashing in 1s interval.



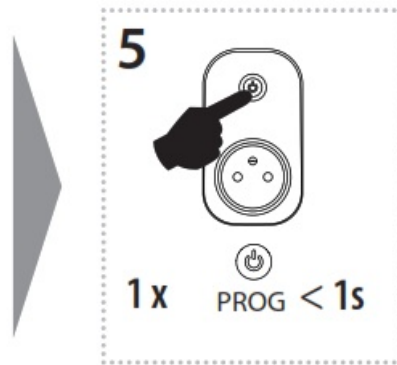
Assignment of the delayed off function is performed by five presses of the selected button on the RF transmitter (must be a lapse of 1s between individual presses).



Press of programming button longer than 5 seconds, will activate actuator into timing mode. LED flashes 2x in each 1s interval. Upon releasing the button, the delayed return time starts counting.

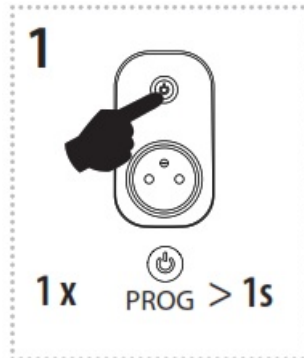


After the desired time has elapsed (range of 2s ... 60min), the timing mode ends by pressing the button on the RF transmitter, to which the delayed return function is assigned. This stores the set time interval into the actuator memory.

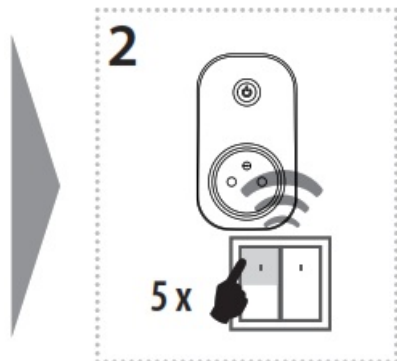


Press of programming button on receiver RFSC-61N shorter than 1 second will finish programming mode. The LED lights up according to the preset memory function.

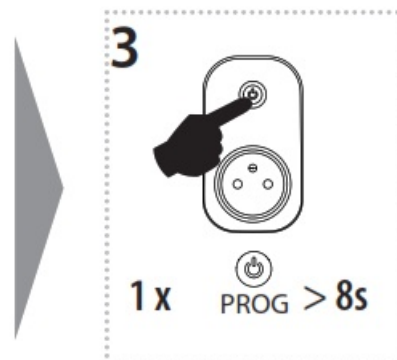
setting the number of hours of delay in hourly intervals – 1h ... 10h



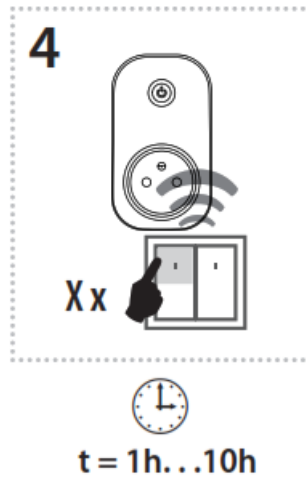
Press of programming button on receiver RFSC-61N for 1 second will activate receiver RFSC-61N into programming mode. Red LED is flashing in 1s interval.



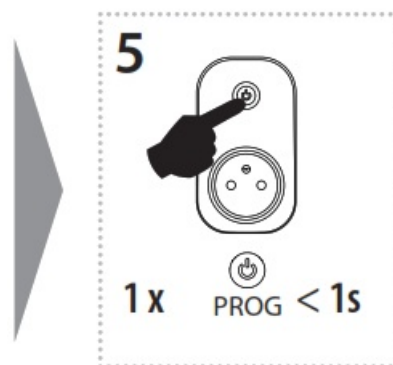
Assignment of the delayed off function is performed by five presses of the selected button on the RF transmitter (must be a lapse of 1s between individual presses).



Pressing the PROG button for longer than 8 seconds brings the socket into the timing mode. The LED will give a single flash 3x and a double flash 3x, then goes out.



By the number of presses of the selected RF transmitter button, set the required delay (1 press – 1h, ... 10 presses – 10h). Each press on the RF transmitter is indicated by a flash of the LED on the socket RFSC-61N.

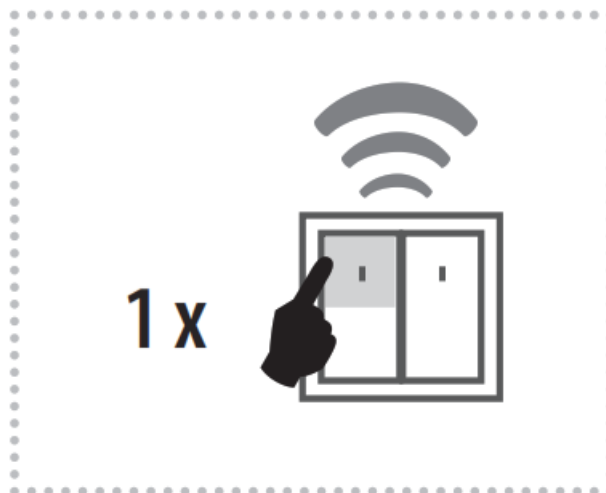


Press of programming button on receiver RFSC-61N shorter then 1 second will finish programming mode. The LED lights up according to the preset memory function.

Note: modes 2s – 60min and 1 hr up to 10 hr cannot be combined.

Function delayed on

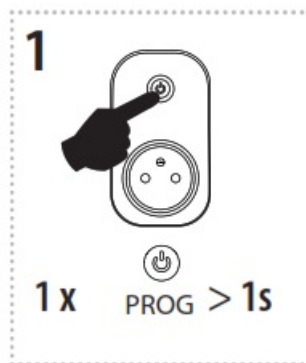
Description of delayed on



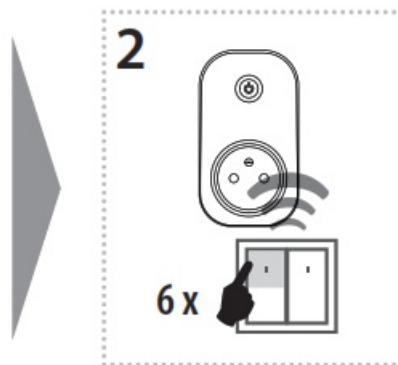
The output contact will be opened by pressing the button and closed after the set time interval has elapsed.

Programming

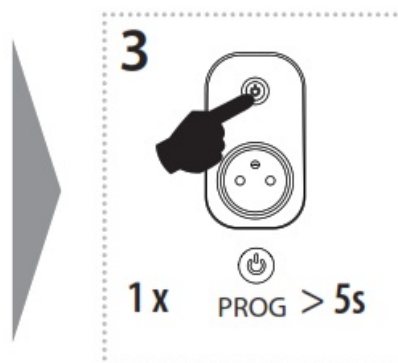
setting time delay 2s ... 60min.



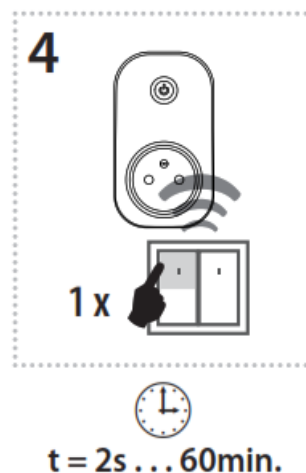
Press of programming button on receiver RFSC-61N for 1 second will activate receiver RFSC-61N into programming mode. LED is flashing in 1s interval.



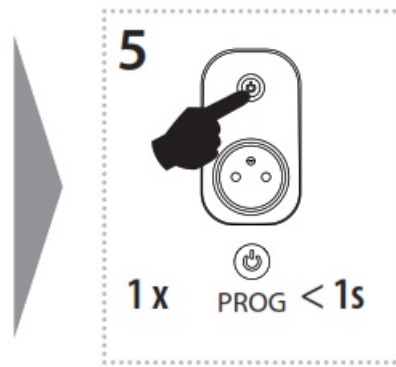
Assignment of the delayed on function is performed by six presses of the selected button on the RF transmitter (must be a lapse of 1s between individual presses).



Press of programming button longer than 5 seconds, will activate actuator into timing mode. LED flashes 2x in each 1s interval. Upon releasing the button, the delayed return time starts counting.

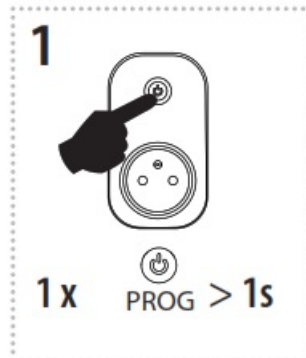


After the desired time has elapsed (range of 2s ... 60min), the timing mode ends by pressing the button on the RF transmitter, to which the delayed on function is assigned. This stores the set time interval into the actuator memory.

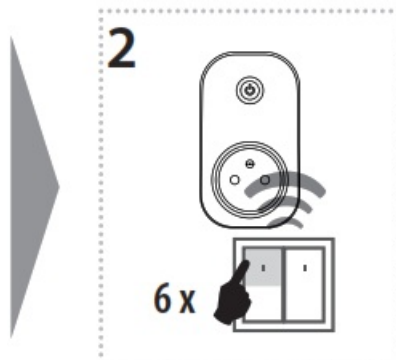


Press of programming button on receiver RFSC-61N shorter then 1 second will finish programming mode. The LED lights up according to the preset memory function.

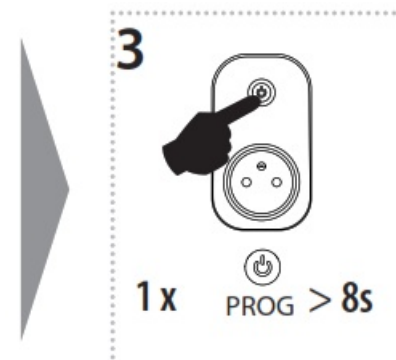
setting the number of hours of delay in hourly intervals – 1h ... 10h



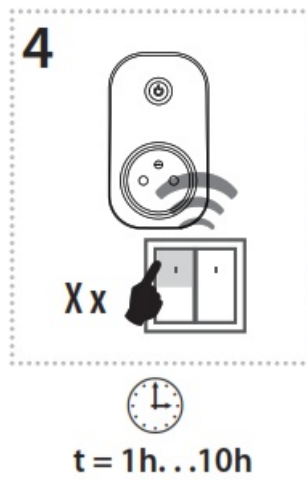
Press of programming button on receiver RFSC-61N for 1 second will activate receiver RFSC-61N into programming mode. LED is flashing in 1s interval.



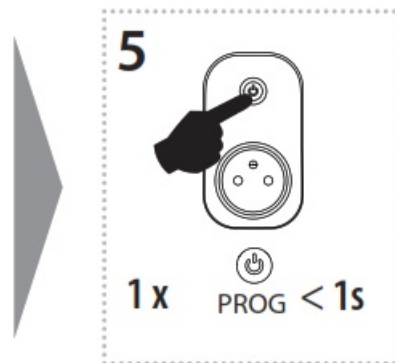
Assignment of the delayed on function is performed by six presses of the selected button on the RF transmitter (must be a lapse of 1s between individual presses).



Pressing the PROG button for longer than 8 seconds brings the socket into the timing mode. The LED will give a single flash 3x and a double flash 3x, then goes out.



By the number of presses of the selected RF transmitter button, set the required delay (1 press – 1h, ... 10 presses – 10h). Each press on the RF transmitter is indicated by a flash of the LED on the socket RFSC-61N.



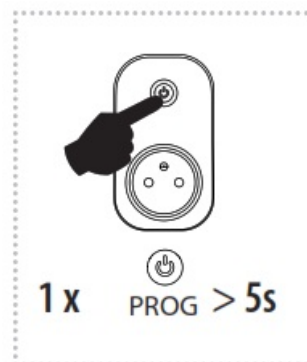
Press of programming button on receiver RFSC-61N shorter then 1 second will finish programming mode. The LED lights up according to the preset memory function.

Note: modes 2s – 60min and 1 hr up to 10 hr cannot be combined.

The address listed on the rear of the socket is used for programming and controlling sockets RFSC-61N by RF control units.

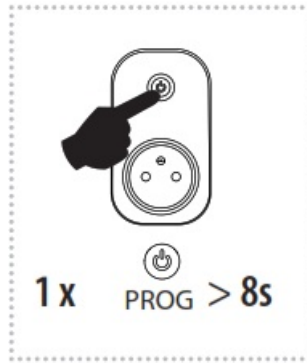
Deleting the socket

Deleting one position of the transmitter



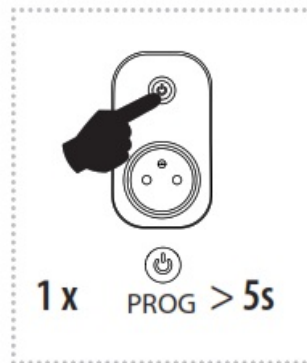
By pressing the programming button on the actuator for 5 seconds, deletion of one transmitter activates. LED flashes 4x in each 1s interval. Pressing the required button on the transmitter deletes it from the actuator's memory. To confirm deletion, the LED will confirm with a flash long and the component returns to the operating mode. The memory status is not indicated. Deletion does not affect the pre-set memory function.

Deleting the entire memory

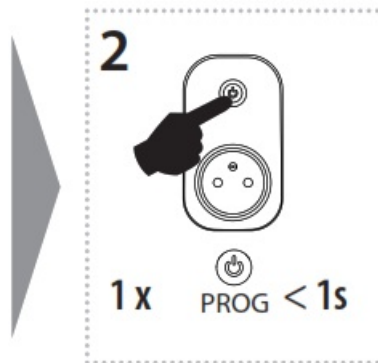


By pressing the programming button on the actuator for 8 seconds, deletion occurs of the actuator's entire memory. LED flashes 4x in each 1s interval. The actuator goes into the programming mode, the LED flashes in 0.5s intervals (max. 4 min.). You can return to the operating mode by pressing the Prog button for less than 1s. The LED lights up according to the pre-set memory function and the component returns to the operating mode. Deletion does not affect the pre-set memory function.

Selecting the memory function



Press of programming button on receiver RFSC-61N for 1 second will activate receiver RFSC-61N into programming mode. LED is flashing in 1s interval.



Pressing the programming button on the RFSC-61N receiver for less than 1 second will finish the programming mode, this will reverse the memory function. The LED lights up according to the current pre-set memory function. The set memory function is saved. Every other change is made in the same way.

- Memory function on:
 - For functions 1-4, these are used to store the last state of the relay output before the supply voltage drops, the change of state of the output to the memory is recorded 15 seconds after the change.
 - For functions 5-6, the target state of the relay is immediately entered into the memory after the delay, after re-connecting the power, the relay is set to the target state.
- Memory function off: When the power supply is reconnected, the relay remains off.

Technical parameters

Supply voltage:	230 V AC
Supply voltage frequency:	50-60 Hz
Apparent power:	7 VA / $\cos \varphi = 0.1$
Dissipated power:	0.7 W
Supply voltage tolerance:	+10 %; -15 %
Output	
Number of contacts:	1x switching / przełączany (AgSnO ₂)
Rated current:	16 A / AC1
Switching power:	4000 VA / AC1
Peak current:	30 A / <3 s
Switching voltage:	250 V AC1
Min. switching power DC:	500 mW
Mechanical service life:	10×10 ⁶
Electrical service life (AC1):	0.7×10 ⁵
Control	
Wirelessly:	32 channels (buttons) / do 32 kanałów (poprzez przyciski)
Communication protocol:	RFIO 2
Frequency:	866–922 MHz
Function repeater:	ne / nie
Manual control:	button / przycisk PROG (ON/OFF)
Range:	up to / do 200 m
Other data	
Operating temperature:	-15... + 50 °C
Working position:	any/ dowolna
Mounting:	plug into a socket / przez podłączenie do gniazda
Protection:	IP30
Overvoltage category:	III.
Contamination degree:	2
Dimensions:	63 x 110 x 74 mm
Weight:	129 g
Related standards:	EN 60730, EN 63044, EN 300 220, EN 301 489

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.

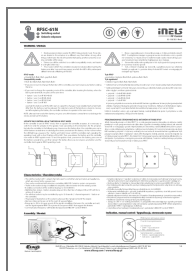
Warning

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 fl at etc. and thus disable remote control.



ELKO EP, s.r.o. | Palackého 493
769 01 Holešov, Všetuly
Czech Republic
e-mail: elko@elkoep.com
Support: +420 778 427 366
ELKO EP Poland, sp. z o. o.
ul. Motelowa 21 | 43-400 Cieszyn
Polska | e-mail: elko@elkoep.pl
GSM: +48 785 431 024
www.elkoep.com
www.elkoep.pl

Documents / Resources



[inELs RFSC-61N Switching Socket](#) [pdf] Instruction Manual
RFSC-61N Switching Socket, RFSC-61N, Switching Socket, RFSC-61N Socket, Socket

References

- [ELKO EP - Global relay manufacturer](#) • [ELKO EP](#)

-  [ElkoEP - Výrobce elektronických přístrojů • ELKO EP POLAND Sp. z o.o.](#)

Manuals+.