

BS-470

Wireless infrared motion detector for BS-468/A burglar alarm panel



- Shielded input stage to protect against external interference
- Normal and high-sensitivity mode to prevent small pets activation
- Maximum coverage, on the vertical axis, 12m.
- Protection from reverse battery installation
- Elegant design

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Olympia Electronics - European manufacturer

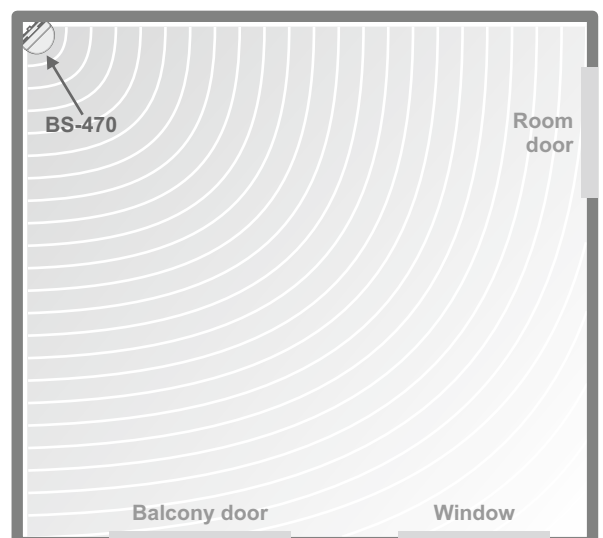
The wireless infrared motion detector BS-470 incorporates a special high efficiency, multi-focal and wide angle lens. Microprocessor controlled improved circuitry along with a shielded input stage ensure maximum protection and external interference avoidance thus avoiding false triggering of the device.

The housing of the device has the appropriate infrastructure to be placed either on a flat surface or at an angle of surfaces when required.

The sensitivity selection can be used to avoid false triggering in the presence of small pets.

MOUNTING THE DEVICE

The device must be mounted in such a position in order to permit the best possible surveillance. The mounting height should be between 2.2 and 2.5 meters, with an ideal height of 2.4 metres. In order to avoid unintended false alarms, the detectors must not be mounted in areas that have hot air or air drafts in general such as over radiators. It must not be mounted near devices that emit radio waves such as WiFi repeaters and also must not be in the path of direct sunlight.

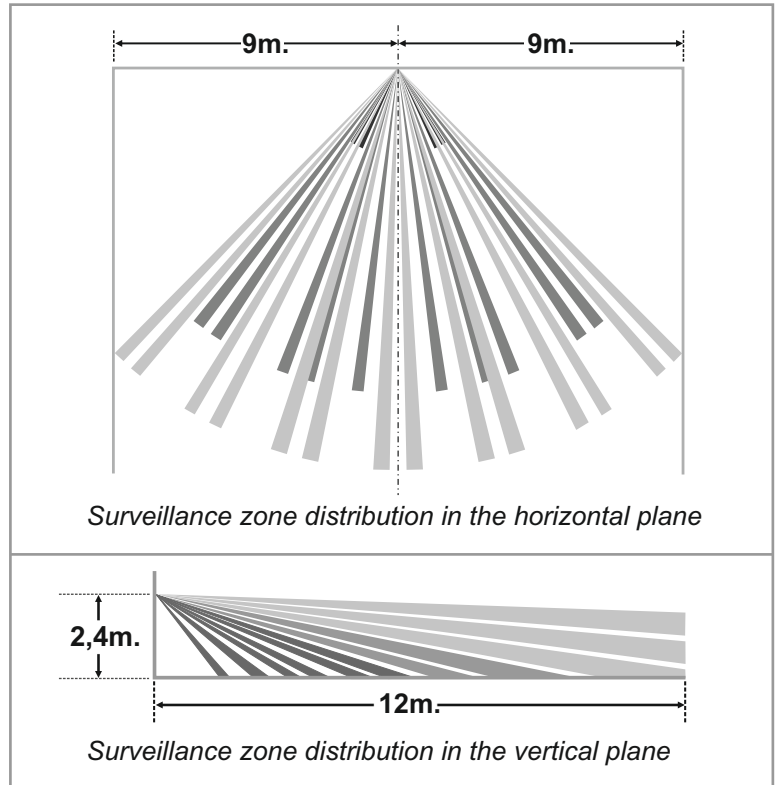


Mounting example in a typical room

If normal sensitivity is selected then care must be taken that house pets do not have access to furniture that is near or at the same height as the detector in order to avoid false triggering. Physical obstructions such as walls, furniture, separators, glass dividers e.t.c must be avoided because they will degrade the detection area of the detector.

The room's ambient temperature is a factor that plays a significant role in the detection range of the detector. In hot summer months the detection range is degraded and can be compensated if we select high sensitivity during these months.

The device is unsuitable for outdoor use.



INTERNAL LAYOUT AND SETTINGS

To remove the top cover insert a flat blade screwdriver in the slot. Push the screwdriver gently to unlock the latch and remove the cover, as shown in the photo below.



Photo 1

After removing the top cover it is suggested to gently remove the circuit board by removing its retaining screw, as shown in the photo 3 of page 3. Take care not to touch the IR sensor surface. This will affect its operation.

Photograph 4 (page 3) shows the interior of the plastic base as well as the cable entry and mounting hole positions.

To mount the unit to the wall, increase the hole diameter of points **A** to 4 mm. using a suitable drill bit and mount the unit using the supplied mounting accessories.

The same can be done if we require to mount the unit at an angle or in a corner. Drill out points **B**, on the side that will have contact with the wall and use the supplied mounting accessories. In corner mounting, it will require two additional screws and the corresponding plugs.

When mounting has been finished reinstall the circuit board, if it was removed, and fasten it using the respective screw. Care should be taken when using the screw driver in order to avoid any damage.

After that the connections with an external contact can be made, if necessary.

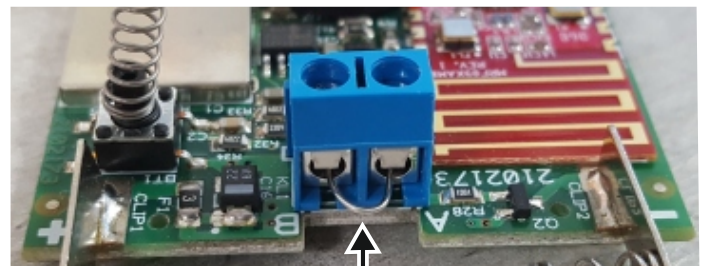


Photo 2

The device can be connected with external contacts, via the KL1 terminal

INTERNAL LAYOUT AND SETTINGS (continued)

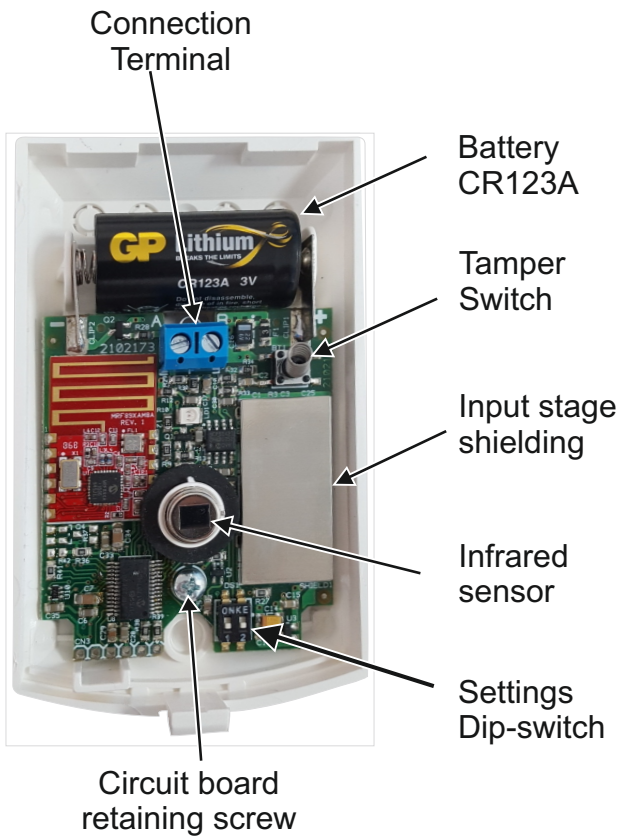


Photo 3

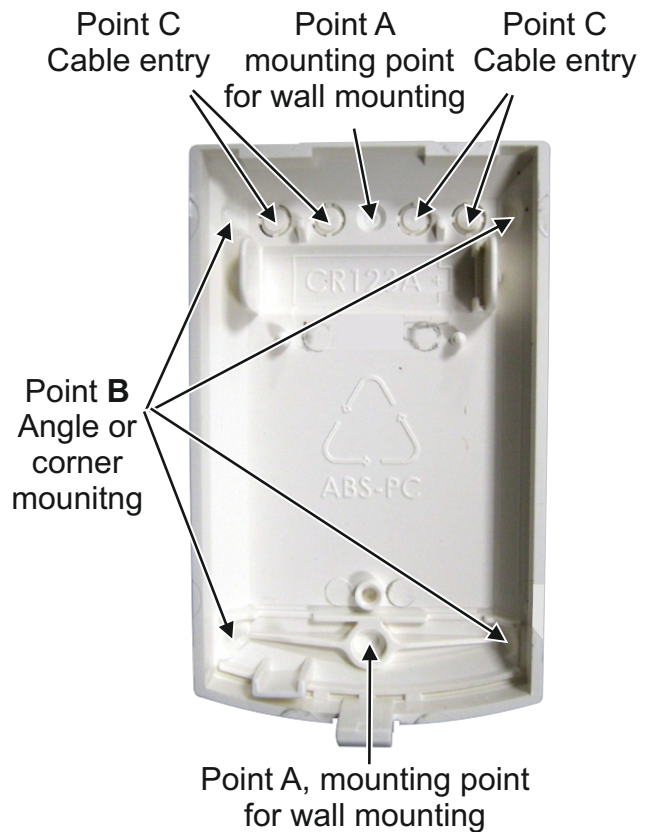
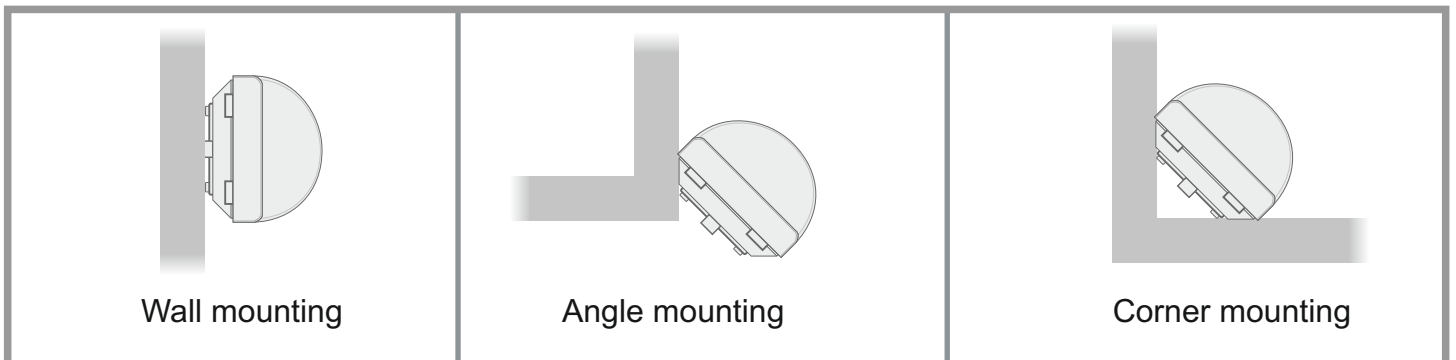
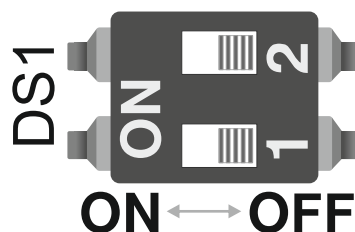


Photo 4



DIP-SWITCH SETTINGS



Wireless motion detector includes 2 DIP-switches for its settings (**DS1**).

DIP-switch 1: **ON** ensures input and output delays for detectors installed at the entrance of a building. **OFF** allows the detector to trigger an alarm immediately if the control panel is armed. The DIP-switch has an effect only if the detector is programmed in physical response from the control panel (zone with delay or zone without delay).

Attention!! Selecting the delay zone from the board is required by BS-468 / A.

DIP-switch 2: When is set to **OFF**, the device is in normal mode. When is set to **ON** it is in high sensitivity mode and increases the detection range.

It also has a terminal for connecting an external magnetic contact which, when not in use, must be short-circuited.

CONNECTION WITH EXTERNAL MAGNETIC CONTACTS

The device can be connected to external magnetic contacts via the KL1 terminal block (Figure 1). If a magnetic field is connected to this input, the device sends an alarm signal to the control panel. If the contact is not connected to an external device, at the cable terminal of the KL1, then manufacturer's cable must remain.

NOTE: The maximum distance of the external sensor cable is 3 meters !!!

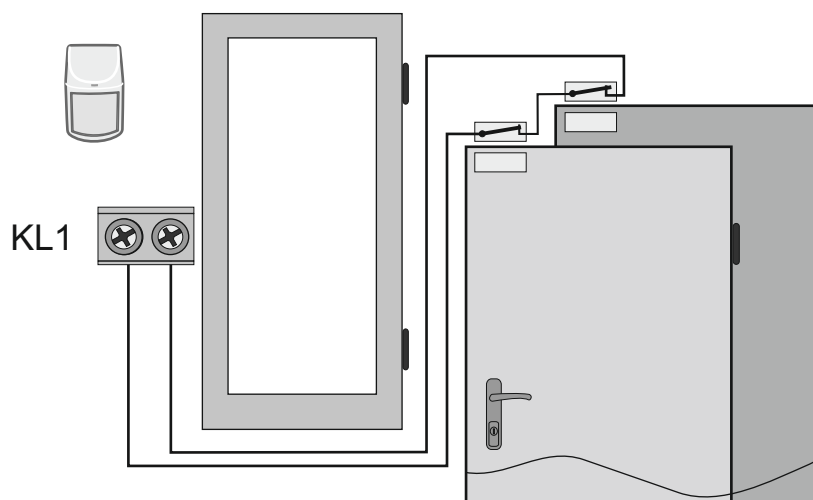


Figure 1
Example of connection NC external magnetic contacts
with BS-470

RANGE TEST

Once the device is connected to the panel's network, remove the battery and wait for 10 seconds. Then press the tamper and reinstall the battery. Wait until the LED lights up. Once you release the tamper, the LED will go out. In this case, the range test will start. During range test the device LED blinks every second. The duration of range test is 60-95 seconds. When it is finished the LED goes off and after 2 seconds the test result is displayed as follows:

Single blink: Strong signal. The device can be safely installed at this point.

Two blinks: Normal signal. The device can be safely installed at this point.

Three blinks: Weak signal. It is recommended not to install the device at this point. There will be communication between the device and the control panel but there will be communication packets losses.

Four blinks: Out of range. The device is forbidden to be placed in this point.

Note: As soon as the test procedure is started, it is suggested that the device cover will be placed directly in order to simulate the actual communication conditions. The environment must be also adapted to the worst possible conditions (eg closed doors).

Finally, in case of home improvements or renovation, it is suggested to perform a range test again.

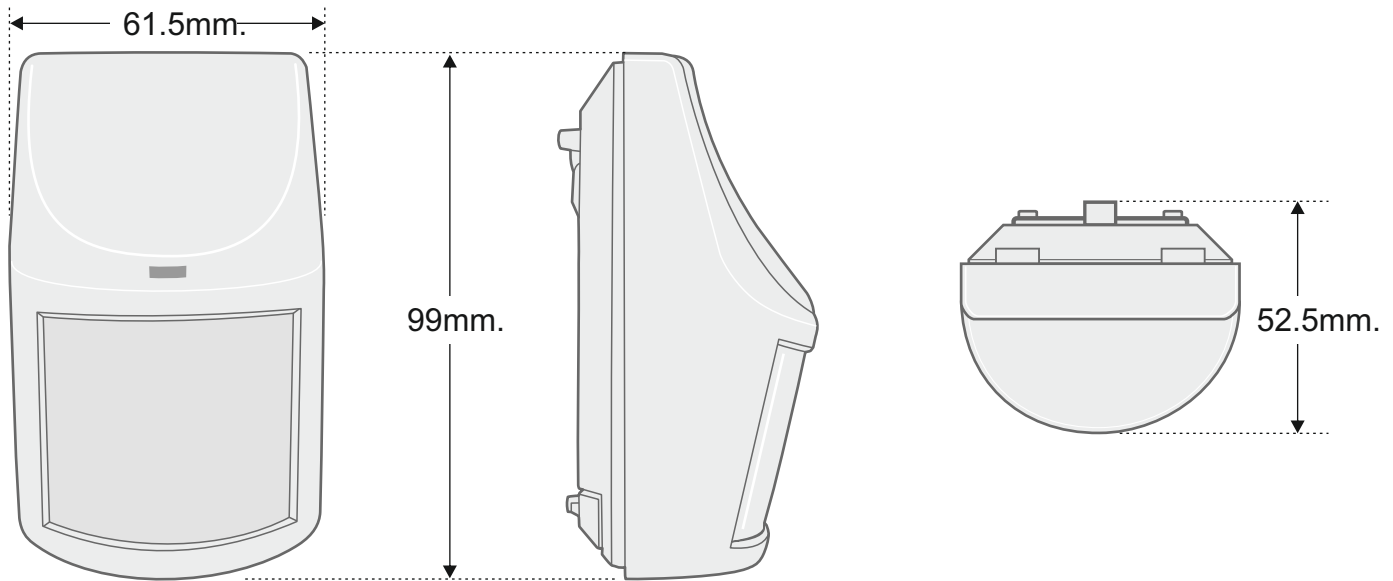
BATTERY REPLACEMENT

The detector checks its battery voltage and transmits the information to the panel. When the control panel displays a low battery indicator, the detector will continue to operate for at least 2 weeks. Nevertheless it is recommended to replace the battery as soon as possible. This must be done by a qualified technician and the control panel must be in **service mode**.



It is not allowed to discard batteries in to common trash bins, they must be discarded only in battery recycling points. Do not incinerate.

EXTERNAL DIMENSIONS OF DEVICE



TECHNICAL SPECIFICATIONS

POWER SUPPLY	CR-123A lithium battery (3V rated voltage)
BATTERY LIFE	2 years minimum (without using external contacts)
COMMUNICATION RANGE	About 200m (open area)
DETECTION RANGE	9 - 12 meters, adjustable
ACTIVATION TIME	0.25 - 0.3 sec.
OUTPUT RELAY RATING	30V - 0.2A DC
INITIAL SETUP TIME	1 minute (the indication LED blinks)
OPERATION TEMPERATURE RANGE	-10 to +50 °C
RELATIVE HUMIDITY	Up to 95%
DEGREES OF PROTECTION	2
ENVIRONMENTAL CLASS	II
DEGREES OF COVER PROTECTION	IP40
PRODUCED IN ACCORDANCE WITH	EN50131-1, EN50131-2-2, EN50130-4, EN61000-6-3
CONSTRUCTION MATERIAL	ABS/PC
EXTERNAL DIMENSIONS (LxWxH)	61.5 x 52.5 x 99 mm.
TYPICAL WEIGHT	70 gr.
GUARANTEE	2 years

WARRANTY

Olympia Electronics guarantees the quality, condition and operation of the goods. The period of warranty is specified in the official catalogue of Olympia Electronics and also in the technical leaflet, which accompanies each product. This warranty ceases to exist if the buyer does not follow the technical instructions included in official documents given by Olympia Electronics or if the buyer modifies the goods provided or has any repairs or re-setting done by a third party, unless Olympia Electronics has fully agreed to them in writing. Products that have been damaged can be returned to the premises of our company for repair or replacement, as long as the warranty period is valid.

Olympia Electronics reserves the right to repair or to replace the returned goods and to or not charge the buyer depending on the reason of deflection. Olympia Electronics reserves the right to charge or not the buyer the transportation cost.

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