# **ROOF-TOP AC.161.076 INSTRUCTION**





Tip: Please read the instruction manual or contactthe factory professionals for consultation before using the air conditioner

## **AFTER-SALES WARRANTY**

#### Users file:

Name:		Sex:		Age:	
Address:				•	•
Telephone:					
Purchase location:			Purchase date		
Part No:			Part No:		
Plate No:			Car Model:		
Distributor signature :			User Signature:		
Warranty record:				•	
Warranty Date:	Warı	Warranty:		Remarks:	

# WARRANTY

- Within one month from the date of sale, if there is performance failure, the
  product itself and the outer packaging must be intact and free of scratches,
  then product of the same model can be replaced (subject to inspection), but
  does not include man-made damage.
- The product is guaranteed for one year from the date of sale.
- The warranty service is only valid under normal use.
- All external damages such as man-made damage, self-dismantling, unpacking, improper use, etc. are not covered by the warranty. This card must be provided during the warranty. If this card is not provided or the card is altered privately, the company has the right to do non-warranty treatment.

The right of final interpretation and modification of the content of this warranty card belong to our company.



5.Fix the host with pull linings both sides and tighten the screws



6.Fix decorative board in NO.7 hole position



7.Install the air conditioning decorative panel and lock 4 screws



8.Connect the positive and negative poles of the power supply, and turn on the air conditioner

#### 3. Wind speed adjustment:

In the power-on state, without any operation, press the key to enter the air volume adjustment mode, and the wind speed symbol displays the current set air volume level and flashes. At this time, press the + key to increase the air volume by 1 level, and press the-key once to decrease the air volume by 1 level to adjust to the setting After the air volume, without any operation for 5 seconds, it will automatically exit the air volume setting mode. (set up(Air volume gear 1-5 gears)

- 4. Mode button M:The air conditioning system has 4 modes
- 4.1Air supply mode: only the internal fan works, natural wind does not cool
- 4.2Manual mode: the temperature and air volume can be set manually.
- 4.3Automatic mode: The system automatically adjusts the air volume and compressor speed according to the set temperature
- 4.4Power mode: The system is at the maximum power for cooling, and the wind speed cannot be adjusted when the wind speed is max (it is recommended that the strong cooling mode does not operate for long time, fast power consumption)
- **5. Display button N:** In the power-on state, short press the display button N to cycle through the display, inlet air temperature, outlet air temperature, compressor speed, undervoltage protection value, undervoltage recovery value, time setting, hour, minute, Purification (negative ion) timing on, timing off, fresh air (external circulation) timing on, timing off.

#### 5.1 Clock setting:

When the power is on, press the N key 6 and the time symbol on the right side is on, and the middle hour number flashes. At this time, press the up and down keys to adjust the hour, press the N key again and the minute number flashes. Press the up and down keys to adjust the minute value. Save the set time.

#### 5.2. Purification negative ion setting:

Press the N key 8 times to enter the negative ion timing setting. At this time, the open time digital flashes, and the open time can be adjusted for 10-90 minutes. Adjust 00 to the normally open state. Press the N key again to close the time digital flashing, and the closed time can be adjusted. 10-90 minutes, the negative ion setting time switch is completed.

## 5.3. External circulation setting of fresh air:

In the power-on state, press the M key 10 times to enter the outer loop timing setting. At this time, the open time digital flashing, the open time can be adjusted 10-90 minutes, and the O key can adjust the time; press the N key again to close the time digital flashing, and the closed time can be adjusted 10-90 minutes, press the 00 key to adjust the time. After the setting is completed, it will exit automatically without any operation. The negative ion setting time switch is completed.

#### 6. Low-voltage protection value setting

Short press the M key 4 times, the undervoltage indicator will light up, and the voltage displayed in the middle is the current low protection value. Each time you press the + key to increase 0.1V, press the-key to subtract 0.1V. After the setting is completed, press the N key to exit, and adjust the voltage range is 9- 23V, Factory default is 21.5

Digital display	Failure description	Elimination method
E2	Current protection	Check whether the pressure is too high, the condenser is blocked and the heat dissipation is not good, whether the fan is running normally, the refrigerant is overcharged, and the compressor is malfunctioning.
E3	Locked-rotor protection	Insufficient power or excessive pressure, pipeline blockage, compressor problem
E4\LU	Undervoltage protection	The battery is too low and needs to be charged
E6	Condensing fan failure	Short circuit of the condensing motor, poor contact of the plug
E7	Motor phase loss	the compressor terminal is burned out or the compressor is short-circuited, and the compressor is damaged
E9\PER	Pressure protection	Whether the pressure is normal or the switch is damaged
OPE	Temperature sensor open circuit	check that the temperature sensor plug is off or the wire is broken
SHr	Temperature sensor short circuit	replace the temperature sensor
AC	Refrigeration failure	check whether the refrigerant is lacking and whether the compressor electronic fan is working
CS	Defrost protection	the temperature is increased, or the air volume is increased, the temperature sensor position is changed.

Common troubleshooting

## The outdoor unit is not working properly (the internal unit has no fault code displayed)

A.The set temperature of the indoor unit is higher than the ambient temperature, the temperature is lowered or the cooling mode is not turned on, try to turn on the strong cooling.

B.The indoor unit controls the frequency conversion green line to measure the voltage at 4.5-19V. There is no voltage. The control panel circuit is faulty or the panel plug-in is in poor contact.

C.The outdoor unit controller power supply, the frequency conversion line voltage is normal, the condensing fan\compressor does not work, replace the outdoor unit controller assembly

D.The outdoor unit controller power supply, the frequency conversion line voltage is normal, the condensing fan works normally, the compressor does not respond, check whether the compressor plug has poor water contact, or the compressor is damaged, replace the compressor (generally report fault E3)

## 2.Internal machine displays E2 fault (compressor overcurrent protection)

A. Work for a few minutes or for a period of time to report a fault, check whether the condenser fan is working properly, the fan is not good for heat dissipation The condenser is full of dust, clean the condenser.

B.The power cord is too thin and the power cord is in poor contact

C. The controller is faulty, replace the controller and try again

#### 3.Display LU or E4 (low power supply failure)

A.Whether the battery has electricity, if the voltage is higher than the low-voltage protection value, the low-voltage protection needs to be turned down and then turned on to release the protection, and it cannot be adjusted too low to maintain the normal start of the car (adjust the voltage to refer to the low-voltage protection setting method)

B.Whether the power cord is connected to the battery, the line is in good contact, please do not connect the body grounding, the main brake switch, it will cause excessive voltage drop.

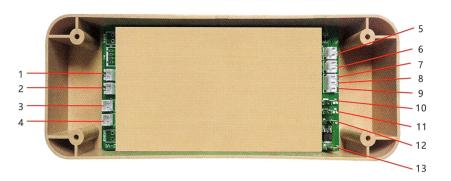
C.The battery pack is not charged in time independently, and the battery is in a long-term non-saturated state.

D.The generator belt is too loose, the generator power is not enough, and the generator speed is not enough. The power of 24V generator is more than 70A, and 12V needs more than 90A.

## Compressor controller wiring definition

Model	AC.161.076	Refrigerant	R134a
Rated cooling power	2800W	Refrigerant Charge	550g
Rated voltage	DC24V	Frozen oil	RH68
Evaporative air volume	600m3/h	Minimum opening	450x380mm
Condensing air volume	2000m3/h	Package dimensions	1170x780x360mm
Rated electric power	900W	G.W	38KG

# Outlet diagram of switch controller box assembly



1.Inlet sensor interface3.Light 15.Fresh air (outer circulation)7.TX (flash code fault signal)9.Backup

11.Power negative13.Evaporating fan positive

2.Wind sensor interface
4.Light 2
6.Purification (negative ions)
8.(4.5-19V)XH (frequency conversion signal output: 4.5-19V)
10.Power positive
12.Evaporator fan negative

Operation instructions of the control panel

#### 1. Switch machine:

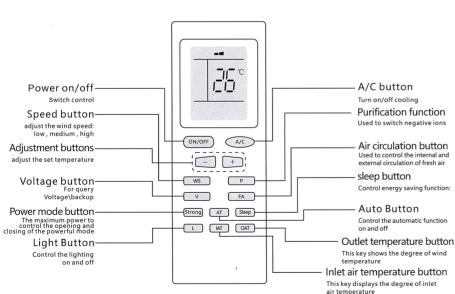
Short press the 1 button in the shutdown state, the air-conditioning system is turned on, and the startup state is the last shutdown mode. After pressing it again, it will shut down; in the shutdown state, press and hold for 10 seconds and all settings will be restored to the factory settings. By default, the first time it is turned on, it works in the manual state of the cooling mode;

#### 2. Temperature adjustment:

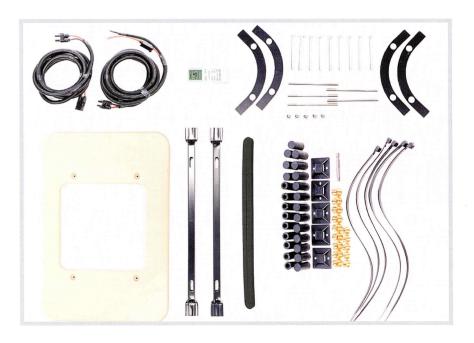
In the power-on state, without any operation, press the key to enter the temperature adjustment mode, displaying the current set temperature and flashing state. At this time, press the plus key once to increase the temperature by 1°C, press the minus key once to decrease the temperature by 1°C, and adjust to the set temperature After 5 seconds without any operation, it will automatically exit the temperature setting mode. The temperature setting is successful, it is recommended to set the temperature between 20-26 to save power. (The set temperature range is 5%C-32°C)

## Compressor controller wiring definition





- 1. Our company provides installation videos and installation instructions, and users must install them in strict accordance with the videos and instructions. If the user fails to install in accordance with the provided installation video and manual, human failure or damage and other accidents occur, the responsibility is borne by the user, and the maintenance and material costs caused by the user shall be paid separately, and we shall not bear any responsibility.
- 2.The user must pay attention to safety issues during the installation process. If a personal safety problem occurs, the user shall be responsible for it.
- 3.If the user transforms the air-conditioning equipment privately, and replaces the parts with non-original parts that cause damage to the air-conditioning equipment and personal safety issues, the user shall bear it, and our company shall not bear any responsibility.
- 4. The user is deemed to agree to this disclaimer after purchasing the product.



## AC.161.076 Installation Manual



1.Remove the skylight of the car and clean the surrounding area.



2.Coat the edge of the skylight with waterproof sealing tape, (Note that the interface of the waterproof tape should be cut diagonally, and coat the interface with glass glue)



3. Put the air conditioner into the center of the skylight



4. Fixing the host with copper nut, No. 6 hole





69cm



- 1 Display screen
- 2 Mode
- (3) Low Key
- 4 Up key
- (5) Light
- 6 Switch to N key
- 7 Power mode

- 01. Power
- 03. Air volume
- 05. Temperature
- 07. Undervoltage
- 09. Air supply
- 11. Heat
- 13. Automatic
- 15. Error
- 17. Air circulation
- 19. Timer
- 21. Sound control

- 02. Inlet
- 04. Outlet
- 06. Pressure speed
- 08. Underrecovery
- 10. Cooling
- 12. Manual
- 14. Strong
- 16. Light
- 18. Air Purify
- 20. atmosphere

