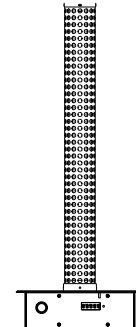


# Owner's Manual

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## PCO-Kit

MDL-PSM10W  
MDL-PSM18W  
MDL-PSM28W

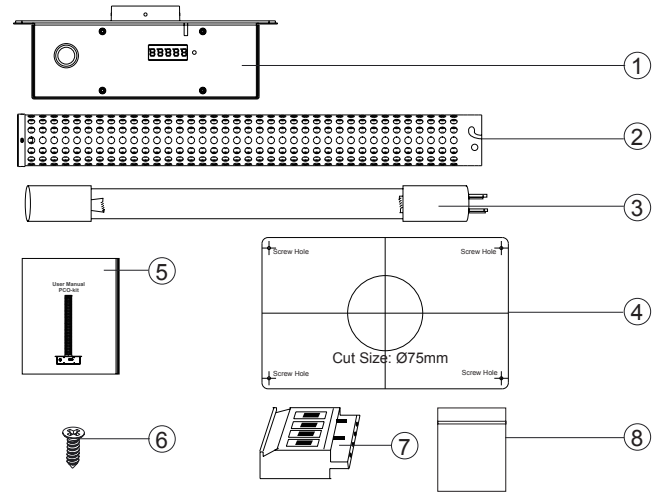


Please read this manual carefully before use and keep it properly.

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## Package BOM



No.	Name	Number
①	Control Box	1pcs
②	Protection Net	1pcs
③	UV-Tube	1pcs
④	Cutting Hole Card	1pcs
⑤	User manual	1pcs
⑥	M4 Screw	5pcs
⑦	Accessory Port	1pcs
⑧	Transparent Plastic Ziplock Bag	1pcs

Note: ⑤ ⑥ ⑦ Pack in ⑧.

## Overview

Basic feature: IP20  
Suitable for air-conditioning duct.

Technical Parameters:

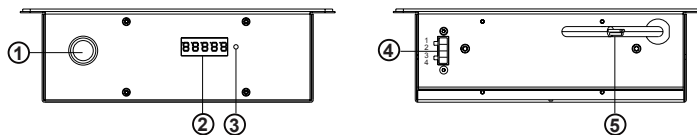
Model	MDL-PSM10W	MDL-PSM18W	MDL-PSM28W
Power(W)	10	18	28
AC Source	220-240V~ 50/60Hz		
Rated Current (A)	0.05	0.095	0.16
Product Size L*W*(h1+h2)(mm)	250*157*(72+227)	250*157*(72+371)	250*157*(72+565)
Airflow(m <sup>3</sup> /h)	<1500	<2600	<4300

## ⚠ Safety Precautions

To prevent accidents such as damage, fall, electric shock and fire, which may cause personal injury, please install and use the PCO-kit in strict accordance with the instructions. The PCO-kit is not replaceable by the user. Do not alter the UV-C tube or replace the components!

- ⊙ The power supply must be within the rated voltage.  
(If the PCO-kit works at voltages outside of range for a long time, it may be damaged.)
- ⊙ Ask a specialized technician to check or repair the PCO-kit.  
(Operations performed by a non-professional staff may cause danger.)
- ⊙ In case of exception, cut off the power supply immediately and contact the sales store.(Provide the model for maintenance. Refer to the label attached to the control box.)
- ⊙ The external flexible cable or cord of this device are not replaceable. The PCO-kit would be discarded if flexible cable or cord are damaged.
- ⊙ When installing PCO-kit, it should not be too close to the air outlet.  
(Too close to the air outlet, the ultraviolet rays of the PCO-kit may cause harm to people, animals or plants.)
- ⊙ UV-C tubes are hazardous materials, do not discard them at will; please handle them according to the recycling management of hazardous materials.
- ⊙ Do not look directly at the pco-kit when the UV-C lamp is working.
- ⊙ The pco-kit installation position is more than 1.5 meters away from the air outlet.
- ⊙ The cable between the signal port and the controller should not exceed 3 meters.
- ⊙ **Fibre-duct need metal support (from local market) inside duct and reserve inspection hole on duct bottom.**

## Main Components Name



- ① Power Switch Key
- ② Digital Tube
- ③ Set Button
- ④ Signal Line Port  
(Alarm Port & Control Port)
- ⑤ Power Cable

## Main Components Function

### 1. Digital tube display:

- (1) Display "U1" or "U2", U1 mode is a stand-alone mode, U2 mode is a multi-machine mode. When the PCO-kit is powered on, or when the "Set" key is pressed, U1 or U2 are displayed.
- (2) When the PCO-kit works normally, the life of the UV lamp is displayed.
- (3) Error code display. When the PCO-kit fails, the fault code and life time will be displayed in turns at 3S intervals.

### 2. Set button:

- 1) Switch working modes U1 and U2.
- 2) When the service life of the UVC-tube ends, long press (about 5s) this button to reset to the default value of 8000 hours.

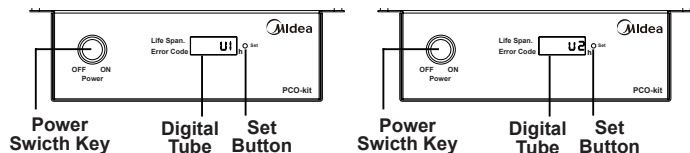
**3. Alarm port (1,2):** PCO-kit outputs an abnormal output signal to the control panel to remind the user that the product is abnormal.

**4. Control port ( 3, 4):** The user can control the "running" and "stop" states of PCO-kit on the control panel interface. When the PCO-kit is turned on, it will start to work after 5s, if the air duct is windy; when there is no wind in the air duct, the PCO-kit will not work.

Fault Code	Description
E-1	Wind sensor failure.
E-2	UV-C tube is not bright or the photoresistor is damaged.
E-3	There is light detected when the UV-C tube is not turned on. The photoresistor is damaged or the structure has light leakage.
E-4	Ballast failure.
E-5	End of life of UV-C tube.

## Instructions For Use

Note: The end of life of the UV-C tube will affect the sterilization effect. Be sure to replace the UV-C tube.



- ③ Power on, and turn on the PCO-kit power switch, the digital tube displays the current mode: U1 mode or U2 mode (display 10s). This product defaults to U1 mode. If you need to switch to another mode, you can set it by pressing the button "Set". When it is pressed for the first time, the current mode is displayed and blinks; when it is pressed for the second time, it switches to other modes. Wait until it does not blink, then power off and Restart, PCO-kit will work in the new mode.
- ③ In any mode, within 25s of starting the PCO-kit, the digital tube displays the life value (no fault code is displayed), and the PCO-kit will work or standby (when there is no wind in the air duct, the PCO-kit will be in standby) .
- ③ The difference between PCO-kit working in U1 mode and U2 mode is shown in the table below.

System Monitoring Failure		
Error Code \ Mode	U1	U2
Er-1	●	●
Er-2	●	X
Er-3	●	X
Er-4	●	X
Er-5	●	●

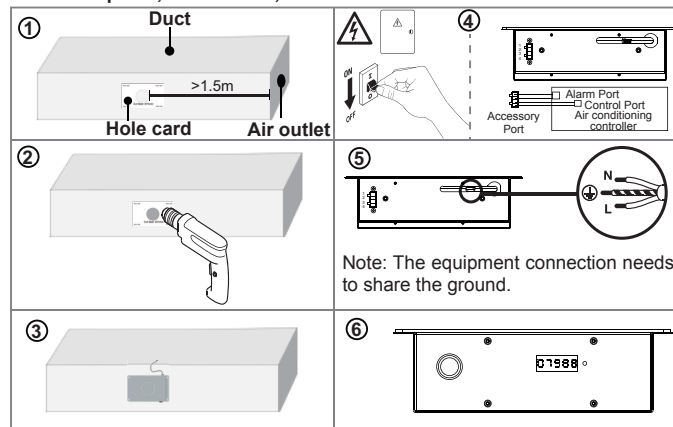
Note: ● means monitoring, X means not monitoring.

## Installation Method

### ⚠ Warning

**Please cut off the power before installation.**

Installation tools: Impact drill, Electric batch, Wiring tool, 75mm diameter iron hole opener, Screwdriver, etc.



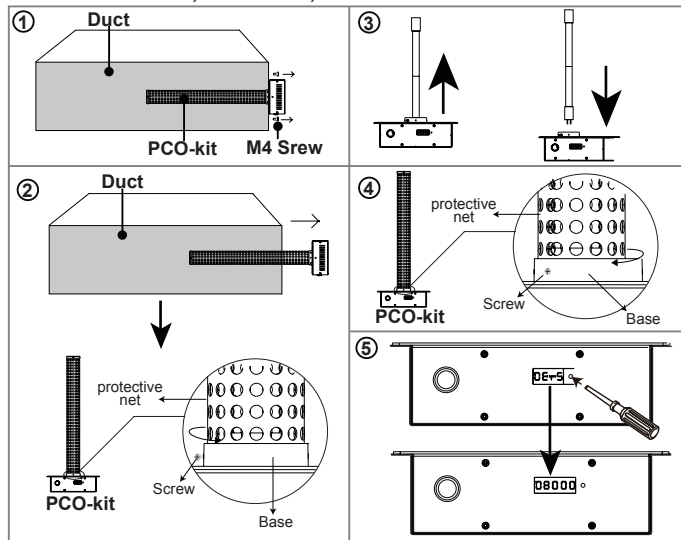
1. Paste the hole card on the air duct. And confirm that the distance between the PCO-kit and the air outlet is greater than 1.5m.
2. Use a percussion drill to drill the hole, and the size of the hole is consistent with that of the hole card.
3. Insert the PCO-kit into the air duct with the hole, and fix it with 4 M4 screws. (Note: When installing, the front direction should be easy to check.)
4. Make sure that the high-voltage power supply has been cut off. Connect the alarm signal wire and control signal to the accessory prot. Insert the accessory port into the signal port on the back of the PCO-kit in the direction of the notch. (Note: The alarm signal line should be connected to the signal ports 1 and 2 of PCO-kit, and the control signal line should be connected to the signal ports 3 and 4.)
5. Connect the power cord on the PCO-kit to the Mains grid distribution box, pay attention to the yellow-green wire and ground wire.
6. Power on, turn on the power switch on the PCO-kit to the "ON" position, turn on the air conditioner, and check whether it lights up normally after 30s. (Note: When it is normally lit, the digital tube displays numbers)

## Replace UV-C Tube

### ⚠ Warning

Please cut off the power before replacing the UV-C tube.

Tools: Electric batch, Screwdriver, etc.



1. Confirm that the power is disconnected. Remove the 4 screws fixing the PCO-kit (keep the screws).
2. Remove the PCO-kit. Use a screwdriver to remove the screws that fix the protective net, and rotate the protective net in the direction of the arrow in the figure 2, then slowly take out the protective net.
3. Pull out the UV-C tube slightly hard (do not damage the UVC-tube). Insert the new UV-C tube into the lamp holder.
4. Insert the protective net and rotate the protective net in the direction shown in Figure 4. When the screw holes on the protective device are aligned with the screw holes on the base, use a screwdriver to lock the screws. Finally, fix the PCO kit back to the air duct.
5. Re-power on, turn on the power switch of PCO-kit, and use a small screwdriver to hold down the reset button to make the digital tube display the value "8000".

## Environmental Protection And Safety

Scrap Disposal: Treat separately with domestic waste and recy as much as possible. The UV-C tube is broken treatment methods:

1. Open the window to ventilate as soon as possible.
2. Quickly clean up the debris and drop solid mercury, put the garbage bag containing solid mercury in the outdoor waste lamp and battery treatment box.
3. Evacuate the personnel and do not get into the room within 15 minutes.

## Fault Rectification

If the PCO-kit cannot operate after being powered on, please check the following items. During the repair process, the disassembly and assembly steps are involved, please refer to the UV-C tube replacement steps.

Fault Code	Check steps
E <sub>r</sub> -1	Check whether the wind speed sensor has a short circuit or an open circuit.
E <sub>r</sub> -2	<ol style="list-style-type: none"> <li>1. Is the UV-C tube plugged in? Pull out the UV-C tube again and insert it again.</li> <li>2. The photosensitive components on the control circuit are damaged. Replace the control board.</li> </ol>
E <sub>r</sub> -3	<ol style="list-style-type: none"> <li>1. Check whether the PCO-kit is in good contact with the air duct? No outside light affects PCO products.</li> <li>2. Remove the protective net, pack the photosensitive components with black insulating tape, power on to confirm whether the alarm is cleared, if not cleared, replace the control circuit board.</li> </ol>
E <sub>r</sub> -4	<ol style="list-style-type: none"> <li>1. Confirm whether the electronic ballast connection line is normal?</li> <li>2. Replace with a new ballast of the same model</li> </ol>
E <sub>r</sub> -5	Replace the UV-C, and long press the Reset button to restore the value of the digital tube to 8000.



## Warranty Service

**The warranty for the light source and electronic parts lasts for one year following the purchase date. The warranty does not cover plastic parts.**

### Warranty and services:

Within one year from the date of purchase, in case of any damage due to the manufacturing process or component, Midea's sales store will provide free repair service to the holder of the warrant card with the purchase certificate and replace the component or the entire product (light source excluded) if necessary.

### Warranty rules:

The following are not covered by warranty:

1. Damage due to improper use, for example, connection to an improper power supply, use of an inappropriate accessory, incorrect installation, use not in accordance with the Manual, incorrect use, or carelessness. Damage due to transportation or other unexpected incidents. Damage due to unauthorized maintenance or modification of the product. Damage due to other force majeure (such as natural disasters, abnormal voltage, etc.)
2. Damage due to use other than for household use.
3. Aging and wear of the product during use, which do not affect the normal use of the product.

### Warranty Card

Product name \_\_\_\_\_  
Specification \_\_\_\_\_ Date of purchase \_\_\_\_\_  
Distributor \_\_\_\_\_  
Contact number \_\_\_\_\_  
Contact address \_\_\_\_\_  
Distributor (seal required)

Date	Maintenance Record	Signature