

## INSTALLATION PROCEDURE



The CRB 758 sensor is a wireless motion detector (PIR), constructed on the basis of a microprocessor. It is supplied from the inner 3-volt lithium battery (CR 123A LongLive).

### PIR's features:

- microprocessor signal treatment
- real temperature compensation
- configurable impulse counter
- wide angle and corridor lens
- angle of view: 98°, 15m
- approach zone
- regulation of vertical position
- separate pyroelement chamber
- self-test
- antisabotage against tearing from the wall and opening the detector

### Radio block features:

- range up to 400m
- four operating modes: NORMAL, FULL SIGNALLING, WRITE, FAST MONITORING
- unique transmission identifier (over 16 million combinations)
- prolonged life of batteries (5 years in the NORMAL mode)
- fully automatic sensor control

### Operating modes:

The WPIR sensor can operate in the following modes:  
NORMAL – is characterized by the 2,5-minute time of the sensor's „inertia“, measured from the last transmission (that is, any signal: self-test, alarm, low battery etc.)  
FULL SIGNALLING – no „inertia“ moment (this mode is recommended during tests and installation)  
FAST MONITORING – the device sends the self-test signal every 12 minutes  
WRITE – the sensor sends the WRITE signal with each simultaneous pressing of the both sabotages for longer than 3 seconds

### Led signalling:

- with each motion detection, the LED diode lights for several seconds
- when there is low battery level, the diode blinks in each transmissions

### STEP 1 – INITIAL ASSUMPTIONS

Before installing evaluate thoroughly the position and the secured area to make the best choice of the place of installation and type of lenses.

Important: the sensor must not be installed in a place set on the direct sunlight or close to warmth sources. The sensor's zones should be directed on a wall or a floor (the sensor should not „look at“ windows, curtains etc.). In addition, one should avoid the direct proximity of metal elements which may worsen the propagation of the radio waves.

### STEP 2 – DEMOUNTING THE FRONTAL PART OF THE CASE

Check fig.2.

### STEP 3 – SENDER/RECEIVER CONFIGURATION

WPIR must be programmed in a receiver by saving a coded message in the address space of the receiver. This operation can be run by performing the following actions:

1. set the receiver in the WRITE mode
  2. take the insulation off the battery
  3. send a WRITE signal by pressing simultaneously both sabotages for longer than 3 seconds. Make sure that the receiver identified the sender.
- Important: the switches J3 and J6 should be shorted.
4. switch the receiver into the NORMAL mode

### STEP 4 – CHOICE OF THE PLACE OF INSTALLATION

1. choose the best place from the point of view of radio communication and covering the secured area. Install the sensor temporarily, using, for example a double-sided Scotch tape.
2. generate an alarm signal and check whether the receiver registered it

### STEP 5 – THE FINAL MOUNTING

Loosen the screw which fastens the printed circuitboard (PCB) and then take it out (check fig.4)

1. cut out the chosen screw stoppers and sabotage stopper, if necessary.
2. attach the back part of the case to a wall in the chosen place
3. install the printed circuitboard

IMPORTANT: during installation make sure that the rear sabotage is properly pressed against the wall.

### STEP 6 – REGULATION OF THE PCB POSITION

In order to regulate the PCB position, use the scale located in the right bottom corner of the board. You can use the following hints when selecting the location (fig.6):

1. wide angle lens (RL-115D)  
mounting height: 2,5m  
range: 3-6m – board in the SHORT position (fig.6a)  
range: 6-15m – board in the LONG position (fig.6b)
  2. corridor lens (RL-17)  
impulse counter: 1  
mounting height 2,5m  
range 23m – board in the LONG position (fig.6b)
- After finishing the regulation tighten the screw which fastens the board.

### STEP 7 – WALK TEST

1. set the sensor's operating mode on FULL SIGN, LED operating mode on ON and select the settings of the impulse counter (1, 2 or 3 – fig. 1 and 3)
2. close the case and perform a WALK TEST (fig.7). Observe the LED diode and check the correctness of sending the signals to the receiver.

## STEP 8 – FINISHING INSTALLATION

Take the case out and using the switches set the proper operating mode, number of impulses and LED operating mode. Close the sensor's case.

Note:

1. larger value of the impulse counter decreases the overall sensitivity and simultaneously increases resistance to the false alarms. When using the corridor lenses, always set the counter on the value „1“.
2. to prolong maximally the life of batteries, use the NORMAL operating mode.

## REPLACING THE LENS

1. take the pyroelement's protection (fig.9)
2. take the lens out (fig.10)
3. install a new lens and the protection

## SAFETY

Any changes in the device done without GardTec company confirmation may make using the device impossible.

Simultaneous transmissions from at least two devices may cause mutual interferences of the signals and in effect, their loss.

The quality of communication depends on the surrounding. Proximity of electrical devices may cause interferences and deterioration of the communication conditions. So, the quality of the received signal must be tested individually with each installation.

## SPECIFICATION:

supply: CR123 (3V) battery  
 power consumption: 20  $\mu$ A (standby)  
 frequency: 868,65 MHz  
 self-test period: 65 minutes / 12 minutes  
 modulation: ASK  
 battery's life: 5lat (average)  
 dimensions: 127,6 x 64,2 x 40,9 (mm)  
 operating temperature: 0°C... 50°C  
 storing temperature: -20°C... 60°C

The producer restricts right to make changes in the devices' specification without informing earlier.

