



OWNERS MANUAL



DF20 Drawer Fridge or Freezer

10000773



www.oztrail.com.au

CONTENTS

General Information & Safety Instructions.....	3
Appliances and Accessories	4
Getting Started	5
Operating your Fridge or Freezer	6
Temp Control/General Operation	7
Single Zone Operation.....	8
Using with Solar Panel or Generator	9
Tips, Maintenance & Service.....	10
Troubleshooting.....	11
Error Code	12
Specifications	12
Warranty Details	16

GENERAL INFO & SAFETY INSTRUCTIONS

Read this manual thoroughly before first use, even if you are familiar with this type of product. The safety precautions enclosed herein reduce the risk of fire, electric shock and injury when correctly adhered to. Keep the manual in a safe place for future reference, along with purchase receipt and carton. If applicable, pass these instructions on to the next owner of the appliance.

Always follow basic safety precautions and accident prevention measures when using an electrical appliance, including the following:

ELECTRICAL SAFETY & CORD HANDLING

- **Correct voltage:** Make sure your local outlet voltage and circuit frequency corresponds to the voltage indicated on the appliance rating label.

NOTE: Intended use: This is a portable product, designed for private use. It is exclusively designed for use in cars, caravans and other vehicles including mobile homes, campervans, rail cars and boats. It is designed to cool food and beverages and to be set up in dry, weather protected areas. It is not intended for stationary extended use as e.g. a second fridge at home.

- **Protect from moisture:** To protect against electric shock, do not immerse the cable, plug or the appliance itself in water or other liquid. Ensure your hands are dry before handling the plug or switching on the appliance. Do not use it on wet surfaces.

NOTE: Installation of AC in boats, cars or any other vehicle must be carried out by a qualified electrician.

- **Protect the power cable.** Do not kink or damage the power cable. Do not wrap it around the appliance. Do not pull the unit by the cable. Do not use the cable as a handle, close a door on the cable or pull the cable around sharp edges or corners. Keep the cable away from heated surfaces.

- **Never touch uninsulated cables with bare hands.** This applies especially to handling AC cables.

- **For installations in boats:** If the device is AC mains operated, it is important that the system is protected by a fuse and an earth leakage protection device.

- **Always ensure that the correct voltage** is applied to the Fridge or Freezer. The voltage is stated on the Fridge or Freezer's data plate.

- **Never obstruct vents** to the Fridge or Freezer's compressor.

- **Defrost the Fridge or Freezer** on a regular basis.

- **Never use hard or sharp implements** to remove ice from the cooling compartment.

- **Never use abrasive or solvent based materials** when cleaning the cooling compartment.

- **Do not use any electrical appliances** inside the cooling compartment.

NOTE: 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.

- **Do not** expose to rain.

- This appliance is suitable for camping use.

ASSEMBLY AND PARTS

SINGLE ZONE FRIDGE OR FREEZER

1. Internal Cabinet and Dividers
2. Control Panel
3. Single Door
4. Door Latches
5. Air Flow Vent
6. Power Input Lead



GETTING STARTED

INSTALLATION

After unpacking the Fridge or Freezer check that no parts are missing. Place the unit in a dry place which is protected against splashing water. Do not place directly adjacent to sources of heat such as heating, gas ovens, hot water, pipes or under the blazing sun.

It is important that your appliance is installed and operated in accordance with these instructions to guarantee its performance, efficiency and operation.

APPLICATION & OPERATIVE COOLING RANGE

The cooling compartment has varying temperature zones. The values indicated on the digital display are related to the middle of the cabinet.

The Drawer Fridge or Freezer is designed to either refrigerate or freeze food. The Fridge or Freezer may be used for outdoor use such as for camping purposes or built into drawer systems/cabinetry.

If you wish to refrigerate medicines, first check to ensure the Fridge or Freezer's cooling capacity meets the demands of the respective medicines.

The Fridge or Freezer is designed to operate in ambient temperatures between -10° and $+55^{\circ}$ C in a maximum air humidity of 90% and can operate continuously at an angle of 30° maximum.

Note: The normal operation of the appliance requires heat to be radiated away from the condenser located at the end of the cabinet. Adequate airflow is required around the compressor at all times. (Fig. 1).

When installing into cavity please ensure there is ventilation present to allow air flow

The cooling system has been designed to operate correctly when the appliance is positioned on angles up to 30 degrees. It is recommended that the time the unit is exposed to angles over 30 degrees is limited to a maximum of four (4) hours continuous operation. (Fig. 2).



Fig. 1

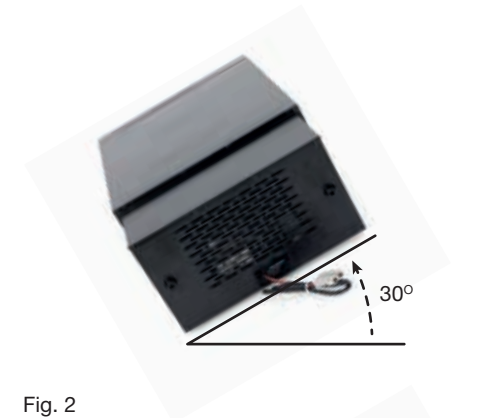
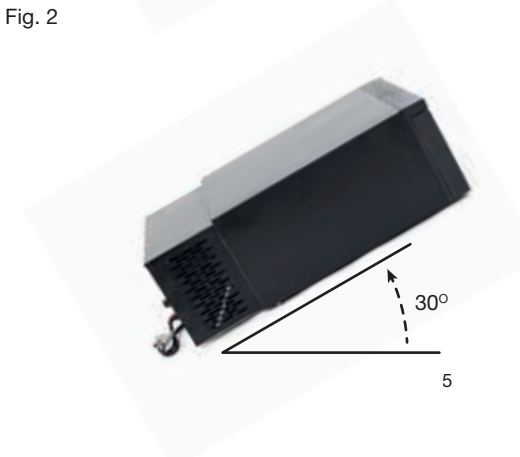


Fig. 2



5

OPERATING YOUR DRAWER FRIDGE

POWER REQUIREMENTS

The Drawer Fridge is designed to operate on DC voltage.

- DC input 12V or 24V DC (e.g. car cigarette lighter or car battery)
- If the Fridge or Freezer is operating when the vehicle ignition is switched OFF, the Fridge/ Freezer will switch OFF automatically unless vehicle is fitted with dual battery system.
- The Fridge or Freezer will automatically switch back ON when the vehicle is re-started and the power source voltage reaches the Battery Monitor cut-in setting.

OPERATING WITH 12/24V DC

- Plug the 12V/24V DC power cable into a vehicle socket or suitable 12V or 24V DC power source.
- It may be necessary to turn the Fridge or Freezer on using the power button the first time it is connected to power.
- The display will automatically show the current internal cabinet temperature.
- For optimum performance and efficiency, it is important that the Fridge or Freezer has a **reliable DC power source available**. Direct connection to the battery is recommended and reduces the risk of voltage dropping to the appliance.
- Use only the DC power cable supplied with the Fridge or Freezer.

Important: If a DC extension cable is required we recommended use of a 6mm dia. (AWG11) 4.58mm² Twin Sheath Two Core cable with direct connection to the positive and negative battery terminals with 15A inline fuse protection.

12/24V DC POWER REQUIREMENTS

If your Fridge or Freezer is cutting out prematurely, it could be due to:

1. The battery voltage protection being set too high on the Battery Monitor
 2. DC power cable and/or connections are not suitable to carry the required current. Check the power cable and all connections and adjust the Battery Monitor on the control panel if required.
- The Fridge or Freezer is equipped with a multilevel Battery Monitor that protects your vehicle battery against excessive discharging when the Fridge or Freezer is connected to 12V or 24V DC power source.

Important: When using the Fridge or Freezer with DC power supply, we recommended setting the Battery Monitor to LOW if Fridge or Freezer not running off crank battery.

Note: A battery charger may only be connected to the battery when the Fridge or Freezer has been disconnected from the DC power source.

- Over-voltage may cause damage to the electronics of the Fridge or Freezer.
- Your Fridge or Freezer is equipped with reverse polarity protection. It protects your Fridge or Freezer against reverse battery connection and short circuit.
- As a protection for your battery, the Fridge or Freezer switches OFF automatically if the power source voltage is insufficient. Fridge will only restart when voltage reaches cut in level.

Note: It is important that the correct cable size and gauge is used for the installation of the DC supply as over distance the voltage can decrease if the incorrect cable size and gauge cable is being used.

OPERATING YOUR DRAWER FRIDGE

- Always consult a qualified automotive electrician when using a DC extension cable.
- The Fridge or Freezer will automatically turn on, there is no requirement to switch the appliance on.
- The Fridge or Freezer will automatically turn on UNLESS it was manually turned off before power was disconnected when last in use. If this is the case it will be in standby mode and needs to be turned on manually with the on/off power button on the control panel.
- The display will automatically show the current internal cabinet temperature.

CAUTION: Do not touch cables, plugs or switches with wet hands or when your feet are in contact with water! If you operate your Fridge or Freezer on board a boat by means of a shore connection to a 220-240V AC power source, the power connection must include an earth leakage RCD residual current device.

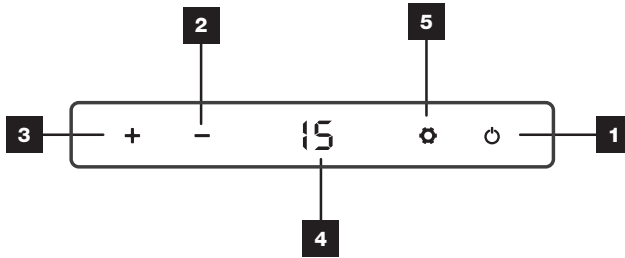
TEMP CONTROL/GENERAL OPERATION

When your Fridge or Freezer is first connected to the DC power input the appliance will power up depending on the state it was disconnected in when last used - it will either turn on fully showing all info on the display or it will start up in standby mode & require the on/off button on the display to be pressed

- The Temperature Controller provides the ability to set the desired temperature level and display the current cabinet temperature. The electronic controller has been programmed to maintain an average of the set temperature.
- The compressor will start up when the internal cabinet temperature increases 0.5 to 2 degrees above the set temperature and will run until the temperature is 0.5 to 2 degrees below the set temperature.

DRAWER FRIDGE OPERATION

1. Power On/Off Button
2. Temp Decrease Button
3. Temp Increase Button
4. Temp Display
5. Settings Button



POWER – OFF AND ON

1. Press power button & fridge will go into standby mode then switch off after 5 seconds
2. Press the power button & fridge will re-start with previously selected settings

CABINET TEMPERATURE – SETTING

1. Adjust Temperature by pressing the + button to increase temp and the - button to decrease temp

Note: Maximum temperature settings are from -20°C to 20°C. We recommend +3 for a fridge or -16 for a freezer

2. Temperature display will flash when selecting temperature & return to solid display when showing actual internal temperature

BATTERY MONITOR – SETTING

1. Adjust the battery monitor setting by pressing & holding the settings button for 3 seconds until the current setting is flashing. Scroll through settings by pressing the settings button while display flashing until desired setting is reached. Setting will stop flashing to indicate it has been selected

We recommend using LOW or MEDIUM setting to avoid the F1 (Low Voltage) error

12V DC Input	Cut Out	Cut In
HIGH ■■■■	11.3V	12.6V
MEDIUM ■■■■	10.1V	11.4V
LOW ■■■■	9.6V	10.9V

24V DC Input	Cut Out	Cut In
HIGH ■■■■	24.3V	25.7V
MEDIUM ■■■■	22.3V	23.7V
LOW ■■■■	21.6V	23.0V

USING WITH SOLAR PANEL OR GENERATOR

USING WITH SOLAR PANELS

- The power consumption and efficiency of your Fridge or Freezer makes it ideal to be used in conjunction with solar panels to provide recharging of the DC power source. Solar panels will provide charge into the battery during the daylight hours even while the appliance is operating.
- As the output from solar panels changes depending on the level of sunlight and intensity, your Fridge or Freezer cannot be connected directly to the solar panels. The appliance must be connected to a suitable DC battery and then the solar panels connected to the battery.
- We recommend the use of the quality regulated portable solar panel kits from 60 to 250 watts for use with your Fridge or Freezer.

DO NOT connect the Fridge or Freezer directly to the solar panel as it will not work. Connection must be via the battery.

USING PORTABLE GENERATORS

- It is important that the correct generator size is used with your Fridge or Freezer. An incorrect generator or voltage output may result in reduced performance or damage to your Fridge or Freezer which may void your appliance warranty.
- If connecting directly to an AC generator, ensure that **only a digital or inverter type generator** is used. These provide a more reliable and constant 240V AC output power source and are specifically designed for use with electronic and other power sensitive appliances.
- Most generators are fitted with a DC power output socket - DO NOT connect your fridge directly to the DC power output of the generator as this will result in damage to your Fridge or Freezer and void warranty.
- When charging the battery using a digital or inverter type generator, we recommend only using a 'smart battery charger' that is fully automatic, spark proof and reverse polarity protected. The battery charger is connected directly to the AC power output socket of the generator.

TIPS, MAINTENANCE & SERVICE

TIPS AND SUGGESTIONS

- Fresh and frozen foods should not be stored right beside each other in the cabinet. Doing so may cause a fresh food to freeze and/or spoil.
- When the appliance is being set at 0° or lower temperatures, do not store glass bottles or liquids such as beer, milk, juices or soft drinks in the unit as these may freeze and shatter, leak or burst. We recommend +3 degrees for a fridge temperature & -16 for a freezer temperature
- Items such as fruit and vegetables should be stored closer to the top of the cabinet as this area is normally slightly warmer. This will reduce the risk of spoiling and ensures that damage is not caused by being crushed by heavier items.
- To improve the efficiency of your Fridge/ Freezer it is better to have the cabinet as full as possible at all times. A full cabinet will provide lower power consumption over 24 hours than a half empty one. When the cabinet is full there is little air space between the goods so the cold air is trapped, but when there is lots of air the coldness cannot be captured and held. On a trip it is a good idea to replace finished products with bottles of water or similar. This will fill the empty spaces and allow the coldness to remain within the cabinet.
- Frequent door opening will allow warm air to enter the cabinet. Keep the number of times you open the door to a minimum where possible.

When located in the rear of a car or trailer, it is recommended that the appliance be kept away from direct sunlight to reduce the risk of increased heat. It should also be provided with suitable ventilation to guarantee efficient power consumption and performance. You must remember that when a vehicle is parked in the sun that on a day where the ambient temperature is +30°C, the interior of the vehicle can reach +55°C.

MAINTENANCE & SERVICE

Your Fridge or Freezer will be delivered cleaned from the factory – you nevertheless should clean prior to initial use. Take a cloth which has been slightly moistened with lukewarm water. Pay attention that no water drops into the seals and possibly damages the electronics. Dry off the Fridge or Freezer with a cloth after cleaning. Clean your Fridge or Freezer periodically and as soon as it is dirty.

ATTENTION:

- **DO NOT** use solvents or agents with sand or acid parts for cleaning your Fridge or Freezer.
- **DO NOT** use brushes, graters or hard sharp tools to clean your Fridge or Freezer.
- Before cleaning, the power cable should be disconnected and the Fridge or Freezer switched OFF.
- Clean the Fridge or Freezer inside and out with a damp cloth. For stubborn dirt, use some sodium bicarbonate dissolved in lukewarm water.
- After washing, rinse with clean water and dry carefully.
- When storing your Fridge or Freezer for a long period of time, **DO NOT** fully close the lid. This will prevent mould and odours.

For additional queries, service and maintenance please contact our After Sales Support 1300 362 921 or warranty@adventureoperations.com. They will provide you with expert advice on further information you may require.

DISPOSAL

When it comes to the end of its working life, your Fridge or Freezer should be disposed of responsibly to ensure that it does not contaminate the environment. It would be advisable to contact your local council for advice on the disposal of this unit.

TROUBLESHOOTING

Issue	Possible Solutions
The Fridge or Freezer will not turn on	Check the unit is switched ON – Press the power button to turn on
	Check the power source (voltage may be too low)
	Check the power cable and all connections from the power source to Fridge or Freezer including blade fuse.
The contents of the fridge are freezing	The temperature has been set too low, therefore increase the temperature setting
Poor refrigeration performance	Too much food has been put inside the unit
	Temperature of the food put inside the fridge is too high
	Ensure door is closed properly
	Ensure power source has sufficient voltage
	There is poor ventilation around the fridge
	Ambient temperature is very high
Temperature is not set correctly	
There is a "water flow" type of noise from inside the unit	This is normal, caused by the flow of refrigerant
There is a noise from the unit	Ensure unit is on a flat level surface
	Check for vibrations in surrounding objects
Fridge or Freezer does not work and display does not illuminate	There is no voltage present in the 12V/24V socket in your vehicle. The ignition must be switched ON in most vehicles to apply current to the cigarette lighter socket
	Check inline fuse in the power lead of the unit
Fridge or Freezer does not work and display does not illuminate when operating from the 12V/24V cigarette lighter socket with ignition switched ON.	The socket fuse in vehicle is defective and must be replaced
	The socket in vehicle must be cleaned or the plug has not been assembled correctly or the fuse in the fridge lead has blown
The display shows an error message (F1) and the Fridge or Freezer does not cool	Connected to DC power source, the Fridge or Freezer has switched off. This may be due to low voltage. Check Battery Monitor setting is on LOW. Re-start vehicle to increase battery voltage level. Test and charge battery
	The Fridge or Freezer has switched off due to an internal fault. Contact After Sales Support 1300 362 921

ERROR CODE INFORMATION

Error Code	Possible Cause	Solution
F1	Low voltage to fridge	DC - Increase voltage of DC power source/Check all connections
		Check battery monitor is set to LOW or MEDIUM
F2	Condensor Fan Faulty	Contact After Sales Support 1300 362 921 to arrange repair
F3	Compressor over pressure	Disconnect power to fridge for 20 minutes & attempt re-start
F4	Compressor not kicking in	Contact After Sales Support 1300 362 921 to arrange repair
F5	Over Temperature of the compressor & electronics	Disconnect power to fridge for 20 minutes & attempt re-start
F7	Temperature Sensor Faulty	Contact After Sales Support 1300 362 921 to arrange repair

SPECIFICATIONS

Model	10000773
Model Name	DF20 Drawer Fridge or Freezer
Weight	20kg
Dimensions	440W x 730D x 250H mm
Compressor	LG BSA025LAVV
Current Draw	3.75A 12V/1.875A 24V
Cooling Range	+20°C to -20°C
Power Input	60W
Insulation	PU Foam
Material	Metal Body, Plastic lining



WARRANTY

Adventure Trading Australia P/L warrants this product against defects for a period of two years from the date of purchase. Adventure Trading Australia P/L will repair or replace the product, at its discretion, should a warrantable defect arise within the warranty period. If the exact model is unavailable a model of equivalent nature will be substituted at our discretion. This warranty excludes faults and failures caused by improper use and abuse; fair wear and tear; or failure to follow instructions regarding care and maintenance. Products used for a commercial nature are not covered by this warranty against defects. A warranty may be claimed by returning the product to its place of purchase, with a detailed proof-of-purchase clearly showing the date and detail of the purchase or contacting Adventure Trading Australia P/L directly.

You can contact Adventure Trading Australia P/L Customer Service by phone on 1300 362 921, in writing: PO Box 1110, Eagle Farm QLD 4009. The benefits under Adventure Trading Australia P/L warranty against defects are in addition to other rights and remedies under law in relation to goods

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

For more detailed information and an explanation of these terms see www.oztrail.com.au/warranty or email warranty@adventureoperations.com

OZtrail® is a registered trademark of
Adventure Trading Australia Pty Ltd

Designed by:
Adventure Trading Australia Pty Ltd
71 Charles Ulm Place,
Eagle Farm, QLD 4009
AUSTRALIA



Made in China

