

COSTWAY®



IMPORTANT

Read instructions before operation

USER'S MANUAL

**Car Fridge
EP23499**



Accessories available separately:-
Protective Transit Bag
AC110V -240Vto DC 12 V Power Adaptor

Please read this manual carefully before using your unit.

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Key Product Features:

- The most reliable portable cooling system in the world.
- Electronics, high efficiency, low energy consumption.
- Multi-voltage system DC (12 and 24 Volt)
- Adjustable battery protection helps protect your battery (DC only).

1. Safety Instructions

- Warning: Do not use your unit if any cabling is damaged, frayed or there is exposed wiring.
- Warning: Do not attempt or continue to operate your unit if it is wet.
- When using the refrigerator in the vehicle, please make sure the circuit being used is fused, recommended size for DC 12 Volt is 15 Amp, DC 24 Volt is 7.5 Amp.
- Make sure the voltage is within the correct range for socket and cable being used. The technical data label on the side of the unit shows the voltage ranges.
- Do not place any electrical devices inside the refrigerator as they may be damaged.

2. Notes on using the product

- o Your unit requires good ventilation, especially around the back of the refrigerator; allow a gap of at least 4" around all sides.
- o Do not allow a large amount of frost to build up on the inside walls as this may impair cooling. Defrost by turning the unit off, allowing the frost to melt and wiping out the water.
- o The lower the ambient temperature, the lower the power usage, in order to maximize efficiency keep the unit in a cool location out of direct sunlight.
- o It is recommended to operate the unit on a flat surface, but it will operate at angles up to 30°.

3. Operation

- o Power: Both DC (12 and 24 Volt)
- o Battery Protection: Selecting the Low, Med, High positions of the switch (next to the DC power socket), you can choose different levels for battery protection. In the below table you can find the voltages when the compressor stops running (cut-out) and when the compressor restarts working (cut-in)

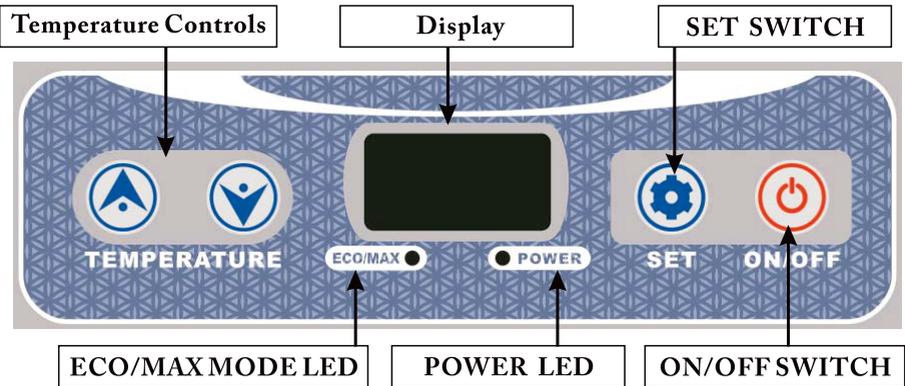
Battery Protection	12V CUT-OUT	12V CUT-IN	24V CUT-OUT	24V CUT-IN
LOW	10.2±0.3V	11.2±0.3V	21.6±0.3V	23.0±0.3V
MED	10.7±0.3V	11.7±0.3V	22.6±0.3V	24.0±0.3V
HIGH	11.7±0.3V	12.7±0.3V	24.6±0.3V	26.0±0.3V

BATTERY PROTECTION PRE-CONFIGURED SETTINGS

- o Cable Length Specification

The DC cables must have a suitable cross-section for their length (measured from the battery to the unit), according to this table:

Cable Thickness		12V Max Cable Length		24V Max Cable Length	
[mm ²]	AWG	[m]	[ft.]	[m]	[ft.]
2.5	14	2.5	8	5	16
4	12	4	13	8	26
6	10	6	20	12	39
10	8	10	33	20	66



Temperature setting range :-20°C to 10°C

- o Plug in the DC power cable. Press the button ON/OFF to turn the unit on. The display on the control panel will turn on and the interior temperature is displayed.
- o Press the button Δ UP or ∇ DOWN button to adjust the temperature the unit aims to achieve. Press the button Δ to increase or the button ∇ to decrease the temperature.
- o When you press the "SET" buttons , it switches the display between °C and °F.
- o Press the button "SET" to enter the economic running mode, the ECO indicator green LED light will be on. Press the button again; the unit will enter the maximum running mode (HH) MAX indicator red LED light will be on.
- o The economic mode runs the compressor at a lower speed to save power; the maximum mode runs the compressor at a higher speed increasing power usage. Maximum mode is useful if the ambient temperature is over 30°C or fast cooling is required.
- o Plug in the DC power. Press the button ON/OFF to turn the unit on. The display on the control panel will turn on and the interior temperature is displayed.

- o If the power supply is cut off or disconnected, the unit will switch off automatically and once the power supply is restored it will automatically switch on again

4. Cleaning and maintenance

- o Clean the appliance inside and out with a clean damp cloth every week. If it is dirty, use sodium bicarbonate dissolved in lukewarm water to clean the unit.
- o Never use abrasive products, detergents or soap. After cleaning, wipe out with a clean damp cloth and dry carefully.
- o Do not store product inside unit if the unit is not on
- o Please wipe dry the inside and close the lid when you are not use it.
- o Never clean the unit under running water or in dish washer Do not use sharp objects during cleaning as these can damage the unit.



5. Troubleshooting

- The unit is not turning on
 - o Check whether the unit has been turned on
 - o Check the power supply (try a different power source, i.e. different vehicle or power socket)
 - o Check whether the plug and the socket have a good connection.
 - o Check whether the fuse has been burned out or blown
- Low refrigeration performance
 - o Too much product been placed inside the unit

- o There is too much warm product inside the unit
- o The lid is unlatched / or open
- o The lid seal is broken
- o Problems arising from poor ventilation (ensure at least 4" around all sides)
- o The ambient is too high
- o The temperature setting is too high
- Can hear the sound of running water from inside the unit
- o This is normal, due to the flow of refrigerant in the unit.
- Unusual noise when refrigerator is working
- o The refrigerator is not placed on a level surface

If none of the above solves your issue please contact with us.

6.Error Protection Function

When the electronic control module of compressor malfunctions, display will show ER1,ER2,ER3,ER4,ER5 and compressor will stop work. After remove the fault please wait 3 minutes before the system starts operation .When NTC(this means temperature sensor/) failure detected, the display shows ERO,ER9 ,after remove the fault 2 seconds later, the display will show the internal temperature again.

Error Code	Problems	Solution Method
ER0	Temperature sensor short circuit (at this point the compressor enters a regular operating mode, work 30 minutes then stop 30 minutes.	Change the temperature sensor line
ER1	Input under-voltage protection	1. Change the battery, 2. Lower battery protection switch
ER2	DC fan over-current protection	Change the fan
ER3	Compressor start-up problem	Interrupt power and place 30min, then re-start
ER4	Rotational Speed of compressor is abnormal	Change the main controller
ER5	The temperature of control module is abnormal	Move the fridges in a cool place , cooling the module then re-start
ER9	Temperature sensor open circuit (at this point the compressor enters a regular operating mode, work 30 minutes then stop 30 minutes.)	1.Tighten the temperature sensor line, 2. Change the temperature sensor line.

7.International Certification Approvals

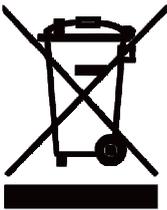


8.Technical Data (DC)

MODEL	EP23499
CLIMATIC CATEGORY	T / ST / N / SN
PROTECTIVE CLASSIFICATION OF ELECTRIC SHOCK RESISTANCE	III
RATED VOLTAGE DC (V)	12/24V
DC FUSE (A)	15A
TOTAL INPUT POWER (W)	55W
RATED CURRENT FOR DC (A)	4.6A/2.3A
REFRIGERANT (g)	42g
FOAM VESICANT	C5H10/C-Pentane

Guidelines for protection of the environment

DISPOSAL : Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.



Meaning of crossed-out wheeled dustbin: Do not dispose of electrical appliances as unsorted municipal waste. Use separate collection facilities.

Contact you local government for information regarding the collection systems available.

If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

9.Packing List

Item				
Quantity	Refrigerator	DC Power Cord	AC Adaptor	User's manual
Model				
EP23499	1	1	1	1



TIPS:

**Your suggestions and comments for Costway are really important to us!
We sincerely solicit you to go back to our shop and leave a good rating in just a simple click. It would be quite encouraging if you could kindly do so like below:**

★★★★★ Great products so far

February 24, 2018

Great product so far. Fast delivery, easy setup, and working without any issues.

**With your inspiring rating, Costway will be more consistent to offer you
EASY SHOPPING EXPERIENCE, GOOD PRODUCTS and EFFICIENT SERVICE!**



COSTWAY

WHERE THERE IS COSTWAY THERE IS HOME

