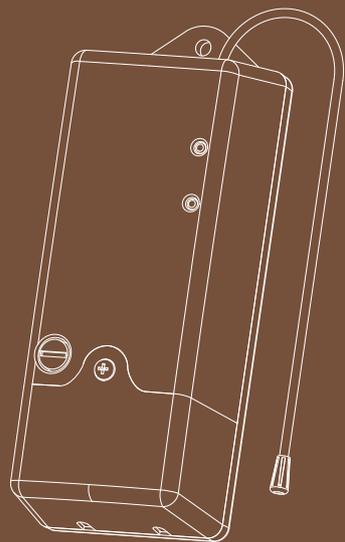


# BASIC 868/434/315 MOTOR CONTROLLER

## INSTRUCTION MANUAL



# SMINN

innovative in electronics

## DESCRIPTION

SMINN's BASIC motor controllers are developed with state-of-the-art electronics and technology. They include a receiver with capacity to store up to 35 transmitters. Their memorization capability via radio or using a simple push-button makes them easy and handy. They have a robust copy protection and anti-burglar system.

These motor controllers are designed for operating single-phase motors for roller shutters with self-managed limit switches. Devices that comply with the current regulations for usage in residential, commercial and light industry environments.

## OPERATION

When the BASIC motor controller receives an SMINN transmitter code, the receiver checks the integrity of that code and if it is registered in the memory. Once verified that everything is correct, the motor is activated and proceeds to open or close the door.

## OPERATING MODES

The BASIC motor controller provides inside its circuit three configuration JUMPERS: A, B, and C. Three maneuver modes can be set using those JUMPERS. **Fig. 1**

## ALTERNATING STOP

When the transmitter button is pressed the motor controller will start opening the door. Pressing it a second time will stop or close if the gate was already stopped. With a 4-channel transmitter 4 BASIC motor controllers can be commanded in this mode.

Jumper settings

- A=ON
- B=OFF
- C=OFF

## DUAL-CHANNEL BISTABLE

It is similar to the alternating stop MODE, but using 2 buttons on the transmitter.

Pressing the 1st or 3rd button of the transmitter, it will open; while pressing one of them a second time it will stop. To close, then 2nd or 4th transmitter's buttons should be pressed. With a 4-channel transmitter 2 BASIC motor controllers can be commanded in this mode.

With a 4-channel transmitter 2 BASIC motor controllers can be commanded in this mode.

Jumper settings

- A=OFF
- B=ON
- C=OFF

## SEMI-AUTOMATIC DEAD-MAN TO CLOSE AND PRESSING TO OPEN

Pressing 1st or 3rd button of the transmitter will open the door. Holding the 2nd or 4th button on the transmitter will close the door.

With a 4-channel transmitter 2 BASIC motor controllers can be commanded in this mode.

Jumper settings

- A=ON
- B=ON
- C=OFF

## DEAD-MAN DURING OPENING AND CLOSING

Holding the 1st or 3rd button on the transmitter will open the door. Holding the 2nd or 4th button on the transmitter will close the door.

Jumper settings

- A=OFF
- B=ON
- C=ON

## PROGRAMMING THE MANEUVER TIME

To program the maneuver time these steps should be followed, always starting with a powered motor controller and the door/rolling shutter closed.

- Press and hold the programming button (PROG) for 8 s, until the LED RUN / PROG is lit.
- Release the programming button (PROG)
- Press the button on the transmitter to start the opening.
- Wait for a few seconds so the door ends the opening action and press again the programming button (PROG).
- Relays are deactivated and you should hear a validation beep.

Now the opening and closing times have been programmed. The two times are the same and they range from 15 seconds up to 2 minutes.

## ERASE MEMORY

Stored SMINN transmitters' codes can only be deleted completely by erasing the memory. To do so, these steps should be followed:

- Push for 1 second and release the PROG button four times.  
Press and hold for 8 seconds the PROG key (5th push) until the LED is on.
- Release the programming button (PROG) for 2 seconds.
- Press and hold the programming button (PROG).
- The LED turns off.
- Wait 8 seconds until the LED flashes.
- Release the programming button (PROG).  
Wait for the validation beep.

After this process the receiver has been erased and the memory checked, leaving it ready to register transmitters.

## TRANSMITTER PROGRAMMING

SMINN's BASIC motor controllers can store up to 35 transmitters with compatible PIN.

Before registering transmitters, make sure they have the same PIN. If this is the first installation, the receiver's memory should be deleted beforehand and, optionally, customized. Repeat the process for as many transmitters as we want to register. If we try to register more than 35 transmitters, the receiver will answer with a long beep indicating that the memory is full. The first registered transmitter indicates the working channel of the motor controller; the rest of the transmitters should be registered using the same button as in the first registration.

## MANUAL PROGRAMMING

To register transmitters manually in a BASIC motor controller using the programming button, proceed as follows:

- Turn on the device and wait 5 sec.
- Press and hold the receiver's programming button (PROG).
- Press and hold the button of the transmitter's channel on the (transmitter/one) we want to register.
- Check that the led is blinking (SCAN mode).
- Wait for the valid registration beep.
- Release the transmitter button.
- Release the programming button of the receiver (PROG).

## REGISTRATION VIA RADIO

Only a registered transmitter can invite or grant self-registration capabilities to other SMINN transmitters with the same PIN.

## Registration by invitation

- Press and hold the already registered transmitter's 1st and 2nd buttons.
- Wait for 5 seconds until the led is on in the transmitter.
- Release 1st and 2nd buttons of the transmitter (the LED remains on).
- Ensure you are close to the receiver to guarantee communication (1 to 10m).
- Press and hold the transmitter's 1st button.
- Wait for the validation beep (learning mode for 8 sec).
- Press and hold the corresponding button on the transmitter channel we want to register.
- Wait for the validation beep.
- Release the transmitter button.

## Registration by invitation

- Press and hold the registered transmitter's 1st and 2nd buttons (MASTER transmitter).
- Press and hold the new transmitter's 1st and 2nd buttons (it must have the same PIN).
- Wait for 5 seconds until the led is on in both transmitters.
- Release 1st and 2nd buttons of both emitters (the leds remain on).
- Take the Master transmitter's led near the new transmitter's SYNC area.
- Press and hold the Master transmitter's 1st button.
- Wait until the new transmitter's led flashes 5 times.
- Release the Master's button.
- Ensure you are close to the receiver to guarantee communication (1 to 10m).
- Press and hold the new transmitter's button that corresponds to the channel that you want to register.
- Wait for the validation beep.
- Release the button of the new transmitter.

## CODE REPLACEMENT DUE TO LOSS

This function allows to replace a transmitter code stored in the receiver with a new one, be it due to loss or mislaying.

The replacement of a transmitter code is only possible with a SMINN programming console. Knowing the PIN of the installation and the code number of the lost transmitter is required.

## INSTALLATION

Specialized and/or skilled personnel will do the installation, using properly protected cable of enough gauge. Taking into account that devices permanently connected to the mains need to have an accessible connection device (i.e. a magnetothermic switch).

For safety, before operating the device, the power supply switch or differential must be disconnected.

The wiring should be done following the instructions printed in the serigraphy of the circuit board.

Terminals 1/2	230VAC power supply
Terminal 3	Motor common contact
Terminal 4	Opening
Terminal 5	Closing

The BASIC motor controller is prepared to be easily fixed on a wall using screws or flange. See fixing point in **Fig. 2**

The antenna should be in the air, preferably in an upright position.

**Reinforced concrete, metallic components or any other receiving devices reduce dramatically the radiofrequency signal. Therefore, installation close to these elements should be avoided.**

After programming and verifying the equipment, place the lid on the front of the box, while holding the screw provided.

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SMINN'S MOTOR CONTROLLERS INCLUDE A LIGHT SIGNAL TO KNOW IF THE EQUIPMENT IS POWERED.

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## USE LIMITATIONS ON MOTOR CONTROLLERS

Functionality is not guaranteed if used in different applications than the specified ones.

THE USAGE INSTRUCTIONS OF THIS DEVICE SHALL BE HANDED TO THE USER, WHO WILL HAVE THEM IN THEIR POSSESSION. IF THEY ARE MISLAID, THE USER CAN ASK FOR A COPY OR DOWNLOAD IT DIRECTLY FROM THE WEBSITE WWW.SMINN.COM

The manufacturer reserves the right to change the specifications of these systems as well as this manual without prior warning.

The equipment must be manipulated only by specialized and/or skilled personnel.

## WARRANTY

This product has undergone a complete TEST during its manufacturing process that guarantees its reliability and proper operation. The manufacturer provides 24 months of warranty to the product from the date printed in the product and against any anomaly that it may present in its appearance or operation.

Any damage caused by third parties, natural causes (flooding, fire, lightning, etc), arising from improper handling or installation, vandalism or any other cause non attributable to the manufacturer will void the warranty. The warranty only covers repairs or replacement of the damaged device. Any expenses derived from assembling, travelling, transport, natural wear of parts, etc., and, in general, any expenses that are not part of the repairs or replacement of the damaged element of the system are excluded.

The installer/provider will ask the manufacturer for an RMA number or authorization for transport of the system in warranty. Without this previous requisite, the manufacturer will not be able neither to process nor provide warranty service.

## WARNING

This product must be used in installations which has been conceived for, considering any other as improper use.

The packaging must not be dumped in the environment. Keep products, packaging, wrapping, documentation, etc., out of the reach of children. Follow the current local, national or European regulations.

Watch the operator movement and avoid the closeness of people once the operator is running or will start.

Do not use the operator if you see signs of wear, damage or malfunction, until it has been reviewed by a qualified technician.

The information contained herein may contain errors that are corrected in subsequent editions. The manufacturer reserves the right to modify the contents of this document or the product without notice.

## WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT DIRECTIVE (WEEE)

In accordance with the European Directive 2002/96/EC about waste electrical and electronic equipment (WEEE), the presence of this symbol (see symbol at the bottom of this text) in the product or in the packaging, means that this article shall not be disposed in local non-classified waste streams.

It is the user's responsibility to dispose this product taking it to a collection point designed for waste recycling of electrical and electronic devices. The separate collection of this product helps optimize the waste sorting and recycling of any recyclable material and also decreases the impact on health and the environment. For more information about the correct wasting of this product, please contact the local authority or the distributor where you acquired this product.

## EC DECLARATION CONFORMITY

The company: ELSONSISTEMAS, S. L.  
Pol. Torrelarragoiti, P6 - A3 - 1ª  
48170 Zamudio - Vizcaya (SPAIN)

Declars that:

The product:

BASIC 864/434/315  
Motor controller

Manufactured by:  
ELSON ELECTRÓNICA, S.A.  
Under the trademark: SMINN

Created for:

Single-phase motor controller of roller shutters with built-in limit switches. In Residential, Commercial and Light Industry environments.

This device meets the provisions contained in the article 3 of the R&TTE 1999/05/CE Regulation, as long as its usage is compliant to what was envisaged, having applied the following regulations:

Telecommunications:

EN 300 220-1 v1.3.1 (2000-09)

EN 300 220-1 v1.1.1 (2000-09)

Electromagnetic compatibility:

EN 301489-1 v1.3.1 (2001-09)

EN 301489-3 v1.3.1 (2001-11)

Tension Low:

EN 60730-1: 2000

Zamudio 2010.03.30

José Miguel Blanco Pérez  
Chief Technical Officer

## TECHNICAL CHARACTERISTICS

BASIC-868	868,30 MHz
BASIC-434	433,92 MHz
BASIC-315	315,00 MHz
Supply	230V AC (125V AC OPTIONAL)
Radio	Superheterodine
Sensibility	< -115 dBm
Encoding	Crypto/Rolling very high security
Code memory	35 codes memory
Increasing memory	NO
Available Channels	1 4
Antenna	External 1/4 Longitud onda
Power max.	20 mA
Operating temperature	20°C - +65° C
Size	140 mm x 55 mm x 40 mm
Ingress protection	IP54
Maneuver time	Programming 120s max.

### Operation modes

	A	B	C
Alternating stop	ON	OFF	OFF
Dual-channel bistable	OFF	ON	OFF
Dead-man during opening/closing	OFF	ON	ON
Dead-man during closing	ON	ON	OFF

FIG. 1 Configuration jumpers

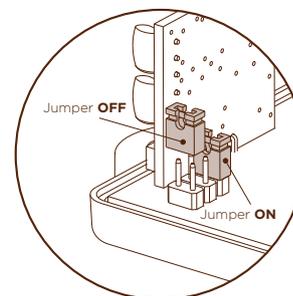
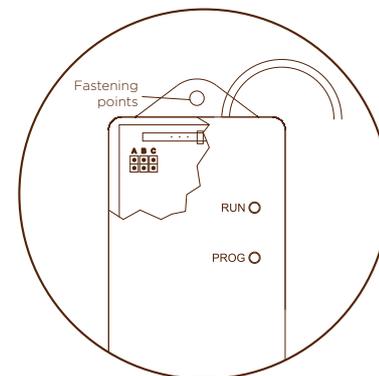
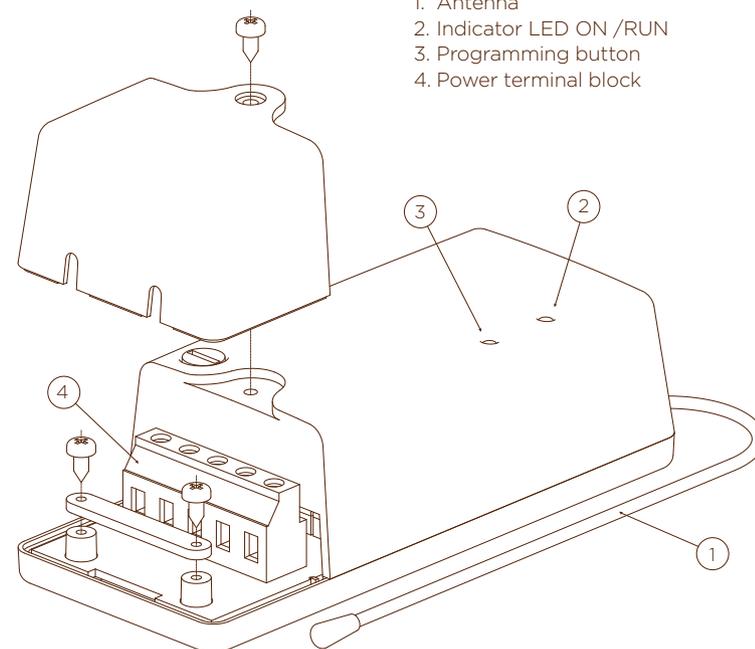


Fig. 2 Fastening points



## COMPONENTS

1. Antenna
2. Indicator LED ON /RUN
3. Programming button
4. Power terminal block



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