

### Technical specifications :

Operating frequency:	868 MHz
Transmit power:	ERP<20 mW
Operating temperature:	between -10°C and +55°C
Operating range:	Conditioned by architectural and statutory factors



# 1. DEVICE DESCRIPTION

The ROB-21 receiver is designed to open/ close entry or garage gates with remotes, as well as the EXALUS HOME and EXTALIFE applications. The receiver can also be successfully used to control electric strikes in wicket gates to the premises. In the case of gate control, it is necessary to connect the receiver to the appropriate inputs of a dedicated entry gate or garage gate controller.

ROB-21 has two inputs for connecting the limit sensors - thanks to this the application shows the actual status of the gate: closed / half-open / open. Functionally, the gate control mode allows it to be fully open or only half-open to a set degree. A wide range of supply voltage 12+24 V AC/DC enables cooperation with most gate controllers available in the market.

Two channels with NO contacts enable independent control of: the gate and the wicket gate, two gates or two wicket gates. The dimensions enable the device to be installed in Ø60 installation boxes or directly in the gate controller housing.

## FEATURES:

- opening/ closing entry or garage gates,
- control of electric strikes in wicket gates,
- possibility of connecting limit sensors,
- cooperation with the majority of gate controllers available in the market,
- control with remotes and the EXALUS HOME and EXTALIFE applications
- independent control of two channels (gate + wicket gate, 2 x gate, 2 x wicket gate),
- gate half-opening function,
- wide range of supply voltage

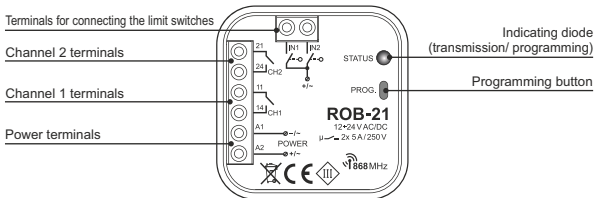
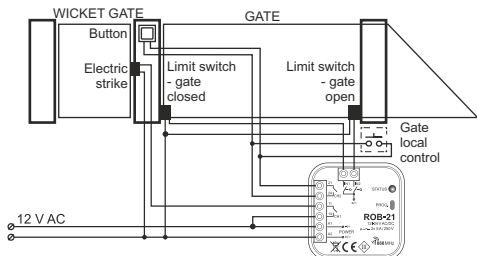


Fig.1

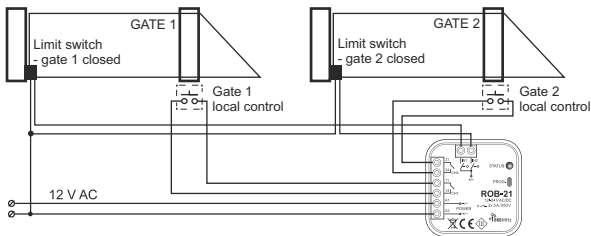
## 2. INSTALLATION NOTICES

- Before connecting and configuring the device, read the user manual carefully.
- The ROB-21 device is designed for installation in Ø60 installation boxes. Deep or pocket boxes should be used. Installation directly in the gate controller housing is permissible if the housing is made of plastic.
- When installed outdoors, the device must be properly protected against penetration of water and condensation of water vapor.
- The specified supply voltage range (12+24 V AC/DC) must be strictly applied. Using a different voltage value may adversely affect the operation of the device or lead to its damage.
- Activities related to the connection and adjustment should be performed by a qualified electrician, for safety reasons do not install the device without the housing or with a damaged housing.
- For installation, use a cross screwdriver up to 3.5 mm.
- The screw terminals allow connection of a maximum cable of 2.5mm<sup>2</sup>.
- The operating range specified in the user manual (up to 200m) applies to perfect conditions in open space. In case of problems with the range, it is recommended to use an additional adapter in the form of the REP-21 retransmitter.
- The outputs of the ROB-21 device (NO dry contact) are connected to the appropriate inputs of the gate controller or to the electric strike of the wicket gate. Typically, in the case of gate controllers, inputs are used to connect a local button.
- Limit switches are connected to IN1 / IN2 inputs. They can be NO or NC type limit switches. Limit switches require appropriate configuration with the EXALUS HOME or EXTLIFE application.
- When installing several devices in one place, avoid mounting one receiver above the other.

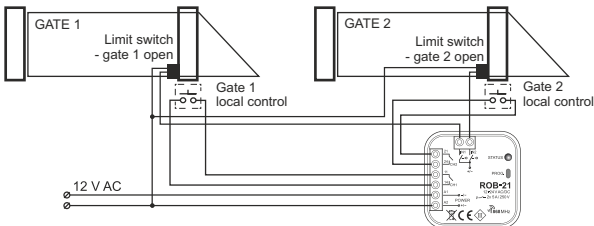
## 3. INSTALLATION



Control of the entry gate (channel 2) and the 12 V AC electric strike for the wicket gate (channel 1)






Control of two entry gates (limit switches for signalling closing)



Controlling two entry gates (limit switches for signalling opening)

## 1. ASSIGNING THE CONTROLLER TO THE TR7 CONTROL UNIT

(INITIAL OPERATION):

1. Connect the controller to the power supply - the STATUS diode flashes green for a few seconds.
  2. Log in to the TR7 application and click the DEVICE CONFIGURATION tab.
  3. Select the New tab and press the  "Search" button - after a few seconds the available devices will appear on the list.
  4. To add the selected device to the application, pull down the menu of the device  and then press the  button to pair it with the TR7 control unit.
    - \* If a software update is available, a window will appear here in which you must confirm this process by clicking the UPDATE button (do not turn off the application during this process)
    - \* After updating the software (100%), the process status will change to: Update has been installed. Then click the CLOSE button.
  5. In the "Added" tab, check whether the name of ROB 21 is displayed.
  6. After identifying the device, press the "Settings" button (cog icon) and then a settings window appears where first we write the device name, and it is possible to edit the device "Actions" such as:
    - Check for updates
    - Software version
    - Running diagnostics
- After pressing the "Next" button, the configuration window opens where we can:
- Select the image of the object controlled by our device from external files.
  - Select the icon of the object controlled by our device (suggested by the application).
  - The name of the controlled object.
  - It is possible to add a device to a group by selecting the name from the pull down menu or by adding a new one, the "Add a new group" button.



### 7. „SETTING OPERATING PARAMETERS“

- Operation mode: Gate, Wicket Gate, Monostabley
- Assigned transmitters: (added earlier)
- Set the impulse time (e.g. for a wicket gate)
- Set global parameters: for Input 1 and for Input 2
- Assigned output (Channel1, Channel2)
- Limit switch functions: (None, Closing, Opening)
- Limit switch type: (Normally Open NO, Normally Closed NC)

After setting "Save" and "Close"

## 2. REMOVING THE CONTROLLER

(WITH THE TR7 CONTROL UNIT):

1. To remove the existing ROB 21 controller, log in to the TR7 application and click the DEVICE CONFIGURATION tab.
2. In the Added item select a specific controller by pulling down the menu  and press the button "BIN"  – a window will appear confirming that the device has been removed.
3. If the ROB 21 controller is within the control unit operation range, it will be removed, and if the control unit cannot communicate with the controller (e.g. it is disconnected from the power supply), another window will appear confirming the removal of its settings. In this case, when restarting the controller, the reset procedure should be carried out using the service button (**ROB 21 CONTROLLER RESET**).

**NOTE: Do not remove a controller whose update has failed.  
The update process must be restarted.**

## 3. COMPATIBLE REMOTES

The ROB-21 receiver can be controlled with:

- the remotes of the EXALUS HOME system:

NX-BIDI  
PX-BIDI

- the Zamel key ring remotes:

P-457/2  
P 457/4

- flush transmitters:

RNP-21  
RNP-22,

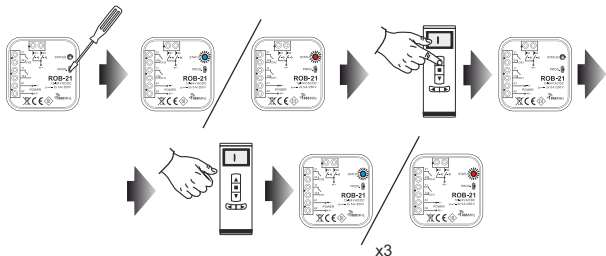
- scenario managers with temperature sensor:

RNK-22  
RNK-24

## 1. ENTERING THE REMOTE BUTTONS WITH THE PROG BUTTON:

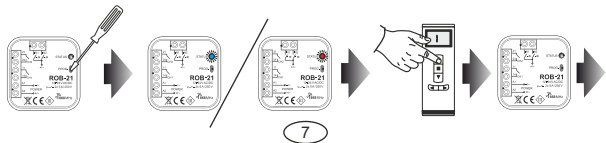
### Single impulse

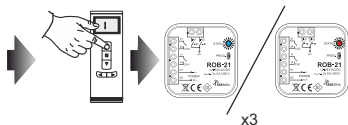
1. Press the PROG button briefly (0.5s). - the STATUS diode will light up in blue (programming the button to channel 1). If you want to enter a button for the second channel, wait about 5 seconds until the STATUS diode lights up in red.
2. Press and hold the remote button that you want to add to the channel.
3. The STATUS diode will go off and then light up again.
4. Release the remote button.
5. When the button is entered correctly, the STATUS diode will blink 3 times and the controller will exit the programming mode.



### Half-opening the gate

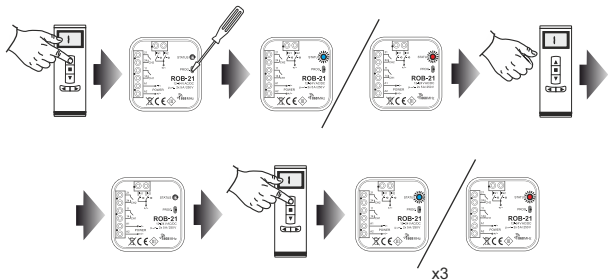
1. Press the PROG button briefly (0.5s). - the STATUS diode will light up in blue (programming the button to channel 1). If you want to enter a button for the second channel, wait about 5 seconds until the STATUS diode lights up in red.
2. Briefly press the remote button that you want to add to the channel.
3. The STATUS diode will go off and then light up again.
4. Briefly press the remote button again.
5. When the button is entered correctly, the STATUS diode will blink 3 times and the controller will exit the programming mode.





## Monostable

1. Press and hold the button that you want to add to the channel.
2. Press the PROG button briefly (0.5s). - the STATUS diode will light up in blue (programming the button to channel 1). If you want to enter a button for the second channel, wait about 5 seconds until the STATUS diode lights up in red.
3. Release the remote button.
4. The STATUS diode will go off and then light up again.
5. Briefly press the remote button again.
6. When the button is entered correctly, the STATUS diode will blink 3 times and the controller will exit the programming mode.

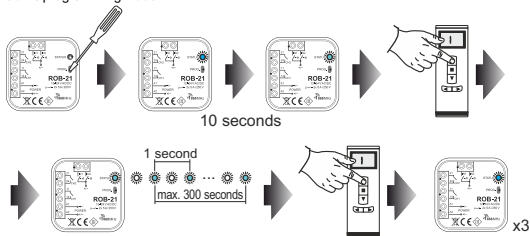


## 2. PROGRAMMING THE DELAY TIME WITH THE PROG BUTTON:

- By default, the 'Delay Time' is set to 10 seconds
- The time is programmed only for the buttons entered in the 'Gate half-opening' mode

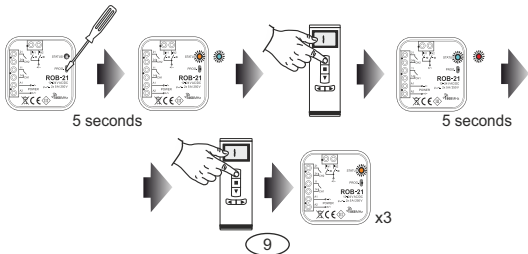


1. Press the PROG button briefly (0.5s) - the STATUS diode lights up in blue.
2. Wait about 10 seconds until the STATUS diode lights up in cyan.
3. Briefly press the remote button that you previously entered in the gate half-opening mode.
4. The output to which the button is assigned will be controlled for a short time. The STATUS diode will start blinking at 1 second intervals.
5. After the time you want to set (maximum 300 seconds), press the remote button again.
6. The output will be controlled for a short time, the STATUS diode will flash 3 times and the receiver will exit the time programming mode.



### 3. REMOVING THE REMOTE BUTTONS WITH THE PROG BUTTON:

1. Press the PROG button for about 5 seconds - during this time the STATUS diode lights up in orange.
2. When the STATUS diode turns in blue, release the PROG button.
3. When the STATUS diode is lit in blue, briefly press the remote button which is to be removed from the channel 1.
4. If you want to remove a button from the channel 2, wait about 5 s until the STATUS diode lights up in red. When the diode is lit in red, briefly press the remote button to be removed from the channel 2.
5. The STATUS diode flashes 3 times in orange and the receiver exits the delete mode.



## 4. RESET TO DEFAULT SETTINGS:

Reset to default settings restores the default configuration of the device.

All remote buttons entered to the receiver, all set times and the icon informing about pairing of the receiver with the controller are removed.

1. Press the PROG button for about 5 seconds - during this time the STATUS diode lights up in orange.
2. When the STATUS diode lights up in blue, release the PROG button and press it again briefly (0.5s).
3. The STATUS diode flashes in orange and then 5 times in green. This means a correctly performed factory reset.

