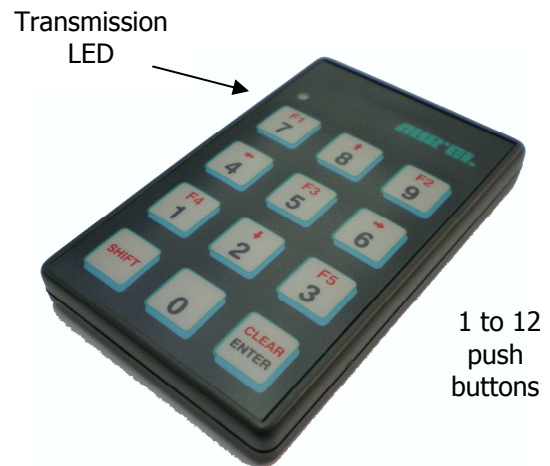


# Trasmitter RF SAW 12 CH Keeloq\* HCS301 Encoder

TX 12CH EVO is a keyfob equipped with a dynamic code [HCS301] encoder and a unique lithium battery able to assure from 3 to 5 years antonomy. Ideal for applications where an high grade of safety and an high number of channels is required.

I must be used in comination with our receivers HCS-DEC4/F or HCS-DEC4/4B (binary output) able to manage all push-buttons stated on the keyboard.

When the battery level is low, transmission led start to blink showing to the user that it has to be replaced.



## How to use

By pressing and releasing any of the provided push buttons, the red LED will light up showing that the transmission of the code on the related channel is in progress.

Through a 4 bits binary code the transmission of one channel at a time can be activated.

While pressing at the same time 2 pushbuttons, no transmission is generated.

## Technical features

	Min	Typical	Max	Units
<b>Carrier's Frequency</b>	433.82	433.92	434.02	MHz
<b>Radiated Power [E.R.P.]</b>		1.0		mW
<b>Modulation</b>		OOK		On-Off Keying
<b>Power Supply (CR2032)</b>	2.2	3	3.3	V
<b>Power consumption in Tx</b>		10	13	mA
<b>Power consumption in stand-by</b>		0		uA
<b>Battery life</b>		3 (1)	5	years
<b>Serial ID code</b>		28		bit
<b>Hopping code</b>		32		bit
<b>Combinations</b>		$2^{32}$		-
<b>Operating Temperature</b>	-10		+55	°C
<b>Dimensions</b>	54 x 85.5 x 10.5			mm

**1:** Avarage estimated time in TX is 70 sec per day (same as 14 trasmissions of 5 sec).

\* Keeloq is a Microchip Trade mark

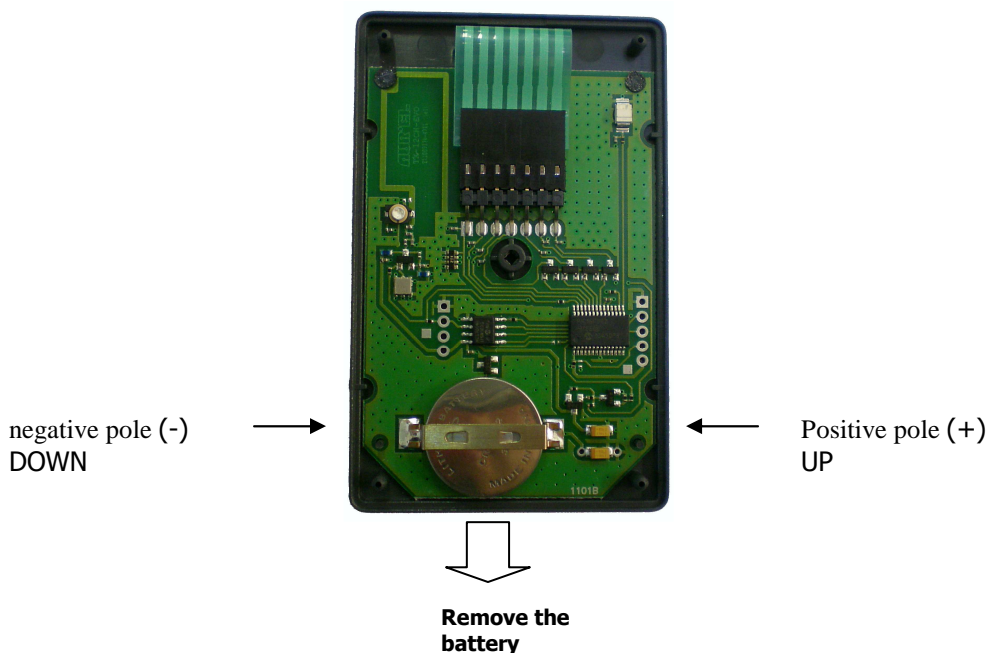
## Battery replacement

When the transmission LED's light is blinking, the supply battery must be replaced.

Remove then the screw on the back side of the radio transmitter and carefully open the plastic cover.. Once the old battery have been removed, fit the new one **CR2032 3V** [**NOTE: use only battery models as specified in back cover**] by paying very much attention not to invert the polarity (see figure). Close then the transmitter plastic shall, paying attention not to damage the integrated circuit.

Should the battery leaking, replace it immediately and clean the battery's casing paying attention not to enter into contact with leaked substances. After such operation wash carefully your hands.

Do not waste the old batteries in the environment but place them inside the containers provided at this purpose, in order to facilitate their disposal.



## CEPT 70-03

TX 12CH EVO is in compliance with this rule thanks to its 1mW on frequency band 434 MHz and it is equipped with an auto shut off within 20 seconds while a specific pushbutton is kept pressed.

## Reference rules

The TX 12 CH EVO is conform to the following normative:

- ETSI EN 301 489-3 V1.4.1 – Electromagnetic compatibility
- ETSI EN 300 220-2 V2.3.1 – Radio aspects
- EN 60950 – Other aspects