ENG



OPERATING MANUAL FIBARO ROLLER SHUTTER FGRM-222 v2.1 - v2.3

Fibaro Roller Shutter is a universal, Z-Wave compatible, electric motor controller. The device allows for controlling motors of roller blinds, aventan blinds, gates and others, which are single phase AC powered. Fibaro Roller Shutter allows for precise positioning of a roller blind or venetian blind lamellas. Precise positioning is available for the motors equipped with mechanic and electronic end switches.

The module may be controlled wirelessly, through the Z-Wave network main controller, or through the switch keys connected to it. It's also possible to combine few devices into groups of devices, which then can be controlled simultaneously. In addition, Fibaro Roller Shutter is equipped with Power Metering.

SPECIFICATIONS

Power Supply	110 - 230 V ±10% 50/60Hz
Supplied motor type	Single phase, VAC
Supported limit switches type	Electronic and mechanic
Power of supplied motor	up to 1kW for 230V up to 500W for 110V
In accordance with EU standards	LVD (2006/95/EC) EMC (2004/10B/EC) R&TTE(1999/5/EC)
Circuit Temperature limit	105 °C
Operational Temperature	0 - 40 °C
For installation in boxes	Ø≥50mm
Radio protocol	Z-Wave
Radio Frequency	868,4 MHz EU; 908,4 MHz US; 921,4 MHz ANZ; 869,2 MHz RU;
Radio signal power	1mW
Range	up to 100m outdoors up to 30m indoors (depending on building materials used)
Dimensions (L x W x H)	42 x 37 x 17 mm
Electricity consumption	< 0,8W

TECHNICAL INFORMATION

Controlled by Fibaro System devices or any Z-Wave controller
 Microprocessor control
 Executive elements: relays

 The device may be operated by momentary or toggle switches, and by dedicated roller blind control switches

Connected motor's current and historical power consumption measured



WARNING Danger of electrocution! Even when the device is turned off, voltage may be present at it's terminals. Any work on the device regarding electrical connections may be performed only after the power supply has been disconnected. WARNING Any maintenance work on controlled devices may be performed only after the power supply has been disconnected.

WARNING It's not recommended to operate all of the roller blinds simultaneously. For safety reasons, at least one roller blind should be controlled independently, providing safe escape route in case of emergency.

WARNING Do not connect the device to loads exceeding recommended value.

It is recomended to monitor regulary operation of Fibaro Roller shutter in all modes. In case of gate control mode device, motor limit switches, infrared barriers and emergency stop should be monitored and maintained regulary

I. GENERAL INFORMATION ABOUT FIBARO SYSTEM

Fibaro is a wireless system, based on Z-Wave technology. Fibaro provides many advantages when compared to similar systems. In general, radio systems create a direct connection between the receiver and transmitter. However, a radio signal is weakened by various obstacles located in its path (apartment walls, furniture, etc.) and in extreme cases it fails to transfer required data. The advantage of Fibaro System is that its devices, apart from being transmitters and signal receivers, also duplicate signal. When a direct connection path between the transmitter and the receiver cannot be established, the connection may be achieved through other intermediate devices.

Fibaro is a bi-directional wireless system. This means that the signal is not only sent to the receivers but also the receivers send the confirmation of its reception. This operation confirms their status, which checks whether they are active or not. Safety of the Fibaro System transmission is comparable to the safety of transmission in data bus wired systems. Fibaro operates in the free bandwidth for data transmission. The

Fibaro operates in the free bandwidth for data transmission. The frequency depends on radio regulations in individual countries. Each Fibaro network has its own unique network identification number (home ID), which is why it is possible to co-operate two or more independent systems in a single building without any interference.

Although Z-Wave is quite a new technology, it has already become recognized and officially a binding standard, similarly to Wi-Fi. Many manufacturers in various industries offer solutions based on Z-Wave technology, guaranteeing their compatibility. This means that the system is open and it may be extended in the future. Find more information at www.fibaro.com.

Fibaro generates a dynamic network structure. After Fibaro System is switched on, the location of its individual components is automatically updated in real-time through status confirmation signals received from devices operating in a "mesh" network.

II. ROLLER SHUTTER INSTALLATION	
 Before installation make sure the voltage supply is disconnected. 	
 Connect the Roller Shutter in accordance with the wiring diagram presented on Fig. 1 (roller blinds, venetian blinds) or Fig. 2 (gates). 	
Place the device in a switch box.	
Arrange the antenna (tips presented below Fig.2)	
 Turn on the power supply keeping the necessary safety precautions. 	
 Include the module into the Z-Wave network, observing pt. III description. 	
7. If necessary, calibrate the module, observing pt. VI description.	

NOTE A push button connected to S1 terminal operates the O1 output, while the push button connected to S2 terminal operates the O2 output. It's recommended to connect an UP button to S1 terminal and a wire, responsible of up movement, to O1 output terminal. Respectively, a DOWN button should be connected to S2 terminal and a wire, responsible for down movement, to O2 output terminal.

WARNING

Fibaro Roller Shutter is dedicated to operate with AC powered electric motors. Connecting the device directly to DC powered motors may result in them being damaged.

NOTES FOR THE DIAGRAM:

- L terminal for live lead N - terminal for neutral lead
- S1 terminal for key no. 1 (has the option of entering the device in
- learning mode)
- S2 terminal for key No. 2 O1 - output terminal no. 1 for shutter motor



Fig. 1 Roller Shutter wiring diagram



Fig. 2 Connecting Roller Shutter to GATE motor

TIPS FOR ARRANGING THE ANTENNA

 Locate the antenna as far from metal elements as possible (connection wires, bracket rings, etc.) in order to prevent interferences.
 Metal surfaces in direct vicinity of the antenna (e.g. metal switch.

boxes, door frames) may impair radio signal reception! 3. Do not cut or shorten the antenna. Its length is perfectly matched to the band in which the system operates.

III. Z-WAVE NETWORK INCLUSION

Fibaro Roller Shutter may be included into the Z-Wave network via the B-button or a push button connected to the S1 terminal. In addition, the module may be included in auto inclusion mode, by simply connecting the power supply.

Automatic Z-Wave network inclusion:

- Make sure the power supply is disconnected and a Roller Shutter is located within a direct Z-Wave network's main controller communication range.
- communication range.2) Set the main controller into the learn mode (see main controllers operating manual).
- Connect the power supply to include the Roller Shutter in auto
- inclusion mode. 4) Fibaro Roller Shutter will be automatically detected and included
- into the Z-Wave network. To disable the auto inclusion mode, press the B-button briefly, after
- connecting the module to the power supply.
- Manual Z-Wave network inclusion: 1) Connect the power supply.
- 2) Set the main controller into the learn mode (see main controllers)
- a) Triple click the B-button or a push button connected to the S1
- 4) Fibaro Roller Shutter will be detected and included into the
- Fibaro Roller Shutter will be detected and include Z-Wave network.



IV. Z-WAVE NETWORK EXCLUSION

- Excluding Fibaro Roller Shutter from the Z-Wave network: 1) Make sure the module is connected to the power supply.
- Set the main controller into the learn mode (see main controllers operating manual).
- 3) Triple click the B-button or a push button connected to the S1 terminal

V. ROLLER SHUTTER RESET

Reset procedure clears the modules' EPROM memory, including all information about the Z-Wave network controller, calibration and power consumption data.

- Make sure the module is connected to the power supply.
 Press and hold the B-button for ca. 14 seconds.
- LED indicator will glow yellow.
- 4) Release the B-button and press it again, briefly.
- 5) The Roller Shutter memory is now empty.6) The module goes into the auto inclusion mode, until any button
- is pushed.



After memory reset, the Roller Shutter goes into the auto inclusion mode and waits to be included into the Z-Wave network. To exit the auto inclusion mode press the B-button briefly.

VI. POSITIONING CALIBRATION

Calibration is a process during which a Roller Shutter learns the position of the limit switches and a motor characteristic. Calibration is mandatory in order for the Roller Shutter to correctly recognize a roller blind position. The procedure consists of an automatic, full movement between the limit switches (up, down, and up again). There are separate procedures of calibrating roller blind and lamellas (venetian blind) positioning. Each time the calibration requires the completion of a full cycle (up and down).

ROLLER BLIND POSITIONING CALIBRATION

There are 5 procedures of calibrating a Fibaro Roller Shutter to choose from. Each one gives the same results and the user may choose which one to execute. A Calibration through a Fibaro Home Center 2 interface

 Make sure the module is connected to the power supply, according to Fig.1

 Include the module into the Z-Wave network, according to section
 Ill of instructions.

 In Home Center 2 interface choose Fibaro Roller Shutter's advanced settings.

Click CALIBRATE buttin in the devices advanced settings tab.
 Roller Shutter performs the calibration process, completing full cycle - up, down and up again.

6) Using an interface test whether the positioning works correctly.

B. Calibration through the Z-Wave network
 Make sure the module is connected to the power supply,

according to Fig.1 2) Include the module into the Z-Wave network, according to pt.III instructions

3) Set the parameter 29 value to 1.

 Roller Shutter performs the calibration process, completing full cycle - up, down and up again.
 The parameter 29 value will be automatically set to 0.

6) Using an interface test whether the positioning works correctly.

C. Calibration through the switch keys
 Make sure the module is connected to the power supply, according to Fig.1, and to the switch keys as well (S1 and S2

inputs).2) Include the module into the Z-Wave network, according to

section III of instructions. 3) Press and hold the switch key connected to S1 or S2 input

terminal and release it after at least 3 seconds.
Press and hold the same switch key again, and release it after 3

seconds. 5) Now press and hold the same button, for 3 seconds, for the 3rd

6) After pressing and releasing the button for the third time,

automatic calibration sequence will start. 7) Roller Shutter performs the calibration process, completing full

cycle - up, down and up again.

 Make sure the module is connected to the power supply, according to Fig.1

 Include the module into the Z-Wave network, according to section

III of instructions.

Press and hold the B-button for ca. 6 seconds.
 LED will glow blue.

5) Release the B-button and press it again, briefly.

6) Roller Shutter performs the calibration process, completing full cycle - up, down and up again.

E. Calibration through a Fibar Command Class control frame. It's possible to force the calibration process execution through sending a Fibar Command Class control frame through a Z-Wave network main controller (see a Fibar Command Class documentaOpening / Closing a blind is acheved through moving a slider or

In Venetian Blind mode, setting lamellas angle is achieved through

Fibaro Roller Shutter allows for connecting push buttons to S1 and

S2 terminals. These may be momentary or toggle switches,

alternatively. Push buttons are responsible for managing the blind's

Clicking **button** connected to S1 terminal, initiates up

Clicking **V** button connected to S2 terminal, initiates down

If the blind is moving, each click, of any button, will stop the

movement. In addition a button click sends a command frame to I-st

In case of venetian blinds, it's possible to manage the lamellas

angle. Operating Mode - Venetian Blind, or Parameter 10 value set

Holding A connected to S1 terminal initiates lamellas rotation up

Holding v connected to S2 terminal initiates lamellas rotation

In addition a button hold sends a Fibar Command Class control

Changing **A** switch key position, connected to S1 terminal,

Changing V switch key position, connected to S2 terminal.

Through an association Fibaro Roller Shutter may control another

Z-Wave network device, e.g. another Roller Shutter, Wall Plug,

Association allows for direct communication

between Z-Wave network devices. Main controller

II association group is inactive when toggle

switches are used or in Gate Controller mode

(parameter 10). In case of controlling Venetian

Blinds, control commands are sent in Fibar

does not take part in such communication.

Fibaro Roller Shutter provides three association groups:

I association group is triggered through a momentary switch click

II association group is triggered through a momentary switch hold

Command Class standard.

III association group reports the module status. Only one device

may be assigned to this group, main controller by default. It's not

Fibaro Roller Shutter allows for commanding other Roller Shutters,

associated into I or II association group, through clicking or holding

a switch key. For example, this mechanism allows for operating a

Roller Shutter connected to the switch with a button click, and

operating the devices associated in II association group by a button

hold. In addition, when operating Venetian Blinds, it's possible to

USING ASSOCIATIONS TO OPERATE ANOTHER

ROLLER SHUTTER OR ANY OTHER Z-WAVE

Clicking **A** button, connected to S1 terminal will initiate up

movement in associated Roller Shutters, or send Turn On command

Clicking V button, connected to S2 terminal will initiate down

movement in associated Roller Shutters, or send Turn Off command

Holding **A** button, connected to S1 terminal will move the

connected roller blind up, and after 1 second delay initiate up movement in associated Roller Shutters, or send Turn On command

Holding V button, connected to S2 terminal will move the

conected rolled blind down, and after 1 second delay initiate down

movement in associated Roller Shutters, or send Turn Off command

USING ASSOCIATIONS TO OPERATE ROLLER

Using association mechanism to operating venetian blinds requires

Clicking **A** button, connected to S1 terminal will initiate up

movement of the connected venetian blind and other devices

SHUTTERS CONNECTED TO VENETIAN BLINDS.

frame to the devices associated in I-st association group.

frame to the devices associated in I-st association group.

frame to the devices associated in II-nd association group.

frame to the devices associated in II-nd association group

configuring both, I-st and II-nd association groups.

moving a slider or pushing a button shown in fig. 3

pushing a button shown in fig. 3.

movement

movement

movement

to 2.

down

Using momentary switches:

association group devices.

Using toggle switches:

initiates un movement

initiates down movement.

IX. ASSOCIATIONS

frame to II-nd association group devices.

Choosing a middle position stops the blind.

Dimmer, Relay Switch, RGBW Controller.

NOTE

or a toggle switch position change.

NOTE

recommended to modify this group's settings.

synchronize many devices

I ASSOCIATION GROUP:

ILASSOCIATION GROUP:

I ASSOCIATION GROUP

associated in I-st association group.

DEVICE.

VIII. MANUAL OPERATION

CALIBRATING LAMELLAS POSITIONING

Apart from calibrating the roller blind position, it's possible to calibrate the position of venetian blinds lamellas. After correct calibration, in case of venetian blinds, it's possible to set the position between the limit switches, as well as the lamellas angle. By default, time of full turn of the lamellas is set to 1,5 seconds. If necessary, it can be modified following below instructions.

2) Include the module into the Z-Wave network, according to section

5) Another device icon, responsible for lamellas operation, will show

network controllers managing the lamellas position is achieved

6) By default, time of transition between extreme positions is set to

7) Turn lamellas between extreme positions. If after full cycle a blind

Roller Shutter needs to be calibrated to work with

In Venatian Blind mode, lamellas need to be

Venetian blind lamellas may be only operated by

calibrated to work with any given motor.

starts moving up or down, then parameter's 12 value must be modified, e.g. to 1 000ms (1 second). Correctly configured

up in Home Center 2 interface. In case of any other Z-Wave

through pressing and holding a switch key (up or down)

lamellas should not force the blind to move up or down

3) Calibrate the Roller Shutter, according to the instructions

4) Set the parameter 10 value to 2 or choose in HC2 interface:

provided in sections VI.A, VI.B, VI.C, VI.D or VI.E.

according to Fig.1

III of instructions.

Device Type - Venetian Blind

1 500 ms (1 5 seconds)

NOTE

NOTE

any given motor.

momentary switches

VII. OPERATING THROUGH THE Z-WAVE NETWORK

will show up, responsible for managing lamellas position.

User can choose from the following operating modes

1. Roller Blind Mode, without positioning

2. Roller Blind Mode, with positioning

4. Gate Mode, without positioning

5. Gate Mode, with positioning

to 0; parameter 17 set to 0)

=

0

V

= =

Fig. 3 Roller Shutter icons in Home Center interface

0

NOTE

XV)

0: parameter 17 set to 0)

3. Venetian Blind Mode

After including into the Z-Wave network, Fibaro Roller Shutter will

be presented in a Home Center 2 interface as a roller blind icon (see

fig. below). After choosing Venetian Blind device type, a second icon

After choosing one of the above operating modes, device will be

addition, each operating mode affects certain parameters settings: 1) Roller blind without positioning (parameter 10 set to 0)

2) Roller blind with positioning (parameter 10 set to 1)
3) Venetian blind (parameter 10 set to 2; parameter 13, set to 2)

4) Gate without positioning (parameter 10 set to 3; parameter 12 set

5) Gate with positioning (parameter 10 set to 4; parameter 12 set to

V

- 11 -

0

Above operating modes and their default settings

are modified automatically only in Home Center 2

controller. In case of the Z-Wave network

controllers from other manufacturers, these

settings need to be manually adjusted (see section

0

represented in Home Center 2 interface by icons shown in Fig.4. In

Clicking V button, connected to S2 terminal will initiate down movement of the connected venetian blind and other devices associated in I-st association group. ILASSOCIATION GROUP (relevant for momentary switches only)

Holding A button, connected to S1 terminal will initiate lamellas rotation up, of the connected venetian blind as well as the other devices associated in II-nd association group. Holding V button, connected to S2 terminal will initiate lamellas

rotation down, of the connected venetian blind as well as the other devices associated in II-nd association group.



IX. OPERATING GATE MOTORS

Fibaro Roller Shutter allows for operating gate motors. Gate motor should be connected to Q1 and Q2 terminals according to Fig.2. In the Gate Mode, a momentary switch may be connected to S1 terminal. It's recommended to connect an IR barrier, an emergency stop button or any alarm mechanism to S2 terminal. Opening a contact in a device connected to S2 terminal will always result in stopping a motor in current position (see Fig. 2).

Clicking a push button connected to S1 terminal will initiate opening the gate. Next click of a button will stop the gate. Yet another click of a button will close the gate. According to following seaguence: $OPEN \rightarrow STOP \rightarrow CLOSE \rightarrow STOP \rightarrow OPEN.$



Fig. 4 Roller Shutter icon in Home Center interface

NOTE In Gate Mode, by default, the S1 terminal is set to operate with a momentary switch, ignoring the parameter 14 settings.

Full opening the gate initiates a Roller Shutter COUNTDOWN. After the COUNTDOWN the gate will start closing. COUNTDOWN length is set through the parameter 12. In addition, if the IR barrier is cut (S2 contact opened) at the gate fully open, the gate will start closing after a time period specified in parameter 17



In both Gate Modes, with and without positioning parameters 12 and 17 are automatically set to 0. At these settings the gate will open, but will not automatically close. Relevant times need to be set manually in parameters 12 and 17 (see section XV).



NOTE Parameters 12 and 17 settings are automatically modified only in Home Center 2 controller, when choosing one of Gate Modes. In case of controllers from other manufacturers these parameters need to be set manually (see section XV).



Installation of the gate driver may be performed only by certified professionals. The motor must be equipped with the appropriate limit switches (see Fig 2). It's recommended to connect a NC (normally closed) contact of an IR barrier to S2 terminal. Opening the contact will stop the gate. In addition, it's recommened to connect ar emergency stop button to the motors neutral (N wire. In emergency, pushing the emergency stop button will cut the power and stop the gate. It is recomended to monitor regulary operation of Fibaro Roller shutter in all modes. Also it is recomended to regulary verificate and maintenance connectors.



XI. LED INDICATOR

Fibaro Roller Shutter has a MENUL Each MENUL level is signaled through a LED Indicator colour. To enter MENU press and hold the B-button for at least 2 seconds

While the B-button is being held, LED Indicator colours will change in the following sequence

BLUE - Roller Shutter calibration procedure (see pt.) VIOLET - initiate the Z-Wave network range tester GREEN - reset energy consumption data memory (see pt.) YELLOW - Roller Shutter reset (see pt.)

Release the B-button to choose the desired function and confirm your choice with the B-button click

XII. Z-WAVE RANGE TESTER

Fibaro Roller Shutter has a built in mechanism, allowing to roughly estimate the Z-Wave network range.



In order to test the Z-Wave network range: 1) Press and hold the B-button for ca. 6 seconds, until the LED Indicator glows violet 2) Release the B-button 3) Click the B-button.

4) LED Indicator will signal the Z-Wave network range (see description below). 5) Click the B-button to exit the Range Tester

Network range signaling modes: Z-Wave network range is signaled by LED illumination colour and behaviour. Blinking each 1-second means the modules tries to establish a direct communication with the main controller, while 2 seconds glowing means the test result. The test is performed in a loop, until being stopped by the user, Z-Wave range test is performed in three steps, signaled with green, yellow, violet and

1) Blinking in GREEN means the module tries to establish a direct communication with the main controller. Positive test result is signaled by a 2 second glowing in GREEN, after which the test is repeated (step 1). In practice, if the module is able to establish a direct communication with the main controller, the LED will glow GREEN. without blinking.

2) If the module is not able to establish a direct connection with the main controller. it will try to establish a routed connection, through another, intermediary, Z-Wave network devices. LED indicator will change the illumination colour to RED. Positive test result is signaled with glowing in YELLOW. After 2 seconds the module will retry establishing a direct communication (step 1).



The module may modify the main controller communication from direct to routed and vice versa, especially if it's located at the direct communication range limit.

3) If the module is not able to establish a routed connection with the main controller, LED Indicator colour will change from YELLOW to VIOLET. After few seconds test will end and the LED Indicator will glow RED for two seconds. Whole procedure will start again and the module will try to establish a direct connection with the main controller (step 1).



Eibaro Roller Shutter allows for the current load and nowe consumption monitoring. Data is sent to the main controller, e.g. Home Center 2

Measuring is carried out by an independent microprocessor dedicated exclusively for the purpose, assuring maximum accuracy and precision. The microprocessor is factory calibrated.

Electric power - power consumed by an electric device in an instant in Watts (W)

Electric energy - energy consumed by a device through a time period. Most commonly measured in kilowatt-hours (kWh). One kilowatt-hour is equal to one kilowatt of power consumed over a

period of one hour, 1kWh = 1000 Wh. RESETTING ELECTRICITY CONSUMPTION MEMORY

Fibaro Roller Shutters electricity consumption memory may be cleared in one of the following ways:

1) Through the module reset (see pt.) 2) Through the main controller menu (see main controllers operating manual

3) Manually using the following instructions:

a) Make sure the device is connected to voltage supply. b) Press and hold the B-button for ca. 10 seconds, until LED I ndicator glows GREEN. c) Release the B-button. d) Click the B-button

e) Energy consumption memory has been erased.



2) Fibaro Roller Shutter stores consumed electricity data on its memory, which means disconnecting the module from voltage supply does not erase the

XIV. PROTECTION MODE

Fibaro Roller Shutter uses the Protection Command Class v2 to prevent from unintended motor movement. 22.22 software version supports the following operation modes (following the Z-Wave protocol description).

1) Local Protection Local Protection State

0 - no protection. Roller Shutter responds to push buttons

1 - not supported 2 - Local protection active. Roller Shutter does not respond to

push buttons.

Once the Local Protection is activated, the module stops responding to S1 and S2 push buttons. SCENE ID and association commands will not be sent as well. The only exception is the B-button, Menu and Z-Wave network inclusion, after the B-button or S1 push button triple click, are still active.



In Protection Mode it will not be possible to control Fibaro Roller Shutter from buttons. It is not recomended to control all Fibaro Roller Shutters in this mode.



2) RF Protection (radio protection) RF Protection State:

0 – No protection Roller Shutter responds to command frames 1 - RF Protection active, Roller Shutter does not respond to the 7-Wave control frames

2 - not supported.

Once the RF Protection is activated, the module stops responding to command frames setting the blind position. It's still possible however to configure the device (advanced configuration parameters, protection modes) and checking it's current state through polling (position, power, energy).

XV. ADVANCED CONFIGURATION

GENERAL SETTINGS:

3. Reports type

0 - Blind position reports sent to the main controller using Z-Wave Command Class. 1 - Blind position reports sent to the main controller using Fibar

Command Class. Parameters value shoud be set to 1 if the module operates in Venetian Blind mode

Defauld setting: 0 Parameter size: 1 [bvte]



0 - Roller Blind Mode, without positioning - Roller Blind Mode, with positioning 2 - Venetian Blind Mode, with positioning 3 - Gate Mode, without positioning

4 - Gate Mode, with positioning Default settng: 1

Parameter size: 1 [byte]

12 In Venetian Blind mode (narameter 10 set to 2) the parameter determines time of full turn of the lamellas. In Gate Mode (parameter 10 set to 3 or 4) the parameter defines

the COUNTDOWN time, i.e. the time period after which an open gate starts closing. In any other operating mode the parameter value is irrelevant.

Value of 0 means the gate will not close automatically Available settings: 0-65535 (0 - 655,35s)

Default setting: 150 (1,5 s) Parameter size: 2 [bytes]

13. Set lamellas back to previous position

In Venetian Blind Mode (parameter 10 set to 2) the parameter influences lamellas positioning in various situations. In any other operating mode the parameter value is irrelevant.

- 0 Lamellas return to previously set position only in case of the main controller operation. 1 - Lamellas return to previously set position in case of the main
- controller operation, momentary switch operation, or when the limit switch is reached
- 2 Lamellas return to previously set position in case of the main controller operation, momentary switch operation, when the limit switch is reached or after receiving a "STOP" control frame (Switch Multilevel Stop).

Default setting: 1 Parameter size: 1 [hvte]

14. Switch type.

The parameter settings are relevant for Roller Blind Mode and Venetian Blind Mode (parameter 10 set to 0, 1, 2). 0 - Momentary switches 1 - Toggle switches

2 - Single, momentary switch. (The switch should be connected to S1 terminal)

Default setting: 0 Parameter size: 1 [byte]

17 In Roller Blind Mode or Venetian Blind mode (narameter 10 set to 0, 1, 2) the parameter determines when the Roller Shutter relays are turned off after reaching a limit switch. In Gate Mode (parameter 10 set to 3 or 4) the paramete determines a time period after which a gate will start closing after a S2 contact has been disconnected. In this mode, time to turn off the Roller Shutter relays after reaching a limit switch is set to 3 seconds and cannot be modified. Value of 0 means the gate will note close automatically.

Default setting: 0

Parameter size: 1 [byte]

activated by the switch keys.

0 - Associations activation

Parameter size: 1 [byte]

XIV Guarantee

- Scenes activation

Default setting: 0

301595664

device.

obtain claim authorization.

number (RMA-number).

Device was kept by AGS.

case

purchase.

Merchandise Authorization -RMA).

"AGS") shall contact the Customer

SCENES AND ASSOCIATIONS SETTINGS:

Parameter determines whether scenes or associations are

1. The Guarantee is provided by FIBAR GROUP Sp. z o.o.

(bereinafter "Manufacturer") based in Poznan ul Lotnicza 1:60-421

Poznan, entered in the register of the National Court Register kept

by the District Court in Poznań VIII Economic Department of the

National Court Register, no. 370151, NIP 7811858097, REGON:

2. The Manufacturer is responsible for equipment malfunction

resulting from physical defects (manufacturing or material) of the

3. During the Guarantee period, the Manufacturer shall remove any

defects, free of charge, by repairing or replacing (at the sole

discretion of the Manufacturer) any defective components of the

Device with new or regenerated components, that are free of

defects. When the repair impossible, the Manufacturer reserves the

right to replace the device with a new or regenerated one, which shall

4 In special cases when the device cannot be replaced with the

device of the same type (e.g. the device is no longer available in the

commercial offer), the Manufacturer may replace it with a different

device having technical parameters similar to the faulty one. Such

activity shall be considered as fulfilling the obligations of the

Manufacturer. The Manufacturer shall not refund money paid for the

5. The holder of a valid guarantee shall submit a guarantee claim

through the guarantee service. Remember: before you submit a

guarantee claim, contact our technical support using telephone or

e-mail. More than 50% of operational problems is resolved remotely,

saving time and money spent to initiating guarantee procedure. If remote support is insufficient, the Customer shall fill the guarantee

claim form (using our website - www.fibargroup.com) in order to

When the guarantee claim form is submitted correctly, the Customer

shall receive the claim confirmation with an unique number (Return

6. The claim may be also submitted by telephone. In this case, the

call is recorded and the Customer shall be informed about it by a consultant before submitting the claim. Immediately after submitting

the claim, the consultant shall provide the Customer with the claim

7. When the guarantee claim form is submitted correctly, a representative of the Authorised Guarantee Service (hereinafter as

8. Defects revealed within the guarantee period shall be removed

not later than 30 days from the date of delivering the Device to AGS.

The guarantee period shall be extended by the time in which the

9. The faulty device shall be provided by the Customer with complete

10. Parts replaced under the guarantee are the property of the

Manufacturer. The guarantee for all parts replaced in the guarantee process shall be equal to the guarantee period of the original device.

11. Costs of delivering the faulty device shall be borne by the

Customer. For unjustified service calls, the Service may charge the

Customer with travel expenses and handling costs related to the

the Device was misused or the manual was not observed,
the Device was provided by the Customer incomplete, without

accessories or nameplate, • it was determined that the fault was caused by other reasons than

. the guarantee document is not valid or there is no proof of

13. The Manufacturer shall not be liable for damages to property

caused by defective device. The Manufacturer shall not be liable for

indirect, incidental, special, consequential or punitive damages, or

for any damages, including, inter alia, loss of profits, savings, data,

loss of benefits, claims by third parties and any property damage or

mechanical damages (cracks, fractures, cuts, abrasions, physical

deformations caused by impact, falling or dropping the device or

other object, improper use or not observing the operating manual);

damages resulting from external causes e.g. flood storm fire

lightning, natural disasters, earthquakes, war, civil disturbance, force

maieure, unforeseen accidents, theft, water damage, liquid leakage

battery spill, weather conditions, sunlight, sand, moisture, high or low

damages caused by malfunctioning software, attack of a computer

virus, or by failure to update the software as recommended by the

· damages resulting from: surges in the power and/or telecommuni-

cation network, improper connection to the grid in a manner

inconsistent with the operating manual, or from connecting other

· damages caused by operating or storing the device in extremely

adverse conditions, i.e. high humidity, dust, too low (freezing) or too high ambient temperature. Detailed permissible conditions for

· damages caused by using accessories not recommended by the

operating the Device are defined in the operating manual:

devices not recommended by the Manufacturer

personal injuries arising from or related to the use of the Device

The guarantee period of the replaced part shall not be extended.

standard equipment and documents proving its purchase

12. AGS shall not accept a complaint claim only when:

a material or manufacturing defect of the Device

14. The guarantee shall not cover:

temperature air pollution:

Manufacturer:

e free of any defects and its condition shall not be worse than the

Device for 12 months from the date of its purchasing.

original device owned by the Customer.

50. Scenes / Associations activation

· damages caused by faulty electrical installation of the Customer,

· damages caused by Customer's failure to provide maintenance and

damages resulting from the use of spurious spare parts or

accessories improper for given model, repairing and introducing

15. The scope of the guarantee repairs shall not include periodic

maintenance and inspections, in particular cleaning, adjustments,

operational checks, correction of errors or parameter programming

and other activities that should be performed by the user (Buyer).

The guarantee shall not cover natural wear and tear of the Device

and its components listed in the operating manual and in technical

16. If a defect is not covered by the guarantee, the Manufacturer

reserves the right to remove such defect at its sole discretion,

repairing the damaged or destroyed parts or providing components

17 This guarantee shall not exclude limit or suspend the Customer

rights when the provided product is inconsistent with the purchase

In case of any technical questions contact customer service centre

other manufacturers.

to Fibaro system.

FIBARGROUP

FIBARO

in your country.

www.fibargroup.com

This Device may be used with all devices

certified with Z-Wave certificate and should be

compatible with such devices produced by

Any device compatible with Z-Wave may be added

documentation as such elements have a defined operational life.

defects caused by operating faulty Device or accessories.

servicing activities defined in the operating manual:

including the use of incorrect fuses:

alterations by unauthorized persons;

necessary for repair or replacement

agreement.

Available settings: 0 - 255 (0,1-25,5s). Default setting: 10 (1s) Parameter size: 1 [byte]

18. Motor operation detection.

Power threshold to be interpreted as reaching a limit switch. Available settings: 0 - 255 (1-255 W)

The value of 0 means reaching a limit switch will not be detected Default setting: 10 (10W). Parameter size: 1 [bvte]

22. Motor operation time Time period for the motor to continue operation

Available settings: 0 - 65535 (0 - 65535s) The value of 0 means the function is disabled Default setting: 240 (240s - 4 minutes)

Parameter size: 2 [bytes] 29. Forced Roller Shutter calibration.

By modifying the parameters setting from 0 to 1 a Roller Shutter enters the calibration mode. The parameter relevant only if a Roller Shutter is set to work in positioning mode (parameter 10 set to 1, 2 or 4).

1 - Start calibration process Default setting: 0 Parameter size: 1 [byte]

ALARM SETTINGS:

30. Response to general alarm 1 - Open blind. 2 - Close blind

Default setting: 2 Parameter size: 1 [byte] 31. Response to flooding alarm 0 - No reaction

1 - Open blind. 2 - Close blind Default setting: 0

Parameter size: 1 [byte] 32. Response to smoke, CO or CO2 alarn 0 - No reaction

33. Response to temperature alar

35. Managing lamellas in response to alarm.

1 - Set lamellas to their extreme position.

POWER AND ENERGY REPORTS SETTINGS:

Value of 0 means the reports are turned off

42. Periodic power or energy reports.

Available settings: 1-65534 (1-65534 seconds)

Default setting: 3600 (3600 seconds / 60 minutes).

Value of 0 means the reports are turned of

Value of 0 means the reports are turned of

In Venetian Blind Mode (parameter 10 set to 2), the parameter

determines how the lamellas will react upon alarm detection. In any other modes, the parameter value is not relevant.

0 - Do not change lamellas position - lamellas return to the last set

Power level change that will result in new power value report being

sent. The parameter defines a change that needs to occur in order

to trigger the report. The value is a percentage of the previous

The parameter defines a time period between consecutive reports.

Energy level change which will result in new energy value report

being sent. The parameter defines a change that needs to occur in

A Roller Shutter may include power and energy used by itself in

Energy threshold available settings: 1-254 (0,01 - 2,54kWh).

Power report threshold available settings: 1-100 (1-100%)

1 - Open blind.

2 - Close blind.

0 - No reaction

1 - Open blind

2 - Close blind

Default setting: 1

position.

Default setting: 1

40. Power reports.

renort

Parameter size: 1 [byte]

Default setting: 10 (10%)

Parameter size: 1 [byte]

Parameter size: 2 [bytes]

order to trigger the report.

Default setting 10 (0.1kWh)

reports sent to the main controlle

0 - Self-measurement inactive.

1 - Self-measurement active

Parameter size: 1 [byte]

44. Self-measurement.

43. Energy reports.

Default setting: 1

Parameter size: 1 [byte]

Parameter size: 1 [bvte]