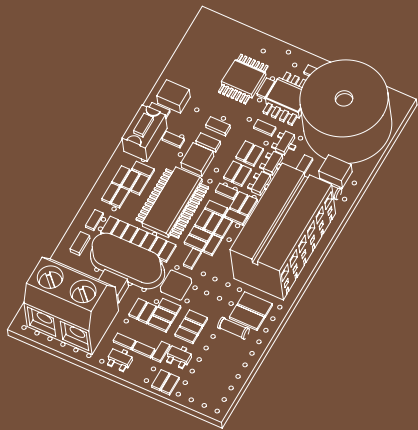# TRSH 868/434/315 B
RECEIVER CARD

INSTRUCTION MANUAL

SMiNN
innovative in electronics

DESCRIPCIÓN

SMINN's TRSH B series receivers are developed using state-of-the-art devices. They include a memory with capacity to store up to 35 transmitters. Its memorization capability via radio or using a simple push-button makes it easy and handy. They have a robust copy protection and anti-burglar system. They are designed to send the activation/deactivation order to SMINN motor controllers, alarm systems, access control systems, 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.

CE

OPERATION

When a SMINN transmitter's code is received, the receiver checks the integrity of that code and if it is registered in the memory. Once verified, it activates the corresponding relay.

INSTALLATION

SMINN radio cards have a 7-way connector compatible with most motor controllers' radio socket. Its use is only possible in other manufacturers' controllers when they meet the connection and powering requisites of the card. Screw the antenna into the corresponding terminal and adapt it into the box avoiding sharp bends. Proximity to metallic elements should be avoided. It should be separated as far as possible of the electric circuit to get the best reception.

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

Power must be disconnected before inserting or detaching the receiver card from the socket. Make sure that the memory is inserted and properly configured.

ERASE MEMORY

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

1. Disconnect the power supply of the equipment.
2. Press and hold the programming button (PROG).
3. Connect the power supply while holding (PROG).
4. Wait 8 seconds until the LED is switched on.
5. Release the programming button (PROG) for 2 sconds.
6. Press and hold the programming button (PROG).
7. The LED turns off.
8. Wait 8 seconds until the LED flashes.
9. Release the programming button (PROG).
10. 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 TRSH B series receiver cards can store up to a total of 35 transmitters with compatible PIN. Before registering transmitters, make sure they have the same PIN.
If it is the first installation, previously we have to delete and, optionally, customize the receiver's memory. 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 card. The rest of transmitters must be registered using the same channel key as the first transmitter.

MANUAL PROGRAMMING

To register transmitters manually using the programming button, proceed as follows:

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

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

Registration by invitation

1. Press and hold the registered transmitter's 1st and 2nd buttons (MASTER transmitter).
2. Press and hold the new transmitter's 1st and 2nd buttons (it must have the same PIN).
3. Wait for 5 seconds until the LED is on in both transmitters.
4. Release 1st and 2nd buttons of both transmitters (the leds remain on).
5. Take the Master transmitter's led near the new transmitter's SYNC area.
6. Press and hold the Master transmitter's 1st button.
7. Wait until the new transmitter's led flashes 5 times.
8. Release the Master's button.
9. Ensure you are close to the receiver to guarantee communication (1 to 10m).
10. Press and hold the new transmitter's button that corresponds to the channel that you want to register.
11. Wait for the validation beep
12. 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.

RECEIVERS' USAGE RESTRICTIONS

Operation is not guaranteed when installed in different equipment 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.

GUARANTEE

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 istallations which has been conceived for, considering any other as improper use.
The packaging must not be dumped in the environment. Keep this product, packaging, documentation, etc.. out of reach of children. Observe the local, national and 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 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.

CE DECLARATION OF CONFORMITY

The company	ELSON SISTEMAS, S. L.
	Pol. Torrelarragoiti, P6 – A3 – 1ª
	48170 Zamudio – Vizcaya (SPAIN)
Declares that	
The product	Card receiver TRSH 868/434/315 B
Manufactured by	ELSON ELECTRÓNICA, S.A.
Under the trademark **SMINN**	
Created for	Residencial, comercial and industrial use.

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:

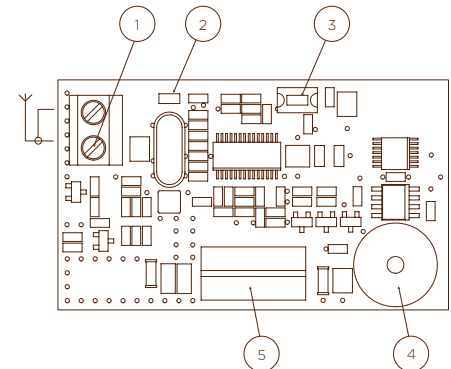|	
Telecomunications:	EN 300 220-1 v1.3.1 (2000-09)
	EN 300 220-1 v1.1.1 (2000-09)
Electromagnetic compatibility:	EN 301489-1 v1.3.1 (2001-09)
	EN 301489-3 v1.3.1 (2001-11)
Low tension:	EN 60730-1: 2000

Zamudio 2010.03.30

José Miguel Blanco Pérez
Chief Technical office

Fig. 1

COMPONENTS

1. Antenna connector
2. Led ON /RUN
3. Programming button
4. Buzzer
5. STOCKO the box connector

TECHNICAL CHARACTERISTICS

TRSH-315 B	315,00 MHz
TRSH-434 B	433,92 MHz
TRSH-868 B	868,30 MHz

Power supply	12V DC +/- 5%
Sensitivity	< -115 dBm
Radio type	Superheterodyne
Encryption	Evolutive Crypto Code
Memorizing codes	Internal memory of 35 codes
Receiver channels	1 to 4
Antenna	Borna External Antenna
Maximum consumption	20 mA
TA Operating	-20ºC - +85º C
Dimensions	56 mm x 33 mm