Panasonic®

Installation Guide

Home Network System
Motion Sensor

Model No. **KX-HNS102HM**

Thank you for purchasing a Panasonic product.

This document explains how to install the motion sensor properly.
For details about how to use the system, refer to the User's Guide
(page 14).

Please read this document before using the unit and save it for future
reference.

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Important Information

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Accessory information

Supplied accessories

No.	Accessory item/Part number	Quantity
①	Batteries[*1]	2
②	Wall mounting adaptor[*2]	1
③	Wall mounting screws (25 mm)	2

[*1] When replacing batteries, see "Power source" of "Specifications", page 15 for battery information.

[*2] The motion sensor can be wall mounted with or without the wall mounting adaptor (page 12).

① ② ③

Other information

- Design and specifications are subject to change without notice.
- The illustrations in these instructions may vary slightly from the actual product.

Trademarks

- iPhone and iPad are trademarks of Apple Inc., registered in the U.S. and other countries.
- Android is a trademark of Google Inc.
- Microsoft, Windows, and Internet Explorer are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- All other trademarks identified herein are the property of their respective owners.

About this system

- This system is an auxiliary system; it is not designed to provide complete protection from property loss. Panasonic will not be held responsible in the event that property loss occurs while this system is in operation.
- The system's wireless features are subject to interference, therefore functionality in all situations cannot be guaranteed. Panasonic will not be held responsible for injury or damage to property that occurs in the event of wireless communication error or failure.

For your safety

To prevent severe injury and loss of life/property, read this section carefully before using the product to ensure proper and safe operation of your product.

⚠ WARNING

Power connection

- Use only the power source marked on the product.
- Do not connect non-specified devices.

Installation

- To prevent the risk of fire or electrical shock, do not expose the product to rain or any type of moisture.
- Do not place or use this product near automatically controlled devices such as automatic doors and fire alarms. Radio waves emitted from this product may cause such devices to malfunction resulting in an accident.
- Keep small parts (screws, etc.) out of the reach of children. There is a risk of swallowing. In the event they are swallowed, seek medical advice immediately.

Operating safeguards

- Do not disassemble the product.

Medical

- Consult the manufacturer of any personal medical devices, such as pacemakers or hearing aids, to determine if they are adequately shielded from external RF (radio frequency) energy. DECT features operate between 1.88 GHz and 1.90 GHz with a peak transmission power of 250 mW.
- Do not use the product in health care facilities if any regulations posted in the area instruct you not to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

⚠ CAUTION

Battery

- The batteries should be used correctly, otherwise the product may be damaged due to battery leakage.
- Do not charge, short-circuit, disassemble, or heat the batteries.
- Do not dispose of batteries in a fire.
- Remove all the batteries when replacing.

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- Do not mix old, new or different types of batteries.
- It is recommended that batteries are replaced annually.
- Keep out of the reach of small children. There is a risk of swallowing. If the battery is swallowed, seek medical attention immediately.
- Remove the battery if it becomes unusable. There is a risk of leakage, overheating, and rupture. Do not attempt to use a battery if it is leaking.
- Do not intentionally pour water on the battery or allow it to get wet. There is a risk of fire and smoke. If the battery becomes wet, remove it immediately and contact an authorised service centre.

Important safety instructions

When using your product, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

1. Do not use this product near water for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement or near a swimming pool.
2. Use only the batteries indicated in this document. Do not dispose of batteries in a fire. They may explode. Check with local codes for possible special disposal instructions.

SAVE THESE INSTRUCTIONS

For best performance

Hub location/avoiding noise

The hub and other compatible Panasonic devices use radio waves to communicate with each other.

- For maximum coverage and noise-free communications, place your hub:
  - at a convenient, high, and central location with no obstructions between the product and hub in an indoor environment.
  - away from electronic appliances such as TVs, radios, personal computers, wireless devices, or other phones.
  - facing away from radio frequency transmitters, such as external antennas of mobile phone cell stations. (Avoid putting the hub on a bay window or near a window.)
- If the reception for a hub location is not satisfactory, move the hub to another location for better reception.

Environment

- Keep the product away from electrical noise generating devices, such as fluorescent lamps and motors.
- The product should be kept free from excessive smoke, dust, high temperature, and vibration.
- The product should not be exposed to direct sunlight.
- Do not place heavy objects on top of the product.
- The product should be kept away from heat sources such as radiators, cookers, etc. It should not be placed in rooms where the temperature is

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less than 0 °C or greater than 40 °C. Damp basements should also be avoided.
● Operating the product near electrical appliances may cause interference. Move away from the electrical appliances.

Other information

CAUTION: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

Routine care

● Wipe the outer surface of the product with a soft moist cloth.
● Do not use benzine, thinner, or any abrasive powder.

Information on Disposal in other Countries outside the European Union

Cd

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.
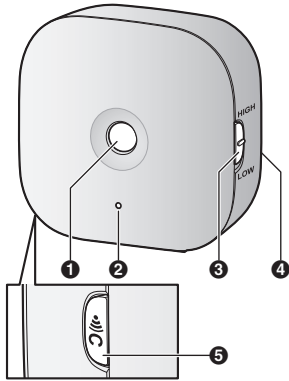
Note for the battery removal procedure

Refer to "Inserting the batteries" on page 8.

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Part names and functions

❶ **Infrared sensor**
❷ **LED indicator**
❸ **【HIGH】/【LOW】**
Used to change the sensor sensitivity (page 14).
❹ **Rear cover**
❺ **【•))C】**
Used to confirm the status of the sensor or register the sensor to the hub.

LED indicator

You can press **【•))C】** and check the LED indicator to confirm the sensor's status.

Indicator	Status
Green, lit	No motion detected
Red, lit	Motion was detected

Indicator	Status
Red, blinking	Sensor is out of range of the hub
Green, blinking slowly	Registration mode (You pressed and held **【•))C】**)
Off	No battery power

Note:
- The LED indicator does not indicate sensor status if the sensor has not been registered (page 8).

Setup overview

1 Initial setup
Make sure you can access the system using your mobile device. For details, refer to the System Setup Guide included with your hub.

2 Insert the batteries
The motion sensor is battery powered.

3 Registration
Required only if the motion sensor was purchased separately (i.e., not as part of a bundle).

4 Confirm the installation area
Read the information in this document to confirm that the desired installation area is suitable to proper operation.

5 Installation
Install the motion sensor in the desired location.

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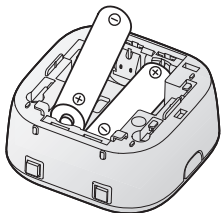# Inserting the batteries

- USE ONLY Alkaline batteries AA (LR6) size.
- Do NOT use Manganese/Ni-Cd/Ni-MH batteries.
- Confirm the polarities ($\oplus$, $\ominus$).
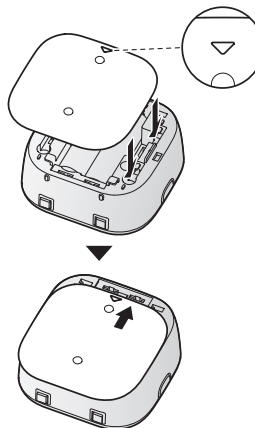
1 Remove the rear cover by pressing the upper sides of the cover (❶) and sliding it down (❷).
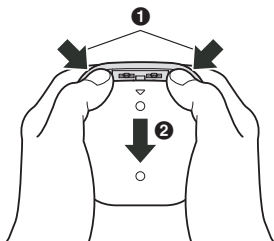
2 Insert the batteries.

3 Install the rear cover.
- Place it with the "▽" mark facing upwards and slide it.

Registering the motion sensor

This procedure is not required for devices that were included as part of a bundle.

Before you can use the motion sensor, it must be registered to the hub.
If you purchased devices separately (i.e., not as part of a bundle), you must register each device to the hub.

You can register each device by using the registration buttons or the **[Home Network]** app.

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Using registration buttons

1 **Hub:**
Press and hold **[•)))C OTHER DEVICE]** until the LED indicator blinks slowly in green.

2 **Motion sensor:**
Press and hold **[•)))C]** until the LED indicator blinks slowly in green (page 7).
  ● When registration is complete, the hub sounds one long beep.

Note:
● To cancel without registering the sensor, press **[•)))C]** on the hub and on the sensor again.
● If registration fails, the hub sounds several short beeps.

Using the app

When you register the motion sensor by using the **[Home Network]** app, you can assign a name to your devices and group them by location. For more information, refer to the User's Guide (page 14).

Information about sensor features

The motion sensor utilises an infrared sensor (i.e., heat sensor).
Please read the following information before deciding where to install the motion sensor.

Note:
● The motion sensor's sensor features are not designed to be used in situations that require high reliability. We do not recommend use of the

motion sensor's sensor features in these situations.
● Panasonic takes no responsibility for any injury or damage caused by the use of the motion sensor.

Using heat to detect motion

The motion sensor's infrared sensor can detect motion by recognizing temperature differences that occur within the range of the sensor. It does this by detecting the infrared rays that are emitted naturally by people, animals, etc., which correlate to the object's temperature. The detection range is indicated in the illustration by the grey area in front of the motion sensor.
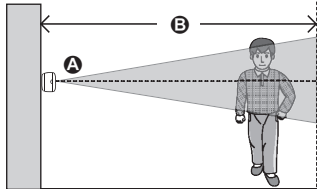
Detection range when looking from above
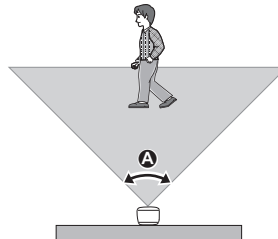
Ⓐ Horizontal detection range: approx. 90°

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Detection range when looking from the side

Ⓐ Vertical detection range: approx. 20°

Ⓑ Distance of detectable motion: approx. 5 m

Note:

- Detection becomes difficult when there is little difference between the temperatures of objects and the surrounding environment, such as during summer. Conversely, detection becomes easier when there is a large difference between the temperatures of objects and the surrounding environment, such as during winter or at night.
- Detection does not occur when there are obstacles in front of the infrared sensor. Remove the obstacles or change the installation location.

Direction of motion

It is easier to detect objects that move sideways in front of the motion sensor, and more difficult to detect objects that move directly toward the front of the motion sensor.
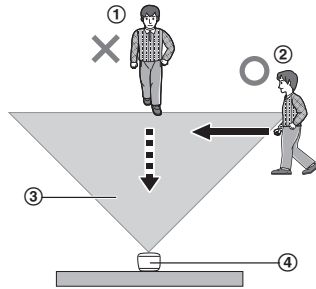
① It is difficult to detect movement directly towards the front of the motion sensor.
② It is easy to detect movement sideways in front of the motion sensor.
③ Detection range
④ Motion sensor

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Confirming the usage area

Wireless communication range

The wireless communication range of each device in the system from the hub is approximately 50 m indoors and approximately 300 m outdoors. Wireless communication may be unreliable when the following obstacles are located between the hub and other devices.

- Metal doors or screens
- Walls containing aluminium-sheet insulation
- Walls made of concrete or corrugated iron
- Double-pane glass windows
- Multiple walls
- When using each device on separate floors or in different buildings

Note:

- You can check the motion sensor's communication status by pressing 【•))C】. If the LED indicator is lit in green or red, the sensor is communicating properly with the hub. If the LED indicator blinks in red, it is out of range of the hub.

Usage area cautions

Using the motion sensor in the following areas may cause deformation, malfunction, or operational failure.

- In direct sunlight
- Areas exposed to grease or steam, such as kitchens
- Near fire or heating devices
- Near magnetic fields (such as near microwaves and magnets)
- Areas subject to extreme temperature changes, such as next to air conditioners
- Areas with reflective objects, such as glass, that can interfere with detection of temperature variation
- Areas where the temperature is affected by strong illuminating objects (such as fluorescent lights)
- Near devices that emit strong radio waves, such as mobile phones

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Wall mounting

There are two methods for wall mounting the motion sensor. To mount the sensor flat against the wall, use the rear cover. To mount the sensor so that it faces 45° to the left or right, use the wall mounting adaptor.

**Mounting examples**[*1] **of the rear cover and wall mounting adaptor**

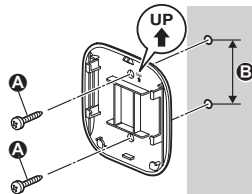| ① Rear cover | ② Wall mounting adaptor |
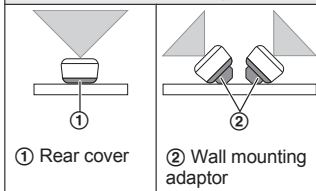
*1 View of looking from above.

Note:
● Mount the motion sensor on the stable location where the motion sensor can be adequately supported when mounting.
● Do not mount motion sensor on a soft material. It may fall down, break or cause injury.
● Do not mount the motion sensor on the following places: gypsum board, ALC (autoclaved lightweight cellular concrete), concrete block, plywood less than 25.4 mm thick, etc.

Using the rear cover

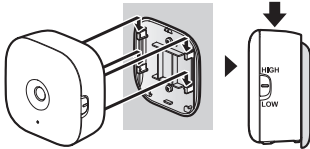**1** Remove the rear cover by pressing the upper sides of the cover (❶) and sliding it down (❷).
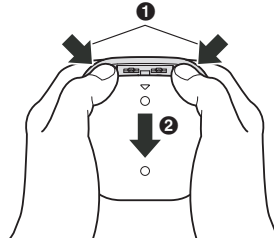
2 Attach the rear cover to the wall by using screws (Ⓐ).
   ● Place the rear cover with "**UP**" mark facing upwards.
   ● Ⓑ 37 mm

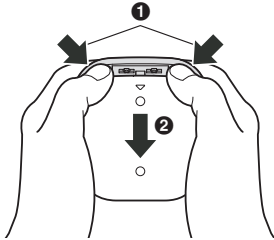**3** Attach the motion sensor to the rear cover.
- Insert the grooves on the motion sensor to the 4 tabs on the rear cover, and then push down the motion sensor.
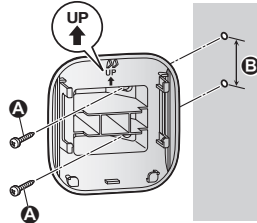

Using the wall mounting adaptor

1 Remove the rear cover by pressing the upper sides of the cover (**❶**) and then sliding it down (**❷**).

2 Attach the wall mounting adaptor to the wall by using screws (**Ⓐ**).
- Place the wall mounting adaptor with "**UP**" mark facing upwards.
- **Ⓑ** 21 mm

3 Attach the motion sensor to the wall mounting adaptor.
- Insert the grooves on the motion sensor to the 4 tabs on the wall mounting adaptor, and then push down the motion sensor.

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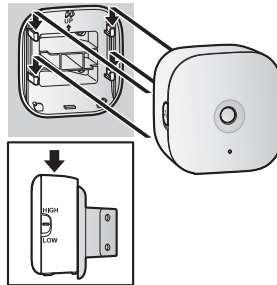
Testing the motion sensor

You can observe the motion sensor's LED indicator and test the performance of the motion sensor.

1   Press **[•))C]**.
2   Move to an area near the motion sensor.
3   While moving near the motion sensor, observe the LED indicator.
     ● When motion is detected, the LED indicator lights in red.
4   Note the areas where movement is detected.
5   Press **[•))C]** again.

Adjusting the sensor sensitivity

You can use the **[HIGH]**/**[LOW]** switch (page 7) to adjust the sensor's sensitivity. If the sensor often makes incorrect detections, such as in areas with frequent and substantial temperature fluctuations, set the switch to the **[LOW]** position.

Note:

● When the switch is in the **[LOW]** position, the sensor detection range is reduced by about half (compared to when the switch is in the **[HIGH]** position).

Features available when using the [Home Network] app

Some of the motion sensor's features that are available when using the **[Home Network]** app are listed below. For more information, refer to the User's Guide (page 14).

–   **Alarm system**
    You can use the app to arm and disarm the alarm system, confirm the current status of the sensor, and view a log of previous events.
–   **Sensor integration**
    You can configure the motion sensor to trigger other system events, such as camera recording, turning on an electric device (such as a lamp), etc. (Appropriate device required.)
–   **Telephone alert**
    You can configure the system to call a preprogrammed phone number when the motion sensor is triggered.

Accessing the User's Guide

The User's Guide is a collection of online documentation that helps you get the most out of the **[Home Network]** app.

1   **iPhone/iPad**
     Tap ☰ in the app's home screen.
     Android™ devices
     Tap ⋮ or press your mobile device's menu button in the app's home screen.
2   Tap **[User's Guide]**.

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Note:

- Microsoft® Windows® Internet Explorer® 8 and earlier versions are not supported.
- Android 4.1 or later versions are recommended.
- You can also access the User's Guide at the web page listed below.

www.panasonic.net/pcc/support/tel/homenetwork/manual/

Specifications

- **Standards**
  DECT (Digital Enhanced Cordless Telecommunications)
- **Frequency range**
  DECT: 1.88 GHz – 1.90 GHz
- **RF transmission power**
  DECT: Approx. 10 mW (average power per channel)
- **Power source**
  AA (LR6) Alkaline battery (2 × 1.5 V)
- **Operating conditions**
  0 °C – 40 °C
- **Sensor detection method**
  Pyroelectric infrared sensor (heat sensor)
- **Heat sensor detection range**
  Horizontal: approx. ±45°
  Vertical: approx. ±10°
  Distance: approx. 5 m (when the surrounding temperature is approx. 25 °C)
- **Battery life**
  Up to 1 year (when motion is detected 50 times a day and the surrounding temperature is approx. 25 °C)
- **Dimensions (height × width × depth)**
  – With the rear cover attached:
    Approx. 72 mm × 73 mm × 39 mm
  – With the wall mounting adaptor attached:
    Approx. 72 mm × 73 mm × 61 mm
- **Mass (weight)**
  – With the rear cover attached:
    Approx. 70 g, excluding the batteries
  – With the wall mounting adaptor attached:
    Approx. 77 g, excluding the batteries

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For your future reference
We recommend keeping your warranty card and a record of the
following information to assist with any repair under warranty.

Serial No.	Date of purchase
(found inside the battery compartment) Name and address of dealer	

Attach your purchase receipt here.