



Ice cUBE

FRIDGE / FREEZER



This user guide includes information on the following IceCube Fridge/ Freezer models:
IFRIDGE30 (30L), IFRIDGE40 (40L) & IFRIDGE50 (50L)

Dear Customer,

Thank you for purchasing an Ironman 4x4 IceCube Fridge/Freezer. Our fridge/freezer is an ideal companion for keeping your beverages, refreshments and food refrigerated while on outback trips, picnics, camping, fishing or shopping trips.

Features:

- Danfoss BD-35F Compressor - The world's most reliable cooling system.
- The best electronic technology, high efficiency and low energy consumption.
- Multi-Voltage System (DC 12-24V) and (AC 100-120/ 220-240V)
- Automatic Battery Protection

Contents in box:

- IceCube Fridge/Freezer Unit
- 12V/ 24V Power Cable
- 240V Power Cable

Also available separately for this product:

- Heavy Duty Insulated Transit Bag
- Fridge Slide
- Fridge Tie Down Straps
- Ironman 4x4 Dual Battery Kits

IMPORTANT: Before first time use of this unit, you should carefully read these instructions to familiarise yourself with the correct connection and operations for your fridge.

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Product Safety

Do NOT touch exposed cables with your bare hands, this especially applies when operating the appliance from an AC source.

It is dangerous to touch the plug with wet hands.

When using the refrigerator in a vehicle or boat, make sure that power supply circuit is properly fused.

The installation of a DC power source should only be handled by qualified personal

Make sure unit is only connected to the correct power supply.

Do not immerse in water.

Do not place any electrical devices inside refrigerator.

General Notes:

Your product requires good ventilation, especially around the back of the refrigerator.

Allow a gap of at least 200mm around the back of unit and approximately a 100mm gap to the right hand side.

Avoid humidity inside the appliance: Humidity inside the appliance can form frost and impair cooling. Therefore defrost the unit regularly.

Never clean appliance under running water or in dishwasher.

Avoid placing your refrigerator near a heat source as this will reduce the refrigerators efficiency.

Place the refrigerator on a flat surface away from edges.

When placing the unit into a vehicle, make sure it is secured properly.



Connection

Power: The 12/ 24V and mains power can be present at the same time, the device will always set itself to the mains power supply as a priority.

Unit must always be connected to an adequate power supply and DC connection must always be fused.

For cable length and specification, refer to table below.

Cable Area		12V Max Cable Length		24V Max Cable Length	
[mm ²]	AWG	[m]	[ft.]	[m]	[ft.]
2.5	12	< 2.5	< 8	< 5	< 16
4	12	< 4	< 13	< 8	< 26
6	10	< 6	< 20	< 12	< 39
10	8	< 10	< 33	< 20	< 66

(AWG - American Wire Gauge)

The length measurement in the above table is from the battery to the refrigerator.

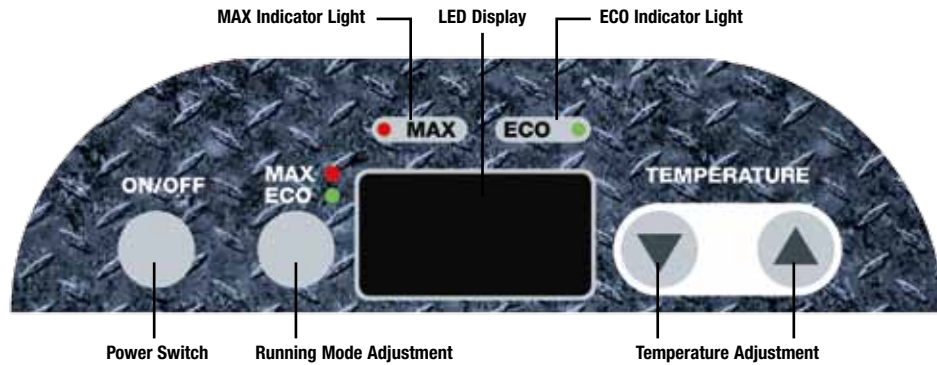
Protection: This unit has an in built automatic low-voltage cutout system, designed to protect your battery from discharging completely. This will automatically turn off the compressor when the battery discharges to Cut-Out voltage (See table below). The compressor will automatically restart when voltage increases to Cut-In (See table below).

Battery Protection	12V Cut-Out	12V Cut-In	24V Cut-Out	24V Cut-In
LOW	10.2V	11.2V	21.6V	23.0V
MED	10.7V	11.7V	22.6V	24.0V
HIGH	11.7V	12.7V	24.6V	26.0V

IMPORTANT: If your fridge cuts out prematurely, this may be due to the Battery Protection being set too high. Consider lowering the battery protection level via the switch located on the rear power panel.



Operation



Temperature Setting Range: -30°C~40°C, -22°F~104°F

LED Display Range: -20°C~45°C, -40°F~113°F

Plug in the DC or AC power. Press the ON/OFF Button to turn the unit on. The LED Display on the control panel will illuminate and the interior temperature of unit will be displayed.

Press the ▲ UP and ▼ DOWN to adjust the temperature. Press the ▲ UP button to increase the temperature, or the ▼ DOWN to decrease the temperature. When the above two buttons are both pressed at the same time it will switch display between °C and °F.

Press the ECO Button to activate the Economy running mode, the ECO indicator light will illuminate green. Press the button again to activate MAX running mode, the MAX indicator light will then illuminate red.

ECO Mode: Reduces power consumption and is used once fridge is down to its desired operating temperature.

MAX Mode: Is used to reduce the internal temperature more rapidly.

NOTE: Fridge will consume more power on this setting.

If power supply is cut off, refrigerator will automatically restart when power supply is restored.



Cleaning & Maintenance

Clean the unit inside and out with a damp cloth. For more stubborn dirt, dissolved sodium bicarbonate in lukewarm water may be used.

Never use abrasive products, detergents or soap. After washing rinse with clean water and dry carefully. Make sure power is disconnected while doing this.

If unit is not being used for long periods of time, do NOT fully close lid. This is to prevent mould and odours.

Troubleshooting

If unit will not turn on, check:

- Power supply ie. Battery voltage (See Battery Protection table on Page 5)
- Check all connections between battery and fridge
- Check condition of fuse
- Check that the unit is turned on

If contents of fridge are freezing:

- Temperature setting is too low

Poor refrigeration performance:

- Too much food has been placed inside refrigerator
- Temperature of food placed in fridge is too high
- The door is not closed properly
- Door seal is broken

Poor cooling:

- Make sure adequate ventilation room is left around unit (See General Notes Page 4)
- Ambient temperature is extremely high
- Temperature is not set correctly

Sound of water from inside of unit:

- This is normal due to flow of refrigerant

Noise

- Unit is not on a flat or level surface
- Check for vibrations in surrounding objects

CODE	ERROR TYPE
E5	Compressor has over heated (Over loaded or internal temperature too high)
E4	Compressor motor running speed error (Over loaded motor cannot maintain 1850times / min which is the lowest speed)
E3	Compressor motor starter error (Motor blockage or cooling system pressure difference)
E2	Fan fault
E1	Battery protection stop (Voltage over setting) - Refer to page 5



Technical Data

Item No.	IFRIDGE30
Approx gross capacity (L)	30L
Supply Voltage (V)	12/ 24 // 100-240
Dimensions (mm)	H - 380mm W - 350mm L - 585mm
Temp. Range / regulation	+10 to -18°C
Approx. Weight (kg)	16kg
Material CFC free	CFC-Free
Insulation	PU foam
Interior light	LED
Average power consumption	40 Watt
Current draw on 12V (5C inside, 20C outside)	approx. 0.7 Ah/h
Certification	GS/ CE/ E certified
Guarantee period	5 year on compressor 3 year on components
Battery protection	3 Stage low voltage protection



Technical Data

Item No.	IFRIDGE40
Approx gross capacity (L)	40L
Supply Voltage (V)	12/ 24 // 100-240
Dimensions (mm)	H - 490mm W - 350mm L - 585mm
Temp. Range / regulation	+10 to -18°C
Approx. Weight (kg)	17kg
Material CFC free	CFC-Free
Insulation	PU foam
Interior light	LED
Average power consumption	40 Watt
Current draw on 12V (5C inside, 20C outside)	approx. 0.7 Ah/h
Certification	GS/ CE/ E certified
Guarantee period	5 year on compressor 3 year on components
Battery protection	3 Stage low voltage protection



Technical Data

Item No.	IFRIDGE50
Approx gross capacity (L)	50L
Supply Voltage (V)	12/ 24 // 100-240
Dimensions (mm)	H - 530mm W - 350mm L - 585mm
Temp. Range / regulation	+10 to -18°C
Approx. Weight (kg)	18.5kg
Material CFC free	CFC-Free
Insulation	PU foam
Interior light	LED
Average power consumption	40 Watt
Current draw on 12V (5C inside, 20C outside)	approx. 0.7 Ah/h
Certification	GS/ CE/ E certified
Guarantee period	5 year on compressor 3 year on components
Battery protection	3 Stage low voltage protection



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Warranty

This fridge/ freezer comes with a 5 year compressor warranty and a 3 year components warranty (the warranty excludes parts such as fuses, connectors, plugs, etc.) From the day of purchase under the following conditions.

- If all defects are variably attributable to material or production errors and not improper use (the warranty is void if the unit is run with supplementary parts or accessories from other manufacturers).
- The warranty claim is made within the warranty period.
- The purchase receipt can be presented with the unit.
Claims other than the above are not covered by warranty, Ironman 4x4 reserves the right to repair or replace at our discretion.
- Warranty does not cover loss of fridge contents.

For any service issues or warranty claims please contact our Ironman 4x4 on our toll-free number 1300 731 137.



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