

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:	Receiver + Base Station BXM-440
Manufactures by	ELSON ELECTRÓNICA, S.A.
Under the trademark:	SMINN
For use in: enviroments.	Residential, Commercial or light industry

This device meets the provisions 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)
Low Voltage	EN 60730-1:2000

2011-03-30 Zamudio

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BOX M 440

RECEIVER + BASE STATION

INSTRUCTION MANUAL



SMINN

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DESCRIPTION

SMINN's receivers + base station controllers are developed with state-of-the-art electronic devices. They provide a high degree of operating reliability and security. Equipped with a solid communication bus RS 485 that allows more mounting versatility and makes them more immune to interference. They are designed to provide the activation and movement order to SMINN motor controllers, alarms, access control and home automation systems, etc.

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 key-tag or emitter is received, the receiver + base station controller checks if it is already registered in the memory. If it is 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.

MANUAL PROGRAMMING

Step by step instructions on how to program a receiver are detailed next. The first code must be stored following all these steps.

TRANSMITTERS

1. Press and hold the MEMO RADIO PROG button (Fig.1 Item 4).
2. Press the button of the transmitter channel we want to learn that will be assigned to the corresponding relay. When receiving the code and channel sent by the transmitter, the receiver will store it in its memory and beep twice as a validation signal.
3. Release the programming button of the receiver.

Repeat this process with as many transmitter codes as you want to manually register in the memory, using the same channel as with the first transmitter. Pressing any other channel will not have any effect.

TAGS

1. Press and hold the MEMO KEY-TAG PROG button (Fig.1 Item 14).
2. Position the TAG to learn near the reader. When receiving the code sent by the TAG, the receiver will store it in its memory and beep twice as a validation signal.
3. Repeat this process for all the TAGS to learn.
4. Release the programming button of the receiver.

Holding a KEY-TAG near the reader for 10 sec. opens the memory enabling the user to learn new TAGS just by positioning them near the reader one by one without pressing the PROG button.

REGISTRATION VIA RADIO

Depending on the level of security configured in the receiver's memory it is possible to register transmitter codes via radio.

Security level 1 (Basic).- Transmitter can be programmed in invitation mode knowing the PIN (the certified number of the installation) using a SMINN programming console. Invited transmitters are automatically registered by level 1 receivers.

Security level 2 (Intermediate).- Transmitters already in use can INVITE new transmitters that share the same PIN (the certified number of the installation).

Security level 3 (Advanced).- Emitters will be registered in the receiver manually. Radio-based registration is disabled.

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.

Note: This function is not available for Key Tags.

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 Base-Station controller is designed 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. 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 the 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.

SMINN'S BASE STATION CONTROLLERS ARE EQUIPPED WITH A LED TO LET KNOW IF THE DEVICE 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.

WIRING

Wiring is easy using the terminal block for three circuits. Readers are connected using just 4 wires on the terminals 3 to 6, with two wires for power and two for the RS485 data BUS.

Terminal	Function	Note
1		
2	Power	230V AC power input
3	Positive (+)	Power output to readers/keypads
4	Negative (-)	
5	Line (A)	Apply to the BUS RS485 line
6	Line (B)	
7-8	NO contacts	Cannal 1 relay
9-10	NO contacts	Cannal 2 relay
11-12	NO contacts	Cannal 3 relay
13-14	NO contacts	Cannal 4 relay

The RS485 BUS is used in Half / Duplex mode with two wires: A and B. All elements of the BUS must have the same connection. A wires connected to A, and B to B (they must not be exchanged).

TECHNICAL CHARACTERISTICS

BOX M 440	433.92 MHz	230 VAC
BOX M 480	868.3 MHz	230 VAC
BOX M 444	433.92 MHz	12/24 VAC/DC
BOX M 484	868.3 MHz	12/24 VAC/DC

RADIO

Sensibility	< -115 dBm
Radio	Superheterodine
Encoding	High security Cryptocode
Antenna	Internal helicoidal
Min./Max. consumption at 12/24VDC	20mA / 80mA (without readers)

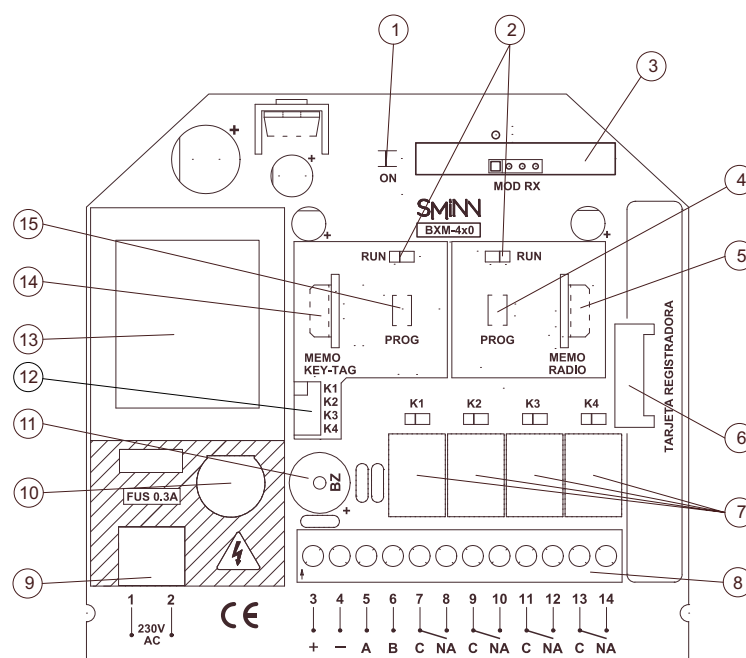
TAG

Type	Read-write 125KHz
Energy consumption	< 5W
Communication	BUS RS485 Half / Duplex
Encryption	High security encryption
Wiring	4 wire (recommended shielded cable CAT5)
Max. capacity of peripherals	2 RD125 readers + 2 KB120 keyboards
Maximun distance	> 200m

COMMON

Power supply	230VAC (125VAC optional)
Code memorization	Plug-in memory of 250 codes
Memory expansion	500 / 1000 / 2000
Operation temp.	-20°C / +85° C
Dimensions	182 x 145 x 65 mm (antenna not included)
Watertight	Ip54 - (IP65 with cable glands)

Fig.1



COMPONENTS

1. ON Led
2. RUN/Status/Error Leds
3. Radio Module
4. Radio PROG button
5. Radio memory card
6. Register card (optional)
7. Relays
8. Terminal strip
9. 230VAC power connector
10. Fuse 0.3A
11. Buzzer
12. Selector Switch
13. Transformer
14. Key-TAG memory card
15. Key-TAG programming button

Fig.2

GENERAL WIRING

