

# **User manual**

Model No.: Eva 12 V RV air conditioner



Thank you for choosing our 12V DC RV air conditioner.

Please read this user manual before using, and keep this manual in a safe place.

# 1. Safety instruction

Please observe the safety instructions and regulations of the car manufacturer.

The manufacturer won't responsible for the damages and liability if:

- Incorrect assembly or incorrect connection
- Mechanical problems caused by product damage; Voltage overload
- Products are changed at will without manufacturer's permission.

#### 1.1 Use the equipment

#### Caution!

- Observe the manufacturer's instruction and use the product. Don't make structural changes to the product.
- Please don't use the product if it is obviously damaged
- The air conditioner should be installed and maintained by qualified person.
   Incorrect maintain may do serious damage to the product. Please contact with the local resellers and authorized service centers.
- This equipment isn't toy, avoid the children touching. Supervise the children to ensure they don't play this air conditioner as toy.
- Ensure there's no combustibles near or installed the air outlet. Combustibles must keep 50 cm distances at least from the air outlet.
- Don't close the flammable liquids and gases while using this air conditioner.
- Don't open the top cover if this air conditioner is on fire. Please use qualified extinguishing agent, don't use water to extinguish fire.
- Ensure no exogenous impurity into the air conditioner system air inlet and air outlet.

# Caution!

- Cut down the all the power before clean and maintain.
- Disconnect the power cord terminal before raising the driver room to maintain the truck.
- Turn off the air conditioner before using automatic clean equipment to clean the truck.

- Drain the condensate from manually before raising the driver room to maintain the truck.
- If there's any change of whole truck height caused by installed the air conditioner, please do relative record to the relative organization.

# 1.2 Safety operation

#### Caution!

- Ensure no exogenous impurity into the air conditioner system.
- Mounting surface slope can't be over 5 degree for the condensate draining from the condenser smoothly.

# 2. Purpose

Cooling and absorbing moisture by using this air conditioner in the driver room.

# This Air conditioner can be used while truck on the road, but need one large power generator with enough power.

This air conditioner isn't suitable for agriculture or construction engineering vehicles.

# 3. Technology descriptions

Air conditioners can be installed on different truck models. The air enters the system through the air intake grille, and be sent out through the air outlet after cooling and drying. The air conditioner is operated via the control panel or remote control.

Air conditioner has battery monitoring. When the vehicle engine is off and the air conditioner continues to run, if the power supply voltage drops below the set value, the air conditioner will automatically disconnect with the power.

#### 4. Operation

#### 4.1 Control panel



- 1. On/Off switch
- 2. Fan speed adjustment button
- 3. LED display board

- 4. Mode
- 5.Temperature rise
- 6.Temperature drop

#### 4.2 Remote controller



- 1. On/off
- 2. Mode
- 3. Temperature rise

- 4. Temperature drop
- 5. Air flow speed
- 6. Screen Light on/off

- 7. Show input voltage
- 8. App on/off

#### 5. Use air conditioner

# 5.1 Better Cooling performance

- Parking the truck in a shady place.
- Advice using the air conditioner comes with the truck to cool down the cab before using this DC air conditioner. If your truck does not have its own air conditioner, please ventilate the cab before using this DC air conditioner.
- When using this air conditioner, please close the doors and windows.
- Truck should keep away from any kind of heat source.
- Reduce other car equipment energy consumption to ensure the air conditioner longest cooling time.
- Ensure there's no exogenous impurity such as cloth, paper cover the air inlet and air outlet.

#### Please take note:

- If you want to change the air conditioner's color to match your car's color, please remove the top cover and spray paint on it.
- Please do clean to your car frequently; dirty cab will get hot easily.
- Ensure that no other heat source affects the cooling effect of the air conditioner.

Please maintain your air conditioner frequently:

- Please simulate use the air conditioner to check the tightness of the system, cover body and air inlet and air outlet. Advise checking before the hot season.
- If necessary, please take away all the exogenous impurity and leaves.

#### 5.2 Start Air conditioner

# Caution! The parking air conditioner cannot replace the original one.

Press this button on the remote controller to turn on the air conditioner; fan will start running based on last speed. Factory settings fan speed is the lowest speed. LED display will be light on, showing the set temperature, fan speed and running mode.

Note: Compressor will run after air conditioner is turned on 1 minute.

#### 5.3 Set temperature

Air conditioner temperature range is 15 to 30 °C.

Press the "+" or "-" button on the control panel or on the remote controller to increase or decrease the temperature. Press once to adjust 1  $^{\circ}$ C. The LED display will show the currently set temperature.

# 5.4 Set running mode

The button "M" is used to select FAN, ECO, NORMAL and TURBO mode. The LED display will show FAN, ECO, NORMAL and TURBO mode according to the selection. In TURBO mode, the temperature can be set from 15°C down to "LO" minimum, other modes can only be adjust temperature to 15 °C minimum. When "LO" is displayed, the air conditioner will not stop even reaches the set temperature, and the compressor works all the time; TURBO mode means that the compressor's speed is high, and the NORMAL mode means that the compressor's speed is less higher than TURBO mode, the compressor will stop running when temperature reaches set temperature. ECO mode means that the compressor's speed is low, and the compressor will stop running when temperature reaches set temperature; FAN mode means that the compressor stops rotating, only the fan is running.

Fan speed button is used to choose fan speed. Maximum fan speed will show minimum fan speed will show .



# 5.5 Turn off the air conditioner

Press the button on the controller once can turn the air conditioner to standby mode, LED display board will be off, and compressor will stop running. Remote control and applet can operate switch.

# 5.6 Set low voltage protection

Air conditioner has a battery power consumption detection system, which can protect the battery from being exhausted too much.

**Caution!** When the battery voltage reaches the system low voltage protection value, the air conditioner will automatically stop; when the voltage rises above the shutdown voltage, the air conditioner needs to be manually turned on by press the on/off button.

Press the button on the control panel, turn the air conditioner to standby mode, then press button "+" and button "-" together, air conditioner will enter shutdown voltage mode. LED display will show code "B1", you can press button "+" or button "-" to choose different low voltage shutdown code (b1 ~ b10), final press button "M" to save the setting. Or click "battery protection setting" on the applet to enter the setting interface and select the required value to set.Please refer the below sheet for different code with different shutdown voltage:

CODE	VOLTAGE
b1	10.8
b2	10.9
b3	11
b4	11.1
b5	11.2
b6	11.3
b7	11.4
b8	11.5
b9	11.6
b10	11.7

# 5.7 Bluetooth connect

When the air conditioner has successfully connected to the phone through Bluetooth, the orange color "Connect" indicator on the LED display will be on.

#### 6. Controller board fault information

The fault information on the LED display will be displayed according to different faults. The following table information explains that different codes represent different faults and maintenance suggestions:

Fault code	Fault reason	Solution
E-1	Temperature sensor abnormal	Inspect the sensor if loose connections or the sensor damage. If not, replace the display board.
E-2	Over low battery voltage	Recharge the battery or handle the connector properly.
E-3	Over high batter voltage	If the input voltage is higher than 30V, check whether the generator voltage is normal.
E-4	Evaporator fan fault	Ground the negative wire of evaporator fan.If it can work, replace the display panel. If not, replace the Evaporator fan.
E-5	Condenser fan fault	Ground the negative wire of condenser fan.If it can work, replace the controller. If not, replace the condenser fan.
E-7	Water pump fault	This fault can only be found on the split air conditioner. Connect to 24V power to check whether the pump can work. If yes, replace the display board. If not, replace the pump.
E-11	Compressor overflow	Compressor internal coil short circuit or cylinder stuck.
E-12	Low voltage	The voltage input to the controller is pulled down instantaneously. It is usually caused by a broken battery or poor contact of the main power line.
E-13	High pressure	A.Check whether the wind speed of condenser fan is normal. B.Check whether the condenser dirty or blocked. C.Check whether the refrigerant overfilled. D.The compressor stops and starts repeatedly.
E-14	Lack of phase	Check whether the connecting line between the controller and the compressor is loose or the voltage input to the controller is too low.
E-15	Over high temperature of controller	Whether the operating environment is higher than 55 °C, otherwise the controller needs to be replaced.
E-16	Failed to start	The compressor tried to start but could not run.A.Compressor cylinder stuck B.High pressure, high load C.Controller

	fault	
	radic.	

# 7. Maintenance and care

Please follow the below tips for your air conditioner maintenance and care:

- Don't use corrosive cleaners or hard objects to clean which can do damage to the air conditioner.
- Don't use high-pressure cleaners, water enters the machine will damage the air conditioner.
- Regularly clean the surfaces and panels of the air conditioner with a damp cloth.
- Clean the blades and other dirt on the ventilation grille. Ensure that the system is not damaged during the process.
- Check all parts of the air conditioner are tight or not regularly.
- Check the wiring connection safety regularly.
- Check the air inlet and outlet tightness of the air conditioner regularly.
- In winter, the air conditioner is used for a short time. It is necessary to ensure that the air conditioner is turned on at least 3-4 times one month. Use the HH mode to run the compressor for 15 minutes.

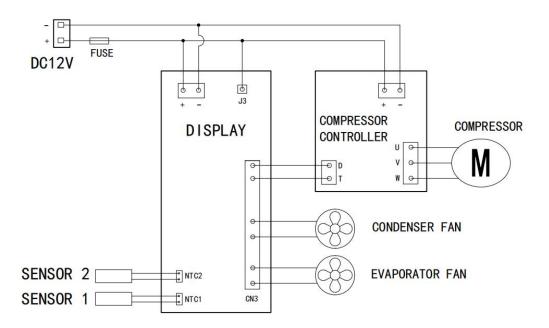
# 8. Disposal

Put the packaging materials in a suitable recycling bin. If you want to eventually dispose of this product, please contact your local recycling center or distributor for details of applicable disposal regulations.

# 9. Technology data

Model No.	Eva 12 V RV air conditioner
Cooling capacity	1900W/6460BTU
Input voltage	12V DC
Coolant	R410a/400g
Working temperature	16~43℃
Current	41A
Evaporator air volume	340 m³/h
Set temperature range	15~30℃
Product size	L976xW894xH350mm
Weight	31kg

# 10. Circuit diagram



ÜRÜN GARANTİ KARTI TARİH:	
NO =	(GEÇERLİ KOD)
MODEL NO:	PARÇA NO:
İMALAT TARİHİ:	
SATIN ALMA TARİHİ:	
KULLANICI ADI:	TEL NO:
SATICI:	SATICI TEL:

SATIŞ SONRASI SERVİS : GARANTİ KARTI

KAŞE/İMZA