MOTOR CONTROLLER USAGE RESTRICTIONS

Operation is not guaranteed when installed in different equipment than the specified.

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 keeps the right to modify the content of this document or the product 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 istallations which has been conceived for, considering any other as improper use. The packaging and wrapping 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. The information contained in this document may have some mistakes that will be corrected in future editions. The manufacturer keeps the right to modify the content of this document or the product without prior warning.

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.

INSTALLATION

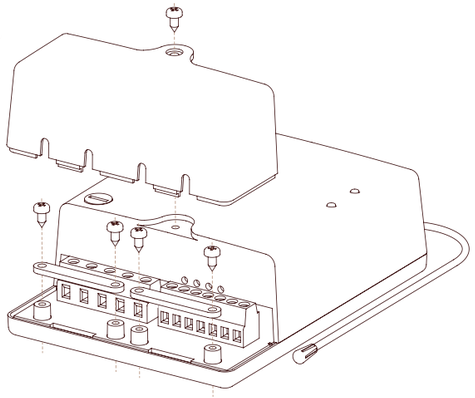
SMINN's motor controller is ready to be easily fixed on a wall using the supplied wall plugs and screws.

Before connecting or operating the device, the power supply switch or differential shall be disconnected.

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

The wiring should be done following the instructions printed in the serigraphy of the circuit board. After programming and verifying the equipment, place the lid on the front of the box, with the supplied screws.

Note: Reinforced concrete, metallic components and/or any other receiving device reduce dramatically the radiofrequency signal, so installation close to these elements should be avoided.



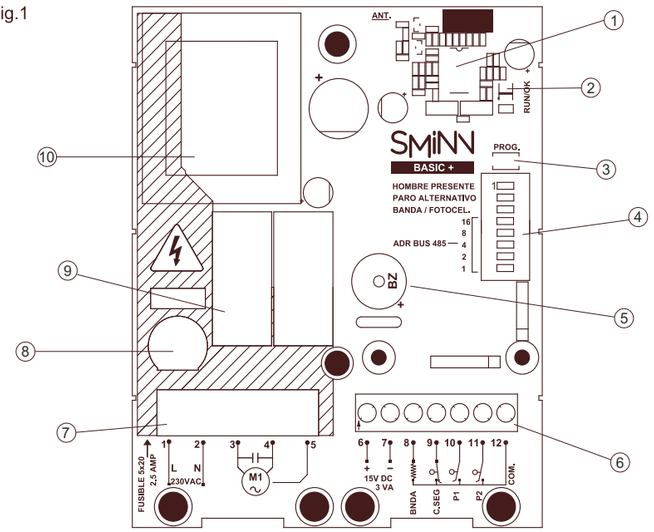
SMiNN
innovative in electronics

TECHNICAL CHARACTERISTICS

BASIC +

Power supply	230V AC (125VAC Optional)
Motor power	Single-phase 0,75CV
Radio receiver	433.92 MHz Crypto code SMINN
Sensitivity	< -115 dBm
Code storage	Internal memory 35 codes
Configuration switch	Binary DIP SWITCH
Output power protection	Auto. resetteable fuse
Output power for peripherals	15VDC / 0.3A
8K2 safety edge control	Analog
Maneuver control inputs	3 - Optocoupled (C.SEG,P1,P2)
Maneuver time	Programmable (120 sec. max)
Operating temperature	-20ºC to +85ºC industrial range
Maximum supported humidity	85% relative humidity
Casing	ABS
Dimensions	130 x 95 x 40 mm
Protection rating	IP54

Fig.1



COMPONENTS

1.- 433.92MHz receiver module
2.- RUN / PROG led
3.- PROG button
4.- Configuration switch
5.- Buzzer.
6.- Peripheral terminal block
7.- Power and motor terminal block
8.- Protection fuse 3/6 A
9.- Maneuver activation relays
10.- Power transformer

CE DECLARATION OF CONFORMITY

REV.4016

The company	ELSON ELECTRONICA, S.A. Pol. Torrelarragoiti, P6 - A3
Declares:	48170 Zamudio - Vizcaya (SPAIN)
The product:	Cuadro Receptor Maniobra BASIC +
Manufactured under the trademark:	**SMINN**
For use in:	Residential, commercial or 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:

Telecomunications:	EN 300 220-1 v1.3.1 (2000-09) EN 300 220-1 v1.1.1 (2000-09)
Electromagnetic compatibility:	2004-108-CE
Low voltage:	2006-95-CE

Zamudio 2016.09.20

José Miguel Blanco Pérez
Chief Technical Officer

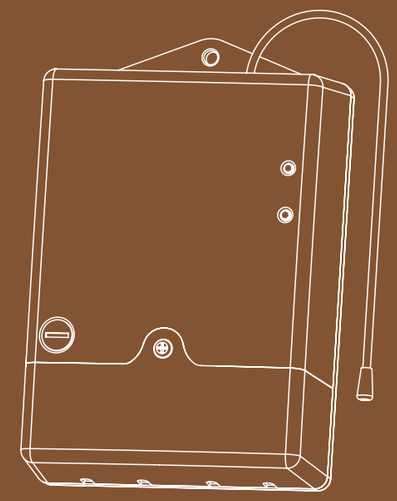
SMiNN
innovative in electronics

T. +34 944 520 308
www. sminn.com
info@sminn.com
Pol. Torrelarragoiti, P6 A3
48170 Zamudio Bizkaia
SPAIN

BASIC +

UNIVERSAL MOTOR CONTROLLER WITH RECEIVER

INSTRUCTIONS
MANUAL



SMiNN
innovative in electronics

DESCRIPTION

Motor controller with integrated radio to control single-phase coaxial motors of up to 0,75 CV at 230VAC to be applied in rolling shutters and rolling doors.

Easy selection between four maneuver types: automatic, semiautomatic (alternative), dual channel and dead man.

Maneuver control via optocoupled inputs for light barriers and buttons.

Automatic detection of external limit switches with maneuver stop.

Devices that are built using high quality materials and components and the latest technology. They are made taking into account the current regulations for the usage in residential, commercial and light industry environments.

OPERATION

Once the motor controller is installed and configured correctly, it will start the maneuver every time an operation request is received via radio, by pressing the test button or by activating the P1 or P2 input.

The motor controller will stop the maneuver when the programmed time finishes or the external limit switches are detected and will interrupt it when any security is activated.

OPERATING MODES

The motor controller has three maneuver types that are easily selectable via the option selector (see fig. 1-4):

- **Automatic (dual channel)**

  in this mode the P1 input or the first or third buttons of a transmitter will start an opening maneuver. The P2 input or the second or fourth buttons of a transmitter will start a closing maneuver.

  If a maneuver is ongoing any of those inputs will stop the maneuver.

  To select this mode set the switch with: DIP1 - OFF
  DIP2 - OFF

- **Semiautomatic (Alternating stop)**

  This mode works the same way the automatic mode does, but it only uses the P1 input or the first transmitter button.

  If a maneuver is ongoing any of those inputs will stop the maneuver.

  Once stopped the next activation will invert the maneuver direction.

  To select this mode set the switch with: DIP1 - OFF
  DIP2 - ON

- **Dead-man in opening and closing**

  While holding P1 the door will open and while holding P2 the door will close. In this mode only the security C.SEG and the opening light barrier (if set in BND) that stops the maneuver are taken into account.

  To select this mode set the switch with: DIP1 - ON
  DIP2 - ON

- **Dead-man in opening and semiautomatic closing**

  The P1 input will open the door like in AUTOMATIC mode and while holding P2 the door will close. In this mode only the security C.SEG and the opening light barrier (if set in BND) are taken into account.

  To select this mode set the switch with: DIP1 - ON
  DIP2 - OFF

MANEUVER CONTROL

The board controls the movement of the motor through the P1 and P2 inputs (terminals 10/11) as described in the selected operating mode.

Light barrier (C.SEG)

Normally closed input (NC) between terminals 9 and 12 that stops and inverts the maneuver when closing.

Opening light barrier (BND)

The BND input (terminals 8, 12) can be configured as a normally closed input for use with an opening light barrier that stops and inverts the maneuver when opening.

To select this mode set the switch with: DIP3 - ON

Safety edge (BND)

8K2 safety edge input (terminals 8, 12) that stops and inverts the maneuver when closing and stops and inverts for 2 seconds when opening.

To select this mode set the switch with: DIP3 - OFF

Automatic closing

Even though automatic closing is not normally used on blinds, this controller allows it as a feature.

To select this mode set the switch with: DIP4 - ON

Peripheral power supply

With this connection, the motor controller supplies power to the external devices, such as light barriers. This output is protected with a 200mA resettable fuse.

Receiver module

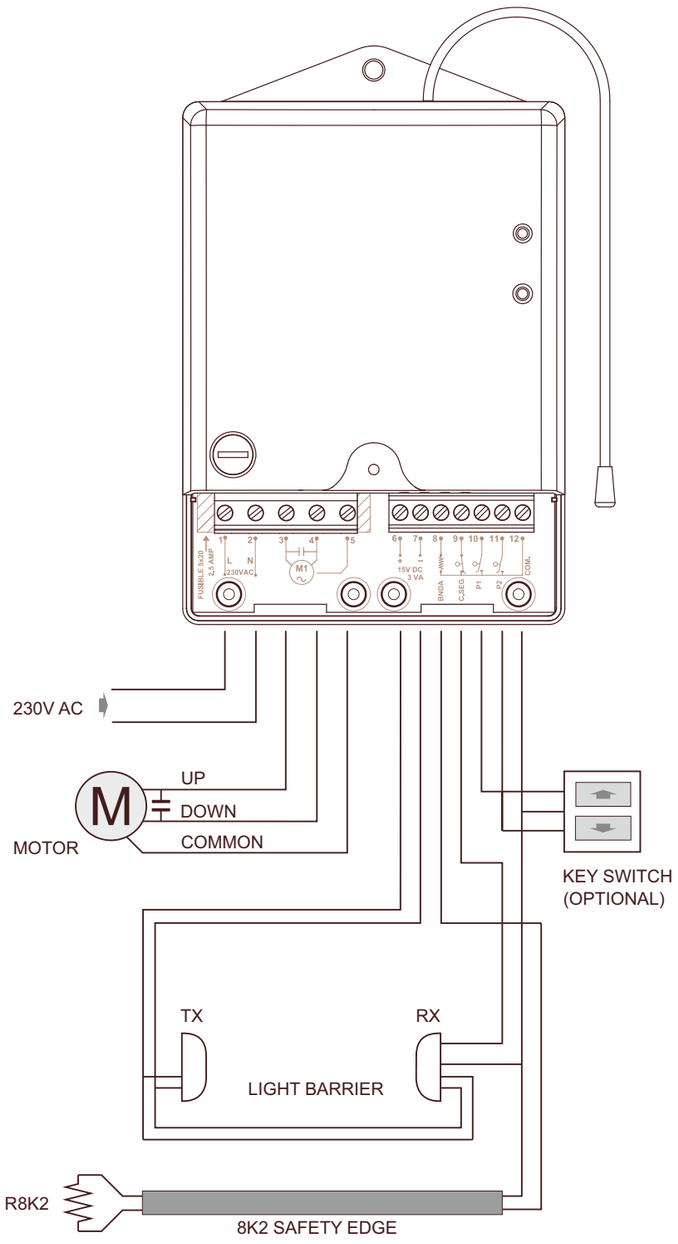
The controller includes an SMINN radio receiver, supporting activation via radio for up to 35 transmitters (see Fig. 1-1)

PROGRAMMING THE MANEUVER TIME

These instructions should be followed to program the maneuver time. The motor controller must be powered on, the door/rolling shutter closed.

- Press and hold the programming button (PROG) for 8 sec. until the RUN/PROG led is on (See fig. 1-2)
- Release the programming button (PROG).
- Press the button of a TRANSMITTER or activate the P1 input to start opening.
- Wait some seconds until the door is completely open and then press again the programming button (PROG).
- The relays should switch off; the maneuver time is saved.
- If the motor controller is configured in automatic cycle (DIP 4 = ON, see fig. 1-4) the RUN/PROG led will blink. After the desired “waiting time” has passed, press again PROG button.
- Finally, a validation beep is heard.

The times of opening, closing and optionally, automatic cycle, have been programmed. The opening and closing times are the same, and they can vary from 15 seconds up to 2 minutes.



ERASE MEMORY

SMINN transmitters’ codes stored in the memory can only be deleted completely erasing the memory. To do so, follow these steps:

- Press and release the PROG button waiting 1 sec. between presses and upon the 5th press hold the button 8 sec. until the RUN/PROG led powers on.
- Release the PROG button for 2 seconds.
- Press and hold again the PROG button. RUN LED will switch off.
- Wait 8 secs until the RUN LED blinks.
- Release the PROG button. Wait for a validation beep.

This procedure completely erases the system memory and leaves it in a default factory state.

TRANSMITTER PROGRAMMING

SMINN UNIVERSAL motor controllers can store up to 35 compatible transmitters. PIN compatibilty must be ensured to register a transmitter.
If this is the first installation, the receiver memory must be customized.

Customizing the receiver

- Power the board and wait for 5 seconds.
- Press and hold the transmitter's 1st and 2nd buttons at the same time (5 sec.) until its led switches on.
- Release the buttons (the led remains on).
- Ensure you are close to the receiver to guarantee communication (2 to 10m).
- Press and hold the PROG button of the motor controller
- Press and hold the transmitter's 1st button (customization)
- Wait for the valid registration beep.
- Release the transmitter's button. Release the PROG button.

MANUAL PROGRAMMING

Follow these steps to register transmitters manually :

- Turn on the motor controller and wait for 5 seconds.
- Press and hold the programming button (PROG).
- Press and hold the button of the transmitter's channel that you want to register.
- Check that the PROG led is blinking (SCAN mode).
- Wait for the valid registration beep.
- Release the transmitter's button.
- Release the PROG button.

Repeat the process for as many transmitters as you want to register. If you try to register more than 35 transmitters, the receiver will answer with a long beep, indicating that the memory is already full.

The first registered transmitter will indicate the operation channel of the motor controller; the rest of transmitters will be registered using the same channel as the first one.

RADIO PROGRAMMING

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 (MASTER transmitter).
- Press and hold the new transmitter's 1st and 2nd buttons (must have the same PIN).
- Wait for 5 seconds until the led is on in both transmitters.
- Release both transmitter's 1st and 2nd buttons (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 blinks 5 times.
- Release the Master's button.
- Ensure you are close to the receiver to guarantee communication (2 to 10m).
- Press and hold the new transmitter's button that corresponds to the channel that you want to register.
- Wait for the valid registration beep.
- Release the button of the new transmitter.

CODE REPLACEMENT DUE TO LOSS

This function allows the replacement of a transmitter code stored in the motor controller 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.