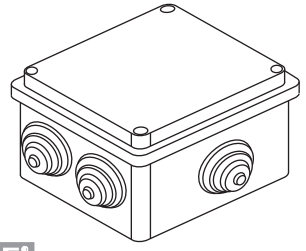
ERONE 433



MANUAL FOR INSTALLING

ERONE THE SMART LIVING

SELW2630MF

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

SUMMARY

1 - INTRODUCTION

1A - Description

The receiver SELW2630MF is a superheterodyne AM/ASK receiver which can work simultaneously in 2 frequencies (when equipped) 433,92 MHz and 868,30 Mhz. The appliance can convert the radio signal coming from Erone transmitters (see compatible transmitter list) in a 26 or 30 bit Wiegand signal. The device is housed in a IP55 enclosure. Hereby, CDVI Wireless Spa, declares that the radio equipment type SELW2630MF is in compliance with directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.erone.com.

1B - Compatible transmitters

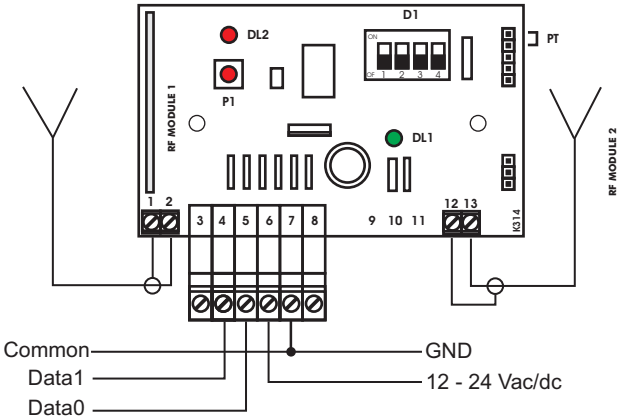
- ERONE Series 024A - Type S2TR2641E2-E4: Transmitter 2-4 ch
- ERONE Series MINI - Type SETR2641AM1-AM2: Transmitter 1-2 ch
- ERONE Series 074A - Type S7TR2641E4: Transmitter 4 ch
- ERONE Series TM - Type SETR2641-TM: Wall Transmitter 4 ch
- ERONE Series 034A - Type S3TR2641T1-T2-T4: Transmitter 1-2-4 ch
- ERONE Series 028A - Type S2TR2681E2-E4: Transmitter 2-4 ch 868 Mhz

1C - Technical specifications

Receiver type:	Superheterodyne.
Demodulation:	AM/ASK.
Operating frequency:	433,92 MHz.
Local oscillator frequency:	6,6128 MHz.
Intermediate frequency:	10,7 MHz.
Sensitivity:	-115 dBm.
Input impedance:	50 Ohm.
Power supply :	12 ÷ 24 V ac/dc.
Consumption:	24 mA
Outputs:	Wiegand (26 / 30 Bit).
Max output current:	250 mA
Operating temperature:	-20 ÷ + 70 °C.
Dimensions:	109 x 109 x 56 mm.
Weight:	65 gr.
Housing protection:	Ip55

1D - Layout

P1 : Programming push-button
DI2 : Led RED (programming)
D1 : 4-ways Dip-switch
RF1: connector card 433 Mhz



1E - Wiring

1	GND Aerial 433 MHz
2	Input aerial 433 MHz
3	Not used
4	Output Wiegand DATA1
5	Output Wiegand DATA0
6	Power supply 12 - 24 Vac/dc
7	Common Wiegand / GND
8	Not used
9	Not used
10	Not used
11	Not used
12	GND Aerial 868 MHz
13	Input aerial 868 MHz.

IMPORTANT

The receiver allocation is very important for the best operation of the system.Place the receiver far from interference sources such as big magnetic fields or radio emissions. The installation and the positioning of the antenna is very important as well. Before installing the antenna it's advisable to make some tests on the site. Use shielded cable type RG58 (impedance 50 Ohm) for the antenna connection.

2- DIP-SWITCHES SETTINGS

	ON	OFF
DIP1	**Bit «26», «27», «28», «29» info channel**	**Bit «26», «27», «28», «29» Fixed at 0**
DIP2	**Output 30 bit**	**Output 26 bit**
DIP3	**Pull-up (4,7KOhm) connected**	**Pull-up unconnected**
DIP4	**Not used**	

3- FACTORY SETTINGS

The information sent by the transmitter is composed by 4 main parameters: MANUFACTURER KEY, FACILITY CODE, SERIAL NUMBER and BUTTON TYPE.
If no memorization is done, the receiver is TRANSPARENT : it means that it converts in wiegand format the information (Facility code +Serial number+ Button) of ANY transmitter. If the memorization is carried out, it will convert in wiegand format only the information of the transmitters memorized.
NOTE : the receiver DOESN'T MEMORIZE the SERIAL NUMBER of the transmitters. It keeps in memory only a combination of data: Facility code+button type

4- TRANSMITTERS MEMORIZING

Before commencing the procedure make sure that the power led L1 is ON.
The EEPROM of the receiver is capable to store up to 50 different combinations: "Facility code - Button type". The button type of each transmitter can be A, B, C, D.
Combinations of this type can be, for example:
001-A, 001-B, 002-B, 003- B, 010-D, where 002 is the Facility code and B is the transmitter button and so on. Combinations as A+B or C+D are not allowed.

Transmitter button A programming
1) Keep the button P1 pressed down until the led L2 turns on and release it.
2) Press the button A of the transmitter which has to be accepted.
3) The led L2 turns off and then make a short flash.

After this operation, the receiver will accept and send out the Facility code and the S/N of all the transmitters with the same Facility code and the same button of the one used for the initialization. See below to get the signal out using more combinations : buttons B, C or D.

Transmitter button B or C or D programming
1) Keep the button P1 pressed down until the led L2 turns on and release it.
2) Press the button B of the transmitter which has to be accepted
3) The led L2 turns off and then make a short flash.

NOTE : Any operation not allowed (memorization with full memory, memorization of codes already stored) causes a double quick flash of led L2.
A transmitter with wrong manufacturer key is signalled during the memorization with a long flash of L2

5- DISABLE OF THE FACILITY CODE CHECK

It is possible to disable the check performed by the receiver on the facility code of the received signal.
At the end of the following procedure, the receiver accepts any facility code and maintains the check on the button code.
This new configuration of the receiver is temporary and can be restored by carrying on the same procedure.

1) Keep the button P1 pressed down until the led L2 turns on and then release it.
2) Within 1 sec. press again P1.
At this point the led L2 start to blink for 5 sec. : the receiver accepts any facility code.
Repeat the phases 1 and 2 to cancel the operation and to recover the initial state.
L2 first will blink and then will come back to solid light for 5 sec.: the facility code checking is restored.
If a power failure occurs after the phase2 the new configuration is mantained.

6- VISUALIZATION

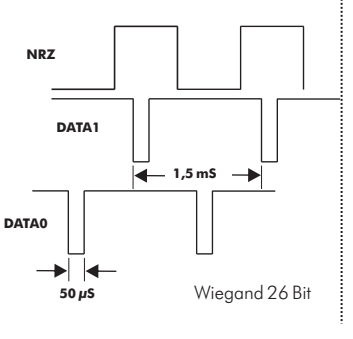
- A flash of 1 second of L2 indicates that a correct signal has been received and that the correct frame in wiegand format has been sent from the outputs DATA0 and DATA1.
- If L2 blinks quickly it means that the combination is not memorized (a different button or a different Facility Code)
- A long flash of L2 indicates a transmitter with wrong Manufacturer key

7- MEMORY ERASURE

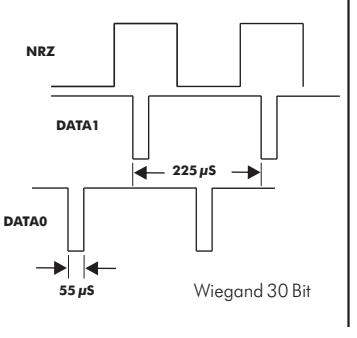
This procedure allows to erase the memory of the receiver.
1) Keep button P1 pressed down until L2 turns on.
2) Release P1 and then press it again until L2 start to flash 3 times.
At this point the settings stored are cancelled, and the receiver accept any transmitter code, as a new product.

8- WIEGAND SIGNAL FORMAT

The timing of the signals DATA0 and DATA1 are the following:



Wiegand 26 Bit



Wiegand 30 Bit

9- FRAME ARCHITECTURE

The 26-Bit Wiegand datagram is composed by as follows:

P1	Facility code	TX Serial Number	P2

LEGEND :

P1 = Parity even calculated over the first 12 bit : First bit coming out
Facility code = 8 bit
Serial Number = 16 bit
P2 = Parity odd calculated over the last 12 bit: Last bit coming out

The 30-Bit Wiegand datagram is composed by as follows:

P1	Channel	Facility code	TX Serial Number	P2

LEGEND :

P1 = Parity even calculated over the first 14 bit : First bit coming out
Channels = 4 bit
Facility code = 8 bit
Serial Number = 16 bit
P2 = Parity odd calculated over the last 14 : Last bit coming out

10 - CHANNELS ENCODING

CHANNEL A : 1010
CHANNEL B : 0101
CHANNEL C : 1000
CHANNEL D : 0001

GUARANTEE

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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