

# OWNER'S MANUAL

Please read this manual carefully before operating your set and retain it for future reference.

VENTILATOR Original instruction

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For more information, Refer to the CD or LG Web site (www.lg.com).



P/NO: MFL67870404

ESPAÑOL

LIMBA ROMÂNI

Ventilator Owner's Manual

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# FOR YOUR RECORDS

Write the model and serial numbers here:

#### Model #

#### Serial #

You can find them on a label on the side of each unit.

#### Dealer's Name

#### Date Purchased

Staple your receipt to this page in the event you need it to prove date of purchase or for warranty issues.

# READ THIS MANUAL

Inside you will find many helpful hints on how to use and maintain your ventilator properly. Just a little preventive care on your part can save you a great deal of time and money over the life of your Ventilator.

You'll find many answers to common problems in the chart of check item prior to notify a failure. If you review our chart of

Check item prior to notify a failure, you may not need to call for service at all.

# PRECAUTION

- Contact the authorized service technician for repair or maintenance of this unit.
- Contact the installer for installation of this unit.
- The ventilator is not intended for use by young children or invalids without supervision.
- Young children should be supervised to ensure that they do not play with the ventilator.
- When the power cord is to be replaced, replacement work shall be performed by authorized personnel only using only genuine replacement parts.
- Installation work must be performed in accordance with the National Electric Code by qualified and authorized personnel only.



# **Safety Precautions**

To prevent injury to the user or other people and property damage, the following instructions must be followed.

Incorrect operation due to ignoring instruction will cause harm or damage. The seriousness is classified by the following indications.

 WARNING
 This symbol indicates the possibility of death or serious injury.

 ACAUTION
 This symbol indicates the possibility of injury or damage.

Meanings of symbols used in this manual are as shown below.

$\bigcirc$	Be sure not to do.
	Be sure to follow the instruction.
4	Risk of electric shock
NOTICE	Special note

# 

Installation		
Do not use a defec- tive or underrated circuit breaker. Use this appliance on a dedicated circuit.	For electrical work, contact the dealer, seller, a qualified elec- trician, or an Autho- rized Service Center.	Always ground the product.
There is risk of fire or electric shock.	<ul> <li>Do not disassemble or repair the product.</li> <li>There is risk of fire or electric shock.</li> </ul>	There is risk of fire or electric shock.
Install the panel and the cover of control box securely.	Always install a dedi- cated circuit and breaker.	Use the correctly rated breaker or fuse.
There is risk of fire or electric shock.	<ul> <li>Improper wiring or installation may cause fire or electric shock</li> </ul>	There is risk of fire or electric shock.

Safety Precautions			
Do not modify or extend the power cable.		all, remove, the unit by istomer).	Be cautious when unpacking and installing the product.
<ul> <li>There is risk of fire or electric shock.</li> </ul>	<ul> <li>There is ris electric sho sion, or inju</li> </ul>	ock, explo-	Sharp edges could cause injury. Be espe- cially careful of the case edges and the fins on the condenser and evaporator.
For installation, always contact the dealer or an Autho- rized Service Center.	Do not ins product of tive install stand.	n a defec-	Do not let the ventilator run for a long time when the humidity is very high and a door or a window is left open.
• There is risk of fire, electric shock, explo- sion, or injury.	<ul> <li>It may cause accident, or the produce</li> </ul>	or damage to	Moisture may con- dense and wet or dam- age furniture.
For re-installation of the installed product, always contact the dealer or an Autho- rized Service Center.	Do not op maintenar of the mai during op	nce cover n body	Use the outdoor air suction hole with the net installed to ensure that birds could not come in.
There is risk of fire, electric shock, explo- sion or injury.	Otherwise, cause elec shock.		Remove estrange things like the bird's nest. Otherwise, it may cause scarcity of indoor oxygen.
Install the air intake whether the set of th			oduct a place that its weight.
<ul> <li>It may cause various action during suffacetion during</li> </ul>			may cause accident

- including suffocation, due to the suction of harmful gasses(CO, etc.)
- due to falling of the product.

Operation		
Take care to ensure that power cable could not be pulled out or damaged dur- ing operation.	Do not place any- thing on the power cable.	Do not plug or unplug the power supply plug during operation.
There is risk of fire or electric shock.	There is risk of fire or electric shock.	There is risk of fire or electric shock.
Do not touch(oper- ate) the product with wet hands.	Do not place a heater or other appli- ances near the power cable.	Do not allow water to run into electric parts.
<ul> <li>There is risk of fire or electrical shock.</li> </ul>	<ul> <li>There is risk of fire and electric shock.</li> </ul>	<ul> <li>It may cause There is risk of fire, failure of the product, or electric shock.</li> </ul>
Do not store or use flammable gas or combustibles near the product.	When flammable gas leaks, turn off the gas and open a win- dow for ventilation before turn the prod- uct on.	If strange sounds, or small or smoke comes from product. Turn the breaker off
There is risk of fire or failure of product.	• Do not use the tele- phone or turn switches on or off. There is risk of explosion or fire	There is risk of electric shock or fire.
Stop operation and close the window in storm or hurricane. If possible, remove the product from the window before the hurricane arrives.	When the product is soaked (flooded or submerged), contact an Authorized Ser- vice Center.	Be cautious that water could not enter the product.
There is risk of property damage, failure of product, or electric shock.	There is risk of fire or electric shock.	There is risk of fire, electric shock, or prod- uct damage.

Turn the breaker off when cleaning or maintaining the product.	When the p not be used long time, o nect the po ply plug or the breaked	d for a discon- wer sup- turn off	Avoid fire equipment
<ul> <li>There is risk of electric shock.</li> </ul>	There is risl damage or unintended	failure, or	<ul> <li>There is risk of fire.</li> </ul>
Don't touch a dedicated breaker with wet hands			stool or ladder when or maintaining the rod-
There is risk of electric short of the	nock.	• Be careful	and avoid personal injury.

■ Installation ───		
Installation		
Use two or more people to lift and transport the prod- uct.	Do not install the product where it will be exposed to sea wind (salt spray) directly.	Do not install the ventilation unit alone for controlling room temperature.
<ul> <li>Avoid personal injury.</li> </ul>	<ul> <li>It may cause corrosion on the product. Corro- sion, particularly on the condenser and evapo- rator fins, could cause product malfunction or inefficient operation.</li> </ul>	<ul> <li>If this is needed, install with another Indoor unit (air conditioner).</li> </ul>

## Operation

Do not expose the skin directly to cool air for long periods of time. (Don't sit in the draft.)

• This could harm to your health.

Do not use the product for special purposes, such as preserving foods, works of art, etc. It is a consumer ventilator, not a precision refrigeration system.

• There is risk of damage or loss of property.

Use a soft cloth to clean. Do not use harsh detergents, solvents, etc.

• There is risk of fire, electric shock, or damage to the plastic parts of the product.

# Do not step on or put anyting on the product. (outdoor units)

- There is risk of personal injury and failure of product.
- Use a firm stool or ladder when cleaning or maintaining the product.
- · Be careful and avoid personal injury.

# **Prior to Operation**

# Preparing for operation

- 1. Contact an installation specialist for installation.
- 2. Plug in the power plug properly.
- 3. Use a dedicated circuit.
- 4. Do not use an extension cord.
- 5. Do not start/stop operation by plugging/unplugging the power cord.
- 6. If the cord/plug is damaged, replace it with only an authorized replacement part.

## Usage

- Being exposed to direct airflow for an extended period of time could be hazardous to your health. Do not expose occupants, pets, or plants to direct airflow for extended periods of time.
- 2. Due to the possibility of oxygen deficiency, ventilate the room when used together with stoves or other heating devices.
- Do not use this ventilator for non-specified special purposes (e.g. preserving precision devices, food, pets, plants, and art objects). Such usage could damage the items.
- 4. This unit cannot control room temperature. If this is needed, do not install the ventilation unit alone, but rather install another indoor unit.

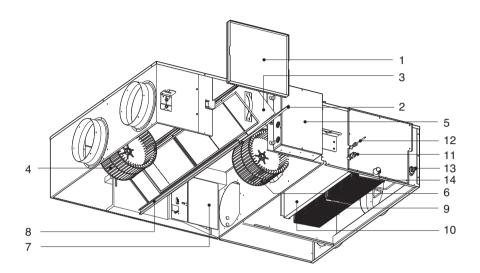
## Cleaning and maintenance

- 1. Do not touch the metal parts of the unit when removing the filter. Injuries can occur when handling sharp metal edges.
- 2. Do not use water to clean inside the ventilator. Exposure to water can destroy the insulation, leading to possible electric shock.
- 3. When cleaning the unit, first make sure that the power and breaker are turned off. The fan rotates at a very high speed during operation. There is a possibility of injury if the unit's power is accidentally triggered on while cleaning inner parts of the unit.

## Service

For repair and maintenance, contact your authorized service dealer.

# Introduction



#### 1. Maintenance cover

#### 2. Air Filter

Prevents clogging of the Total heat exchanger due to dust.

## 3. Total Heat Exchanger

Exchanges temperature and moisture between supply air and exhaust air.

#### **4. Blower for Exhaust Air** A blower for draining polluted air outside.

5. Electronic Parts Box (Control box)

#### 6. Blower for Supply Air

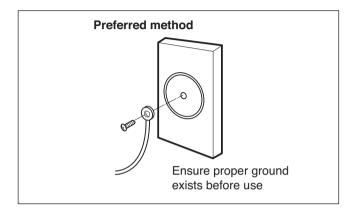
A blower for induction outside air.

- 7. Bypass Damper Converts the ventilation via Total heat exchange to the normal ventilation.
- 8. Holder for Total Heat Exchanger Used for installation guide of the Total heat exchanger.
- 9. Humidifier Element
- 10. Direct expansion coil (DX Coil)
- 11. Gas pipe connection (Ø12.7)
- 12. Liquid pipe connection (Ø6.35)
- 13. Feed water connection port (Ø6.35)
- 14. Drain outlet (Ø25.4)

# **Electrical Safety**

## WARNING: This appliance must be properly grounded.

To minimize the risk of electric shock, you must always plug into a grounded outlet.





WARNING: Do not cut or remove the grounding prong from the power wire.



WARNING: Attaching the adapter ground terminal to the wall receptacle cover screw does not ground the appliance unless the cover screw is metal and not insulated, and the wall receptacle is grounded through the house wiring.



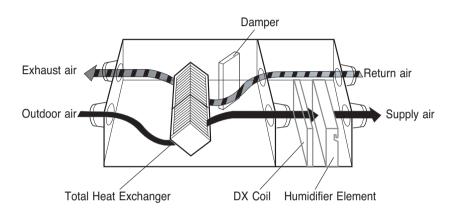
WARNING: If you have any doubt whether the ventilator is properly grounded, have the wall receptacle and circuit checked by a qualified electrician.

# Characteristics

## Ventilation via Total Heat Exchanger

#### Exhausts indoor air via the Total Heat Exchanger outdoor.

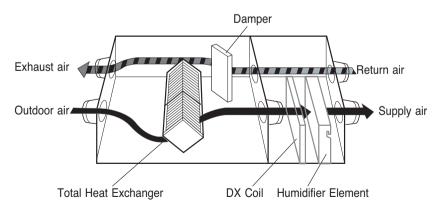
• The outdoor air heat exchanged is supplied to indoor. Operate the ventilator in the **Ventilation via Total heat exchanger** in summer/winter when cool/heat operation is done.



## Normal Ventilation

# Exhausts the polluted indoor-air directly without via the Total Heat Exchanger.

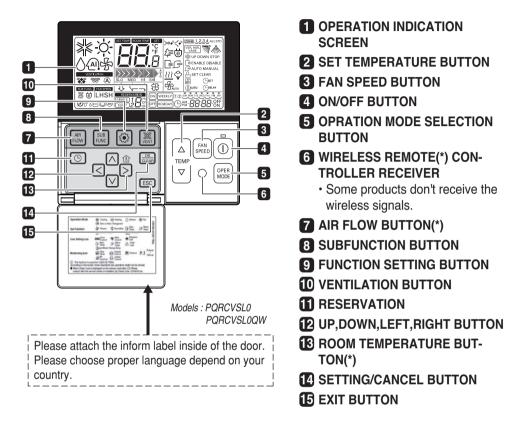
• Operate the ventilator in the **Normal Ventilation** in spring/autumn when the Total heat exchanger is not required.



**CAUTION:** In case of high outdoor pollution degree like yellow sand please pause the ventilator.

# **Operating Instructions (Accessory)**

# Name and Function of Remote Controller



- Some functions may not be operated and displayed depending on the product type. Refer to remote controller in order to know detail functions.
- \* (\*) : Functions for air conditioner.

# Ventilation operating scene and ventilation operating method

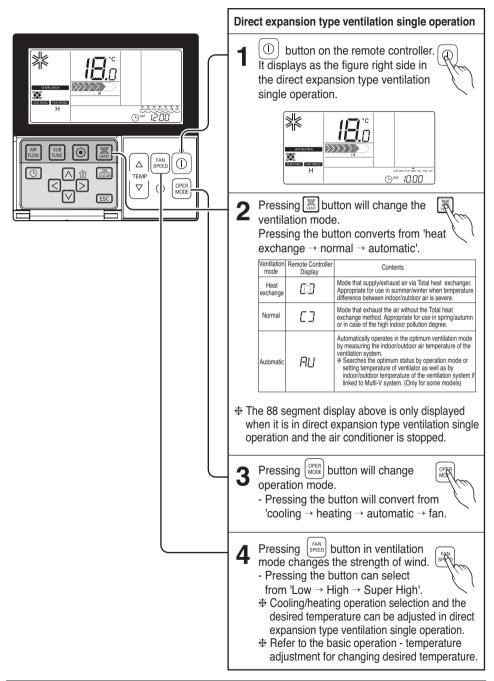
#### This unit's remote controller can be installed with two types; Single Operation & Interlinked Operation

	Direct Expansion Ventilation Interlinked Operation)
Direct Expansion Ventilation Wired Remote Controller	Air conditioner Indoor unit

\* Connecting wires is the same as air conditioner user manual. (Refer to page about Group control)

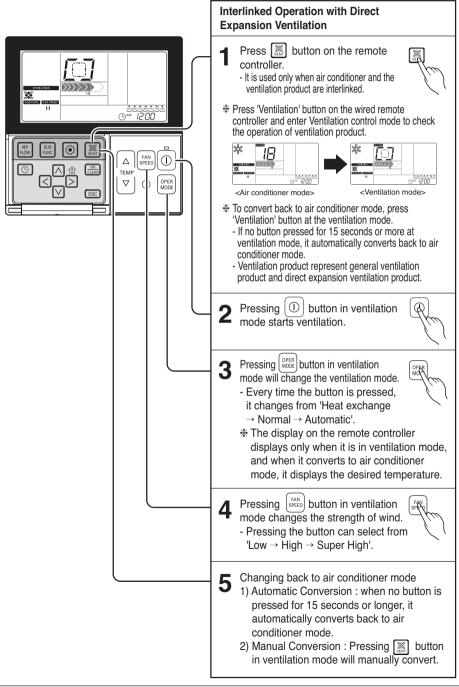
# Single operation control

It performs ventilation operation with cooling or heating at the same time using the heat exchanger inside the direct expansion type ventilation product.



# Interlinked operation control

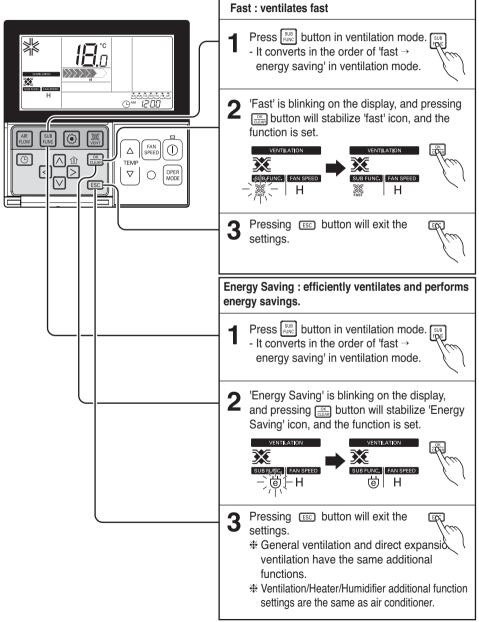
It can only be used when the air conditioner is interlinked with direct expansion ventilation product.



# **Additional Function**

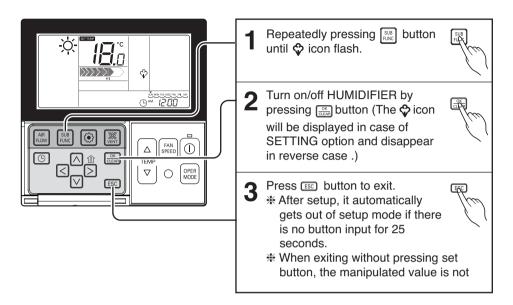
# Fast/Energy saving ventilation mode

It is a function to operate ventilation function more efficiently through the ventilation additional functions, fast / Energy saving settings.



# Humidification operating mode

Only products with humidifying function can use this.

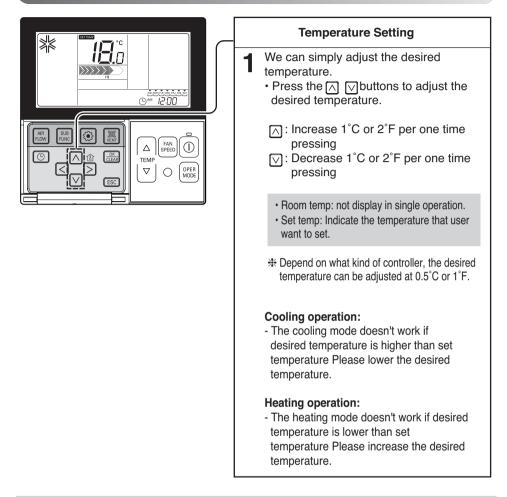


#### NOTICE

- Humidification function might not be operated at the partial product.
- This function is able to selected automatically or manually when operating heating mode (\* Factory default : When choosing heating mode, humidification mode is automatically selected.)
- · In case of interlinked operating, control Humidification operating mode refer to above chart on

ventilation mode, though pushing the with button.

## Temperature setting/Room Temperature check



- For air-cooling drive, from 18°C to 30°C, and for heating drive, from 16°C to 30°C, you can select desired temperature.
- 5°C is proper for the difference between room and outside temperature.
- Ventilation unit can't reach to the set temperature because the air is supplied from outdoor.
- This unit cannot control room temperature. If this is needed, do not install the ventilation unit alone, but rather install another indoor unit.

# **Maintenance and Service**

# Method to disassemble each part

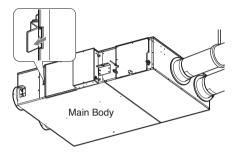
To prevent function of the ventilator deteriorating, clean dust adhered to the air filter and total heat exchanger regularly.

## Method to take each part out(Air filter, Total heat exchanger)

#### 1. Remove the maintenance cover.

Put the hands inside of the ceiling from the maintenance cover, and pull the maintenance cover up.

(Looser the hinge and detach the maintenance cover.)

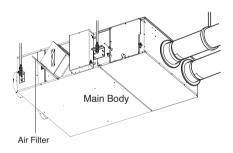


#### 2. Take the air filter out.

Take the air filter with each contained to the left/right downside of the Total heat exchanger.



CAUTION: Take care to ensure that you could not damage when taking the air filter out since there is a sharp part on it.



## 3. Take the Total heat exchanger out.

Catch the handle and then take the Total heat exchanger (2EA) out from the main body. (2 units)

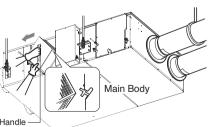


WARNING: Turn the breaker off when cleaning the product.

Main Body Handle



CAUTION: Gloves should be worn when doing the maintenance work.



## Method to Clean and Replace Each Part

#### 1. Cleaning of Air Filter

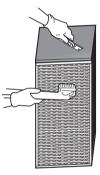
- Clean dirt from the air filter using a vacuum cleaner or wash with water.
   (if dirt is conspicuous, wash with a neutral detergent in lukewarm water)
- After washing with water, dry well in the shade. (Do not expose the air filter to direct sunlight or heat from a fire when drying it)
- If the air filter is damaged, purchase it from the service center or professional agent.

#### 2. Cleaning of Total Heat Exchanger

Suck dusts adhered to the surface of the Total heat exchanger with a cleaner.

- Use the cleaner that attached to brush at its nozzle, and use a soft brush.
- Do not use a hard nozzle on the cleaner. (Otherwise, surface of the Total heat exchanger may be damaged.)
- Never wash the Total heat exchanger with water.
- Replacement expenses are for a consideration after 2 years from the purchasing date.
- Expenses are for a consideration when you will contact the service center even within 2 years from the purchasing date.
- For service, always contact the dealer or an Authorized Service Center.







Air Filter

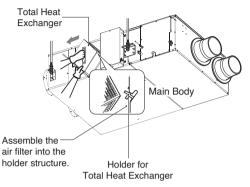


Total Heat Exchnger

## Assembly and Check after Maintenance

#### 1. Assembly of Total heat exchanger

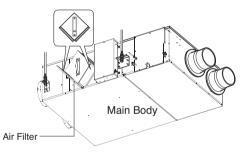
Securely put the corner parts (4 or 6 parts) of the Total heat exchanger into the holder for assembly and slide them into the inside of the main body.



#### 2. Assembly of air filter

Assemble the air filter into the holder structure of the Total heat exchanger.

- Take care to ensure that surface of the Total heat exchanger could not be damaged.
- Dusts adhered to the Total heat exchanger may cause deterioration of Air volume.



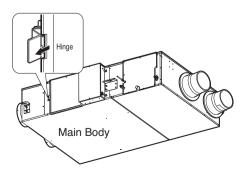
#### 3. Assembly of maintenance cover

Fix the cover to the right hinge and fix it to the left side. (A nameplate is adhered toward the reading direction).



WARNING: Turn the breaker off when cleaning the product.

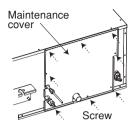
CAUTION: Gloves should be worn when doing the maintenance work.



## Replacement of the Humidifier

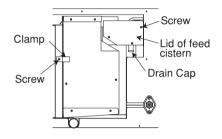
#### 1. Remove the maintenance cover.

Loosen the screw (8EA) and detach the maintenance cover.



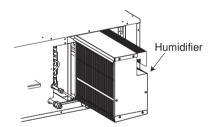
#### 2. Prepare to replace the Humidifier.

- Uncork the Drain Cap to drain the remaining water in the feed cistern.
- Loosen the screw (3EA) and detach the lid of feed cistern.
- Loosen the screw (1EA) and Detach the clamp.



#### 3. Pull out the Humidifier (2EA)

- Uncork the Drain Cap to drain the remaining water in the feed cistern.
- Loosen the screw (3EA) and detach the lid of feed cistern.
- Loosen the screw (1EA) and Detach the clamp.



#### 4. Insert the new Humidifier (2EA)

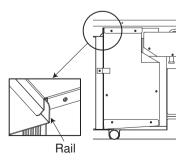
Confirm that the edge of top panel of humidifier element has been hooked securely on the rail.

And assemble the lamp, rid of cistern and drain cap.



WARNING: Turn the breaker off when b cleaning the product.

CAUTION: Gloves should be worn when doing the maintenance work.





# **Humidifier Maintenance**

## Inspection and Maintenance of the Humidifier

- · Have your dealer do the following inspections in order to get the longest use.
- In order to prevent harmful bacteria from generating, ask your dealer to do maintenance on humidifying unit portion at the beginning or the end of the heating season.

Inspected	Content of maintenance		Problems if maintenance is not
part	Items to be inspected	Solution	carried out
Feed water	Check for operation of float switch	Clean if it does not work properly due to build-up.	Insufficient humidifying. Overflowed feed water tank.
tank	Check for dirt	Clean if very dirty.	Weak fan strength. Reduced humidifying capacity.
Solenoid valve	Check for shutting and opening. Check in a similar fashion when checking the float switch operation.	Replace if it doesn't work.	Insufficient humidifying. Overflowed feed water tank. (Increased tap water consumption.)

## Replacing the Humidifier element

- 1. The humidifier element should in general be replaced once every three years when supply water is soft water, but outside factors (water quality, operating times) may shorten its productive life.
- 2. Contact your dealer if you have any questions.

#### NOTICE

This note is only applied to model that there is humidity function.

When humidifying fails, the remote controller does not display any error code.

(just twinkle the icon of Humidification " ♥" for 30 minutes and disappeared)

Usage under that status will lead to insufficient humidification and increased tap water consumption.

The solenoid valve and float switch should be checked at the beginning of heating season.

#### Maintenance Cycle

#### · Recommended maintenance cycle of each part.

Name of Part	Inspection cycle (Cleaning cycle)	Replacement Cycle
Air filter	0.5 year	3 years
Total Heat Exchanger	1 year	10 years
Humidifier Element	1 year	1~3 years

· This table indicates main parts.

- · See the maintenance and inspection contract for details.
- This maintenance cycle indicates recommended lengths of time until the need arises for maintenance work, in order to ensure the product is operational as long as possible.
- · Use for appropriate maintenance design (budgeting maintenance and inspection fees, etc.).
- Life of humidifier element is about 3 years (4,000 hours), under the supply water conditions of hardness ; 150mg/l.
- Life of humidifier element is about 1 year (1,500 hours), under the supply water conditions of hardness ; 400mg/l.
- Annual operating hours : 10 hours/day x 26 days / month x 5 month = 1,300 hours.
- · The cycle is not the same as the warranty period

# Check Item prior to notify a failure

Symptom	Check Item	Counter-measure
The Product doesn't work	Is power not supplied?	Supply Power
The Product doesn't work through you press the 'ON' switch	Is the Indoor temperature less than 45°c or more than 40°C?	It's standby mode for protect- ing Total Heat Exchanger.
Even though you change the fan speed, the operation mode doesn't change and it changes to 'Auto or Low'	Is the Indoor temperature less than -10°C or more than 45°C?	It's operation mode to protect Total Heat Exchanger.
	Is the icon " . " displaying on remote controller?	It's Child Lock mode. Refer to Remote controller.
Even though you push the but- ton of remote controller, any function doesn't work.	Is the icon " ( ) " displaying on remote controller? Does the message "HL" display on remote controller when you push the button.	It's centralized control mode. You can't control on remote controller.

