

Blackout / Roller Blind



# ARF / ARF/D / ARP Solar



IMPORTANT INFORMATION	3
SIGNALLING DESCRIPTION	3
PROGRAMMING / QUICK START	4
MANUAL CONTROL	5
BLIND CALIBRATION	5
ADDITIONAL INFORMATION	5
WARRANTY	7


Dear Sir/Madam! Thank you for purchasing the product from FAKRO. To ensure appropriate functioning of the product, please peruse this User Manual.

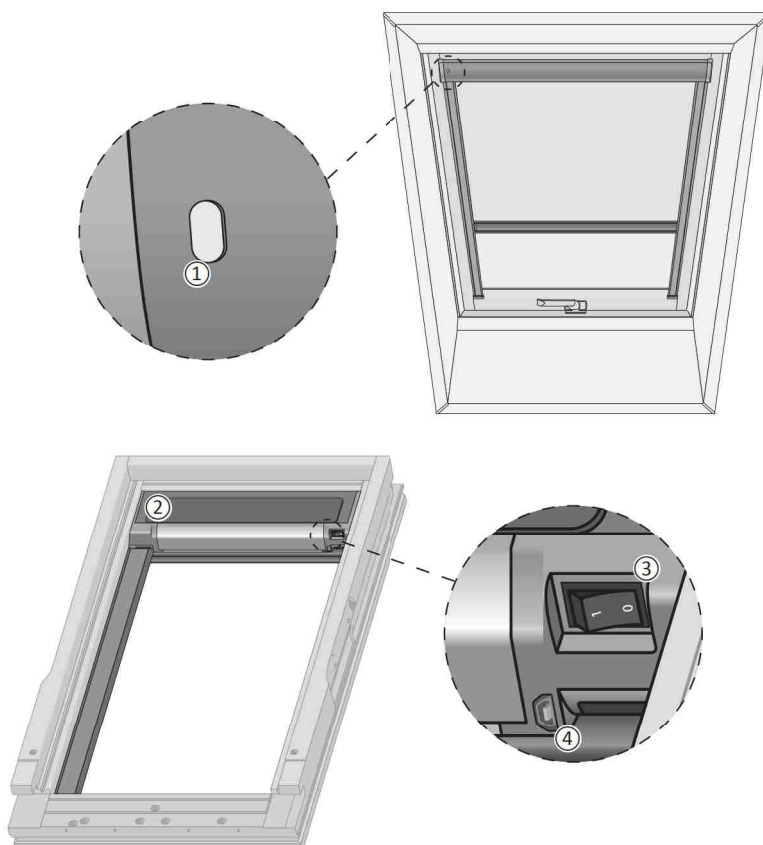
## BLIND DESCRIPTION

The ARF / ARF/D / ARP Solar internal blind increases the comfort of using the attic space. It is designed for FAKRO roof windows. The remotely controlled blind operates based on the Z-Wave radio communication module with frequency depending on part of the world. It is adapted to work with any Z-Wave controller\* offered by FAKRO.

Operation of the product does not require electrical system. The blind is equipped with a battery charged by a photovoltaic panel.

In case the photovoltaic panel is covered for a long time, eg. covered by snow or external accessory, it is possible to recharge the blind using the microUSB type B charger.

 \*CONTROLLER – Z-Wave device such as remote control, module, wall switch, internet gateway.  
The controller must be purchased separately.



### BLIND DESCRIPTION

①	Programming button, manual control button	③	On/off button
②	Photovoltaic panel	④	MicroUSB type B charging socket

## TECHNICAL SPECIFICATION

**Battery powered:**

7,2VDC, LiFePO4

1500mAh

**Charging:**

5VDC; 0,5A – microUSB type B

**Rated power:**

10,8W

**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

(depending on version)

## IMPORTANT INFORMATION

When installing the blind, it is required to observe the following recommendations:

- After unpacking, check the blind elements for any signs of mechanical damage.
- Installation should be performed by a qualified person in accordance with manufacturer's instructions.
- Plastic containers used for packing should be stored out of children reach as they may be a potential source of danger.
- The blind should be used according to its intended design. FAKRO shall not be responsible for any consequences being the result of improper blind use.
- The blind must not be washed using solvent-based substances or open stream of water (do not immerse it in water).
- Any repairs of the blind should be carried out by service authorised by the manufacturer.
- The blind is intended for indoor installation.

## SIGNALLING DESCRIPTION

### Z-WAVE NETWORK



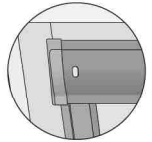
x1

LED blinks once after pressing the button - the blind is assigned to the Z-Wave network.

3s.



LED is on for approx. 3 seconds after pressing the button - the blind is not assigned to the Z-Wave network.



### CONTROL



x1

LED blinks once - the blind reached its upper end position.

x3



LED blinks three times - the blind reached its lower end position.

x4



LED blinks four times - blocked bar (error in reading motor encoders). Please contact FAKRO Service in case of problems with the control.

### CHARGING



LED is on continuously - the charger is connected. Once charged, LED starts blinking. Please note! It is not possible to operate the blind when the charger is connected.

x5



After pressing the STOP button on the remote control, LED blinks 5 times - the battery is being charged by the photovoltaic panel.

## LOW BATTERY WARNING



After activating the blind, LED blinks in green/red - low battery warning - 6.4V voltage. The blind can move in both directions.

x2



After activating the blind, LED blinks red twice - low battery warning - 6.3V voltage. The blind can move in the opening direction.



After activating the blind, LED blinks in green/red - low battery warning - 6.2V voltage. Automatic movement of the blind in the opening direction.

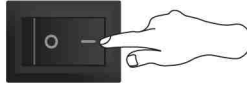
x2



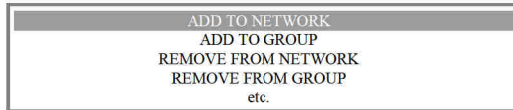
After activating the blind, LED blinks red twice - low battery warning - 5.9V voltage. Movement blocked in both directions.

## PROGRAMMING / QUICK START

### RUNNING THE BLIND FOR THE FIRST TIME

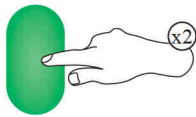


Switch the button to position 1.



Add the blind to the Z-Wave controller.

For programming information refer to the user manual of the Z-Wave controller which is to control the blind.



### METHOD 1

Press twice the programming button on the blind.



### METHOD 2\*

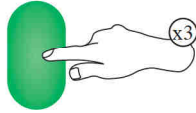
The Autoinclusion procedure has been started.  
The blind will be automatically added to the Z-Wave network.



\*It allows a hard-to-access blind to be remotely added to the Z-Wave network without the need for pressing the programming button. After performing Autoexclude (see Table on page 5 - parameter 100) the blind goes into Autoinclusion mode for 10 minutes.

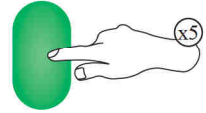
## BLIND RESET

### RESTORING DEFAULT PARAMETERS



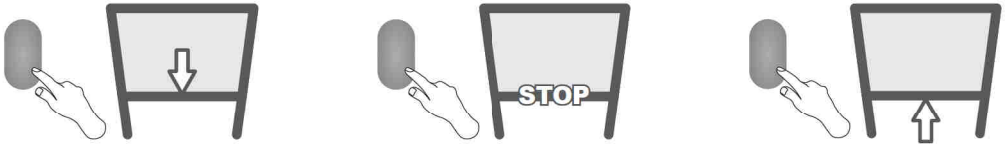
Perform three double presses of the programming button on the blind. The blind signals correct performance with 5 quick blinks.

### RESTORING DEFAULT PARAMETERS AND REMOVING FROM THE Z-WAVE NETWORK



Perform five double presses of the programming button on the blind. The blind signals correct performance with 5 quick blinks.

## MANUAL CONTROL



Operate the blind using manual control button: 1. Start, 2. Stop, 3. Start in the opposite direction...

## BLIND CALIBRATION

The blind is factory calibrated. In addition, the calibration is automatically repeated each time the blind completes full working cycle. In case of large discrepancy between the set and reported position, force full working cycle of the blind (full opening and full closing).

## ADDITIONAL INFORMATION

### ASSOCIATION GROUPS

1. Life Line – group for reporting the position of the blind after each stop and receiving information about the alarm (overload, damaged encoders).

A maximum of 1 device can be in the group.

2. Basic Repeat – group used for sending received commands of movement 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 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	Autoexclude: 1 – off / 2 – on. After Exclude is performed it goes into Autoinclusion mode for 10 minutes.

## ALARMS & NOTIFICATIONS

Notification type	Event
Energy management	Overload
System	System device failure (defective encoders)

## COMMAND CLASSES

Command Classes	Role	
	Support	Control
Command Class Z-Wave+ Info v2	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 Multilevel v3	ok	ok
Command Class Switch All v1	ok	
Command Class Configuration v1	ok	
Command Class Node Naming v1	ok	
Command Class Alarm	ok	
Command Class Battery	ok	

## MANUFACTURER SPECIFIC REPORT

Parameter	Value
Manufacturer ID	0x0085
Product Type ID	0x0004
Product ID	0x0012

## WARRANTY

The manufacturer guarantees correct device functioning. The Manufacturer is the only body which decides about its liability under the warranty and the way of investigating the claim. In case the Manufacturer accepts legitimacy for the reported defect, he may, at his own discretion:

- repair the defective product;
- replace the product for a product free of defects, although not necessarily identical, but a product of the same type, model and quality;
- return the value of the defective product according to its purchase price, while the customer is required to return the product.

The warranty period is 24 months from the date of purchase, fulfilling the following conditions:

- Installation has been performed in accordance with the manufacturer's recommendations.
- Seals remain intact and no unauthorised structural changes have been made.
- The product 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 product must be submitted for repair with a Warranty Card. Within 14 days of the date of receipt of the defective product, the manufacturer will inform whether he has accepted the claim or whether he will refuse to recognize the claim and provide the grounds for the refusal. Warranty and post-warranty repairs are performed by the manufacturer i.e. FAKRO Sp. z.o.o.

Detailed warranty terms and conditions are to be found in the Warranty Card.

Producent:

**FAKRO Sp. z o.o.**

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[www.fakro.com](http://www.fakro.com)

Quality certificate:

Device

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Model

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Serial number

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Seller

---

Address

---

Purchase date

---

Invoice number

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Signature (stamp) of person installing a device

