

Nexberg Pty Ltd T/a Evakool 16 Enterprise Street CALOUNDRA QLD 4551 AUSTRALIA Tel: (07) 5492 7777 Fax: (07) 5492 7733

## **Table of Contents**

Introduction	2
Internal Diagram	2
Safety Information	3
Installation Instructions	3
Packing and Moving	3
<b>Operation Instructions</b>	4
Temperature Control	4
Fridge Compartment	5
Freezer Compartment	5
Locking Your Fridge	5
Cleaning and Care	5
Defrosting	6
Technical Specifications	6
Packing List	6
Error Code Flow Chart	7
Troubleshooting	7

## **Introduction**

Thank you for purchasing an Evakool Upright Fridge Freezer. These units utilize a 12/24V compressor, offering low power consumption and great cooling performance. Evakool offers a 2 year warranty, valid from the date of purchase.



# DC210-S-01 / DC175-S-01 / DC146-S-01

**Internal Diagram** 

DC110-S-01



## **Safety Information**

Please read and follow all safety instructions

- Avoid any moisture or liquids coming into contact with the electronics.
- Never store glass bottles or soft drink / beer cans in the freezer as these may shatter or explode.
- Whether the unit is stored or operating please ensure it is upright and level.
- Always make sure the correct voltage is being used. (See page 4 for details)
- Never obstruct the back compressor bay as this supplies the necessary cooling airflow to the compressor and fan.

Do not place any electrical devices inside the refrigerator as they may be damaged by moisture and humidity generated during use of the fridge/freezer.

## **Installation Instructions**

Select a flat and firm surface to install the fridge onto.

To ensure proper ventilation allow approximately 100-150mm of space around the compressor bay.

Leave a space to allow for the door to swing open.

Direct sunlight and sources of heat increase power usage - reduce exposure if possible.

Try to avoid installing your unit in a location where there is high humidity.

When installing the refrigerator on a carpet floor please place something firm and level under the fridge.

Never screw through the cabinet (i.e. if mounting the refrigerator in a motor home or caravan.)

If you need to permanently mount the refrigerator please consider the Evakool mounting kit.

### **Packing and Moving**

When removing the fridge from its original packaging make sure to take note of how it is packaged in case you need to transport it in the future.

Make sure to keep the fridge upright. If it is necessary to lean the fridge, lean the fridge at an angle no greater than 45 degrees.

Do not hold the fridge by the door when moving as this could cause damage to the hinges or door.

Be sure not to shake the unit whilst moving the fridge/freezer.

After moving unit allow at least 1 hour before switching the unit on to allow it to settle.

## **Operating Instructions**

Power : The fridge can be powered by either 12V or 24V DC. The unit comes with exposed terminals for hardwiring the fridge to DC Power.

#### NOTE: The fridge can draw up to 12 Amps on start-up. Please make sure your fused line and cabling is at least 6mm auto (10AWG).

With an AC Adaptor, the unit can be run off 240V (mains power) – The recommended method of powering the unit is to hardwire it to a DC source.

The operating power range for 12 Volt is 10.4V to 16.8V and the 24 Volt range is 22.5V to 30.7V (This Voltage is measured at the fridge, not the power socket). If the voltage is out of this range the fridge will automatically cut out. Once the voltage returns to the operating range the fridge will start again. **CAUTION**  $\sim$  DO NOT run the unit directly off a power source where the power output fluctuates as this may cause damage to the electronics. E.g. Generators

Do not power the refrigerator on unless it has been standing upright for at least 1 hour.

When using the unit for the first time, please keep your fridge empty and running until it starts to cycle, this should take somewhere between 4-12 hours.

When storing food inside the fridge, make sure there is enough room around products to enable air circulation. Do not pack product in too tightly.

Please make sure that food and liquids are stored in appropriate containers when placing them inside the refrigerator.

If possible, to reduce energy consumption please cool product before it is placed inside the fridge.

Try not to open either the fridge or freezer doors too frequently as this will increase energy consumption.

### **Cable Specification**

The DC cables must have a suitable cross-section for their length, according to this table:

Cable Size	(Area)	12V Max Cable	24V Max Cable	
		Length*	Length*	
mm (Auto)	AWG	Metres	Metres	
6	10	3	6	
10	8	6	12	

\*Note: The length is from the battery to the refrigerator.

## **Temperature Control**

The temperature knob controller is for adjusting inside temperature. The inside temperature gets lower as the dial is turned higher.

The suggested dial setting is between 3 – 4, individual units may vary. <u>i.e.</u> 1 is the warmest and 7 is the coldest. <u>Note</u>. It is not possible to adjust the internal temperature of the refrigerator and the freezer individually. <u>Light</u>

Fault Light

## **Storing Product in the Fridge**

Please ensure that food is only placed in the fridge for short term storage.

Never place product with corrosive attributes into the fridge as this could cause damage if it leaks.

For food that is high in water content please wrap in paper first to absorb any condensation before storing in the fridge.

The shelves inside the cabinet can be adjusted as required for convenient storage of foods of different heights.

Make sure that when food is stored in the fridge it is not packed in too tight as this will affect the cooling circulation and cause high power usage.

The vegetable and fruit crisper is ideal for storing fruits and vegetables which are easily accessible. The door shelf is useful for storing eggs and drinks.

## **Storing Product in the Freezer**

The normal temperature of a freezer should be around -15°C which can preserve food in a fresh state for a long period of time. Never place food with corrosive attributes into the freezer as this could cause damage if it leaks.

Please ensure that warm or hot food is cooled down before it is placed inside either the refrigerator or freezer.

If freezing food, it is better to reduce food into smaller portions before freezing. This will help the freezer and draw less power.

Do not put any glass, glass bottles, or soft drink / beer cans in the freezer as these may shatter or explode.

Do not add too much product into the freezer at once as this reduces circulation of cold air and could cause food to go off.

Do not open the door too frequently as this will reduce the efficiency of the freezer and lead to higher power consumption.

Generally, take food out as required for thawing, never re-freeze thawed out food as the food may spoil.

## Locking your Fridge

Your fridge is fitted with a locking mechanism.

### DC110-S-01





The DC110 is fitted with a locking system at the top of the door.

To lock the door shut simply push down and turn the pin. This will ensure your fridge does not open during transit.

## DC146/175/210-S-01

The DC146/175/210 are fitted with a locking system at the join between the fridge and the freezer.

To lock the door shut simply attach the lock lever to the locking hole. This will ensure your fridge does not open during transit.

## **Cleaning and Care**

Your fridge is for preserving food. Regular cleaning is necessary to keep it sanitary inside.

Use a piece of soft cloth dipped in lukewarm water or neutral dishwashing detergent when wiping the inside clean. If detergent is used, be sure to clean inside with water and dry with cloth.

The door seals can become dirty over time, please clean when necessary. Be sure to regularly check these for damage as well. Dust can accumulate on the outside of the fridge. This should be wiped away with a soft cloth. If necessary use a damp cloth to remove any stains.

If the bulb blows or is damaged, unplug the unit and remove the light cover. (Fit replacement bulb - contact Evakool).

## **CAUTION**

DO NOT spray / splash your fridge with water directly.

NEVER use washing powder, alkaline detergent, a steel brush, sharp objects, gasoline, thinners, kerosene, acid, or boiling water while cleaning your fridge / freezer, otherwise your fridge may become damaged.

Clear away spills immediately.

Always check the following before use:-

Check the wiring to see if it is cracked or damage.

### **Defrosting your fridge**

Excessive frost coverage will affect the performance of the refrigerator and increase power consumption.

If the frost is more than 1cm thick, it is time to defrost the fridge by leaving the fridge off and the door open.

Dry all excess water with a towel or soft cloth.

Please try and defrost the fridge and freezer every 1-2 Months.

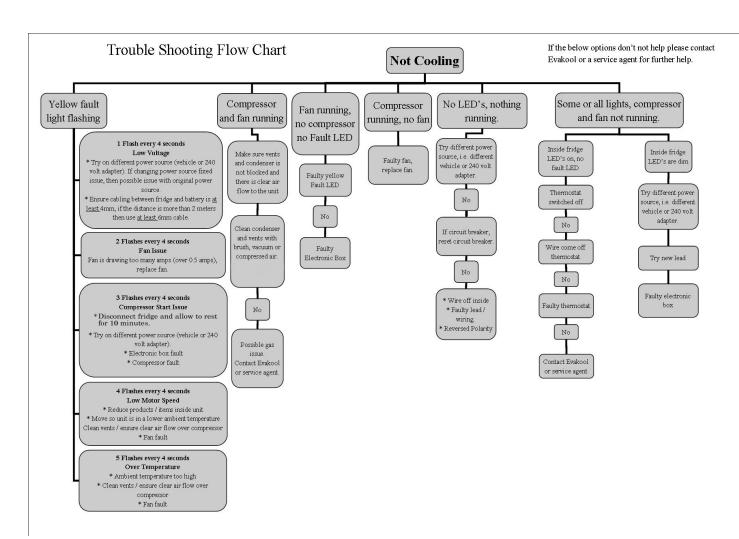
## **Technical Specifications**

Model		DC110-S-01	DC146-S-01	DC175-S-01	DC210-S-01
<b>Climate Class</b>	\$	T+	T+	T+	T+
Total Capacity		110 L	146 L	175 L	210 L
Fridge Capacity		93 L	116 L	135 L	170 L
Freezer Capacity		10 L	30 L	40 L	40 L
Voltage Range		12V (10.4V ~ 16.8V) or 24V(22.5V ~ 30.7V)			
Average Power Usage –		26.9 W	28.9 W	31.4 W	33.3 W
Over 24 Hour Period **		2.1 Amps	2.25 Amps	2.45 Amps	2.6 Amps
Weight		29.2 Kg	45 Kg	49.5 Kg	53Kg
Wall	-Freezer	50mm	75mm	75mm	80mm
Thickness	- Fridge	35mm	55mm	55mm	55mm
Dimensions ~	mm	814 (H)	1095 (H)	1275 (H)	1428 (H)
(H x W x D)		473 (W)	590 (W)	590 (W)	590 (W)
		530 (D)	585 (D)	585 (D)	585 (D)
Compressor					
-		R134a			
0	es			nterior fridge light	
Plastic coated metal shelves		3	4	4	4
Perspex shelves (top of crisper)		1	1	1	1
Vegetable drawer (crisper)		1	1	1	1
Freezer Shelf		0	0	1	1
Ice Tray & Egg container		1	1	1	1
Perspex shelves (top of crisper) Vegetable drawer (crisper) Freezer Shelf Ice Tray & Egg container		PBC-2.5 DC Compressor R134a Metal door retaining clips, Adjustable Temperature Control, Interior fridge light 3 4 4 4 1 1 1 1 1 1 1			

\*\* <u>Note:</u> The Power Usage figures quoted above are estimates only. Depending upon the ambient (outside) temperature, the temperature the fridge is set to, where and how it is installed, how often the doors are opened etc., the total daily power consumption could vary from as little as 50 Amps to much more. As more detailed information comes to hand these figures will be updated.

These specifications may change at any time without notice.

## **Troubleshooting**



#### If the fridge is not cooling

Check the DC cable is connected to power? Check if the power cord is damaged? Check is the power source is on / charged (Battery)? Check whether the voltage is in the correct range?

### If low refrigeration performance

Too much product has been placed inside the unit. There is too much warm product inside the unit. The door is unclipped / or open. The door seal is broken. Problems arising from poor ventilation (ensure at least 100-150mm of space around the back of the unit) The temperature around the cabinet is very hot (above 43° C)

### If the fridge is very noisy

Check if the floor is level or unstable? Is anything touching your refrigerator?

#### If the fridge does not cycle off

Is the temperature around the cabinet very high? – Try to improve ventilation. Is the door being opened too frequently? Is the door tightly closed? Is the temperature setting set to very cold ~ on 5+? Try to set to 3 or 4 as recommended.

### If there is a bad smell coming from the fridge

Is there any spoilt food in the fridge? Does your fridge need cleaning?

#### If there is water underneath the fridge coming from the back

Is the water outlet of the refrigerator blocked – Defrost and clean the fridge. Fridge not level. If tilted forwards water may not fill drain correctly.

### Is there is large frost built up on the inside of the fridge

Is the ambient humidity high? Does your fridge need to be defrosted?

### The following are NOT problems

#### If you can hear the sound of running water from inside the fridge

This is normal, due to the flow of refrigerant around the cooling pipes.

### If there is an unusual noise when refrigerator is working

This may be caused by your refrigerator not running on a level surface.

### If none of the above solves your issue please contact Evakool on (07) 5492 7777.

\*This manual is for reference purpose only. The product you have purchased may differ slightly from the one shown in this manual.