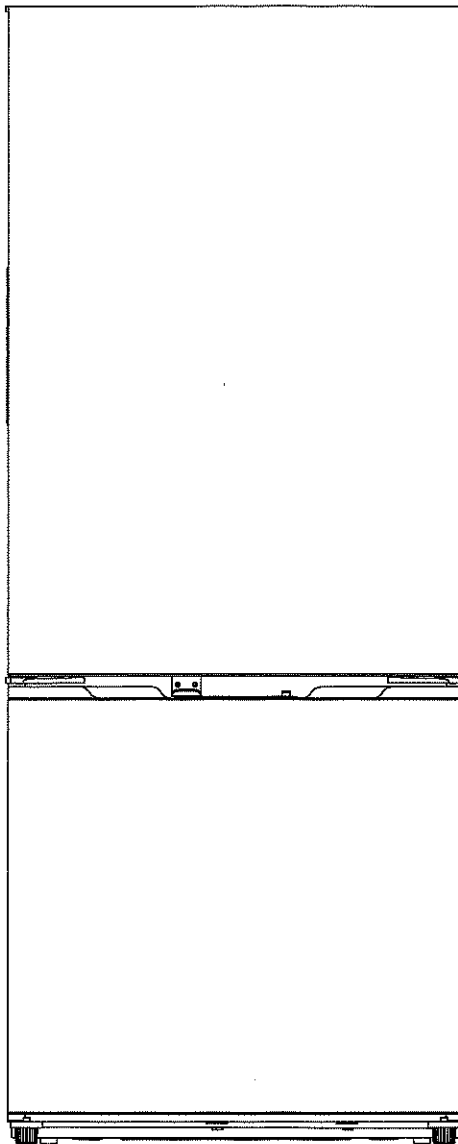




# INSTALLATION/ USER MANUAL

## 10.7CUFT DUAL-SWING 12V RV REFRIGERATOR



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**BLACK COLOR 100-2562**  
**SS COLOR 100-4562**

## WELCOME

Thank you for your purchasing of this appliance produced by Invision!


Please carefully read through this manual and follow the notices before installation and operation of this appliance. These guidelines do not cover every possible condition or situation that may occur. Be safe and keep common sense and caution when installing, operating and cleaning this appliance.


Please keep this manual properly.


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## SYMBOLS AND DEFINITIONS

 **NOT ALLOWED:** This symbol means that the behavior as described is not allowed and failing which may damage the appliance or cause personal injuries.

 **WARNING:** This symbol means that the safe operation of the product and personal safety of the operator are concerned and that the operation must be performed in strict compliance with the requirements as specified, failing which may damage the appliance or cause personal injuries.

 **CAUTION:** This symbol means that the operator must pay attention to the information as described, failing which may damage the appliance or cause other losses.

## SAFETY PRECAUTIONS

This appliance is designed as built-in refrigerators for recreational vehicles. Failure to follow these instructions may result in electric shock, fire and death.



### **WARNING: ELECTRIC SHOCK HAZARD**

- ❗ **WARNING:** To avoid a hazard due to instability of the appliance, it must be fixed in accordance with the instructions.
- ❗ 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.
- ❗ The manufacture or service agent or similar qualified persons are required to replace the damaged power connection unit to avoid a hazard.
- ❗ **WARNING:** Do not use electrical appliance inside the food storage compartments of the appliance, unless they are recommended by the manufacturer.
- ❗ Never store or use the gasoline or other flammable substances in the immediate area of the refrigerator to avoid fires.
- ❗ Never place flammable and explosive substances and highly corrosive acid etc. in the refrigerator.
- ❗ **WARNING:** Do not damage the refrigerator circuit. For appliances which use flammable insulation blowing gases, the instructions shall include information regarding disposal of the appliance. Only the service agent or similarly qualified persons can disposal flammable insulation blowing gases of appliance.
- ❗ **Prevent water ingress**  
Never sprinkle or flush the refrigerator using water, nor place it in an area exposed to moisture or water sprinkling, or filling the refrigerator with water to avoid impairment of the electric insulation of the refrigerator. Furthermore failing to follow such requirements may lead to electric shock and fire other accidents
- ❗ **Never modify the refrigerator without approval**  
Never modifies a refrigerator without approval. It is not allowed to remove or modify the refrigerator without approval or any man made damages to the refrigerator circuits. The refrigerator must be repaired by the qualified personnel.
- ❗ Do not take out frozen products from the freezer into your mouth to avoid severe frostbite.
- ❗ Do not store liquid bottle food in the freezer compartment. The cans may explode.
- ❗ Only professional personnel is allowed to carry out the maintenance of the refrigerator. Power should always be disconnected before any service is coming.
- ❗ When the appliance is not in use, cut off the power, secure or remove the doors to prevent children from playing inside the cabinets.

## REFRIGERANT

- ⓘ The refrigerant isobutane (R600a) is contained within the refrigerant pipe of the appliance a nature gas with a high level of environmental compatibility which is flammable. During transportation and installation of the appliance, ensure that none of the components of the refrigerant pipes are damaged.

The refrigerant (R600a) is flammable.



## **WARNING: RISK OF FIRE / FLAMMABLE MATERIALS**

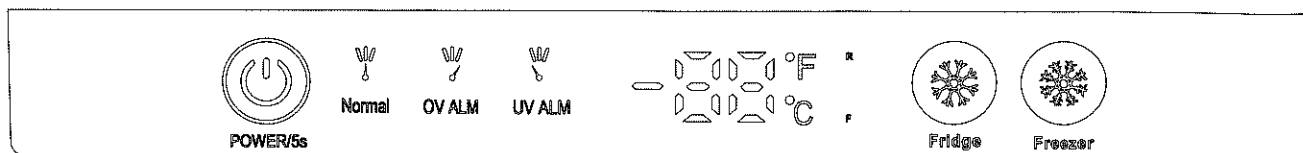
If the refrigerant pipes are damaged:

- Avoid any flames or sources of ignition.
- Thoroughly ventilate the room in which the appliance is situated.

# OPERATING YOUR APPLIANCE

## CONTROL PANEL

This frost-free refrigerator uses electric control system. Power on it will automatically turn on and the compartments will start cooling. You can also set temperature according to your requirements.



Press and hold on "Power" button for 5s to activate the control panel.

### 1. Functions:

#### 1.1 Power Off

Hold on "Power" for 5s to power off the refrigerator for any extended period of non-use.

#### 1.2 Temp. Setting

"Fridge", the key to set temperature of fridge compartment.

"Freezer", the key to set temperature of freezer compartment.

Pressing on "Fridge", fridge temperature setting cycle "°C": 1→2→3→4→5→6→7→1.

Pressing on "Freezer", freezer temperature setting cycle "°C":

-12→-13→-14→-15→-16→-17→-18→12.

Depressing both "Fridge" + "Freezer" for 3s to switch between "C" and "F"

### 2. Battery Monitor

"Normal": voltage range: 10.4~14.5V

"OV ALM": Over voltage alarm:  $\geq 14.5V$

"UV ALM": Under voltage alarm:  $< 10.4V$

The refrigerator has a low voltage shut-off function intended to protect your battery

The refrigerator has a low voltage shut-off function intended to protect your battery from excessive drain. The refrigerator will shut off if the voltage drops below 9V. UV alarm will resume normal status when voltage reaches 11.7V.

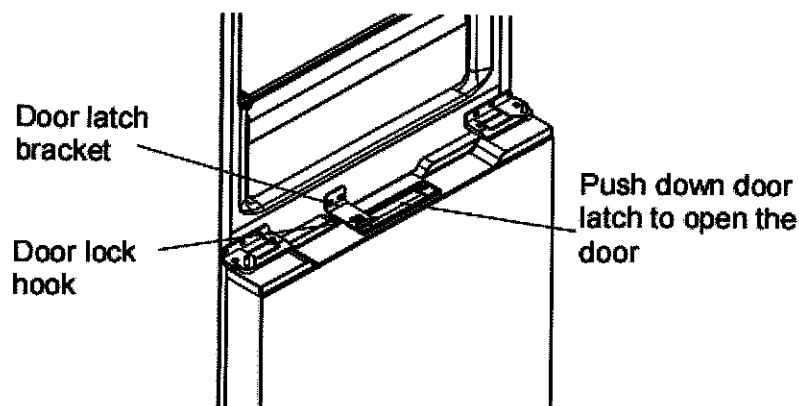
### 3. Operational errors will be indicated according to the following chart.

Error Codes	Error Description
E1	Ambient temperature sensor failure
E2	E2 Fridge sensor failure
E3	Freezer sensor failure
E4	Frosting sensor failure
HI	Power voltage is more than 14.5V
LO	Power voltage is less than 10.4V
Ed	The fridge door is not closed well. Check and fix it.
EC	The appliance has internal communication failure.
E6	Fan failure
EP	Power voltage is over 17V

Note: Error codes will be displayed on the control panel. One minute later, the screen will light off to save energy. When you press any key to activate the screen, the alarm error code will be visible till it is repaired.

## DOOR LOCK FUNCTION

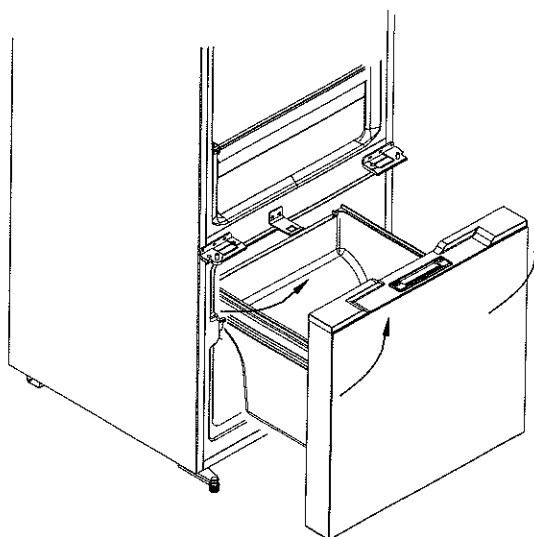
The door should be locked during using. When you close the freezer door, please check the lock hook are pushed into the latch bracket on the cabinet as shown below. To open the door, you push down the door latch and pull to get the hook out of the bracket.



## FREEZER DRAWER

Freezer drawer is suitable for storing food required to be frozen such as meat, ice-cream, etc.

1. To remove the freezer drawer, open the door and pull it out fully, then tilt up the door by holding the two sides of the door, and let the two wheels out the trail slowly until the door is separated from the refrigerator. Please be carefully to avoid hurting the structure.
2. Put the door on the floor softly, lift the drawer up from the holder.
3. To install the door back, please repeat the reverse steps as the above.



**⚠** Do not allow babies or children go inside the refrigerator or climb into the drawer. **DANGER OF SUFFOCATION!** It will also damage the drawer door.

1. Please do not stack the food too high which will affect the air circulation in the drawer.
2. Please note that the food may fall into the gap behind the drawer to prevent door close properly.
3. Do not force excess food into the freezer drawer.

## ROUTINE MAINTENANCE

The refrigerator has been equipped with automatic defrosting function. Defrosting water will go to water tray and be evaporated.

1. To make sure best operation performance and prolong its service life, it shall be serviced frequently. Before maintenance, it shall be confirmed that the power supply has been disconnected.

2. The refrigerator inside shall be thoroughly cleaned every year. Before cleaning, the appliance shall be power disconnected and emptied. Use wet soft cloth or sponge dipped with clean water or mild detergent to clean the appliance. It is not allowed to clean the refrigerator using the organic solvents, alkaline detergent, boiled water, washing powder or acid and the like.

3. In the humid environment or in the rainy weather, the refrigerator surface may have condensation. This is caused due to the contact with the moisture in the air. Please using the dry cloth to remove the condensation.

4. To ensure the normal operation of the refrigerator in a long period of time, the users should inspect the refrigerator on a regular basis.

5. During cleaning, it is not allowed to use water to flush the compressor compartments of the refrigerator. After cleaning it shall be wiped with dry cloth to prevent rusting.

6. Please be sure to keep the door gaskets clean and you need to running efficiently.

7. The refrigerator shelves are fixed in the compartments from the factory. Taking out shelves are possible by removing the screws using one screwdriver.

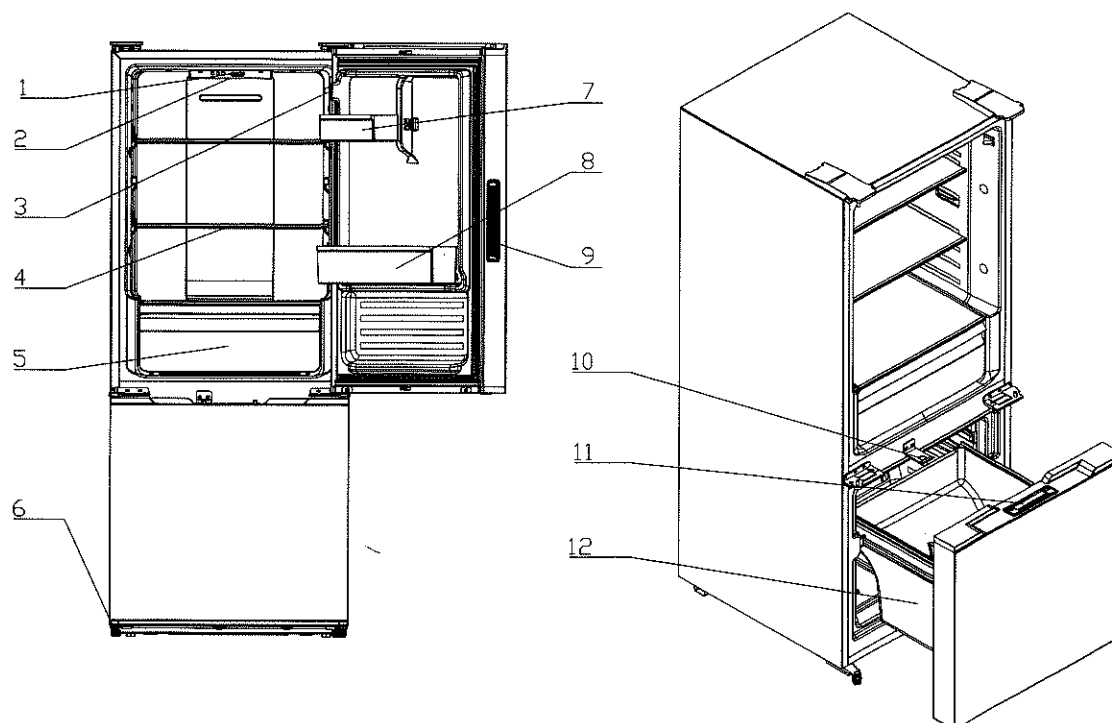
## FOOD STORAGE

1. Before loading food in your refrigerator, please make sure your good, especially food with water in plastic bags have proper sealing or put in containers with proper sealing to avoid unexpected odor or drying.
2. Hot or warm food shall be loaded into the refrigerator after cooling for energy saving purpose.
3. Please leave adequate space between food for better air circulation in the refrigerator.
4. Please store fruit and vegetable in proper wrapping or in properly sealed containers before loading into the crisper drawer.
5. The storage time for frozen products depends on their quality before freezing when fresh and on the storage temperature. Products beef, pork, fish and poultry are recommended about 3 months in the freezer compartment when the temperature of  $-15^{\circ}\text{C}$  or lower is maintained.
6. Fridge mode is for all delicate and perishable food.
  - Pre-packed vegetable and other fresh food with a label stating it should be kept at a temperature of approx.  $5^{\circ}\text{C}$ .
  - Fresh dough, cake mixtures.
  - Dishes or baked goods containing eggs or cream.
  - Sausage products, ready meals.
  - Butter and cheese.
9. Not all good is suitable for storing in the refrigerator, particularly:
  - Fruit and vegetable which are sensitive to cold, such as bananas, avocado, papaya, passion fruit, aubergines, peppers, tomatoes and cucumbers.
  - Fruit which is not yet ripe
  - Potatoes

This refrigerator is for food use which could not store any object with strict temperature requirement, such as medicine, blood, vaccine or academic stuff, etc.



## PARTS AND USAGE



1	Control Panel	Setting temperature
2	LED Lamp	For illumination in fridge
3	Lamp Switch	Turning on/off lamp
4	Glass Shelf	Cooling various food
5	Crisper	Cooling vegetables and fruits
6	Adjustable bottom feet	For adjusting the level of the refrigerator
7	upper door Rack	For cans of food
8	lower door Rack	For bottles of food
9	Door handle	For opening fridge door
10	Door latch bracket	For locking the freezer door
11	Door handle and lock latch	For opening the freezer door
12	Freezer drawer	Freezing various food

### Note:

- ◆ Product will be improved. The refrigerator you buy may be little difference from that listed on the manual. It will not affect its performance.
- ◆ Before using, please remove the foam and tape which is used for fixing drawers, glass shelves and other parts during shipping.
- ◆ Drawers and shelves are easily to be damaged. Please use them properly.

## PACKING LIST

Description	BLK- 100-2562 SS- 100-4562
Glass shelf	3
Door rack	2
Crisper	1
Freezer drawer	1
User manual	1

## SPECIFICATIONS

Model	BLK- 100-2562 SS- 100-4562
Rated Voltage	DC 12V
Defrosting Power	DC12V, 120W
Rated Current	12V
MCA MOP	12A 27A
Volume	10.7cuft (303L)
Freezer Volume	2.87cuft(81L)
Fridge Volume	7.83cuft(222L)
Refrigerant Charging	R600a / 50g
Insulation Blowing Gas	Cyclopentane
Dimensions (W * D * H)	601*670*1520mm

## PRECAUTIONS FOR INSTALLATION

- ⚠ After transport where the refrigerator has been on its side or back, ensure that the refrigerator is in a level, upright position for 2 hours before connecting the appliance to a power source; this will reduce the possibility of a mal-function in the cooling system.
- ⚠ Set the refrigerator vertically. The refrigerator shall not be tilted over 45° when being handled.
- ① Take the product out of the package; remove the tape protecting the door and the equipment. Any remaining adhesive stains may be removed with a mild soap + water.
- ① The refrigerator must be placed on a flat, firm and stable ground surface. If it needs to be elevated, a stable, solid and non-flammable pad shall be used. Never use the package foam as the pad to elevate the refrigerator.
- ① Adjust the feet so the appliance sets vertically.  
Tilt the top backwards a little by turning the feet 1~2 turns further. This will allow the drawer door to close and seal properly.
- ① Do not place the refrigerator in the area exposed to moisture or water splash. The water splash or dirt on the refrigerator could cause rusting and issues of electrical connections.
- ⊘ For best and most efficient operation, the refrigerator should operate within 50F-126F(10°C-52°C). The refrigerator shall be kept far away from the heat source such as fireplaces, furnaces, et. Ensure a thermal barrier, such as wood paneling isolates the refrigerator spaces as not to hinder performance of the refrigerator.
  - If the ambient temperature is higher than 126F(52°C), allow the inside of the coach to cool down before turning on.
  - If the ambient temperature is lower than 50F(10°C), the temperature setting may need to set towards max to operate the refrigerator.

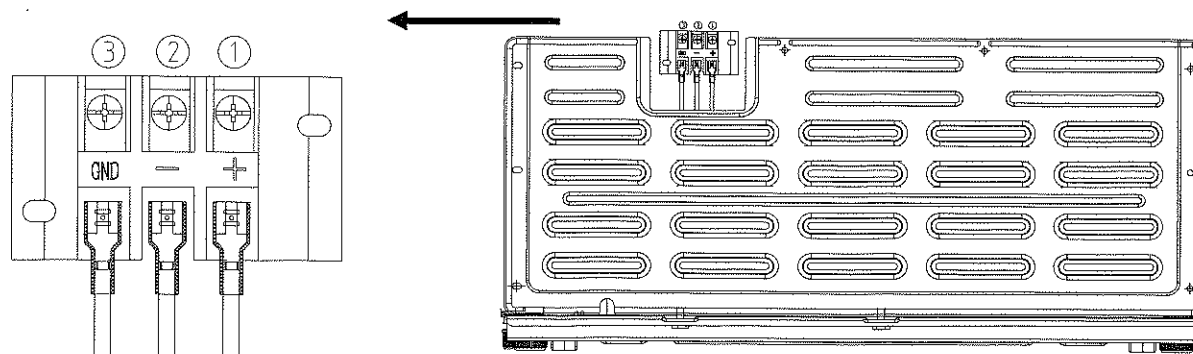
## POWER SUPPLY REQUIREMENT

- ① This refrigerator must be connected to a stable and regulated 12VDC power supply only and must be supplied at safety extra-low voltage circuit. The circuit must be protected properly between the appliance and power supply main, 15A min, 20A max is acceptable. Do not use auto resetting or mini-breaker type circuit protection. The appliance will automatically detect the voltage.
- ① The wire connection shall be chosen according to current recommendations.  
Wire our refrigerator directly to your power supply. You will need the correct sized wire depending on the distance from your power supply to the refrigerator. If your wiring is insufficient, your refrigerator may not perform correctly or may be damaged.

Wire Size	The Max Length (Feet)
14 AWG	5 Feet
12 AWG	10 Feet
10 AWG	15 Feet
8 AWG	23 Feet
6 AWG	38 Feet
Remarks	The DC unit is not equipped with a power source. Please purchase a power source from an authorized dealer. For maximum battery performance ensure the voltage drop between each power source (battery & converter) and the refrigerator does not exceed 0.4V

Note: Only authorized or qualified professionals should perform repair services for this appliance.

## ELECTRICAL CONNECTION



1. Connect the red "+" terminal 1 with Positive pole of 12V DC.

2. Connect the black "-" terminal 2 with Negative pole of 12V DC.

If the appliance is installed in and RV, the green GND terminal 3 shall be connected directly to the RV chassis.

Note: All the connections must be reliable.

## REFRIGERATOR CABINET

1. Ventilation condition

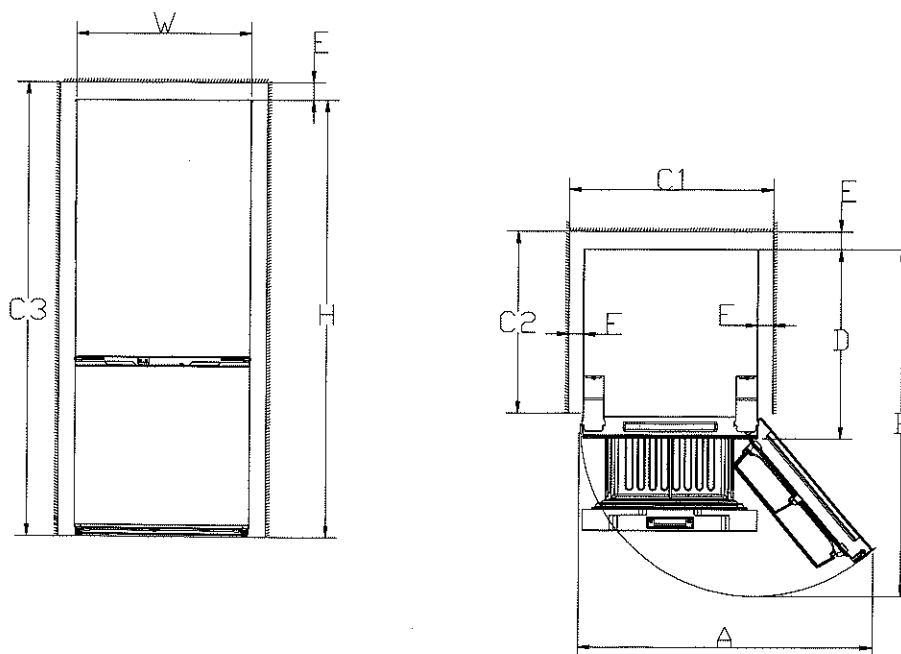
The position you select for the refrigerator installation should be well-ventilated with minimal hot air.

2. Heat dissipation space

During operation, the unit gives off heat to surroundings. Ensure that there is adequate space between the refrigerator and neighboring walls or large objects. A minimum spacing of 25.4mm(1.0") is highly recommended on the top, on both sides and at the backside of the refrigerator.

The rear wall of the refrigerator, in particular, the electrical parts and the elements of the cooling system must not contact other elements which may damage them.

Dimensions suggested as below:



W	D	H	A	B	E	F
601mm	670 mm	1520mm	888 mm	1220 mm	Minimum	Minimum

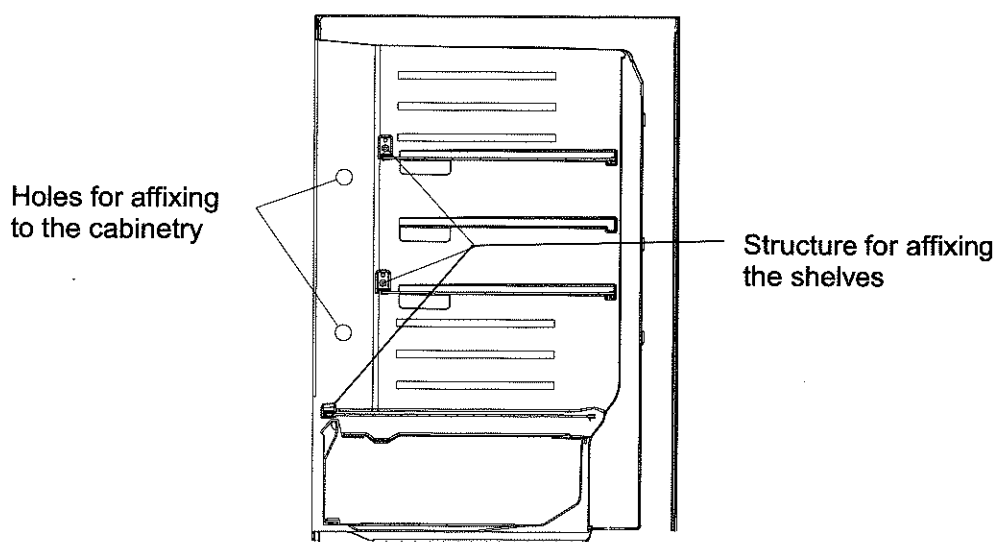
(23.7")	(26.4")	(59.8")	(35")	(48 ")	25.4mm (1.0")	25.4mm (1.0")
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Cavity dimensions Recommended below:

C1	C2	C3
Minimum 652mm (25.7")	Minimum 610mm (24.6")	Minimum 1546mm (60.9")

### 3. Affixing the refrigerator to the cabinet

The refrigerator can be affixed to the RV cabinet by installing the screws provided or similar pan head type where the shank connects into the backer support by 25mm(1"). Screw into the holes on the inner compartment, as shown:



### 4. Affixing the shelves in the refrigerator and freezer compartments

The glass shelves in the refrigerator compartment are affixed in the production for safety considerations.

## PRECAUTIONS FOR OPERATION

1. Make sure the accessory parts inside the refrigerator are present and the inside is wiped with a soft cloth.
2. Connect the refrigerator to the dedicated power supply in the RV, then the compressor will start working. In one to two hours, open the freezer door, if the compartment internal temperature drops significantly, it indicates the refrigeration system is working normally.
3. After refrigerator runs for a period of time, the internal temperature will be automatically controlled according to the user's temperature setting. After the refrigerator is fully cooled, load food inside.
4. Do not switch off the power supply of the refrigerator when unnecessary, because the power interruption may cause temperature rise inside the refrigerator, thus to shorten the storage term of food.
5. A certain space shall be maintained between food containers which will facilitate the air circulation.

## TROUBLESHOOTING

If you find any abnormality during operation, immediately stop the operation, turn off the power and check the appliance according to the following instructions. If necessary, contact the after-sales service center.

Status	Reason and solution	
The refrigerator doesn't work	The power supply is not switched on	Switch on the power supply
	The compressor is provided with a protection mode	The operation interval of the compressor is 5 minutes.
	The control board is damaged	Notify the manufacturer for repair
Too high noise	The refrigerator is not level	Level the refrigerator, for the unlevelled refrigerator may produce noise during operation
	The refrigerator is touching furniture and / or other objects	Place the appliance at a location that ensures proper clearances around it
Heat dissipation	There is anti-condensate tube on the front frame which will send out heat during refrigerator operation.	It is a normal phenomenon.
	There is heat dissipation (condenser) on the cabinet which may cause heat.	It is a normal phenomenon.
Moisture forms on outside of refrigerator	The door is opened too frequently or the door is opened for too long time	Do not open the door for too long time, nor open or close the door too frequently
	The external environment is highly humid	Dry using a piece of dry and soft cloth
	The refrigerator temperature is set too low	Set a proper temperature
The illumination lamp is not lit	The illumination lamp is damaged	Notify the manufacturer for replacement of the lamp
	Check whether the power supply is switched on	Check the power supply

The door is not properly sealed and there is a leakage of cool air	The door seal may be hardened or deformed	Use the hot air of the hair dryer to bake the deformed surface or use the hot towel to cover the deformed surface, and close door and press it tightly after the door seal is softened.
The compressor keeps operating for long time	<p>If the temperature in the summer is too high, the compressor will work for long time. This is normal.</p> <p>If the refrigerator is not cool enough, please check against the following items: If the refrigerator door is not properly sealed or the door is opened too frequently, close the door tightly, and open the door at a lower frequency. Do not place too many foods in the refrigerator, and maintain a certain space between foods.</p> <p>If the temperature inside the refrigerator reaches too low required temperature, check the temperature setup, and set the temperature at a higher level.</p>	
The refrigerating effect of the refrigerator is poor	<p>The refrigerator is exposed to sunshine or any heat source is located in its immediate area.</p> <p>Temperature control is not set correctly.</p> <p>A large amount of warm or hot food was stored recently. Wait for the refrigerator to reach its selected temperature.</p> <p>The bottles in the fridge are crowded to impair the cool air circulation.</p> <p>The refrigerator door is frequently opened or is not properly closed.</p>	
Food is frozen in fridge mode	<p>Is food placed too close to sensor?</p> <p>Is food placed too close to air outlet?</p>	
There is any odor in the refrigerator	<p>The new refrigerator may give off the smell of the foaming agent or plastic. That's normal, and such smell will disappear slowly in future. Check whether there is any spoiled food inside the refrigerator.</p> <p>Any odorant food shall be tightly sealed using the plastic bag.</p> <p>The refrigerator shall be cleaned on a regular basis.</p>	
The refrigerator produces the liquid flowing sound.	The sound is generated from the flowing of the refrigerant inside the circulating pipeline of the refrigerating system. That's normal. No further treatment is required.	
The refrigerator produces abnormal sound	This is the sound generated in the startup of electric components, such as the relay and thermal protector, during start or stop of the refrigerator.	
	<p>This is caused by the mutual fine movements of various kinds of materials due to the inconsistent thermal expansion and contraction arising out of abrupt changes of the refrigerator inside temperature when the refrigerator is being started or stopped.</p> <p>Bubbling or gurgling sounds (like boiling water). This is the normal sound of refrigerant (used to cool refrigerator) circulating throughout the system.</p>	

## HOLIDAY

If it is not used for a long time, turn off the refrigerator, disconnect the power supply.  
Do a good job in cleaning and open the door so that no smell will be produced.

## ENVIRONMENT IMPACT STATEMENT


Protect the environment and avoid any pollution. This product may cause environment impacts during the operation.

Please pay attention to the following:

The carton, plastic and other recyclable wastes must be put into the classified waste bin as designated. The improper disposal of old batteries and other hazardous wastes may cause serious environmental pollution; therefor, they must be stored in the waste recycling bin.

## WASTE DISPOSAL WARNING

- Packing materials are used to protect the electric appliance during transportation, and every part of the material is recycled material.
- Paper board/cardboard (made of waste paper)
- Polystyrene blocks (foam, non-fluorinated polystyrene)
- Plastic film, bag (polystyrene)
- Packing tape (polystyrene)
- Do not let children play with packaging material. DANGER OF SUFFOCATION!
- Send the packing materials to the public environmental recycling station.
- The outdated refrigeration in residential areas where garbage is not classified still has many valuable raw materials which shall be dealt with.
- The outdated refrigerator shall be discarded immediately; and the soft power cable shall be removed.
- Destroy the lock to prevent children from locking themselves when they play.
- Before sending the outdated refrigerator to the public recycling station, the cold circulation system shall not be damaged to ensure the refrigerant and oil of the refrigerator will not leak.
- Information about recycling dates and recycling stations can be consulted with local sanitation departments or government agencies.

	Correct disposal of this product
	<p>This symbol on the product, or in its packaging, indicates that this product may not be treated as household waste. Instead, it should be taken to the appropriate waste collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by the inappropriate waste handling of this product. For more details about the recycling of this product, please contact your local council, your household waste disposal service, or the shop where you purchased the product.</p>





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