



ZAMEL Sp. z o.o.

ul. Zielona 27, 43-200 Pszczyna, Poland
tel. +48 (32) 210 46 65, fax +48 (32) 210 80 04
www.zamel.com, e-mail: export@zamel.pl



DESCRIPTION

A ROM-22 modular radio receiver is the final element of EXTA LIFE system which allows individual control of any two devices/circuits. Two relays with switch contacts (NO/NC) with maximum rated load 10A as outputs. This enables the user to control low voltage circuits (e.g. 12/24 VAC/DC) and high voltage circuits (230 VAC). The receiver is also good for remote actuation of other devices. You can also use it for feeding control signals. The ROM-22 receiver is also suitable for controlling solenoids in heating systems. Thanks to bidirectional communication between the receiver and controller, you can view each receiver channel's status at any particular time on a mobile app. Also, the bidirectional communication enables the operator to change the specific parameters of the receiver and add receivers remotely (i.e. without the actual access to the receiver). Frame encryption algorithm ensures control safety. A receiver installed outside a controller may be controlled in parallel using the EXTA LIFE system's transmitters. You can register more transmitters with a receiver to enable independent control from several locations. Configurable cable inputs increase control functionalities. The receiver has a built-in remote software update from a controller. The product is designed for installing in switch cabinets using a TH35 (DIN) bar. With removable antenna to enable connecting an external antenna.

FEATURES

- Rated supply voltage 230 V AC.
- Compatible with EXTA LIFE system controller and transmitters.
- With 2 output channels (2 x potential-free NO/NC switchable contacts).
- Two-way transmission with an indication of each output status in the application.
- Programmable output status after supply voltage loss.
- 2 programmable external inputs.
- For connecting monostable or bistable connectors.
- 4 operating modes when working with transmitters (activate/deactivate, bistable, monostable, time).
- 2 operating modes when working with controller (activate/deactivate, time).
- Independently programmable time for radio transmitters, external inputs and for controller.
- Times assigned independently for each output.
- Software can be updated remotely.

Zamel Sp. z o.o. hereby declares that the ROM-22 radio equipment type conforms to Directive 2014/53/EU.



The symbol means selective collecting of electrical and electronic equipment. It is forbidden to put the used equipment together with other waste.

TECHNICAL DATA

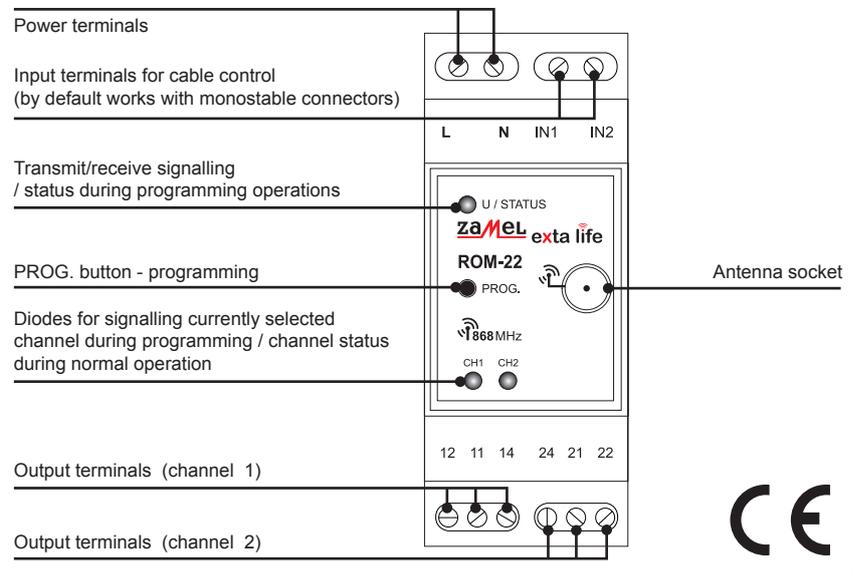
Rated supply voltage	230 VAC
Rated frequency	50 / 60 Hz
Rated power consumption	Standby: 0.65 W
	One channel active: 1.3 W Two channels active: 1.9 W
Transmission	RF — ISM 868 MHz (868.50 MHz) band
Transmission mode	duplex — 9600 bps
Maximum power	14 dBm (25 mW)
Encryption	128-bit key algorithm
Operating range	max. 300 m in open areas
Transmitting/programming signalling	Yes - green LED (STATUS)
Selected channel / channel status signalling	Yes - red LEDs (CH1, CH2)
Maximum number of paired buttons	96 pairs (distributed into 2 channels)
Current channel status information	Yes - in EXTA LIFE mobile application
Operation modes in co-operation with EXTA LIFE system transmitters	Turn on/off, bistable, monostable, time
Operation modes in co-operation with an EXTA LIFE controller	Turn on, off, timer
Number of external outputs	2
Compatible connectors*	monostable (buttons), bistable
Operation modes for external inputs**	Turn on/off, bistable, monostable, time
Time setpoint range***	1 s–18 h
Number of output channels	2
Relay contact parameters	2 x NO/NC 16A / 250 VAC
(Selectable voltage-free contacts)	2 x 10 A / 250 VAC
Maximum outputs current-carrying capacity	2 x 10 A / 250 VAC
Number of termination points	10 (conductor cross-section up to 2.5 mm ²)
Enclosure mounting	TH35 bar (DIN)
Operating temperature range	-10 to +55°C
Enclosure protection rating	IP20
Dimensions	90 x 35 x 66 mm (double module)
Weight	0.13 kg

* Selection of switch possible only from the mobile app level coupled with the EFC-01 controller.

** Input operating mode selection depends on the type of selected coupler type.

*** Times are assigned independently to each channel of the receiver. The periods are programmed separately for buttons operating in time mode, external inputs and for control from the app level.

APPEARANCE



OPERATING CONSIDERATIONS

RECEIVER FUNCTIONALITY ROM-22:

- The ROM-22 receiver may at the same time be controlled using:
 - EXTALIFE system transmitters (on/off, bistable, monostable, time mode),
 - EXTALIFE mobile app after pairing with controller (on/off, time mode),
 - IN1, IN2 external inputs (operating mode depends on the connector type — see Input functionalities).
- Current status of the specific receiver's channel is signalled with LEDs CH1/CH2 and on the mobile app.
- More EXTALIFE buttons/receivers can be assigned to a single receiver — up to 96 pairs distributed in the receiver (e.g. 48 receivers in on/off mode).
- Radio transmitters can be programmed with a receiver locally using the PROG button and remotely without access to the receiver using the mobile app.
- Several receivers (channels) may work with a single transmitter; in such a situation it is recommended to assign a transmitter to each receiver (channel) working in on/off mode.
- A receiver may be paired with only one EXTALIFE controller at a time.
- Transmitter buttons assigned to the specific receiver's channel may be deleted individually.
- It is also possible to delete all buttons stored in the receiver's memory at the same time by performing factory reset.
- basic parameters of a ROM-22 receiver are configured from app level.
- The parameters are configurable independently for channel 1 (CH1) and channel 2 (CH2).
- You can use mobile app to execute remote software update in the receiver.

Default settings (factory settings) for a ROM-22 receiver

Parameter	Default settings	Configuration range
Output status after supply voltage loss	Disabled (terminals 11-12 and 21-22)	Yes – mobile app
Type of connectors compatible with inputs IN1,IN2	Monostable connectors (buttons)	Yes – mobile app
Operating mode inputs IN1, IN2	bistable (cyclic change of output condition)	Yes – mobile app
Default time for channel 1 (CH1) and channel 2 (CH2)*	10 s	Yes – mobile app / PROG button

*Applies to receiver's buttons assigned to specific outputs in time mode.

OPERATING MODES

ON/OFF MODE

In the on/off mode, two transmitter buttons are always used for controlling the receiver's channel. One of the buttons is always used for "on" function and the other for the "off" function.

CAUTION! This mode is recommended for use to control more channels, i.e. more receivers using one transmitter.

BISTABLE MODE

In the bistable mode, only one transmitter button is used for controlling the receiver's channel. That means that one button performs both the "on" and "off" function. Output control is executed as a cyclic change of status at subsequent presses of button on the transmitter. The bistable mode enables independent control of more receivers using a single transmitter. For example when using remote a 4-channel remote control P-457/4, it is possible to independently configure 4 circuits (channels).

CAUTION! The bistable mode is not recommended for simultaneous control over than one receiver (channel).

MONOSTABLE MODE

In the monostable mode, only one transmitter button is used for controlling the receiver's channel. The receiver's output is active as long as the transmitter key is pressed.

TIME MODE

In the time mode, only one transmitter button is used for controlling the specific transmitter's channel. The receiver's output is activated by pressing the transmitter button and it deactivates automatically after a preset time. Pressing the transmitter button during the countdown time results in quicker deactivation of the receiver's output (system without retriggering of time). Activation time can be programmed in the range from 1 s to 18 h. With ROM-22 receiver you can set independent times for each button assigned in the time mode, for each local input and for control from application.

ACTIVATE MODE

This mode is available only from installation connectors connected to inputs IN1/IN2. In this mode you can only activate the specific channel, i.e. output in a receiver.

DEACTIVATE MODE

This mode is available only from installation connectors connected to inputs IN1/IN2. In this mode it is possible to deactivate the specific channel (output) in a receiver.

ROM-22 receiver's operating modes summary

Operating mode	Radio transmitters <i>EXTA LIFE</i>	Application <i>EXTA LIFE</i>	Monostable connector (button)	Bistable connector
on/off mode	+	+(default)	-	-
bistable mode	+	-	+(default)	-
monostable mode	+	-	+	+
time mode	+	+	+	+
activate mode	-	-	+	+
deactivate mode	-	-	+	+
inactive	-	-	+	+

With EXTALIFE radio transmitters, the operating mode is set by assigning the correct transmitter buttons to the receiver. In other cases, operating mode is configured using the EXTALIFE mobile app.

DIRECT PROGRAMMING USING PROG BUTTON

You can use the PROG button on the receiver to directly assign radio transmitters to the receiver.

PROGRAMMING BUTTONS TO CHANNEL ONE (CH1) Using 2-button remote P-457/2 as an example

ON/OFF MODE

- Briefly press (1 s) the PROG button on the receiver; "CH1" LED lights up.
- Wait approx. 2 s until STATUS LED lights up. After the STATUS LED is lit, within 5 s briefly press the button which is assigned to activate function (for example „1“).
- STATUS LED will go off and light up again.
- Within the next 5 s briefly press the button assigned to the "deactivate" function (e.g. "2").
- After correctly pressing the buttons, several quick blinks of STATUS LED occur and "CH1" LED turns off.

BISTABLE MODE

- Briefly press (1 s) the PROG button on the receiver; "CH1" LED lights up.
- Wait approx. 2 s until STATUS LED lights up. After the STATUS LED is lit, within 5 s briefly press and hold the button which you want to assign in bistable mode (for example „1“).
- STATUS LED will go off and light up again.
- Within next 5 s, release the button to be assigned to the bistable mode (e.g. "1").
- After correctly pressing the button, several quick blinks of STATUS LED occur and "CH1" LED turns off.

MONOSTABLE MODE

- Press the button you want to enter in monostable mode (for example „1“).
- While holding the transmitter button pressed, briefly press (1 s) the PROG button on the receiver; "CH1" LED lights up.
- Wait approx. 2 s until STATUS LED lights up. After the STATUS LED is lit, within 5 s release the transmitter button you want to enter in monostable mode.
- STATUS LED will go off and light up again.
- Within next 5 s briefly press the button to be entered in the monostable mode again.
- After correctly pressing the button, several quick blinks of STATUS LED occur and "CH1" LED turns off.

TIME MODE

Step_1: Pairing a selected button with receiver

- Briefly press (1 s) the PROG button on the receiver; "CH1" LED lights up.
- Wait approx. 2 s until STATUS LED lights up. After the STATUS LED is lit, within 5 s briefly press and hold the button to be entered in the time mode (for example „1“).
- STATUS LED will go off and light up again.
- Within next 5 s again briefly press the button you selected before, the one to be entered in the time mode (for example „1“).
- After correctly pressing the button, several quick blinks of STATUS LED occur and "CH1" LED turns off.

After pairing the selected button on the transmitter with the channel on the ROM-22 receiver, the period assigned to this button takes the default value of 10 s (default global time). To change the time, carry out the time programming procedure (Step_2). With the ROM-22 receiver, you can assign an individual time to each button paired with channel 1 (CH1). The time is programmable from 1 s to 18 h.

Step_2: Programming the time assigned to the selected button in time mode (for channel 1)

- Briefly press (1 s) the PROG button on the receiver; "CH1" LED lights up.
- Wait approx. 2 s until STATUS LED lights up. After the STATUS diode lights up, wait approx. 5 s until the STATUS diode goes off.
- After the LED goes off in less than 5 s, briefly press the transmitter button assigned to the channel 1 in time mode. (This refers to the transmitter you want to program time).
- The STATUS LED will start blinking which signals time measurement.
- After a period of time you want to assign to the specific button has passed, briefly press the button on the transmitter again.
- The time programming procedure is now complete which will be confirmed by blinking STATUS LED and the „CH1" diode going off.

The time assigned to a button can only be changed through its reprogramming.

PROGRAMMING BUTTONS TO CHANNEL TWO (CH2) Using 2-button remote P-457/2 as an example

ON/OFF MODE

- Briefly press (1 s) the PROG button on the receiver; "CH1" LED lights up.
- Briefly press (1 s) the PROG button on the receiver again; "CH2" LED lights up and "CH1" LED will turn off.
- Wait approx. 2 s until STATUS LED lights up. After the STATUS LED is lit, within 5 s briefly press the button which is assigned to activate function (for example „1“).
- STATUS LED will go off and light up again.
- Within next 5 s briefly press the button assigned with the "deactivate" function (e.g. "2").
- After correctly pressing the buttons, several quick blinks of STATUS LED occur and "CH2" LED turns off.

BISTABLE MODE

- Briefly press (1 s) the PROG button on the receiver; "CH1" LED lights up.
- Briefly press (1 s) the PROG button on the receiver again; "CH2" LED lights up and "CH1" LED will turn off.
- Wait approx. 2 s until STATUS LED lights up. After the STATUS LED is lit, within 5 s briefly press and hold the button which you want to assign to bistable mode (for example „1“).
- STATUS LED will go off and light up again.
- Within next 5 s, release the button to be assigned to the bistable mode (e.g. "1").
- After correctly pressing the button, several quick blinks of STATUS LED occur and "CH2" LED turns off.

MONOSTABLE MODE

- Press the button you want to enter in monostable mode (for example „1“).
- While holding the transmitter button pressed, briefly press (1 s) the PROG button on the receiver; "CH1" LED lights up.
- Briefly press (1 s) the PROG button on the receiver again; "CH2" LED lights up and "CH1" LED will turn off.
- Wait approx. 2 s until STATUS LED lights up. After the STATUS LED is lit, within 5 s release the transmitter button you want to enter in monostable mode.
- STATUS LED will go off and light up again.
- Within next 5 s briefly press the button again to be entered in the monostable mode.
- After correctly pressing the button, several quick blinks of STATUS LED occur and "CH2" LED turns off.

TIME MODE

Step_1: Pairing a selected button with receiver

- Briefly press (1 s) the PROG button on the receiver; "CH1" LED lights up.
- Briefly press (1 s) the PROG button on the receiver again; "CH2" LED lights up and "CH1" LED will turn off.
- Wait approx. 2 s until STATUS LED lights up. After the STATUS LED is lit, within 5 s briefly press and hold the button to be entered in the time mode (for example „1“).
- STATUS LED will go off and light up again.
- Within next 5 s briefly press the button to be entered in the time mode (for example „1“) again.
- After correctly pressing the button, several quick blinks of STATUS LED occur and "CH2" LED turns off.

After successful assignment of the selected button on the transmitter to the channel 2 on the ROM-22 receiver in time mode, the period assigned to this button takes the default value of 10 s (default global time). To change the time, carry out the time programming procedure (Step_2). With the ROM-22 receiver, you can assign an individual time to each button paired with channel 2 (CH2). The time is programmable from 1 s to 18 h.

Step 2: Programming the time assigned to the selected button in time mode (for output-2)

1. Briefly press (1 s) the PROG button on the receiver; "CH1" LED lights up.
 2. Briefly press (1 s) the PROG button on the receiver again; "CH2" LED lights up and "CH1" LED will turn off.
 3. Wait approx. 2 s until STATUS LED lights up. After the STATUS diode lights up, wait approx. 5 s until the STATUS diode goes off.
 4. After the LED goes off in less than 5 s, briefly press the transmitter button assigned to the channel 2 in time mode. (This refers to the transmitter you want to program time).
 5. The STATUS LED will start blinking which signals time measurement.
 6. After a period of time you want to assign to the specific button has passed, briefly press the button on the transmitter again.
 7. The time programming procedure is now complete which will be confirmed by blinking STATUS LED and the „CH2" diode going off.
- The time assigned to a button can only be changed through its reprogramming.

REMOTE PROGRAMMING USING EXTA LIFE APPLICATION

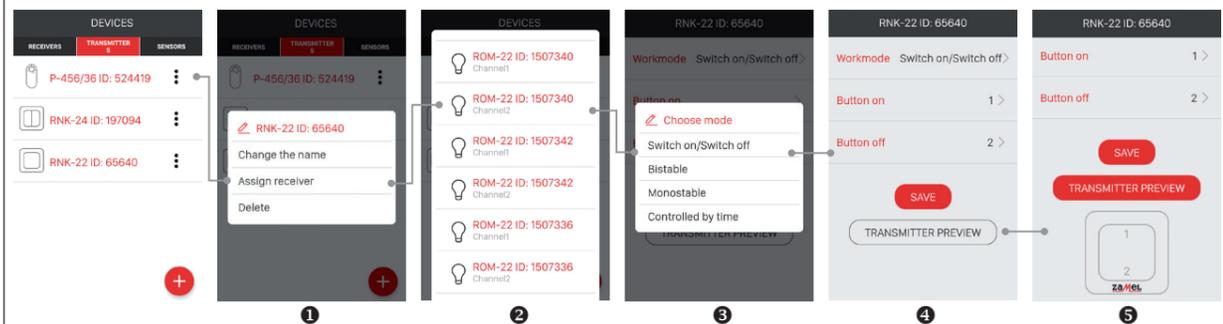
The remote programming function for receivers enables the assigning of the transmitter's buttons to the selected receiver's channel, without actual access to the receiver, i.e. without the need to press the PROG button on the receiver). This is particularly convenient when the receivers are already installed in a location and it is difficult to access them.

Requirements for remote programming transmitters with ROM-22 receiver:

- An EXTA LIFE controller installed in the system,
- The receivers you want to assign to the receiver are supplied with power and paired with a controller,
- The transmitters to be remotely assigned to receivers must be paired with the controller,
- During one step only one transmitter can be remotely assigned to a receiver.

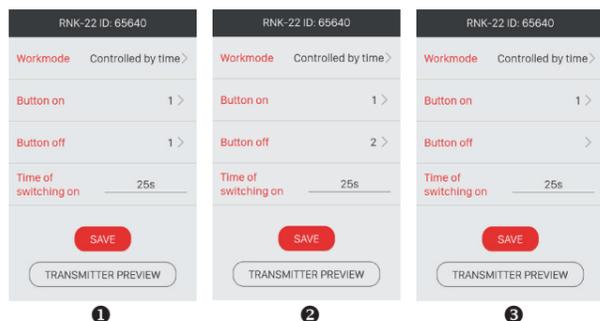
To remotely assign selected buttons on a transmitter to the specific channel, do the following:

1. Pair the receiver with controller.
2. Pair the transmitter with the controller, this applies to the transmitter whose buttons you want to remotely assign to the receiver.
3. On the transmitter select "Assign receiver" ❶.
4. From the list of all paired receivers select the receiver (channel) to which you want to remotely assign the transmitter ❷.
5. In the "Operating Mode" field set the mode for use by the transmitter working with the receiver (channel) ❸. The available modes for ROM-22 are: on/off, bistable, monostable, time.
6. Select the transmitter's buttons for remote assignment to the receiver ❹. In case of time mode, you must also declare time assigned to the selected button. The time range available is from 1 s to 18 h.
7. Pressing "Transmitter preview" button brings up a transmitter's view with button numbers shown ❺.
8. Press "Save" to remotely program the transmitter into the receiver. After the correct completion of the operation you will see the message "The devices have been paired".



Remote assignment of a transmitter to receiver can be also executed from the receiver level. In this situation, select "Assign transmitter" from the receiver's (channel's) editing menu.

If you are programming time mode, the following situations are possible:



1. "On button" and "off button" are the same — receiver (channel) activation and deactivation before the programmed period is executed using the same button (in this example, it is "1" on the RNK-22 transmitter).
2. "On button" and "off button" are different — the "on" button only activates the receiver (channel) and "off" button only deactivates the device before programmed time elapses.
3. "off button" was not defined — the situation is the same as the one described in section 1.

PROGRAMMING "GLOBAL TIME"

Each new button assigned to the specific channel in the ROM-22 receiver in time mode operates using "global time". By default the global time for channel 1 (CH1) and channel 2 (CH2) is set to 10 s. The user can change the global time within the range from 1 s to 18 hours. After changing global time for the specific channel, the buttons registered with this output in time mode will operate automatically with new value for global time. Exception: individual times assigned to buttons during programming stage.

The global time value can be adjusted from the receiver using the PROG button and also from the mobile app if the receiver is paired with the EXTA LIFE controller.

PROGRAMMING GLOBAL TIME using PROG button

Changing global time for channel 1 (CH1)

1. Briefly press (1 s) the PROG button on the receiver; "CH1" LED lights up.
2. Wait approx. 2 s until STATUS LED lights up. After the STATUS diode lights up, wait approx. 5 s until the STATUS diode goes off.
3. After the LED turns off, briefly press PROG within 5 s. The STATUS LED will start blinking which signals time measurement.
4. After the time you want to program as the new "global time" for channel 1 has passed, again briefly press PROG.
5. The global time programming procedure is now complete which will be confirmed by blinking STATUS LED and the "CH1" diode going off.

Changing global time for channel 2 (CH2)

1. Briefly press (1 s) the PROG button on the receiver; "CH1" LED lights up.
2. Briefly press (1 s) the PROG button on the receiver again; "CH2" LED lights up and "CH1" LED will turn off.
3. Wait until STATUS LED lights up. After the STATUS diode lights up, wait approx. 5 s until the LED goes off.
4. After the LED turns off, briefly press PROG within 5 s. The STATUS LED will start blinking which signals time measurement.
5. After the time you want to program as the new "global time" for channel 2 has passed, briefly press PROG again.
6. The global time programming procedure is now complete which will be confirmed by the blinking STATUS LED and the "CH2" diode going off.

REMOTE PROGRAMMING OF GLOBAL TIME using mobile application

Remote change of global time for each of ROM-22 receiver's output is also possible using mobile app. To do so, first pair the receiver with an EXTA LIFE system controller. After successful pairing, the ROM-22 receiver will be visible in the system as 2 channels (Channel 1 and Channel 2). To set global time for a channel, select "Configure" from the editing menu. You will be transferred to the configuration screen where you can set basic parameters for the specific receiver channel.

For global time, set the "Global time" parameter. This parameter can be set from 1 s to 18 h using the following format — hour : minutes : seconds (xxh : xxm : xxs).

SELECTIVE DELETION OF RECEIVER'S MEMORY

In the EXTA LIFE system receivers, you can use selectively delete buttons from the receiver's memory. This enables deleting only the selected buttons without the need to clear the complete memory of the receiver. You can delete buttons using PROG or remotely using the EXTA LIFE app.

DELETING RECEIVERS USING PROG BUTTON

Selectively deleting buttons (or button pairs for on/off mode) from channel 1 of the receiver:

1. Press PROG and hold it for approx. 5 s; the STATUS LED will be lit.
2. After STATUS LED goes off, "CH1" LED will come on. Then, release the PROG button and wait approx. 2 s until STATUS LED lights up.
3. After STATUS LED comes on, within 5 s you must briefly press the button assigned to channel 1 to delete it from the receiver's memory. If the button pair has been assigned using on/off mode, just press one of these buttons.
4. After pressing the button, the STATUS LED will start blinking which informs that you entered deleting procedure. Completion of the deleting procedure is signalled by the STATUS and "CH1" LEDs going off.

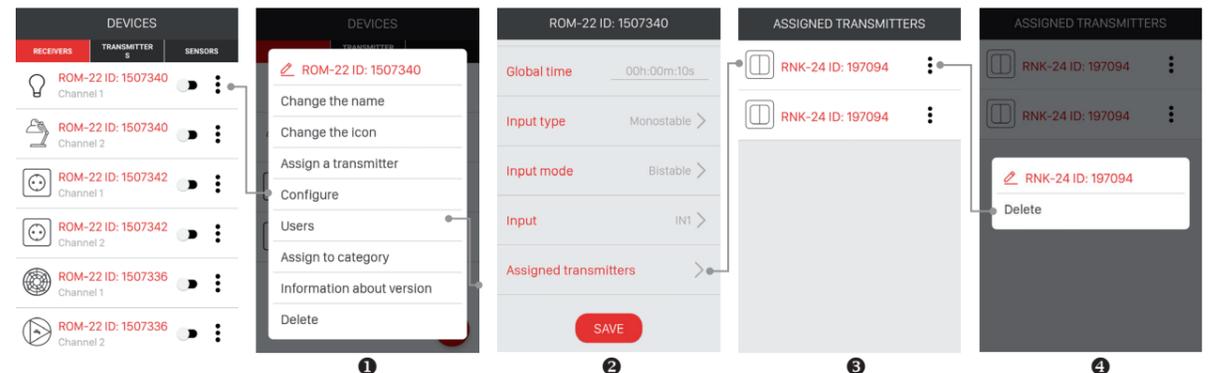
Selectively deleting buttons (or button pairs for on/off mode) from channel 2 of the receiver:

1. Press PROG and hold it for approx. 5 s; the STATUS LED will be lit.
2. After STATUS LED goes off, "CH1" LED will come on. Next, briefly press (1 s) the PROG button again; "CH2" LED will light up and "CH1" LED will turn off.
3. After that, wait approx. 2 s until the STATUS LED comes on again.
4. After STATUS LED comes on, within 5 s you must briefly press the button assigned to channel 2 to delete it from the receiver's memory. If the button pair has been assigned using on/off mode, just press one of these buttons.
5. After pressing the button, the STATUS LED will start blinking which informs that you entered deleting procedure. Completion of the deleting procedure is signalled by the STATUS and "CH2" LEDs going off.

DELETING TRANSMITTERS USING EXTA LIFE APP (REMOTE)

The receiver from which you want to remotely delete receivers' buttons must be paired with an EXTA LIFE controller. To remotely delete buttons from the receiver's memory, do the following:

1. From a receiver's (channel) editing menu, select "Configure" (1).
2. At the setup screen, press the key "Assigned Transmitters" (2) to download the list of transmitters currently stored in its memory (3).
3. By pressing the name of a transmitter you can view details on the record in the receiver's memory displayed its entry into the memory of the receiver (numbers of entered keys, operating mode, assigned time for time mode).
4. By selecting "Delete" from the transmitter's editing menu, you delete the transmitter buttons from the receiver's memory (4). You can also delete a transmitter by moving an element to the side.



CLEARING ALL RECEIVER MEMORY

After clearing the receiver's memory (channel 1 and 2) all buttons are removed from the memory. **Clearing the memory also includes unpairing (deletion) of the receiver from the EXTA LIFE controller (as a result it will not be possible to control the system using the application).** If there are buttons entered in time mode in the receiver's memory, then after clearing the memory the assigned times were also cleared. Global time assumes the default value of 10 s.

To clear the complete receiver's memory, do the following:

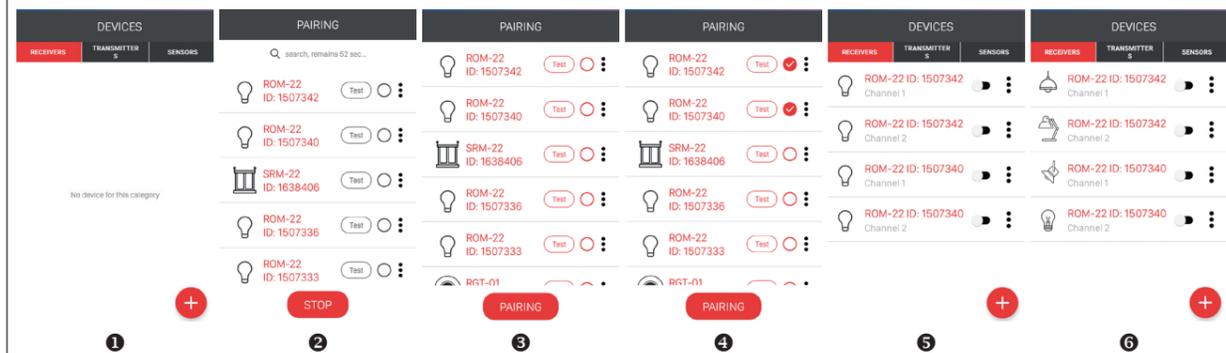
1. Press PROG and hold it for approx. 5 s; the STATUS LED will be lit.
2. After STATUS LED goes off, "CH1" LED will come on. Then, release the PROG button and wait approx. 2 s until STATUS LED will light up.
3. After the STATUS diode lights up, again briefly press PROG button.
4. After approx. 3 s, the STATUS LED will start blinking which informs you that you have entered the deleting procedure. Completion of the deleting procedure is signalled by the STATUS and "CH1" LEDs going off.
5. After this operation the device will be restarted; the restart process takes approx. 5 s.

REGISTERING (PAIRING) OF ROM-22 RECEIVER IN EXTA LIFE SYSTEM

To register the receiver ROM-22 in the system it is necessary to connect an EXTA LIFE controller and install the EXTA LIFE mobile app. The receivers must be connected to a 230 VAC power supply. The receivers are saved in the system only if they have been successfully paired with the controller.

Procedure:

1. Launch the EXTA LIFE mobile app and open the Devices screen.
2. Select the Receivers tab and press "+" to start searching for receivers installed in the system. The discovery takes up to 60 s. You can terminate it earlier by pressing Stop. If the receivers are in the range of the controller, they will automatically appear on the list with its default name, which is the receiver model (ROM-22) with its six-digit ID in the suffix.
3. After completion of the discovery procedure by pressing "TEST", it is possible to quickly find the receiver (both channels for the receiver will be active as long as the TEST button is pressed).
4. By selecting the boxes next to the "TEST" button you can select receivers to pair with the EXTA LIFE controller. You can select more than one receiver with the selection boxes.
5. Press PAIR to pair the selected receivers. The selected receivers will be recorded in the system and appear in the Receivers tab.
6. ROM-22 receivers after pairing are always shown as two channels: Channel-1 (CH1) and channel-2 (CH2). A default icon is assigned to each channel.
7. The receivers after pairing can be controlled right away using switches in the application. The receiver status is signalled using the switch position and an icon.
8. You can pair one receiver at a time; once PAIR has been pressed, you can assign a new name to the receiver. In the event of simultaneous pairing of more receivers, they are automatically saved with the default names unless individual names have been assigned to them before pairing.
9. Individual name and icon (from the base of available icons) may be assigned to each channel of the ROM-22 receiver also after the pairing operation.
10. Only when paired can the receivers be used in the system for further configuration (assigned to users, categories, building scenes, time or logical functions).



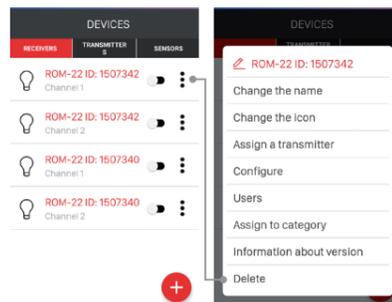
DELETING (UNPAIRING) A ROM-22 RECEIVER FROM EXTA LIFE SYSTEM

Each ROM-22 receiver registered in the system may be removed. Removal is the "unpairing" of a receiver from the controller's assets.

CAUTION: With ROM-22 you cannot remove, i.e. unpair only single channel (channel-1 or channel-2). Removing one channel always results in the removal of the receiver as a whole from the controller's memory (system).

To remove a receiver from the EXTA LIFE system:

1. Launch the application and open the Devices screen.
2. Select the Receivers tab and then from the editing menu for a receiver or channel, select "Remove".
3. The receiver after removal is automatically deleted from the list of paired receivers.



INPUT FUNCTIONALITY

The IN1 and IN2 inputs on the ROM-22 receiver are fully configurable. The configuration is carried out only using EXTA LIFE mobile app.

The configuration includes the following items:

- Selecting the type of connector coupled to inputs IN1/IN2,
- Selecting the operating mode for specific inputs,
- Channel activation time setpoints if time mode was selected as input operating mode.

The app also enables changing the order of inputs so that the connector in input IN1 is able to control channel 2 and the connector in input IN2 controls channel 1.

Default settings for inputs IN1/IN2:

- Connector type: monostable (button)
- Operating mode: bistable
- Input IN1: controls channel 1 (CH1)
- Input IN2: controls channel 2 (CH2)

To change inputs configuration:

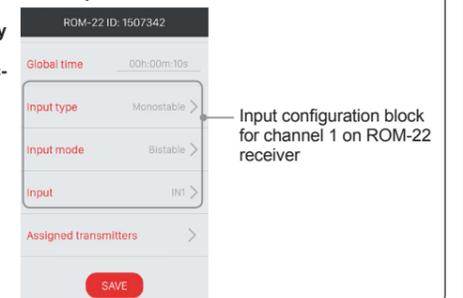
1. Launch the application and open the Devices screen.
2. When configuring the operating mode for inputs for channel 1 (CH1) from the editing menu for the channel, select "Configure". Use the same method for selecting the operating mode for channel 2 (CH2) — select "Configure" for the channel.
3. After opening the configuration screen, first set the "Input type" field. The following types are available:
 - monostable connector (button),
 - Bistable connector.
4. Next, set the operating mode for input — "Input mode" field. The modes available for selection depend on the "Input type".

Modes for the monostable connector	Modes for the bistable connector
bistable	Time
Time	monostable
monostable	activate
activate	deactivate
deactivate	Inactive
Inactive	-

5. During the next step, depending on the selected input operating mode, set the number of input to control this channel (applies to bistable, time, monostable, activate, deactivate). For on/off mode, set the input to be used for the activate function and output for the deactivate function.
6. If time mode was selected, you must also declare the activation time for the output from cable input. The time can be set from 1 s to 18 h in the format of hour : minutes : seconds.
CAUTION: The activation time is assigned to the output. Remember this during mapping, i.e. changing the order of inputs.
7. After configuring all the settings press "Save" to save the configuration in the receiver.

NOTES:

- Specific input (IN1 or IN2) can be assigned to both outputs simultaneously which enables the user to use one input to control both channel 1 and channel 2.
- With monostable connectors, i.e. buttons the inputs react only to short pulses (rising slope). The exception is the monostable mode in which the output is active as long as the button connected to the receiver's input is pressed.
- With bistable connectors, the inputs react to the rising and falling slope. This means that any change in the connector's position triggers the specific mode.
- Design inputs are adjusted for long-term triggering which is particularly important for connectors (long-term phase voltage supplied to input).



Input configuration block for channel 1 on ROM-22 receiver

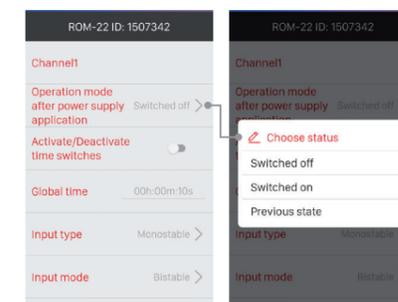
OUTPUT MODE CONFIGURATION AFTER POWER SUPPLY SWITCH ON

With ROM-22 receiver, you can configure the status of the output after activating supply voltage. By default, the outputs are configured as "off".

Available output status after activation of supply voltage:

- off
- on
- previous status.

If you selected "previous status" after activating supply voltage, the output after engaging the supply voltage will operate in the state it was before turning off. Time mode is an exception here — cutting the voltage during time measurement, then after reapplying the power, the output will operate in deactivated state.



Status of the specific output after activating the supply voltage can be set on configuration tab for the channel.

INSTALLATION

The ROM-22 receiver is designed for installation in switch cabinets on TH35 bar. The receiver's body takes up two modules. It is required to connect an antenna for correct operation. If you need to install the antenna outside the switch cabinet (applies mainly to metal switchboards), you can use external antenna ANT-01 with a 3 m cable. The antenna with an SMA type connector.

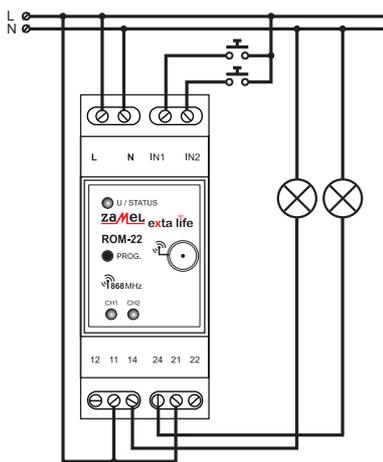
1. Disconnect the supply circuit with a fuse, an overcurrent circuit breaker or an isolator connected to the corresponding circuit.
2. Check the voltage-free status of the power cords with a suitable instrument.
3. Connect the wires to the terminals according to the connection diagram.
4. Install the device on a TH bar in the switchgear.
5. Turn on the supply circuit and check for proper operation (when an output is triggered, the red LED assigned to it should light up for a short time).



CAUTION

Connect the device to single-phase mains, according to applicable standards. The connection method is shown in this manual. The activities related to the installation, connection and adjustment should be performed by qualified electricians, familiar with the user manual and functions of the device. Removing the housing leads to the loss of guarantee and creates the risk of electric shock. Before starting installation, ensure connection lines are not supplied with voltage. For installation, use a Philips screwdriver with a diameter of up to 3.5 mm. The correct operation of the device can be affected by transport, storage and operation. Installing the device is not recommended in the following cases: no components, damage to the equipment or deformities. In the event of malfunctioning, contact the manufacturer.

CONNECTION



NOTES

1. Observe the maximum output current-carrying capacity value:
 - incandescent and halogen light bulbs: 1500 W / per channel
 - compact fluorescent lamps (CFL): 500 W / per channel
 - LED lamps: 120 W / per channel
2. During the installation make sure that the receiver is not exposed to direct water impact or operation in environments of increased humidity. The temperature at the installation site should be from -10 to +55°C.
3. The ROM-22 receiver is designed for indoor installation. If installed outdoors, the receiver must be placed in an additional pressure-tight housing and protected against the ingress of water particularly from the terminals side.
4. The receiver has a detachable antenna. You can also connect an external antenna ANT-01 and install it outside the switchboard.
5. Installation connectors for wired control can be connected to inputs IN1 and IN2 of the ROM-22 receiver. By default these inputs are designed for work with monostable connectors, i.e. buttons working in bistable mode. This means that each consecutive pulse supplied to the input changes the status of the specific output to opposite one. By default, input IN1 controls channel 1 (CH1) and input IN2 controls channel 2 (CH2).

CAUTION: Functionality of inputs (connector type, operating mode) may be changed only using EXTA LIFE mobile app working with EFC-01 controller — see Input functionality.

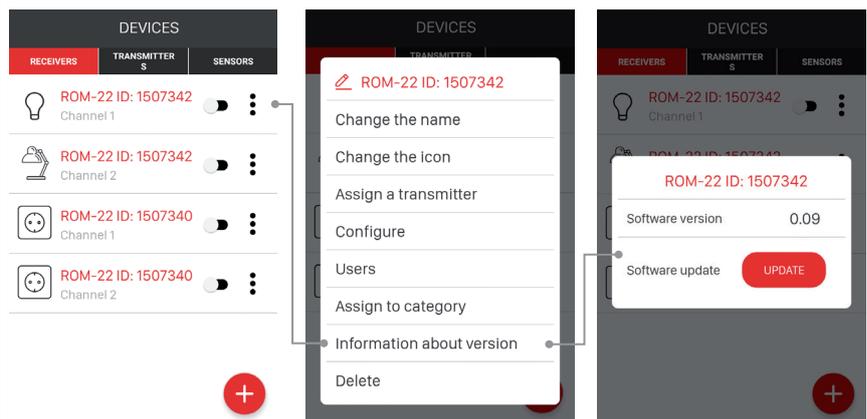
6. After installing the receiver, check it for proper operation. When using EXTA LIFE system transmitters for control, you must first program them with a receiver (see Programming the transmitters). To work with the controller, the receiver must be properly paired with the controller (see Receiver registration in the EXTA LIFE system).

REMOTE SOFTWARE UPDATE

The ROM-22 receiver has a built-in bootloader for remote updating of software from the EXTA LIFE app. Updating is possible only for receivers paired with the controller and can be carried out by a user with administrator's rights. To perform an update, you must download the latest version of software from extalife.pl and move it to an SD card in the controller; read the manual "Updating software in EXTA LIFE receivers". The manual can be downloaded from extalife.pl.

The current software version of the ROM-22 receiver is shown in the "Version information" tab. After pressing the "Update" button, you are sending information to the controller which switches the receiver into software update mode. The latest version of the software is sent to the receiver from the controller. During the update, the receiver and controller are switched to service frequency and cannot be controlled. After a successful update, the applicable information is sent from receiver to the controller and signalled in the mobile app.

If the update procedure fails for some reason, then it will be shown as a receiver with update error on the controller. The receiver loses its original functionality (which is signalled by the green STATUS LED blinking continuously). Then, you can go to the "Version information" screen and restart the update process by pressing the "Update" button. Pressing this button will restart the software update process. **CAUTION: Do not delete the receiver with an update error from the controller's resources.**



WARRANTY CARD

There is 24 months guarantee on the product

Salesman stamp and signature, date of sale

1. ZAMEL provides a two-year warranty for its products.
2. The ZAMEL warranty does not cover: a) mechanical defects resulting from transport, loading/unloading or other circumstances b) defects resulting from incorrect installation or operation of ZAMEL products; c) defects resulting from any changes made by CUSTOMERS or third parties, to products sold or equipment necessary for the correct operation of products sold; d) defects resulting from force majeure or other aleatory events for which ZAMEL is not liable; e) power supply (batteries) to be equipped with a device in the moment of sale (if they appear);
3. All complaints in relation to the warranty must be provided by the CUSTOMER in writing to the retailer after discovering a defect;
4. ZAMEL will review complaints in accordance with existing regulations.;
5. The way a complaint is settled, e.g. replacement of the product, repair or refund, is left to the discretion of ZAMEL.
6. Guarantee does not exclude, does not limit, nor does it suspend the rights of the PURCHASER resulting from the discrepancy between the goods and the contract.