USAGE RESTRICTIONS

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

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 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 a 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. The information contained in this document may have some mistakes that will be corrected in future editions. The manufacturer reserves the right to modify the contents of this document or the product without any prior warning.

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (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.

CE DECLARATION OF CONFORMITY

The company	ELSON SISTEMAS, S.L
	Pol. Torrelarragoiti, P6-A3-1ª
	48170 Zamudio - Bizkaia (SPAIN)
Declares	
The product:	Four channel Receiver BOX M 240
Manufactures by	ELSON ELECTRÓNICA, S.A.
Under the trademark:	**SMINN**
For use in: enviroments.	Residential, Commercial or light industry

This device meets the provisions contained in the article 3 of the R&TTE1999/05/CE Regulation, as long as its usage is compilant 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)
Low Voltage	EN 60730-1:2000

2012-03-30 Zamudio

Jose Miguel Blanco Perez
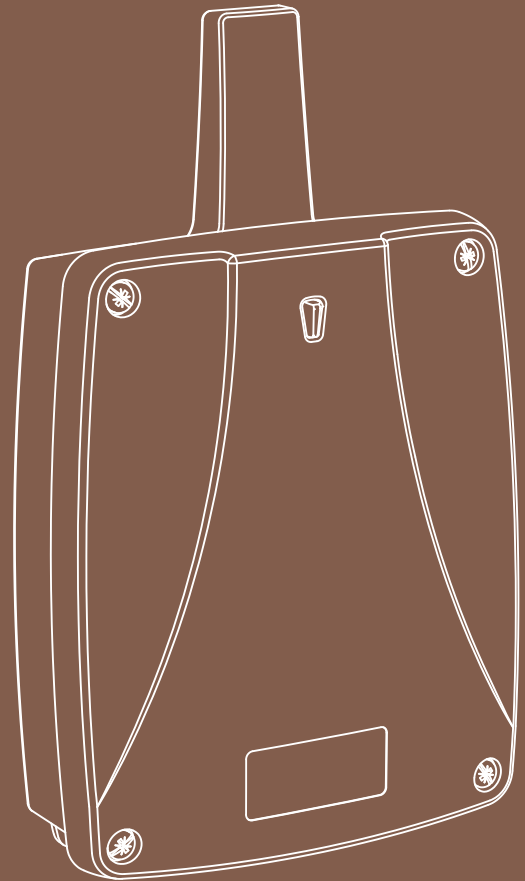Chief Technical Officer

SMiNN
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Rev. 2114

BOX **M** 240
FOUR CHANNEL RECEIVER

INSTRUCTION MANUAL

SMiNN
innovative in electronics

DESCRIPTION

SMINN's four channels receivers are developed with state-of-the-art electronic devices. They provide a high degree of operating reliability and security.
They are designed to provide the activation and movement order to SMINN motor controllers, alarms, access control and home automation systems, etc.
They are suitable for industrial, commercial and/or residential enviroments.

These devices are built using high quality materials and components and the latest technology. They are devices that observe the current regulations for usage in residential, commercial and light industry environments.

OPERATION

When a code from a SMINN emitter is recived, the receiver checks if it is already registered in any of 4 inserted memories. If it si registered and not blocked, the relay will activate.

ERASE MEMORY

The memory can only be erased using SMINN´s programming console and knowing its PIN, avoiding accidental or malicious erasures.

BLOCKING A CODE IN THE MEMORY

A transmitter code cannot be simply erased from the memory, but it can be blocked so it won´t work anymore. Blocking codes in the memory can only be done using a SMINN programming console and knowing its PIN.

TRANSMITTER RECORDING

SMINN BOX M receivers can store up to 2000 transmitters in each of the inserted memories (depending on memory capacity 500 / 1000 / 2000). Before recording any transmitter, we must make sure that the memories are formatted and configured correctly with an SMIINN programming console.

Security Level 1 (basic) .- Knowing the PIN it is possible to program a transmitter with the SMINN programming console that will just record itself in the receiver memory.

Security Level 2 (medium) .- Only a transmitter that is already recorded can grant permission for self-recording to transmitters with the same PIN.

Security Level 3 (high) .- Recording can only be done manually and with transmitters programmed with the installation PIN.

The first transmitter, which must be manually recorded, sets the working channel for the entire memory. Other transmitters may be recorded manually or via radio, usng the same channel as the first transmitter.

MANUAL RECORDING

To manually record transmitters using the PROG button follow these instructions:
  • Power on the device and wait 5 seconds
  • Press and hold the PROG button for the desired memory (PROG.1/4)
  • Press and hold the desired channel button of the transmitter we want to record.
  • Notice the blinking led (SCAN mode).
  • Wait for the validation beeps.
  • Release the transmitter button.
  • Release the PROG button (PROG.1/4).
Repeat these steps for each transmitter you want to record manually.

RECORDING VIA RADIO

Depending on the memory security level it is possible to record transmitters via radio (permission grant or invite).

Recording via permission grant (Security levels 1 or 2)
  • Press and hold the first and second buttons of a recorded transmitter (MASTER transmitter).
  • Wait until the transmitter led powers on (5 seconds).
  • Release the transmitter buttons (The led stays powered on, LEARNING MODE).
  • Make sure you are close to the receiver (1 to 10m).
  • Press and hold the first button of the MASTER transmitter.
  • Wait for the validation beep (Memory open for 8 seconds).
  • Press and hold the working channel button of the transmitter we want to record.
  • Wait for the validation beep.
  • Release the button of the new transmitter.

Recording via invite
A transmitter can be invited with an already recorded transmitter (security levels 1 and 2) or using an SMINN programming console (security level 1).
To invite a transmitter follow these instructions:
  • Press and hold the first and second buttons of a recorded transmitter (MASTER transmitter).
  • Press and hold the first and second buttons of a new transmitter (it must have the same PIN).
  • Wait until both trnasmitter leds power on (5 seconds).
  • Release the transmitters buttons (leds stay powered on, LEARNING MODE).
  • Place the MASTER transmitter close to the new transmitter, with its LED touching the SYNC AREA of the new transmitter.
  • Press and hold the first button of the MASTER transmitter.
  • Wait until the new transmitter blinks slowly 5 times.
  • Release the button of the MASTER transmitter.
  • Make sure you are close to the receiver (1 to 10m).
  • Press and hold the working channel button of the transmitter we want to record.
  • Wait for the validation beep.
  • Release the button of the new transmitter.

TRANSMITTER REPLACEMENT

With this function it is possible to replace a transmitter code from a memory with a new one. This functon is useful in case of loss or breakage.
This function can only be performed using the SMINN programming console and knowing the PIN of the installation and the code of the lost transmitter.

BACKUP COPY

Although the device is protected against power line disturbances and electrical surges, it is important to keep a backup of the memory card in case of breakdown or damages caused by external circumstances such as electric storms, theft, improper handling, etc.

INSTALLATION

SMINN´s receiver is designed to be easily fixed on a wall using the suplied 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. Take 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 he serigraphy of the circuit board. Make sure that the memory is inserted and properly configured. After programming and verifying the equipment, close the case with the supplied top.

SMINNRECEIVERSARE EQUIPPED WITH A LED TO LET KNOW IF THE DEVICES IS POWERED

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..

TECHNICAL CHARACTERISTICS

BOX M 240	433.92 MHz	230 VAC
BOX M 280	868.3 MHz	230 VAC
BOX M 244	433.92 MHz	12/24 VAC/DC
BOX M 284	868.3 MHz	12/24 VAC/DC

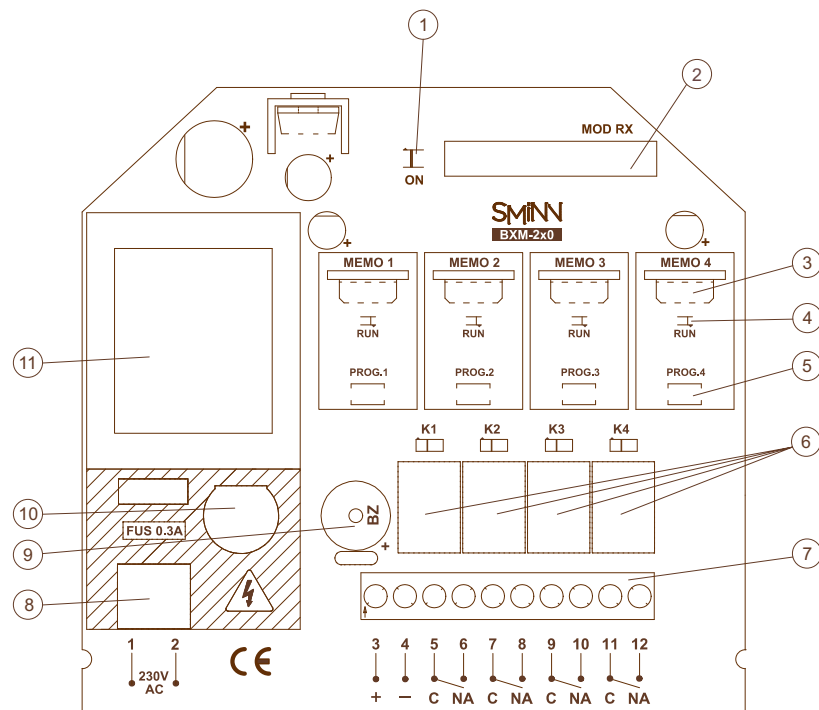## RADIO

Sensibility	< -115 dBm
Radio	Superheterodine
Encoding	High security Crypto/Rolling
Antenna	Internal helicoidal
Min./Max. consumption at 12/24VDC	20mA / 80mA

COMMON

Power suply	230VAC (125VAC / 24V AC/DC optional)
Code memorization	4 plug-in memories of 250 codes
Power output	+15 VDC
Memory expansion	500 / 1000 / 2000
Operation Temperature	-20ºC / +85º C
Dimensions	182 x 145 x 65 mm (antenna not included)
Watertight	IP54 - (IP65 with cable glands)

Fig.1

COMPONENTS

1. ON Led
2. Radio Module
3. Memory card
4. RUN Led
5. Radio PROG button
6. Relays
7. Terminal strip
8. Power connector
9. Buzzer
10. Fuse 0.3A
11. Transformer (Depends on model)

WIRING

Wiring is easy using the terminal block for three circuits.
Power input, power output and relays.

Term.	Function	Note
1	Power	Power input 230V AC / 24V AC/DC
2	Power	
3	Positive (+)	Power output 15VDC - 200mA MAX
4	Negative (-)	
5-6	N.O. Contact	Cannal 1 Relay
7-8	N.O. Contact	Cannal 2 Relay
9-10	N.O. Contact	Cannal 3 Relay
11-12	N.O. Contact	Cannal 4 Relay