

FREE 50 R: Hands free activator with presence detection signal for external presence detectors.

FREE 50 RS: Hands free activator with presence detection signal and presence detector incorporated (sonar).



FREE 50 R



FREE 50 RS

In the FREE 50 RS version a sonar is incorporated, it does the function of presence detection. This device operates with ultrasound (not audible) at 42kHz. It can detect little objects at a few meters and big objects at more distance. For a good detection of the obstacle, this has to be at an angle of 90° respect the sonar.

The presence detection signal, free contact input, allows connecting external presence detectors, like photocells or magnetic detectors, and when the device detects a presence it activates the signal and enables the tag inside the activation field.

#### SONAR DETECTION DISTANCE TABLE

People	3,5 to 4,5 meters
Car	Frontal: 5,0 to 5,5, meters Lateral: 6,0 to 6,5 meters
Wall	7,0 meters

#### 1. TECHNICAL CHARACTERISTICS

	FREE 50 R	FREE 50 RS
Operating frequency	125kHz	
Electricity	230Vac	+/- 10%
Consumption	<5	i0mA
Radiated power	<2	5mW
Wiring	4 wires (sec	tion 0,5mm2)
Op. temperature	-20°C	- +55°C
Watertightness	I	P66
Size	394,4 x 310,5 x 42 mm	394,4 x 310,5 x 78,7 mm
Enabling area (hands-free mode)	Į.	ōm
Maximum detection speed	50	km/h

#### 2. CONNECTION

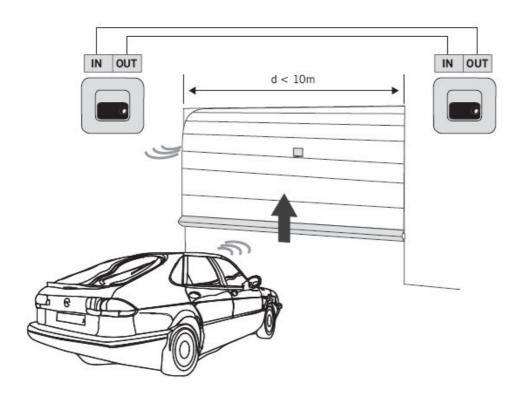
Connect the power supply wire to the 230Vac and connect the 4 signal wire as follows:

Signal	Cable colour
Presence	Red
- (GND)	Black
Sync IN	Green
Sync OUT	White

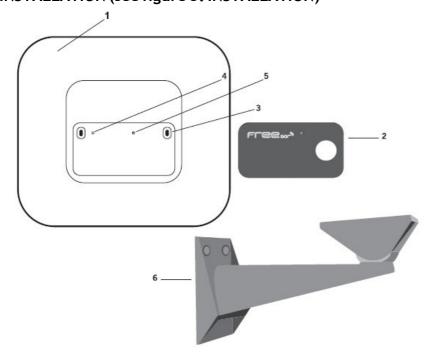
In the FREE 50 R version, if the presence detection signal (red) is not used, please join it to the black wire (GND), and the device will always detect presence

In case of using more than one activator in series (maximum 4), connect the synchronism signal OUT to the synchronism signal IN of the following activator, to avoid interference between them. (See connection figure).

If you only desire to connect one activator join the two synchronism signals IN and OUT.

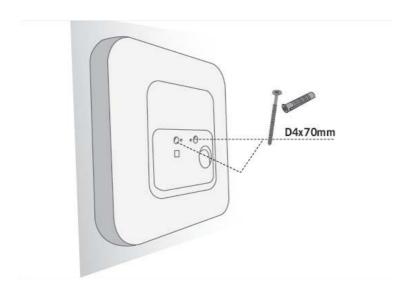


## 3. INSTALLATION (see figure 3. INSTALLATION)

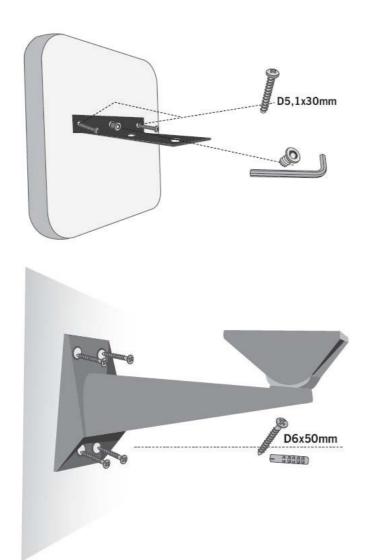


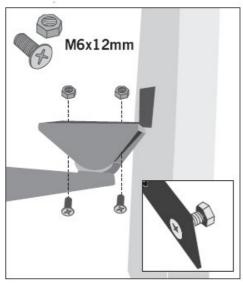
- 1 Equipment
- 2- Adhesive Trim
- 3- Wall fixing holes
- 4- Configuration pushbutton
- 5- Led
- 6- Support

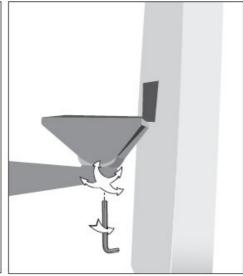
# 3.1. WALL INSTALLATION (see figure 3.1)



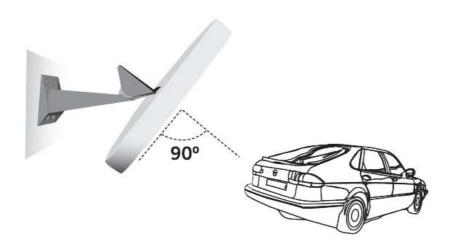
# 3.2. INSTALLATION WITH SUPPORT (see figure 3.2)







#### 3.3. SONAR INSTALLATION RECOMMENDATIONS (see figure 3.3)



# **4. SONAR PRESENCE SELECTOR (only version FREE 50 RS)** Allows selecting the sonar detection distance.

Position	Detection distance
0	No detection
1	Up to 3 meters
2	Up to 3,5 meters
3	Up to 4 meters
4	Up to 4,5 meters
5	Up to 5 meters
6	Up to 5,5 meters
7	Up to 6 meters
8	Up to 7 meters
9	Always detects presence

Note: Between positions 1 and 8, any object at a distance < 1,5 meters activates a continuous detection. Between 1,5 meters and the distance selected, the presence activation is repeated each second during the detection of the object.

#### 5. CONFIGURATION OF CHANNELS AND GROUPS

Use the button (4) to configure the activator's operating mode.

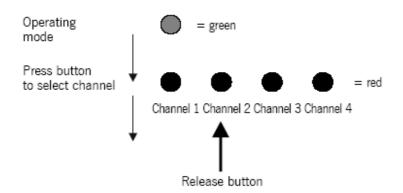
**Channel configuration:** Keep the configuration button pressed down until the number of long red signals is equal to the channel to be configured. For example, if you want to configure channel 2, release the button after the second long red signal.

**Group configuration:** Press the configuration button and keep it pressed down. The led will issue the red channel configuration signals followed by a series of flashing green signals to indicate that the open group will start the group selection sequence (long green signals indicating groups 1 to 7). Release the button at the required group. For example, if you want to configure group 5, release the button after the fifth long green signal.

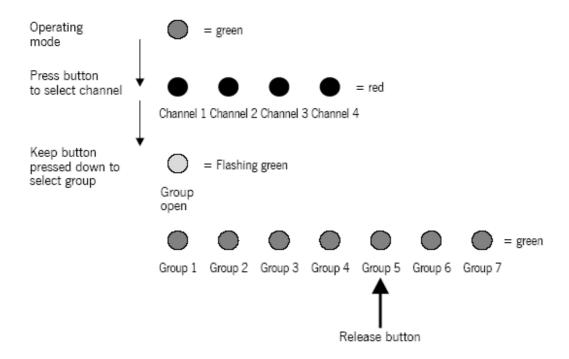
The procedure can be carried out as many times as required.

#### Sequence for configuring channels and groups (e.g. channel 2, group 5)

#### Channel 2 Configuration



#### Group 5 Configuration



Channel: This allows for the channel to be sent to the receiver to be selected.

Group: This allows for the installation of more independently enabled doors (to a total of 22).

#### 6. OPERATING

When the equipment is switched on, the led will make 3 flashes.

By bringing the tag/transmitter close to the hands-free activator or pressing the button, the activator will send a signal to the receiver in which it is programmed, provided the detection signal is activated. (See figure 6. OPERATING)

