LG
Life's Good

OWNER'S MANUAL

Smart ThinQ™ Hub and Sensor

Read this owner's manual thoroughly before operating the appliance and keep it handy for reference at all times.

MFL69410401
Rev.01_032116

SAFETY INSTRUCTIONS

We have provided many important safety messages in this manual and on your appliance. Always read and follow all safety messages.

⚠ This is the safety alert symbol.
This symbol alerts you to potential hazards that can kill or injure you and others.
All safety messages will follow the safety alert symbol and either the word WARNING, or CAUTION.

These words mean :

⚠ **WARNING** — You may be killed or seriously injured if you do not follow instructions.

⚠ **CAUTION** — You may be slightly injured or cause damage to the product if you do not follow instructions.

IMPORTANT SAFETY INSTRUCTIONS

⚠ **WARNING**

To reduce the risk of fire, electric shock, or injury to persons when using your appliance, follow basic precautions, including the following :

⚠ **WARNING**

California Safe Drinking Water and Toxic Enforcement Act
This product contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm. *Wash hands after handling*.

Installation Instructions

- When installing, please avoid locations exposed to direct sunlight for a long time, locations with high temperatures due to heating apparatuses, etc.
  Failure to do so may result in fire or explosion.

- Do not install or store the product in enclosed locations.
  Doing so may result in fire or explosion.

Power Supply Instructions

- Do not bend the power cable, Internet cable, or charging cable or place heavy objects on them.
  Doing so may result in fire or electric shock.

- Do not touch the power plug with wet hands.
  Doing so may result in electric shock or injury.

- Firmly plug the adapter into the power outlet after removing any moisture or dust.
  Moisture or dust may result in fire or electric shock.

- When unplugging the adapter, always pull the body of the adapter, not the power cord.
  Failure to do so could cause fire or damage to the adapter.

- Please use only the voltage or current indicated on the adapter.
  Failure to do so could result in fire.

Operating Instructions

- Only the service engineers of LG Electronics service centers are allowed to disassemble, repair, or modify the product.
  Doing so could result in fire, electric shock, explosion, or injury.

- Keep out of reach of children or pets.
  Placing the battery in the mouth or applying impact to it causes electrocution or exposure to electromagnetic radiation.

- When the adapter is inserted into the power outlet, do not insert metal objects such as pins or wires into the power connection.
  Doing so could cause electrocution.

- Do not use or keep the product near flammable materials (candles, lamps, etc.) or combustibles (ether, benzene, alcohol, drugs, propane, butane, combustible spray, insecticide, air freshener, cosmetics, etc.).
  Doing so could result in fire or explosion.

- When using the product, if strange smell or smoke is detected, immediately remove the adapter and contact an LG Electronics service center.
  Failure to do so may result in fire or electric shock.

- Do not allow anything to strike the product.
  Doing so may result in explosion.

⚠ **CAUTION**

To reduce injury or damage to the product to persons when using the appliance, follow basic safety precautions, including the following :

Operating Instructions

- Do not charge or use the product for prolonged periods when the product is placed on blankets, electric blankets, or carpets.
  Doing so could result in fire.

- Do not swallow the product or its components.
  This may lead to suffocation.

Information

Installation Instructions

- Please install the product in a location free from electromagnetic interference.
  Failure to do so may cause the product to malfunction.

Operating Instructions

- Please use only the dedicated adapter provided.
  Failure to do so may cause the product to fail, voiding your warranty.

- Do not drop or expose the product to impact.
  This could result in product malfunction.

- When removing the power cable or connection cable from the product, always hold the end of the cable.
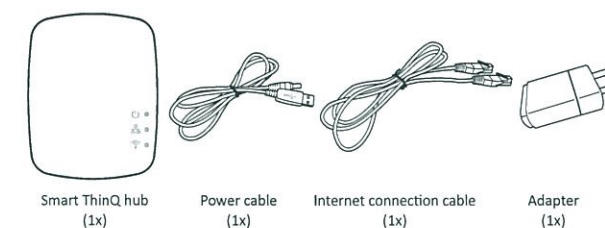 Failure to do so may cause the product to fall and malfunction.

Cleaning Instructions

- When cleaning the product, do not use chemical substances such as thinner or benzene.

- Use a dry rag or a soft cloth to wipe the product off.

- If water has leaked into the product, immediately dry the affected area and contact the LG Electronics service center.

- Do not spray water or disinfectant on the product.

- The company will not be held liable for product malfunctions or electrical accidents caused by customer negligence that results in water, disinfectant, or other foreign materials entering the product.
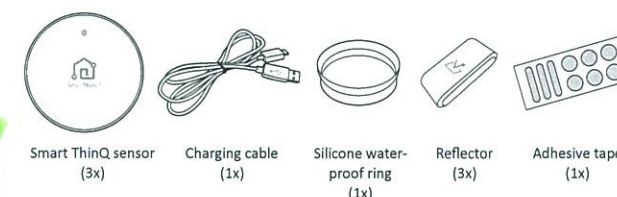
SAVE THESE INSTRUCTIONS
INSTALLING

Product Contents

Smart ThinQ™ hub

Smart ThinQ hub (1x) Power cable (1x) Internet connection cable (1x) Adapter (1x)

Smart ThinQ™ sensor

Smart ThinQ sensor (3x) Charging cable (1x) Silicone waterproof ring (1x) Reflector (3x) Adhesive tape (1x)
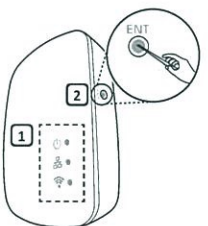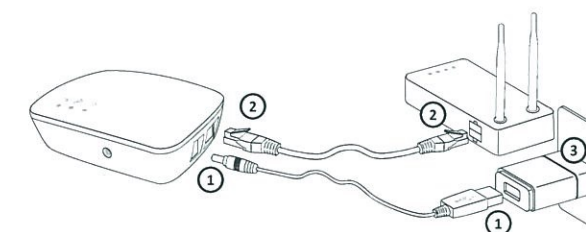
- The actual appearance of the components may be different.
- Smart ThinQ hub components are available only as part of the Smart ThinQ™ Sensor Kit.
  (If you require Smart ThinQ hub components, please contact an LG Electronics service center.)
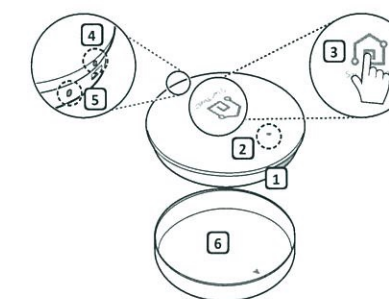
Installing

Names and functions of Smart ThinQ™ hub

1 **LED indicator**

⏻ **Power**
The LED is lit when power is connected.

品 **Network**
The LED is lit when Internet is connected normally.

📶 **Wireless**
The LED blinks when an active wireless connection has been established with the Smart ThinQ sensor.

2 **Settings**

- **Initializing settings:** Insert a sharp tool into the ENT hole on the side of the product and press and hold for at least 10 seconds. The power LED, network LED, and wireless LED will blink, initializing all information registered in the product.
- **Reset:** Insert a sharp tool into the ENT hole on the side of the product and press for around 1–2 seconds to power down and restart the product. (At this time, information registered in the product is not initialized.)
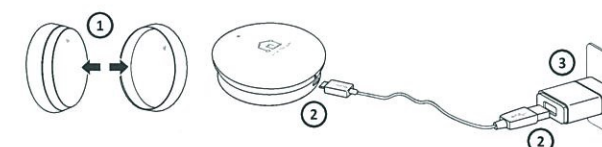
Installing the Smart ThinQ™ hub

1 Connect the power cable to the Smart ThinQ hub and adapter.

2 Connect the Internet cable to the Smart ThinQ hub and wireless router (AP).

3 Plug the adapter connected to the Smart ThinQ hub into a power outlet.
   - Check whether the Power LED lights up.

Names and functions of Smart ThinQ™ sensor

1 **IR communication unit**

2 **LED indicator**
- **Charging:** Red LED is lit.
- **Fully charged:** Green LED is lit.
- **Sensor operational:** Blue LED is lit.

3 **Settings button**
- **Data transmission:** When the blue LED lights up with a push of the button, this indicates that the sensor is connected.
  (A blinking red LED indicates that the sensor is not connected.)
- **Initialize settings:** Press and hold the button for at least 10 seconds. The red and blue LEDs will blink alternately, and the settings registered in the product will be initialized.

4 **Temperature and humidity sensor unit**
This sensor detects temperature and humidity.

5 **Reset**
Separate the container (detachable cover), and then press the hole next to the cable connection port with a sharp tool for at least 3 seconds. This will reset the product. (At this time, information registered in the product is not initialized. Please use this feature only when the product malfunctions.)

6 **Container (detachable cover)**

Charging the Smart ThinQ™ sensor

1 Remove the container (detachable cover) from the Smart ThinQ sensor.

2 Connect the charging cable to the Smart ThinQ sensor and adapter.

3 Plug the adapter connected to the Smart ThinQ sensor into a power outlet.

USING THE PRODUCT

Before Using the Product

Attach the Smart ThinQ sensor to an LG home appliance to view various kinds of information on your home appliances conveniently through the "LG Smart ThinQ" app.

Washing machine sensor

It notifies you to remove laundry when a cycle is complete.

Refrigerator sensor

The storage periods of foods stored in the refrigerator are indicated.

Temperature and humidity sensor

It notifies you when the preset temperature or humidity range is exceeded.

Door and window sensor

It notifies you when door or window movement is detected

Automatic air conditioner operation sensor

The air conditioner is automatically turned on if the temperature in the space where the air conditioner is installed exceeds the preset value. The air conditioner settings can be changed remotely.

Automatic robot vacuum cleaner operation sensor

The robot vacuum cleaner begins cleaning at the preset time. The robot vacuum cleaner settings can be changed remotely.

Installing the Application

Install the "LG Smart ThinQ" application on your smart phone to use the product more conveniently.

The application can be installed from the Google Play Store.

Please refer to the Help section of the application for details on how to use "LG Smart ThinQ."

Installing from the Google Play Store

On your smart phone, go to Google Play Store, search for "LG Smart ThinQ," and install.

Registration

Using the "LG Smart ThinQ" application, you can experience a wide range of LG Electronics services.

1. On your smart phone, run the "LG Smart ThinQ" application, and then click **Create new account**.

2. Follow the registration procedure to read the terms of service and enter member information, and then press the **OK** button.
   - A verification email will be sent to the email address entered.

3. Access your email account, open the email, and press the **Authenticate** button in order to register your LG account.

Information
- The email address you entered when registering your LG account is your ID.

Registering the Product

Step 1. Registering the Smart ThinQ™ hub

1. Run the application and press the **Register** button on the smart phone screen.

2. Select **Smart ThinQ hub (standard)** and follow the instructions on your smart phone screen.

Step 2. Registering the Smart ThinQ™ sensor

1. Select the registered Smart ThinQ hub (standard) and press the **Register Sensor** button.

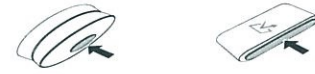2. Please follow the instructions on the smart phone screen.

Information
- After resetting the product, the product can be re-registered by following the "Registering the Product" procedure above. For instructions on how to reset the product, refer to "Installing."
- During firmware updates through the application, please do not turn off Smart ThinQ hub. This may cause Smart ThinQ hub to malfunction.
- The contents of this manual may vary depending on the version of the "LG Smart ThinQ" application, and they may be changed in part without prior notice.

Attaching the Smart ThinQ™ Sensor and Reflector

1. Attach adhesive tape to the bottom of the Smart ThinQ sensor container (detachable cover) and the reflector.

   Smart ThinQ sensor   Reflector (attach to door and window only)

2. Attach the Smart ThinQ sensor and reflector as indicated below.
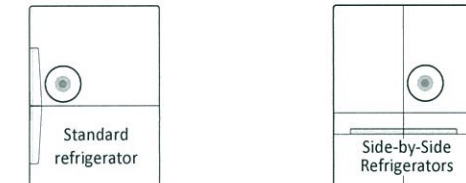   - Only LG home appliances may be used.

Washing machine
- Attach the Smart ThinQ sensor near the handle to the washing machine door.
- To keep water from entering the Smart ThinQ sensor, please install the waterproof silicone ring.
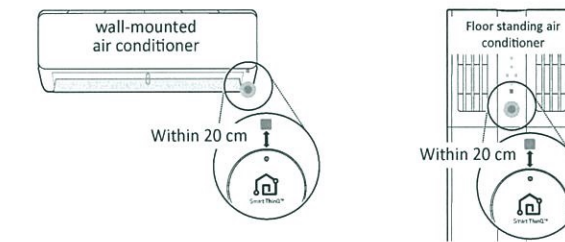
   Top-loading washing machine   Front-loading washing machine

Refrigerator
- Attach the Smart ThinQ sensor near the refrigerator door handle, which is most frequently used.

   Standard refrigerator   Side-by-Side Refrigerators

Air conditioner
- With the IR communication unit of the Smart ThinQ sensor facing the remote control signal receiver of the air conditioner, place within 20 cm.
- The location of the remote control signal receiver may vary depending on the model.

   wall-mounted air conditioner   Floor standing air conditioner
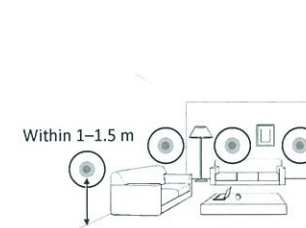   Within 20 cm   Within 20 cm

Robot vacuum cleaner
- Attach on the upper left or right corner of the charging station, with the IR communication unit of the Smart ThinQ sensor facing the robot vacuum cleaner.
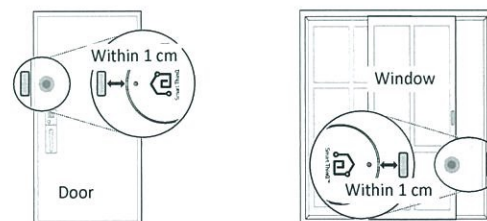
Temperature and humidity
- Attach the Smart ThinQ sensor on a wall surface 1–1.5 m off the floor.

   Within 1–1.5 m

Door and window
- Attach the reflector on a wall near the door handle or on the doorframe.
- With the IR communication unit of the Smart ThinQ sensor facing the reflector attached on the wall or doorframe, attach within 1cm.

   Within 1 cm   Window
   Door   Within 1 cm

- For details on positioning and use, please refer to the "LG Smart ThinQ" application.

PRODUCT SPECIFICATIONS AND CERTIFICATIONS

Trade name of certified party: LG Electronics Co., Ltd.
Device name: Specific low power wireless device (wireless data communication system wireless device)

As wireless equipment may cause radio interference, it must not be used to provide life saving services.

	Smart ThinQ™ hub	Smart ThinQ™ sensor
Model Name	AIHC61	ISC61G-ZB
Frequency used	2405–2480 MHz	2405–2480 MHz
Requested output	10 mW/MHz	10 mW/MHz
Modulation method	O-QPSK	O-QPSK
Signal type / channels	D2D / 16	D2D / 16
Input power / current	5 V / 0.85 A	3.7 V / 300 mAh
Power consumption	max. 400 mA	max. 210 mA
Operating temperature	- 20 ˚C to 40 ˚C	- 20 ˚C to 60 ˚C
Manufacturer / Country of origin	LG Electronics Co., Ltd. / China	LG Electronics Co., Ltd. / Korea
Certification number	MSIP-CRM-LGE-AIHC61	MSIP-CRM-LGE-ISC61G-ZB

Open Source Software License Notice
- The following applies only to the Smart ThinQ hub:

Please visit http://opensource.lge.com to obtain open source codes developed under GPL, LGPL, MPL or other open source licenses that are included in this product.

In addition to source codes, you can also download the contents of all licenses, copyright indications and indication of no warranty.

If you request open source codes for any software included in this product by sending an email to opensource@lge.com within three years of purchasing the product, we will send the codes on a CD-ROM with minimal charges for the CD and shipping.

CHECKLIST BEFORE REQUESTING SERVICE

If any of the following symptoms occurs while using the product, please double-check. It may not be a malfunction.

Symptom	Cause	Solution
Smart ThinQ hub		
The power does not turn on.	Is the power cable properly connected to the Smart ThinQ hub?	• Firmly connect the power cable to the Smart ThinQ hub.
The Smart ThinQ hub cannot be registered/found in the "LG Smart ThinQ" application.	Is the wireless router (AP) on?	• Check whether the network LED of the Smart ThinQ hub is lit. • Please connect the network cable and power cable between the Smart ThinQ hub and wireless router (AP) properly. • Power down and restart the wireless router (AP), confirm that it operates properly, and then power down and restart the Smart ThinQ hub.
	Is the network LED off?	• Check whether the IP address has been set successfully from the wireless router (AP). • Check whether the DHCP (dynamic IP) function of the wireless router (AP) is enabled.
	Is the Smart ThinQ hub installed near the wireless router (AP)?	• For better performance, please separate by at least 10 cm from the wireless router (AP).
Smart ThinQ sensor		
The power does not turn on.	When the Smart ThinQ sensor button is pressed, does the LED blink?	• The battery has been discharged. Please charge the battery.
The product is not working.	When the Smart ThinQ sensor button is pressed briefly, does the LED blink?	• If the red LED blinks, connection with the Smart ThinQ hub has been cut. Please re-register the Smart ThinQ sensor. • If the blue LED blinks, the Smart ThinQ hub is connected normally. Power down and restart the Smart ThinQ sensor.

PRODUCT WARRANTY

Customers have the right to receive free services for one year after the purchase date for any errors that occur while using the product. This product is eligible for free service during the warranty period within South Korea only.

Model Name		Warranty Period: 1 year
Date of purchase		

- The warranty period is calculated from the purchase date. Please record your purchase date here.(If the purchase date cannot be verified, the warranty period is calculated from three months after the manufacturing date or import clearance date.)

Consumer Dispute Resolution Criteria
- Only products found to have manufacturing defects or which have experienced natural failure within the warranty period are eligible for free repairs.
- Please present your receipt for refund.

Type of consumer damage		Compensation	
		Within the warranty period	After the warranty period
If major repairs are required within 10 days of purchase		Product exchange or refund of the purchase price	
If major repairs are required within 1 month of purchase		Product exchange	
Any performance or functional defect that occurred during normal use within the warranty period	If a defect occurs.	Product exchange	Exchange (paid)
	If repair is not possible.	Product exchange or refund of the purchase price	
	If exchange is not possible.	Refund of the purchase price	
	The exchanged product requires a major repair within one month.	Refund of the purchase price	
Damages during transportation after purchasing the product		Product exchange (In case of entrustment to a transportation company, however, the seller will exercise his/her right to indemnity against the transporting company).	NA
Damages that occurred while the seller is installing the product		Product exchange	NA

- The above compensation criteria are based on the consumer dispute resolution standards reported by the Fair Trade Commission.
- Follow the "Consumer Dispute Resolution Criteria" for matters not covered above.
- Cleaning, adjustment, and manual are not covered by the service.

Liability for paid-for services (expenses paid for by the customer)

If service is requested in any of the following cases, any service provided will be subject to a fee even during the warranty period:
- You will be charged if you request service for non-failure. Therefore, please read the Owner's Manual carefully.
- You will be charged for equipment failure due to dropping, flooding, impact, damage, forced operation, or other improper handling by the user.
- If failure occurs due to repairs or modifications made by a person other than a qualified technician from an LG Electronics service center
- If product failure or damage occurs due to use of parts other than genuine LG parts
- Lost or damaged parts due to arbitrary disassembly of the product by the customer
- Malfunctions caused by natural disasters such as lightning, fire, storm and flood, seawater, gas, and earthquakes
- If consumable parts are replaced under normal wear and tear conditions

LG Electronics Service Center

For inquiries or inconveniences experienced while using the product, please inquire by telephone before visiting an LG Electronics service center.

Failure reports and usage instructions	Internet service request
1544-7777, 1588-7777 (paid) 080-023-7777 (toll-free)	www.lgservice.co.kr

What is the Korea Service Quality Certification?

This certification is given by the Korea Association for Service to companies with excellent service quality and customer satisfaction.

Consumer Centered Management

This certification mark is attached to products and services of consumer-oriented companies that make consumers their top priority.

This mark is assessed by the Korea Consumer Agency and certified by the Fair Trade Commission.(www.kca.go.kr)

Open Source Software Notice Information

- 본 내용은 Smart ThinQ 허브에만 적용됩니다.

To obtain the source code under GPL, LGPL, MPL, and other open source licenses, that is contained in this product, please visit http://opensource.lge.com. In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping, and handling) upon email request to opensource@lge.com. This offer is valid for three (3) years from the date on which you purchased the product.

Wireless LAN Module Specifications

	Smart ThinQ™ Hub	Smart ThinQ™ Sensor
Model	AIHC61	ISC61G-ZB
Frequency Range	2405~2480 MHz	2405~2480 MHz
Output Power (max.)	10 mW/MHz	10 mW/MHz

FCC Notice (For transmitter module contained in this product)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions :

1) this device may not cause harmful interference and
2) this device must accept any interference received, including interference that may cause undesired operation of the device.

Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with minimum distance 20 cm (7.8 inches) between the antenna and your body. Users must follow the specific operating instructions for satisfying RF exposure compliance.