

## **Installation**

### **Refrigerator at a glance**

The actual refrigerator and provided component parts of your refrigerator may differ from the illustrations in this manual, depending on the model and the country.

Type A

Type B

- 01 Auto Ice Maker
- 02 1-Step Foldable Shelf
- 03 Water tank (Auto Water Fill)
- 04 Main panel (on the FlexZone™ handle)
- 05 FlexZone™
- 06 Freezer
- 07 Door bins
- 08 2-Step Foldable Shelf
- 09 Water filter

\* applicable models only

#### **NOTE**

- For energy efficiency, keep all shelves, drawers, and baskets in their original positions.
- When closing the door, make sure the vertical hinged section is in the correct position to avoid scratching the other door.
- If the vertical hinged section is reversed, put it back into the correct position, and then close the door.
- Moisture may form at times on the vertical hinged section.
- If you close a door forcefully, the other door may open.
- When a door is opened, the interlock switch automatically disables the auger motor of the ice maker for safety reasons.
- If the internal or external LED lamp is out of order, contact a local Samsung service center.
- If the door is left open for too long, the top internal LED will blink. This is normal.

#### **Door bins**

Your refrigerator ships with door bins of different types and sizes. If the door bins for your refrigerator were packaged separately, use the figure below to help you position the bins properly.

## Step-by-step installation

### STEP 1 Select a site

Select a site that:

- Has a solid, level surface without carpeting or flooring that may obstruct ventilation
- Is away from direct sunlight
- Has adequate room for opening and closing the door
- Is away from any heat sources
- Provides room for maintenance and servicing
- Has a temperature range between 50 °F (10 °C) and 109 °F (43 °C)

Clearance

See the pictures and table below for space requirements for installation

### STEP 2 Flooring

If the refrigerator cannot pass through the entrance due to its size, see STEP 3 Door removal for entrance.

NOTE: To prevent floor damage, make sure the front levelling legs are in the upright position.

- The surface you install the refrigerator on must support a fully loaded refrigerator.
- To protect the floor, put a large piece of cardboard along the path to the refrigerator's final installation location.
- Once the refrigerator is in its final position, do not move it unless necessary to protect the floor. If you have to move the refrigerator, place thick paper or cloth such as old carpets along the path of movement.

### STEP 3 Door removal for entrance

If the refrigerator cannot pass through the entrance to your home or kitchen due to its size, follow these instructions to remove and then re-install the refrigerator's doors.

Tools required (not provided)

Detach the fridge doors

*Left door*

1. With the doors closed, use a Phillips head screwdriver to remove the screws (x3) in the top cover.
2. Disconnect the wires and the water tube from the left-side door. Do the following sequentially:

- Decouple the connector.
- While holding down one end of the water line coupler, disconnect the water tube.

3. Gently draw up the clamp in several steps. To prevent finger injuries, do not apply a sudden force to the clamp.

4. Pull up the clamp to remove it.

5. Open the door 90 degrees. While holding the door, pull up and remove the top hinge. Be careful not to damage the connector wires when you remove the hinge.

6. Gently pull up the door vertically to remove. Do not apply excessive force to the door. The door may fall, causing physical injury.

7. Lay the door down on a flat surface.

#### *Right door*

1. Disconnect the wire connectors (x2) on the right door. The position of the connectors differs with the model.

2. Gently draw up the clamp in several steps. To prevent finger injuries, do not apply a sudden force to the clamp.

3. Pull up the clamp to remove it.

4. Open the door 90 degrees. While holding the door, pull up and remove the top hinge. Be careful not to damage the connector wires when you remove the hinge

5. Gently pull up the door vertically to remove. Do not apply excessive force to the door. The door may fall, causing physical injury.

6. Lay the door down on a flat surface.

### **STEP 4 Levelling the refrigerator**

Level the refrigerator using the special screws (levellers) on the front legs. Use a flat-head screwdriver to turn the levellers.

- To adjust the height of the left side: Insert a flat-head screwdriver into the leveller on the left side front leg. Turn the leveller clockwise to raise the left side or turn it counterclockwise to lower.
- To adjust the height of the right side: Insert a flat-head screwdriver into the leveller on the right side front leg. Turn the leveller clockwise to raise the right side or turn it counterclockwise to lower.

### **STEP 5 Adjust the door height and the door gap**

Snap rings

- The height of a door can be adjusted using the provided snap rings, which come in 4 different sizes (1 mm, 1.5 mm, 2 mm, and 2.5 mm).

To adjust the height of a door

1. Check the height difference between the doors, and then lift up and hold the door with the lower height.
2. Insert a suitable-sized snap ring (A) between the door grommet (B) and the hinge as shown.

### **STEP 6 Attach the handles**

1. Using a Phillips screwdriver, attach the handle screws to the refrigerator, two for each handle respectively, as shown in the illustration to the left.

2. Attach the handle to the handle screws on the door.

For type B handle: Insert the hook on the middle of the handle to its designated hole on the door, and then place the upper and lower part of the handles to the handle screws.

3. Push the handle down.

4. Insert the supplied wrench into the handle hole, and then turn it clockwise to tighten.

5. Repeat Steps 2 through 4 with the second refrigerator door handle.

6. To attach the freezer handle to the refrigerator, first place the left side of the freezer handle onto the left handle screw, and then push it to the left.

7. Then, place the right side of the freezer handle onto the right handle screw.

8. Insert the supplied wrench into the handle hole, and then turn it clockwise to tighten.

### **STEP 7 Connect the water dispenser line**

- A water dispenser with a filter is one of the helpful features on your new refrigerator. To help promote better health, the water filter removes unwanted particles from your water. However, it does not sterilize or destroy microorganisms. You may need to purchase a water purifying system to do that.
- The water line also connects to the ice maker. For the ice maker to operate properly, water pressure of 30 to 120 psi (206 to 827 kPa) psi is required.
- If the refrigerator is installed in an area with low water pressure (below 30 psi / 206 kPa), you can install a booster pump to compensate for the low pressure.
- After you have connected the water line, make sure the water storage tank inside the refrigerator is properly filled. To do this, press the water dispenser lever until water runs from the water outlet.

1. Shut off the main water source.

2. Insert the pipe clamp (B) and the shutoff valve (C) into the cold water line (A).

3. Connect the water line installation kit (A) to the shutoff valve (B).

### **STEP 8 Initial settings**

By completing the following steps, the refrigerator should be fully functioning

1. Plug the power cord into the wall socket to turn the refrigerator on.
2. Open the door, and check if the interior light lights up.
3. Set the temperature to the coldest setting, and wait for about an hour. Then, the freezer will be slightly chilled, and the motor should be running smoothly.
4. Wait until the refrigerator reaches the set temperature. Now the refrigerator is ready for use.

## **STEP 9 Final check**

When installation is complete, confirm that:

- The refrigerator is plugged into an electrical outlet and grounded properly.
- The refrigerator is installed on a flat, level surface with a reasonable clearance from walls and cabinets.
- The refrigerator is level and is sitting firmly on the floor.
- The door opens and closes freely, and the interior light turns on automatically when you open the door.

## **Operations**

### **SmartThings**

#### **Installation**

Visit the Google Play Store, Galaxy Apps, or Apple App Store and search for “SmartThings”. Download and install the SmartThings app provided by Samsung Electronics to your smart device.

#### **NOTE**

- The SmartThings app is not available for some tablets, iPads, smartphones:
  - That support [Android] OS 6.0 or higher. (mimimum 2 GB RAM Size)
  - That support [iOS] 10.0 or higher/iPhone 6 or higher
- For improved performance, the SmartThings app is subject to change without notice or discontinued support according to the manufacturer’s policy.
- Recommended encryption systems include WPA/TKIP and WPA2/AES. Any newer or non-standard Wi-Fi authentication protocols are not supported.
- Wireless networks may be affected by the surrounding wireless communication environment.
- If your Internet service provider has registered the MAC address of your PC or modem for identification, your Samsung Smart Refrigerator may fail to connect to the Internet. If this happens, contact your Internet service provider for technical assistance.

- The firewall settings of your network system may prevent your Samsung Smart Refrigerator from accessing the Internet. Contact your Internet service provider for technical assistance. If this symptom continues, contact a local Samsung service center or retailer.
- To configure the wireless access point (AP) settings, see the user manual of the AP (router)
- Samsung Smart Refrigerators support both IEEE 802.11 b/g/n (2.4 GHz) and 802.11 a/n/ac (5 GHz) protocols. (IEEE 802.11 n and 802.11 ac are recommended.)
- Unauthorized Wi-Fi wireless routers may fail to connect to applicable Samsung Smart Refrigerators.

#### Samsung account

- You are required to register your Samsung account to use the app. If you don't have a Samsung account, follow the app's onscreen instructions to create a free Samsung account.

#### Getting started

Turn on the device you want to connect, open the SmartThings app on your phone, and then follow the instructions below.

- If a pop-up appears saying that a new device has been found, tap ADD NOW.
- If a pop-up doesn't appear, tap the + button, and then select the device you want to connect from the list of available devices.
- If your device isn't in the list of available devices, tap Supported Devices, select the device type (Refrigerator), and then select the specific device model.

Follow the instructions in the app to set up your device. Once setup is complete, your refrigerator will appear as a "card" on your Devices screen.

### **SMART GRID Function (Demand Response)**

When the refrigerator operates in SMART GRID (Demand Response) mode, the Energy Management Refrigerator function can control energy usage or delay the operation of some functions to save money when energy prices or demand are the highest.

#### NOTE

- You can deactivate the SMART GRID (Demand Response) function at any time using the Peak Demand Off function.
- To use the SMART GRID (Demand Response) function, you need a separate contract with your electric utility company.

In addition, to use the Smart Grid (Demand Response) function, you must register for the service with your electric company. The company must have an EMS (Energy Management System) that supports SEP (Smart Energy profile).

### **Using the SMART GRID (Demand Response) Function**

This feature monitors energy prices and demand information from your utility company and sends notifications to the refrigerator to run high energy consuming tasks during offpeak times when electricity costs and demand are lower.

If the refrigerator receives a control signal from the utility company, the refrigerator will display the DAL (L3) ~ TALR (L4) levels on the refrigerator display and control the power consumption according to the level.

[Exception condition] The DAL and TALR control signals from a utility company work as long as product performance is maintained.

If the refrigerator receives the SMART GRID (Demand Response) signal (DAL or TALR), the refrigerator will operate in Delay Appliance Load (Display:L3) or Temporary Appliance Load Reduction (Display:L4) mode.

- Delay Appliance Load (L3): The refrigerator responds to a DAL signal by providing a moderate load reduction for the duration of the delay period. This function controls functions that consume a lot of energy such as adjusting the Cooling system, running the defrost cycle, and making ice.
  - When the refrigerator operates in DAL (L3) mode, “L3” is displayed on the refrigerator display.
  - DAL mode is automatically deactivated after it lasts for the amount of time stipulated by the DAL signal (max. 4.5 hours) or when the Peak Demand Off key is pressed.
- Temporary Appliance Load Reduction (L4): The refrigerator responds to a TALR signal by aggressively reducing the load for a short time period. This function reduces energy consumption by stopping the compressor and controlling the functions that consume a lot of energy such as the defrost cycle and making ice.
  - When the refrigerator operates in TALR (L4) mode, “L4” is displayed on the refrigerator display.
  - TALR (L4) mode is automatically deactivated after it lasts for the received duration (max. 15 minutes), or when the Peak Demand Off key is pressed. The mode is immediately deactivated and the refrigerator returns to the normal state when the door is opened or closed, or the dispenser is used.

### **To check the MAC address**

1. Tap the Settings icon on the Home screen.



2. Scroll down to and open About Family Hub.
3. The screen displays (among other things) the Wi-Fi MAC address.

### **Peak Demand Off (Override mode)**

- When you want the refrigerator to ignore the SMART GRID (Demand Response) signal from the utility company, you can activate Peak Demand Off (Override mode).
- When you activate Peak Demand Off (Override mode), the refrigerator ignores the SMART GRID (Demand Response) signal and is not controlled by the utility company.

### **Activating and deactivating Peak Demand Off (Override mode)**

1. Tap the 'FridgeManager' Icon on the Home screen.
2. Open the 'Fridge Settings' menu on the bottom of the screen.
3. Open the 'Demand Response' menu.
4. Turn the 'Peak Demand Off (Override mode)' on and off. Tap and drag the button to activate or deactivate "Demand Off".

## **Maintenance**

### **Handling and care**

#### **Ice bucket (applicable models only)**

If you do not dispense ice for an extended period, ice may form clumps inside the bucket. If this happens, remove and empty the ice bucket.

1. To remove the ice bucket, gently lift it up, and then pull it out slowly while holding the bottom of the bucket with one hand and the side with the other hand.
2. Empty the bucket.
3. When done, put the bucket back into position. If the bucket does not fit in, turn the helix screw 90 degrees, and then try again.

If the ice bucket is not firmly inserted, turn the Helix (A) 90 degrees, and then try again.

#### **Auto Water Fill (applicable models only)**

1. Grasp a handle groove of the sealed mouth, and then pull up to remove.
2. Grasp both sides of the sealed mouth, and then lift to remove.
3. While slightly twisting the infuser, pull it out of the sealed mouth.
4. Clean the infuser with neutral agents and running water. Rinse and dry well.
5. Reassemble the Auto Water Fill in the reverse order of disassembly.

## Cleaning

### Interior and exterior

#### WARNING

- Do not use benzene, thinner, home/car detergent, or Clorox™ to clean the refrigerator. They may damage the surface of the refrigerator and cause a fire.
- Do not spray water onto the refrigerator. This may cause electric shock.

Regularly use a dry cloth to remove all foreign substances such as dust or water from the power plug terminals and contact points.

1. Unplug the power cord.
2. Use a moistened, soft, lint-free cloth or paper towel to clean the refrigerator's interior and exterior.
3. When done, use a dry cloth or paper towel to dry well.
4. Plug in the power cord.

### Rubber seals

- If the rubber seals of a door become dirty, the door may not close properly and reducing refrigerator performance and efficiency. Use a mild detergent and damp cloth to clean the rubber seals. Then, dry well with a cloth.

## Troubleshooting

### General

#### Temperature

Fridge/freezer does not operate. Fridge/freezer temperature is warm

- Power cord is not plugged in properly.
  - Properly plug in the power cord.
- Temperature control is not set correctly.
  - Set the temperature lower.
- Refrigerator is located near a heat source or direct sunlight.
  - Keep the refrigerator away from direct sunlight or a heat source.
- Not enough clearance between refrigerator and nearby walls or cabinets.
  - Make sure there is a gap of at least 2.5 inches (5 cm) between the refrigerator back and sides and any nearby walls or cabinets.

- Energy Saver mode is activated.
  - Deactivate Energy Saver mode.
- The refrigerator is overloaded. Food is blocking the refrigerator vents
  - Do not overload the refrigerator. Do not allow food to block ventilation.

Fridge/freezer is over-cooling.

- Temperature control is not set correctly.
  - Set the temperature higher.

Interior wall is hot.

- Refrigerator has heat-proof piping in the interior wall.
  - To prevent condensation from forming, the refrigerator has heat-proof piping in the front corners. If the ambient temperature rises, this equipment may not work effectively. This is not a system failure.

## **Odors**

Refrigerator has odors.

- Spoiled food.
  - Clean the refrigerator and remove any spoiled food.
- Food with strong odors.
  - Make sure strong smelling food is wrapped airtight.

## **Frost**

Frost around the vents.

- Food is blocking the vents.
  - Make sure no food blocks the refrigerator vents.

Frost on interior walls.

- Door is not closed properly.
  - Make sure food does not block the door. Clean the door gasket.

Fruits or vegetables are frozen.

- Fruits or vegetables are stored in the Flex Zone and the temperature was set too low.
  - Set the temperature of the Flex Zone to a temperature appropriate for fruits or vegetables.

## **Condensation**

Condensation forms on the interior walls.

- If door is left open, moisture enters the refrigerator.
  - Remove the moisture and do not leave a door open for extended periods of time.
- Food with high moisture content.
  - Make sure food is wrapped airtight.

### **Water/ice (dispenser models only)**

Water flow is weaker than normal.

- Water pressure is too low.
  - Make sure the water pressure is between 20 to 120 psi.

Ice maker makes a buzzing sound.

- The ice maker function is activated, but the water supply to the refrigerator has not been connected.
  - Press Ice Maker off .

Ice maker does not make ice.

- Ice maker has just been installed.
  - You must wait 12 hours for the refrigerator to make ice.
- Freezer temperature is too low.
  - Set the freezer temperature below 0 °F (-18 °C) or -4 °F (-20 °C) in warm, ambient air.
- Dispenser Lock is activated.
  - Deactivate Dispenser Lock.
- Ice maker is off.
  - Turn on the ice maker.

Ice does not dispense.

- Ice may jam if the ice dispenser is not used for a long time (approx. 3 weeks).
  - If you won't be using the refrigerator for a long time, empty the ice bucket and turn off the ice maker.
- Ice bucket is not properly inserted.
  - Make sure the ice bucket is properly inserted.

- Water line is not connected properly or water supply is not on.
  - Check if the water line is installed correctly. Check if the water line stop cock is closed.

Water does not dispense.

- Water line is not connected properly or water supply is not on.
  - Check the water installation conditions.
- Dispenser Lock is activated.
  - Deactivate Dispenser Lock.
- A third-party water filter was installed.
  - Use only Samsung-provided or approved filters.
  - Unapproved filters may leak and damage the refrigerator.
- Water filter indicator turns on or blinks.
  - Replace the water filter. After replacing, reset the filter indicator sensor.

## SmartThings

Could not find “SmartThings” in the app market.

- The SmartThings app is designed for Android 6.0 (Marshmallow) or later, iOS 10.0 or later, iPhone 6 or later, and is optimized for Samsung smartphones (Galaxy S and Galaxy Note series).

The SmartThings app fails to operate.

- The SmartThings app is available for applicable models only.
- The old Samsung Smart Refrigerator app cannot connect with Samsung Smart Home models.

The SmartThings app is installed but is not connected to my refrigerator.

- You must log into your Samsung account to use the app.
- Make sure that your router is operating normally.
- If you have not connected your refrigerator to the SmartThings App after the app was installed, you must make the connection using the device registration function of the app.

Could not log into the app.

- You must log into your Samsung account to use the app.
- If you don't have a Samsung account, follow the app's onscreen instructions to create one.

An error message appears when I try to register my refrigerator.

- Easy Connection may fail due to the distance from your access point (AP) or electrical interference from the surrounding environment. Wait a moment and try again.

The SmartThings app is successfully connected to my refrigerator but does not run.

- Exit and restart the SmartThings app or disconnect and reconnect the router.
- Unplug the power cord of the refrigerator, and then plug it in again after 1 minute.

## **Samsung Family Hub**

Could not find “Samsung Family Hub” in the app market.

- The Samsung Family Hub app is available for smartphones that run Android 4.4 (KitKat) or later, or iOS 8.0 or later.

Could not log into the app.

- You must log into your Samsung account to use the app.
- If you don't have a Samsung account, follow the app's onscreen instructions to create one.

## **Smart Grid (Applicable countries only)**

*What Do I Need to use the Energy Management and Smart Grid functions?*

To use the Smart Grid (Demand Response) and Energy Management functions on your refrigerator, you need the following:

Devices

- A wireless access point (router)
- A Samsung Energy Management-supported refrigerator
- A smartphone

Registration

- Connect your refrigerator to your home Wi-Fi network.
- Register for the EMS service with your electric company. Your electric company must have an EMS (Energy Management System) supporting SEP (Smart Energy profile).

App

- Download the SmartThings app from the Google Play Store, Apple App Store, or Samsung Galaxy Apps.
- Install and run the SmartThings app on your smartphone.

*Why isn't the Energy Management function working normally?*

- Make sure that your home router is operating normally with proper Internet service and connection.
- Make sure that the refrigerator is connected to the AP (router).

Checkpoints

- Connect your smartphone to the router (AP, Access Point), and then check if you can browse the Internet on the smartphone.

*Why isn't the Delay Defrost Capability working normally?*

- Make sure that your home router is operating normally with proper Internet service and connection.

**Warning**

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.

