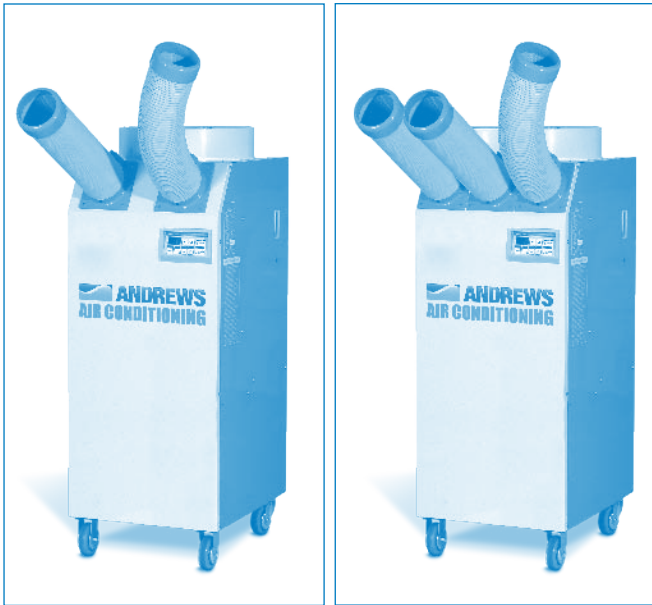


# ET 21 & 25 Portable Air Conditioning



## Operating Instructions & Safety Guide

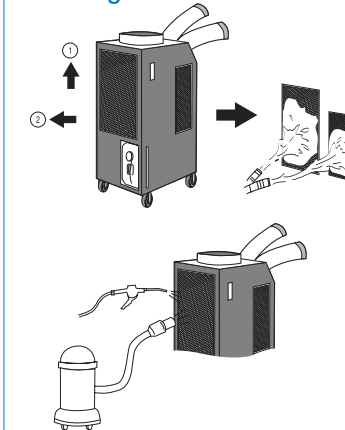


### General Safety

- Keep children and animals away from air conditioning units. Never leave them alone in a room where the units in use.
  - This equipment should only be used by a competent person who has read and understood these instructions.
  - Never operate this equipment if you are ill, feeling tired or under the influence of alcohol or drugs.
  - Keep the Air Conditioning vents clear of all obstructions.
  - Never put anything on top of the unit or block the air outlets.
  - Make sure equipment is switched off and unplugged after use. Never leave switched on or unattended.
  - Do not use the unit where sunlight is shining directly onto it.
  - Check condition of equipment before use. If unit is showing signs of damage contact your supplier immediately.
  - Use a 230V. 50HZ. 1 phase power supply only. (Wrong supply may cause a fire and / or shock hazard.)
  - Securely plug into an earthed supply. (Unless earthed, may cause electric shock)
  - Do not use a damaged power cable, plug or socket. (Short, fire or shock hazard)
  - Do not remove plug by pulling cable or with wet hands. (Risk of fire and electric shock)
  - Before cleaning, remove plug from socket. (Otherwise risk of electric shock)
  - Do not place anything on top of the machine. (This may cause electric shock, malfunction or injury)
  - Do not use an extension lead unless of the approved type. Fully uncoil extension leads when being used. (Heavy duty, risk of fire and / or electric shock.)
  - Ensure mains plug is clean and securely plugged in. (Otherwise it may short causing smoke and fire)
  - Ensure correct 13 amp fuse is fitted in the plug. (Otherwise malfunction or fire may result)
  - Do not 'kink' or sharply bend the power cable nor put weight on it. (The installation may be damaged causing fire and / or electric shock)
  - Do not turn off by removing power plug. Always turn off at control panel first. (Risk of electric shock and / or malfunction)
  - Do not use this cooler on unstable or inclined surfaces. Always use on solid flat floor. (Risk of falling causing injury, fire or malfunction)
- Ensure the safety of the location in which cooler is to be used.
  - Ensure the floor or ground is smooth and sound.
  - Ensure you allow at least 50cm air space all around the cooler.

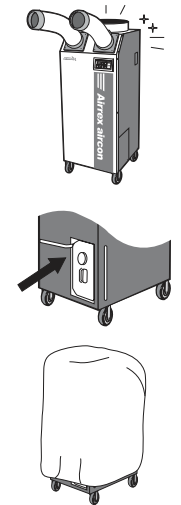
- When in position LOCK the casters to prevent rolling.
- Never use the cooler at more than 2° incline.
- Do not place cooler on uneven, unstable or inclined surface. (This could cause malfunction)
- When storing the cooler, ensure that it is kept in a dry, cool place. (To prevent corrosion and malfunction)
- If not being used for some time or lighting is present, always unplug from mains. (To prevent risk of electric shock, short circuit or fire)
- Do not spray water on to the cooler nor use solvents such as benzene, thinner or alcohol for cleaning. (There is a risk of electric shock and / or short circuit)
- If the power cable is damaged this must be replaced by a fully qualified electrician. (To avoid danger of electric shock, short circuit or fire.)

### Cleaning



1. To remove filters, slide up a little ① and pull towards you ②.
2. Clean the filters with water or compressed air.
3. Clean evaporator and condenser units with a vacuum cleaner or compressed air.

### Maintenance



1. After cleaning, completely dry the inside of the unit by operating on 'Fan Mode' only 3 to 4 hours.
2. Turn 'OFF' at control panel, remove plug from socket. Coil and store cable neatly.
3. Keep machine suitably covered to prevent damage by damp, humidity and dust.

# Operating Instructions - ET 21 & 25



## Control Panel Functions

- Power:** Use to power On / Off/.
- ▲▼:** Raises or lowers temperature and / or sleep (off) time.
- Cool:** Use to select cooling mode.
- Lower Mode:** Controls fan low speed.
- High Mode:** Controls fan high speed.
- Off Timer:** To set the length of time, once turned on, that you wish the cooler to run for. You can set 0~24 hours. Time intervals are 30mins. up to 10 hours and then 1 hour between 10 and 24 hours.
- Remote:** From the long distance, you can control the machine by wired remote control.
- Room:** If the LED is ON, the displayed temperature is for room temperature. If the LED is OFF, the displayed temperature is for spot temperature.
- Comp:** When the compressor is operating, the LED is ON.
- Error:** Error signal (E1: High pressure, E2: Low pressure, E3: Sensor, AF: Eva freezing)
- Water Full:** Red light indicates 'Tank Full'. The compressor will shut off automatically. Empty tank and replace in position to resume operation. Fig. 2
- Align Drain Tank:** The red light indicates the water tank is not in the correct position.
- Display:** Display Room / Spot temperature, and the setting temp and sleep time in case of setting them. When the user set the sleep timer 'hr' will be turned on. (Display of 'LO': under the 0°C, display of 'HI': over the 50°C)

- START BY PRESSING THE 'POWER' BUTTON.
  - Cooler will start up automatically
  - To STOP the unit, press the 'POWER' button once again
- To change fan speed, press the 'LOW' button.
- If you wish to operate on fan only, press the 'COOL' button. To resume cooling, press the 'COOL' button again. (NOTE: There is a 3 minute delay when switching functions to protect the compressor)
- To reduce the temperature of the entire room then select 'Room / Area cooling'. For targeted cooling of machinery, servers, or people etc, select 'spot cooling'.
- If you want to display room temperature, push cool and ▼ button simultaneously for three seconds.
- If you want to switch from centigrade to fahrenheit - push (up) ▲ and (down) ▼ button simultaneously for three seconds.

## Control Panel Functions

- When the power is on, the best set temperature is displayed. Default of set temperature is 5°C.
- When you push either (up) ▲ or (down) ▼ button, the setting temperature can be changed.
- The display showing the set temperature will blink 3 times.
- Limits of Room / Spot and setting temperature:

Room / spot temperature	Setting temperature
0°C - 5°C	1°C - 30°C

Cooling operates when room / spot temperature is more than set temperature  
Cooling stops when room / spot temperature is less than set temperature

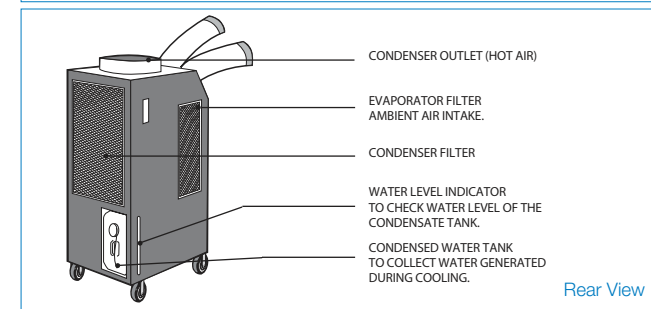
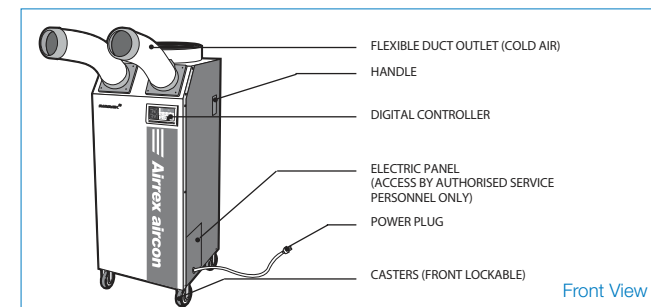
## Setting the timer

- When cooler is operating, press the 'OFF TIMER' button and set the length of time you want by pressing ▲ or ▼. Each time you press the button you will increase the 'time to off' period by 30 minutes up to 10 hours, and 1 hour thereafter up to 24 hours. The display will show .5 for 30 minutes and 1 for an hour. e.g. 1 ½ hours will be shown as 1.5.
- When you have finished setting the time period, the 'off timer' lamp will illuminate, which indicates the cooler is in sleep (off timer) mode.
- If you press the 'OFF TIMER' button during its operation, the remaining time will be shown.
- to CANCEL timing, press the 'OFF TIMER' button for ONE second, it will then switch the timer off automatically.

## Errors and Warnings

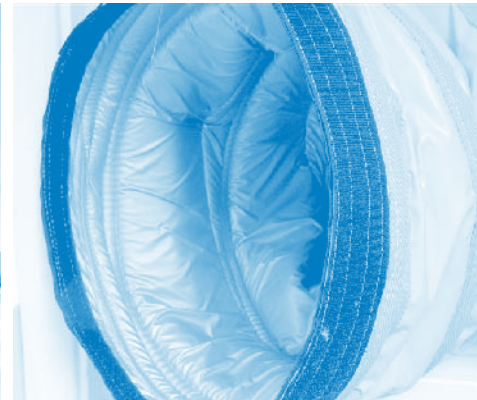
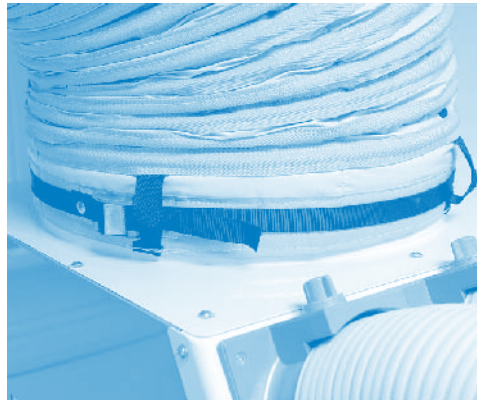
- WATER FULL** - Display shows FU  
When the water container is full, FU is displayed and the LED 'Water full' illuminate.
- ALIGN WATER TANK** -  
If the water tank is not positioned correctly, the LED 'Align Drain Tank' illuminate
- HIGH PRESSURE** -  
'E1' is displayed and the 'Error' LED will be on when the pressure of the compressor is too high and the high pressure switch is open.
- LOW PRESSURE** -  
'E2' is displayed and the 'Error' LED will be on when the pressure of the compressor is too low.
- SENSOR PRESSURE** -  
If the thermistor is short circuited or cut, 'E3' is displayed and the 'error' LED will be on
- ANTI FREEZING** -  
When the temperature of the evaporator is below -4°C, 'AF' is displayed and the 'Error' LED will be on.

## Errors and Warnings



# Operating Instructions - ET 21 & 25

Problem	Likely Cause	Solution
Not working	Power plug incorrectly connected	Connect plug correctly
	Power button OFF	Press POWER button to ON
	Blown fuse in mains plug	Replace fuse (MUST BE 13 amp)
	Fuse (supply) blown	Exchange fuse in board
	Breaker on switch board tripped	Check load capacity and reset
	Ambient temp. too high	Use only below 45°C (HSC-3500 : 40°C)
Poor cooling performance	Filter blocked with dust	Clean filter
	Dust in heat exchanger	Clean heat exchanger
	Obstacle against inlet side	Remove and allow 50cm clearance side
	Ambient temp. too high	Use only below 45°C (HSC-3500 : 40°C)
E1	Exhaust fan is not operating	Check the power supply or replace the motor
	Hot air being restricted from leaving the machine	Unblock or relocate exhaust hose
E2	Refrigerant is leaking. Check with manifold gauge	Supply optimum refrigerant and check the leakage. (By authorised service personnel only)
E3	Thermistor sensor wire is cut	Change the thermistor sensor
AF (Freezing)	Evaporator is frozen (Ambient temp. is under 20°C)	Operate continuously until "AF" disappears or operate in "FAN" mode



## Insulation exhaust Duct

This new insulated exhaust duct reduces diameter from 17" (43cm) down to 12" (30 cm) thereby making it easier to handle. Being 3 metres long, it can either be ducted out of a window or vertically up into a ceiling void. The duct is also insulated which improves the cooling efficiency because heat is not being put back into the room / are. (Max. exhaust duct length 9mtr)

The open end (12" diam) has a velcro cuff and this enables easy and efficient fitting of out 3 metre extension lengths which also have velcro cuffs. Loops are fitted to both reducer duct and extensions should support be necessary.