

USER MANUAL

Fridge/Freezer



DSP-60BY1

DSP-85BY1(A3)

***PLEASE READ AND UNDERSTAND THIS MANUAL
COMPLETELY BEFORE USING THIS PRODUCT.***

SAFETY INFORMATION



NOTICE

Please read the user manual and safety instructions carefully before using the appliance.

- ◆ By ignoring the safety instructions, the manufacturer cannot be held responsible for the damage.
- ◆ The use of accessories that are not recommended by manufacturer can cause injuries and will invalidate any warranty that you may have.
- ◆ The appliance shall not be exposed to moderate/heavy rain.
- ◆ Place the refrigerator on a dry, secure surface, with adequate ventilation.
- ◆ Do not leave the refrigerator unattended in uncovered, outdoor areas exposed to the elements.
- ◆ Do not use this appliance near direct heat sources, such as an open flame or radiator.
- ◆ Do not place open containers of liquid inside the fridge.
- ◆ Please don't put hot/warm food into the fridge directly without letting it cooling off. Place/arrange the content of your fridge securely when using the refrigerator inside a moving vehicle.
- ◆ To maximize energy savings, please make sure the lid is closed and secure, and only open the fridge when you need to.
- ◆ The power cable must only be replaced by qualified technical personnel and by an assistant body authorized by the manufacturer.
- ◆ Before carrying out any maintenance operations on the refrigerator, disconnect all power sources from the fridge.
- ◆ Further information is provided on the technical data label inside the product.



CAUTION

- Please keep the fridge in a well ventilated area.
- Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- Do not use electrical devices inside the food storage compartments of the appliance, unless approved/recommended by the manufacturer.
- It must only be supplied at safety extra low voltage corresponding to the marking on the appliance.
- To avoid contamination of food, please respect the following instructions:
 - Opening the door for long periods can cause a significant increase of the temperature in the compartments of the appliance.
 - Clean regularly surfaces that can come in contact with food and accessible drainage systems.
 - If the refrigerating appliance is left empty for long periods, switch off, defrost, clean, dry, and leave the door open to prevent mould developing within the appliance.

WARNING! Food needs to be packed in bags before putting into the refrigerator, and liquids need to be packed in bottles or capped containers to avoid the problem that the product design structure is not easy to clean.



WARNING!

- Do not store explosive items, such as aerosol cans with a flammable propellant in this appliance.
- Risk of fire and electrical shock.
- Do not let hot items touch the plastic parts of the appliance.
- Do not put flammable products or items in, near or on the appliance.
- Do not touch the compressor or the condenser when the fridge is operating. They may be very hot.
- When setting up the appliance, ensure the supply cord is not trapped or damaged.
- Do not locate multiple portable socket-outlets or portable power supplies at the rear of the appliance.
- 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.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person in order to avoid a hazard.
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.

CORRECT DISPOSAL OF THIS PRODUCT



To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the recovery systems or contact the retailer that they can take this product for environmental safe recycling.

Risk of child entrapment.

Before you throw away your old refrigerator or freezer:

- Take off the doors.
- Leave the shelves in place so that children may not easily climb inside.

INTENDED TO USE

This appliance is intended to be used in household and similar applications such as :

- staff kitchen areas in shops, offices and other working environments;
- farm houses and by clients in hotels, motels and other residential type environments;
- bed and breakfast type environments;
- catering and similar non-retail applications.

SPECIFICATIONS

Model	DSP-60BY1	DSP-85BY1(A3)
1 Dimensions(Wx D x H)	450x520x530(mm)	475x560x630(mm)
2 Capacity	60L	85L
3 Net Weight	19.6kg	25kg
4 CMP/ECU	Huayi	Huayi
5 Voltage	12V/24V	12V/24V
6 Average power consumption	52W	60W
7 Temperature range	Fridge 0°C to 10°C	Fridge 0°C to 10°C
8 Gas	R134a (25g)	R134a (55g)
9 Door /Cabinet material	Plastic/Metal	Plastic/Metal

SKETCH MAP OF MAIN PARTS

- ① Evaporator Door ② Water Tray ③ Wire Shelf ④ NTC
- ⑤ Drawer ⑥ Display ⑦ LED Light ⑧ & ⑨ Retainer



NOTICE : DSP-60BY1 without ①、②&⑤ parts!

GETTING STARTED

Some Reminders

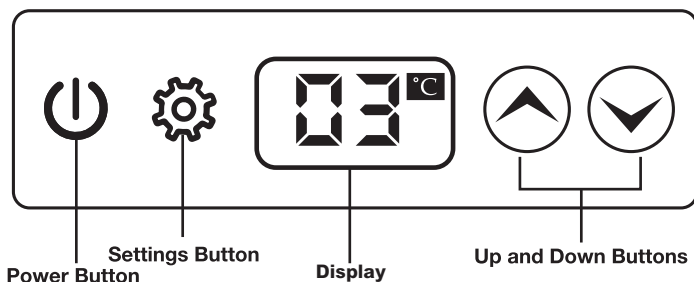
1. If the device was not placed in the upright position after transit and delivery, **please keep it upright for 24 hours** to make sure that the compressor can work properly.
2. If the device can't turn on or you encounter other problems for first time use, please contact us for help.
3. **Pre-cool** the empty unit before using it to enhance system efficiency.

EFFICIENT OPERATION

If installed in a caravan or similar environment, large vents should be installed to allow air to vent to the outside environment. A lower vent to intake cool air and a higher vent for exhaust of warm air. The vents should be at least 200cm² in size.

OPERATION

The thermostat in the top of the fridge section sets the temperature inside the Upright Fridge/Freezer. Each unit will have some variation, so no one setting will work for every unit. Generally, settings 1 - 4°C are suitable for daily use.



Power Button -Press and hold to turn on or off.


Settings Button -Press to turn non-night mode on or off.

Up and Down Buttons -Press to increase or decrease the set temperature.

Display:

- Connect the fridge with power, the digital screen will be fully lighted up for 2 seconds, then enter the normal display. Under the normal display, the unit symbol of “ °C ” will be long bright.
- Under non-night mode: symbol of “ ☾ ” will not be bright, but it will be bright under the night mode.

BATTERY PROTECTION LEVEL

Under Power-off status, long press " " and " + " for 3 seconds, current battery protection level will be displayed on the screen and flashing, then short press " + " or " - " to switch up/down the level.

Protection Level Power Source	L Level is the Default Setting					
	H		M		L	
	Start-up	Cut-off	Start-up	Cut-off	Start-up	Cut-off
12V	12.4V	11.1V	11.7V	10.4V	10.9V	8.5V
24V	25.7V	24.3V	24.2V	22.8V	22.7V	21.3V

What is Battery Protection Setting?

This function is designed to prevent over-discharge and battery depletion. When the measured DC voltage is below the Cut-off value, the compressor will shut off to prevent battery depletion. After the voltage is higher than Start-up value, the compressor will go back to work again. Improper , please lower the protection setting or low-power battery may cause E1 error battery protection or recharge the battery in time.

INSTALLATION

The included mounting brackets come with suitable screws to allow easy installation.

1. Place the refrigerator on a dry, flat, protected surface, away from corners. Do not use the refrigerator in uncovered areas, outdoor areas or areas exposed to the elements.
2. The refrigerator requires good ventilation. Leave a space of at least 5 cm across all its sides.
3. Avoid placing the refrigerator near to a heat source, for example a cooker, radiator, or exposing it to direct sunlight.
4. Do not place ice or liquids which are not sealed in containers within the refrigerator.
5. Do not place hot products within the refrigerator.

DEFROSTING

Defrosting needs to be completed when ice inside the Upright Fridge/Freezer is around 5mm thick. Ice on the inside walls will affect the normal operation of the device. Use the Power button to turn the fridge off and remove items from inside the Upright Fridge/Freezer.

Do not use mechanical devices, metallic, sharp objects, or other means to accelerate the defrosting process.

Do not attempt to manually remove the ice, allow air flow to naturally melt the ice.

COOLING TIPS

How full should your fridge be? It comes down to energy; pull energy out of something and it gets cooler, put energy in and it gets warmer. Think of a kettle, put energy by turning it on, the water gets hotter, turn the kettle off and energy is released from the water and the water gets cooler. Water vs Air, water takes around 4 times more energy to cool down compared to air.

Therefore, filling a fridge with liquid instead of leaving empty will take noticeably longer to cool down and use more power. This is one big reason why pre-cooling your fridge is strongly recommended.

Every time you open your fridge, cool air will be pulled out and replaced with warm and moist air. So initially your empty fridge will get cooler quicker, but anytime you open the door to place or remove items the fridge will take time to get back down to temperature.

The optimum point ends up being around $\frac{1}{2}$ to $\frac{3}{4}$ full of product. This fills most of the fridge and reduces air lost each time the door is opened but also leaves enough room for air flow around the product inside the fridge.

Air flow around products is also important for keeping all the product inside the unit at similar temperatures and makes for a more efficient fridge.

If you tightly pack product, it could take days for the product at the center to correctly come down to temperature. This will also have a negative effect on power usage.

GENERAL TIPS

1. Pre-chill before trips.
2. If the fridge will be accessed frequently (drinks fridge for example) aim to have around $\frac{3}{4}$ loaded.
3. If you need more items to fill up space, you can use empty reusable containers. (e.g. take-away containers) They are easy to stack and help with air-flow around products.
4. Keep the fridge out of direct sunlight.
5. Keep the vents of the fridge at least 150mm clear from any obstructions.

6. It is recommended you set the thermostat to 2 for the best balance of fridge and freezer. This may have to be adjusted dependent on the environment you are operating the fridge in.

DIFFERENTIAL

A differential is the measurement between the hottest and coldest part of a cooling cycle. Common differentials can be 2 – 5°C, meaning the difference between the warmest and coldest part of a cooling cycle could be up to 5°C. This is not a product fault, the same measurement exists for your fridge at home. For example, if your fridge is set to 4°C. It runs and cools to 1°C, when it turns off it may warm up to 3 – 5°C before the unit switches back on and cools back down to 1°C. This is normal operation for any compressor fridge.

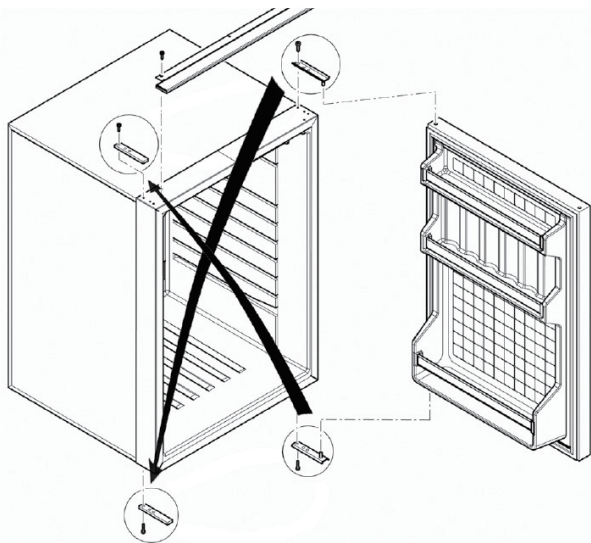
Good fridge/freezer temperature is not reliant on the warmest or coldest part of the cycle but the average temperature this keeps the unit at.

You can easily measure the average temperature of your fridge by placing a large glass of water inside an otherwise empty fridge. Set the fridge thermostat to 4 and let the fridge run overnight. Measure the temperature of the water the following day. You will be able to see the temperature differential and adjust your fridges thermostat to suit your needs.

- **E.g.** Thermostat is set to 4 but the fridge average temperature is 3°C. You could increase your thermostat to 5
- **E.g.** Thermostat is set to 4 but the fridge average temperature is 5°C. You could decrease your thermostat to 3

MOVING THE DOOR HINGE

Remove the screws securing the top and the fastening pins, remove the door, reverse the fastening hinges as illustrated as below image and re-insert the door and re-tighten all parts.



RUBBER SEALS

1. There are magnets inside the rubber seal to help pull the seal towards the cabinet when the door is closed.
2. Periodically and after any changes to the hinges or door latch, check the door seal is making positive contact on all 4 sides of the door.
3. If gaps are found, a small amount of heat from a hair dryer will soften the rubber seal and assist in making the rubber better contact the cabinet.

ERROR CODE & SOLUTIONS

When there is error for the fridge, there will be code on the display. The possible error for each code would be as follows:

CODE	ERROR	ERROR FIXING
E1	Low battery voltage	Please check your DC power voltage and/or wiring
E2	DC fan error	Unplug and re-start your fridge after 5 minutes. If the error still persists, please contact customer service.
E3	Motor start error	
E4	Min. motor speed error	Check and confirm whether the voltage of power supply is stable. If the error persists, please contact customer service.
E5	Max. temp exceeded	Please check and make sure the air vents are not blocked. If the error still persists, please contact customer service.
	Compressor temp too high	
E6	Sensor reading too low	Please check the temp sensor connection; sensor replacement may be needed - please contact customer support for further assistance.
	Sensor reading too high	

- If this error code appears when the fridge is operating on 12V DC, please try to lower the battery protection setting and see if the error is resolved. The battery protection mode may be triggered prematurely on certain vehicles due to small wiring imperfections, contributing to a measured DC voltage drop at compressor start-up. Lowering the battery protection setting may resolve this issue.
- Please also care about the reading of your battery voltage to make sure it is not depleted/discharged
- Please contact us directly if the error persists.

UK	REP
----	-----

Company:YH Consulting Limited

Address: C/O YH Consulting Limited Office 147,Centurion House , London
Road , Staines-upon-Thames , Surrey , TW18 4AX