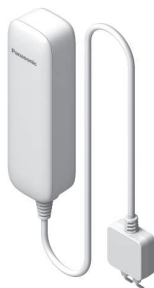


Panasonic®

Installation Guide

Home Network System Water Leak Sensor

Model No. **KX-HNS103FX**



Thank you for purchasing a Panasonic product.

This document explains how to install the water leak sensor properly. For details about how to use the system, refer to the User's Guide (page 19).

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

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Accessory information

Supplied accessories

No.	Accessory item/Part number	Quantity
①	Battery*1	1
②	Wall mounting adaptors*2	2
③	Wall mounting screws (25 mm)*3	3

*1 When replacing the battery, see “Power source” of “Specifications”, page 20 for battery information.

*2 1 adaptor for the main unit
1 adaptor for the probe unit

*3 2 screws for the main unit and 1 screw for the probe unit



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.
- 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.

- Do not allow the cable to be excessively pulled, bent or placed under heavy objects. Keep the main unit upright at all times.
- Do not allow the probe unit to make contact with a battery or an electric outlet. The product could become damaged.
- 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.

CR Lithium battery

- Do not recharge, disassemble, remodel, heat or throw it into fire.

- Do not touch the terminals \oplus and \ominus with metal objects.
- Risk of explosion if battery is replaced by an incorrect type. Dispose of used battery according to local regulations.
- If any electrolyte should come into contact with your hands or clothes, wash it off thoroughly with water.
- If any electrolyte should come into contact with your eyes, never rub your eyes. Rinse your eyes thoroughly with water, and then consult a doctor.

CAUTION

CR Lithium battery

- Use only the battery noted on page 3.
- Insert the battery correctly.
- Do not leave the battery in an automobile exposed to direct sunlight for a long period of time with the doors and windows closed.
- Remove the battery if you do not use the product for a long period of time. Keep it in a cool, dark area.
- Do not replace a battery with wet hands.
- 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.
- Exercise care when handling the batteries. Do not allow conductive materials such as rings, bracelets, or keys to touch the batteries,

otherwise a short circuit may cause the batteries and/or the conductive material to overheat and cause burns.

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. 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

Important Information

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 less than 0 °C or greater than 40 °C.
- Operating the product near electrical appliances may cause interference. Move away from the electrical appliances.
- Do not allow the probe unit's metal probes to make contact with metal objects. This may reduce the battery life.

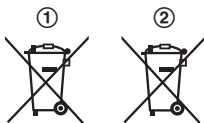
Other information

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 benzene, thinner, or any abrasive powder.
- If the probe unit's metal probes come into contact with a foreign material (oil, detergent, etc.), the probes may repel water and therefore will not be able to properly detect a water leak. Periodically check the metal probes and wipe away any water or foreign material that has become adhered to the probes.
- If the probes come into contact with water, wipe the probe unit dry. Do not allow the probes to remain in contact with water for an extended period of time, as the probes may begin to turn black. (This will not affect the product's ability to detect a water leak.)

Disposal of Old Equipment and Batteries (Only for European Union and countries with recycling systems)



These symbols (①, ②) on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries must not be mixed with general household waste. For proper treatment, recovery and recycling of old products and used

batteries, please take them to applicable collection points in accordance with your national legislation.

By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment. For more information about collection and recycling, please contact your local municipality.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union

These symbols (①, ②) 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.

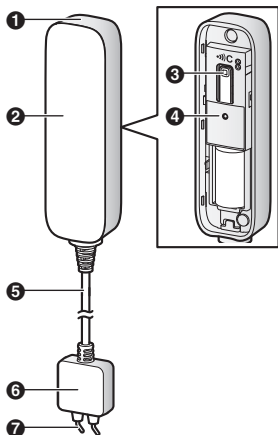
Note for the battery symbol

This symbol (②) might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

Note for the battery removal procedure

Refer to “Inserting the battery” on page 9.

Part names and functions



- 1 Main unit**
- 2 Main unit cover**
- 3 [••]C**
Used to confirm the status of the sensor or register the sensor to the hub.
- 4 LED indicator**
- 5 Cable**
- 6 Probe unit**
- 7 Probes**

LED indicator

You can press [••]C and check the LED indicator to confirm the sensor's status.

After confirming the sensor's status, we recommend turning the LED indicator

off by pressing [••]C again as soon as possible, otherwise battery life may be reduced.

Indicator	Status
Green, lit	No water detected
Red, lit	Water detected
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:

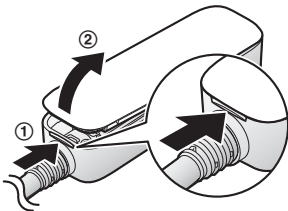
- The LED indicator does not indicate sensor status if the sensor has not been registered (page 9).

Setup overview

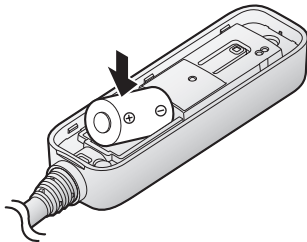
- 1 Initial setup**
Make sure you can access the system using your mobile device. For details, refer to the System Setup Guide included with your hub.
- 2 Insert the battery**
The sensor is battery powered.
- 3 Registration**
Required only if the sensor was purchased separately (i.e., not as part of a bundle).
- 4 Confirm the usage area**
Read the information in this document to confirm that the desired installation area is suitable to proper operation.
- 5 Installation**
Install the sensor in the desired location.

Inserting the battery

- USE ONLY a CR2 Lithium battery.
 - Confirm the polarities (+, -).
- 1 Remove the main unit cover.
 - Lift from the indented area (1) and open the main unit cover (2).



- 2 Insert the battery.



- 3 Attach the main unit cover.

Registering the sensor

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

Before you can use the 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.

Using registration buttons

- 1 **Hub:**
Press and hold **[•]C OTHER DEVICE]** until the LED indicator blinks slowly in green.
- 2 **Sensor:**
Remove the main unit cover and press and hold **[•]C]** until the LED indicator blinks slowly in green (page 8).
 - 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 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 19).

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

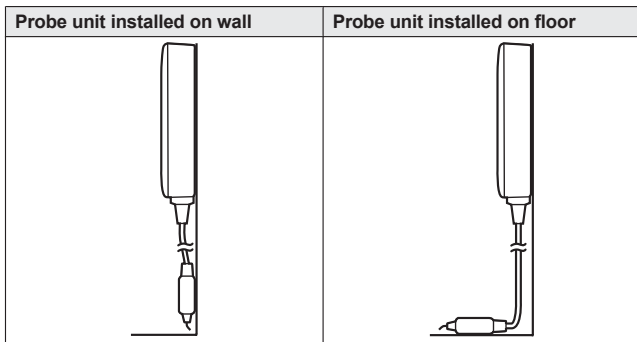
Note:

- You can check the 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.

Installation

The main unit is installed on a wall, and the probe unit can be installed on a wall or a floor.

When the metal probes on the probe unit come in to contact with water, a small amount of electrical charge flows between the probes, which the main unit recognizes as a water leak.

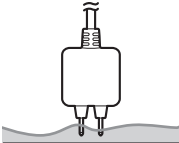



Installation precautions

- The sensor is not designed to be used in situations that require high reliability. We do not recommend use of the sensor in these situations.
- Panasonic takes no responsibility for any injury or damage caused by the use of this product.
- When installing, make sure the battery is inserted properly and the main unit cover is completely closed.
- When installing on a wooden surface, use the included wall mounting adaptors. Secure the wall mounting adaptors to the wall using screws (not double-sided tape).
- Mount the sensor on the stable location where the sensor can be adequately supported when mounting.
- Do not mount the sensor on a soft material. It may fall down, break or cause injury.
- Do not mount the sensor on the following places: gypsum board, ALC (autoclaved lightweight cellular concrete), concrete block, plywood less than 25.4 mm thick, etc.
- The sensor may not be able to properly detect a water leak if the water contains contaminants such as oil, or if the water is frozen (i.e., ice or snow).

Setup

- Touching the metal probes with your hand may cause a water leak to be detected. This is not a defect.
- Install the probe unit so that the metal probes are horizontal. A water leak can only be detected if water touches both of the metal probes; if water touches only one of the probes, a water leak will not be detected.

Correct installation	Incorrect installation
<p data-bbox="118 288 477 339">Metal probes are horizontal to the floor</p> 	<p data-bbox="532 288 891 339">Metal probes are not horizontal to the floor</p> 

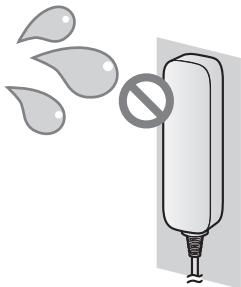
Installation location

Install the water leak sensor in a basement, kitchen, utility room, or anywhere you want to detect a water leak. Common installation examples include near a washing machine, hot water heater, or a location where a water leak has occurred in the past.

Note:

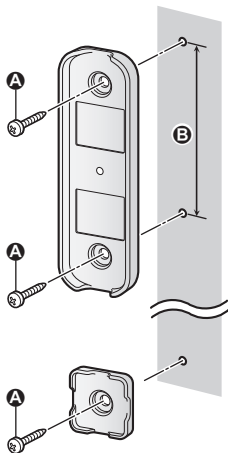
- Install the probe unit so that its metal probes are about 1 mm above the floor. If the probes touch the floor, the sensor may make false detections. If the probes are too far from the floor, water leaks can only be detected after the leaked water has become deep enough to touch the probes.

- Install the main unit 1 m or higher above the floor. The main unit is not waterproof; if it becomes wet, the sensor may become damaged and water leaks will not be detected properly.



Securing with the wall mounting adaptors

- 1 Use screws to attach the wall mounting adaptors to the wall.
 - Main unit
 - Ⓐ Screws
 - Ⓑ 75 mm
 - Probe unit
 - Ⓐ Screw

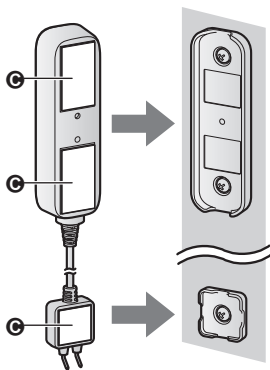


Note:

- To install the probe unit on a floor, see page 17. In this case, you will not use the probe unit's wall mounting adaptor.

- 2** Remove the backing from the double-sided tape, insert the main unit and the probe unit into the wall mounting adaptors, and then press firmly on each unit to ensure solid adhesion to the installation surface.

C Double-sided tape

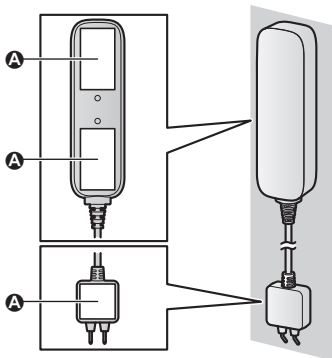


Securing with double-sided tape only

Note:

- Make sure any surfaces that will make contact with the double-sided tape are clean and dry before applying the tape. When attaching the double-sided tape to concrete or bricks, if the surface of the concrete or bricks is wet, make sure to completely dry the surface before attaching the double-sided tape.
- 1** Remove the backing from the double-sided tape, attach the main unit and the probe unit to the installation surface, and then press firmly on each unit to ensure solid adhesion to the installation surface.

A Double-sided tape



Note:

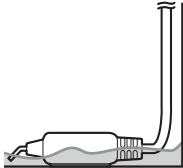
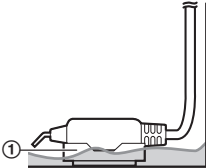
- To install the probe unit on a floor, see page 17.

Installing the probe unit on a floor

When installing the probe unit on a floor, use the double-sided tape to attach the probe unit directly to the floor.

Note:

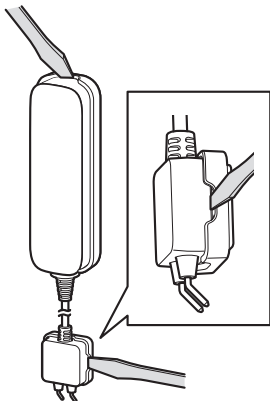
- If the probe unit is inserted into the wall mounting adaptor and attached to a floor, the probes will be too far from the floor and therefore water leaks can only be detected after the leaked water has become deep enough to touch the probes.

Correct installation	Incorrect installation
<p data-bbox="120 419 439 442">Shallow water touches probes</p>  A cross-sectional diagram showing a probe unit lying flat on a floor surface. Two vertical probes extend upwards from the unit. A shallow layer of water is shown on the floor, reaching the tips of the probes.	<p data-bbox="534 419 899 442">Only deep water can touch probes</p>  A cross-sectional diagram showing a probe unit mounted on a floor using a wall mounting adaptor. The adaptor is a raised platform. A circled number '1' points to the adaptor. Two vertical probes extend upwards from the unit. A layer of water is shown on the floor, but it is too shallow to reach the tips of the probes because they are elevated by the adaptor. <p data-bbox="534 693 808 716">① Wall mounting adaptor</p>

Removing from the wall

■ Removing from the wall mounting adaptors

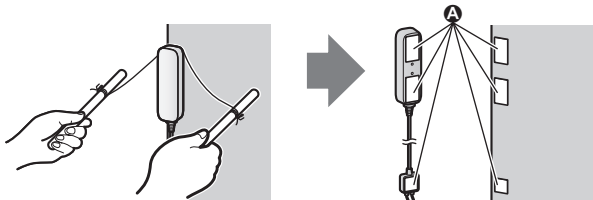
- 1 Insert a flat screwdriver into the notches on the wall mounting adaptors, and carefully pry away the main unit and probe unit.



- 2 Remove the screws that secure the wall mounting adaptors to the wall.

■ Removing when secured with double-sided tape only

- 1 Tie a piece of thread to two sticks, screwdrivers, etc.
 - 2 Pull the thread tight and use it to cut the double-sided tape, and then remove any excess tape.
- A** Excess tape



Testing the sensor

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

- 1 Remove the main unit cover.
- 2 Press **[••)C]**.
- 3 Touch the probes of the probe unit to water.
- 4 Confirm that the LED indicator lights in red.
- 5 Press **[••)C]** again.



Features available when using the [Home Network] app

Some of the 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 19).

- **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 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 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]**.

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**
1.88 GHz – 1.90 GHz
- **RF transmission power**
Approx: 10 mW (average power per channel)
250 mW (max.)
- **Power source**
Lithium battery CR2 (CR15H270)
(1 × 3.0 V, 850 mAh)
- **Operating conditions**
0 °C – 40 °C
- **Battery life**
Up to 2 years (when the sensor is triggered once a month, in an environment of 25 °C) when using a 3.0 V, 850 mAh battery. The battery life differs depending on the capacity of the battery used.
- **Dimensions**
Main unit (height × width × depth) (not including double-sided tape):
Approx. 106 mm × 31 mm × 22 mm
Probe unit (height × width × depth) (not including double-sided tape):
Approx. 44 mm × 24 mm × 10 mm
Cable (length):
Approx. 1.2 m
- **Mass (weight)**
Approx. 80 g, excluding the battery

For your future reference

We recommend keeping a record of the following information to assist with any repair under warranty.

Serial No.	Date of purchase
(found inside the main unit)	
Name and address of dealer	

Attach your purchase receipt here.

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