



# MOBILE AIR CONDITIONER INSTRUCTION MANUAL

## MODEL ACS16E



## IMPORTANT

Please read these instructions carefully before use.

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# Important Safety Instructions

1. Transport & store the unit in an upright position only. Leave it in an upright position for at least 3 hours before first use.
2. Always place the unit on an even, level surface.
3. An opening in a window or wall is required to accommodate the exhaust hose to expel the hot air.
4. Make sure the unit is connected to an earthed power supply of the correct rating. (Refer to the rating label located at the back of the unit).
5. The unit will cool when the room temperature is between 18°C~32°C depending on the thermostat setting.
6. Operate this unit in an ambient temperature of 32°C or lower.
7. Do not operate the unit with a damaged power cord or plug, after it malfunctions, has been dropped or damaged. If the power cord is damaged it must be replaced by the manufacturer or a qualified service engineer to avoid a hazard.
8. DO NOT use this unit for functions other than those described in this instruction manual.
9. DO NOT tilt the unit.
10. DO NOT cover or obstruct the appliance's inlet and outlet grilles.
11. Your air conditioner has been designed to be used only in the home, office and similar conditions and should not be used for any other purpose.
12. Never unplug the air conditioner while it is working, this could damage the electronic circuits.
13. DO NOT use the appliance in a wet room, such as a bathroom or laundry room to avoid the risk of shock.
14. DO NOT sit or place articles on the appliance.
15. DO NOT use the appliance with wet or damp hands.
16. DO NOT let chemical substances come into contact with the appliance.
17. DO NOT use the appliance in the presence of inflammable substances or vapours such as alcohol, insecticides, petrol, etc.
18. DO NOT use the plug to start and stop the appliance.
19. ALWAYS use the control panel to start and stop the unit.
20. ALWAYS keep an air path of at least 50cm from walls, furniture or curtains.
21. ALWAYS turn off the appliance when it is not in use and remove the mains plug from the socket outlet.

22. **ALWAYS** turn the unit off and remove the mains plug before cleaning, carrying out maintenance or moving location.
23. Avoid the use of adapter plugs, multiple sockets and /or extension leads. If their use is necessary, ensure they conform to current safety standards.
24. Do not pull the electrical cable or place it near a source of heat: always unroll it completely to avoid dangerous overheating. If the supply cord becomes damaged, the service agent or a similarly qualified person must replace it, in order to avoid a hazard.
25. The filter must be used with the product at all times, when removing it for clearing always turn the unit off and unplug the mains plug from the socket.

For those who are not aware of the danger that might occur from the usage of an electrical appliance, they should use the product under guidance and supervision.

**THE MANUFACTURER DISCLAIMS ANY  
RESPONSIBILITY IF THE ABOVE INSTRUCTIONS  
ARE NOT FOLLOWED.**

# BS Plug Wiring

**Wiring Instructions:** Should it be necessary to change the plug please note the wires in the mains lead are coloured in accordance with the following code:

**BLUE - NEUTRAL**  
**BROWN - LIVE**  
**GREEN AND YELLOW - EARTH**

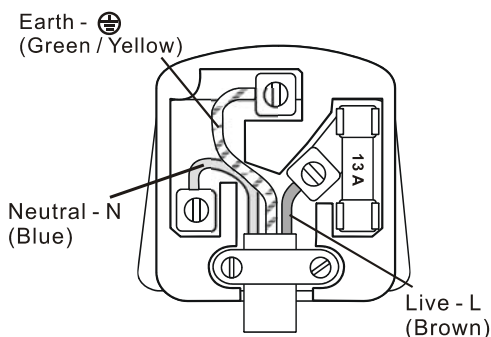
As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

1. The **BLUE** wire is the **NEUTRAL** and must be connected to the terminal which is marked with the letter **N** or coloured **BLACK**.
2. The **BROWN** wire is the **LIVE** and must be connected to the terminal which is marked with the letter **L** or coloured **RED**.
3. The **GREEN/YELLOW** is the **EARTH** and must be connected to the terminal which is marked with the letter **E** or  $\oplus$  or coloured **GREEN OR GREEN/YELLOW**.
4. Always ensure that the cord grip is positioned and fastened correctly.

If a **13A (BS 1363)** fused plug is used it must be fitted with a **13A** fuse. If in doubt consult a qualified electrician.

## Wiring for a 13 Amp Plug (BS1363)

Please note. The Earth Terminal is marked with the letter **E** or Earth Symbol  $\oplus$



# Technical Specification

Model no.		ACS16E
Power supply		220-240V/ 50Hz / 1 phase
Cooling capacity		16000BTU/hr, 4039Kcal/hr, 4689watts
Heating capacity		16000BTU/hr, 4039Kcal/hr, 4689watts
Power / Ampere consumption for cooling		1750W/ 7.5A
Power / Ampere consumption for heating		1280W/ 5.8A
Max. airflow volume (indoor unit)		750 m <sup>3</sup> /h
Humidity removal capacity		53L/day
Compressor		Rotary
Refrigerant		R-407C
Refrigerant load*		1.25Kg
Fan speed		3
Timer		1 ~ 12 hours
Working temperature		Indoor unit: 18 ~ 32°C Outdoor unit: 21 ~ 43°C
Net weight	Indoor unit	35 kg
	Outdoor unit	13 kg
Size	Indoor unit	360 x 590 x 757 mm
	Outdoor unit	500 x 310 x 525 mm
Length of connection tube		3 m
Recommended room size		28m <sup>2</sup>

\* For models with heat function only.

Measuring condition for above is:

Cooling – Indoor: RT27°C, RH60%  
Outdoor: RT35 °C, RH50%

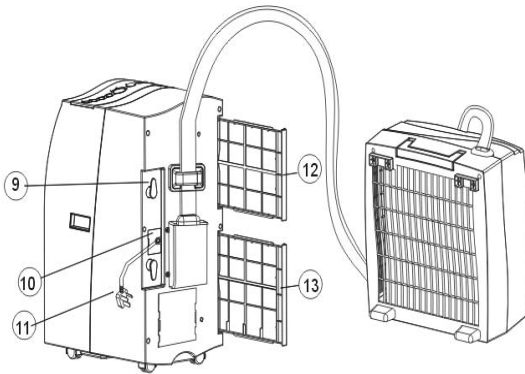
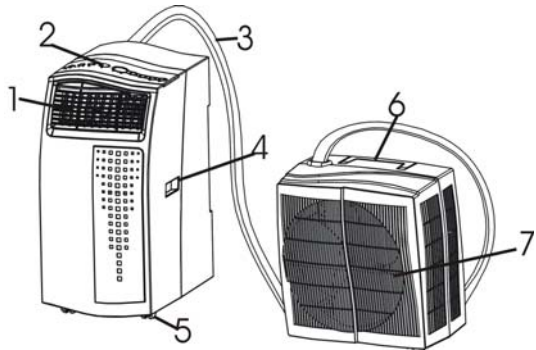
Heating - Indoor: RT20°C, RH60%  
Outdoor: RT7 °C, RH85%

# **Energy Saving Advice**

- 1. Do not locate the air conditioner where furniture or other objects can obstruct the airflow.**
- 2. Keep blinds/curtains closed during the warmest part of the day.**
- 3. Close the fireplace damper, floor and/or wall grilles, so cool air does not escape through the chimney or ductwork.**
- 4. Keep the filters clean.**
- 5. Avoid opening doors frequently.**
- 6. Each person present in a room provides between 100 & 150Watts of heat, consequently, the more people there are in the room, the less effective the unit will be in cooling.**
- 7. Set the unit to maximum cooling and high-speed ventilation for the initial start up and then adjust the unit to a comfortable setting.**

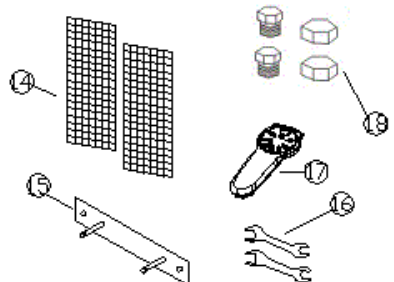
# Component Layout

1. Cool air outlet
2. Control panel
3. Connection tube
4. Handle
5. Casters
6. Outdoor unit handle
7. Exhaust air outlet

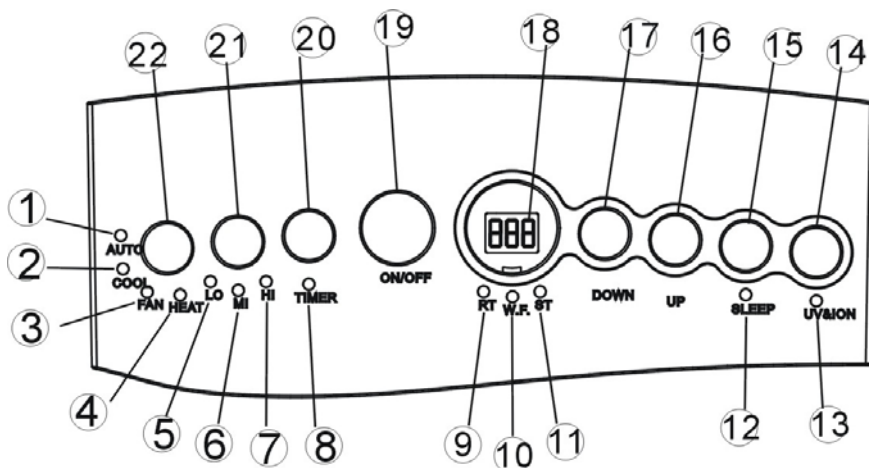


9. Cable storage
10. Power cable compartment
11. Power cable
12. Filter
13. Filter

14. Active Carbon filter
15. Outdoor unit mounting bracket
16. Spanners
17. Remote control
18. Bag containing screws & washers



# Control Panel Functions



- |                               |                               |
|-------------------------------|-------------------------------|
| 1. Auto mode indicator        | 2. Cooling mode indicator     |
| 3. Fan mode indicator         | 4. Heating mode indicator*    |
| 5. Low fan speed indicator    | 6. Medium fan speed indicator |
| 7. High fan speed indicator   | 8. Timer operation indicator  |
| 9. Room temperature indicator | 10. Water FULL indicator      |
| 11. Set temperature indicator | 12. Sleep function indicator  |
| 13. UV & ion indicator*       | 14. UV & Ion selector*        |
| 15. Sleep function selector   | 16. Temperature UP selector   |
| 17. Temperature DOWN selector | 18. LCD read out              |
| 19. Power ON/OFF              | 20. Timer                     |
| 21. Fan speed selector        | 22. Mode selector             |

\* For models fitted with these functions only

# Use of Control Panel

All function below can be carried out using the infrared remote control

## Turning ON/OFF

1. Press the **ON/OFF** button and the unit will start automatically. If the ambient temperature is: -
  - higher than 23°C, the unit will work in cooling mode.
  - higher than 20°C but below or equal to 23°C, the unit will work in fan only mode.
  - below 20°C, the unit will work in heating function (This is for cooling & heating models only).
2. Indicator LED's of the functions in progress come on at the same time.  
**NOTE** The display window shows the ambient room temperature from 0°C to 50°C
3. To turn the unit off, press **ON/OFF** button again.

## Setting Mode / Functions

Press **MODE** button to select required working mode: Automatic, Cooling, Fan or Heating, (Heating is only available for heating & cooling models.)  
The indicator LED of your selected mode illuminates.

## Setting temperature

1. Press the '**Temperature up**' or '**Temperature down**' button to regulate the temperature you require.
2. The display window will show the temperature you set as you press '**Temperature up**' or '**Temperature down**' button. Otherwise, it will always show the ambient temperature.
3. The pre-setting temperature of this machine is: 24°C for cooling, 20°C for heating.

## **Setting ventilation speed**

1. Press **SPEED** button to choose the fan speed you require (high, medium or low). The indicator of high or low ventilation will illuminate at the same time.

If the unit is in **AUTO** mode, it will choose the fan speed automatically according to the ambient temperature (the related indicators will illuminate), at this time the speed switch is invalid.

## **Setting timer**

1. Press the **TIMER** button to set the operating hours you require (1 to 24 hours, the timer indicator will illuminate). When the set time has been reached, the machine will turn off automatically. The display window will show the hour(s) you set as you press the **TIMER** button. If the timer button is not pressed, the unit will work continuously.

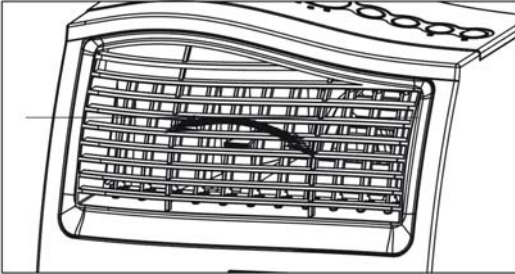
By pressing the timer but without turning on the other functions, you can **PRE-SET** the time for the machine to work. For example, if you press the timer to '2', the unit will work automatically after 2 hours.

## **Sleep function**

1. By pressing the **SLEEP** button, the set temperature will increase 1°C at the 1st hour, another 1°C at the second hour and then remains at that temperature.
2. Re-press the **SLEEP** button, the setting temperature will return to the pre-selected one.

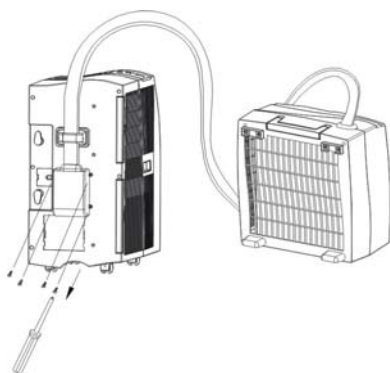
The unit will shut down automatically after the **SLEEP** function runs for 12 hours.

# Control of Airflow Direction



Turn the roller in the horizontal direction to control the airflow distribution.

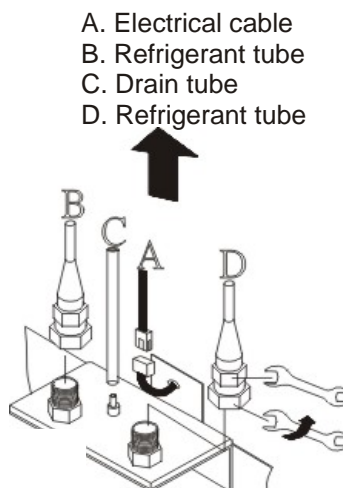
# Disconnecting The Refrigerant Line



**Fig. 9**

If you need to disconnect the indoor unit from the outdoor unit (to place it in a more suitable position), please follow the steps below:

1. Open the tube connection box situated at the back of the indoor unit. (FIG.9)
  2. Disconnect the drain tube. (FIG.10)
  3. Disconnect the electrical cable. (FIG.10)
  4. Disconnect the refrigerant tubes using the spanners provided (fig.10). The terminals are fitted with automatic closing valves to prevent the large amounts of gas from leaking. During this operation, takes extreme care not to break the refrigerant tubes.
5. Cap the terminals with provided caps to protect them from dust. (FIG. 11)
  6. Mount the outdoor unit on the bracket as previous described.
  7. Pass the connecting tube through the hole in the wall if present  
(at least DIA. 50mm)
  8. Remove the protection cap (If you have capped them previously. Reconnect the refrigerant tubes; drain tube and the electrical cable in opposite steps. (FIG. 12)  
Close the connection box of the indoor unit. (FIG. 13)



**Fig. 10**

# Disconnecting The Refrigerant line

continued



Fig. 11

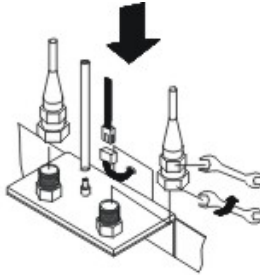


Fig. 12

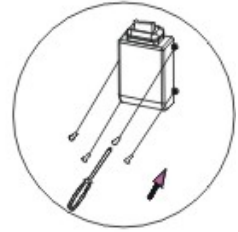
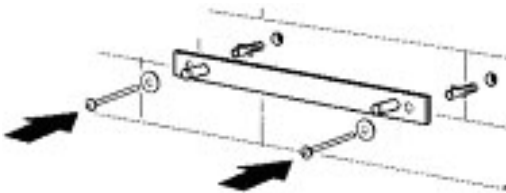


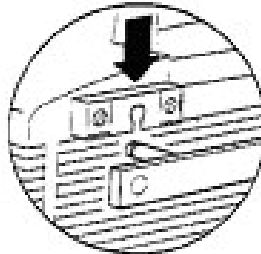
Fig. 13

## Mounting The Outdoor Unit

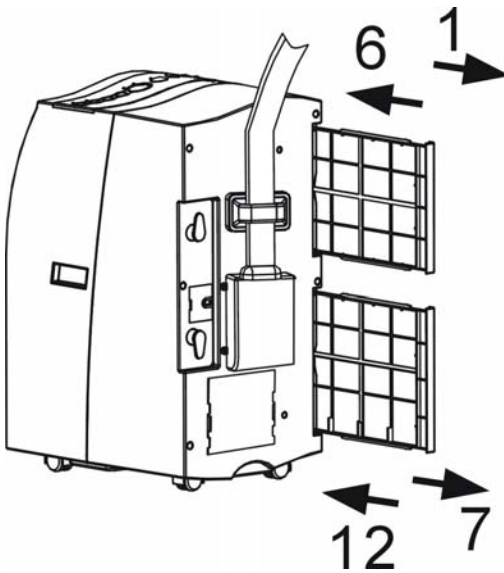


Firmly screw the bracket to the wall. The maximum height from the floor to the outdoor unit should be no more than 1.5m

Locate the outdoor unit bracket onto the wall-mounted bracket.

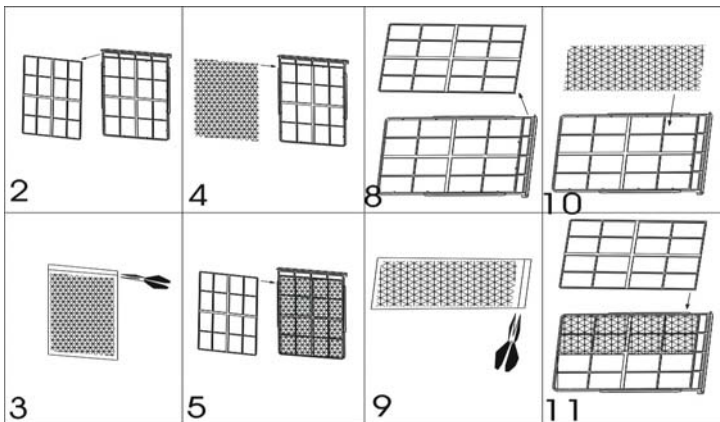


# Installing The Carbon Filters



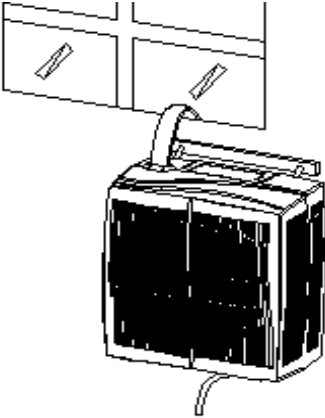
1. Remove the filter frame from the unit.
2. Separate the filter frames.
3. Remove the active carbon filter from its plastic bag.
4. Insert the active carbon filter into the filter frame.
5. Fix the filter by reassembling the filter frames.
6. Re-fit the filter frame inside the unit.

**Repeat this process for the second Filter, stages 7-12**



# Maintenance

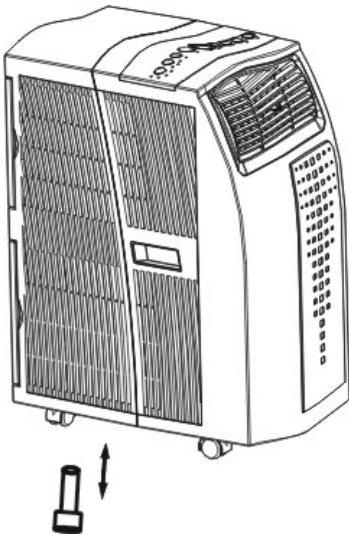
## Drainage (outdoor unit)



This unit is equipped with automatic drainage function. The condensed water will be discharged from the hole placed at the bottom of the outdoor unit. Do not locate the unit above doorways.

You may also connect the discharge hole with a water tube (Diameter 12.5 mm) to channel the water to a proper place. Make sure the water will always drain away freely.

## Drainage (indoor unit)

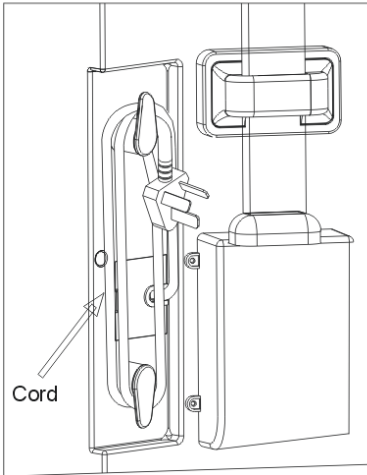


Please note. All condensed water must be drained prior to relocation or storage. Although the water has been drained some water may still remain inside. To drain the remaining water please: -

1. Switch off & unplug the appliance
2. Lean the unit and remove the rubber plug on the underside of the unit.

(For safety reasons, this is a two-person operation).

# End Of Season Storage



Drain any water in the unit before operating the unit on ventilation only mode for a few hours, to thoroughly dry the inside.

Clean or replace the filters.

Unplug and store the power cord as shown.

Replace in the original carton or cover for storage.

## Cleaning

**Always switch off the appliance & remove the plug from the power outlet socket before cleaning.**

**To maximize the efficiency of the air conditioner clean regularly.**

### Cleaning the Cabinet

Use a soft, damp cloth with a mild detergent to wipe the body clean.

Never use aggressive chemicals, petrol, detergents, chemically treated cloths or harsh cleaning solutions – these may cause permanent discolouration or damage to the external surface.

### Cleaning the filters

Use a vacuum cleaner or tap the filter lightly to remove loose dust and dirt from the filters and then rinse thoroughly under running water (no hotter than 40°C).

# Troubleshooting

<p><b>The air conditioner does not run</b></p>	<ul style="list-style-type: none"> <li>• Is the air conditioner plugged in?</li> <li>• Is there a power failure?</li> <li>• Is the room temperature below the set temperature?</li> </ul>
<p><b>The machine seems to do little</b></p>	<ul style="list-style-type: none"> <li>• Is there direct sunlight? (Close curtain &amp; blinds.)</li> <li>• Are too many windows or doors open?</li> <li>• Are there too many people in the room?</li> <li>• Is there equipment in the room producing lots of heat?</li> </ul>
<p><b>The machine seems to do nothing.</b></p>	<ul style="list-style-type: none"> <li>• Is the filter dirty / contaminated?</li> <li>• Is the air intake or output obstructed?</li> <li>• Is the room temperature below your selected temperature?</li> </ul>
<p><b>Too noisy</b></p>	<ul style="list-style-type: none"> <li>• Is the machine positioned unevenly so as to create vibration?</li> <li>• Is the floor underneath the machine uneven?</li> </ul>
<p><b>The compressor doesn't run.</b></p>	<ul style="list-style-type: none"> <li>• It is possible the overheat protection of the compressor is on. Just wait for the temperature to drop.</li> </ul>

# Service Warranty

Do not operate the unit with a damaged cord or plug, after the unit malfunctions, has been dropped or damaged.

For your convenience, record the complete model number and product name (located on the Product Identification Plate), the date you purchased the product, and attach your purchase receipt as proof of purchase.

To ensure your product is covered by warranty, the complete faulty product together with your purchase receipt should be returned to your retailer.

## ONE (1) YEAR LIMITED WARRANTY Save This Warranty Information

EHS (International) Ltd. Guarantees this product free from defects in materials and workmanship for a period of one (1) year.

Should this unit be operated under conditions other than those recommended, at voltages other than the voltage indicated on the unit, or any attempts made to service or modify the unit, will render this **WARRANTY VOID**. The product you buy may sometimes differ slightly from illustration. This warranty is in addition to, and does not affect, your statutory rights.

Should you have a problem with this product, please call our Help Desk on: (0870) 742 5021.

This product has been manufactured to comply with EEC Directives 73/23/EEC and 89/336/EEC



**EHS, Manchester, M17 1RN, UK**