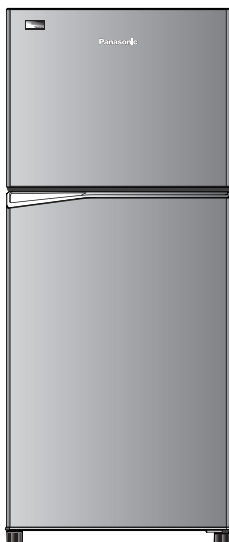




# Panasonic®

## Operating Instructions Refrigerator

For Household Use



Model No.: **NR-TL351**  
**NR-TL381**

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#### ■ NON-CFC

This unit uses totally **NON-CFC MATERIALS** both for refrigerant (R600a) and for insulation (Cyclo-Pentane). So, this refrigerator does not damage the Earth's ozone layer.

Thank you for purchasing the Panasonic product.

- Please read these instructions carefully and follow safety precautions on page 2-5 before using this product.
- Please make sure the date and name of store of purchase are stamped in warranty card and keep it with this operating instructions.

PHI

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Printed in Vietnam

## Safety precautions

Please be sure to follow these instructions.



### WARNING

This sign means: It may lead to a serious injury or death.



These signs mean prohibited action.



This sign means required action.



This sign means the appliance must be earthed to prevent electric shock.



### CAUTION

This sign means: It may result in injury or property damage.



iso-butane

Risk of fire / flammable materials

Otherwise it may cause a fire, injury, electrical shock.



## WARNING

### When using...



- **Do not** damage the cooling circuit (piping on the back).
- **Do not** touch the compressor and pipes, because of high temperature, that there is a risk of burn injury.
- **Do not** let any children hang onto the refrigerator's door, it may overturn to the kid.
- **Do not** place any water container on the top of the refrigerator in case the spilling water causes electrical shock or combustion.
- **Do not** locate multiple portable socket-outlets or portable supplies at the rear of the appliance.
- Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.



- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.

### When recycling the product...



- Before taking the refrigerator to be recycled, please remove all the door opening seal to prevent locking a child in it.
- The warning labels mentioned above should be kept throughout the life of the refrigerator.
- The operating instructions should be handed over to any person who would use or handle the refrigerator whenever the refrigerator would be transferred to another location and delivered to a recycling plant.
- Regarding to local laws, Cyclo-Pentane is used for insulation of this refrigerator. When you throw away this unit, please discard it by proper method and do not dispose it by burning.

Otherwise it may cause a fire, injury, electrical shock.



# WARNING

## For power plug and cord...



- **Do not** plug or unplug with wet hands.
- **Do not** let the cord or plug be damaged.



- Disconnect power plug when cleaning.
- Plug into a wall outlet of the rated voltage on its own with the rated current and insert plug fully.
- Reserve one socket for the refrigerator only. Avoid connecting many appliances to the same socket and unroll through the length of cord.
- Remove dust periodically from the power plug.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- If you detect burning smell, disconnect the power plug and ventilate the kitchen.
- **Stop** using the refrigerator and unplug the unit immediately if there is an abnormality or failure. Abnormality and failure examples:
  - Power cord or plug is abnormally hot.
  - Power cord is deeply cut or deformed.
  - There is burning smell.
  - You can feel tingling electricity.

## In case of emergency...



- Maintenance work only be carried out at workshop by well-trained maintenance worker.



- **Do not** store explosive substances such as aerosol cans with a flammable propellant and chemicals or scientific specimens in the appliance.
- **Do not** use electrical appliances such as a deodorizer in the refrigerator. Leaked refrigerant may catch fire from a spark of the electrical contacts and may cause an explosion.
- **Do not** use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.



- **Do not** disassemble, repair or modify the refrigerator by yourself. If you want to repair the refrigerator, please consult your dealer or authorized service center.
- **Do not** use mechanical device or other means to accelerate the defrosting process, other than those recommended by the manufacturer.

## When installing...



- Fix the refrigerator to avoid danger due to unbalance.
- When positioning the appliance, ensure the supply cord is not trapped or damaged.



- Ensure that the refrigerator is plugged into an earthed mains socket.

Otherwise it may cause injury, accidents.

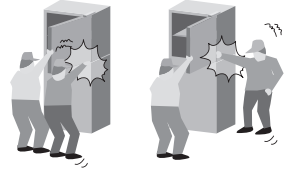


## CAUTION

### When opening/closing the doors...



- While opening the refrigerator, be careful not to pinch other one's hand holding the door.
- Mind the gap between the doors. They may nip your hand while closing the door.



### When storing food...



- **Do not** freeze glass bottles, that there is a risk of injury. (If the liquid in a glass bottle is frozen, then the bottle may break and you may be injured.)
- **Do not** add a high impact on glass trays. (Otherwise those glass trays may break and you may be injured.)



### When moving the refrigerator...



- Hold the refrigerator tightly when transporting.
- Apply protective covering, etc. to floors with a fragile surface.
- When transporting, use straps to secure the refrigerator doors and avoid letting the doors open by itself.
- Do not place the refrigerator on its side when transporting, as this may cause damage to the refrigerator.
- After installation, wait at least 4 hours before plugging in the power to ensure that the gas and oil in the compressor are in a stable state.

## Usage precautions

### When opening/closing the doors...

- **Do not** refrigerate items which are bigger than tray or shelf, as the door will not close completely causing leakage of cool air.
- **Do not** open refrigerator frequently or leave it open for long time in order to prevent water dripping inside and waste energy.
- Frequently check the door opening seal, it must be closed to the refrigerator's body completely.

### When cleaning...

- **Do not** clean the refrigerator with chemical substance or liquid. It will cause damage and have corrosion on the surface.
- Clean the pan water evap located over the compressor at the back of the refrigerator every three months to prevent the odour generated from humidity.



# Usage precautions

## When using:

- When the plug is disconnected, leave it for 5 minutes before plugging again. If not, the compressor may not work.
- Adjust the temperature according to the actual operating condition for energy saving.
- The humidity inside the fresh case may condense so wipe it with a cloth periodically. Clean the fresh case once a month.
- If you will not be at home for several days and there are nothing refrigerated in the refrigerator, the plug should be disconnected for energy saving. When the refrigerator is not used for several days, it is necessary to take out all remaining food inside the refrigerator, clean and open the doors for a few hours to let the moisture inside the refrigerator dry out, avoiding mold and oxidation of components.
- The outside wall of refrigerator cabinet may sometimes get warm, especially just after installation. This is quite normal, and is due to the built-in Mullion Dryer Pipe which prevents sweating and radiates heat.
- When humidity is high, e.g. during rainy-season, condensation may appear on the surface of cabinet, especially around the door seal gasket. Wipe off the condensed water with a clean cloth.
- **Do not** keep the door open any longer than necessary, particularly in hot, humid weather.
- The top of the refrigerator is made of steel in order to prevent fire caused by external influences. **Do not** put things on top of the refrigerator to ensure this factor.



## When storing food...

- **Do not** place warm/hot foodstuff in the refrigerator.
- **Do not** overload the refrigerator. Gap must be provided between foodstuffs to maintain the cooling effect.
- Store fruits and vegetables in vegetable case, where trapped moisture helps preserve food quality for longer time periods.
- Drinking water, beverage bottles should be sealed to prevent odor contamination.
- Foodstuff such as vegetable, fruits and fresh food should be wrapped or pack in box before freezing and refrigerating.
- Put the food such as meat or fish in the freezer if you want to store for an extended period.
- Cover juicy food with tight lids, plastic film or foil.
- Cool hot dishes in room temperature before placing them in your refrigerator.



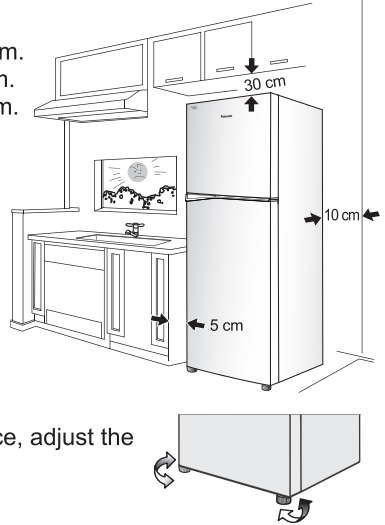
# Installation

## The distance requested for installation

- The top of the refrigerator and the ceiling at least 30 cm.
- The back of the refrigerator and the wall at least 10 cm.
- The sides of the refrigerator and the walls at least 5 cm.

## Area around the installed unit

- **Do not** locate the refrigerator in a humid place as rust may form and may cause electric leakage.
- **Do not** locate the refrigerator exposing to direct sunlight as the heat and sunlight will increase the temperature.
- **Do not** locate the refrigerator near heat source such as cooking stove or oven.
- **Do not** block the openings around the refrigerator.
- The refrigerator must be located in the place where there is good air circulation.
- In case of placing the refrigerator on an uneven surface, adjust the adjustable bolt to make the refrigerator stands stably.



## Moving or shifting

- When moving or shifting the refrigerator, remove ice cube tray, box ice tray, pan water evap etc. and check to be sure that there is no water in the refrigerator.

## Power cord setting

- To bring power cord for use, pan water evap from left should be lifted up. Then bring the power cord out and then insert pan water evap into the block by pressing at both the sides.

## LED lamp and grounding

- The refrigerator LED lamp, specially designed for this refrigerator, does not function on individual replacing. If you need replacement, please contact Panasonic Service Center.
- If there is no grounding wiring plug in refrigerator, it should be connected with grounding connection to prevent electrical hazard from electric leakage.

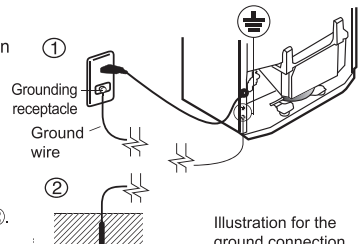
## For safety, the ground connection should be done

(For a refrigerator with plug (2-pin plug) without any grounding wire)

The ground connection will allow prevention of danger resulted from electricity leakage.

The ground connection can be performed in 2 ways as follows:

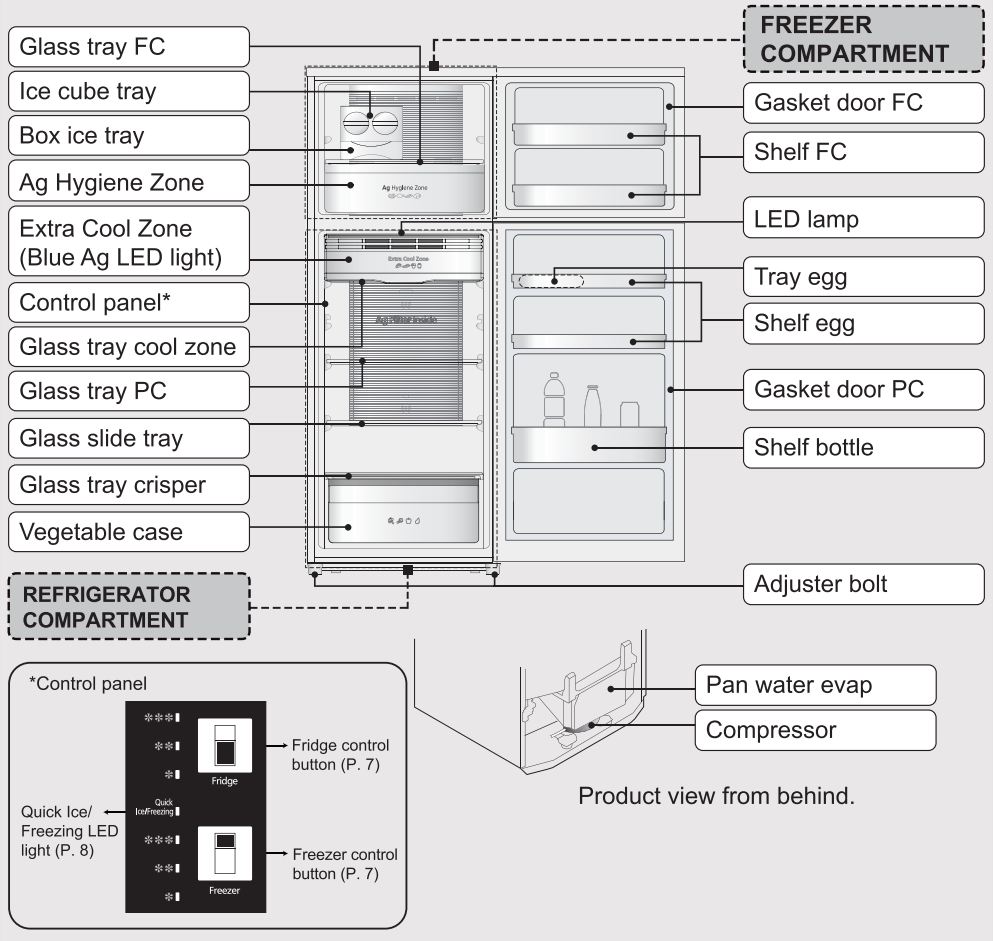
1. In the case that the grounding receptacle having been prepared for the socket (plug socket), connect the ground wire to the screw used for ground connection at the bottom rear of the refrigerator (regarding the screw used for ground connection, please notice the ⚡ symbol) as shown in the illustration ①. And then connect the other end to the grounding receptacle.
2. In the case that the socket (plug socket) having not been provided with any grounding receptacle, connect the ground wire to the screw at the bottom of the refrigerator, (as regards the screw used for ground connection, please notice the ⚡ symbol). And then connect the other end to the ground rod as shown in the illustration ②.



## Prohibited spots for ground connection

- Gas pipes and water supply pipes (dangers from electric shock or explosion).
- The ground wires of telephone cords and lightning rods (dangers from lightning).

# Parts identification



# Temperature control

The temperature can be adjusted for Min - Max levels. Press "Freezer" to adjust temperature in Freezer room and press "Fridge" to adjust temperature in Fridge room.

Temperature setting \ Button	[Fridge] (Fridge room)	[Freezer] (Freezer room)
<b>Max</b> ❄️❄️❄️	Lower than "Med" by approx. 2 °C ~ 3 °C	Lower than "Med" by approx. 2 °C ~ 3 °C
<b>Med</b> ❄️❄️	Approximately 1 °C ~ 6 °C	Approximately -23 °C ~ -17 °C
<b>Min</b> ❄️	Higher than "Med" by approx. 2 °C ~ 3 °C	Higher than "Med" by approx. 4 °C ~ 5 °C

Generally, use the refrigerator with the temperature set to "Med".

# Temperature control (Fine adjustment mode)

The refrigerator is specially designed for appropriate use, which can adjust the temperature level to detailed 9 levels with the following details.

## ■ How to operate the fine adjustment mode

### For the Freezer compartment

- ① Set LED display to “Min” with the “Freezer” button.
- ② Press and hold the “Freezer” button (for a few seconds) until the LED display return to show at “Min” position.
- ③ Set “9 levels” mode following below table mentioned by pressing the “Freezer” button.

### For the Fridge compartment

Operate above ① ~ ③ steps with pressing “Fridge” button instead of “Freezer” button.

## ■ LED Display table

Cooling Level Levels	Minimum  Maximum								
	1	2	3	4	5	6	7	8	9
LED Display									

## ■ To reset the setting fine adjustment mode

Repeat step ① and ②, then the refrigerator return to normal operation mode.

**Remark:** Temperature control varies depend on the changing of environment and food storage quantity.

# Quick Ice/Freezing

When “Quick Ice/Freezing” is set, the refrigerator will reduce the temperature quickly for better performance of preserving food and speed of making ice.

## ■ How to operate the “Quick Ice/Freezing” mode



- Press the button “Freezer” until the light LED “Quick Ice/Freezing” turns on. “Quick Ice/Freezing” mode starts after about 10 seconds.

Light is on: Quick Ice/Freezing is operated  
Light is off: Quick Ice/Freezing is not operated

### Remark:

- If you want to stop the operation immediately, press and hold the button “Freezer” until the light LED “Quick Ice/Freezing” turns off.
- The system will stop the operation automatically when it runs for 60 mins (as ambient temperature is below 18 °C) or 150 mins (as ambient temperature is above 18 °C) and return to normal mode (the light LED “Quick Ice/Freezing” turns off.)
- The light LED “Quick Ice/Freezing” flashing means that the defrosting system is now working. “Quick Ice/Freezing” mode will start right after the defrosting operation is finished.
- The Freezer temperature control will not operate during Quick Ice/Freezing mode as the compressor is already at maximum operating levels for the Quick Ice/Freezing mode.

**Remark:** While operating the refrigerator for the first time, after connecting the plug, adjust the temperature to “Med” position of each control and leave it for 24 hours for the effective cooling operation. After that, adjust the temperature as you prefer. If you want to save energy, do not adjust the temperature lower than the actual operating condition.



# ECONAVI operation

The refrigerator detects the opening and closing of the refrigerator door to control operations automatically to ensure maximum energy saving.\*1

## ■ ECONAVI operation

- The refrigerator learns the lifestyle patterns of your family from door opening and time periods of infrequent use to maximize energy efficiency.
- The refrigerator learns your lifestyle patterns from the previous 3 weeks of use and uses that data from the 4<sup>th</sup> week onwards.






## ■ Setting for enabling ECONAVI operation

- ECONAVI operation is enabled automatically only when the temperature control of the Freezer room is set to “Med”.
- ECONAVI does not operate while “Quick Ice/Freezing” mode is operating.
- It is not possible to forcefully start ECONAVI operation.

### Remark:

\*1 The effectiveness of the ECONAVI mode is dependant on the ambient temperature and the number of times the refrigerator door is opened and closed and the state in which food is stored.

# Usage tips

Fridge comp	<b>“Processed food and drinks...”</b> For regular storage of food and drinks or temporary storage of those to be served soon. 
Extra Cool Zone	<b>“Dairy products...”</b> For dairy products, etc. that perish easily but whose quality changes if frozen. 
Vegetable case	<b>“Fruits and vegetables”</b> A rather high humidity keeps fruits and vegetables fresh and juicy. 
Ag Hygiene Zone	<b>“Fresh food...”</b> For storage of fresh foods such as meat or fish to avoid the odors spread out the freezer compartment. 
Freezer comp	<b>“Dried or frozen foods...”</b> For storage of food for an extended period. 



### Storage using hermetically sealed containers is recommended!

To prevent the interior from being discolored!



- Cut citrus fruits  
(→ The plastic will be discolored white.)

To prevent odors from spreading!



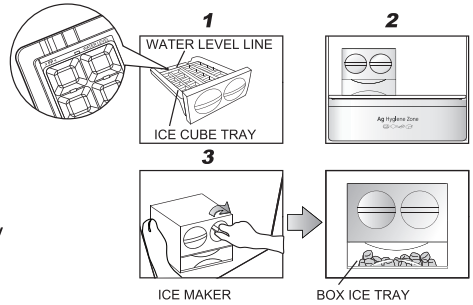
- Garlicky or other strong smelling vegetables  
(→ Odors will spread to other nearby food.)

# How to make ice cubes with ice maker

To use ice maker, remove ice maker from Ag Hygiene Zone and place it on the FC tray.

## STEP

1. Fill water in the ice cube tray till the water level line.
2. Put ice cube tray inside Freezer room, wait until ice is made.
3. To remove ice cubes, suppress the frame with left hand and twist the dial ice cube tray clockwise with right hand. The ice cubes will drop into the box ice tray.



## Remark:

- Don't pour water into ice box for ice-making, otherwise the box may crack.

# How to clean the refrigerator

## 1 Interior cleaning

Wipe off the stain with warm water. When stains can not be removed easily, wipe them with warm water and soap by using a soft cloth.

Then wipe the soap off using damp soft cloth.

## 2 Exterior cleaning

Cleaning by using soft cloth with warm water and soap.

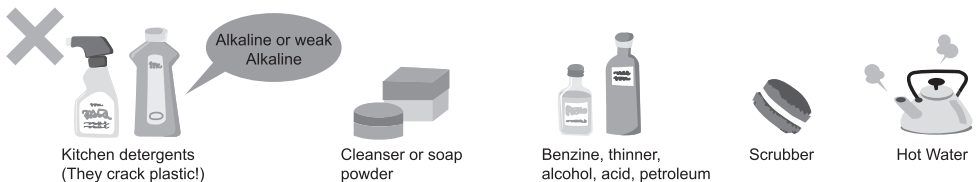
Then wipe off the soap with warm soft cloth.

## 3 Gasket door FC/PC

- Clean by wiping gently. This area, petroleum gel was applied to reduce the friction to the refrigerator body. Be careful not to wipe off them.
- The door opening seal is replaceable when reaching end of life. While cleaning, push it back to the groove if it comes off.



**Note:** Do not use the following items. (Otherwise, the surface will be scratched.)



Kitchen detergents  
(They crack plastic!)

Cleanser or soap  
powder

Benzene, thinner,  
alcohol, acid, petroleum

Scrubber

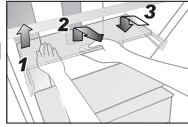
Hot Water

# How to clean the refrigerator

## Removing glass tray PC / FC, glass tray cool zone, glass tray crisper for cleaning

### • Removing

1. Lift the tray upward then pulling it forward until removing.
2. For tray cool zone, tilt the tray slightly upward for easier removing.



### • Attaching

3. Place tray on both supportors, then push until it reaches the end.

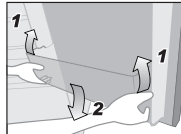
### Remark:

- When removing tray above vegetable case, pull out the vegetable case first and then follow to remove the tray as above details.
- In case of attaching the tray and it does not lock, make sure that you did not attach the wrong tray.
- Make sure that you don't attach the upper side of the tray downward.

## Removing shelf egg, shelf bottle, shelf FC for cleaning

### • Removing

1. Lift it upward, alternating between the right and left side.



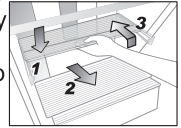
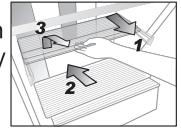
### • Attaching

2. Place it on both supportors, and then press until it reaches the end of supportors.

## Removing glass slide tray for cleaning

### • Removing

1. Lift the tray upward, then pulling the front slide tray outward until separating the two slides trays.
2. Push the front slide tray downward the back tray until it reaches the end.
3. Raise both the trays up and take them out.



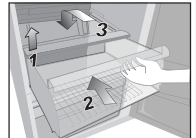
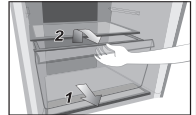
### • Attaching

1. Place two trays on both supportors.
2. Pull the lower slide tray upward and outward until it reaches the end.
3. Raise the front slide tray up and push it backward until it reaches the end.

## Removing vegetable case, Ag Hygiene Zone for cleaning

### • Removing

1. Pull the case until it reaches the end of stopper.
2. Raise up the front of case a bit and then completely take out.



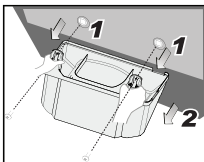
### • Attaching

1. Keep the lid on the vegetable case lifting until case is attached.
2. Raise it up and place case on both supportors.
3. Push the case until it reaches the end.

## Removing pan water evap for cleaning

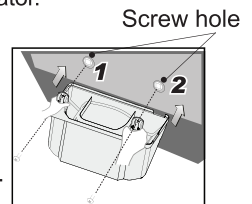
### • Removing

1. Remove the screws on both sides.
2. Take out the pan water evap.



### • Attaching

1. Place and adjust the pan water evap so that the pan water evap hole on the left side matches the screw hole on the back of the refrigerator. Fix the left part with screw.
2. Place and adjust the pan water evap so that the pan water evap hole on the right side matches the screw hole on the back of the refrigerator. Fix the right part with screw.



# Troubleshooting

Before you call for service, please check the following items:

**The refrigerator does not operate.**

- Check that the plug and its socket are in good condition.
- Check if there is any problem on main fuse and electrical system of the house.
- Check by unplug and wait for 5 minutes before plugging it back in.

**The refrigerator does not cool enough.**

- Check to be sure that light in control panel is displayed at proper position.
- Check to see if the refrigerator is overloaded with stuff or there is any hot foodstuff refrigerated inside.
- Is the refrigerator exposed directly to sunlight or heat source?
- Is the refrigerator door completely closed?
- Is the refrigerator door opened frequently?

**Dew, snow appear.**

**Outside**

- When the ambient humidity is too high, the door gasket may have dew. This situation will be stopped if the air humidity decreases. Please wipe it up with dry cloth.

**Inside**

- Is the door closed firmly?
- Is the door being opened and closed too frequently?
- When too high weather humidity, long opening time or making too much ice, inside the freezer compartment may appear frozen snow. This is normal. Please wipe with dry and soft cloth.



**The refrigerator makes noise.**

- Check if the refrigerator is located on a stable floor or is installed properly.
- Check if there is any object in contact with the refrigerator.
- Check if the pan water evap touches the evap pipe?

**Food becomes frozen.**

- Do you put the food near cold air holes?
- Do you adjust the temperature control at "Max"? Adjust to "Min"?
- Do you put food in extra cool zone?

**The inside is smelling.**

- Do you store food with dry odor without wrapping it?

**The surfaces of the refrigerator is hot.**

- Because the refrigerator is equipped with the dew prevention and heat radiation tubes, the surfaces of the refrigerator get warmer when operating.
- The back and side plates may get warmer especially when starting up or if the door is frequently opened and closed.

# Troubleshooting

The normal sounds of refrigerator.

- When the refrigerator starts operation, the sound like water flowing and boiling water is created. This is the sound of the cooling liquid.
- The noise is generated when the automatic defrost system operated.
- The dilatation of the details inside the refrigerator in the cooling process can cause sound “crack-crack”.
- You may feel that the operation sound is larger because the compressor operates in high-speed under the following conditions: the refrigerator does not cool fully on the occasion such as using it for the first time, setting “Quick Ice/Freezing” mode, opening/closing the door too frequently, the surrounding temperature is high. The sound becomes more quiet after cooling fully.

Lamp does not turn on.

- Please contact Panasonic service center.

# Specifications

Model No.		NR-TL351	NR-TL381
Freezer Star Rating		✳️***	
Capacity (L)	Total	326	366
	Freezer	98	
	Refrigerator	228	268
Outside Dimensions Width x Depth x Height (mm)		650 x 656 x 1645	650 x 656 x 1785
Net Weight (kg)		57	59
Refrigerant Type		R600a	
Rated Voltage (V) Rated Frequency (Hz)		220 - 240 V ~ / 60 Hz	





