

EVAPORATIVE AIR COOLER KT-1E

User Manual



KEY FEATURES

Effective and Economical

Energy-saving & Environmentally friendly

- **Reliable operation.**
- **Cools a large area.**
- **Quiet running.**
- **Adjustable speed.**
- **Automatic swing function – standard.**
- **Full function remote controller.**
- **Large water tank for extended time between fills.**
- **No need for compressed air.**
- **No installation, no duct work required.**
- **Easy to use, easy to clean.**
- **The body is corrosion-proof plastic.**
- **Easy to maintain.**
- **Fully portable.**
- **Can be attached to a standard garden hose.**
- **Timer function for auto start or auto stop.**

KT-1E Introduction

The cooler is a high-tech product, showing simplicity and outstanding reliability, due to its European design origin.

Its working principle is that water evaporation uses up the surrounding heat and causes the temperature to cool down.

When water is continuously distributed onto the cooling pad surface, the air being drawn through the pad causes the water to evaporate, making the air cool and fresh. The circulating water moves down to the reservoir, where it is again pumped up through the cooling pads. If the hose option is being used (supplied as standard), a float valve keeps the reservoir full continuously. If filled manually, the big 60L capacity reservoir ensures hours of uninterrupted operation. There is a digital level indicator to quickly check the amount of water remaining.

KT-1E Applications

This cooler is currently being used in many different industries and applications in many countries. Company offices, shops, hospitals, schools, workshops, workers dormitories, outdoor teahouse/coffee bars, restaurants, recreation facilities.

Manufacturing: Textile, machinery, ceramic, refined chemical industries, metallurgy, hardware, and leather industries.










Industrial processing: Electronics, clothes & shoe making, plastics, food industries, packaging.

Others: Indoor sports courts, bakeries, playgrounds, laundries, kitchens, vegetable markets, gymnasiums, underground parking lots, greenhouses, chicken and pig farms, gardens, the list goes on.

KT-1E Technical Specification

Model	-	KT-1E
Max airflow	m ³ /h	6,000
Rated voltage/frequency	V/Hz	22-240/50
Rated power	W	290
Fan style	-	Axial
Water consumption	L/H	4-6
Water capacity	L	60
Dimensions	mm	860x490x1400 (LxWxH)
Weight	kg	32.5
Effective	m ²	30-50

KT-1E Technical Feature

	New evaporative cooling pad, energy saving and environmentally friendly.		3 levels fan speed (low, medium & high).
	Low noise.		Large capacity water tank for longer operating hours.
	Swing function.		Large wheels and brake allow easy movement.
	Time setting function.		Micro-computer program control, LCD panel.
	More convenient with remote controller.		

KT-1E Important Reminders

Please read the manual carefully before operating the cooler.

Operating conditions:

- 1) Temperature: 18°C to 45°C; Water Temperature: < 45°C.
- 2) The power supply must not exceed the required voltage (+/-) 5%.
- 3) Air supply must be largely free of dust or extra cleaning is required.

Protect the power cable from vehicle or foot traffic. Connection to incorrect electric voltage, or faulty installation, will cause danger of electric shock.

If the product malfunctions at startup, please disconnect from electric power immediately and refer to the dealer for service.

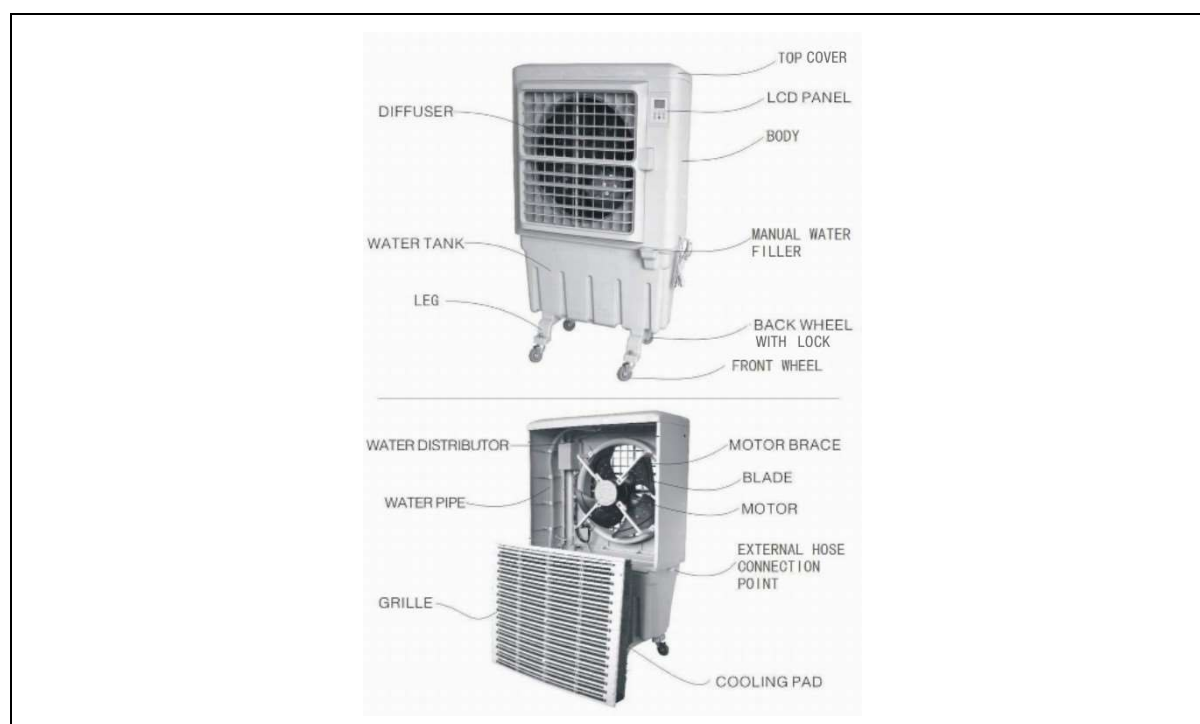
Necessary caution measure including grounding:

- 1) Keep doors and windows open to allow fresh air to enter, and treated air to exit, when cooler is operating.
- 2) Flashing red light on the control panel means the water level in reservoir is low.
- 3) Rinse the reservoir with fresh water and clean prior to use after a period where the cooler has not been in operation.
- 4) Take care when moving the cooler, especially when it is full of water. Pushing too hard will cause the cooler to overbalance and tip over, which may cause injury and will damage the cooler.
- 5) Simplified description of the cooler installation process and the connection modes to supply main of water and electricity.

Open the carton, make sure the cooling machine is good looking, put water into the water tank, put plug on, power supply is 220-240V/50Hz including grounding. There is no lubricating process because there is no belt.

Clean the water reservoir and change the water in the reservoir each month. Make sure the power is off, open the cooling pad, wash pad and water tank in clean water monthly.

KT-1E Diagram



Operating Instruction

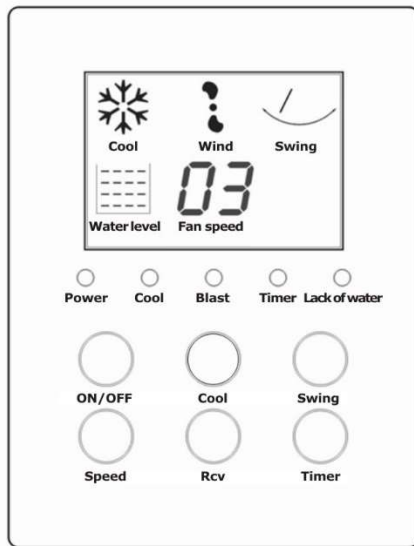


WARNING

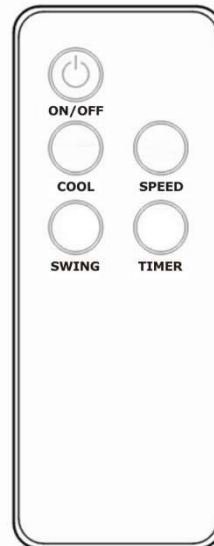
- 1) The power supply cord includes 3 wires (live, neutral & earth) and the switch must be near to where the cooler is placed.
- 2) The electric supply shall be disconnected when inspection or maintenance of the cooler is taking place.
- 3) Children should be supervised to ensure that they do not play with the appliance.
- 4) Ground connection and electrical supply shall be disconnected before opening the window.

Keypad instruction	Operation method
ON/OFF	This turns the cooler on or off.
COOL	This activates the cooling function. Note that there is a delay of up to one minute before the fan starts whilst the cooling pads soak.
BLAST	When COOL is pressed again, the water evaporation feature is turned off, with only the fan operating.
SPEED	Pressing SPEED will select low, medium, or high fan speed.
SWING	This activates/de-activates swing function.
TIMER Delayed start	The timer setting can be used to start the cooler after a certain number of hours delay. When only the green POWER light is on, press TIMER under the number of hours delay (1-24) is shown.
TIMER Automatic stop	When the cooling is already going, press TIMER to get the number of hours (1-24) until the machine will automatically switch off.
WATER SUPPLY	Use only clean, fresh water. Pour water into the water inlet on the right-hand side of the unit (max 60L). Alternatively, attach a hose to the water inlet on the left side for automatic filling. Note a pressure reducing valve is recommended for high pressure water supplies.

KT-1E Control Panel



KT-1E Remote Controller



KT-1E Maintenance

For the best results and long-term operation, regular maintenance is essential.

To ensure the cooler delivers fresh and clean air, regularly change the evaporation joint and clean the water reservoir. It is vital to change the water in the reservoir each month.

- 1) Remove the filter pad by unscrewing the 4 screws on the rear of the cooler, then lift the pad and pull out at the bottom to release. To replace the pad, slide up into the slot under the top of the cooler, push in at the bottom and allow dropping into the lower slot.
- 2) Clean the pad from the inner side to outside of the pad (inner side is towards the motor). Never use any liquid detergent and never use pressurized water as it may cause damage to the pad.
- 3) Unscrew the drainage lid to let dirty water flow out, then clean the water tank thoroughly with a soft cloth. Wash off dirt on the water sensor, water pump and then float valve. Rinse thoroughly.
- 4) Use mild soap and a soft, clean cloth when cleaning the cooler casing. Do not use any caustic chemical detergent that may cause damage to the surface of the cooler.
- 5) To prevent build up of algae and biological organisms in the reservoir, regularly add chlorine/bromine tablets as per the tablet manufacturer recommendations for evaporative cooler reservoirs.

KT-1E Troubleshooting

Problem	Possible reason	Solution
Operating screen stays dark	No power Main control board failure Fuse is blown Panel failure	Check unit is plugged in Change control board Change fuse Change panel
Display is normal but without airflow or the air speed is too low	The fan is jammed Cooling pad or dust filter is blocked Fan is distorted Main control board failure	Check to ensure there is nothing preventing free rotation of the fan Clean the cooling pad and dust filter Change the fan Change the main control board
Motor does not respond to control panel	Main control board failure Panel failure	Change the main control board Change panel

Water leaking from drain valve	Drain valve is loose Dirt in the valve	Tighten drain valve nut Clean drain valve
Air diffuser / swing function is not working	Synchronous motor is burnout out Crankshaft is broken	Change synchronous motor Change crankshaft
Water drops splash out of the air diffuser	Water pipe has come loose	Check water pipe to top of filter pad and reattach or tighten as necessary

Note: this troubleshooting is here for reference purposes only. If any technical assistance is needed, please contact your distributor for service/repair.