

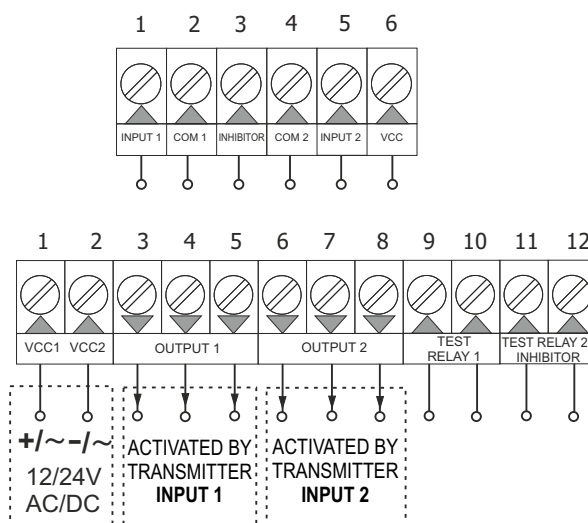
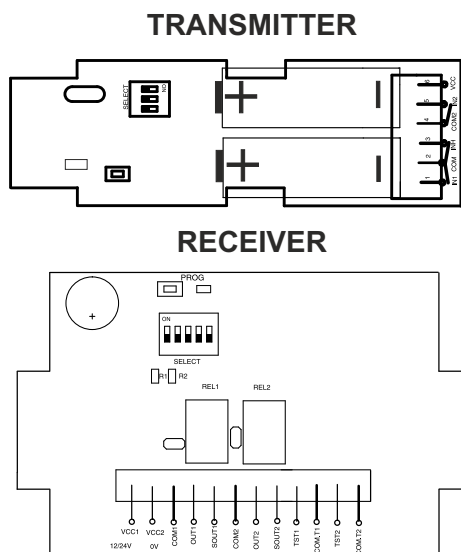
1. GENERAL

- Two channel wireless system communication for either optical, resistive or mechanical safety edges.

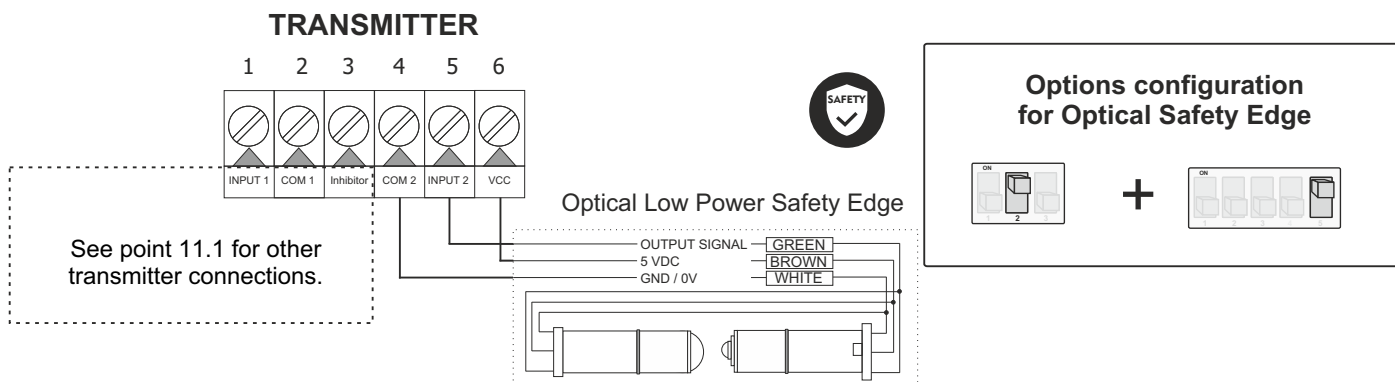
1.1 SAFETY INSTRUCTIONS

- Reaction time < 60ms. (according TÜV test report AV86368T **Certificate n° M6A 0908000001 Rev. 01**)
- A Relay test should be done before any operation in order to fulfill EN13849-1-2015 Cat2 PL-C.

2. TRANSMITTER AND RECEIVER TERMINAL CONNECTIONS



3. TRANSMITTER - REGULAR CONFIGURATION FOR OSE



4. SLEEPING MODE SETTING UP FOR OPTICAL LOW POWER SAFETY EDGE

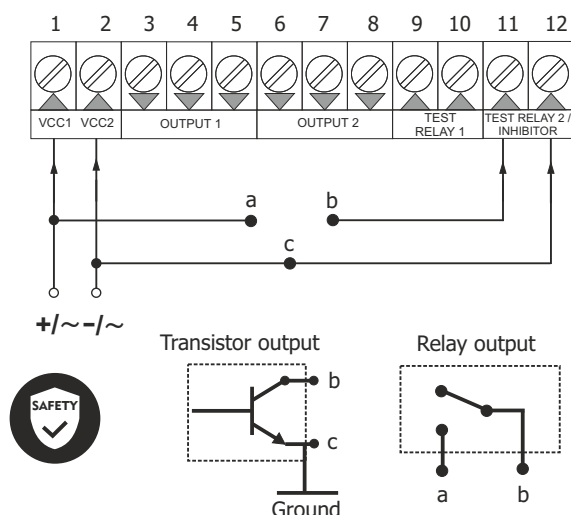
Sleeping mode disconnects the Optical Safety Edge (OSE) power supply from transmitter when no signal is received in 11-12 input. When signal is detected, connects the power supply during the door manoeuvre. There are 2 sleeping mode configurations depending on control unit output (Pulse or level signal) and without* sleeping mode.

Signal type	Pulse	Level
Receiver	point 4.1	point 4.2

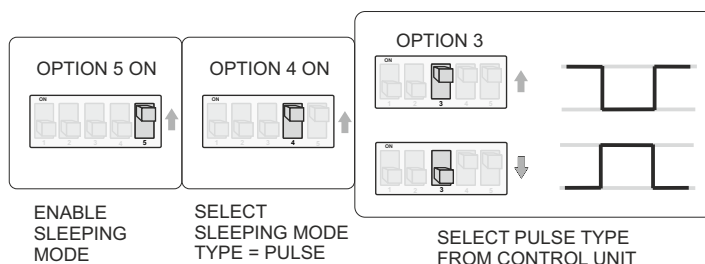
WARNING!!

***Sleeping mode is highly recommended due to optimize energy consumption when using an optical safety edge. If skip sleeping mode, battery life will decrease to 6 months. Desired transmitter and receiver options must be set before code memorisation for proper use.**

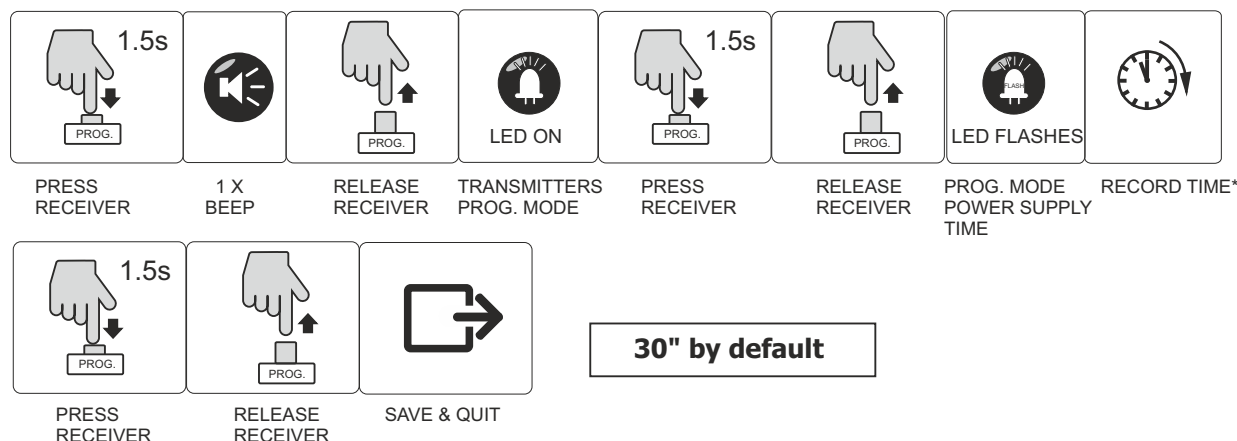
4.1 PULSE FROM CONTROL UNIT



- Pulse signal before each manoeuvres is needed.
- For the control unit pulse output, must program the optical safety edge power supply time (equal or more than door manoeuvre time)(follow point 4.1.1).

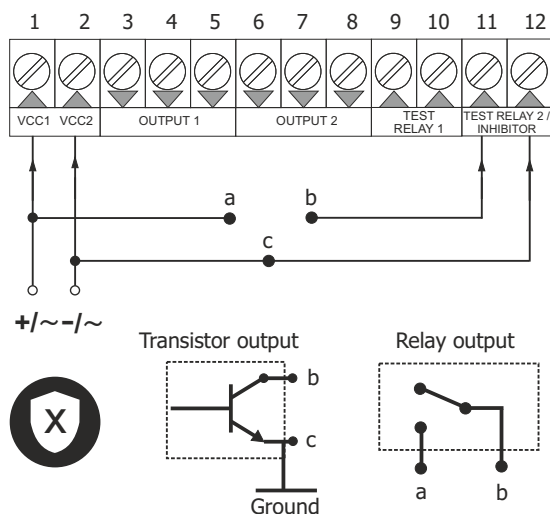


4.1.1 OSE POWER SUPPLY TIME PROGRAMMING PROCESS (only with OPTION 4 & 5 - ON)

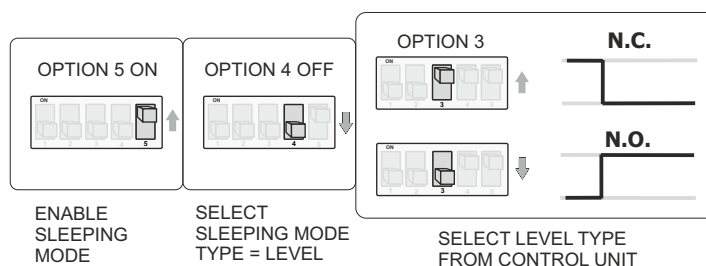


* Record the optical safety edge power supply time. (Equal or more than door operation time).

4.2 LEVEL SIGNAL FROM CONTROL UNIT (POSITIONING CONTACT N.O. or N.C.)

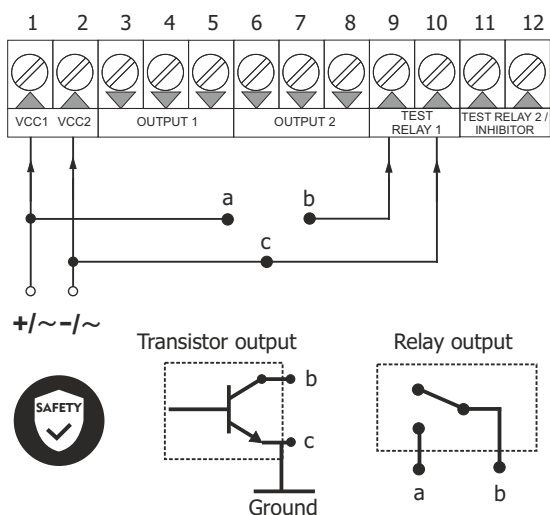


Before each maneuver there must be a signal that must be active during the maneuver to wake up the power supply of the optical safety edge.

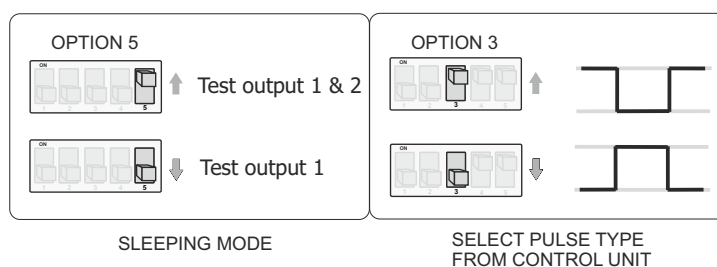


5. TEST SETTING UP

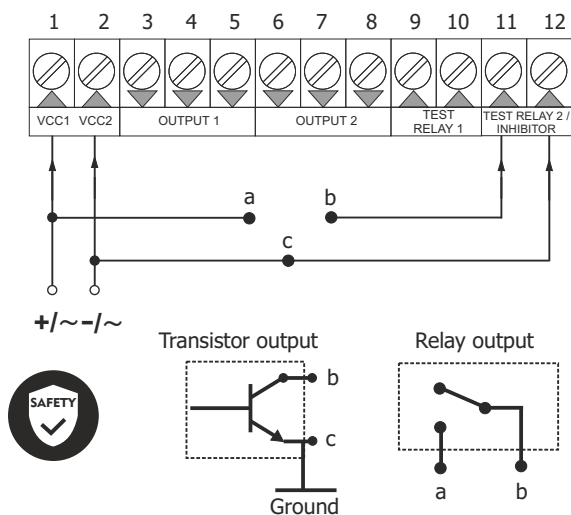
5.1 TEST RELAY INPUT 1 CONFIGURATION (9-10)



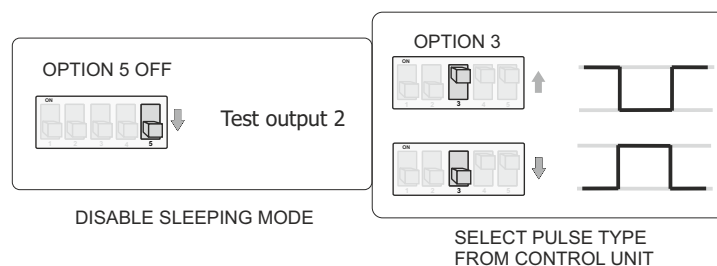
- Pulse signal before each manoeuvres is needed.



5.2 TEST RELAY INPUT 2 CONFIGURATION (11-12)



- Pulse signal before each manoeuvres is needed.



6. RECEIVER OUTPUTS CONNECTIONS

Normal conditions, safety edge deactivated.	Fail / Sensor active / Sensor not memorized	
		WITH BRIDGE SELECTOR *Only 3-4 & 6-7 outputs
		WITHOUT BRIDGE SELECTOR

7. RECEIVER LED INDICATOR

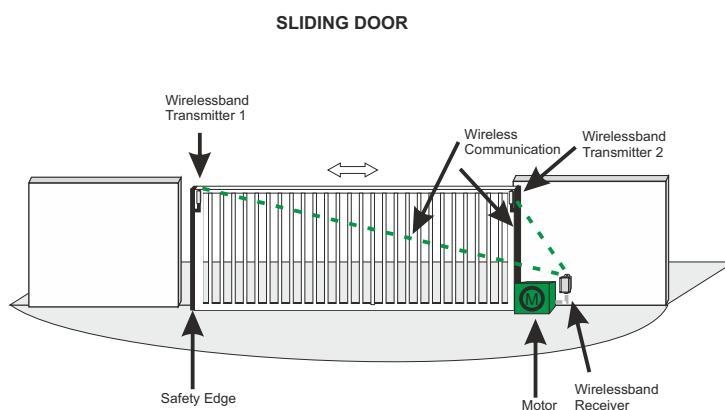
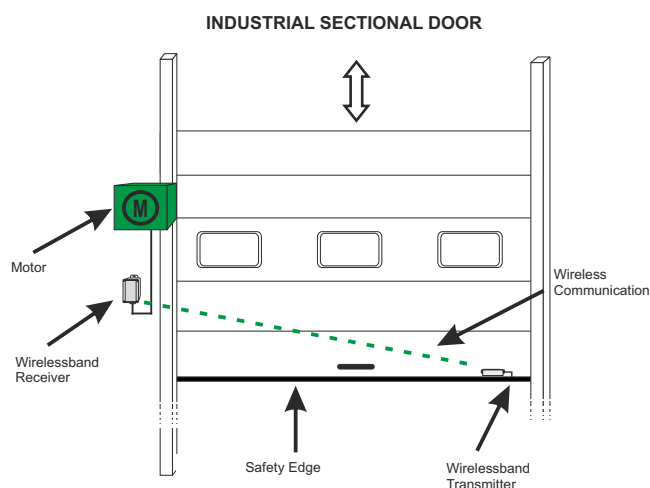


LED ON - Security OK

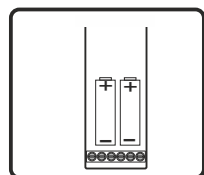


LED OFF - Obstacle detected

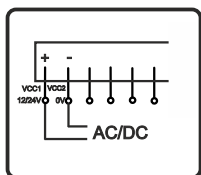
8. MOUNTING



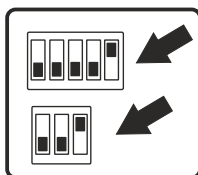
9. START-UP



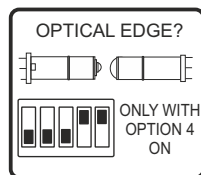
1. INSERT BATTERIES



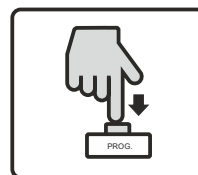
2. CONNECT RECEIVER



3. CHECK SWITCH SETTINGS

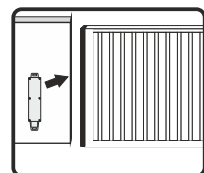


4. SAFETY EDGE TYPE CONFIGURATION (SEE POINT 11.2)

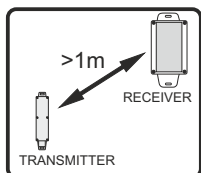


5. CARRY OUT PROGRAMMING PROCESS (SEE POINT 10.)

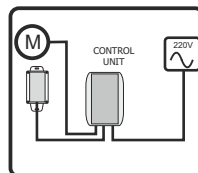
*In kits, transmitter and receiver are already paired.



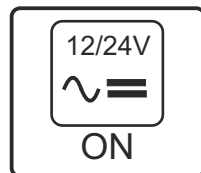
6. INSTALL WIRE TRANSMITTER



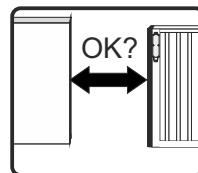
7. MINIMUM DISTANCE 1 m.



8. INSTALL WIRE RECEIVER



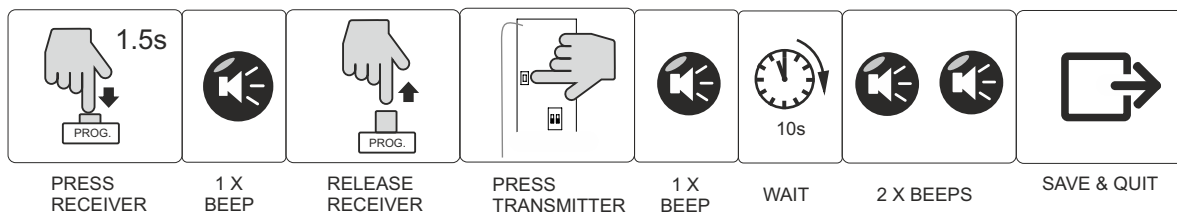
9. TURN ON POWER SUPPLY



10. TEST SAFETY EDGE ON DOOR.

10. PROGRAMMING PROCESS

TRANSMITTER MANUAL PROGRAMMING (up to 7 transmitters per receiver)



MEMORY RESET



MEMORY FULL INDICATOR

Several beeps for 10 seconds when trying to memorize a new transmitter. The system can store 7 transmitters per channel.

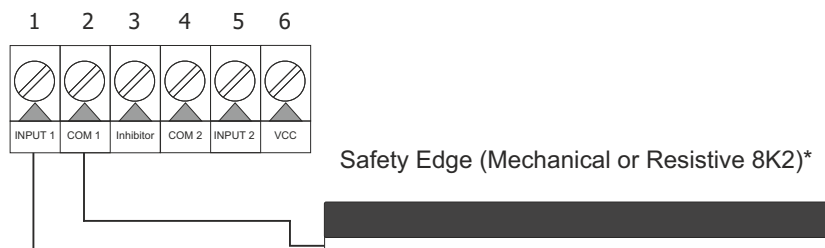
LOW BATTERY INDICATOR

4 beeps each time a message is received from a programmed transmitter. Both, warning LED and buzzer are activated simultaneously.

11. OTHER CONFIGURATIONS

11.1 TRANSMITTER

Input 1 Safety Edge (Mechanical  or Resistive 8K2 )



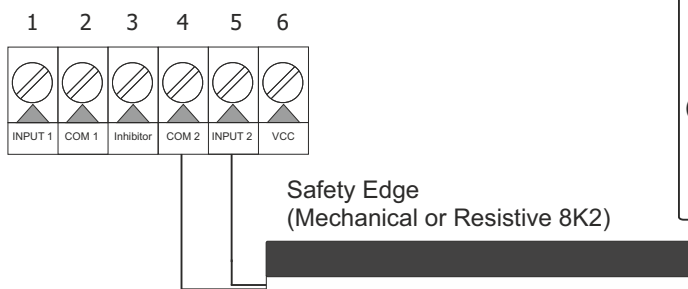
*Choose the Safety Edge type with transmitter option 1

Resistive

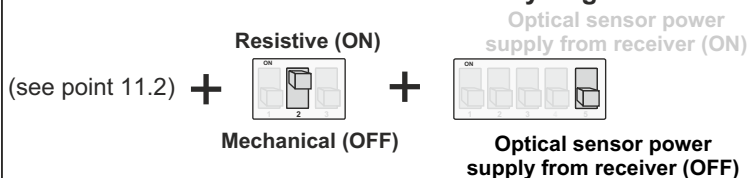


Mechanical

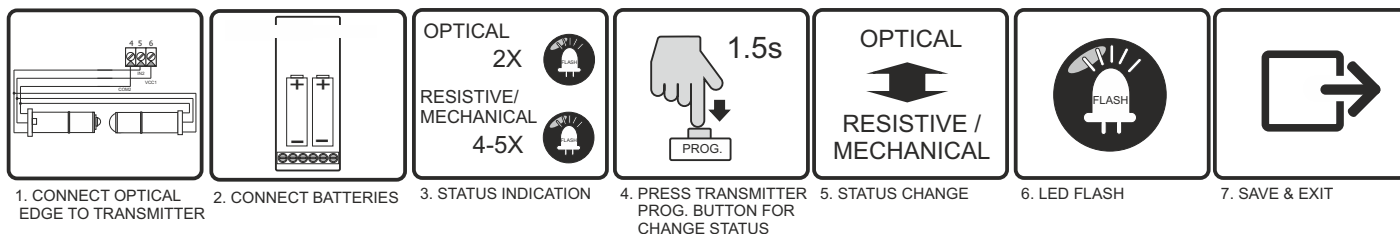
Input 2 Mechanical or  Resistive 8K2 
Safety Edge



Transmitter and receiver options configuration for Mechanical or Resistive Safety Edge



11.2 Input 2 LOW POWER OPTICAL SAFETY EDGE or RESISTIVE PROGRAMMING PROCESS



Default optical configuration.

You have 5 seconds after battery connection to make the change of safety edge status. If you want to change again the status, please remove and connect batteries again.

12. RECEIVER OPTION SELECTOR

CLASS 2		Enabled (Conforms UNE-EN 13849-1-2015) 
		Disabled* 
TRANSMITTER FREQUENCY***		869,85 MHz
		868,95 Mhz*
RELAY TEST/ SLEEPING MODE TYPE		N.C. Contact
		N.O. Contact*
SLEEPING MODE TYPE		Pulse (Autotest contact).** 
		Level (Positioning contact)*. 
SLEEPING MODE		Enabled.
		Disabled.*

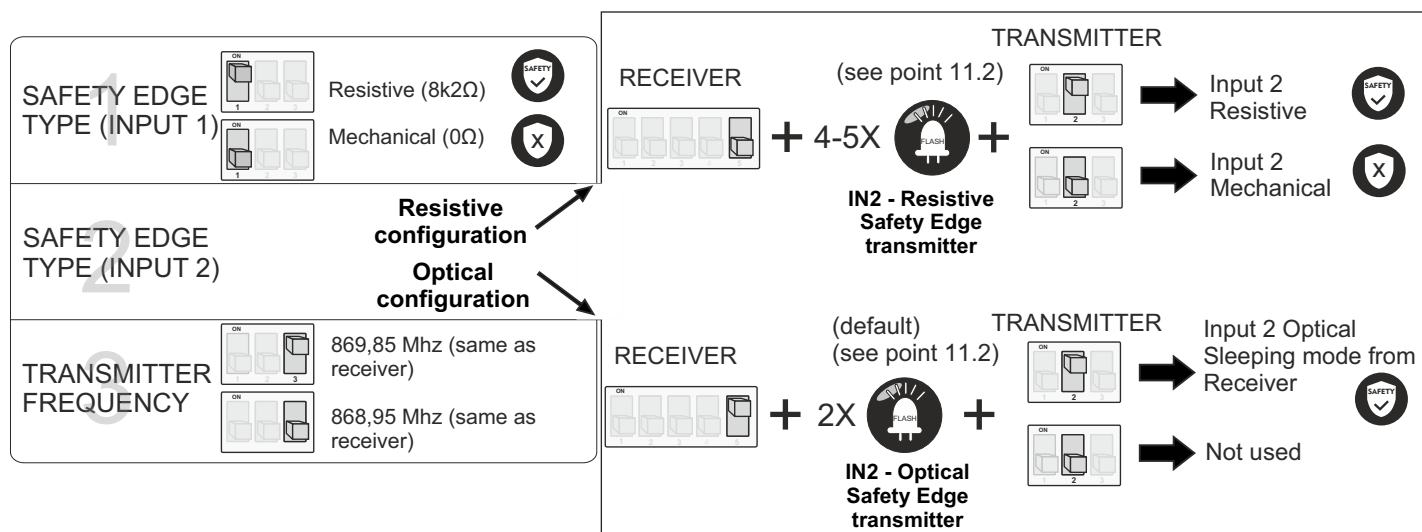
WARNING:

* Default options

**With Option 4 ON, you must program the Optical Safety Edge power supply time (equal or more than the door operating time), following point 4.1.1.

***Receiver and transmitter configuration must be the same.

13. TRANSMITTER OPTIONS SELECTOR



TECHNICAL SPECIFICATIONS

Receiver supply voltage	12/24 AC/DC SELV/PELV
Transmitter supply voltage	2x AA lithium battery 3.6V
Batteries life	Optical: 2 years (with sleeping mode) Resistive: >8 years
Transmitter inputs	Selectable by dip-switch and prog. 1 Resistive / contact /optical 1 Resistive / contact
Transmitter Inhibition input type	Power free contact
Receiver memory	7 transmitters per channel
Receiver Output	2 Relay, micro disconnection 1B or power free contact
Receiver test inputs	2
Type	- 12/24V AC/DC , contact, open collect.
Receiver Power consumption	0.5 W - 12 V / 1,2 W - 24 V
Ball pressure test (IEC 695-10-2)	PCB (125°C) WRAP (75°C)
Pollution degree	2
Protection class (IEC 60529)	Ip55
Frequency Channels	868.95MHz & 869.85MHz
Range	100m
Working temperature	-20°C to +55°C
Rated transient over voltage	330V
Transmitter power consumption	Transmitting 17mA / stand by 16uA
Maximum screw force	0,4 Ncm
Machine Safety Normative	13849-1:2015 PL-C Cat. 2, with TEST before every manoeuvre
Reaction time	<60 ms

CE DECLARATION OF CONFORMITY
For more information visit the website www.aerf.eu

WARNING!!

- Installation, start-up, modification and updating of the system may only be carried out by a qualified person.
- Switch off the operating voltage before working on the system.
- The system doesn't have fuse protection. Is recommended to include exterior protection from 100mA to 250mA.
- In case of any hypothetical issue, please do a memory reset (point 10.).

