





WARNING - This unit must be transported and operated in the upright position at all times

Electrical Supply

As standard, this unit requires a 13 amp fused electrical supply rated at 230 volts

 $\sim 1N$ 50Hz. The unit will operate from a standard 13A wall socket. The size of any extension cable that may be used is 2.5mm² minimum up to a maximum length of 10 metres. For longer lengths 4.0mm² cable must be used. If the cable is on a 'cable drum' then ensure that it is completely unwound; serious complications will occur otherwise. Note: most domestic proprietary extension cables are 1.5mm². This is not sufficient.

System Description PAC 4500AX / PAC 6500AX

The system comprises of an indoor unit cooling section and an outdoor heat exchanger unit, and the two are interconnected by means of a flow and return water pipe and an electrical supply to the outdoor unit fan. The indoor unit is fitted with an automatic condensate disposal pump, which discharges the condensate via a small plastic pipe into the base of the outdoor heat exchanger and all interconnecting pipes and electrics are enclosed in a flexible plastic sheath In addition, both ends of each pipe are fitted with ''quick connect'' couplings that open on coupling but reseal to become water tight on disconnection.

ET 4500AX

The system comprises of an indoor unit fitted with either a fixed or flexible ducting system (specified by the customer). Condensate is collected either in the units internal tank and emptied by the user or pumped away using an optional condensate disposal unit

Air Flow

The angled air outlets at the top of the indoor unit are fitted with air grilles that allow the angle of air outlet to be adjusted vertically and horizontally and, in conjunction with the fan speed control switch, the air velocity and direction can be carefully set up to obtain maximum coverage of the area being cooled without causing draughts. Car should be taken to avoid outlet air being obstructed as this will the air to 'eddy" around the unit resulting in recirculation and short/inaccurate cycling of the unit. Ideally cold air should be directed to create a 'blanket" all across the ceiling area allowing natural convection to drop the air over the whole area at very low velocity

Positioning the Unit

PAC 4500AX / PAC 6500AX / ET 4500AX Indoor unit

Ideally the indoor unit should be positioned along the shortest wall in the room blowing down the length of the room. If there is more than one unit in the same area then they would normally be positioned side by side and along the long wall all pointing in the same direction. Sometimes it may be necessary to position the units around the perimeter of an area, but in this case great care should be taken to avoid one unit blowing cold air straight into another which will adversely affects the units operation. Good and correct air flow is perhaps the single most important aspect of satisfactorily applying portable air conditioner.

PAC 4500AX / PAC 6500AX Outdoor unit

The outdoor unit must stand external to the area being cooled and preferably in the outside atmosphere. It can stand freely on a flat surface or may be hung in the upright position from a window sill

ET 4500AX

The exhaust tube(s) must carry air to an area external from that being cooled, preferably the outside atmosphere.

Condensate

PAC 4500AX / PAC 6500AX

In operation the indoor unit is constantly condensing water vapour out of the atmosphere (reducing relative humidity). This water has to be drained away/ an automatic condensate pump is fitted inside all PAC 4500AX / PAC 6500AX indoor units. The flexible hose outlet from the condensate pump runs to the outside, inside the flexible sheath and the condensate are deposited in the base if the outdoor unit. Considerable re-evaporation of this water takes place on the warm air stream passing through and around the outdoor unit, but please remember that there will also be a degree of dripping through the base of the outdoor unit.

Have great regard for this characteristic when positioning the outdoor unit

The flexible water pipes should be routed so as to avoid any possibility of kinking or unnecessary restrictions to the flow of the water inside. Also, remember that the plastic and rubber becomes more flexible when warm and as a result much more susceptible to distortion.

Condensate from the ET 4500AX is collected in an internal tank and emptied by the user.

Unit link up for the PAC 4500AX / PAC 6500AX $\,$

Ensure the mains supply lead to the room is disconnected. A 5m line set to connect all services between the indoor unit and the outdoor unit will have been supplied. The water pipe connections are by means of ''quick connect couplers''. These are simple ''push-on'' connectors which when disconnected (after pulling back sprung loaded locking ring), re-seal the water system on either side. The complete system will have been filled with the necessary amount of water/antifreeze prior to arrival on site. A

water proof 3 pin quick connect electrical coupler (push fit with screw lock ring, hand tight only), and a condensate drain pipe coupler 6mm clear polythene (push fit) should also be connected. Having made the couplings the system is operational immediately.

Indoor unit water levels For PAC 4500AX / PAC 6500AX

The water system in the indoor unit will be to the correct level when delivered. However if for some reason the level has fallen, antifreeze and water will have to be added. The header tank filler is located to the rear of the indoor unit and can be accessed by removing the security plate over the filler cap.

Ensure the machine is running in cooling mode before removing the header tank cap, and as with all pressure caps, remove slowly. It is recommended that a mixture by volume of one part antifreeze to two parts water is utilised. This will prevent freezing down to an external temperature of -20°C/-5°F.

Operating Instructions

The control panel on the indoor unit is illustrated to the right.

- 1. Mains light (red) 2. Cooling light (green) 3. Fan only position 4. Thermostat knob 5. Fan speed high 6. Attention light (amber) 7. Defrost light (white) PAC 6500AX 8. Off position 9. Mode switch C 4500AX 4500AX 10. Cooling position 11. Fan speed switch 12. Fan speed low 13. High pressure re-
- 14. Low pressure re-set
- 15. Container full

set

Lights for convex console - Mains-red, defrost & chill-green, and fault-amber

- · Revolve the thermostat knob fully clockwise to the number 8 position
- Plug in the indoor units mains cable, and switch on electricity, red main light will illuminate
- Select 'fan only" with the mode switch and the fan will start
- · Select the "fan speed" with the fan speed switch. High or low depending on air velocity required

DO NOT APPLY MAINS WATER PRESSURE TO THE SYSTEM

- Select 'cooling" with the mode switch and revolve the thermostat know fully anti-clockwise to the number '1" position. If fitted the outdoor unit fan and the water pump in the indoor unit will start. After a delay of 10 minutes the green 'cooling" light will illuminate and the unit will proceed to cool the air
- Monitor the room temperature and when it has reduced to the desired level, very slowly revolve the thermostat knob clockwise until the green 'cooling' light goes out. The room unit will now control the room temperature cooling automatically at this setting

Routine Maintenance

The air filter must be kept clean, and never allow the filter to become choked with dust or dirt. If allowed to do so, the performance of the unit will become impaired, resulting in the loss of air flow, freezing up of the evaporator coil and possible component damage.

Accessing the Filter PAC 4500AX / ET 4500AX

Open the lower front panel, and the filter is located in the front of the evaporator. A second filter is fitted to the rear panel of an ET 4500AX

PAC 6500AX

Lift open the return air grille on the front face of the unit. On re-fitting the filter, ensure that it is correctly positioned covering the whole rear face of the grille. The filter can be washed in warm soapy water, rinsed and shaken dry before replacement. Frequency if cleaning depends upon application and can only be determined by the user. However, you should never allow more than two months to elapse between cleaning.

Failure to have the filter fitted during operation will cause serious damage

The refrigeration circuit inside the indoor unit is fitted with a HIGH and a LWO pressure sensing switch. They are both manually

re-settable. A pencil or screwdriver with gentle pressure on the knob behind is all that is required to re-set. Necessary access is provide via the lower front panel on PAC 4500AX / ET 4500AX and through the control console on the PAC 6500AX.

Trouble Shooting

ONLY A COMPETANT ELECTRICIAN SHOULD ATTEMPT TO RECTIFY ELECTRICAL SUPPLY PROBLEMS. DO NOT REMOVE ANY PANELS FROM THE MACHINE.

PROBLEM	REASON	SOLUTION	
	Red ''mains light is on	Turn on electricity and/or check mains supply fuse	
No air flow from room unit	Red 'mains" light is off. White 'defrost" light is on	The unit is in defrost mode. Do not adjust anything, the unit will revert to normal run after 10mins	
Insufficient air flow from indoor unit	The air filter is blocked	Clean the air filter	
No cooling	Green ''cooling" light off	Revolve thermostat knob fully anti- clockwise to '1". Wait 10 minutes for time delay on start up	
	Amber attention light is illuminated. High pressure trip	Press "+" button to re-set and check the water level, water flow, see if the hose is kinked. ET 4500AX lack of air flow from exhaust – kinked or blocked duct, duct too long	
	Amber attention light is illuminated. Low pressure trip	Press '-' button to re-set and check for low air flow, blocked filter, evaporator blocked with ice, and a very low external temperature	
No cooling (PAC 6500AX)	Amber attention light is illuminated. High level condensate trip	Condensate pump not reducing water level. Kink in condensate tube between the indoor unit and the outdoor unit. Indoor unit could be leaking. Sump filter inside indoor unit is blocked. Condensate tube is frozen	
No cooling (ET 4500AX)	Amber attention light is illuminated. Bottle fitted switch trip	ET 4500AX with pump unit – ensure link fitted to terminal block ET 4500AX with bottle – ensure bottle is fitted correctly	
No cooling (PAC 4500AX / ET 4500AX)	Amber ''container full" light is illuminated. High level condensate trip	PAC 4500AX – As per PAC 6500AX ET 4500AX with condensate kit – As per PAC 6500AX ET 4500AX with bottle – Remove and empty container, then replace in the unit	

IF PROBLEMS PERSIT THEN CALL LONDON COOL ON 0800 440 444

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