

## Radiator Ventilator Instruction Manual

### 1. Description of the User Manual

This installation manual is intended for the end-user, the general homeowner, who wants to install one or more ventilator on the radiators in his home. The user does not need to be skilled, trained or certified to install the ventilator.

### 2. Safety Warnings

Read and understand this manual and its safety instructions before using this product. Follow all the instructions. This will avoid fire, explosions, electric shocks or other hazards that may result in damage to property and/or injuries. The product shall only be used by persons who have fully read and understand the contents of this user manual.

Ensure that each person who uses the product has read these warnings and instructions and follows them.

Keep all safety information and instructions for future reference and pass them on to subsequent users of the product. The manufacturer is not liable for cases of material damage or personal injury caused by incorrect handling or non-compliance with the safety instructions. In such cases, the warranty will be voided.

### 3. Safety Instructions

Read and understand this manual and its safety instructions before using the ventilator and matching components.

#### 3.1. How to Use the Product Safely

##### 3.1.1. Safety information for vulnerable people

- Never leave children alone with packaging material. There is a risk of suffocation.
- Children should not play with the product. This product is not a toy.
- Do not install the product if you have reduced physical, sensory or mental capabilities.
- Do not allow installation of the product by persons (including children) with reduced physical, sensory or mental capabilities.

##### 3.1.2. Safety information related to the intended use

- Use this product only as a radiator ventilator by attaching it to a radiator. Follow the instructions in this manual to do so.

##### 3.1.3. Product limitations and restrictions

- Do not use any sharp objects near the fans.
- Keep the product away from open fire, soldering irons, or other hot tools as this could damage the product.

##### 3.1.4. Installation safety information

- Lift, handle and transport the product with great care.
- Pay attention and be careful when installing an electrical product. Do not install the product if you are not able to concentrate properly or if you may faint or if you are under the influence of medication, alcohol or drugs.
- Before connecting the power adapter to the wall socket, ensure that the local voltage corresponds to the value on the product. The maximum permissible voltage is 240 V.

- Connect the product to a properly installed and easily accessible wall socket. Make sure the product can be disconnected from the power supply at any time.

##### 3.1.5. Safety information regarding the use

- Never use the product outdoors. The product is intended for indoor use only.
- Check all components (including cables) for any damages before installing the product. Immediately remove the power adapter from the wall socket in the event of visible damage, strong odour or overheating of the components.

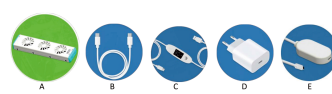
##### 3.1.6. Maintenance safety information

- Never touch the product or power adapter with wet hands.
- Thermostat with connector cable, each end 80cm with Type C connector, total 170cm to which it is attached. Make sure no water enters the product through the fans.

##### 3.1.7. Service and repair safety information

- Do not attempt to open, modify or repair the product. Alterations or modifications of this product are not permitted. This will void the warranty.

### 4. Main components



#### A. Radiator Ventilator

- 50cm extension cable with Type C connector on both ends

#### C. Thermostat with connector cable

- each end 80cm with Type C connector, total 170cm

#### D. Power adapter

- Magnetic temperature sensor with 100cm cable length and Type C connector

#### E. Magnetic temperature sensor

- 100cm cable length and Type C connector

SPECIFICATION	
Radiator Ventilator Set (A+C+D+E)	Model: MKRV-01 Input Voltage: 100-240V 50/60HZ AC 350MA
Single Radiator Ventilator for Extension (A+B)	Model: MKRV-001 Input Voltage: DC 5V 0.2A
Remark: The power adapter in the package can power up to 10 ventilators maximum.	

### 5. How to Use

### 5.1. Type of radiators can be used for this ventilator

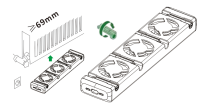
- Wide radiator ≥69cm
- Narrow radiator <69cm
- Single sided radiator
- Connector
- Other radiators

### 5.2. Connect the ventilator to the radiator

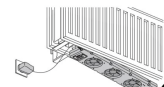
#### 5.2.1. Connect the ventilator to a wide radiator (plates ≥ 69 mm apart)

- Make sure that the ventilator (A) faces upwards, put it between the radiator plates and the magnets will automatically stick to the radiator.

Radiator width ≥ 69mm



- Identify a space where the radiator wall brackets and connecting clips are not in the way. Attach the ventilator (A) at the bottom between the radiator plates with the adjustable magnets. The ventilator(A) can also be attached on top of the radiator and under a cover. NOTICE Make sure the fans still face upwards!



- Connect the thermostat cable (C) and temperature sensor (E) to the type C connectors on one side of the ventilator(A). Make sure the thermostat cable (C) and temperature sensor cable (E) are connected to the Type C ports on the ventilator at the same side.
- Attach the temperature sensor (C) with its adjustable magnets on the back of the radiator, close to the heated water supply pipe, or on the pipe itself.
- Connect the power adapter (D) with the thermostat cable (C) to the wall socket.
- On long radiators, connect additional ventilator (A) with the 50 cm connecting cables(B). Multiple ventilator (A) (up to 10) can be connected to one

power adapter (D). Additional temperature sensors (E) or thermostat cable (C) are not required.

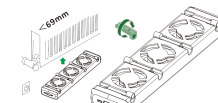
- Turn on your central heating system. Wait for the Radiator Ventilator (A) to automatically turn on. This happens when the radiator temperature reaches 32°C. It automatically turns off when the radiator cools down below 23°C. The thermostat displays the radiator temperature it detects, you can also manually set up the auto start and auto stop temperature by the buttons on the thermostat.

IMPORTANT: please connect the ventilator (A) to the power after the thermostat controller and temperature sensor cables are properly connected to it, to make sure ventilator (A) can be thermostat controlled.

#### 5.2.2. Connect the Radiator Ventilator to a narrow radiator (plates < 69 mm apart)

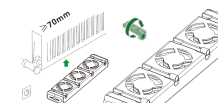
- Turn the adjustable magnets until the magnet is on top, 2 magnets on one side, and two on the other side.
- Adjust the adjustable magnets to the correct width.
- Repeat step 1 – 7 as for the wide radiator. Use the adjustable magnets to hang the Radiator Ventilator (A) between the plates.

Radiator < 69mm



#### 5.2.3. Connector the radiator ventilator to a single sided radiator

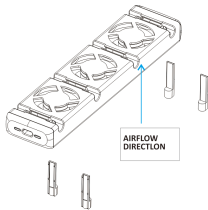
- Adjust all the adjustable magnets to the same side of the Radiator Ventilator (A), and make sure the magnets are at the edge.
- Repeat step 1 – 7 as for the wide radiator.



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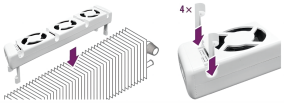
### 5.2.4. Connect the radiator ventilator to a connector

- Attach the feet by pushing them into the slots of the Radiator Ventilator (A).
- Make sure that the Radiator Ventilator (A) faces upwards.



- Place the Radiator Ventilator (A) on top of the connector and allow space between the connector sides and the Radiator Ventilator (A) to reduce noise. The Radiator Ventilator can also be placed on the ground below the connector if space allows.

- If the connector block is made of magnetic material, the temperature sensor (C) can be easily positioned on it with its magnets. The temperature sensor can also be clamped between two plates of the connector block to ensure good heat transfer. The sensor can be attached to a copper pipe or any other non-magnetic location using the provided Velcro.



### 5.2.5. For other radiators

- Make the feet is vertical to the radiator fan. Put the radiator fan directly under the radiator. Make sure the fans face upwards.
- Follow the steps of 5.2.1 steps 3-7 to make the ventilator working.

### 6. How to Set the thermostat

Normally, the display shows the temperature detected by the temperature sensor. If the temperature sensor is not plugged in or damaged, the display shows 00.

- Press and hold the left key (WORK+) for 3 seconds to enter WORK temperature setting. The temperature on display screen flashes. Now the left key (WORK+) is for increasing the temperature and the right key (STOP-) is for decreasing the temperature, you may change the temperature by pushing these 2 buttons. After setting, stop for 3 seconds and do not operate any button. The temperature will be saved and exit the setting interface to return to the actual temperature interface of the temperature sensor. (Note: The initial WORK temperature is 32 °C. When the temperature sensed by the temperature sensor is 32 °C, the thermostat will enter the WORK mode and the fans will start turning.)

- Press and hold the right key (STOP-) for 3 seconds to enter STOP temperature setting, and the temperature on display screen flashes. Now the left key (WORK+) is for increasing the temperature and the right key (STOP-) is for decreasing the temperature, you may change the temperature by pushing these 2 buttons. After setting, stop for 3 seconds without any operation on the buttons, the temperature will be saved and exit the setting interface, and display the current temperature detected by sensor. (Note: The initial set STOP temperature is 23 °C. When the temperature detected by the temperature sensor is below 23 °C, the thermostat will enter the STOP state and the fan will stop working.)

- The working temperature of the thermostat is between 0-60 °C. (Notice: If no temperature sensor or temperature sensor is not working, the thermostat defaults to be on WORK status, that is, the ventilator works. If the temperature detected is within 23°C - 32 °C, for the first use, the thermostat defaults to be on STOP status, that is, the fan does not rotate.)

- The WORK temperature set has to be higher than STOP temperature. (i.e. when the WORK temperature is set to be 30°C, the STOP temperature can be set to be 29°C maximum.)

- Reset: hold the both buttons of WORK and STOP for 3 seconds, the screen displays 88 °C + WORK-STOP and flashes for 3 times, and then exit to display current temperature or display 00 if no temperature is detected. The product is reset to default setting.

### 7. How to Maintain the Radiator Ventilator

#### 7.1. Cleaning the product

The Radiator Ventilator and matching components can be cleaned if necessary. To clean the product:

- Clean the product with a vacuum cleaner, when dirty. CAUTION! Make sure to use the lowest power setting on the vacuum cleaner.
- Clean the product with a damp cloth only if required. CAUTION! Make sure no water enters the Radiator Ventilator through the fans.

#### 7.2. Replacing components

If any components break, they must be replaced. CAUTION! Do not attempt to open, modify or repair the product.

#### To replace components:

- Exchange broken components, still under warranty, at the supplier. The Radiator Ventilator has a 2 year guarantee and the power adapter has a 2 year warranty. NOTICE For safety- and control reasons (CE), alterations or modifications of this product are not permitted.
- Dispose of broken components that are not under warranty and buy new components.

### 8. Trouble Shooting

Problem	Cause	Solution
Radiator Ventilator (A) does not fit between the radiator plates.	It is a narrow radiator.	Follow the installation steps for the radiator ventilator on a narrow radiator.
Radiator Ventilator (A) makes too much noise when placed on the connector.	There is too little space.	Place the Radiator Ventilator (A) on top of the radiator. This will not influence performance. The bottom is only preferred as it is less visible. Make sure the Radiator Ventilator (A) still faces upwards.

The Radiator Ventilator (A) need to be attached at the top of the radiator, but the radiator fan is a cover.	NA	Place the Radiator Ventilator (A) underneath the cover. Keep in mind that this exposes the Radiator Ventilator (A) higher temperature, which may display no to trigger.
Cannot connect the Radiator Ventilator (A) to the wall socket.	The Radiator Ventilator (A) was placed with the two female connectors on the wrong side or the power adapter cable is not long enough.	Turn the Radiator Ventilator (A) around so that the two female connectors face in the other direction or connect the power adapter cable to a power strip.
The temperature sensor (E) cannot reach the warm water supply pipe.	The temperature sensor cable is too short.	Buy an additional long cable and connect to the temperature sensor cable. Else, the temperature sensor (E) may also be attached anywhere of the radiator.
Cannot fix the Radiator Ventilator (A) between the wall and single plate radiator.	The Radiator Ventilator (A) was placed with the two female connectors on the wrong side or the power adapter cable is not long enough.	Follow the single plate radiator installation steps. If there is not enough space between the back of the radiator and the wall, please attach the feet to the Radiator Ventilator (A) and position the product on the floor below the radiator.
Radiator Ventilator (A) did not turn on after fan connected to the wall socket.	The temperature sensor (E) is not reading 32°C or more on the Radiator Ventilator (A) is not receiving power.	Make sure the radiator is at least 32 degrees. Make sure that temperature sensor (E) is attached to the warm water supply pipe or close by to this pipe on the radiator where it gets warm. Make sure that the temperature sensor (E) makes proper contact. If the radiator does not heat properly, use the central heating system and consider doing hydraulic balancing. Make sure that the wall socket works and that the power adapter (D) is properly inserted.
The Radiator Ventilator (A) may be facing downwards. This causes the air to flow in the wrong direction, against rather than with the flow.	The Radiator Ventilator (A) may be facing downwards. This causes the air to flow in the wrong direction, against rather than with the flow.	Turn the Radiator Ventilator (A) over so that the Radiator Ventilator (A) is facing upwards. The top is the side where the fans are covered with three white protective strips.
Does not save 30% on the energy bill.	The central heating system is not optimized.	Optimize the central heating system by distributing the Radiator Ventilator (A), adjusting the temperature set point and ensuring hydraulic balancing. If the central heating system has been functioning optimally before the installation of the Radiator Ventilator (A), it may not be possible to save 30%. User behavior can also have an impact on the maximum savings that can be achieved.
Does not save radiator or single plate radiator with plate < 59 mm from wall.	This may be correct noise.	Make sure the Radiator Ventilator (A) does not touch any metal pieces. For this reason the feet should also be attached.
The Radiator Ventilator (A) does not turn off when the radiator is off / cold.	The thermostat (C) is not switching it off.	Make sure the Radiator Ventilator (A) is properly connected to a thermostat (C) and temperature sensor (E).

### 9. Disposal

#### 9.1. Disposal of the Product

The symbol on the product indicates that this product must not be treated as unsorted municipal waste, but must be collected separately. Dispose of the product via a collection point for the recycling of waste electrical and electronic equipment if you live within the EU and in other European countries that operate separate collection systems for waste electrical and electronic equipment. By disposing of the product in the proper manner, you help to avoid possible hazards for the environment and public health that could otherwise be caused by improper treatment of waste equipment. The recycling of materials contributes to the

#### 9.2. Disposal of Packaging Waste

Dispose of the packaging through your local recycling facilities. By disposing of the packaging and packaging waste in the proper manner, you help to avoid possible hazards for the environment and public health.

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