# Radiator Ventilator Instruction Manual

# CONTENTS

## 2024 Radiator Ventilator Options

| Configuration | 2024 Option 1 Simple 3-Fan Ventilator | 2024 Option 2 Standard 3-Fan Ventilator | 2024 Option 3 Pro 3-Fan Ventilator | 2024 Option 4 Simple 5-Fan Ventilator | 2024 Option 5 Standard 5-Fan Ventilator | 2024 Option 6 Pro 5-Fan Ventilator |
|---|---|---|---|---|---|---|
| Image |  |  |  |  |  |  |
| Model Number | MXRV-S01 | MXRV-01 | MXRV-P01 | MXRV-S20 | MXRV-20 | MXRV-P20 |
| Dimensions | 300(L)×69(W)×30(T)mm | 300(L)×69(W)×30(T)mm | 300(L)×69(W)x30(T)mm | 470(L)×69(W)×30(T)mm | 470(L)×69(W)x30(T)mm | 470(L)×69(W)x30(T)mm |
| Max. Airflow | 30CFM or 51m³/h | 30CFM or 51m³/h | 6CFM ~ 60CFM (30CFM or 51m³/h at default setting) | 50CFM or 85m³/h | 50CFM or 85m³/h | 12CFM ~ 100CFM (50CFM or 85m³/h at default setting) |
| Nominal Voltage and Current | 5V-0.2A | 5V-0.2A | 12V-0.05A~12V-0.25A(12V-0.08A at default setting) | 5V-0.33A | 5V-0.33A | 12V-0.083A~12V-0.42A(12V-0.14A at default setting) |
| Power Consumption | 1W | 1W | 0.6W to 3W (1W at default setting) | 1.65W | 1.65W | 1W ~ 5W (1.65W at default setting) |
| Fan Bearing Type | Sleeve Bearing | Ball Bearing | Ball Bearing | Sleeve Bearing | Ball Bearing | Ball Bearing |
| Average Noise Level | 18dB | 20dB | 12dB ~ 33.9dB (20db at default setting) | 18dB | 20dB | 12dB ~ 33.9dB (20db at default setting) |
| Power Adapter | 5V/1A | 5V/2A | 12V/1.67A | 5V/1A | 5V/2A | 12V/1.67A |
| Max. Quantity of Daisy-Chained Ventilators | 5 | 10 | 7 to 33 (20 at default setting) | 3 | 5 | 4 to 20 (12 at default setting) |
| Thermostat Control | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Temperature Display | ✗ | ✓ | ✓ | ✗ | ✓ | ✓ |
| Adjustable Temperature Settings | ✗ | ✓ | ✓ | ✗ | ✓ | ✓ |
| 10 Adjustable Speed Levels | ✗ | ✗ | ✓ | ✗ | ✗ | ✓ |
| Smart Fan Speed Control | ✗ | ✗ | ✓ | ✗ | ✗ | ✓ |
| New Visual Design | ✗ | ✗ | ✓ | ✗ | ✗ | ✓ |

## 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.
• Keep the product away from moisture. Take care when cleaning the product or radiator 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. How to Install The Radiator Ventilator

**4.1 Type of radiators can be used for this ventilator**

1.Wide radiator ≥69cm
2.Narrow radiator <69cm
3.Single sided radiator
4.Convector
5.Other radiators

**4.2 Connect the ventilator to the radiator**
4.2.1 **Connect the ventilator to a wide radiator (plates ≥ 69 mm apart)**
1. Make sure that the ventilator faces upwards, put it between the radiator plates and the magnets will automatically stick to the radiator.
THIS SIDE UP





Radiator Width ≥69mm

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



Ventilator on the bottom of the radiator:



3. Connect the thermostat cable  and temperature sensor to the type C connectors on one side of the ventilator.

4. Attach the magnetic temperature sensor on the back of the radiator, close to the heated water supply pipe, or on the pipe itself.
5. Connect the power adapter with thermostat cable  to the wall socket .
6. On long radiators, connect additional ventilator with the 50cm extension connecting cable . Multiple ventilators can be connected to one power adapter. Additional temperature sensors or thermostat cable are not required.
7. Turn on your central heating system. Wait for the Radiator Ventilator 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. For the MXRV-01 and MXRV-P01 as well as the MXRV-20 and MXRV-P20 ventilator packages, 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 to the power after the thermostat controller and temperature sensor cables are properly connected to it, to make sure ventilator can be thermostat controlled.

**4.2.2. Connect the Radiator Ventilator to a narrow radiator (plates < 69 mm apart)**
1. Turn the adjustable magnets until the magnet is on top, 2 magnets on one side, and two on the other side.
2. Adjust the adjustable magnets to the correct width.
3. Repeat step 1 – 7 as for the wide radiator. Use the adjustable magnets to hang the Radiator Ventilator (A) between the plates.


Radiator <69mm
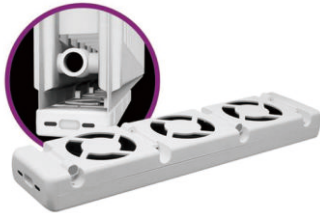
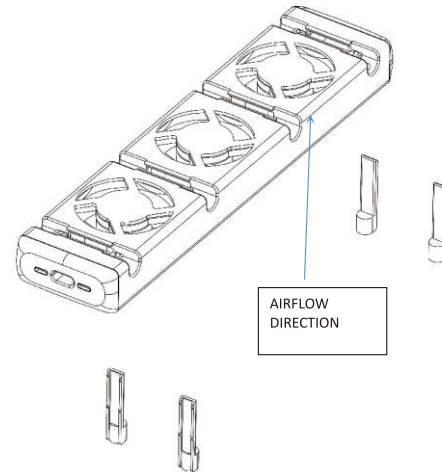**4.2.3. Connector the radiator ventilator to a single sided radiator**
1. Adjust all the adjustable magnets to the same side of the Radiator Ventilator, and make sure the magnets are at the edge.
2. Repeat step 1 – 7 as for the wide radiator.

One-Sided Radiator

**4.2.4. Connect the radiator ventilator to a convector**
1. Attach the feet by pushing them into the slots of the Radiator Ventilator.
2. Make sure that the Radiator Ventilator faces upwards.



AIRFLOW DIRECTION

3. Place the Radiator Ventilator on top of the convector and allow space between the convector sides and the Radiator Ventilator to reduce noise. The Radiator Ventilator can also be placed on the ground below the convector if space allows.
4. If the convector block is made of magnetic material, the temperature sensor can be easily positioned on it with its magnets. The temperature sensor can also be clamped between two plates of the convector block to ensure good heat transfer.

**4X**
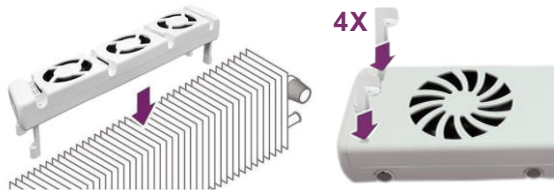
#### 4.2.5 For other radiators
1. Make the feet is vertical to the radiator fan. Put the radiator fan directly under the radiator. Make sure the fans face upwards.
2. Follow the steps of 5.2.1 steps 3-7 to make the ventilator working,



## 5.How to Maintain the Radiator Ventilator

**5.1 Cleaning the product**
The Radiator Ventilator and matching components can be cleaned if necessary.
**To clean the product:**
1. Clean the product with a vacuum cleaner, when dirty. **CAUTION!** Make sure to use the lowest power setting on the vacuum cleaner.
2. Clean the product with a damp cloth only if required. **CAUTION!** Make sure no water enters the Radiator Ventilator through the fans.
**5.2. Replacing components**
If any components break, they must be replaced. **CAUTION!** Do not attempt to open, modify or repair the product.
**To replace components:**
1. Exchange broken components, still under warranty, at the supplier. The

Radiator Ventilator has a ten 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.
2. Dispose of broken components that are not under warranty and buy new components.

## 6. Trouble Shooting

| Problem | Cause | Solution |
|---|---|---|
| Radiator Ventilator 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 does not fit at the bottom of the radiator. | There is too little space. | Place the Radiator Ventilator 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 still faces upwards. |
| The Radiator Ventilator need to be attached at the top of the radiator, but the radiator has a cover. | NA | Place the Radiator Ventilator underneath the cover. Keep in mind that this exposes the Radiator Ventilator to higher temperatures, which may slightly limit its lifespan. |
| The temperature sensor 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 may also be attached anywhere of the radiator. |
| Cannot fit the Radiator Ventilator between the wall and single plate radiator. | The space is usually too small (less than 70 mm). | 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 and position the product on the floor below the radiator. |
| Radiator Ventilator did not turn on after it was connected to the wall socket. | The temperature sensor is not reaching 32°C or more or the Radiator Ventilator is not receiving power. | ·  Make sure the radiator is at least 32 degrees.<br>·  Make sure that temperature sensor is attached to the warm water supply pipe or close by to this pipe on the radiator where it gets warm.<br>·  Make sure that the temperature sensor makes proper contact.<br>·  If the radiator does not heat up properly, vent the central heating system and consider doing hydronic balancing.<br>·  Make sure that the wall socket works and that the power adapter is properly inserted. |
| The Radiator Ventilator does not seem to increase the radiator heat output. | The Radiator Ventilator may be facing downwards. This causes the air to flow in the wrong direction; against rather than with the flow. | Turn the Radiator Ventilator over so that the Radiator Ventilator is facing upwards. |
| Do not save 30% on the energy bill. | The central heating system is not optimized enough or the central heating system has been functioning optimally before installation of the Radiator Ventilators. | Optimize the central heating system by distributing the Radiator Ventilators, adjusting the temperature set point and ensuring hydronic balancing.<br>If the central heating system has been functioning optimally before the installation of the Radiator Ventilators, it may not be possible to save 30%. User behavior can also have an impact on the maximum savings that can be achieved. |

| Old cast iron radiator or Single plate radiator with plate < 55 mm from wall. | Not one of the 5 types of radiators mentioned. | Attach the feet to the Radiator Ventilator and place on the floor under the radiator. |
|---|---|---|
| The Radiator Ventilator makes too much noise when placed on the convector. | This may be contact noise. | Move Radiator Ventilator to a even place. |
| The Radiator Ventilator does not turn off when the radiator is off / cold. | 1. The thermostat is not switching it off. 2.The environmental temperature is higher than the work temperature | 1. Make sure the Radiator Ventilator is properly connected to a thermostat and temperature sensor. 2.Make sure the air temperature is lower than the work temperature, or cut off the power if it is not needed. |

## 7. Disposal

**7.1. 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 conservation of natural resources. Therefore do not dispose of your old electrical and electronic equipment with the unsorted municipal waste.

**7.2. 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.

# SIMPLE VERSION RADIATOR VENTILATOR
## ----SPECIFICATION AND OPERATION INSTRUCTION

## For MXRV-S01 Series And MXRV-S20 Series

### 1. Main components

A                    B                 C                 D                 E
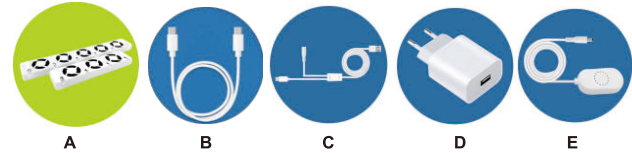
A. Radiator Ventilator
B. 50cm extension cable with Type C connector on both ends
C. 160cm power cable, with USB Type A connector to connect with power adapter, and USB Type C connector to connect with ventilator, and DC female connector to connect with the thermostat controller
D. Power adapter with USB connector
E. 100cm magnetic thermostat controller with builtin temperature sensor and male DC connector

### 2. Parameters

| SIMPLE 3-FAN VENTILATOR SPECIFICATION | |
|---|---|
| **Package** | **Electrical Parameters** |
| **Radiator Ventilator Single Set (A+C+D+E)** | Model: MXRV-S01 For power adapter: Power Input: 100-240V 50/60HZ AC 200MA Power Output: 5V/1A For radiator fan: Power Consumption: DC 5V 0.2A |
| **Extension Kit (A+B)** | Model: MXRV-S001 Power Consumption: DC 5V 0.2A |
| **Radiator Ventilator Multiple Set ("N"*A+("N"-1)*B+C+D+E)** | Model: MXRV-S0"N" For Power Adapter: Power Input:  100-240V 50/60HZ AC 350MA Power Output: 5V/1A For radiator fan: |

| | Power Consumption: DC 5V "**N**"*0.2A |
|---|---|

**Remark: "N"** means daisy-chainable radiator ventilator quantity.
          The power adapter in the package can power up to 5 ventilators maximum.
**Default Temperature:** 30 ℃
**Buffer Temperature:** 5℃
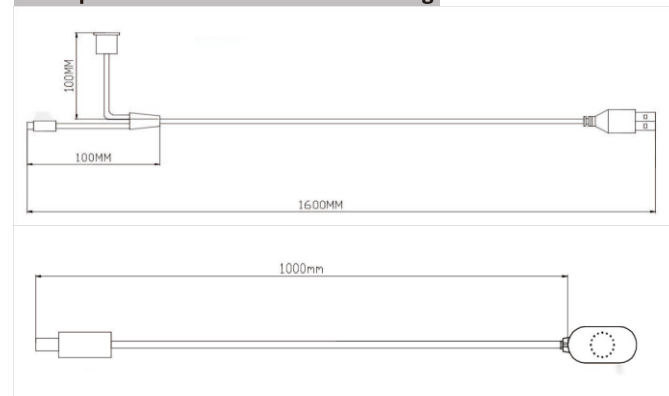**Working Temperature:**  30℃( ± 5 ℃)
**Operation Environment Temperature:** -10-70 ℃

| SIMPLE 5-FAN VENTILATOR SPECIFICATION ||
|---|---|
| **Package** | **Electrical Parameters** |
| **Radiator Ventilator Single Set (A+C+D+E)** | Model: MXRV-S201<br>For power adapter:<br>Power Input: 100-240V 50/60HZ AC 200MA<br>Power Output: 5V/1A<br>For radiator fan:<br>Power Consumption: DC 5V 0.33A |
| **Extension Kit (A+B)** | Model: MXRV-S2001<br>Power Consumption: DC 5V 0.33A |
| **Radiator Ventilator Multiple Set ("N"*A+("N"-1)*B+C+D+E)** | Model: MXRV-S20"**N**"<br>For Power Adapter:<br>Power Input:  100-240V 50/60HZ AC 200MA<br>Power Output: 5V/1A<br>For radiator fan:<br>Power Consumption: DC 5V "**N**"*0.33A |

**Remark: "N"** means daisy-chainable radiator ventilator quantity.
          The power adapter in the package can power up to 3 ventilators maximum.
**Default Temperature:** 30 ℃
**Buffer Temperature:** 5℃
**Working Temperature:** 30℃( ± 5 ℃)
**Operation Environment Temperature:** -10-70 ℃

## 3. Simple Thermostat Control Information

| Product Name | Simple Thermostat Controller Set |
|---|---|
| Feature | Power cable with separate simple Thermostat Controller with Built-in Temperature Sensor |
| Reference Picture | |
| For Package | For MXRV-S01 and MXRV-S20 Series |

## 4. Simple Thermostat Controller Setting



When the temperature sensor is not connected with the power cable, the ventilator will be always in working mode. When the temperature sensor is connected, the ventilator will work on temperature.

Thermostat (Default working temperature: 30 ℃, buffer temperature: 5℃, tolerance ±5℃)

Working Principle: When the detected temperature at the thermostat switch exceeds 30 (± 5) ℃, the thermostat switch activates, turning on the fan. When the temperature drops below 25 (± 5) ℃, the thermostat switch deactivates, and the fan stops operating.

Notice:

- The temperature range of 5 ℃ serves as a buffer zone. When the temperature decreases from 30 ℃ by 5 ℃, the buffer zone thermostat remains active, keeping the fan operational. Conversely, when the temperature rises from 25 ℃ by 5 ℃, the buffer zone thermostat remains deactive, keeping the fan in stop mode.
- The buffer temperature range is designed to prevent frequent fan activation/deactivation due to environmental fluctuations, thus prolonging the fan's lifespan.
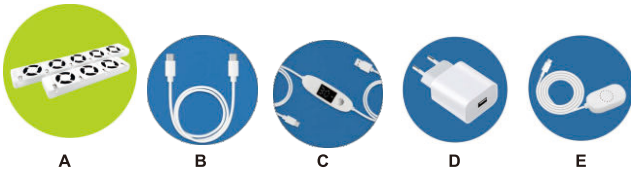
# STANDARD VERSION RADIATOR VENTILATOR
## ----SPECIFICATION AND OPERATION INSTRUCTION

## For MXRV-01 Series And MXRV-20 Series

### 1.Main components

A          B          C          D          E

A. Radiator Ventilator
B. 50cm extension cable with Type C connector on both ends
C. Thermostat controller cable, with a USB Type A connector on one end, and a USB Type C connector on the other end, total about 170cm
D. Power adapter with USB connector
E. 100cm Magnetic temperature sensor cable with USB Type C connector

### 2.Parameters

| STANDARD 3-FAN VENTILATOR SPECIFICATION ||
|---|---|
| **Package** | **Electrical Parameters** |
| **Radiator Ventilator Single Set (A+C+D+E)** | Model: MXRV-01<br>For power adapter:<br>Power Input: 100-240V 50/60HZ AC 350MA<br>Power Output: 5V/2A<br>For radiator fan:<br>Power Consumption: DC 5V 0.2A |
| **Single Radiator Ventilator for Extension (A+B)** | Model:MXRV-001<br>Power Consumption: DC 5V 0.2A |
| **Radiator Ventilator Multiple Set ("N"*A+("N"-1)*B+C+D+E)** | Model: MXRV-0"N"<br>For Power Adapter:<br>Power Input: 100-240V 50/60HZ AC 350MA<br>For radiator fan: |

| | Power Consumption: DC 5V "**N**"*0.2A |
|---|---|
| **Remark: "N"** means daisy-chainable  radiator ventilator quantity.<br>            The power adapter in the package can power up to 5 ventilators maximum.<br>**Operation Environment Temperature:** -10-70 ℃<br>**Thermostat Controller Adjustable Temperature Range:** 0-60 ℃ ||

| STANDARD 5-FAN VENTILATOR SPECIFICATION ||
|---|---|
| **Package** | **Electrical Parameters** |
| **Radiator Ventilator Single Set (A+C+D+E)** | Model: MXRV-201<br>For power adapter:<br>Power Input: 100-240V 50/60HZ AC 350MA<br>Power Output: 5V/2A<br>For radiator fan:<br>Power Consumption: DC 5V 0.33A |
| **Single Radiator Ventilator for Extension (A+B)** | Model:MXRV-2001<br>Power Consumption: DC 5V 0.33A |
| **Radiator Ventilator Multiple Set ("N"*A+("N"-1)*B+C+D+E)** | Model: MXRV-20"N"<br>For Power Adapter:<br>Power Input: 100-240V 50/60HZ AC 350MA<br>For radiator fan:<br>Power Consumption: DC 5V "**N**"*0.33A |
| **Remark: "N"** means daisy-chainable  radiator ventilator quantity.<br>            The power adapter in the package can power up to 5 ventilators maximum.<br>**Operation Environment Temperature:** -10-70 ℃<br>**Thermostat Controller Adjustable Temperature Range:** 0-60 ℃ ||

### 3.Thermostat Controller Set Information

| Product Name | Standard Version Thermostat Controller Set |
|---|---|
| Feature | Thermostat Controller with Temperature Display and Adjustable Buttons, Separate Temperature sensor |
| Reference Picture | |
| For Package | For MXRV-01 Series and MXRV-20 Series |

### 4.Standard Thermostat Controller Setting
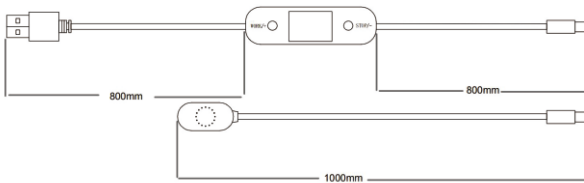
Normally, the display shows the temperature detected by the temperature sensor. If no temperature sensor is connected or the temperature sensor is not functioning, the display shows "00." the thermostat defaults to the WORK status, meaning the ventilator operates.

1. WORK temperature setting: Press and hold the left key (WORK/+) for 3 seconds to enter the WORK temperature setting. The temperature on the display screen will flash. The left key (WORK/+) is used to increase the temperature, and the right key (STOP/-) is used to decrease the temperature. Adjust the temperature by pressing these buttons. After setting, pause for 3 seconds without pressing any button. The temperature will be saved, and you will exit the setting interface, returning to the actual temperature display detected by the sensor. (Note: The default WORK temperature is set to 32°C. When the temperature detected by the sensor is ≥ 32°C, the thermostat will enter the WORK mode, and the fan will start running.)

2. STOP temperature setting: Press and hold the right key (STOP/-) for 3 seconds to enter the STOP temperature setting. The temperature on the display screen will flash. The left key (WORK/+) is for increasing the temperature, and the right key (STOP/-) is for decreasing the temperature. Adjust the temperature using these buttons. After setting, pause for 3 seconds without pressing any button. The temperature will be saved, and you will exit the setting interface, displaying the current temperature detected by the sensor. (Note: The default STOP temperature is set to 23°C. When the temperature detected by the sensor is ＜ 23°C, the thermostat will enter the STOP state, and the fan will stop working.)

3. Adjustable temperature range: The operating temperature range of the thermostat is between 0-60°C. (Notice: For the initial use, if the temperature detected is within 23°C-32°C, the thermostat defaults to the STOP status, meaning the fan does not run.)

4. The WORK temperature must be set higher than the STOP temperature. (For instance, if the WORK temperature is set to 30°C, the STOP temperature can be set to a maximum of 29°C.)

5. Reset: Hold both the WORK and STOP buttons for 3 seconds. The screen will display "88°C+WORK+STOP" and flash three times before returning to display the current temperature or showing "00" if no temperature is detected. The product will be reset to the default settings.

IMPORTANT: The temperature sensor and the thermostat controller must be plugged into the 2 USB Type C ports on the same side of the radiator ventilator, or else the radiator ventilator won't work on temperature.

# PRO VERSION RADIATOR VENTILATOR
## ----SPECIFICATION AND OPERATION INSTRUCTION

## For MXRV-P01 Series And MXRV-P20 Series

### 1. Main components
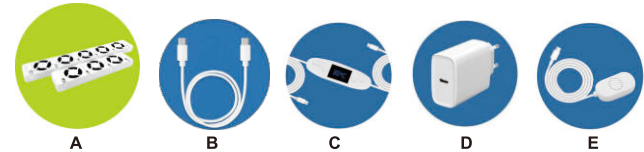


A. Radiator Ventilator
B. 50cm PWM extension cable with USB Type C connector on both ends
C. Pro thermostat controller cable, with USB Type C connector on both ends, total about 170cm
D. Power adapter with Type C connector
E. 100cm Magnetic temperature sensor cable with USB Type C connector

### 2. Parameters

| PRO 3-FAN VENTILATOR SPECIFICATION | |
| --- | --- |
| Package | Electrical Parameters |
| Radiator Ventilator Single Set (A+C+D+E) | Model: MXRV-P01<br>For power adapter:<br>Power Input: 100-240V 50/60HZ AC 600MA<br>Power Output: 12V/1.67A<br>For radiator fan:<br>Max Power Consumption: DC 12V 0.25A |
| Single Radiator Ventilator for Extension (A+B) | Model:MXRV-P001<br>Max Power Consumption: DC 12V 0.25A |
| Radiator Ventilator Multiple Set ("N"*A+("N"-1)*B+C+D+E) | Model: MXRV-P0"N"<br>For Power Adapter:<br>Power Input: 100-240V 50/60HZ AC 600MA |

| | For radiator fan:<br>Max Power Consumption: DC 12V "**N**"*0.25A |
|---|---|

**Remark: "N"** means daisy-chainable  radiator ventilator quantity.
          The power adapter in the package can power up to 7 ventilators maximum.
**Working Temperature:** -10-70 ℃
**Thermostat Controller Adjustable Temperature Range:** 0-60 ℃
**Levels of Speed:** 10 Levels

| PRO 5-FAN VENTILATOR SPECIFICATION | |
|---|---|
| **Package** | **Electrical Parameters** |
| **Radiator Ventilator Single Set (A+C+D+E)** | Model: MXRV-P201<br>For power adapter:<br>Power Input: 100-240V 50/60HZ AC 600MA<br>Power Output: 12V/1.67A<br>For radiator fan:<br>Max Power Consumption: DC 12V 0.42A |
| **Single Radiator Ventilator for Extension (A+B)** | Model:MXRV-P2001<br>Max Power Consumption: DC 12V 0.42A |
| **Radiator Ventilator Multiple Set ("N"*A+("N"-1)*B+C+D+E)** | Model: MXRV-P20"**N**"<br>For Power Adapter:<br>Power Input: 100-240V 50/60HZ AC 600MA<br>For radiator fan:<br>Max Power Consumption: DC 12V "**N**"*0.42A |
| **Remark: "N"** means daisy-chainable  radiator ventilator quantity.<br>          The power adapter in the package can power up to 3 ventilators maximum.<br>**Working Temperature:** -10-70 ℃<br>**Thermostat Controller Adjustable Temperature Range:** 0-60 ℃<br>**Levels of Speed:** 10 Levels | |

## 3. Pro Version Thermostat Controller Set Information

| Product Name | Pro Version Thermostat Controller Set |
|---|---|
| Feature | Thermostat Controller with Temperature Display and Adjustable Temperature and 10 Speeds Control,<br>Separate Temperature sensor |
| Reference Picture | |
| For Package | For MXRV-P01 and MXRV-P20 Series |

## 4. Pro Thermostat Controller Setting
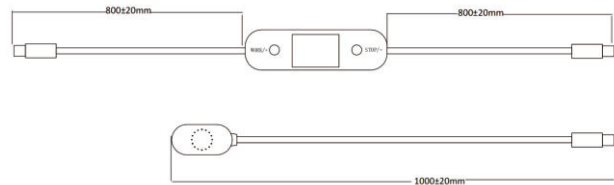


Normally the display of the thermostat controller shows the temperature detected by the temperature sensor. If the temperature sensor is not connected or damaged, the display shows "00", and the radiator ventilator will be in working state.

1.        WORK temperature setting: Press and hold the left button (WORK/+) for 3 seconds to enter the WORK temperature setting on the display. The temperature on the display will flash. Keep pressing the left button (WORK/+) to increase the temperature, and press the right button (STOP/-) to decrease the temperature. After setting the temperature, wait for 3 seconds without pressing any buttons to save the temperature and exit the setting interface, returning to the actual temperature detected by the temperature sensor. (Note: The default WORK temperature is 32℃. When the temperature detected by the temperature sensor is ≥ 32℃, the thermostat enters the WORK state and the fan starts to work.)

2.        STOP temperature setting: Press and hold the right button (STOP/-) for 3 seconds to enter the STOP temperature setting on the display. The temperature on the display will flash. Keep pressing the left button (WORK/+) to increase the temperature, and press the right button (STOP/-) to decrease the temperature. After setting the temperature, wait for 3 seconds without pressing any buttons to save the temperature and exit the setting interface, returning to the actual temperature detected by the temperature sensor. (Note: The default STOP temperature is 23℃. When the temperature detected by the temperature sensor is ＜ 23℃, the thermostat enters the STOP state and the fan stops working.)

3.        Adjustable temperature range: The adjustable temperature range of the thermostat is between 0-60℃.  (Note: If the temperature sensor is not connected or damaged, it defaults to the WORK state, meaning the fan operates, and the mode switches directly to manual speed adjustment mode. The display will show "00" blinking, and the fan speed can be adjusted directly by pressing the +/- buttons and the screen display the speed level. If there is no operation for 3 seconds, it will return to the "00" blinking interface. If temperature is detected again, it will return to the previous mode. If the previous mode was MANUAL mode, it will return to manual mode. If the previous mode was SMART mode, it will return to SMART mode.

4. Reset: Press and hold both the WORK and STOP buttons for 3 seconds to restore the thermostat controller to factory default settings. The display will show "88℃+WORK+STOP" blinking three times, then exit and display the currently detected temperature if connected to a temperature sensor, or "00" blinking if there is no temperature detected.

5. SMART mode for WORK: From the set WORK temperature, for every 2℃ increase, the fan speed increases by one level. There are a total of 10 speed levels. The subsequent temperature increase will also increase the speed level, with a maximum of 10 speed levels. The specific levels are as follows: For example, if the WORK temperature is default set to 32℃, the corresponding speed level goes with the rising temperature like following table:

| Temperature | Speed Level |
|---|---|
| 32℃ | 1 |
| 34℃ | 2 |
| 36℃ | 3 |
| 38℃ | 4 |
| 40℃ | 5 |
| 42℃ | 6 |
| 44℃ | 7 |
| 46℃ | 8 |
| 48℃ | 9 |
| 50℃ | 10 |

6. MANUAL speed adjustment. The fan speed can be manually set to 10 levels. When the actual temperature reaches the WORK temperature, the fan will operate according to the corresponding set level. Default speed level is 5.

7. Either SMART or Manual speed control can be selected. The default mode is manual speed adjustment mode with speed level 5 (When restoring to factory settings, the mode will also be restored to manual mode with speed level 5). The specific adjustment of speed levels is as follows: In the normal detected temperature display, press the WORK/+ button once to increase one speed level. The display will show the current speed level (e.g., 06) and blink the corresponding letter.  After reaching level 10, pressing the WORK/+ button will no longer increase the speed level. If there is no operation for 3 seconds, it will return to the actual temperature display. Conversely, pressing the STOP/- button will decrease the speed level. When reaching speed level 01, pressing the STOP/- button will no longer decrease the level.

8. To switch between SMART temperature-controlled speed adjustment mode and MANUAL speed adjustment mode, simultaneously press once the WORK/+ button and the STOP/- button. This will switch to the SMART temperature-controlled speed adjustment mode, and the WORK+STOP+℃ symbols will remain lit. In this mode, the thermostat will operate according to the automatic temperature-controlled speed adjustment mode. Pressing the WORK/+ button and the STOP/-

button simultaneously again will switch back to the manual speed adjustment mode, and the WORK+STOP symbols will turn off.

Notice: The WORK setting must always be higher than the STOP setting. For example, if the WORK temperature is set to 30℃, the highest STOP temperature that can be set is 29℃. It cannot be equal to 30℃. Conversely, if the STOP temperature is set to 23℃, the lowest WORK temperature that can be set is 24℃. If it needs to be lower, the STOP temperature must be lowered first, and then the WORK temperature can be adjusted further.

The temperature sensor can be connected to any USB Type C port of the ventilator, even that on the daisy-chained ventilators.