# ■EXALUS

EXALUS TR7 Spółka z ograniczoną odpowiedzialnością sp.k. Kuchary 24F 63-322 Gołuchów www.exalus.pl

#### EXALUS HOME system - home automation system

## User's manual for remote controls <u>NX-BIDI PRO</u>

Controllers operate at 868 Mhz frequency

#### Transmission power: ERP<25 mW



### **1. APPEARANCE**



Button	Function	
	transmitting signals to a receiver(s) / increasing the settings	
▼	transmitting signals to a receiver(s) / decreasing the settings	
	change of the channel number/ change of the group number (incrementation)	
•	change of the channel number / change of the group number (decrementation)	
	entry to sub-menu / confirmation of settings	
P2	entry to main menu of the remote control / menu navigation	
Φ	setting the date and hour	
М	selection of work mode: AUTO, MANUAL	

### 2. TECHNICAL DATA

Rated supply voltage	3 V DC
Battery type	1 x CR2430
Operating range	up to 200 m in open area
Transmission	radio - 868 Mhz band
Manner of transmission	one-way
Coding	algorithm is based on a 128-bit key (EXTA LIFE standard) transmission with addressing (EXTRA FREE standard)
Work modes available	MANUAL – manual control using buttons ▲,▼ AUTO – automatic control based on programs (on the basis of the clock)
Number of channels	max. 16
Number of programs	max. 100
Number of groups	max. 10
Number of channels in a group	max. 16
Relay time in group control	setting in range 0 + 60s with 1s incrementation
Battery life	up to 3 years (depending on frequency of use and conditions of work)
Signalling the low battery status	yes
Display	LCD (34 mm x 20 mm) with no backlight
Operating temperature range	-10 ÷ +55 °C
Casing protection rating	IP20
Protection class	111
Dimensions	130 x 45 x 10 mm
Weight	0,085 kg

NOTE! The above presented operating range concerns open space, i.e. ideal conditions with no barriers. If there are barriers between the transmitter and receiver, the operating range shall be expected to decrease respectively for: hrick by 10 to 40%, wood and plaster by 5 to 20%, reinforced concrete by 40 to 80%, metal by 90 to 100%, glass by 10 to 20%. The operating range will be also negatively impacted by overground and underground high voltage power lines and mobile telephony located in close distance from controllers.



Description of displayed elements:

Mo TU WE TH FR SA SU	current day of the week
մի	work in manual mode - MANUAL     (deactivation of automatic programs-
B	• manual change of summer to winter time (the icon is displayed on the time settings screen)
	• activation of a given program (the icon is displayed on the program editing screen)
G	• automatic change of summer to winter time (the icon is displayed on the time settings screen)
88:88	current hour
	signalling the transmission of code allocated to button ▲
•	signalling the transmission of code allocated to button ▼
88.88	number of currently selected channel / group

### 4. MAIN MENU



You can enter the menu by holding down the P2 button and then, you can navigate between main screens - by pressing the P2 button briefly. You can exit the menu after navigating through all screens or automatically after 10 seconds. Screens visible in the remote control menu:

- PROG- program settings in the automatic mode (AUTO);
- Ch defining the number of channels needed for control (Ch1\_Ch16);
- Gr defining the number of groups needed for control and setting up groups on the basis of channels;
- dELA setting the relay time in group control;
- Mod selection of EXTALIFE system (concerns EXALUS)/EXTAFREE.

### 5. SETTING THE TIME AND DATE

- The time is set only in the 24 hour format.
- The remote control automatically calculates the day of the week on the basis of the date entered.
- Summer/winter time can be changed manually or automatically.
- 1. Press briefly the 🕒 button under the battery cover.
- 2. Using up/down buttons, set the minutes confirm the setting with the stop button.
- 3. Using up/down buttons, set the hours confirm the setting with the stop button.

- 4. Using up/down buttons, select the mode of change from summer to winter time:
  - h manual change of time by the user
  - - automatic change of time (last Saturday of March/ last Saturday of October).
- 5. Using up/down buttons, set the date confirm the setting with the stop button.
- 6. Using up/down buttons, set the month confirm the setting with the stop button.
- 7. Using up/down buttons set the year confirm the setting with the stop button.









### 6. OPERATION

Having selected an activated channel or group by pressing buttons VA, \* the remote control will transmit relevant codes by radio. Code transmission is confirmed with illumination of a relevant pictogram on the LCD screen.



A group can be selected only after groups have been defined (see: GROUP PROGRAMMING)

### 7. SELECTION OF WORK MODE

Work mode can be selected by button (w) under the battery cover.



#### Work in the automatic mode (AUTO)

The automatic mode allows for controlling the devices by up/down buttons, depending on the currently selected channel or group. Moreover, if there are any activated programs (for single channels or groups), such programs are executed in accordance with their time schedule.

#### Work in the manual mode (MANUAL)

The manual mode allows for controlling the devices by up/down buttons, depending on the currently selected channel or group. All programs set in the remote control are deactivated (they are, however, not deleted from the memory of the remote control). Programs are activated once the remote control is switched to the automatic mode.

### 8. SETTING THE NUMBER OF ACTIVATED CHANNELS

Maximum (default) number of channels on the NX-BIDI PRO remote control is 16. A channel that has been activated (an active channel) is selected by using buttons. If the remote control user does not use all the channels, then their number can be reduced to the required number.

- To enter the "select the number of channels" function, press and hold the P2 button under the battery cover.
- 2. Navigate to "Ch" screen by pressing briefly the P2 button.
- 3. Press briefly the stop button.
- Using up/down buttons, set the number of activated channels. Confirm the settings with the stop button.
- You can exit the menu after navigating through all screens or automatically after 10 seconds.



### 9. SWITCHING BETWEEN CHANNELS/GROUPS

In the ordinary course of use, the user switches between the activated channels/groups using buttons ◀, ► . Groups are visible only if they have been defined.



### **10. SETTING PROGRAMS**

The remote control can be set for 100 programs at the maximum. A program can be linked to a particular channel, to several channels or a group.

Setting a program, the following shall be defined:

- number of the program,
- number of the channel(s) or number of the group,
- hour of setting,

- · day of the week,
- command: open, close,
- program status: activation, deactivation.

Programs are set in the menu of the remote control - ProG' screen

- 1. Press and hold the P2 button to navigate to the ProG screen in the remote control menu.
- 2. Confirm the selection with the stop button.
- 3. Using buttons ▼, ▲ select the program number you want to edit (from 001 to 100).
- 4. Using buttons ► navigate to the channel(s)/group(s) selection.
- 5. Channels/Groups are selected using buttons ▼, ▲ . A channel/group can be activated/deactivated by using the stop button.
  - number of the channel/group blinks the channel/group is deactivated,
  - number of the channel/group lights continuously the channel/group is activated.
- 6. Using button > navigate to settings of the hour for the program execution.
- 7. Using buttons ▼, ▲ set the hour.
- 8. Using button > navigate to settings of the minutes for the program execution.
- 9. Using buttons ▼, ▲ set the minutes.
- 10. Using button > navigate to settings of the day of the week.
- To select the day of the week, press the stop button. By pressing the stop button, you switch between subsequent days. The day is selected by briefly pressing button ▲.
  - the symbol assigned to a given day lights continuously the day is activated
  - the symbol assigned to a given day blinks the day is deactivated.

Days of the week, on which the program is to be executed, can be set in any configuration from Monday to Sunday.

- 12. Using button navigate to the selected command.
- Commands are set using buttons ▼, ▲ . Taking controllers of roller shutters as an example, these will respectively be:
  - Up button opening of the roller shutters,
  - Down button closing of the roller shutters.
- 14. Using button ▶ navigate to settings of the program status.
- 15. Program status is set using buttons ▼, ▲.
  - Up button program activation (symbol () lights continuously),
  - Down button program deactivation (symbol () blinks).

If symbol O lights continuously, when scrolling through programs, it means a given program has been activated.





### **11. DEFINING GROUPS**

- Groups allow for controlling simultaneously a larger number of devices. They are
  particularly useful in case of controlling roller shutters, where respective roller
  shutters have been divided into zones or are centrally controlled.
- NX-BIDI PRO remote control enables the user to set up 10 groups at the maximum.
- Each group can be assigned with 16 elements at the maximum (concerns only defined elements).
- Physically, controlling groups shall mean transmission of "n" sequence of commands to each channel within a group. Commands are transmitted sequentially starting from the first channel in the group to the last channel in the group.
- The user can define relay from 0 to 60 seconds between transmissions of commands related to channels. This can be done on the "dELA" screen in the main menu of the remote control.

In order to define a group, the user has to:

- 1. By pressing a button 👹 navigate to "Gr" screen in the main menu of the remote control.
- 2. Confirm the selection with the STOP button.
- 3. Using buttons ◀, ► select the group number, the user wants to edit (from 01 to 10).
- Using buttons ▼, ▲ select the channel number. Each time, the STOP button is pressed, a channel is added to or deleted from a group:
  - the channel number blinks the channel is not added to the group,
  - the channel number lights continuously the channel is added to the group.
- Using buttons ◄, ► number of the edited group can be changed. The main menu of the remote control is automatically exited after 10 seconds.



### 12. DEFINING RELAY BETWEEN CHANNELS IN A GROUP

- Typically commands are sent immediately one after the other (with no relay). If needed, the User can set additional relay between subsequent commands in a group from 0 to 60 seconds with 1 second increments.
- One relay is defined for the whole group.

In order to define relay for a group, the user has to:

- 1. Press and hold the P2 button to navigate to the menu.
- 2. By pressing a button, navigate to "dELA" screen in the menu of the remote control.
- 3. Confirm the selection with the STOP button.
- 4. Using buttons, select the group number for which relay is to be defined.
- Using buttons, set the relay value from 0 to 60 seconds with 1 second increments. If 0 seconds has been selected, there will be no relay.
- 6. Confirm the selection with the STOP button.
- Using buttons you can change number of the group. The main menu of the remote control is automatically exited after 10 seconds.



### 13. SIGNALLING THE LOW BATTERY STATUS

The remote control will signal the low battery status, thus, informing that it needs to be replaced. This underlies correct operation of the remote control and has vital impact on the operating range. Information about low battery status is displayed on the LCD display in the form of "Lo\_batt" message.

### 14. REPLACEMENT OF THE BATTERY

- 1. Remove the battery cover.
- 2. Take out the battery smoothly releasing it from the spring.
- Press any button of the transmitter several times (this is aimed to discharge the capacitance voltage).
- 4. Insert the new battery, paying attention to correct polarisation.

#### NOTE: Incorrect battery placement may damage the remote control!

- 5. Having replaced the battery, check the remote control operation.
- 6. Put the battery cover back.