

# ERONE 433

## EXTERNAL MINI RECEIVER

MANUAL  
INSTALLATION



**SEL 2641 R433-Z1**  
**SEL 2641 R433-Z2**  
**SEL 2641 R433-Z4**

*Thank you for choosing a product Erone. You are recommended to read carefully this manual before installing the product.*

### 1 - DESCRIPTION

#### 1A - Introduction

The receiver ERONE 433 mod. SEL2641 R433IP is a component of the radiocontrol ERONE 433, designed for the control of automatic closing systems and anti-burglar systems, thanks to its very high security coding system (KeeLoq® Hopping code). The operating frequency is among the European harmonised frequencies; the product fully complies with the EMC European Regulations (CE) The code sent by the transmitter changes at every activation, avoiding any scanning and copying risk.

A special algorithm allows to keep synchronized transmitter

and receiver. The receiver has up to 4 output relays (depending upon the model, with NO and NO/NC contacts, and can be connected to many types of mechanics (gate, garage door, rolling shutters, awnings, anti-burglar appliances, lighting, etc.). All the receivers of the range Erone 433 can store into the EEPROM a serial number, a manufacturer key and a synchronism algorithm of more transmitters. The programming can be done in self-learning mode by means of one button. The housing protection of IP65 allows external installations. The receiver is produced in 3 versions, with 1, 2 or 4 output relays.

The appliance fully complies with the European Regulations 89/336/EEC, 73/23/EEC and EN 60336-1.

## MODELS

The receiver is produced in the following models:

SEL2641R433-Z1 : 1 Relay external mini receiver

SEL2641R433-Z2 : 2 Relays external mini receiver

SEL2641R433-Z4 : 4 Relays external mini receiver

## 2 - TECHNICAL SPECIFICATIONS

Receiver type	Supereheterodyne
Carrier frequency	433,92 MHz
Local oscillator frequency	6.6128 MHz
Demodulation	AM/ASK
Local Oscillator	VCO / PLL
Channel width	> 25 KHz
Intermediate frequency	10.7 MHz
Input sensitivity	-115 dBm
Local oscillator spurious emissions	< -57 dBm
Input load:	50 Ohm
Power supply:	12 / 24 Vac/dc
Consumption:	
Steady / 12 Vdc ( 2 relays excited)	15 mA / 49 mA
Steady / 24 Vdc ( 2 relays excited)	19 mA / 55 mA
Max applicable power	24VA
Relay number	1, 2 or 4
Contacts	NO, NO/NC
Memory capacity	85 user codesTX
security code	Rolling code
Max code combination number	2 <sup>64</sup>
Operating temperature	-20°/+70°C
Housing protection	IP65
Weight	gr. 130
Overall dimensions (mm)	80 x 80 x 50

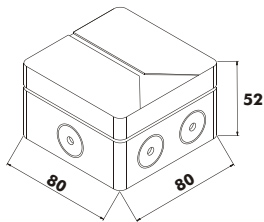


Fig. 1

## 3 - COMPOSITION

The receiver is composed by :

- 1 box with electronics
- 1 cover
- 2 screws
- 2 gumm taps
- 1 antenna net
- 2 screws with plugs

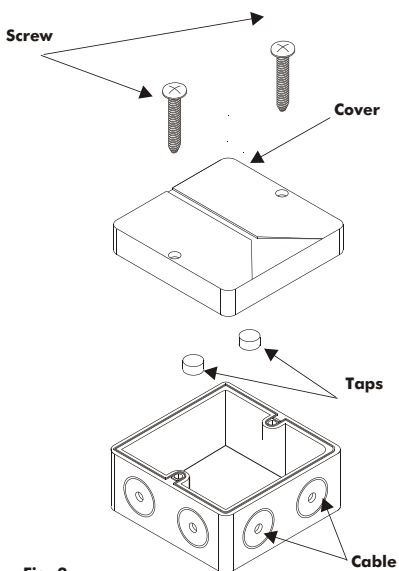


Fig. 2

## 4 - INSTALLATION

### 4.1 - Positioning

The receiver allocation is very important for the best operation of the system. Place the receiver far from interference sources as big magnetic fields, informatic systems, radio emissions. The installation and the antenna positioning is very important for the best receiving as well.

## 4.2 - Fixing

Remove the receiver cover. T  
Fix the box by using the screws and the plugs supplied

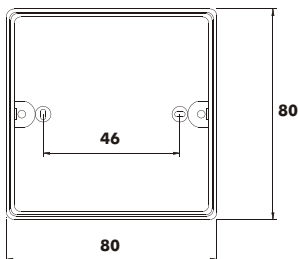


Fig. 3

At the end place the taps supplied over the holes to protect the screws head.

## 5 - LAYOUT E CONNECTIONS

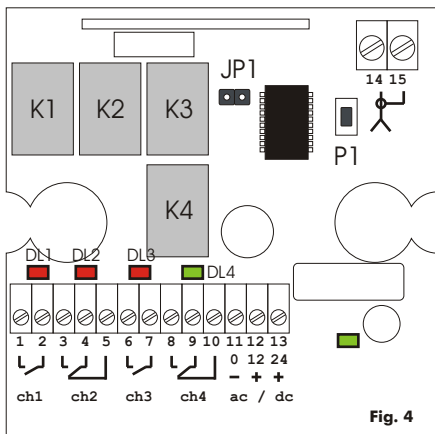


Fig. 4

## 5.1 - Contacts

terminal 1 =	Contact NO Relay1
terminal 2 =	Contact C Relay1
terminal 3 =	Contact NO Relay2
terminal 4 =	Contact C Relay2
terminal 5 =	Contact NC Relay2
terminal 6 =	Contact NO Relay3
terminal 7 =	Contact C Relay3
terminal 8 =	Contact NO Relay4
terminal 9 =	Contact C Relay4
terminal 10 =	Contact NC Relay4
terminal 11 =	Input supply Common
terminal 12 =	Input supply +12 Vac/dc
terminal 13 =	Input supply +24 Vac/dc
terminal 14 =	Pole Antenna
terminal 15 =	GND Antenna

## 5.2 - Relay K4 Configuration

The relay K4 can be configured in step mode. Close the jumper JP1.



**JP1 = CLOSED**  
**K4 Pulse**



**JP1=OPEN**  
**K4 Pulse mode**

## 6 - TX PROGRAMMING

### Memorizing

The receiver makes the memorization of the transmitters buttons in sequential way.

Keep the button **P1** pressed down until the red led **DL1** switches on ; release **P1** and push the key "A" of the transmitter ; after push again **P1**, the second red led **DL2** switches on ; release **P1** and push the key "B" of the transmitter. After a while both the led will switch off and the procedure will be finished. In this way the keys "A" and "B" of the transmitter activate the relays K1 and K2 of the receiver.

The procedure to follow for the keys "C" and "D" is the same as above. For the memorization of the "C" key on **K3** push **P1** 3 times, and for the memorization of the "D" key on **K4** push **P1** 4 times.

## 7 - USABLE TRANSMITTERS

The receiver types SEL2641R433-Z1, Z2, Z4 can be used with the following types of ERONE 433 Series transmitters:

- **SETR 2641 E2, SETR2641E2M, SETR2641E4**
- **SETR 2641AM2, SETR 2641-TM**

## 8 - TX ERASURE

### Single transmitter erasure

Keep the button **P1** pressed down until the first red led **DL1** switches on ; push the key "A" of the transmitter to cancel : if this one was stored, it is cancelled: at the end of the operation both the led **DL3** and **DL4** blink 2 times a to confirm .For the erasure of the key "B" of the transmitter push 2 times **P1**. The second position is shown by the flash of the second red led **DL2**; at this point activate the key "B" of the transmitter to cancel.

### Complete erasure

Keep the button **P1** pressed down until the first red led **DL1** switches on, release it, push it again and keep it pushed down until 3 blinks of the red led **DL3** and green led **DL4** occur. In this way the memory is completely cancelled.

## 9 - N° OF STORED TX DISPLAY

It is possible to display the number of the transmitters stored in the memory. Push 2 times **P1**: at this point a sequence of 7 flashes of **DL3** and **DL4** commences: this sequence represents the number of stored transmitters, expressed in binary annotation. Referring to the table below and the next example it is possible to find the corresponding decimal number:

Led on	1°	2°	3°	4°	5°	6°	7°
value DL4	1	2	4	8	16	32	64
value DL3	0	0	0	0	0	0	0

### Example :

Led sequence: DL3, DL3, DL4, DL4, DL3, DL3, DL3.

Number: 0 + 0 + 4 + 8 + 0 + 0 + 0 = 12

Than the receiver has 12 stored transmitters .

### MEMORY FULL

In case of full memory, that means **85** transmitters are already stored, if one try to store an extra transmitter, a sequence of 3 blinks of **DL3** and **DL4** occurs and the operation fails.

**The guarantee period of all Erone products is 24 months, beginning from the manufacturer date. During this period, if the product does not work correctly, due to a defective component, the product will be repaired or substituted at the discretion of the producer. The guarantee does not cover the plastic container integrity. After-sale service is supplied at the producer's factory.**

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