



Lossnay Energy Recovery Ventilator



MODELS:

LGH-F110MXL-E

LGH-F110MXR-E

Operating Instructions

For the user

Please read this manual carefully before use for proper and safe use.

Do not attempt to install the product by yourself.

- This product is for residential use.
- To ensure correct and safe use, read the instruction manual thoroughly.
Before using the product, check Safety Precautions to use it correctly and safely.
- After reading, store the manual in a handy location for easy access.

Safety precautions

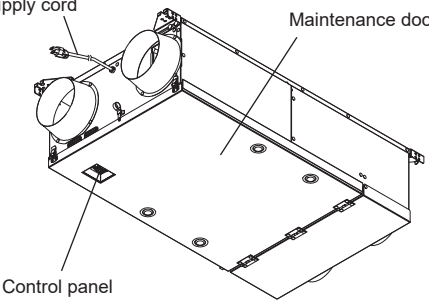
The following signs indicate that death or serious injury may be caused by failure to heed the precautions described below.

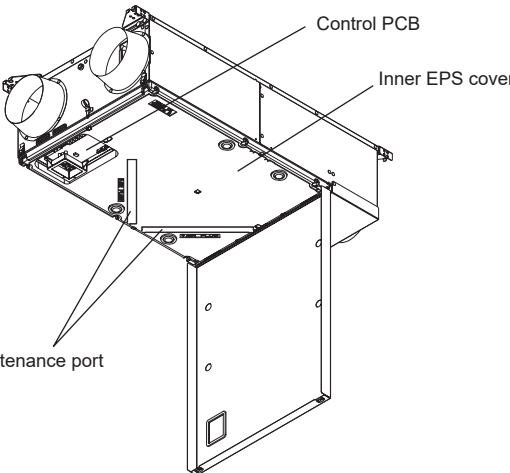
 WARNING	Incorrect handling could cause serious injury or death.
 Prohibited	Do not turn the unit on or off when flammable gas has leaked. It could catch fire or cause explosion with sparks released from electrical components. Open windows to ventilate.
 Do not disassemble	Do not modify or disassemble. It could cause fire, electric shock or injury.
 Do not wet	Do not apply water to the unit and remote controller. Electric shock can result.
 Do not touch	Do not poke your fingers or sticks into the air intake or outlet while the product is operating. Failure to heed this warning may result in injury.
 Wet hands prohibited	Do not operate with wet hands. Electric shock can result.
 The instructions given must be followed.	Use the specified power supply and voltage. Use of incorrect power supply or voltage could cause fire or electric shock.
	Make sure to turn the breaker OFF or unplug the power supply cord of the unit before starting maintenance. It could cause electric shock or injury if it is turned on.
	When any abnormal conditions (burning smell, water leakage, or others) are observed, stop operation, turn off the power supply breaker and consult your dealer. Continuing operation under such conditions could cause electric shock, fire, or damage.
	When unplugging the power supply cord, do not touch the metal part of the plug. It could cause electric shock or injury. After disconnecting the power, do not touch the product until the LED on the control panel turns off. Electric shock can result.

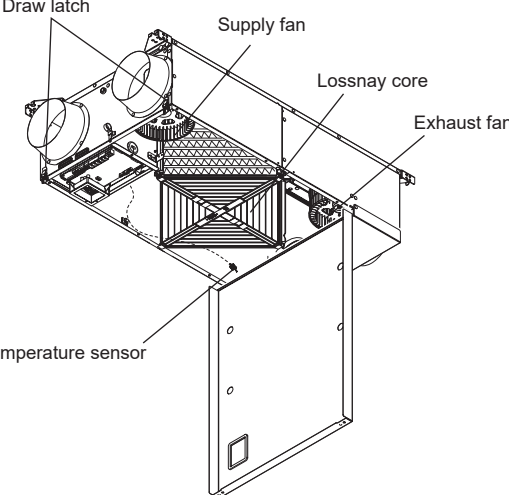
Safety precautions

 CAUTION Incorrect handling could cause injury or damage to property or household effects.	
 Prohibited	Do not place a burning appliance in a place where it is exposed directly to the wind from the Lossnay unit. It could cause an accident as a result of incomplete combustion.
	Do not use in a place where exposed to high temperatures (104 °F (40 °C) or higher), naked flames, or in an environment with heavy fumes. It could cause fire.
	Check that the power plug is free of dust and make sure it is inserted all the way to the base of the prongs to prevent loosening. It could malfunction.
 The instructions given must be followed.	Securely install parts after maintenance. It could cause injury if parts fall.
	Put on gloves during maintenance. It could cause injury.
	Make sure to turn the breaker OFF or unplug the power supply cord of the unit when it is not used for a long period of time. It could cause electric shock, power leakage, or fire as a result of deteriorated insulation.
	When the outdoor temperature becomes lower than 14°F (-10°C), the supply fan starts intermittent defrosting or sensing operation. 14°F (-10°C) to 5°F (-15°C) : Intermittent defrost operation Lv.1 10 min OFF, 60 min ON 5°F (-15°C) to -13°F (-25°C) : Intermittent defrost operation Lv.2 4 min OFF, 18 min ON + 8 min OFF each 6 cycles -13°F (-25°C) or less : Intermittent sensing operation 55 min OFF, 5 min ON
	This appliance is not intended for use by persons (including children) with reduced physical sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

Names of the parts







These pictures show LGH-F110MXR-E.

LGH-F110MXL-E has a symmetrical structure to the LGH-F110MXR-E, so the following instructions apply to both.

Filter	Filter model name	ASHRAE 52.2-2017
Standard filter	PZ-F110RF-E	MERV 10
Optional high efficiency filter	PZ-F110MF-E	MERV 14

Control panel

Operation mode selection

OFF	Stops the operation
External	ON/OFF interlocked with external device (Remote controller, M-NET, or Thermostat)
CN105	Unavailable * Stops the operation
ON	Starts in accordance with the panel settings

Operation indication LED 1 (green)

Unlit	Unit stopping
Lit	Unit running
6 Blinks	Defrost or sensing operation under 5°F (-15°C)
0.5 sec ON/ 0.5 sec OFF	Maintenance Stand-by operation
2 sec ON/ 2 sec OFF	Trial operation

Power indication LED 2 (red)

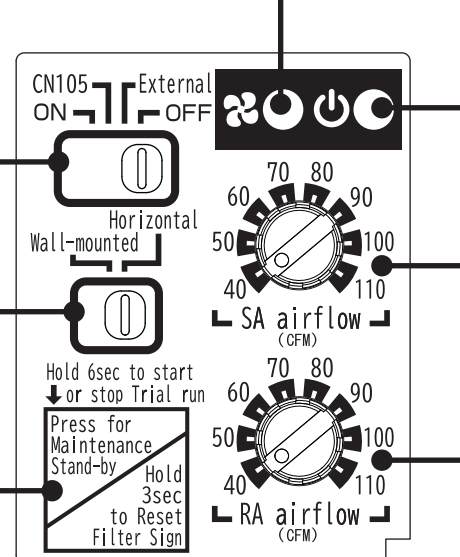
Unlit	No power is supplied
Lit	Power is supplied
1 sec ON/ 1 sec OFF	Starting up
2 sec ON/ 1 sec OFF	Filter maintenance sign
5 Blinks	Filter maintenance sign was just reset

Installation direction selection

Horizontal
Wall-mounted

Maintenance switch

Single push	Starts Maintenance Stand-by operation (3 hours) to defrost and dry inside the unit before opening the maintenance door
3 sec hold	Resets the filter maintenance sign after replacing the filter
6 sec hold	Starts trial run, when held again, the trial run stops



Error indicator information on LED 2

Number of blinks	Error details
1	Supply motor error
2	Exhaust motor error
4	Thermistor error
7	Supply voltage fault
8	Pre-heater error
9	Communication error
10	Function setting fault
11	RC overcurrent
12	CO ₂ sensor error
13	M-NET error

Airflow selection switch

Supply and Return airflow can be selected independently.

* Air volume can be set in increments of 10 CFM, and air volume does not change between each number.

CAUTION

- When the outdoor air temperature drops lower than 14°F (-10°C), or external devices or sensors are connected, air volumes selected on the control panel are not always the same as actual air volume.

Operation

Cold region operation

Supply fan operation at low outdoor temperatures

Outdoor temperature	Installation direction selection switch on the control panel		LED 1 (green)
	Horizontal	Wall-mounted	
>14°F (-10°C)	Continuous operation		Continuous lighting
14°F (-10°C) to 5°F (-15°C)	Intermittent defrost operation Lv.1 10 min OFF, 60 min ON		
5°F (-15°C) to -13°F (-25°C)	Intermittent defrost operation Lv.2 4 min OFF, 18 min ON + 8 min OFF each 6 cycles	Intermittent sensing operation 55 min OFF 5 min ON	6 Blinks * Refer to the following cautions if maintenance is necessary during these operations.
< -13°F (-25°C)	Intermittent sensing operation 55 min OFF, 5 min ON		

* The exhaust fan keeps continuous operation.

* For safety reasons, the fan may operate at an airflow different from the value set via the control panel dial.

* Due to changes in airflow during the above protective operations, noise levels may fluctuate or increase.

CAUTION

- During Intermittent defrost operation Lv.2 and Intermittent sensing operation, do not open the maintenance door until the Maintenance Stand-by operation has finished.
It could cause water to drip from the unit.
- Maintenance Stand-by operation to defrost and dry inside the unit is required before performing maintenance when LED1 (green) blinks six times.
* By pushing the Maintenance switch on the control panel, this operation can be started manually to prepare for maintenance. Open the maintenance door after the 3-hour Maintenance Stand-by operation.
* During this operation, the supply fan will stop to defrost and dry inside the unit, and LED 1 (green) will blink for 0.5 sec ON and 0.5 sec OFF.
* Condensation water may remain inside the Lossnay unit even after 3-hour Maintenance Stand-by operation, so when performing maintenance, remove any water and make sure it does not fall into the surrounding area.
* After a total of 80 hours of Intermittent defrost operation Lv.2, 3-hour Maintenance Stand-by operation will be performed automatically to defrost and dry inside the unit for protection.
- The pressure ports on the Lossnay unit can be used to discharge drain water to prevent water from getting into live parts if the outdoor temperature remains extremely low for a long time.

Maintenance

Replace air filters at regular intervals in order to prevent a deterioration in the Lossnay functions. The filters are disposable.

Guideline: Replace the air filters at the following intervals (or when indicated on LED 2 or on the remote controller).

	Dust concentration ($\mu\text{g}/\text{m}^3$)		Recommended replacement interval			
			Standard filter PZ-F110RF-E		Optional high efficiency filter PZ-F110MF-E	
	PM2.5	PM10	70 CFM	110 CFM	70 CFM	110 CFM
Air Condition 1	6.0	13.0	24 months	12 months	10 months	5 months
Air Condition 2	8.0	20.0	16 months	8 months	7 months	3 months
Air Condition 3	20.0	55.0	6 months	3 months	2 months	1 month

Recommended replacement intervals vary depending on air conditions, filter types, and airflow selection. (The unit automatically adjusts the accumulated operating time based on the actual airflow. However, since the values in the function settings are predicated on a 110 CFM airflow, convert the estimated maintenance interval for your specific airflow into the equivalent value for 110 CFM.) Refer to the installation manual for adjusting the filter maintenance sign interval according to the air conditions or filter types.

! WARNING

- **Make sure to unplug the power supply cord or turn off the power supply breaker before starting maintenance.**
Electric shock or injury can result.
- **After disconnecting the power, do not touch the product until the LED on the control panel turns off.**
Electric shock can result.

! CAUTION

- **Put on gloves during maintenance.**
It could cause injury.
- **Securely install parts after maintenance.**
It could cause injury if parts fall.

Note:

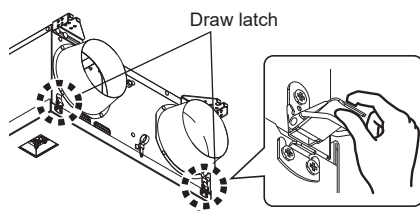
- Remove any remaining condensation water inside the Lossnay unit while performing maintenance, and make sure it does not fall into the surrounding area.
- The Lossnay unit tries to maintain the air volume selected on the control panel (Constant airflow control), so if the filters or duct are clogged, noise from the unit increases. Replace the filters in the Lossnay unit according to the following instructions and keep the duct system clean.
- If the Operation mode selection switch is set to "OFF" for maintenance, make sure to return it to its original setting.

Replacing the filters

The following instructions can be performed for both horizontal and wall-mounted installation.

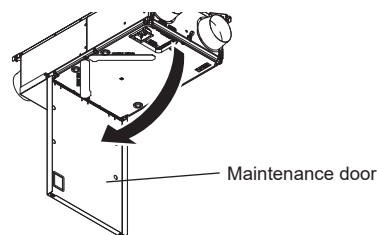
1) Open the maintenance door

1. Release the two latches.



2. Open the maintenance door.

* Do not apply excessive force to the maintenance door or hang from it.



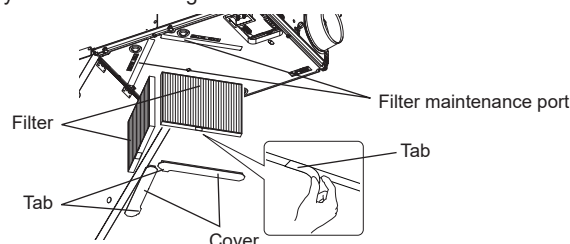
2) Remove the air filters

1. Pinch the tab to remove the covers from the filter maintenance port.

2. Remove the filters from the unit.

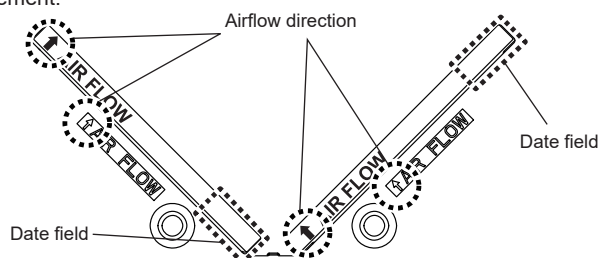
Pinch the tab to remove or attach the filters.

* Dust may fall when removing the covers or filters.



3) Insert new air filters

Insert the filters into the filter port so that the airflow direction indicated on the filter aligns with the airflow direction marked on the inner EPS cover. Writing the start date of use on the filter is recommended for the next replacement.



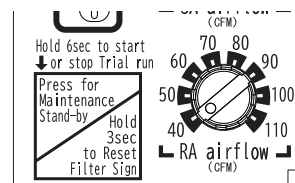
4) Reassembly after maintenance

Pinch the tab to attach the covers to the filter maintenance port, and close the maintenance door.

* Make sure to fix the two latches after maintenance.

Note:

- If the icon  is displayed on the remote controller or if LED 2 blinks to indicate the filter maintenance sign, clear the indication after replacement by holding the Maintenance switch for 3 seconds to reset the filter sign.
- The maintenance sign can also be reset from the Lossnay remote controller.



After-sales servicing

Consult with your dealer about the after-sales services provided for this Lossnay product.

If you hear strange sounds, if no air is blown out, or if some other trouble occurs, switch off the power and contact your dealer. Consult with your dealer concerning the cost of inspection or repair work.

■ Recommended inspection and maintenance

After several years of use, the following might occur. We recommend inspection and maintenance by a qualified professional.

- Entry of dust due to deterioration of the filters
- Abnormal noise or vibration due to the motor reaching the end of its service life
- Air leakage due to the Lossnay core reaching the end of its service life

The following are consumables: Motor/Supply air filter/Exhaust air filter/Lossnay core/Circuit board/Thermistor

■ Repair costs include technical fees, the cost of parts, (and business trip charges), etc.

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