


Instruction Manual

W series

Compressor Car Fridge

 **Caution:Read this important information**

Make sure to unpack product and leave upright for at least 24 hours before you first use it.

Only use the items supplied in this package to install the device in your vehicle.

DO NOT disassemble the product by yourself. For more information and assistance, please contact the retail outlet where you purchased the product, or call the after-service center.

When using the device, avoid exposure to high temperature and direct sunlight.

DO NOT disassemble, impact, or put the device into a fire.

DO NOT use this product for any illegal purpose. Follow the relevant national laws and regulations.

Make sure that the device is positioned horizontally during operation. Note: The tilt angle must be less than 5° for long-time running and that must be less than 40° for short-time running (<2 mins).

Note: the device must be well ventilated to sufficiently dissipate heat. Keep the device at least 10 cm away from nearby items or surfaces.

DO NOT store explosives, accelerants and other flammable liquids and sprays in the device.

For disposal of this device, please use your local recycling center and follow applicable disposal regulations.

Please read this operating manual carefully before starting the device. Keep it in a safe place for future reference. If the device is passed on to another person, this operating manual must be handed over to the user along with it.

The manufacturer can not be held liable for damage resulting from improper usage or incorrect operation.

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1. Safety Instruction.

1.1 General Safety

WARNING!

- ⊕ Do not operate the cooling device if it is visibly damaged.
- ⊕ If this cooling device's power cable is damaged, it must be replaced by the customer service in order to prevent safety hazards.
- ⊕ This cooling device may only be repaired by qualified personnel, improper repair can lead to considerable hazards.
- ⊕ Cleaning and user maintenance must not be carried out by children without supervision.
- ⊕ Children must be supervised to ensure that they do not play with the cooling device.
- ⊕ Always keep and use the cooling device out of the reach of children under age of 8 years.
- ⊕ Do not store any explosive substances such as spray cans with a flammable propellant in the cooling device.

CAUTION!

- ⊕ Disconnect the cooling device from the power supply:
 - before each cleaning and maintenance.
 - after every use
- ⊕ Food may only be stored in its original package or in suitable containers.

NOTICE!

- ⊕ Check that the voltage specification on the rating label corresponds to that of the power supply.
- ⊕ Only connect the cooling device as follows:
 - Connect the DC cable to a DC power supply in the vehicle.
- ⊕ Never pull the plug out of the socket by the cable.
- ⊕ If the cooling device is connected to the DC outlet, disconnect the cooling device and other power consuming devices from the battery before connecting a quick charging device.
- ⊕ If the cooling device is connected to the DC outlet, disconnect the cooling device or switch it off when you turn off the engine. Otherwise you may discharge the battery.
- ⊕ The cooling device is not suitable for transporting caustic material or material contains solvents.
- ⊕ The insulation of the cooling device contains flammable cyclopentane and requires special disposal procedures. Deliver the cooling device at the end of its life-cycle to an appropriate recycling.

1.2 Operating the cooling device safety.

CAUTION!

- ⊕ Before starting the cooling device, ensure that the power supply line and the plug are dry.

NOTICE!

- ⊕ Do not use electric device inside the cooling device unless they are recommended by the manufacturer for the purpose.
- ⊕ Do not place the cooling device near naked flames or other heat sources (heaters, direct sunlight, gas ovens etc.)
- ⊕ Danger of overheating!

Ensure at all times that there is sufficient ventilation so that the heat arises during operation does not build up. Make sure the cooling device is sufficiently far away from walls and other objects so that the air can circulate.

- ⊕ Ensure that the ventilation openings are not covered.
- ⊕ Do not fill the inner container with ice or fluid.
- ⊕ Do not immerse the cooling device into the water.
- ⊕ Protect the cooling device and the cable against heat and moisture.

2. Cooling device application.

The cooling device is designed to be operated from:

- ⊕ a DC on-board power supply from a vehicle, boat or caravan.
- ⊕ a DC auxiliary battery

The cooling device is intended to be used in household and similar application such as

- ⊕ Staffkitchen areas in shops, offices and other working environments.
- ⊕ Farm houses
- ⊕ Clients in hotels, motels and other residential type environments.
- ⊕ Bed and breakfast type environments.

CAUTION! Health hazard!

- ⊕ Please check if the cooling capacity of the device is suitable for storing the food or medicine you wish to cool.

3. Cooling device function.

The cooler device can refrigerate or freeze food products. A fast-acting and efficient cooling system provides maintenance-free cooling performance with a compressor and control module. The cooling device is designed for mobile use and it can be used in the various harsh condition and situation.

Function description:

- ⊕ 3-level battery monitor for protecting the vehicle battery.
- ⊕ Display with temperature gauge (switch off automatically at low battery voltage)
- ⊕ Temperature adjustment (with two buttons in step of 1°C or 2°F).

4. Display elements and operation.

NOTICE!

- ⊕ After buying your new cooling device, please lay the new cooling device horizontally for more than 24 hours before starting.
- ⊕ Before starting your new cooling device for the first time, you should clean it inside and outside with a damp cloth for hygienic reasons. Please also refer to the chapter “Cleaning and Maintenance”.

4.1 Display & control panel:



- ①Up/Down ②Small compartment temperature ③Car battery voltage ④Large compartment temperature
⑤Set ⑥Power on/off ⑦Temperature unit ⑧Screen lock ⑨Power mode

Note: The the display screen will automatically be locked in 30s without operation.

Press the button “Up” and “SET” simultaneously to unlock the fridge.

4.2 Cooler device switch on/off:

Note: under the condition of being unlocked

- ⊕ **Switch on:** Long press the button “ON/OFF” for about three seconds.
- ⊕ **Switch off:** Long press the button “ON/OFF” for about three seconds.

Note: When connected to power, the digital display screen will flash for 2 seconds and enter into normal working mode.

4.3 Cooling temperature setting:

- ⊕ **Switch on the cooling device.**
- ⊕ **Setting temperature:**

1. With the power on, press the “UP” or “Down” button. The small compartment temperature number will flash, indicating you are in setup mode.
2. Adjust the temperature using “UP” or “Down” and press “Set” to fix it at the desired level. This will then cause the large compartment temperature to flash. Again, press the “UP” or “Down” to adjust the temperature.
3. After 5 seconds, the setting will automatically save and setup mode will end.

- ⊕ **Changing the temperature unit:**

1. With the power on, press the “Set” button three times.
2. Press the “Up” or “Down” button to switch between “°C” and “°F”.
3. After 5 seconds, the setting will automatically save and setup mode will end.

- ⊕ **Single Zone temperature setting:** Press the button “Up” and “Down” to change the temperature. The temperature can be set within the range of 20 °C to -22 °C for each separate zone in 1 °C or 2 °F.

- ⊕ **Dual Zone Temperature setting:** Press the button “Up” and “Down”, the temperature for left room will flash when you can set the temperature of left room. Press the button “SET” again, the temperature of right room will flash when you can set the temperature of right room. The temperature can be set within the range of 20°C to -22°C for each separate zone in 1°C or 2°F. The temperature displayed on the left is the room near the compressor and the temperature displayed on the right is the room away from the compressor.

4.4 Low voltage protection battery monitor setting:

The cooling device is equipped with a 3-level battery monitor which protects your vehicle battery against excessive discharging when the device is connected to the on-board DC supply.

If the cooler is operated when the vehicle ignition is switched off, the cooler switches off automatically as soon as the supply voltage falls below a set level. The cooler will switch back on once the battery has been recharged to the restart voltage level.

NOTICE! Danger of damage!

When switched off by the battery monitor, the battery will no longer be fully charged. Avoid starting repeatedly or operating without longer charging phases. Ensure that the battery is recharged.

In “**High**” level, the battery monitor responds faster than at the level “**Low**” and “**Medium**”.

Monitor Level		Low	Medium	High
12V	Switch-off voltage	8.5V	10.4V	11.1V
	Restart voltage	10.9V	11.7V	12.4V
24V	Switch-off voltage	21.3V	22.8V	24.3V
	Restart voltage	22.7V	24.2V	25.7V

When the cooler is supplied by the started battery, select the battery monitor level “**High**”, if the cooling device is connected to a supply battery, the battery monitor level “**Low**” will suffice.

- ⊕ **Switch on the cooling device.**
- ⊕ **There are 3-level low voltage protection battery monitor setting: Low, Medium and High.**
 1. With the power on, press the “set” button twice to enter battery protection mode.
 2. Press the “Up” or “Down” button to select the protection mode - H(high),M(medium), or L(low), Medium is the default, to prevent the battery over-discharging.
 3. After 5 seconds, the setting will automatically save and setup mode will end.

*Recommendation: Use H and M mode for car power, L mode for a portable battery or other back-up batteries.

4.5 Cooling device working mode setting:

⊕ Cooling device working mode selection:

There are two working modes in the device:

Touch the button “set”, there will be flashing letter “ECO” or “MAX” display in the screen, use the button “UP +” and “DOWN -” to select the mode you want. The working mode letter “ECO” or “MAX” will flash in the screen for 5 seconds, and then the display screen will return to display the current temperature.

1. With the power on, press the “Set” button to enter power mode setting.
2. Press the “Up” or “Down” button to switch the mode (the default is Max).
3. After 5 seconds, the setting will automatically save and setup mode will end.

4.6 The Change for Single and Dual zones

There are different types of products in single zone or double zone. A single zone is a single storage control adjustment. Two zones can be stored and adjusted separately.

4.7 The explanation for the running code shown in the display screen:

Error Code	Possible Reason	Suggested Solution
E0	Sensor circuit is broken or short	Connect or replace the sensor
E1	Input voltage is low	Check the battery voltage or adjust the Battery Monitor Level.
E2	Ventilating fan problem	Check if the ventilating fan is blocked or short circuit.
E3	Compressor started self-protection	Disconnect the device from power supply for 30 minutes, and re-start the device.
E4	Compressor protect itself against unusual running speed.	Change the working mode by device control panel
E5	Control panel’s overheating warning	Move the device to a place with well-ventilated installation environment.

4.8 Energy saving tips:

- ⊕ Choose a well-ventilated installation location which is protected against direct sunlight.
- ⊕ Allow warm food to cool down first before placing it in the cooling device to keep cool.
- ⊕ Do not open the cooling device more often than necessary.
- ⊕ Do not leave the cooling device open for longer than necessary.
- ⊕ Defrost the cooling device once a layer of ice forms.
- ⊕ Avoid unnecessary low temperature.

5 Connecting the cooling device.

WARNING! DC extension cord.

- Ⓢ Because of the potential safety hazards under certain conditions, the manufacturer does not recommend using any type of DC extension cord.
- Ⓢ Under no circumstance should you attempt to splice extension cord wires.
- Ⓢ Do not use power strips or two-way splitter.
- Ⓢ Always unroll or uncoil a DC cord to avoid heat retention and possible melting.

Connecting to a battery (vehicle or boat), the cooler can be operated with DC 12V or 24V.

NOTICE! Danger of damage!

Disconnect the cooler and other consumer units from the battery before you connect the battery to a quick charging device.

Over-voltage can damage the electronic of the cooling device.

For safety reason, the cooling device is equipped with an electronic system to prevent polarity reversal. This protects the device against short-circuiting when connecting to a battery.

5.1 Using the fused DC plug for device connection.

NOTICE! Danger of damage!

For protection of the device, the DC cable supplied includes a fuse inside the plug.

- Ⓢ Plug the DC cable into the cooling device DC power supply inlet.
- Ⓢ Connect the DC cable to the DC power supply outlet.

5.2 Connect to an AC power supply.

- Ⓢ Plug the DC cable into the cooling device DC power supply inlet.
- Ⓢ Connect the DC cable to the cigar lighter socket of an **AC adaptor** (AC adaptor is optional sale products).
- Ⓢ Connect the AC cable of the AC adaptor to the AC power supply outlet.

NOTICE! Danger of damage!

- Ⓢ Only use the DC cable supplied from the manufacture.
- Ⓢ Never handle plugs and switches with wet hands or if you are standing on a wet surface.
- Ⓢ If you are operating your cooler on board of a boat from a power supply 120V, you must install a residual current circuit breaker between the 120VAC power supply and the cooler. seek advice from a trained technician.

6 Using the cooling device.

6.1 Switch on the cooling device.

NOTICE! Danger of overheating!

Ensure at all time that there is sufficient ventilation so that the heat which generated during the operation can dissipate. Ensure that the ventilation slots are not covered. Make sure that the device is sufficiently far away from walls and other object so that the air can circulate.

- ⌚ Place the cooler on a firm foundation.
Make sure that the ventilation slots are not covered and that the heated air can dissipate.
- ⌚ Close the cooling device.
- ⌚ Switch on the cooler.

NOTICE! Danger from excessively low temperature!

Ensure that the only those objects are placed in the cooler that are intended to be cooled at the selected temperature.

NOTE!

The temperature displayed in the screen is that of the middle in the interior.
The temperature elsewhere can deviate from this temperature.

6.2 Switch off the cooling device.

- ⌚ Empty the cooler.
- ⌚ Switch off the cooler.
- ⌚ Pull out the DC connection cable from the socket.

If you do not want to use the cooling device for a longer period of time.

- ⌚ Leave the device cover slight open, this will prevents odour build-up.

6.3 Defrost the cooling device.

Humidity can form frost in the interior of the cooling device or on the vaporiser, and this will reduce the cooling capacity of device. Defrost the cooling device in good time to avoid this.

NOTICE! Danger of damage!

Never use hard or pointed tools to remove ice or to loosen objects which have frozen in the cooler.

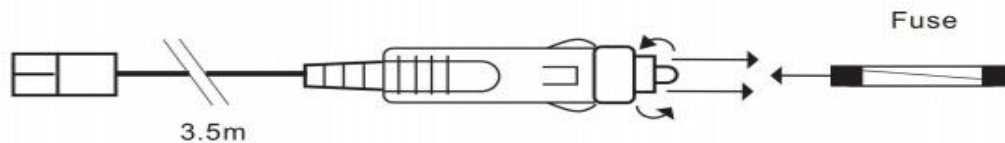
Process the following step to defrost the cooler

- ⌚ Take out the contents of the cooler.
- ⌚ If necessary, place them in another cooling device to keep them cool.
- ⌚ Switch off the device.
- ⌚ Leave the cover open.
- ⌚ Wipe off the defrosted water.

7 Cleaning and Maintenance.

7.1 Replacing the DC plug fuse.

- ⌚ Pull off the adaptor sleeve from the DC plug.
- ⌚ Unscrew the screw out of the upper half of the housing.
- ⌚ Carefully raise the upper half of the housing from the lower half.
- ⌚ Take out the contact pin.
- ⌚ Replace the defective fuse with a new fuse with the same type and rating
- ⌚ Re-assemble the plug in the reverse order.



7.2 Cleaning the cooling device.

- ⌚ Occasionally clean the device interior and exterior with a damp cloth.
- ⌚ Make sure that the air inlet and outlet vents in the device are free of any dust and dirt, so that heat can be released and the device is not damaged.

WARNING!

Always disconnect the device from the power supply before you clean and service it.

NOTICE! Risk of damage.

- ⌚ Never clean the cooler under running water or in dish water.
- ⌚ Do not use abrasive cleaning agents or hard objects during cleaning as these can damage the cooler

8 Guarantee.

If the product is defective, please contact the supplier in your country or your retailer.

For repair and guarantee processing, please include the following documents when you send in the device.

- ④ A copy of the receipt with purchasing date.
- ④ A reason for the claim or description of the fault.

9 Troubleshooting.

- ④ Note: If encountered troubles that can not be handled, you can contact our after-service personnel or customer service staff for help.

Fault	Possible cause	Suggested remedy
Device does not function, LED light does not glow.	No voltage was detected in the DC power supply.	In most vehicles the ignition must be turned on before power supplied to the DC power outlet.
	The cooling device plug fuse is defective	Replace the device plug fuse by a new one.
The device does not cool (plug is inserted , “ON” LED is lit)	Defective compressor	This can only be repaired by an authorized repair center.
The device does not cool (plug is inserted, display screen shows Error Code“E1”). Please also refer to chapter “ 4.7The explanation for the running code shown in the display screen ”:	Low voltage protection battery monitor is set too high.	Select a lower level for battery monitor
	Battery voltage is too low.	Test the battery and charge it if needed
When operating the device from DC outlet. (the ignition is on, but the device is not work, the LED light is not on either)	The DC outlet is dirty, this result in a poor electric contact.	If the plug of your device becomes very warm in the DC outlet, either the DC outlet must be cleaned or the plug has not been assembled correctly.
	The fuse of the DC plug has blown.	Replace the fuse in the DC plug, please refer to the chapter “ 7.1 Replacing the DC plug fuse. ”
	The vehicle fuse has blown	Replace the vehicle’s DC outlet fuse, please refer to your vehicle’s manual
The display screen shows the Error Code and the vehicle does not cool. Please refer to “ 4.7 The explanation for the running code shown in the display screen ”	Please refer to “ 4.7The Explanation for the running code shown in the display screen ”	This should only be repaired by an authorized repair center.
Why are there water droplets around the device?	Don’t worry. This is normal.	The moisture will condense to water when it contacts the cold surface of the device.

10 Disposal.

- ♻️ Place the packaging material in the appropriate recycling waste bins wherever possible.
- ♻️ If you wish to finally dispose your device, ask your local recycling center or specialist dealer for details about how to do this in according with the application disposal regulations.

11 Technical data.

NOTE.

The coolant circuit contains R134a.

Contains fluorinated greenhouse gases.

Hermetically sealed equipment.

	W-35S	W-45S	W-55S	W-35S	W-45S	W-55S
Connection Voltage:	DC 12V/24V					
Related current:	4.6A/12V 2.3A/24V	5.0A/12V 2.5A/24V	5.4A/12V 2.7A/24V	4.6A/12V 2.3A/24V	5.0A/12V 2.5A/24V	5.4A/12V 2.7A/24V
Cooling capacity:	+20°C to -22°C					
Volume:	36L	45L	54L	36L	45L	54L
Climate class:	SN N ST T					
Refrigerant quantity:	20g	24g	27g	42g	46g	53g
Power consumption:	48W	50W	50W	55W	60W	65W
Refrigerant:	R600a			R134a		
Insulation:	Polyurethane					
Cooling System:	Compressor					
Ambient temperature:	+16°C to +43°C (+61°F to 110°F)					

(Note: Owing to the advancement, the data might be changed. Please refer to the information on data plate as standard)

Warning: When used on car, the fridge's voltage protection level must be reset to the middle.