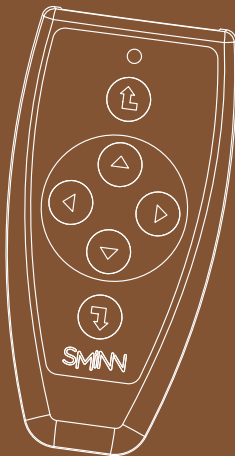


# TMC 640

## 6 CHANNEL TRANSMITTER

### INSTRUCTION MANUAL



### OPERATION

The transmitter has 6 buttons that can be activated independently or simultaneously to ease the movement of the platform, crane or commanded device.

The buttons are organized intuitively allowing maximum ease of use.

Inside the circle there are buttons for Forward, Backward, Left and Right, and outside the circle for Up and Down.

When the button is released the transmitter stops emitting.

Each transmitter has a unique serial number and a PIN code that allows usage only with receivers with the same PIN. To modify the PIN code an SMINN programming tool is required.

### TRANSMITTER LEARNING

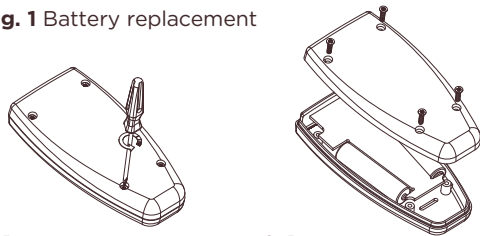
This transmitter is designed to work with the BOX M 640 receiver that decodes the received signal and avoids activation of complementary outputs like Up and Down or Left and Right.

The receiver can store up to 35 different transmitters. Transmitter learning can only be done manually via switch.

### BATTERY REPLACEMENT

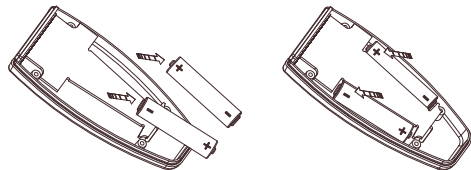
The transmitter is powered with 2 AAA 1.5V batteries that have an average life of 2 years with 10 transmissions per day. Transmission duration, operating temperature and other factors can affect battery life. When the battery is starting to wear out, the range of the transmitter will decrease and the led will flicker with less light. When that moment comes, replace the battery with another one of the same type and quality, considering polarity. The transmitter will continue working properly. See Fig.1

**Fig. 1** Battery replacement



**1.** Remove screws

**2.** Remove cover



**3.** Pull out the dead batteries

**4.** Insert the batteries

**ATTENTION TO POLARITY**

### 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.

### USE LIMITATIONS

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

## WARNING

This product must be used in installations 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 (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.



REV.3016

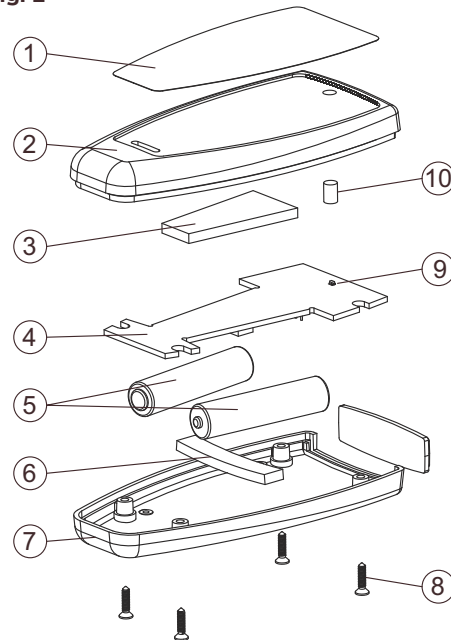
## TECHNICAL CHARACTERISTICS

<b>TMC 640</b>	6 channels
Frequency	433.92MHz +/-75KHz
Encoding	Evolutive Crypto Code 72 bits
Power	Battery AAA 1.5V
Battery life	2 years aprox. depending on use
Power in standby	Lower than 0.0005mA (0.5uA)
Power in operation	20mA
Radiated power	<10mW for 434.92 MHz
Range outdoors	Up to 200m
Nominal range	100m
Operating temperature	-20 / +65°C
Degree of protection	IP40
Size	100x50x18 mm

**Note:** Other electronic devices, such as radio ear plugs, alarms and radio operated cranes can influence negatively in the range of transmitters that work in the same frequency band.

## COMPONENTS EXPLOSION

Fig. 2



- |                        |                  |
|------------------------|------------------|
| 1 - Cover              | 6 - Battery felt |
| 2 - Case top           | 7 - Case bottom  |
| 3 - Keyboard felt      | 8 - Screws       |
| 4 - Electronic circuit | 9 - Led          |
| 5 - AAA 1.5V battery   | 10 - Led visor   |

## CE DECLARATION OF CONFORMITY

The company ELSON ELECTRONICA, S.A.  
Pol. Torrelarragoiti, P6-A3  
48170 Zamudio-Bizkaia (SPAIN)

Declares  
The product: TMC 640 6 channel transmitter  
Under trademark: **SMINN**  
For use in: Residential, Commercial or light industry environments.

This device meets the provisions as long as its usage is compliant to what was envisaged, having applied the following regulations:

Electromagnetic compatibility:	2004/108/CE
Low Voltage	2006/95/CE
FCC Regulations	Part 15

Low Power Transmitters Communications Commission  
This equipment must endure any external radio-electrical interference and should not cause any detrimental interference to other systems.  
Meeting the provisions of this regulation, any modification or adjustment to the product that may alter its characteristics or the functionality it has been developed for are entirely prohibited.

2014-12-10 Zamudio

Jose Miguel Blanco Perez  
Chief Technical Officer

**SMINN**

innovative in electronics