

PAC 4700 X

EN

OPERATING MANUAL
AIR CONDITIONER



 **TROTEC**
AT WORK.

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Notes regarding the operating manual

Symbols

 **Danger!**
 Warns of a hazard which can lead to injuries.

 **Hazardous electric voltage!**
 Warns of a hazard resulting from electric voltage which can lead to injuries.

 **Caution!**
 Warns of a hazard which can lead to damage to property.

The current version of the operating manual can be found at:



PAC 4700 X



<http://download.trotec.com/?sku=1210000022&id=1>

Information about the device

Description of the device

The primary purpose of the device is room cooling. It further filters and dehumidifies the air thus creating an agreeable room climate. In ventilation mode the device also provides the opportunity of air circulation without cooling effect. In dehumidification mode moisture is withdrawn from the air.

The device operates fully automatically and thanks to its microprocessor control features a multitude of further options, the device can, for instance, be switched on or off automatically with time delay via the timer function.

Handling the device can be conveniently accomplished via the control panel at the device or the supplied infrared remote control.

The device was designed for universal, flexible and uncomplicated application. Due to its compact dimensions it can be easily transported and used in all interior spaces.

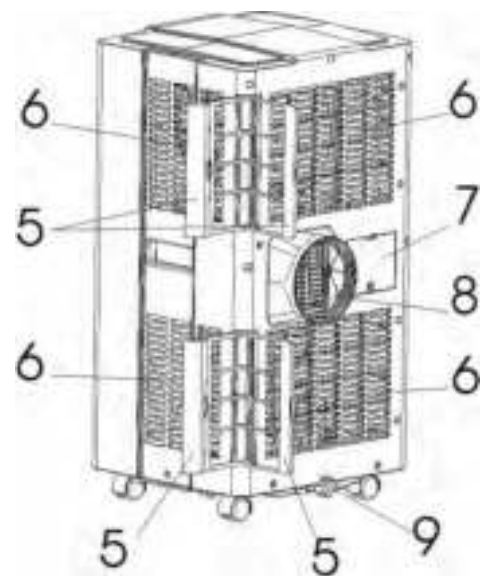
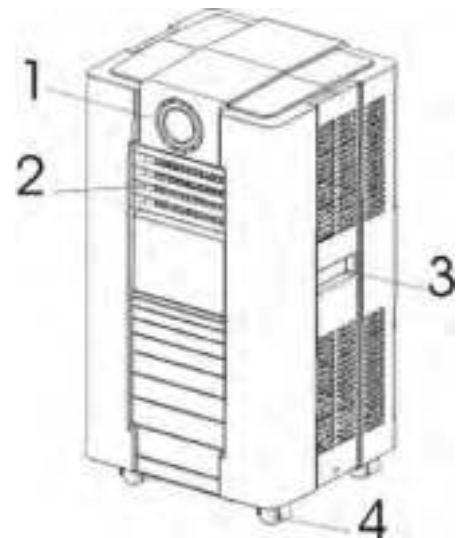
The air handling unit cools the room air by withdrawing warmth. The absorbed warmth is emitted to the outside via the exhaust air hose, cooled air is fed to the installation site by means of a fan.

Accumulating condensate trickles from the evaporator onto the hot condenser, there it evaporates and then is transported to the outside via the exhaust air hose.

Excess condensate is dripping from the condenser into a condensate trap and is there re-fed to the condenser by use of a paddle wheel, where it evaporates and is discharged along with the exhaust air flow.

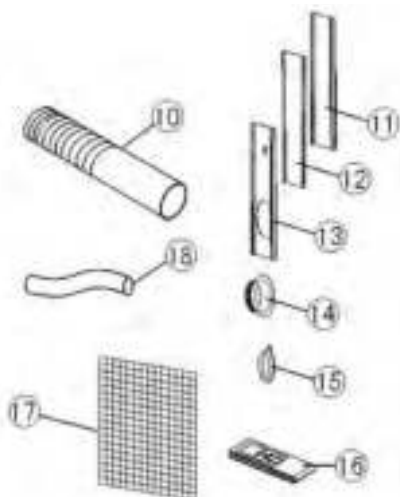
A cooling agent sees to the transport of the absorbed warmth within the closed refrigerant circuit.

Device depiction



No.	Operating element
1	control panel
2	louvers
3	handle
4	wheel
5	air filter
6	air inlet
7	cable storage compartment
8	exhaust air outlet
9	plug / condensate drain

Accessories



No.	
10	Exhaust air hose
11	PVC strip – for filling the open window space
12	PVC strip – for filling the open window space
13	PVC strip (with hole) – for filling the open window space and with hole for connection
14	Outward adaptor – to be put on the hose and inserted into the PVC strip (or into the hole in the wall/window)
15	Cover for outward adaptor
16	Remote control
17	Activated carbon filter
18	Drain tube for continuous drainage

Technical data

Parameter	Value
Model	PAC 4700 X
Cooling capacity	4.7 kW
Power consumption for cooling operation	1800 W / 8.2 A
Air flow rate, max.	550 m ³ /h
Dehumidifying capacity, max.	1.5 l/h
Power supply	1/ N/ PE ~ 230 V, 50 Hz
Compressor type	rotary compressor
Cooling agent	R410A
Fan stages	3
Timer	1 to 24 hours
Surrounding conditions	cooling: 18 to 32 °C
Exhaust air hose	Ø 142 x 1500 mm
Weight	35 kg
Dimensions (WxDxH)	422 mm x 443 mm x 825 mm
Minimum distance from walls or other objects	A: Top: 36 cm B: Rear: 36 cm C: Side: 36 cm D: Front: 36 cm

Note:

- Measuring condition for the above specifications is according to EN 14511:
 - temperature of dry bulb (room temperature) = 35°C
 - temperature of wet bulb (relative humidity) = 24°C
- Test condition for the data on the nameplate is as per safety regulation: EN 60335-2-40

Safety

Carefully read the operating manual before using the device and keep it within reach!

- Do not use the device in potentially explosive rooms.
- Do not use the device in atmospheres containing oil, sulphur, chlorine or salt.
- Set the device in an upright and stable position.
- Let the device dry out after a wet clean. Do not operate it when wet.
- Ensure that the air inlet and outlet are not obstructed.
- Ensure that the side of the device where the air inlet is found is kept free of dirt and loose objects.
- Never insert objects into the device.
- Do not cover or transport the device during operation.
- Ensure that all electric cables outside of the device are protected from damage (e.g. from animals).
- Only use extensions to the connecting cable which are appropriate to the device power consumption, the length of its cable and its use. Avoid electrical overload.
- Only transport the device in an upright position with an emptied condensation tank or condensation drain hose.
- Dispose of the collected condensation. Do not drink it. There is a risk of infection!
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Observe the storage and operating conditions (see chapter Technical data).

Intended use

Only use the device for cooling, ventilating and dehumidifying room air in closed rooms, while adhering to and following the technical data.

Improper use

Do not place the device on damp or flooded ground. Do not use the device outdoors. Do not place any objects, e.g. wet clothing, on the device for drying. Any unauthorised changes, modifications or alterations of the device are forbidden.

Personnel qualifications

People who use this device must:

- be aware of the dangers that occur when working with electric devices in damp areas.
- have read and understood the operating manual, especially the Safety chapter.

Residual risks



Hazardous electric voltage!

Work on the electrical components must only be carried out by an authorised specialist company!



Hazardous electric voltage!

Before any work on the device, remove the mains plug from the mains socket!



Danger!

Do not leave the packaging lying around. Children may use it as a dangerous toy.



Danger!

Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way. Observe the personnel qualifications.



Caution!

To avoid damages to the device, never operate the device without an air filter inserted!

Transport and storage

Transport

To make the device easier to transport, it is fitted with wheel.

Before transporting the device, proceed as follows:

1. Switch off the device.
2. Remove the mains plug from the mains socket. Do not use the power cable to drag the device!
3. Empty the water tank.

Storage

Empty the condensation tank (see chapter Maintenance).

When the device is not being used, observe the following storage conditions:

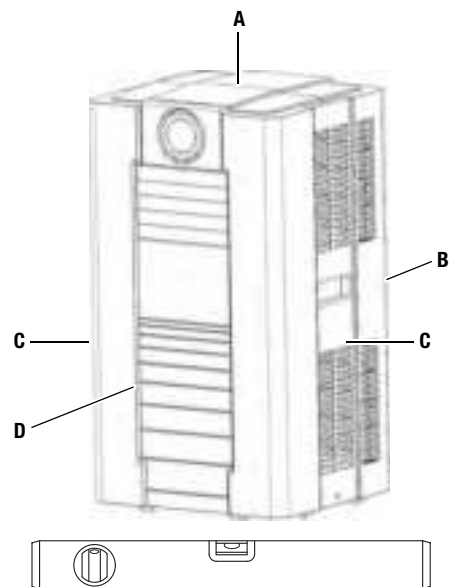
- dry,
- protected from dust and direct sunlight,
- with a plastic cover to protect it from invasive dust, if necessary.

Operation

- Avoid open doors and windows.
- Do not exceed the recommended room size.
- Keep curtains and venetian blinds closed during the sunniest time of the day.
- Keep the filter clean.
- Reduce the temperature and ventilation settings as soon as the room has reached the desired ambient conditions.

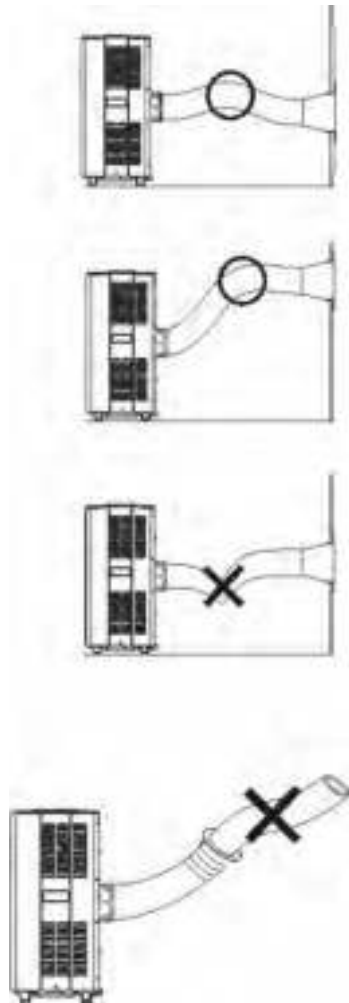
Installation of the device

When positioning the device, observe the minimum distance from walls or other objects as described in the chapter Technical data.



- Set the device up in a level, upright and stable position.
- Do not create tripping hazards when laying the power cable or other electric cables.
- Make sure that no curtains or other objects interfere with the air flow.
- Ensure that extension cords are completely unrolled.

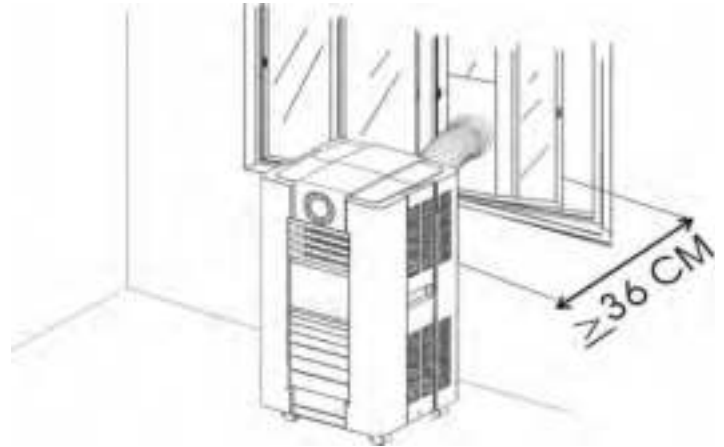
Connecting the exhaust air hose



- Only use the supplied hose and fasten the exhaust air hose and adaptor to the back of the air conditioner.
- Avoid kinks and bends in the exhaust air hose as this will lead to accumulation of emitted humid air causing the device to overheat and shut down.
- The hose may be extended from 300 mm to 1500 mm, but maximum efficiency can only be achieved using the shortest length.
- The length of the exhaust air hose is especially designed according to the product specifications. Do not replace or prolong it with different hoses as this could cause a malfunction.

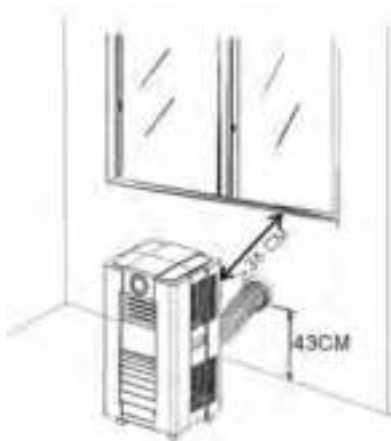
Discharge of exhaust air

Using the PVC strip



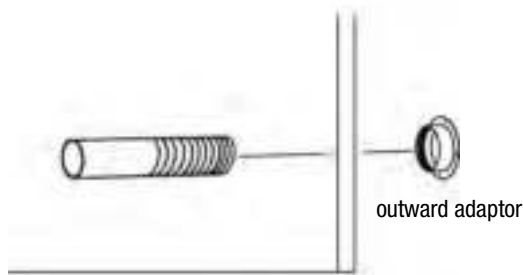
- Fix the PVC strip in the window gap and adjust the length as needed.
- Connect one end of the exhaust air hose to exhaust air opening and the other end to the outward adaptor.
- Feed the exhaust air hose through the PVC strip and close the window until the PVC strip is held securely.

Using the adaptor



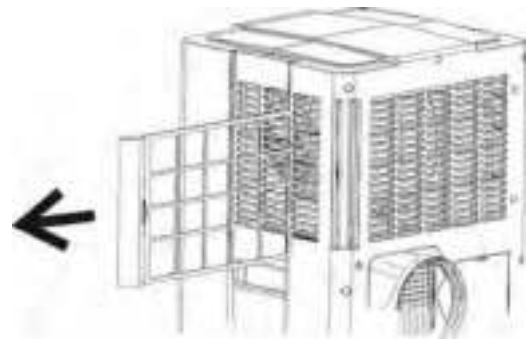
- Cut a hole with a diameter of 151 mm into the wall or window.

wall or window

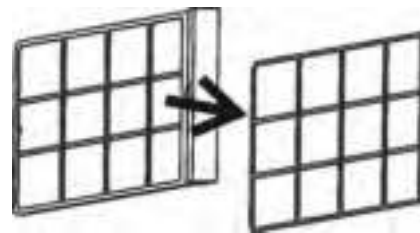


- Feed the exhaust air hose through the window or wall and attach the threaded adaptor from the outside as depicted.
- When not in use, plug the hole with the provided cover.

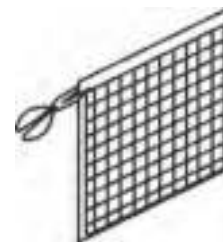
Installation of the carbon filter



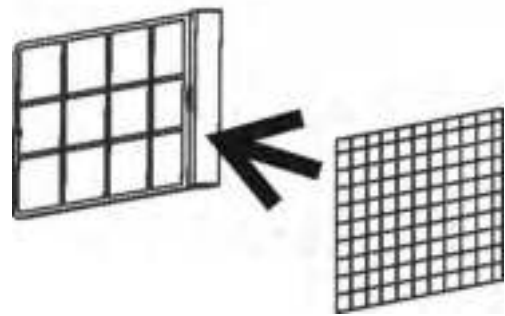
1. Pull the filter frame out of the device.



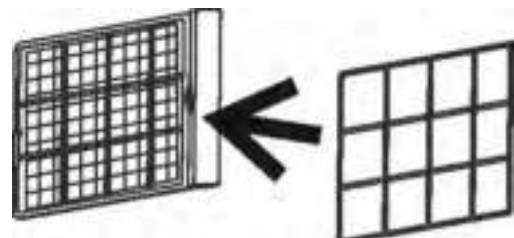
2. Remove the filter fixing element from the filter frame.



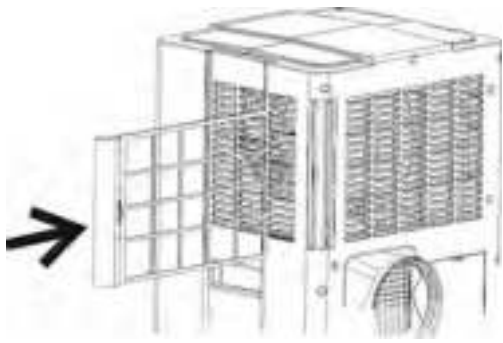
3. Take the activated carbon filter out of its plastic wrapping.



4. Attach the activated carbon filter to the filter frame.



5. Fasten the filter fixing element to the filter frame (the activated carbon filter is held between filter frame and fixing element).

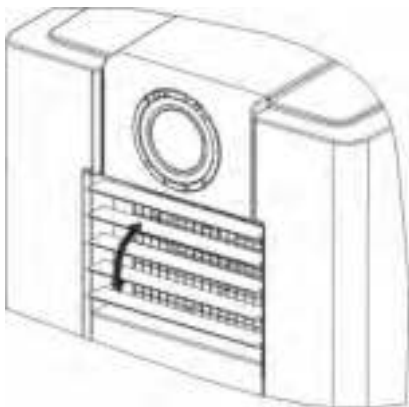


6. Insert the filter set (filter frame + activated carbon filter + filter fixing element) at the back of the device.

Start-up

- Prior to initial start-up, a battery (button cell, type CR 2025) must be inserted in the remote control.
 - To do so, open the cover of the battery compartment at the back of the remote control.
 - Insert the batteries observing the correct polarity. Go by the marking inside the battery compartment.
 - Then close the battery compartment.
- Check air inlets and outlets for foreign objects and remove these, if necessary.
- Check the air filter for dirt and clean it, if required. Also see chapter Maintenance.

Adjusting the air vent

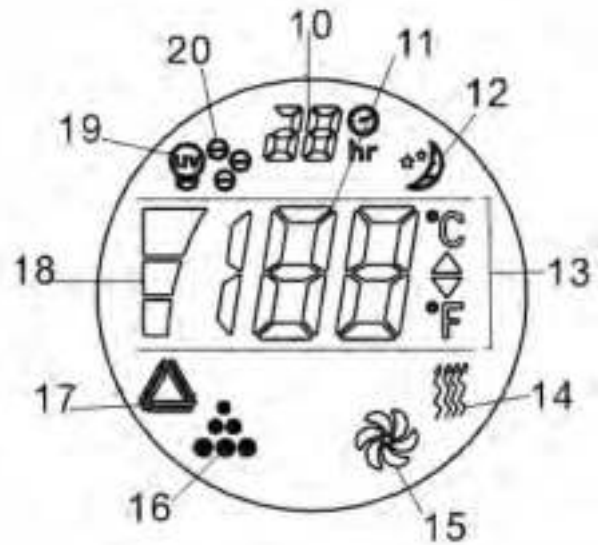


- Before using the device, please open the horizontal louver!
- Adjust the louvers to the desired position.

Switch-on of the device

1. Insert the mains plug into a properly secured mains power socket.
 2. Open the horizontal louver.
 3. Use the power button (2) to switch the device on.
 4. The device starts in automatic operation mode (AUTO). If the ambient temperature is
 - higher than 23°C, the device works in cooling mode.
 - higher than 20°C, but lower than or equal to 23°C, the device works in fan operation mode.
- To prolong the compressor lifetime, wait for at least 3 minutes after switch-off before switching the device back on.
 - The cooling system switches off automatically when the ambient temperature falls below the set one. The fan, however, keeps running at the set level. If the ambient temperature rises above the selected level, the cooling will switch on again.

Control panel



No.	Designation	Function
1	Remote control receiver	Remote control receiver
2	POWER button	POWER button
3	Temperature increase	Temperature increase
4	Temperature reduction	Temperature reduction
5	TIO2/ION button	This option only applies to models with the respective function
6	Operating mode selection	Operating mode selection
7	Sleep	Sleep function
8	Timer	Timer
9	Fan Speed	Fan speed
10	Timer icon	Displays the number of hours you set
11	Room temperature display	Room temperature display
12	Sleep icon	Sleep icon
13	Celsius or Fahrenheit sign	Please refer to the unit that applies for you
14	Heating function icon	Optional
15	Ventilation mode icon	Ventilation mode icon
16	Cooling mode icon	Cooling mode icon
17	Auto mode icon	Auto mode icon
18	Fan speed icon	1 to 3 levels
19	TiO2 icon	Optional
20	Ionizer function icon	Optional

Setting the operation mode/function

- To select the required operating mode, press the Operating mode button:
 - automatic,
 - cooling,
 - ventilation.
- The indicator light of the operating mode you selected is illuminated.

Setting the temperature

- Use the temperature control buttons (up or down) to set the desired temperature.
- The display window will show the temperature you set as you press these buttons. Otherwise, it will always show the ambient temperature.
- The preset temperature value of this device is:
 - 24°C for cooling operation.

Setting the fan speed

- Choose from the 3 available speed levels by pressing the button Fan speed.
 - The indicator lights for high and low fan speed are lit simultaneously.
- In AUTO mode the device chooses the fan speed automatically according to the ambient temperature.

Setting the timer

- Press the Time button to set the desired operating time.
 - 1 to 24 hours, indicated by the corresponding indicator light.
 - When the set time has been reached, the device will switch off automatically.
 - While pressing the Timer button, the display window will show the number of hours you set.
 - If the timer function is not activated, the device will work continuously.
- If you activate the timer without selecting other functions, you can set the time period after which the device begins to operate.
 - Consequently, if you set the timer to say 2, the device will automatically start to work after 2 hours.

Sleep function

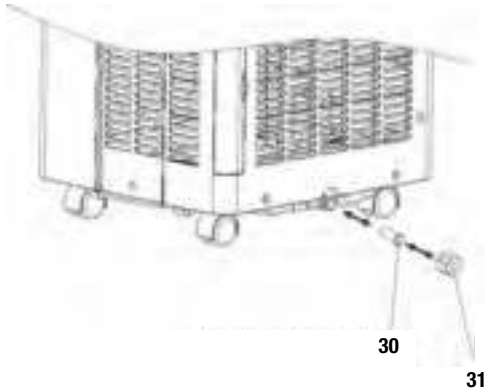
Note:

The sleep control function is only available in cooling mode.

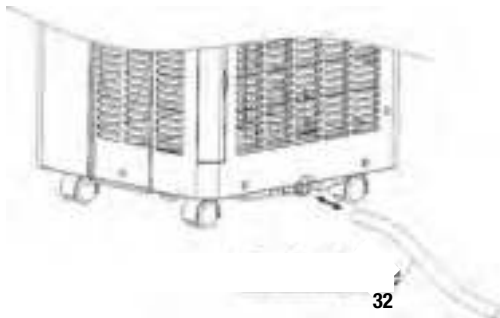
- If you press the Sleep button during cooling operation, the set temperature will increase by 1°C in the first hour, by another in the second and then remain constant.
- In sleep mode the only available fan speed is low.
- Press the Sleep button again to reset the temperature and fan speed settings.
- In Sleep mode the device automatically switches off after 12 hours of operation.

Continuous drainage

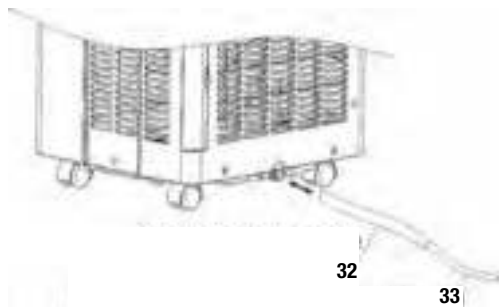
If you want to operate the device without the having to empty the condensation tank as often, please proceed as follows:



1. Remove drain knob (31) and rubber plug (30) and retain them for future use.



2. Connect the supplied drain pipe (32) to the water outlet as depicted and put the other end into a drain.



3. The drain pipe (32) can be extended by adding an extension tube (33) and using a suitable connector.

Notes:

- The drain must be at a lower level than the drain hole of the device.
- The water level indicator light (1) will be inactive in this drainage mode.
- If you want to extend the water tube, you can connect it to another hose (OD: 18 mm).

Self-diagnosis

- This device is equipped with a self-diagnosis function.
- In case of a fault *E1* or *E2* will be indicated on the display.
- In such an event please contact the Trotec customer service.

Remote control

All settings of the device can also be made using the remote control included in the scope of delivery. Please gather the button functions from the Control panel paragraph.



Shutdown

1. Use the power button (2) to switch the device off.
2. Remove the mains plug from the mains socket.
3. Clean the device, and especially the air filter, according to chapter Maintenance.
4. Store the device according to chapter Storage.

Errors and faults

The accurate functionality of the device was tested during production a number of times. However, if functionality faults do occur, then check the device according to the following list.

The device does not start:

- Check the power connection (230 V~/50 Hz).
- Check the mains plug for damages.
- Observe the operating temperature of 18 to 32 °C.
- Check whether the water level indicator light (1) is lit. If required, empty the condensation tank (see chapter Maintenance).
- Have the electrics checked by a specialist company for cooling and air-conditioning or by Trotec.

The device works with reduced or no cooling capacity:

- Check whether the cooling operating mode is selected.
- Check the proper fit of the exhaust air hose. In case of kinks, bends or blockage in the hose, exhaust air cannot be discharged. Clear the way for the exhaust air.
- Check the positioning of the air vent. It should be opened to the maximum.
- Check the air filter for dirt. If required, clean the air filter (see chapter Maintenance).
- Check the minimum distance to walls or other objects. Position the device a little more in the room's centre, if required.
- Check whether there are opened windows and/or doors of the room. Close these, if any. The window for the exhaust air hose has to remain open nonetheless.
- Check the temperature setting at the device. Reduce the set temperature, if it is higher than the room temperature.

The device is loud or vibrates; condensate is leaking:

- Check whether the device is standing upright and on an even surface.
- Check the stopper of the condensate drain for proper fit or damage. Plug the stopper in correctly or replace it as appropriate.

The device does not respond to the infrared remote control

- Check whether the distance between remote control and device is too big and minimize it, if necessary.
- Check the charging status of the batteries and change them, if required.
- If the batteries have only just been changed, check them for correct polarity.

The compressor is not running

- This might be due to the compressor's overheating protection. Simply wait for the temperature to drop.

Your device still does not operate correctly after these checks?

Bring the device to a specialist company for cooling and air-conditioning or to Trotec for repairs.

Maintenance

Maintenance intervals

Maintenance and care interval	before every start	when necessary	at least every 2 weeks	at least every 4 weeks	at least every 6 months	at least annually
empty condensation tank		x				
check air inlets and outlets for dirt and foreign objects and clean if necessary	x					
clean housing		x				x
visually check the inside of the device for dirt		x		x		
check air inlet grid and air filter for dirt and foreign objects and clean or replace if necessary	x		x			
replace air filter					x	
check for damages	x					
check attachment screws		x				x
carry out a test run						x

Maintenance and care log

Device type:

Device number:

Maintenance and care interval	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
check air inlets and outlets for dirt and foreign objects and clean if necessary																
clean housing																
visually check the inside of the device for dirt																
check air inlet grid and air filter for dirt and foreign objects and clean or replace if necessary																
replace air filter																
check for damages																
check attachment screws																
carry out a test run																

1. Date: Signature:	2. Date: Signature:	3. Date: Signature:	4. Date: Signature:
5. Date: Signature:	6. Date: Signature:	7. Date: Signature:	8. Date: Signature:
9. Date: Signature:	10. Date: Signature:	11. Date: Signature:	12. Date: Signature:
13. Date: Signature:	14. Date: Signature:	15. Date: Signature:	16. Date: Signature:

Activities required before starting maintenance

- Do not touch the mains plug with wet or damp hands.
- Before any work, detach the mains plug!

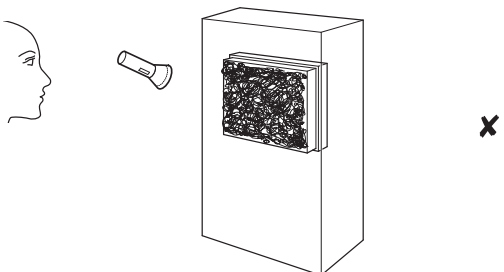
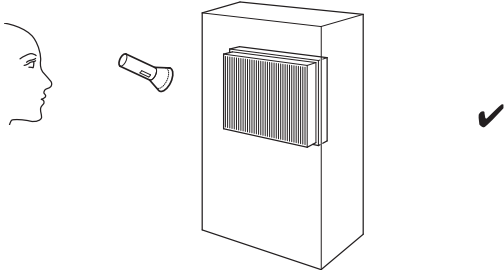


Maintenance tasks which require the housing to be opened must only be carried out by specialist companies for cooling and air-conditioning or by Trotec.



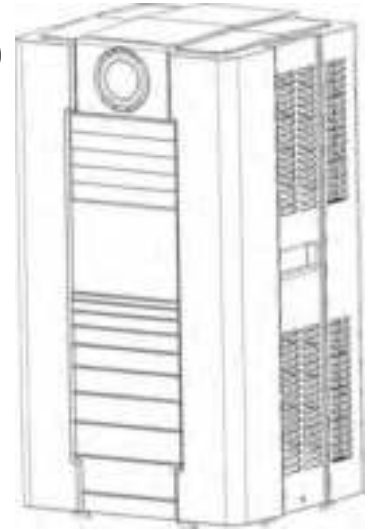
Visual check for dirt in the inside of the device

1. Remove the air filter.
2. Shine a torch through the opening of the device.
3. If you see a thick layer of dust, have the inside of the device cleaned by a specialist company for cooling and air-conditioning or by Trotec.
4. Put the air filter back in.



Cleaning the housing

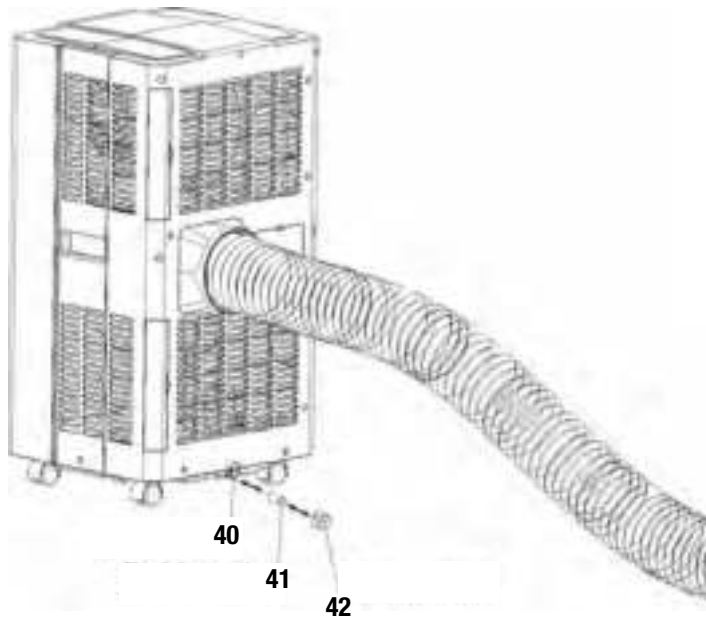
Clean the device with a soft, damp and lint-free cloth. Ensure that no moisture enters the housing. Do not use any sprays, solvents, alcohol-based cleaning agents or abrasive cleaners. Only use clean water to moisten the cloth.



Refrigerant circuit

- The entire refrigerant circuit is a maintenance-free, hermetically sealed system and may only be maintained or repaired by specialist companies for cooling and air-conditioning or by Trotec.

Emptying the condensation tank



1. Switch the air conditioner off and avoid moving it with full tank.
2. Place a vessel (e.g. a water collection pan) underneath the drain hole (40).
3. Remove the drain knob (42) and the rubber plug (41) from the drain hole (40) and drain the water.
4. When the collection container is almost full, put the rubber plug (41) back into the drain hole (40) and empty the container.
5. Repeat this procedure until the device is completely empty.
6. Plug the rubber plug (41) back in and fasten the drain knob (42).
7. Switch the device on.
 - The water level or compressor operation indicator should not be flashing.

Cleaning the air inlets and the air filter

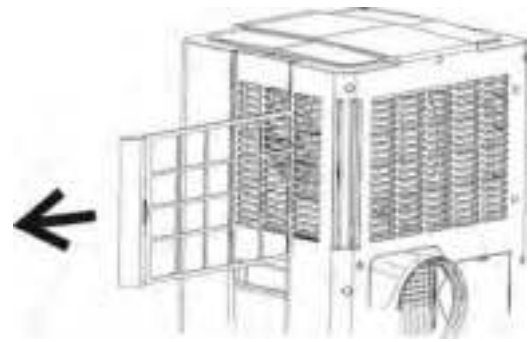


Caution!

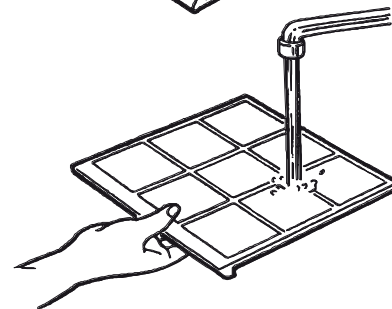
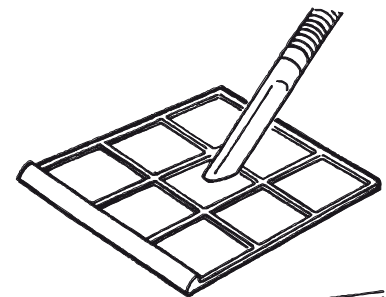
Ensure that the air filter is not worn or damaged. The corners and edges of the air filter must not be rounded or misshaped. Before reinserting the air filter, ensure that it is dry and is not damaged!

Read the chapter Maintenance intervals and replace the air filter in due time!

A.



B.



Disposal



In the European Union, electronic equipment must not be treated as domestic waste, but must be disposed of professionally in accordance with Directive 2002/96/EC of the European Parliament and Council of 27th January 2003 concerning old electrical and electronic equipment. At the end of its life, please dispose of this instrument in a manner appropriate to the relevant legal requirements.

The device uses an environmentally and ozone-neutral cooling agent (see Technical data). Dispose of the refrigerant appropriately and according to the national regulations.

Declaration of conformity

in accordance with the EC Low Voltage Directive 2006/95/EC and the EC Directive 2004/108/EC about electromagnetic compatibility.

Herewith, we declare that the PAC 4700 X was developed, constructed and produced in compliance with the named EC directives.

Applied technical standards:

EN 60335-2-40/A13:2012

EN 60335-1:2012

EN 62233:2008

The CE marking is found on the rear of the device.

Manufacturer:

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