



ERV Wired remote controller MWR-VH12N

# ERV(Energy Recovery Ventilator) user manual



This manual is made with 100% recycled paper.

## imagine the possibilities

Thank you for purchasing this Samsung product.





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## **Safety Precautions**

This content is intended to protect the user's safety and prevent property damage. Please read it carefully for correct use of the product.

<b>⚠ WARNING</b>	Hazards or unsafe practices that may result in severe personal injury or death.
<b>A</b> CAUTION	Hazards or unsafe practices that may result in minor personal injury or property damage.
0	Follow directions.
$\bigcirc$	Do NOT attempt.
	Make sure the machine is grounded to prevent electric shock.
	Cut-off the power supply.
<b>®</b>	Do NOT disassemble.

#### FOR INSTALLATION



- The installation of this appliance must be performed by a qualified technician or service company.
  - ► Failing to do so may result in electric shock, fire, explosion, problems with the product, or injury.

You must connect the product with rated power upon installation.

► Failing to do so may result in problems with the product, electric shock, or fire.

## **Safety Precautions**

- On not install this appliance near a heater, inflammable material. Do not install this appliance in a humid, oily or dusty location, in a location exposed to direct sunlight and water (rain drops). Do not install this appliance in a location where gas may leak.
  - ▶ This may result in electric shock or fire.

#### FOR INSTALLATION

## **A** CAUTION

- Install the product on a hard and even place that can support its weight.
  - ▶ If the place cannot support its weight, the product may fall down and it may cause product damage.

#### FOR POWER SUPPLY



O not bend or pull the power cord excessively.

Do not twist or tie up the power cord.

► This may result in electric shock or fire.

#### **FOR OPERATION**

## **A** WARNING

- If the appliance generates a strange noise, a burning smell or smoke, stop the operation immediately and contact your nearest service center.
  - ▶ Failing to do so may result in electric shock or fire.

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- To reinstall the air conditioner, please contact your nearest service center.
  - Failing to do so may result in problems with the product, water leakage, electric shock, or fire.
  - ▶ A delivery service for the product is not provided. If you reinstall the product in another location, additional construction expenses and an installation fee will be charged.

If the malfunction diagnosis indicator appears or malfunctions, then stop operation immediately.

- ▶ If you detect any burning smells from the product or it malfunctions, then immediately turn off the ventilator(ERV) and power and then contact the service center. Continuing to use the device in this state can cause electrical shock, fire, or damage to the product.
- Do not attempt to repair, disassemble, or modify the appliance vourself.
  - ▶ This may result in electric shock, fire, problems with the product, or injury.

## **Safety Precautions**

#### **FOR OPERATION**

## **⚠** CAUTION

- Do not allow water to enter the product.
  - ▶ This may result in fire or electric shock.
- O Do not operate the appliance with wet hands.
  - ► This may result in electric shock.

Do not spray volatile material such as insecticide onto the surface of the appliance.

▶ As well as being harmful to humans, it may also result in electric shock, fire or problems with the product.

Do not apply a strong impact to the remote controller and do not disassemble the remote controller.

Do not use this product for other purposes.

▶ This product is designed to only be used as a ventilator(ERV).

Do not press the buttons with any sharp objects.

▶ This may result in electrical shock or part damage.

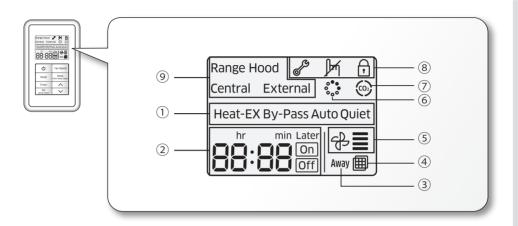
#### FOR CLEANING



- O Do not clean the appliance by spraying water directly onto it. Do not use benzene, thinner, alcohol or acetone to clean the appliance.
  - ▶ This may result in discoloration, deformation, damage, electric shock or fire.

# Name of each part

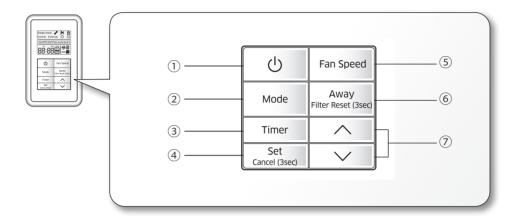
## Display



Classification	Indication	Function		
1)	Heat-EX By-Pass Auto Quiet	Displays operation mode		
2	hr min Later On Off	Displays set time		
3	Away	Displays Away mode		
4		Displays filter cleaning alarm		
(5)	#≣	Displays fan speed		
6	0°0 00°	Displays SPI (Optional)		
7	<b>©</b>	Displays CO <sub>2</sub> sensor (Optional)		
8		Displays inspection, invalid, and lock		
9	Range Hood Central External	Displays range hood, central control and external interlock		

# Name of each part

## Buttons



Classification	Button	Function			
1	Q	Power button	Turns on or off the wired remote controller.		
2	Mode	Mode button	Selects the mode you want to operate		
3	Timer	Schedule button	Sets the timer function.		
4	Set Cancel (3sec)	Set/Cancel button	Completes the timer function/ Cancels the timer function (Press the button for more than 3 seconds.)		
(5)	Fan Speed	Fan speed button	Adjusts the fan speed.		
6	Away Filter Reset (3sed)	Away/Filter reset button	Selects the Away mode/ Turns off the filter cleaning alarm indicator (Press the button for more than 3 seconds.)		
7	^_,	Time control button	Sets the On/Off timer.		

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## **Basic operation of ERV**

Press the **Mode** button to operate the basic operation.

#### Heat-EX mode

Collects cooling or heating energy generated by the indoor cooling or heating operation to reduce the energy loss during ventilation.

## By-Pass mode

Intakes outdoor air directly into the indoor room.

#### Auto mode

Indoor air can be refreshed automatically depending on contamination level of indoor air.

#### Quiet mode

Reduces the noise generated during the ERV operation.

## **Basic operation of ERV**



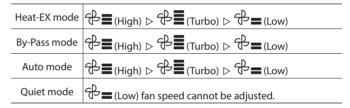
Press the button to start ERV operation.

#### Press the button to select operation mode.

When all the options of ERV are selected, the operations like below become available. (Setting is available with installation of wired remote controller.)



#### Press the Fan Speed button to adjust the fan speed.



\* However, after CO₂ sensor is installed to the ERV, the fan speed can be adjusted as ♣ (High) ▷ ♣ (Turbo) ▷ ♣ (Auto) ▷ ♣ (Auto) ▷ ♣ (Low) (Exception: Quiet mode and Away mode)

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## **Away operation**

Away mode enables the ERV to operate when you are out.

Press the Fitter Reset (39ec) button to select the Away mode.



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- The Away mode is cancelled if the operation mode is changed by another controller.
- ▶ When ERV stops operation, only 'Away' will be displayed.
- ► Fan speed is fixed as Low and it cannot be adjusted.

## Filter reset

Heat-EX



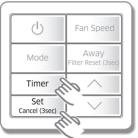
When maindicator is displayed, clean the filter and insert the filter back. After inserting the filter back, press the AND button for more than 3 seconds to reset the filter timer.

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## On timer function

#### When the FRV is turned off





- 1. Press the Timer button to set On time.
- ▶ When you press the **Timer** button one time, set time blinks.
- You can set the time in half hour unit from 30 minutes ~ 3 hours and hour unit from 3~24 hours with the (△) and (▽) button.
- 2. Press the Set button to complete the timer setting.
- When you press the Set button, set time stops blinking and then is displayed.
- ➤ Timer setting is cancelled if you don't press the **Set** button within 3 minutes after setting the time. Therefore, check that the timer setting is completed correctly.

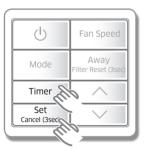
Cancel Press the **Set** button for more than 3 seconds.

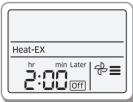


- The On timer can be set only when the ERV is turned off.
- When the external interlock function is not supported, simple timer function can be used.

## Off timer function

#### When the ERV is turned on





- 1. Press the Timer button to set Off time.
- ▶ When you press the **Timer** button one time, set time blinks.
- ▶ You can set the time in half hour unit from 30 minutes~3 hours and hour unit from 3~24 hours with the (∧) and (∨) button.
- 2. Press the Set button to complete the timer setting.
- When you press the Set button, set time stops blinking and then is displayed.
- Timer setting is cancelled if you don't press the Set button within 3 minutes after setting the time. Therefore, check that the timer setting is completed correctly.

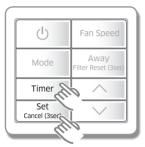
Cancel Press the **Set** button for more than 3 seconds.



- The Off timer can be set only when the ERV is turned on.
- When the external interlock function is not supported, simple timer function can be used.

## **Delayed On timer function**

#### When the ERV is turned off





- 1. Press the Timer button to set delayed On time.
- ▶ When you press the **Timer** button one time, set time blinks.
- You can set the time in minute unit from 30 minutes to 1 hour with the (△) and (▽) button.
- 2. Press the Set button to complete the setting.
- ▶ When you press the **Set** button, set time stops blinking and the setting is completed.
- ➤ Timer setting is cancelled if you don't press the **Set** button within 3 minutes after setting the time. Therefore, check that the timer setting is completed correctly.

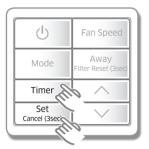
Cancel Press the Set button for more than 3 seconds.



- The delayed On timer function can be set only when the ERV is turned off.
- When the wired remote controller is connected with indoor units and ERVs, delayed timer function can be used with external interlock function.
- After the delayed time setting is saved, the setting remains even
  if the wired remote controller is reset. If you want to cancel the
  delayed time setting, press the Cancel button.

## **Delayed Off timer function**

#### When the FRV is turned on





#### 1. Press the Timer button to set delayed Off time.

- ▶ When you press the Timer button one time, set time blinks.
- You can set the time in minute unit from 30 minutes to 1 hour with the (△) and (▽) button.

#### 2. Press the Set button to complete the setting.

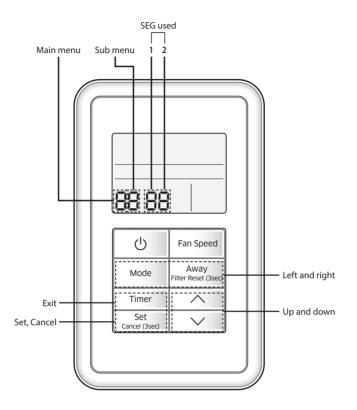
- When you press the Set button, set time stops blinking and the setting is completed.
- ➤ Timer setting is cancelled if you don't press the **Set** button within 3 minutes after setting the time. Therefore, check that the timer setting is completed correctly.

Cancel Press the **Set** button for more than 3 seconds.



- The delayed Off timer function can be set only when the ERV is turned on.
- When the wired remote controller is connected with indoor units and ERVs, delayed timer function can be used with external interlock function.
- After the delayed time setting is saved, the setting remains even
  if the wired remote controller is reset. If you want to cancle the
  delayed time setting, press the Cancel button.

## Setting additional functions of ERV wired remote controller (Detailed settings)



- ▶ You will enter the detailed setting mode and main menu is displayed.
- Refer to the list of detailed settings for your ERV wired remote controller on the next page, and select the desired menu.
- ▶ Using the ^/∨ buttons, select a main menu number and press the **Away** button to enter the sub-menu setting screen.
- ▶ When you enter the setting stage, the current setting is displayed.
- ▶ Refer to the chart for data settings.
- ▶ Using the ∧/∨ buttons, select the settings and press the **Away** button to move to the next setting.
- ▶ Press the **Set** button to save the settings and exit to the sub-menu setting screen.
- ▶ Press the **Timer** button to exit to normal mode.



- While setting the data, press the **Mode** or **Away** button to move the digit of SEG.
- If you press the **Timer** button while your are setting data, you can exit to the sub-menu setting stage without saving your changes.

# Setting additional functions of ERV wired remote controller (Detailed settings)

Main menu	Sub menu	Function		Factory setting	Page	Range	Remarks
0	1	Reset to d	0	1	0-Disuse, 1-Reset		
	1		All lock	0	1	0-Unlock, 1-Lock	
1	2	Partial key lock	Lock of operation On/Off key	0	1	0-Unlock, 1-Lock	
	3		Lock of mode selection key	0	1	0-Unlock, 1-Lock	
	4		Lock of fan speed key	0	1	0-Unlock, 1-Lock	
	5		Lock of timer setting key	0	1	0-Unlock, 1-Lock	

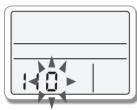
#### Example of locking all buttons



- ► When main menu is displayed, press the ∧ or ∨ button to select no.1.



- Press the Away button to select the number you will set on the sub menu.
- ▶ Press the ∧ or ∨ button to select no.1



- 3. Press the Away button to enter the data setting stage.
- ▶ When you enter the setting stage, the current setting is displayed.



- 4. Press the  $\wedge$  or  $\vee$  button to select no.1
- ► The option of ERV wired remote controller is set from "Unlock all buttons" to "Lock all buttons".
- 5. Press the Set button to complete the option settings.
- ▶ Save the setting value and exit to sub menu.
- 6. Press the Timer button to exit to normal mode.