



Roller Shutter Z-Wave



ARZ Solar



IMPORTANT INFORMATION / SAFETY	2
CONTROL PANEL	2
QUICK START	3
MANUAL CONTROL	5
ADVANCED INFORMATION	5
WARRANTY	7





Dear Sir/Madam! Thank you for purchasing the product from FAKRO. We hope it will meet your expectations. To ensure appropriate functioning of the product, please peruse this User Manual.

The ARZ Solar roller shutter is designed for installation with FAKRO roof windows and is suitable for cooperation with elements of the remote control provided by the Z-Wave system. The roller shutter ensures maximum comfort of using the attic space as well as controls the temperature and light access within the attic.

TECHNICAL SPECIFICATION

Power supply: 14.4VDC, NiMh 2100 mAh Reach: up to 20 m in a building Radio protocol:

Z-Wave

Frequency: EU - 868,4 MHz AS/NZ - 921,4 MHz US/Canada - 908,4 MHz RU - 869 MHz KR - 919-923MHz JP - 922-926MIIz (depending on version)

IMPORTANT INFORMATION / SAFETY

It is required to observe the following recommendations when installing the roller shutter:

- After unpacking, check the roller shutter elements for any signs of mechanical damage.
- Installation should be carried out in accordance with manufacturer's instructions by a qualified professional.
- Plastic containers used for packing should be stored out of children reach as they may be a potential source of danger.
- The roller shutter should be used according to its intended design. FAKRO shall not be responsible for any consequences being the result of improper roller shutter use.
- The roller shutter parts must not be washed using solvent-based substances or open stream of water (do not immerse them in water).
- Any repairs of the roller shutter should be carried out by service authorised by the manufacturer.
- The roller shutter is designed for outdoor installation.
- The Z-Wave makes it possible to integrate devices of different manufacturers (lighting, heating, domestic automatic control, etc.). The Z-Wave devices operate as repeaters in the network which extends the communication range of radio waves.
- This product is compatible with other certified Z-Wave devices of other manufacturers.
- All battery-free devices of different manufacturers operating in one Z-Wave network can route through other devices, which can result in increased range.

Please note: All information on adding devices to the Z-Wave network in controllers of other manufacturers can be found in manuals of those products.

EU DECLARATION OF CONFORMITY

FAKRO PP Sp. z o.o. hereby declares that a type of radio device ARZ Solar is compliant with Directive 2014/53/EU. The full text of the EU Declaration of Conformity can be found at::

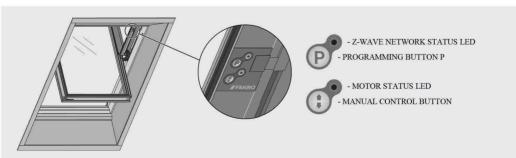
http://www.fakro.pl/architekci/certyfikaty-i-deklaracje/

COMPLIANCE WITH WEEE DIRECTIVE

Devices marked with this symbol must not be disposed of or thrown away as household waste. It is the user's responsibility to deliver devices that are worn out to the designated recycling area.



CONTROL PANEL



Z-WAVE NETWORK STATUS SIGNALLING



LED is on for 1 second after pressing the P button.

Cause: The shutter is assigned to the Z-Wave network. Remote control of the shutter is possible.



LED is on for 3 seconds after pressing the P button.

Cause: The shutter is not assigned to the Z-Wave network.



LED flashes for 10 minutes after running Autoexclude mode.

Cause: The shutter is in Autoinclusion mode.



LED is on for 3 seconds after pressing the P button 5 times.

Cause: The shutter has been removed from the Z-Wave network without the use of the controller and the shutter default settings have been restored.



LED flashes 5 times after pressing the P button 3 times.

Cause: The shutter default settings have been restored.

MOTOR STATUS SIGNALLING



LED flashes once.

Cause 1: Current consumed by the shutter is too low.

Cause 2: The shutter reached extreme position.



LED flashes two times.

Cause: Too high or too low supply voltage.



LED flashes three times.

Cause: Current consumed by the shutter is too high.

QUICK START



ROLLER SHUTTER OPERATION

The ARZ Solar roller shutter is factory assigned to the first group of the ZRH12 remote control.

CONTROL



Control the roller shutter using UP/DOWN buttons.



Stop the roller shutter using STOP button.



RE-PROGRAMMING

In case of control problems, check the roller shutter operation using the manual control button. If the roller shutter operates only via the manual control button, follow the procedure below.

1. ROLLER SHUTTER RESET

Remove the roller shutter from the Z-Wave network.



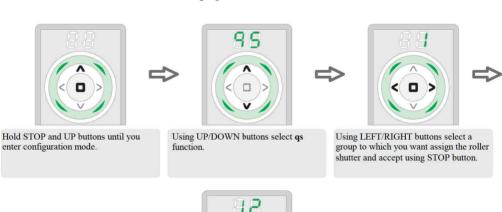
Hold STOP and DOWN buttons until you enter configuration mode.

Using UP/DOWN buttons select **EL** function and then accept using STOP button

Within 12 seconds press the programming button on the roller shutter or run AUTOINCLUSION* procedure.

2. ADD ROLLER SHUTTER TO REMOTE CONTROL

Add the roller shutter to the Z-Wave network to selected group in the remote control.





Within 12 seconds press the programming button on the roller shutter or run AUTOINCLUSION* procedure.



* It allows a hard-to-access roller shutter to be remotely added to the Z-Wave network without the need for pressing the programming button P. Autoinclusion procedure is activated automatically after performing Autoexclude procedure - see Z-WAVE CONFIGURATION PARAMETERS (page 5). The mode is active for up to 10 minutes.

MANUAL CONTROL













Control the roller shutter by pressing the manual control button. 1. Start, 2. Stop, 3. Start in the opposite direction...

ADVANCED INFORMATION

ASSOCIATION GROUPS

- 1. Life Line group for reporting the position of the roller shutter after each stop and receiving information about the alarm (overload). A maximum of 1 device can be in the group.
- 2. Basic Repeat group used for sending received commands of movement (BASIC SET) to devices belonging to this group. A maximum of 5 devices can be in the group.
- 3. Multilevel Repeat group used for sending received commands (SWITCH MULTILEVEL SET, SWITCH MULTILEVEL START LEVEL CHANGE, SWITCH MULTILEVEL STOP LEVEL CHANGE) to devices belonging to these groups. A maximum of 5 devices can be in the group.

Z-WAVE CONFIGURATION PARAMETERS

Parameter No.	Value	Default value	Size	Description
13	1 2	1	1	1 – FF go to maximum 2 – FF go to previous position
99	1 2	1	1	1 – restoring all parameters to factory settings. If there is 2 in the report, it means that one of the parameters has a value other than the default one
100	1 2	1	1	2 – autoexclude

ALARMS & NOTIFICATIONS

Notification type	Event
Energy management	Overload

MANUFACTURER SPECIFIC REPORT

Parameter	Value
Manufacturer ID	0x0085
Product Type ID	0x0003
Product ID	0x0112

COMMAND CLASSES

	Role	
Command Classes	Support	Control
Command Class Z-Wave+ Info v2	ok	
Command Class Basic v1	ok	ok
Command Class Version v2	ok	
Command Class Manufacturer Specific v2	ok	
Command Class Device Reset Locally v1	ok	
Command Class Association v2	ok	
Command Class Association Group Info v1	ok	
Command Class Powerlevel v1	ok	
Command Class Switch Binary v1	ok	
Command Class Switch Multilevel v3	ok	ok
Command Class Switch All v1	ok	
Command Class Configuration v1	ok	
Command Class Notification v3	ok	
Command Class Node Naming v1	ok	
Command Class Battery	ok	

CONTROL PROBLEMS / SERVICE

Supply voltage	Roller shutter closing	Roller shutter opening
11V – 11,5V	The roller shutter closes for approx. 3 seconds and goes to previous position.	Full opening of the roller shutter.
8V – 11V	The roller shutter opens for approx. 3 seconds.	Full opening of the roller shutter.
<8V	Motor status LED flashes 2 times.	Motor status LED flashes 2 times.
>16V		

WARRANTY

The manufacturer guarantees correct device functioning. It also undertakes to repair or replace faulty device if damage is a result of material or structural faults. The warranty period is 24 months from the date of purchase, fulfilling the following conditions:

- Installation has been performed as per manufacturer recommendations.
- Seals remain intact and no authorised structural changes have been made.

Invoice No.

- The device has been used in accordance with its intended use as per user manual.
- Damage is not a result of improperly made electrical system or atmospheric phenomena.
- The manufacturer is not liable for damage which occurred as a result of improper use or mechanical damage.

In case of failure, the device must be submitted for repair with a Warranty Card. Defects revealed within the warranty period will be removed free of charge no longer than 14 days after accepting the product for repair. Warranty and post-warranty repairs are performed by the manufacturer i.e. FAKRO PP. Sp. z o.o.

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Quality certificate:

Device

Model

Serial number

Seller

Address

Purchase date

Signature (stamp) of person installing a device

