



Lossnay Heat Recovery Ventilator

MODELS:

- LGH-15RVX3-E**
- LGH-25RVX3-E**
- LGH-35RVX3-E**
- LGH-50RVX3-E**
- LGH-65RVX3-E**
- LGH-80RVX3-E**
- LGH-100RVX3-E**
- LGH-160RVX3-E**
- LGH-200RVX3-E**

Installation Instructions

This product needs to be installed properly in order to ensure maximum functionality as well as safety.

Please be sure to read this installation manual before starting the installation.

- Installation must be performed by a dealer or installation contractor. Please note that improper installation may cause malfunction or accident.

“Operating Instructions” and this manual must be handed over to the customer after completing the installation.

For use by dealer/contractor

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1. 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.
 Do not disassemble	Do not modify or disassemble. It could cause fire, electric shock or injury.	
 Prohibition of use in bath or shower room	The Lossnay unit and remote controller should not be installed where it is highly humid, like a bathroom, or other wet place. It could cause electric shock or power leakage.	
 Connect the grounding wire.	Connect the product properly to ground. Malfunctioning or power leaks can cause electrical shock.	
 The instructions given must be followed.	Follow the laws and regulations of each country for electrical wiring. It could cause fire, electric shock or injury.	
	Use the specified power supply and voltage. Use of incorrect power supply or voltage could cause fire or electric shock.	
	Select a place with sufficient strength and install the main unit securely. It could cause injury or death.	
	Wiring work must be performed by qualified professionals, and be implemented safely and securely in accordance with appropriate standards and regulations. Poor connection or improper wiring work could cause electric shock or fire.	
	Make sure to install an all-pole electric leakage isolator securely. All supply circuits must be disconnected before obtaining access to the terminal devices. Use the specified cable size and connect the cables securely to prevent disconnection when they are pulled. If there is a defect in the connection, there is a possibility of fire.	
	Select an adequate place for the opening to introduce outdoor air, where it will not intake the exhaust fumes like combustion gas, or others, and there is no risk of blockage. Shortage of fresh air could put the room in a state of oxygen deficiency.	
	A duct made of steel must be installed with care not to be connected electrically with metal, wire, stainless steel plate, or others. It could cause fire when power leakage occurs.	
	It is prohibited to use the unit where salt, sulphur, chlorine or hot spring steam damage is expected. It could cause fire, electric shock or injury.	
Do not touch the product for at least 5 minutes after the power is shut off. It could cause electric shock.		



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 air from the Lossnay unit.
It could cause an accident as a result of incomplete combustion.

Do not use at a place where it is exposed to high temperatures (40°C or higher), naked flames, or in environment with combustible fumes.
It could cause fire.

When using the product where it is exposed to high temperatures and humidity (40°C or higher, RH 80% or higher), or where fog occurs frequently, moisture is likely to condense in the core, and may result in condensation build up in the unit. The product should not be used under such conditions.
It could cause malfunction.

Do not use in an environment such as a chemical factory, where hazardous gases such as acidic gases, alkaline gases, organic solvent fumes, paint fumes, or gases containing corrosive components are generated.
It could cause malfunction.

Do not install this product in a place where it is exposed to ultraviolet light.
UV may damage covering insulation.

Avoid to install air inlets and outlets where insects are likely to gather like a place near interior or exterior lights. In that case, choose hoods have repellent net.
It could cause intrusion of small insects.

Do not put strong shock on the product.
It could cause malfunction.

Put on gloves during installation.
It could cause injury.

Make sure the power supply isolator is turned off when Lossnay is not used for a long period of time after the installation.
It could cause electric shock, power leakage, or fire as a result of deteriorated insulation.

Always use the specified suspension bolts, nuts and washers or correctly rated wire / chain hangers.
Use of hardware with insufficient strength could result in the product dropping.

The outside ducts must be tilted at a gradient (1/30 or more) down toward the outdoor louvres from Lossnay, and properly insulated.
The entry of rain water may cause power leakage, fire, or damage to household property.

The control box cover must be closed after the installation.
Dust or humidity may cause power leakage or fire.

When connecting external devices (electric heater, damper, lamp, monitoring unit, etc.) using output signals of the Lossnay unit, make sure to install safety equipment for the external devices.
It could cause fire, damage, etc. without safety equipment.

Select a duct heater in compliance with local and national laws, ordinances, and standards.
Select a duct heater that meets adequate standard in each country.

Install the duct heater separated from the product by a distance of 2 m or more.
Failure to do so may result in fire or equipment damage due to the transmission of residual heat from the heater.

The unit shall be installed horizontally or vertically (except 160 and 200RVX3-E).
In each case, the tolerance is $\pm 1^\circ$. For vertical installation, maintenance cover shall be always face up.
Use vertical installation support place (PZ-1/2VS-E).
Otherwise installers shall ensure the safety during the lifetime of the unit.
For vertical installation, refer to 4.2.4 for detail.

Install weather louver or "Weather cover" for OA inlet & EA outlet to prevent rainwater from entering the Lossnay unit.
Ducts to outdoor (OA and EA) shall decline by 1/30 or more downward to outdoor.

In cold area or strong wind area, outdoor air may enter the unit because of the pressure difference or external wind even when the unit stops. It is recommended to install an electrically operated damper to block outdoor air in such cases.

In cold weather areas, even if they are within the range of operating conditions, dewing or freezing could occur on the main unit, where the duct is connected, or other sections, depending on the conditions of outdoor air and indoor temperature and moisture. Make sure to check the operating conditions and other precautions, and do not use the product if dewing or freezing is anticipated.

Do not connect the field supply fan to the product so that the air volume exceeds the maximum air volume of Lossnay's P-Q curve. It may not work properly.

Other than EU countries:

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.

EU countries:

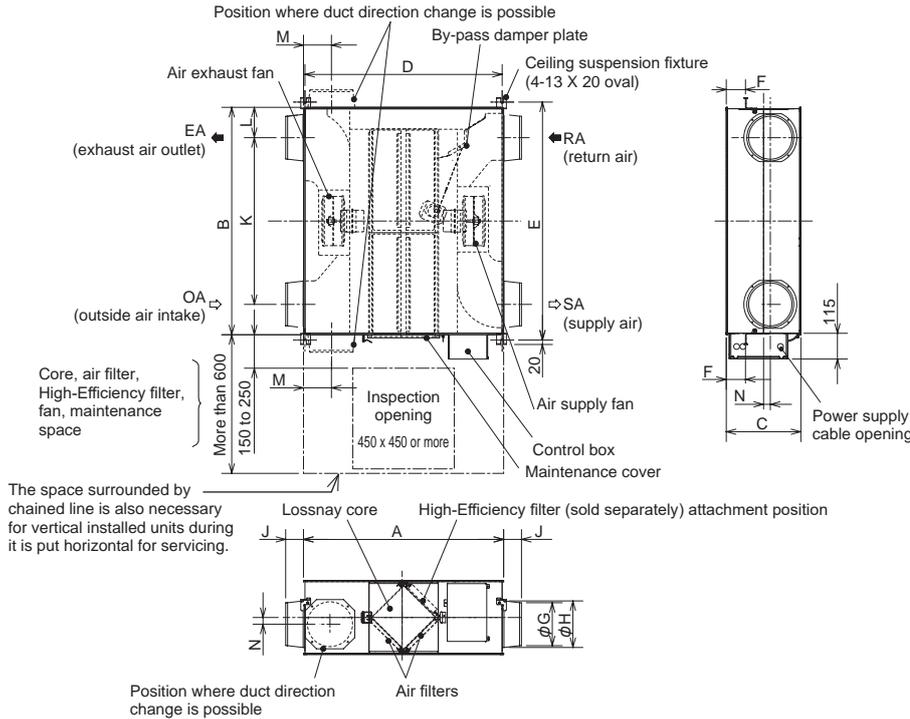
This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.



The instructions given must be followed.

2. Outline drawings

LGH-15 to 100 RVX3-E



The space surrounded by chained line is also necessary for vertical installed units during it is put horizontal for servicing.

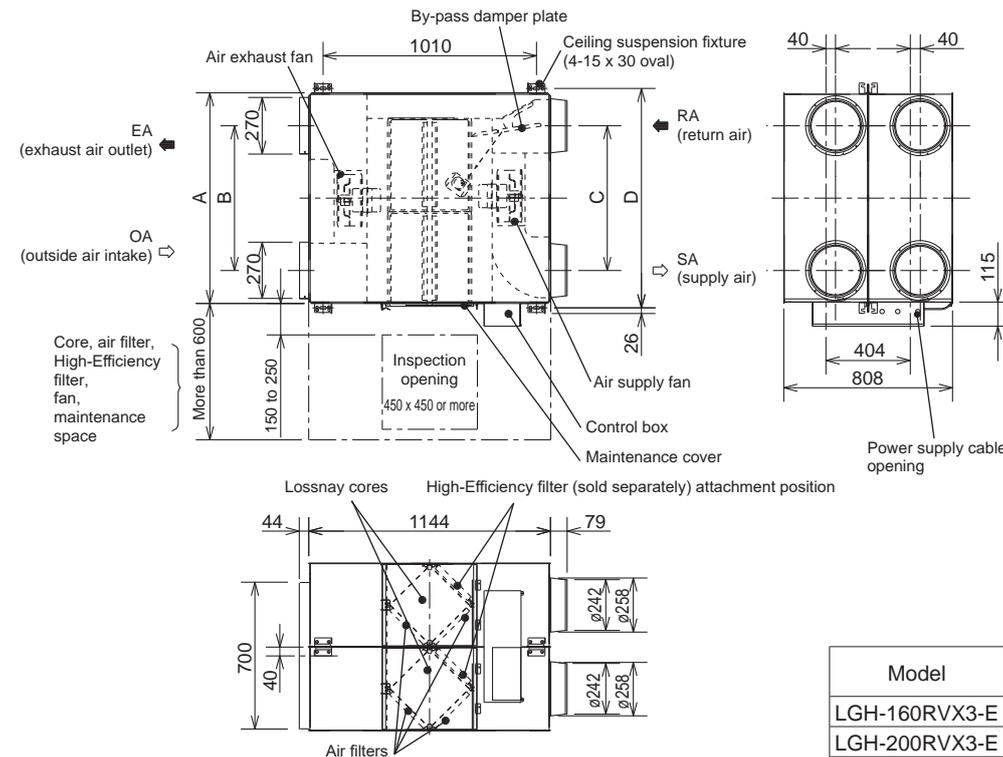
Accessory parts

- Mounting small screws for duct flangesx16
- Mounting large screws for ceiling suspension fixturex4
- Duct connecting flanges.....x4
- Screw capx6
- Slim-Lossnay connection cable (gray: two wires).....x1

Unit (mm)

Model	Dimensions			Ceiling suspension fixture pitch			Nominal diameter	Duct connecting flange			Duct pitch				Weight (kg)
	A	B	C	D	E	F		G	H	J	K	L	M	N	
LGH-15RVX3-E	780	610	289	768	658	65	100	97.5	110	54	450	80	119	50	20
LGH-25RVX3-E	780	735	289	768	782	65	150	142	160	64	530	102.5	102	30	23
LGH-35RVX3-E	888	874	331	875	921	85	150	142	160	64	650	112	124	55	30
LGH-50RVX3-E	888	1016	331	875	1063	85	200	192	208	79	745	135.5	124	30	33
LGH-65RVX3-E	908	954	404	895	1001	70	200	192	208	79	692	131	124	40	41
LGH-80RVX3-E	1144	1004	404	1131	1051	77	250	242	258	79	690	157	165	40	47
LGH-100RVX3-E	1144	1231	404	1131	1278	77	250	242	258	79	917	157	165	40	53

LGH-160 and 200 RVX3-E



Accessory parts

- Mounting small screws for duct flangesx16
- Duct connecting flanges.....x4
- Screw capx6
- Slim-Lossnay connection cable (gray: two wires).....x1

Unit (mm)

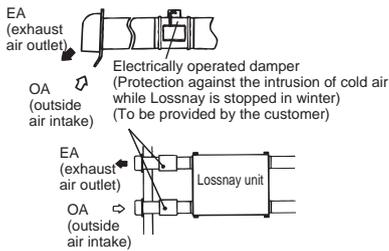
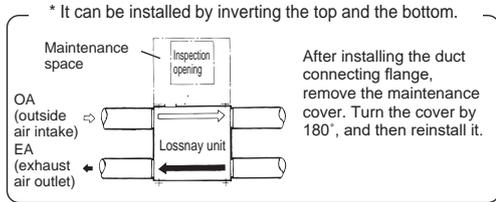
Model	A	B	C	D	Weight (kg)
LGH-160RVX3-E	1004	690	690	1045	98
LGH-200RVX3-E	1231	917	917	1272	110

3. Standard installation examples

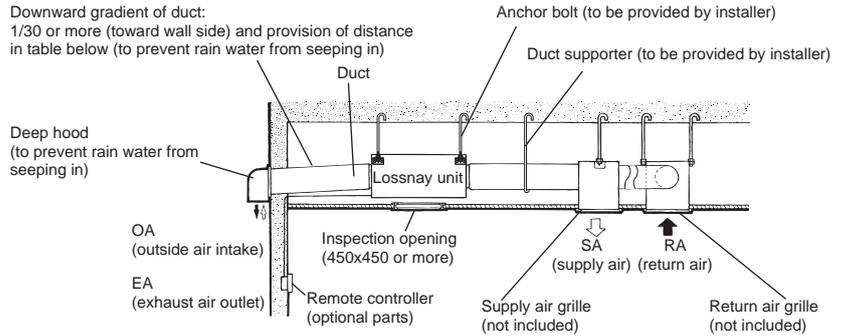
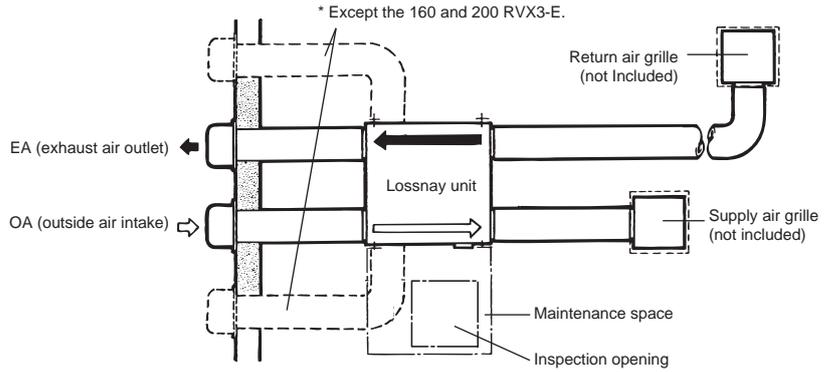
- OA and EA duct minimum length

Model	Length
LGH-15 to 65RVX3-E	1 m or more
LGH-80 and 100RVX3-E	2.5 m or more
LGH-160 and 200RVX3-E	3 m or more

- The parts can also be installed upside down. Remove the maintenance cover, rotate the parts by 180°, and re-install.



- In a region where there is risk of freezing in winter, it is recommended to install an Electrically operated damper, or the like, in order to prevent the intrusion of (cold) outdoor air while Lossnay is stopped.



CAUTION

- When RA comes from a space which have strong odor like aromatic or detergent in wash room or shower room, the SA location is recommended not to arrange directly over the human living space.
- Ducts should be fixed individually in accordance with the necessity so that their weight will not be applied to the Lossnay unit.
- In the case any of them is not observed, water leakage happens from the unit.
 - The surrounding air condition of the unit shall be between 0 and 40°C, and the dew point of the ambient air shall be lower than 11°C in winter (e.g. 20°C 56%RH or less).
 - When LGH-15 to 100RVX3-E are installed vertically, follow the cautions mentioned in 4.2.4.

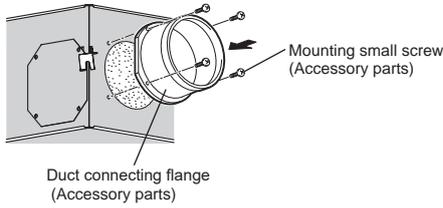
4. Installation method

4.1 Installing the Lossnay unit

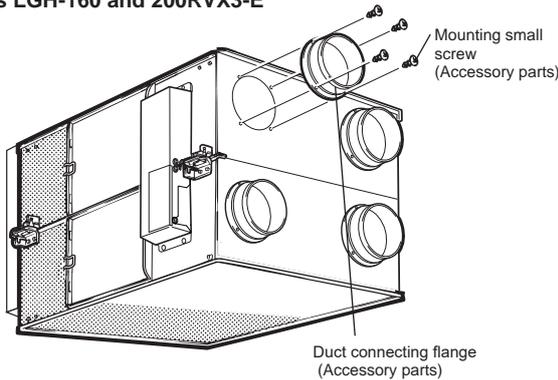
4.1.1 Attaching the duct connecting flanges

Use the supplied small screws to secure the duct connecting flanges to the Lossnay unit.

Models LGH-15 to 100RVX3-E



Models LGH-160 and 200RVX3-E



⚠ CAUTION

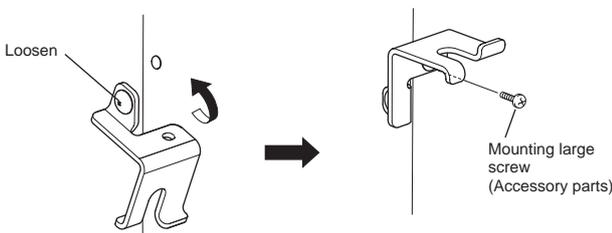
- Before attaching the duct connecting flanges, check that no foreign matter (scraps of paper, vinyl, etc.) has found its way inside to Lossnay unit.
- The rectangle flange have to be sealed from inside of the flange to prevent from air leakage.
- Always use accessory screws. Otherwise the screw may interfere internal parts and result abnormal operation.

4.1.2 Securing the ceiling suspension fixtures

Models LGH-15 to 100RVX3-E

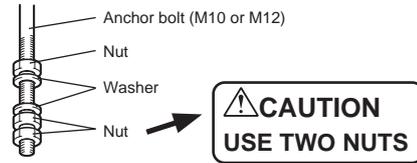
- (1) Loosen the screws for the ceiling suspension fixtures.
- (2) Rotate the ceiling suspension fixtures 90° centered around the loosened screws to make them horizontal.
- (3) Firmly tighten and secure the ceiling suspension fixtures to the product with the loosened screws and the included mounting large screws.

* The ceiling suspension fixtures are folded and secured to the unit when shipped from the factory.



4.1.3 Preparing the anchor bolts

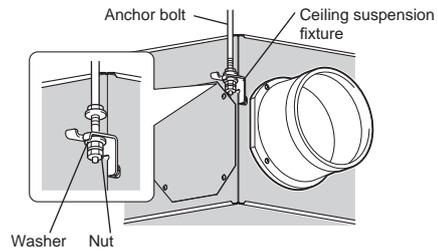
Mount the washers (outer diameter of >21 mm for M10, >24 mm for M12) and nuts onto the pre-recessed anchor bolts (M10 or M12), as shown in the figure below.



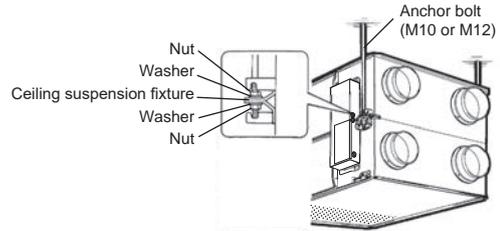
4.1.4 Mounting Lossnay unit

- (1) Hang the ceiling suspension fixtures on the anchor bolts and adjust in such a way that Lossnay unit is level.
- (2) Tighten up securely using double nuts.

Models LGH-15 to 100RVX3-E



Models LGH-160 and 200RVX3-E



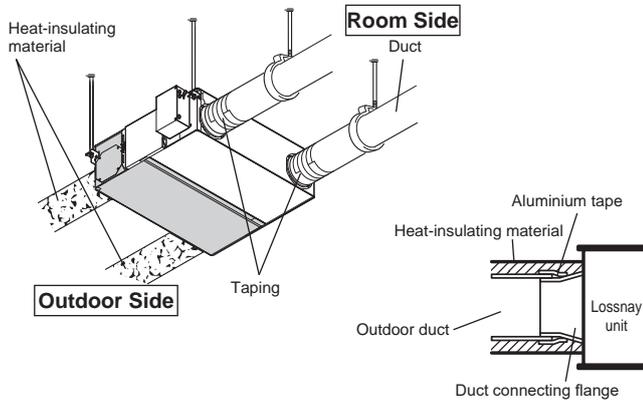
⚠ CAUTION

- When suspending Lossnay unit from the ceiling, do not handle it in such a way that force will be applied to the control box.
- Install the anchor bolts to ensure the product's weight or earthquake load. (Correctly rated wire/chain may also be used)

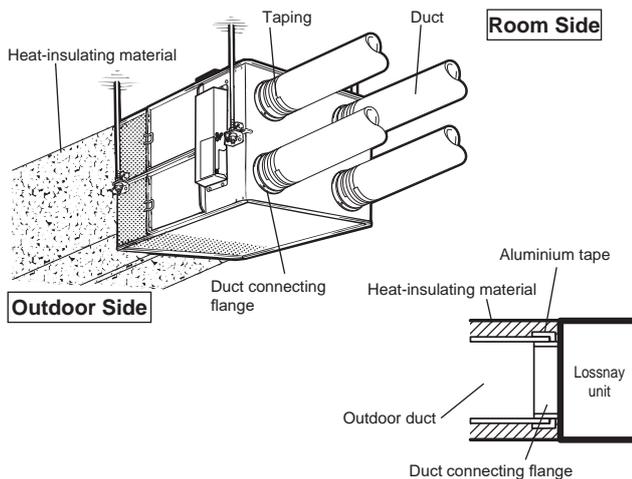
4.1.5 Connecting the ducts

- (1) Fasten the duct securely to the duct connecting flange, and wrap aluminium tape (field supply) around the joints so that there is no air leakage.
- (2) Suspend the ducts from the ceiling so that their weight will not be applied to the Lossnay unit.
- (3) The two outdoor ducts must be covered with heat-insulating material in order to prevent condensation from forming.

Models LGH-15 to 100RVX3-E



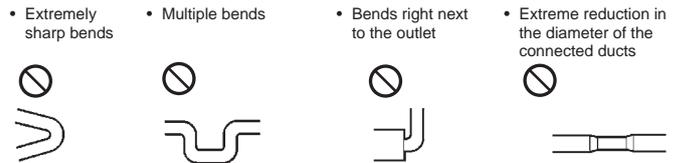
Models LGH-160 and 200RVX3-E



CAUTION

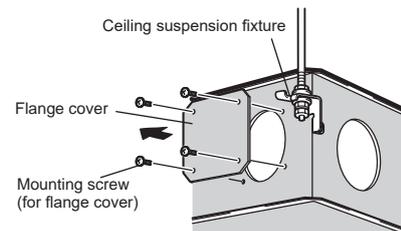
- When the supply air is set twice as much as the exhaust air or more by airflow function, the Lossnay body indoor side must be put additional insulation. Without additional insulation, it could cause condensation and water drop from the unit.
- When on-site commissioning is planned, a straight duct length more than $10 \times D$ (D =duct diameter) from the source of turbulence like bends, contractions and dampers etc, to the measurement point is recommended for correct measurement. In the United Kingdom, on-site measurement should therefore be measured in accordance with BSRIA guideline (Commissioning Air System. Application procedures for buildings AG3/89.3(2001))
- Before attaching the ducts, check that no (debris or any other) foreign matter (scraps of paper, vinyl, etc.) has found its way inside the ducts.
- Do not touch the damper plate inside Lossnay unit when connecting the ducts.
- If it is expected that the ambient temperature around the place where the Lossnay unit is installed will be high during the summer air conditioning season, it is recommended that the indoor duct work be covered with insulation material.
- For LGH-160RVX3-E and LGH-200RVX3-E, thermistors are built only in the lower unit. Lossnay unit controls its operation according to the lower unit detecting temperature. Even when actual return air temperature between the upper and the lower unit is different, Lossnay operates according to the lower unit temperature.

- Do not carry out the following types of duct construction. (Doing so could cause a drop in the air volume and generate abnormal noises.)

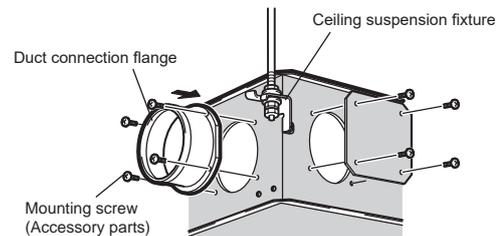


4.1.6 When changing the direction of the outdoor side duct (EA/OA) ... Except for LGH-160 and 200RVX3-E

- (1) Removal of flange cover
Unscrewing the flange cover mounting screws (4 pcs), remove the flange cover.



- (2) Installation of duct connecting flange
 1. Install the duct connecting flange using attached mounting screws.
 2. Fix the removed flange cover with the removed mounting screws (4 pcs).



4.2 Electrical installation

With this product, the wiring installation method will vary according to the design of the system.

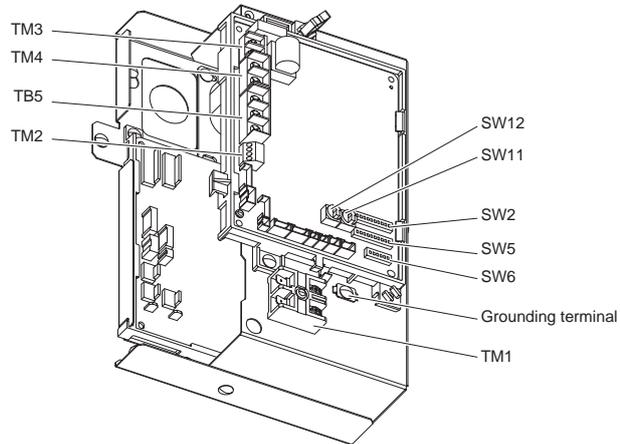
Perform electrical installation to meet appropriate standards and regulations.

* Always use double insulated PVC cable for the transmission cables.

* Wiring work must be performed by qualified professionals.

* All supply circuits is disconnected and all LED on the circuit board shall be lit off, before accessing to the terminal devices.

4.2.1 Names of components in control box



CAUTION

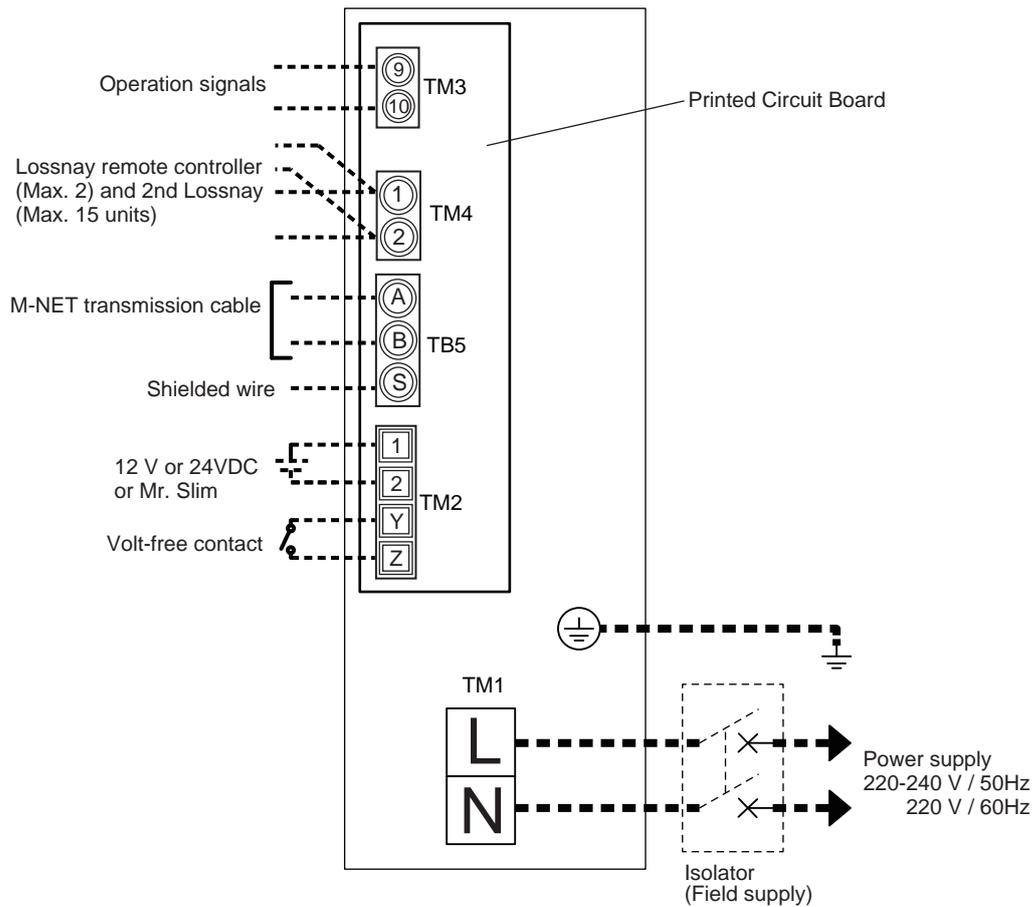
- Do not pull out preconnected connectors unnecessarily during installation.

4.2.2 Wire connection diagram

- * TM1, TM2, TM3, TM4, TB5 shown in dotted lines are field work.
- * Be sure to connect the ground wire.
- * A power supply isolator must be installed.
- * Always use an isolator for the main switch power connection.
- * Select proper circuit breaker according to the electrical current information in the chart below.
- * Do not disconnect connectors while power supplied.

Model	LGH-15RVX3-E	LGH-25RVX3-E	LGH-35RVX3-E	LGH-50RVX3-E	LGH-65RVX3-E	LGH-80RVX3-E	LGH-100RVX3-E	LGH-160RVX3-E	LGH-200RVX3-E
Maximum current when operating [A]	0.57	0.81	1.37	1.76	2.37	3.23	3.77	4.74	5.40

- * Make sure that the current leakage breaker is one compatible with higher harmonics.
- * Always use a current leakage breaker that is compatible with higher harmonics as this unit is equipped with an inverter.
- * The use of an inadequate breaker can cause the incorrect operation of inverter.

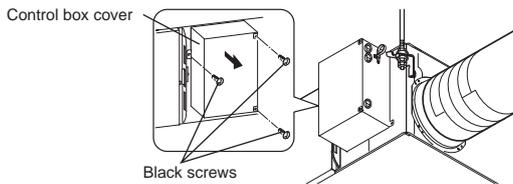


TM1: Terminal block (Power supply)
 TM2: Terminal block (External control input)
 TM3: Terminal block (Monitor output)
 TM4: Terminal block (Transmission cable)
 TB5: Terminal block (M-NET transmission cable)

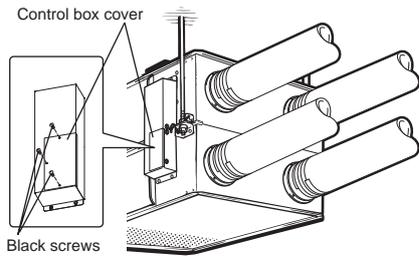
4.2.3 Connecting the power supply cable

(1) Remove the black screws and the control box cover.

Models LGH-15 to 100RVX3-E

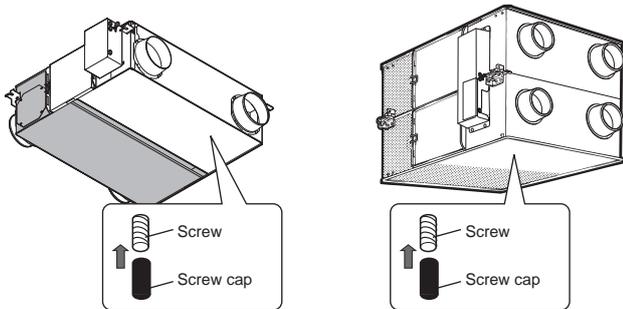


Models LGH-160 and 200RVX3-E



(2) Attach the screw cap.

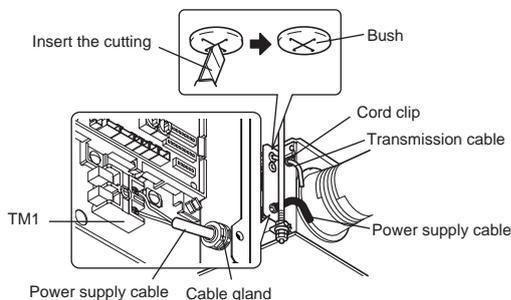
Models LGH-15 to 100RVX3-E Models LGH-160 and 200RVX3-E



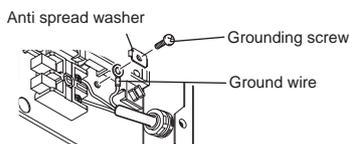
⚠ CAUTION

- After installing the Lossnay unit, attach the supplied screw caps to the screws at the bottom of the unit.

(3) Connecting the power supply cable and transmission cable
 Pass the Power supply cable through the bush* and connect to the TM1 terminal block using the round terminals. Connect the ground wire to the ground terminal and secure tightening the bush. (* Use an item that can firmly secure the cable such as a cable gland.)



Be sure to tighten the ground wire to the grounding screw using the round terminals with anti spread washer.



⚠ CAUTION

- Always separate the power supply cable and transmission cable by 5 cm (2") or more to prevent malfunctioning of the unit.
- If the length of the stripped Power supply cable is too long, the conductors may touch and short out.
- Power supply cable size : 1.0 mm² or more.
- Power supply cable into the control box must be U trapped appropriately.

- (1) Tighten the ground wire and transmission cables to the terminal block.
- (2) Secure the transmission cables using the cord clips.

Upon completion of the wiring connections, replace the control box cover.

- When using optional signal output terminal(PZ-4GS-E), please follow the install manual of it for the electrical installation as well.

4.2.4 Installing Lossnay unit vertically

When unit is installed vertically, follow below instructions.

For items not described in this section, follow the instructions in other sections.

LGH-15 to 100RVX3-E are allowed to be installed vertically, only in the direction the maintenance cover faces up.

Use optional parts PZ-1/2VS-E for vertical floor installation, otherwise installer shall ensure the safety during the lifetime of the unit.

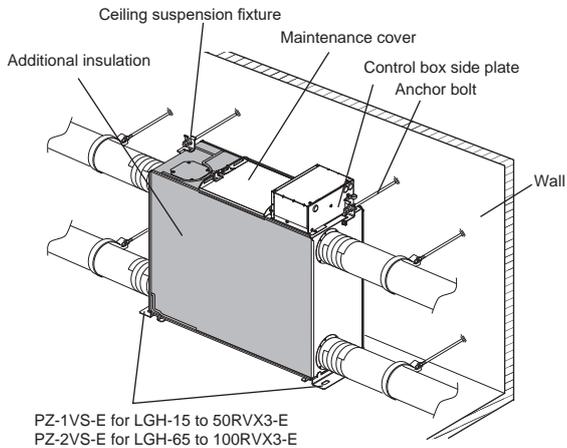
WARNING

 The instructions given must be followed.	<p>Install the unit on the floor which is flat and have enough strength. Make sure the unit is always touching to the floor certainly. Otherwise, it could cause injury.</p>
	<p>Always make the fall prevention by using upper ceiling suspension fixture of the unit. In case of using anchor bolts embedded to the wall, choose the anchor bolts of M10 or M12. Install the anchor to the enough strong wall.</p>
	<p>Do not use the PZ-1/2VS-E in a corrosive environment, such as where it gets wet. The product may tip over and cause injury.</p>

CAUTION

 The instructions given must be followed.	<p>Make sure to install the unit where users cannot touch it easily, for example in the machine room. Otherwise there is a risk of burns and injuries.</p>
	<p>Make a protection to the edges and areas that may be touched during maintenance.</p>
	<p>Do not install the unit in contact with the wall directory for avoiding any problem of vibration, wall discoloration and condensation water.</p>
	<p>Do not put anything on the unit.</p>
	<p>Do not install unit in the place where water can come to the unit from above, such as under the drainage ducts. It could cause fire or electrical shock.</p>
	<p>When using the product where it is exposed to low temperatures or high humidity, additional heat insulation on the unit are necessary which is a closed-cell foam with a thickness of 3 mm or more.</p>
	<p>Filters and Lossnay cores can be withdrawn out even when the unit is installed vertically, but when replacing fans and GM, the unit must be laid down and placed horizontally. Install the unit where horizontal maintenance space can be secured around it and use enough length of cables and detachable ducts so that the unit can be laid down. The required space is shown in the product outline drawing.</p>
	<p>Installation gradient tolerance should be $0\pm 1^\circ$, same as horizontal installation.</p>
	<p>If the unit causes vibration problem, use anti-vibration countermeasures such as a rubber sheet between the PZ-1/2VS-E and the floor.</p>
	<p>Ducts should be fixed individually so that their weight will not be applied to the Lossnay unit.</p>
	<p>The duct should have a slope of 1/30 toward the outdoors, and the length of the duct at the slope should be longer than required (see <i>Standard installation examples</i> section). Do not make a U-trap on the duct. Otherwise, rainwater might be collected and it cause bad smells or broken of the unit by weight.</p>
	<p>When installing vertically, do not install elbow duct facing the floor near the RA suction port of the unit. When installing a downward bending duct or a damper on the RA, please install it at least 3 m away from the product so as not to generate turbulence in the RA duct. Otherwise, the unit may not work properly.</p>
	<p>Do not connect the field supply booster fan to the unit so that the air volume exceeds the maximum air volume of the unit P-Q curve. Otherwise, the unit may not work properly.</p>
	<p>Make traps of sufficient height to the power and communication cables so that water running along the wires does not enter the circuit box. If not, there is a risk of product broken, malfunctions, smoke or fire.</p>
	<p>When wiring communication cable, make sure to seal the gap created at rubber bush on the side plate of the control box due to passing through the cable to prevent from insects or small animals comes into the box (The seal is local supply). If not, it might cause the fire.</p>
<p>Do not lean on or put your weight on the product. There is a risk of product deformation or injury.</p>	
<p>When inserting or removing Lossnay cores, securely hold the handle until the end and insert or remove them one by one. Otherwise, some parts might be damaged.</p>	
<p>The specifications of the unit are value in case of horizontal installation.</p>	
<p>Be sure to install the DX coil unit (GUG-SL-E series) horizontally even if Lossnay unit is vertically oriented. Dripping of drain water and deformation of the product will occur.</p>	

1. Replace the PZ-1/2VS-E with the existing ceiling suspension fixtures before standing the unit vertically. Use the removed M6 screws from the unit and the included M5 screws to fix them securely. Refer to the PZ-1/2VS-E manual for more information.
2. The additional heat insulation should be applied to all surface of the top and bottom when viewing the unit as horizontal, and pay attention to additional insulation is necessary even on the existing insulation on the unit.



The following system configuration can be created. Connect the necessary parts.

- 1 When connecting with remote controller (PZ-62DR-EA/EB)
- 2 When interlocked with indoor unit of air conditioner or other external device including other manufactures
- 3 When operating multiple Lossnay units
- 4 Signal output from Lossnay unit
- 5 When switching fan speed externally (when a sensor or other device is connected)
- 6 When switching By-pass externally
- 7 To change fan speed by 0 - 10 VDC input
- 8 When using the remote/local switching and the ON/OFF input (level signal)
- 9 When connecting to the City Multi or Mitsubishi Electric Air-Conditioner Network System (MELANS)
- 10 To start/stop Lossnay stand-alone operation without using the remote control
- 11 Control via Wi-Fi interface or MELCOBEMS MINI
- 12 When connecting CO₂ sensor PZ-70CSD-E or PZ-70CSW-E

CAUTION

- When connecting external devices (electric heater, damper, lamp, monitoring unit, etc.) using output signals of the Lossnay unit, be sure to install safety equipment for the external devices.
(It could cause fire, damage, etc. without safety equipment.)
- Seal the opening between the bushing and the cables in order not to intrude insects.

1 When connecting with remote controller (PZ-62DR-EA/EB)

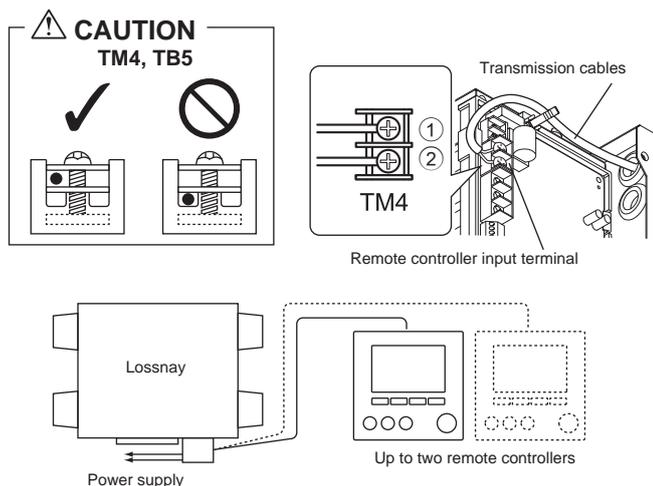
* When controlling Lossnay units with MELANS, connect wires according to 9.

Securely connect the transmission cable from the remote controller to ① and ② of the input terminal block (TM4). (No polarity)

- Wire type: two-core sheathed cable
- Wire diameter: 0.3 mm²
- If there are two remote controllers, connect them in the same way.
- Keep the overall length of the transmission cable between Lossnay and the remote controller within 200 m.

Note

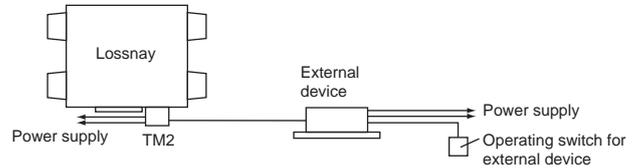
- Do not tighten screws of terminal block with a torque larger than 0.5 N · m. It could damage the circuit board.
- Take care not to connect the power supply cable or M-NET transmission cable.
- When connecting multiple cables to the terminal, use round terminal.
- Solid wire (single-stranded wire) cannot be connected.
- PZ-61DR-E is not available.



2 When interlocked with indoor unit of air conditioner or other external device including other manufactures

CAUTION

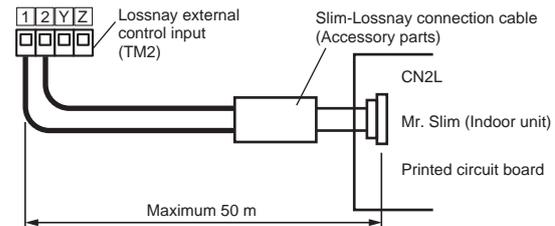
- The connection may vary according to the output signal type of the external unit.
- Do not press the terminal with a force of more than 19.6 N when connecting the cable to TM2.



When using Mitsubishi Mr. Slim air conditioner with MA Remote controller

Confirm that the pulse input switch (SW2-2) is set to "OFF". (Factory setting is "OFF".) (Refer to function settings No. 28)
Connect the Slim-Lossnay connection cable connector side to CN2L on the circuit board for the Mr. Slim indoor unit, then connect the lead wire side to the ① and ② of the input terminal block (TM2) for the Lossnay external controller input. (No polarity)

- Always separate the power supply cable and the Slim-Lossnay connection cable by 5 cm or more to prevent the unit from malfunctioning.
- The Slim-Lossnay connection cable is 100 mm long. When wiring, extend it as far as necessary.



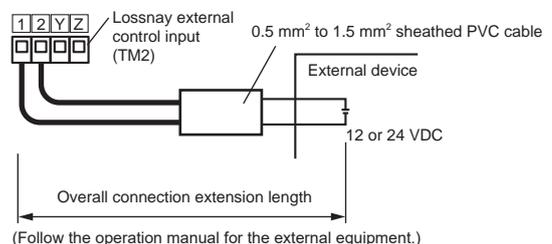
Note

- Use MA remote controller of Mr. Slim for switching Lossnay ON/OFF or the fan speed.
- The ventilation mode is fixed to "automatic ventilation" from MA remote controller.
- Ensure that all connections are secure and that the appropriate insulation is provided.
- Use extension cable sheathed PVC cable or cable 0.5 mm² to 1.5 mm².
- Only one Lossnay and one Mr. Slim unit can be interlocked. Multiple units interlock is not possible.
- Lossnay can not be connected M-NET in this case.

[SW2-2] setting vary depending on the types of output signal of external device.

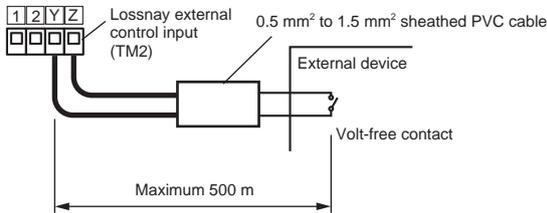
When the external device has a charged operating signal of 12 VDC or 24 VDC

- If the input is pulse signal, move the pulse input switch [SW2-2] to the ON position. (Refer to function settings No. 28)
- When level signal is selected, the signal width has to be more than 10 seconds for ON and OFF.
- When pulse signal is selected, a pulse width has to be at least 200 m sec. to turn Lossnay ON, and 10 sec. interval is necessary to next output.
- The wiring should be as shown by the following picture.



When the external device has an Volt-free contact signal

- If the input is pulse signal, move the pulse input switch [SW2-2] to the ON position. (Refer to function settings **No. 28**)
- When level signal is selected, the signal width has to be more than 10 seconds for ON and OFF .
- When pulse signal is selected, a pulse width has to be at least 200 m sec. to turn Lossnay ON, and 10 sec. interval is necessary to next output.
- The wiring should be as shown by the following picture.



CAUTION

- If an optocoupler or any other type of polar coupler is used at the Volt-free contact, connect the positive side to Y and the negative side to Z.

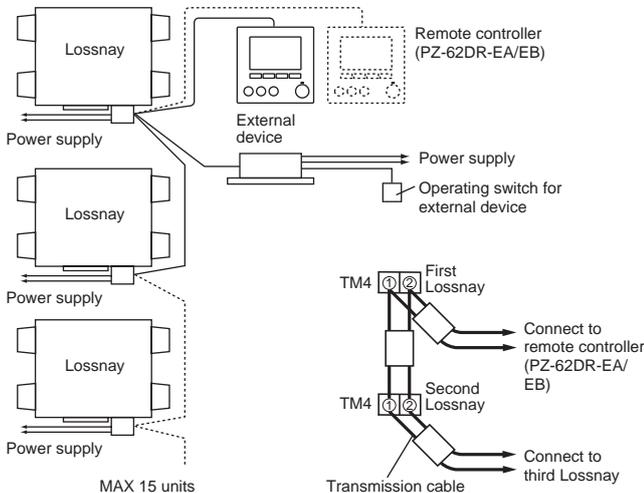
3 When operating multiple Lossnay units

In the case that all Lossnay units are the same LGH-RVX3-E series, up to 15 multiple units can be operated at the same time.

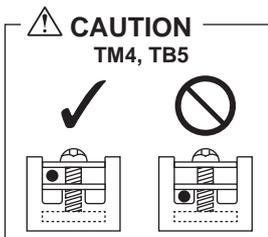
- 1) Connect the Lossnay unit from Unit 1 to Unit 2, and from Unit 2 to Unit 3 and so on up to a maximum of 15 units using a transmission cable.

Wire type: two-core sheathed cable
Wire diameter: 0.3 mm²

- 2) When it is interlocked with an external device, set the Lossnay unit which has external signal input to "Main".



MAX 15 units



Note

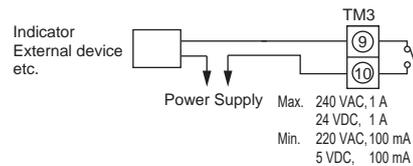
- Do not tighten screws of terminal block with a torque larger than 1.2 N · m. It could damage the circuit board.
- When connecting multiple cables to the terminal, use round terminal.
- Solid wire (single-stranded wire) cannot be connected.

- Only one unit can be set as main Lossnay. The operating signal and pulse signal of the external device can be connected to Main Lossnay only.
- Connect the power supply cable to each Lossnay unit.
- When setting the Lossnay address for use with a Mitsubishi Electric Air-Conditioner Network System (MELANS) etc., the Lossnay with the smallest address in the group will be the Main Lossnay. When not setting the address, set the address to "1" for only one unit in the group. The Lossnay with an address of "1" is the Main Lossnay. (Refer to "Setting the address" on the section 5 for more detail.)

4 Signal output from Lossnay unit

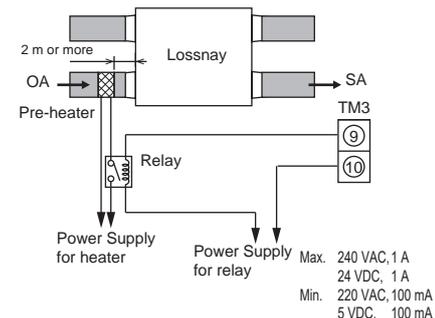
Set DIP-SW or Function setting on PZ-62DR-EA/EB as following table depending on the necessary output signal from Lossnay unit. For more information of signal output, see function settings **No. 12** to **No. 16**.

DIP-SW setting		Function setting on PZ-62DR-EA/EB	Signal output
SW5-1	SW5-2		
-	-	12	0 Dip-SW priority
OFF	OFF		1 Operation monitor
ON	OFF		2 Malfunction monitor
OFF	ON		3 By-pass monitor
ON	ON		4 Supply fan operation monitor
N/A	N/A		5 Exhaust fan operation monitor
N/A	N/A		6 Pre-heater signal output
N/A	N/A		7 After-heater signal output



- Do not tighten screws of terminal block with a torque larger than 0.5 N · m. It could damage the circuit board.
- When connecting multiple cables to the terminal, use round terminal.
- If multiple output signals are necessary, use optional signal output terminal (PZ-N4GS-E).

When using Pre-heater output signal, the wiring should be as shown by the following picture.

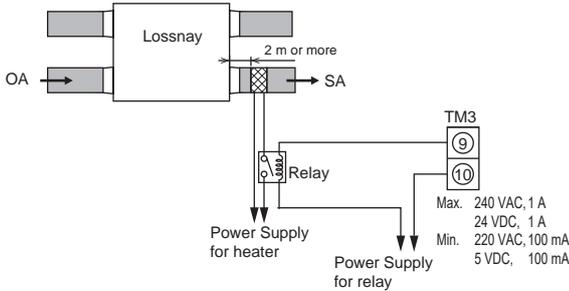


CAUTION

- Failure to follow below instructions, it could cause a fire.
- Choose a OA pre-heater which can control the heater outlet air temperature even both the air flow is maximum and minimum, and set Lossnay inlet air temperature to 2 - 13°C. Otherwise it could fall the supply fan into intermittent operation.
- Select a duct heater in compliance with local and national laws, ordinances, and standards.
- Select a duct heater that is tested by a certification body.
- Always select a heater that is equipped with a non-self-resetting safety device.
- Do not directly supply power from the Lossnay unit to the duct heater. Doing so could cause fire.
- Install a circuit breaker for the duct heater in compliance with all applicable laws, ordinances, and standards.

- Install the duct heater separated from the product by a distance of 2 m or more.
Failure to do so may result in equipment damage due to the transmission of residual heat from the heater.
- Ensure that the duct heater and Lossnay are wired and that the Lossnay function settings have been configured, and then always check operation by trial operation.
- For the duct heater output, see function setting **No. 60** and **No. 61**.

When using After-heater output signal, the wiring should be as shown by the following picture.



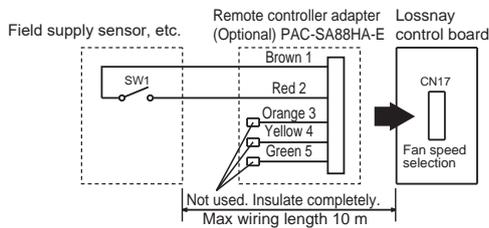
For the heater, observe the cautions listed in Pre-heater.

5 When switching fan speed externally (when a sensor or other equipment is connected)

Using a field supply sensor, etc., make connection by inserting the optional remote controller adapter (PAC-SA88HA-E) in the connector CN17 as shown by the figure. Lossnay will operate at the fan speed following the table below, regardless of the remote controller setting.

CN17	Fan speed
1-2 (Brown-Red)	4
1-3 (Brown-Orange)	3
1-4 (Brown-Yellow)	2
1-5 (Brown-Green)	1

■ Example "Fan speed 4"



Use this in such a way that it ventilates at low fan speed normally, and when the external sensor detects contamination of indoor air, or SW1 is on, it changes to high fan speed operation.

When multiple Lossnay units are controlled by one input, PZ-62DR-EA/EB is necessary.

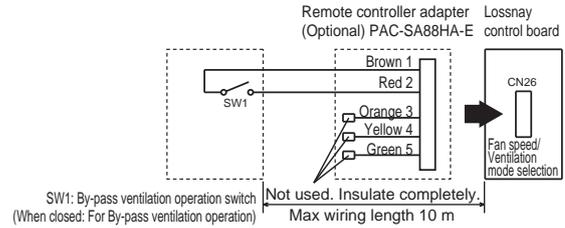
The signal has to be inputted into main unit referring to **3**.

Cannot be used in conjunction with the following functions:

- To change fan speed by 0 - 10 VDC input.
- Connecting CO₂ sensor PZ-70CSD-E or PZ-70CSW-E.

6 When switching By-pass externally.

Establish the wire connection by inserting the optional remote controller adapter (PAC-SA88HA-E) in the connector CN26.



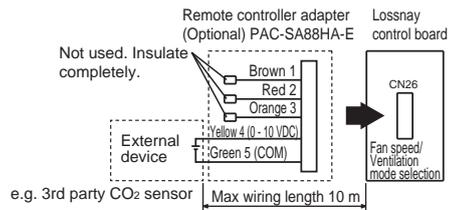
With SW1 is "ON", the ventilation mode of Lossnay is changed to the By-pass ventilation regardless of the setting on the remote controller. When multiple Lossnay units are controlled by one input, PZ-62DR-EA/EB is necessary.

The signal has to be inputted into main unit referring to **3**.

* When the outdoor air temperature drops lower than 8°C, it changes to the heat recovery ventilation. (In this case, ventilation mode icon on the display of the remote controller does not change from the previous mode, it might be different from the actual unit operation.)

7 To change fan speed by 0 - 10 VDC input

Establish the wire connection by inserting the optional remote controller adapter (PAC-SA88HA-E) in the connector CN26.



To change fan speed by 0 - 10 VDC input, the wiring should be as shown by the above picture. Refer to function settings **No. 66** for more details.

When multiple Lossnay units are controlled by one input, PZ-62DR-EA/EB is necessary.

The signal has to be inputted into main unit referring to **3**.

Cannot be used in conjunction with the following functions:

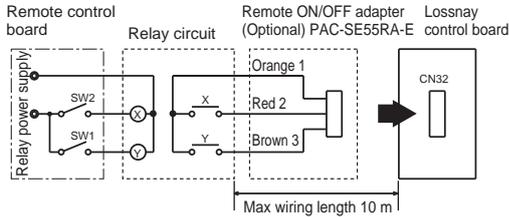
- Switching fan speed externally (CN17).
- Connecting CO₂ sensor PZ-70CSD-E or PZ-70CSW-E.

⚠ CAUTION

- Make sure of correct polarity.
- Do not apply voltages higher than 10 VDC.

8 When using the remote/local switching and the ON/OFF input (level signal)

Insert the optional remote ON/OFF adapter (PAC-SE55RA-E) in CN32 on the Lossnay control circuit board.
When multiple Lossnay units are controlled by one input, the signal has to be inputted into main unit referring to **3**.



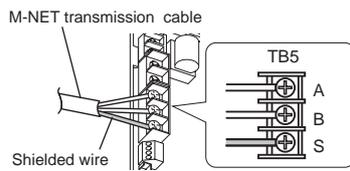
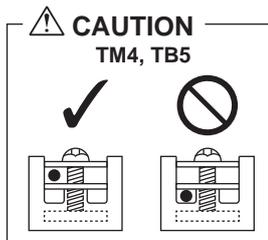
- SW1: When this is ON, Lossnay cannot be turned ON/OFF by the Remote Controller (PZ-62DR-EA/EB).
- SW2: When SW1 is ON, Lossnay can be turned ON by setting SW2 at ON or turned OFF by setting SW2 at OFF.

SW1: Remote/local selector switch

SW2: ON/OFF switch

X, Y: Relay (Contact rated load: 0.1 A at 15 VDC or more, Minimum applicable load: 1 mA or less)

9 When connecting to the City Multi, Mitsubishi Electric Air-Conditioner Network System (MELANS)



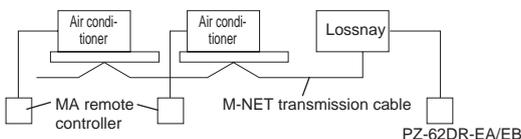
- Connect a shielded wire to terminal TB5 (S) on the circuit board. Address setting is required. (Refer to function setting section.)
M-NET transmission cable: Connect any of the City Multi indoor unit, or Mitsubishi Electric Air-Conditioner Network System (MELANS) - to the Lossnay.
- Remote Controller
PZ-62DR-EA/EB:
Connect to TM4 (1), (2) on the circuit board. (See Section **1** "When connecting with remote controller (PZ-62DR-EA/EB)".)
- Securely connect the M-NET transmission cables to TB5 (A)(B). (No-Polar)
Type: (Shielded wire, CVVS/CPEVS)
Wire diameter: 1.25 mm²

CAUTION

- Do not tighten screws on the terminal block with a torque larger than 1.2 N · m. It may damage the circuit board.
- Always use shielded wires only for the M-NET transmission cables, and finish the shield properly.
- Be sure to cut M-NET power supply during Lossnay wiring, otherwise it causes malfunction.

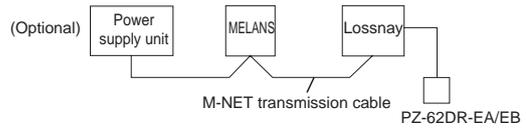
When interlocking with Mitsubishi M-NET air conditioner

- Incase of PZ-62DR-EA/EB



When connecting to PZ-62DR-EA/EB and MELANS

- Connect the power feeding unit.

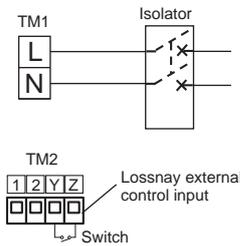


- * Limit the total length of transmission cables no longer than 500 m. Limit the wiring length between Lossnay and the power supply unit (Optional) or the outdoor unit no longer than 200 m.

Note

- LGH-RVX3-E series Lossnay can NOT be set as the same group with other series Lossnay such as LGH-RVS-E series or LGH-RVXT-E series.

10 To start/stop Lossnay stand-alone operation without using the remote control



- Start/stop the unit by a switch connected to TM2 (Y)(Z).
- When turned the unit ON, it operates at fan speed 4 and automatic ventilation mode.

CAUTION

- Do not start/stop the unit by turning the power supply to the unit ON/OFF.

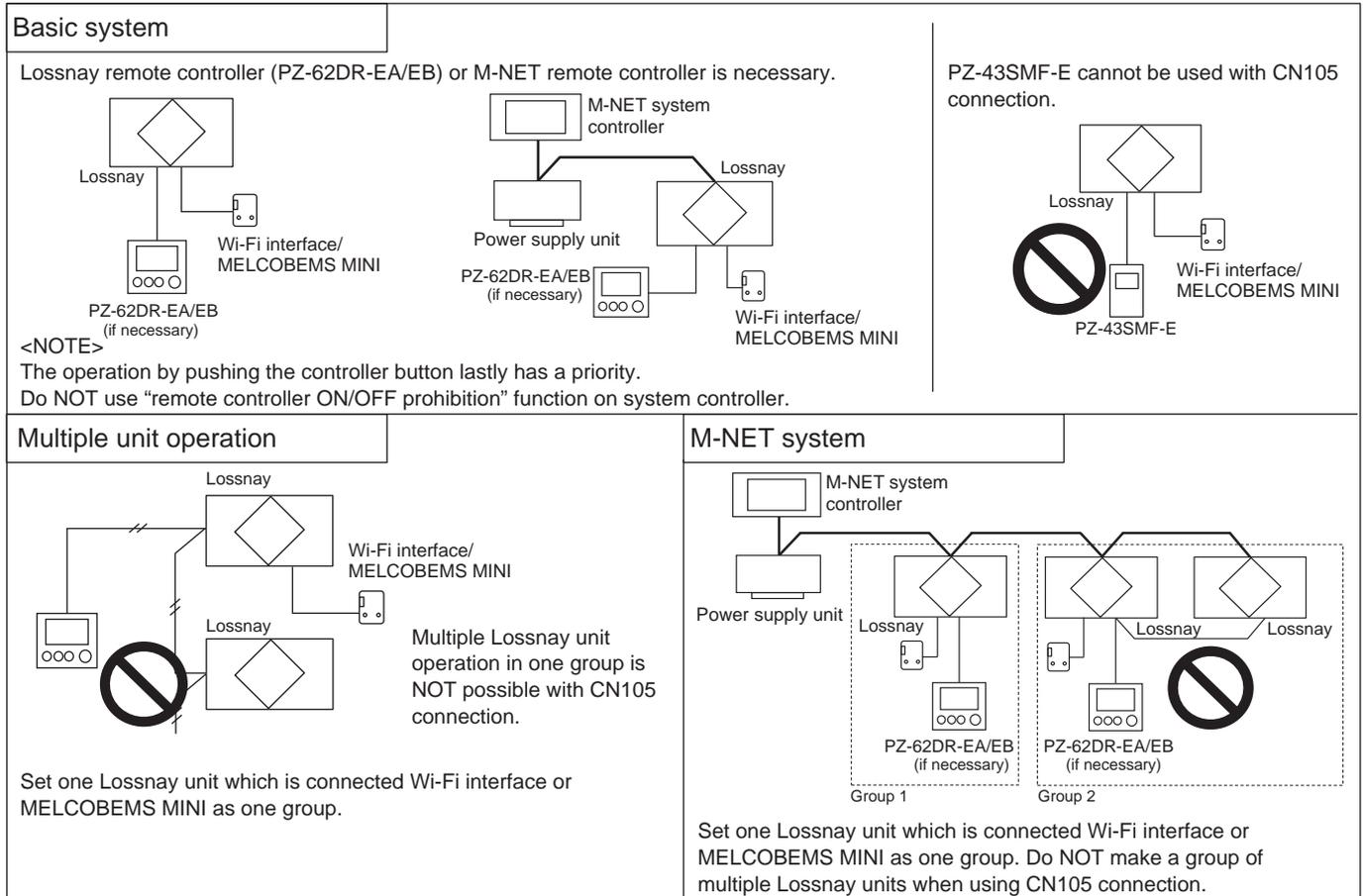
11 Control via Wi-Fi interface or MELCOBEMS MINI

Connect the lead wire of a Wi-Fi interface or MELCOBEMS MINI to CN105 on circuit board of Lossnay unit.

Regarding the model name of the connectable Wi-Fi interface or MELCOBEMS MINI, please contact the sales company in your market.

CAUTION

1. For the installation of the Wi-Fi interface, there are some precautions. Refer to the Installation manual of the Wi-Fi interface for more details.
2. After the installation, be sure to do a test run prior to the start of actual operations.
3. Follow the system configuration examples listed below.



System controller	Prohibit remote controller	Do NOT use "remote controller ON/OFF prohibition" function on system controller.
External control	ON/OFF switching by CN32	NOT available with CN105 connection control.
	External fan speed control (CN17, CN26)	The unit follows external input signal. Therefore, the fan speed selection through CN105 connection control become invalid.
	External Bypass control (CN26)	The unit follows external input signal. Therefore, the ventilation mode selection though CN105 connection control become invalid.
Interlocking	Interlock with Mr. Slim	Interlocking with Mr. Slim unit by Slim-Lossnay connection cable (CN2L-TM2①② connection) is NOT possible.
	Interlock mode setting	Only "ON/OFF interlock mode" is available. Please set function No. 19 as 0 on PZ-62DR-EA/EB (factory setting).

12 When connecting CO₂ sensor PZ-70CSD-E or PZ-70CSW-E

When CO₂ sensor is connected, "Auto" fan speed can be selected.

In "Auto" mode, the fan speed changes automatically according to CO₂ concentration.

Connect and install correctly by following the installation manual of PZ-70CSD-E or PZ-70CSW-E.

Note

- PZ-70CSB-E can not be installed in LGH-RVX3-E series.

5. Function settings

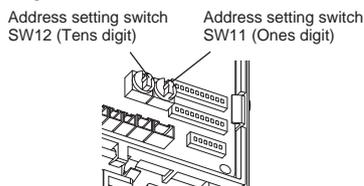
Address setting is required when connecting to City Multi and MELANS.

Setting the address

Use the following procedure when setting the address for dedicated Lossnay.

(The method in determining the addresses will depend on the existing system. Refer to the appropriate technical documents for details.)

- (1) Remove the control box cover.
 - (2) Turn the address setting switch on the circuit board.
- SW12 indicates the tens digit and SW11 indicates the ones digit.
 - The factory setting is "00".



* When the address number has been changed, the data in the memory is automatically reset.

Changing the function selection switches (SW-2, 5 and 6)

Set the selection switches (SW-2 and 5) to perform the appropriate function.

* All function except "Trial operation" and "Auto fan speed setting without Lossnay or M-NET remote controller" can be set also from the remote controller (PZ-62DR-EA/EB). If the function is switched later using the remote controller, it operates according to the setting on the remote controller.

(SW2)		
	OFF	ON
1	<input type="checkbox"/>	Trial operation
2	<input type="checkbox"/>	No. 28 Pulse input setting
3	<input type="checkbox"/>	No. 9 Delay start setting for air conditioner starting
4	<input type="checkbox"/>	No. 6 Indoor negative pressure setting
5	<input type="checkbox"/>	No. 7 Indoor positive pressure setting
6	<input type="checkbox"/>	No. 64 Fan speed for air volume "High" setting
7	<input type="checkbox"/>	No. 65 Fan speed for air volume "Low" setting
8	<input type="checkbox"/>	No. 5 Automatic recovery setting after power interruption
9	<input type="checkbox"/>	No. 70 Dx-coil unit connection selecting
10	<input type="checkbox"/>	N/A

(SW5)		
	OFF	ON
1	<input type="checkbox"/>	No. 12 Monitor output setting
2	<input type="checkbox"/>	
3	<input type="checkbox"/>	No. 17 Exhaust fan setting during air conditioner defrosting
4	<input type="checkbox"/>	
5	<input type="checkbox"/>	No. 71 Selection of the operation mode from "Temp. priority mode" or "Fan speed priority mode" with DX-coil unit
6	<input type="checkbox"/>	
7	<input type="checkbox"/>	No. 66 CO ₂ sensor or BMS setting
8	<input type="checkbox"/>	
9	<input type="checkbox"/>	When connecting the CO ₂ sensor, Auto fan speed setting without Lossnay remote controller or M-NET system controller
10	<input type="checkbox"/>	N/A

Change the function settings from the remote controller PZ-62DR-EA/EB.

Please refer to the Instruction book of PZ-62DR-EA/EB for how to set the function settings.

DIP-SW6 is to identify the model for circuit board. When replacing to new circuit board, set the same setting as old one.

(SW6)

	SW6-1	SW6-2	SW6-3	SW6-4	SW6-5	SW6-6
LGH-15RVX3-E	ON	OFF	OFF	OFF	OFF	OFF
LGH-25RVX3-E	OFF	ON	OFF	OFF	OFF	OFF
LGH-35RVX3-E	ON	ON	OFF	OFF	OFF	OFF
LGH-50RVX3-E	OFF	OFF	ON	OFF	OFF	OFF
LGH-65RVX3-E	ON	OFF	ON	OFF	OFF	OFF
LGH-80RVX3-E	OFF	ON	ON	OFF	OFF	OFF
LGH-100RVX3-E	ON	ON	ON	OFF	OFF	OFF
LGH-160RVX3-E	OFF	OFF	OFF	ON	OFF	OFF
LGH-200RVX3-E	ON	OFF	OFF	ON	OFF	OFF

* Do not change from factory setting. If changed, please set as factory setting.

No	Function	Setting Data															Factory setting	DIP-SW No.		
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14			15	
1	Filter maintenance and fan power up setting against filter choking	Indicator N/A Fan power up N/A	Indicator available Fan power up N/A	Indicator available Fan power up available	Indicator N/A Fan power up available	—	—	—	—	—	—	—	—	—	—	—	—	0	—	
2	Lossnay core maintenance indicator setting	N/A	Available	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	
5	Automatic recovery setting after power interruption	Dip-SW priority	Stop when the power is On	Start when the power is On	Return to the state before interruption	—	—	—	—	—	—	—	—	—	—	—	—	0	2-8	
6	Indoor negative pressure setting	Dip-SW priority	N/A	Supply 1 down	Supply 2 down	—	—	—	—	—	—	—	—	—	—	—	—	0	2-4	
7	Indoor positive pressure setting	Dip-SW priority	N/A	Exhaust 1 down	Exhaust 2 down	—	—	—	—	—	—	—	—	—	—	—	—	0	2-5	
8	Max. fan speed setting during the first 30 minutes	N/A	Available	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	
9	Delay start setting for air conditioner starting	Dip-SW priority	N/A	15 min	30 min	—	—	—	—	—	—	—	—	—	—	—	—	0	2-3	
12	Monitor output setting TM3 ⑨⑩	Dip-SW priority	Operation monitor	Malfuction monitor	By-pass monitor	Supply fan monitor	Exhaust fan monitor	Pre-heater output	SA fan monitor output with delay operation (for After heater)	—	—	—	—	—	—	—	—	0	5-1 5-2	
13	Monitor output setting PZ-4GS-E COM-OUT1	Operation monitor	Malfuction monitor	By-pass monitor	Supply fan monitor	Exhaust fan monitor	Pre-heater output	SA fan monitor output with delay operation (for After heater)	—	—	—	—	—	—	—	—	—	1	—	
14	Monitor output setting PZ-4GS-E COM-OUT2	Operation monitor	Malfuction monitor	By-pass monitor	Supply fan monitor	Exhaust fan monitor	Pre-heater output	SA fan monitor output with delay operation (for After heater)	—	—	—	—	—	—	—	—	—	2	—	
15	Monitor output setting PZ-4GS-E COM-OUT3	Operation monitor	Malfuction monitor	By-pass monitor	Supply fan monitor	Exhaust fan monitor	Pre-heater output	SA fan monitor output with delay operation (for After heater)	—	—	—	—	—	—	—	—	—	3	—	
16	Monitor output setting PZ-4GS-E COM-OUT4	Operation monitor	Malfuction monitor	By-pass monitor	Supply fan monitor	Exhaust fan monitor	Pre-heater output	SA fan monitor output with delay operation (for After heater)	—	—	—	—	—	—	—	—	—	4	—	
17	Exhaust fan setting during air conditioner defrosting	No change	Stop	Dip-SW priority	—	—	—	—	—	—	—	—	—	—	—	—	—	2	5-3	
18	Exhaust fan setting at OA temperature lower than -15 °C	No change	Forced to fan speed 2 or less	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	
19	Interlock mode setting	ON/OFF interlock	ON interlock	OFF interlock	External input given priority	—	—	—	—	—	—	—	—	—	—	—	—	0	—	
28	Pulse input setting	Dip-SW priority	Non-pulse input	Pulse input	—	—	—	—	—	—	—	—	—	—	—	—	—	0	2-2	
30	Night-purge setting 1) Air volume	N/A	Fan speed 1	Fan speed 2	Fan speed 3	Fan speed 4	—	—	—	—	—	—	—	—	—	—	—	0	—	
31	Night-purge setting 2) Outdoor and indoor temperature gap	0 K (0°C)	1 K (1°C)	2 K (2°C)	3 K (3°C)	4 K (4°C)	5 K (5°C)	6 K (6°C)	7 K (7°C)	—	—	—	—	—	—	—	—	5	—	
32	Night-purge setting 3) The lowest outdoor temperature	Setting Data 0 to 15 --> The lowest outdoor temperature for Night-purge 15°C to 30°C															2	—		
33	Night-purge setting 4) Outdoor temperature detection period	24 hrs	48 hrs	72 hrs	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	
34	Input priority setting	Bunch control priority	Individual control priority	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	
36	Outdoor temperature display setting	N/A	Available	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	
37	Indoor temperature display setting	N/A	Available	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	
38	CO2 concentration display setting	N/A	Available	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	
39	Calculated supply air temperature display setting	N/A	Available	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—	
40	Temperature exchange efficiency setting (10 digit)	Setting Data 0 to 9 --> 10 digit of temperature exchange efficiency 0 to 9										—	—	—	—	—	7	—		
41	Temperature exchange efficiency setting (1 digit)	Setting Data 0 to 9 --> 1 digit of temperature exchange efficiency 0 to 9										—	—	—	—	—	—	0	—	
42	Outdoor temperature correction	Setting Data 0 to 14 --> Outdoor temperature correction -7 K (-7°C) to 7 K (7°C)															—	7	—	
43	Indoor temperature correction	Setting Data 0 to 14 --> Room temperature correction -7 K (-7°C) to 7 K (7°C)															—	7	—	
44	CO2 concentration correction	Setting Data 0 to 10 --> CO2 concentration correction -500ppm~500ppm (100ppm in increments)										—	—	—	—	—	—	—	5	—
45	Supply fan monitor threshold	Fan speed 1 or higher	Fan speed 2 or higher	Fan speed 3 or higher	Fan speed 4	—	—	—	—	—	—	—	—	—	—	—	—	0	—	
46	Exhaust fan monitor threshold	Fan speed 1 or higher	Fan speed 2 or higher	Fan speed 3 or higher	Fan speed 4	—	—	—	—	—	—	—	—	—	—	—	—	0	—	
52	Automatic ventilation mode setting 1) Outdoor and indoor temperature gap	Setting Data 0 to 7 --> Temperature gap 0 K (0°C) to 7 K (7°C)								—	—	—	—	—	—	—	—	0	—	

No	Function	Setting Data															Factory setting	DIP-SW No.		
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14			15	
53	Automatic ventilation mode setting 2) The lowest outdoor temperature setting	Setting Data 0 to 15 --> Lowest outdoor temperature 10°C to 25°C															6	—		
54	Automatic ventilation mode setting 3) The lowest indoor temperature setting	Setting Data 0 to 15 --> Lowest indoor temperature 15°C to 30°C															1	—		
55	Supply fan power up for Fan speed 4	N/A	1 level up	2 level up	3 level up	4 level up	—	—	—	—	—	—	—	—	—	—	—	—	0	—
56	Exhaust fan power up for Fan speed 4	N/A	1 level up	2 level up	3 level up	4 level up	—	—	—	—	—	—	—	—	—	—	—	—	0	—
60	Pre-heater output setting 1) ON temperature	0 °C	-1 °C	-2 °C	-3 °C	-4 °C	-5 °C	-6 °C	-7 °C	—	—	—	—	—	—	—	—	—	0	—
61	Pre-heater output setting 2) OFF interval	1 hr	2 hrs	3 hrs	4 hrs	5 hrs	—	—	—	—	—	—	—	—	—	—	—	—	0	—
62	LED usage setting for PZ-70CSW-E during non operation	Unlit	Lit	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—
64	Fan speed for air volume "High" input	Dip-SW priority	Fan speed 4	Fan speed 3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	2-6
65	Fan speed for air volume "Low" input	Dip-SW priority	Fan speed 2	Fan speed 1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	2-7
66	CO ₂ sensor or BMS setting	Dip-SW priority	N/A	3rd party's CO ₂ sensor	—	BMS Pattern Z	CO ₂ sensor PZ-70CSW-E	—	CO ₂ sensor PZ-70CSD-E	—	—	—	—	—	—	—	—	—	0	5-6 5-7 5-8
67	Threshold minutes for PZ-70CSW-E LED	10 min	15 min	20 min	25 min	30 min	—	—	—	—	—	—	—	—	—	—	—	—	2	—
68	Threshold concentration for PZ-70CSW-E LED	1000 ppm	1100 ppm	1200 ppm	1300 ppm	1400 ppm	1500 ppm	1600 ppm	1700 ppm	1800 ppm	1900 ppm	2000 ppm	—	—	—	—	—	—	5	—
69	Emergency stop setting	Emergency stop	Normal stop	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—
70	Dx-coil unit connection selecting	Dip-SW priority	Dx-coil unit is NOT connected	Dx-coil unit is connected	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	2-9
71	Selection of the operation mode from "Temp. priority mode" or "Fan speed priority mode" with DX-coil unit	Dip-SW priority	Temp. priority mode	Fan speed priority mode	Fan speed priority mode after 1 hour temp. priority mode	Fan speed priority mode after 2 hours temp. priority mode	—	—	—	—	—	—	—	—	—	—	—	—	0	5-4 5-5
73	Airflow setting for supply fan speed 3	100 %	95 %	90 %	85 %	80 %	75 %	70 %	65 %	60 %	55 %	50 %	45 %	40 %	35 %	30 %	25 %	5	—	
74	Airflow setting for supply fan speed 2	100 %	95 %	90 %	85 %	80 %	75 %	70 %	65 %	60 %	55 %	50 %	45 %	40 %	35 %	30 %	25 %	10	—	
75	Airflow setting for supply fan speed 1	100 %	95 %	90 %	85 %	80 %	75 %	70 %	65 %	60 %	55 %	50 %	45 %	40 %	35 %	30 %	25 %	15	—	
76	Airflow setting for exhaust fan speed 3	100 %	95 %	90 %	85 %	80 %	75 %	70 %	65 %	60 %	55 %	50 %	45 %	40 %	35 %	30 %	25 %	5	—	
77	Airflow setting for exhaust fan speed 2	100 %	95 %	90 %	85 %	80 %	75 %	70 %	65 %	60 %	55 %	50 %	45 %	40 %	35 %	30 %	25 %	10	—	
78	Airflow setting for exhaust fan speed 1	100 %	95 %	90 %	85 %	80 %	75 %	70 %	65 %	60 %	55 %	50 %	45 %	40 %	35 %	30 %	25 %	15	—	
83	Filter maintenance interval setting - Thousands digit	0	1	2	3	4	5	6	7	8	9	—	—	—	—	—	—	—	3	—
84	Filter maintenance interval setting - Hundreds digit	0	1	2	3	4	5	6	7	8	9	—	—	—	—	—	—	—	0	—
85	Lossnay core maintenance interval setting - Thousands digit	0	1	2	3	4	5	6	7	8	9	—	—	—	—	—	—	—	6	—
86	Lossnay core maintenance interval setting - Hundreds digit	0	1	2	3	4	5	6	7	8	9	—	—	—	—	—	—	—	0	—
87	Airflow setting for supply fan speed 4	100 %	95 %	90 %	85 %	80 %	75 %	70 %	65 %	60 %	55 %	50 %	45 %	40 %	35 %	30 %	25 %	0	—	
88	Airflow setting for exhaust fan speed 4	100 %	95 %	90 %	85 %	80 %	75 %	70 %	65 %	60 %	55 %	50 %	45 %	40 %	35 %	30 %	25 %	0	—	
89	CO ₂ sensor setting - maximum side - Hundreds digits	600 ppm	700 ppm	800 ppm	900 ppm	1000 ppm	1100 ppm	1200 ppm	1300 ppm	1400 ppm	1500 ppm	1600 ppm	1700 ppm	1800 ppm	1900 ppm	2000 ppm	—	—	4	—
90	CO ₂ sensor setting - maximum side - tens digits	0 ppm	50 ppm	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—
91	CO ₂ sensor setting - minimum side - Hundreds digits	300 ppm	400 ppm	500 ppm	600 ppm	700 ppm	800 ppm	900 ppm	1000 ppm	1100 ppm	1200 ppm	1300 ppm	1400 ppm	1500 ppm	1600 ppm	1700 ppm	—	—	1	—
92	CO ₂ sensor setting - minimum side - tens digits	0 ppm	50 ppm	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
93	CO ₂ sensor correction	-250 ppm	-200 ppm	-150 ppm	-100 ppm	-50 ppm	0 ppm	50 ppm	100 ppm	150 ppm	200 ppm	250 ppm	—	—	—	—	—	—	5	—
94	Indoor negative / positive pressure setting at auto fan speed setting	N/A	Supply fan	Exhaust fan	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—
95	Indoor negative / positive pressure setting at auto fan speed setting	N/A	5 %	10 %	15 %	20 %	25 %	30 %	35 %	40 %	45 %	50 %	55 %	60 %	65 %	70 %	75 %	0	—	
100	Initialization (No.1~99)	N/A	Initialize	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	—

This table shows the summary of function settings. Please refer to the following pages for more details.
 The functions indicated with "N/A" in the "DIP-SW No." column are available only when using with remote controller PZ-62DR-EA/EB.
PZ-62DR-EA/EB can set Night purge setting (No.30), By-pass setting (No.52, 53, 54), CO₂ sensor setting (No.89, 90, 91, 92), Filter maintenance interval setting (No.83, 84), Lossnay core maintenance interval setting (No. 85, 86) and Airflow setting (No. 73-78, 87, 88) by different way more easily.
Refer to the remote controller PZ-62DR-EA/EB operation manual for more detail.

Auto fan speed setting without Lossnay remote controller or M-NET system controller

When CO₂ sensor is connected but any remote controller is not connected, SW 5-9 has to be ON in order to operate according to CO₂ concentration.
When SW 5-9 is ON, any Lossnay remote controller or M-NET system controller can not be connected and not possible to interlock with City Multi or Mr. Slim unit.

DIP-SW		Setting check	Auto fan speed setting without Lossnay or M-NET system controller
SW No.	Setting		
SW5-9	OFF (Factory setting)		N/A
	ON		Fan speed changes according to CO ₂ concentration

No. 1 Filter maintenance and fan power up setting against filter choking

Set the schedule for filter cleaning based on the estimated concentration of dust in the air.
When fan power up is available, exhaust and supply fans power up at 1,000 hrs, 2,000 hrs and 3,000 hrs gradually.
If function No. 55 or No. 56 is already worked, fan power up function may not be available.
Estimated hour differs by actual operated fan speed.
This function is N/A from Lossnay unit DIP-SW.
The target interval can be selected at No. 83, No. 84.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Filter maintenance indicator	Fan power UP
SW No.	Setting		Function No.	Setting Data			
N/A	-	-	1	0 (Factory setting)		N/A	N/A
	-	-		1		Appears at the interval of estimated 3,000 hrs	N/A
	-	-		2		Appears at the interval of estimated 3,000 hrs	Available
	-	-		3		N/A	Available

CAUTION

- When the cumulative operation time of the Lossnay exceeded the estimated hours, the maintenance icon will appear on the air conditioner remote controller or the Lossnay remote controller. After cleaning the filter, the maintenance icon can be reset. Refer to the Instruction book for the remote controller.

No.2 Lossnay core maintenance indicator setting

When using PZ-62DR-EA/EB, set to enable Lossnay core maintenance display. Estimated hour differs by actual operated fan speed.
This function is N/A from Lossnay unit DIP-SW.
The target interval can be selected at No. 85, No. 86.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Lossnay core maintenance indicator
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	2	0 (Factory setting)		N/A
	-	-		1		Indicate at estimated 6,000 hrs

CAUTION

- When the cumulative operation time of the Lossnay exceeded the estimated hours, the maintenance icon will appear on the Lossnay remote controller. After cleaning the Lossnay core, the maintenance icon can be reset. Refer to the Instruction book for the remote controller.

No.5 Automatic recovery setting after power interruption

Sets for automatic recovery following power interruption.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Lossnay operation when the power is recovered
SW No.	Setting		Function No.	Setting Data		
SW2-8	-	-	5	0 (Factory setting)		DIP-SW priority
	OFF (Factory setting)			1		Lossnay remains stopped.
	-	-		2		Lossnay starts operation.
	ON			3		Lossnay returns to the state before interruption*

* If a power failure happens when Lossnay is operating by external signal via TM2 ①② or [YIZ], Lossnay returns the condition before power failure regardless of the external input condition after power recovery.

No. 6 Indoor negative pressure setting

Exhaust fan speed becomes bigger than supply fan speed.
Remote controller indicates fan speed of exhaust fan.

Fan speed Display	Exhaust fan	Supply fan	
		1 down	2 down
4	4	3	2
3	3	2	1
2	2	1	1
1	1	1	1

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Down level of supply fan speed
SW No.	Setting		Function No.	Setting Data		
SW2-4	-	-	6	0 (Factory setting)		DIP-SW priority
	OFF (Factory setting)			1		N/A
	ON			2		Supply fan speed is 1 down to exhaust fan speed
	-	-		3		Supply fan speed is 2 down to exhaust fan speed

No.7 Indoor positive pressure setting

Supply fan speed becomes bigger than exhaust fan speed.
Remote controller indicates fan speed of supply fan.

Fan speed Display	Supply fan	Exhaust fan	
		1 down	2 down
4	4	3	2
3	3	2	1
2	2	1	1
1	1	1	1

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Down level of exhaust fan speed
SW No.	Setting		Function No.	Setting Data		
SW2-5	-	-	7	0 (Factory setting)		DIP-SW priority
	OFF (Factory setting)			1		N/A
	ON			2		Exhaust fan speed is 1 down to supply fan speed
	-	-		3		Exhaust fan speed is 2 down to supply fan speed

No.8 Max. fan speed setting during the first 30 minutes

This sets the fan to run forcibly for 30 minutes when operation starts to ventilate the indoor area. After 30 minutes, fan speed can be changed. Use this setting if the indoor air is contaminated at night when the system is shut down and you desire to ventilate the indoor area quickly when operation is started in the morning.
This function is N/A from Lossnay unit DIP-SW.
While this function is working,  and selected fan speed are displayed on the screen of PZ-62DR-EA/EB.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Max. fan speed setting during the first 30 minutes
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	8	0 (Factory setting)		N/A
	-	-		1		Available

No.9 Delay start setting for air conditioner starting

Delays Lossnay operation for 30 minutes when City Multi or Mr. Slim starts operating or when a external device starts operating. This function is available only when Lossnay is interlocked with air conditioners.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Lossnay delay start
SW No.	Setting		Function No.	Setting Data		
SW2-3	-	-	9	0 (Factory setting)		DIP-SW priority
	OFF (Factory setting)			1		N/A
	-	-		2		15 min
	ON			3		30 min

No.12-16 Monitor output setting

Set operation monitor output from TM3 ⑨⑩ synchronized with fan operation, ventilation mode or occurrence of malfunction. Monitor output setting for PZ-4GS-E COM-OUT1 to 4 can be set from the remote controller as well. See page 19 for which function No. is applied for the each terminal.

DIP-SW			Setting check	PZ-62DR-EA/EB		Setting check	Monitor output setting
SW No.	Setting			Setting			
	Function No.12	Function No.13-16		Function No.12	Function No.13-16		
SW5-1 SW5-2	-	-	-	0	-		DIP-SW priority
	5-1 OFF 5-2 OFF (Factory setting)	-		1	0		Operation monitor output The output turns ON while Lossnay is operating.
	5-1 ON 5-2 OFF	-		2	1		Malfunction monitor output The output turns ON when a malfunction occurs on the Lossnay unit.
	5-1 OFF 5-2 ON	-		3	2		By-pass ventilation operation monitor output Corresponds to operation mode output of the By-pass damper.
	5-1 ON 5-2 ON	-		4	3		SA fan monitor output * When supply fan stops due to cold outdoor temp. or defrosting, output stops.
				5	4		EA fan monitor output
				6	5		Pre-heater output Output starts 10 seconds after supply fan starts operation. Fan continues to operate for 3 min. after stopping the output. Lossnay starts output when outdoor temp. is 0°C or less, and stops output when detecting temp. becomes 15°C Lossnay stops the output every 1 hour. Error code is shown on the remote controller and the output stops in the case of following. 1) Outdoor temperature higher than 15°C within 15 minutes after the output starts. 2) Outdoor temperature -20°C or lower, 5 minutes after the output starts.
				7	6		SA fan monitor output with delay operation (for After heater) Output starts 10 seconds after supply fan starts operation. Fan continues to operate for 3 min. after stopping the output.

- To use as the after-heater output, observe the cautions listed in 4 in the page 14.
- For heater selection, observe the cautions listed in 4 in the page 14.

No.17 Exhaust fan setting during air conditioner defrosting

This function can be used under the condition Lossnay supply duct is connected to Mr. Slim or City Multi indoor unit. Sets the operation of the exhaust fan during defrosting of the air conditioner (when supply fan stop). To enable this function, it is necessary to set the indoor unit also. Please refer to its manual.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Exhaust fan operation during air conditioner defrosting
SW No.	Setting		Function No.	Setting Data		
SW5-3	OFF (Factory setting)		17	0		No change
	ON			1		Stop
	-	-		2 (Factory setting)		DIP-SW priority

No.18 Exhaust fan setting at OA temperature lower than -15 °C

Sets the operation of the exhaust fan when the outdoor air is lower than -15 °C (when supply fan stop). This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Exhaust fan operation at outdoor temp. -15 °C or less
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	18	0 (Factory setting)		No change
	-	-		1		Forced to fan speed 2 or less

- If EA and SA is set unbalanced, the Lossnay core defrosting may not work correctly. For continuous unbalanced operation, a pre-heater is recommended to install.

No.19 Interlock mode setting

These settings indicate how Lossnay should operate when City Multi or external devices are started or stopped. This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Interlock setting
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	19	0 (Factory setting)		The Lossnay will start and stop according to the operation of the external devices. Subsequent operation will be possible using the remote controller for the Lossnay or MELANS.
	-	-		1		The Lossnay will start whenever external devices are operated. Stopping Lossnay operation will be possible using its remote controller or MELANS.
	-	-		2		The Lossnay will stop whenever external devices are stopped. Starting Lossnay operation will be possible using its remote controller or MELANS.
	-	-		3		The Lossnay will start and stop according to the operation of the external devices. Control via the Lossnay remote controller or MELANS will only be possible when external devices are stopped.

No.28 Pulse input setting

Set external input signal type from external device for TM2.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Pulse input setting
SW No.	Setting		Function No.	Setting Data		
SW2-2	-	-	28	0 (Factory setting)		DIP-SW priority
	OFF (Factory setting)			1		NOT pulse input
	ON			2		Pulse input

When pulse signal is selected, **No. 9** and **No. 19** are not available.
Keep factory settings for **No. 9** and **No. 19**.
Either interlocking with City Multi or Mr. Slim is not possible.

No.30 Night-purge setting 1) Air volume

Set fan speed during Night-purge. To use Night-purge function, it is necessary to set **No. 30**, **No. 31**, **No. 32** correctly.
This function is N/A from Lossnay unit DIP-SW.
It can also be set on the PZ-62DR-EA/EB's Ventilation settings screen.

When using PZ-62DR-EA/EB and AE-200A together, set all conditions from AE-200A.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Air volume
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	30	0 (Factory setting)		N/A (Night-purge function is not available)
	-	-		1		Fan speed 1
	-	-		2		Fan speed 2
	-	-		3		Fan speed 3
	-	-		4		Fan speed 4

No.31 Night-purge setting 2) Outdoor and indoor temperature gap

Set one of conditions for Night-purge start, temperature gap between indoor and outdoor.

When the actual gap between indoor and outdoor becomes bigger than the setting, Night-purge starts.

This function is N/A from Lossnay unit DIP-SW.

When using PZ-62DR-EA/EB and AE-200A together, set all conditions from AE-200A.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Outdoor and indoor temperature gap
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	31	0		0 K (0 °C) or more
	-	-		1		1 K (1 °C) or more
	-	-		2		2 K (2 °C) or more
	-	-		3		3 K (3 °C) or more
	-	-		4		4 K (4 °C) or more
	-	-		5 (Factory setting)		5 K (5 °C) or more
	-	-		6		6 K (6 °C) or more
-	-	7		7 K (7 °C) or more		

No.32 Night-purge setting 3) The lowest outdoor temperature

Set one of conditions for Night-purge start, maximum outdoor temperature within 72 hours.

When this setting temperature is low, it is likely to start Night-purge.

This function is N/A from Lossnay unit DIP-SW.

When using PZ-62DR-EA/EB and AE-200A together, set all conditions from AE-200A.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	The lowest outdoor temperature
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	32	0		15 °C or more
	-	-		1		16 °C or more
	-	-		2 (Factory setting)		17 °C or more
	-	-		3		18 °C or more
	-	-		4		19 °C or more
	-	-		5		20 °C or more
	-	-		6		21 °C or more
	-	-		7		22 °C or more
	-	-		8		23 °C or more
	-	-		9		24 °C or more
	-	-		10		25 °C or more
	-	-		11		26 °C or more
	-	-		12		27 °C or more
	-	-		13		28 °C or more
	-	-		14		29 °C or more
-	-	15		30 °C or more		

No.33 Night purge setting 4) Outdoor temperature detection period

Night-purge is decided to start or not by the OA temperature within X hour.

X hour can be selected from 24, 48 or 72 hrs.

It is possible to operate Night-purge on Sunday midnight or Monday early morning by selecting longer setting.

This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	OA temperature detection period
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	33	0		24 hrs
	-	-		1		48 hrs
	-	-		2 (Factory setting)		72 hrs

No.34 Input priority setting

Set to follow input to the main unit from air conditioner, fan speed controller, etc.

When multiple Lossnay units fan speed is externally controlled via CN17 or CN26, select individual control or bunch control.

When bunch control is selected, connect PZ-62DR-EA/EB and input external signal to the main unit.

This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Input priority setting
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	34	0 (Factory setting)		Bunch control priority
	-	-		1		Individual control priority

No.36 Outdoor temperature display setting

Set to display outdoor temperature detected by Lossnay unit thermistor.

This function is N/A from Lossnay unit DIP-SW.

This function is available only when "Sensor value" is set to "Yes" (Display) by the remote controller PZ-62DR-EA/EB.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Outdoor temperature display
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	36	0		N/A
	-	-		1 (Factory setting)		Available on the screen of PZ-62DR-EA/EB

No.37 Indoor temperature display setting

Set to display indoor temperature detected by Lossnay unit thermistor.

This function is N/A from Lossnay unit DIP-SW.

This function is available only when "Sensor value" is set to "Yes" (Display) by the remote controller PZ-62DR-EA/EB.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Indoor temperature display
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	37	0		N/A
	-	-		1 (Factory setting)		Available on the screen of PZ-62DR-EA/EB

No.38 CO₂ concentration display setting

Set to display CO₂ concentration when the CO₂ sensor (PZ-70CSD-E, PZ-70CSW-E) is used.

This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	CO ₂ concentration display
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	38	0		N/A
	-	-		1 (Factory setting)		Available on the screen of PZ-62DR-EA/EB

- This function is available only when "Sensor value" is set to "Yes" (Display) by the remote controller PZ-62DR-EA/EB.
- When displaying CO₂ concentration, supply air temperature cannot be displayed simultaneously.
- CO₂ concentration display shows the value detected by a CO₂ sensor connected to Lossnay unit. The value may differ from the actual indoor CO₂ concentration. This function cannot be used as a measuring instrument.
- The value may significantly differ from the actual indoor CO₂ concentration for approx. 15 minutes after starting operation.
- When 3rd party's CO₂ sensor is connected, CO₂ concentration is not displayed on PZ-62DR-EA/EB screen.

No.39 Calculated supply air temperature display setting

Set to display calculated supply air temperature or not.

This function is N/A from Lossnay unit DIP-SW.

In addition, this function is available only when "Sensor value" is set to "Yes" (Display) by the remote controller PZ-62DR-EA/EB.

CO₂ concentration and supply air temperature can not be displayed at the same time.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Calculated supply air temperature display
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	39	0 (Factory setting)		N/A
	-	-		1		Available on the screen of PZ-62DR-EA/EB

- CO₂ concentration and supply air temperature can not be displayed at the same time.

No.40, 41 Temperature exchange efficiency setting

Set the 10 digit of temperature exchange efficiency which is used to calculate supply air temperature.

This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	10 digit of temperature exchange efficiency
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	40	0		0
	-	-		1		1
	-	-		2		2
	-	-		3		3
	-	-		4		4
	-	-		5		5
	-	-		6		6
	-	-		7 (Factory setting)		7
	-	-		8		8
	-	-		9		9

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	1 digit of temperature exchange efficiency
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	41	0 (Factory setting)		0
	-	-		1		1
	-	-		2		2
	-	-		3		3
	-	-		4		4
	-	-		5		5
	-	-		6		6
	-	-		7		7
	-	-		8		8
	-	-		9		9

No.42 Outdoor temperature correction

Set the correction for the outdoor temperature displayed on the PZ-62DR-EA/EB screen by function [No. 36](#).

This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	The correction to thermistor detection
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	42	0		-7 K (-7 °C)
	-	-		1		-6 K (-6 °C)
	-	-		2		-5 K (-5 °C)
	-	-		3		-4 K (-4 °C)
	-	-		4		-3 K (-3 °C)
	-	-		5		-2 K (-2 °C)
	-	-		6		-1 K (-1 °C)
	-	-		7 (Factory setting)		0 K (0 °C)
	-	-		8		+1 K (+1 °C)
	-	-		9		+2 K (+2 °C)
	-	-		10		+3 K (+3 °C)
	-	-		11		+4 K (+4 °C)
	-	-		12		+5 K (+5 °C)
	-	-		13		+6 K (+6 °C)
-	-	14		+7 K (+7 °C)		

No.43 Indoor temperature correction

Set the correction for the indoor temperature displayed on the PZ-62DR-EA/EB screen by function **No. 37**.
This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	The correction to thermistor detection
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	43	0	-7 K (-7 °C)	
	-	-		1	-6 K (-6 °C)	
	-	-		2	-5 K (-5 °C)	
	-	-		3	-4 K (-4 °C)	
	-	-		4	-3 K (-3 °C)	
	-	-		5	-2 K (-2 °C)	
	-	-		6	-1 K (-1 °C)	
	-	-		7 (Factory setting)	0 K (0 °C)	
	-	-		8	+1 K (+1 °C)	
	-	-		9	+2 K (+2 °C)	
	-	-		10	+3 K (+3 °C)	
	-	-		11	+4 K (+4 °C)	
	-	-		12	+5 K (+5 °C)	
	-	-		13	+6 K (+6 °C)	
-	-	14	+7 K (+7 °C)			

No.44 CO2 concentration correction

CO2 concentration displayed on the PZ-62DR-EA/EB can be corrected.
This function is available when there is CO2 concentration gap due to the location of CO2 sensor.
This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	CO2 concentration correction
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	44	0	-500 ppm	
	-	-		1	-400 ppm	
	-	-		2	-300 ppm	
	-	-		3	-200 ppm	
	-	-		4	-100 ppm	
	-	-		5 (Factory setting)	±0 ppm	
	-	-		6	100 ppm	
	-	-		7	200 ppm	
	-	-		8	300 ppm	
	-	-		9	400 ppm	
	-	-		10	500 ppm	

No.45 Supply fan monitor threshold

The threshold fan speed of supply fan monitor output can be selected.
This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Supply fan monitor threshold
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	45	0 (Factory setting)	Fan speed 1 or higher	
	-	-		1	Fan speed 2 or higher	
	-	-		2	Fan speed 3 or higher	
	-	-		3	Fan speed 4	

No.46 Exhaust fan monitor threshold

The threshold fan speed of exhaust fan monitor output can be selected.
This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Exhaust fan monitor threshold
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	46	0 (Factory setting)	Fan speed 1 or higher	
	-	-		1	Fan speed 2 or higher	
	-	-		2	Fan speed 3 or higher	
	-	-		3	Fan speed 4	

No.52 Automatic ventilation mode setting 1) Outdoor and indoor temperature gap

Set one of conditions for By-pass mode in auto ventilation operation, temperature gap between indoor and outdoor.
This function is N/A from Lossnay unit DIP-SW.
This function can also be set on the **Auto By-pass** settings screen of the PZ-62DR-EA/EB.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Gap between Indoor temp. and Outdoor temp.
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	52	0 (Factory setting)	0 K (0 °C) or more	
	-	-		1	1 K (1 °C) or more	
	-	-		2	2 K (2 °C) or more	
	-	-		3	3 K (3 °C) or more	
	-	-		4	4 K (4 °C) or more	
	-	-		5	5 K (5 °C) or more	
	-	-		6	6 K (6 °C) or more	
	-	-		7	7 K (7 °C) or more	

No.53 Automatic ventilation mode setting 2) The lowest outdoor temperature

Set one of conditions for By-pass mode in auto ventilation operation, minimum outdoor temperature which comes in indoor directly.
This function is N/A from Lossnay unit DIP-SW.
This function can also be set on the **Auto By-pass** settings screen of the PZ-62DR-EA/EB.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Outdoor temperature
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	53	0	10 °C or more	
	-	-		1	11 °C or more	
	-	-		2	12 °C or more	
	-	-		3	13 °C or more	
	-	-		4	14 °C or more	
	-	-		5	15 °C or more	
	-	-		6 (Factory setting)	16 °C or more	
	-	-		7	17 °C or more	
	-	-		8	18 °C or more	
	-	-		9	19 °C or more	
	-	-		10	20 °C or more	
	-	-		11	21 °C or more	
	-	-		12	22 °C or more	
	-	-		13	23 °C or more	
	-	-		14	24 °C or more	
-	-	15	25 °C or more			

No.54 Automatic ventilation mode setting 3) The lowest indoor temperature setting

Set one of conditions for By-pass mode in auto ventilation operation, minimum indoor temperature.

This function is N/A from Lossnay unit DIP-SW.

When Lossnay is interlocked to Mr. Slim or City Multi indoor unit, the target temperature of the indoor unit is the lowest indoor temperature for By-pass mode.

This function can also be set on the **Auto By-pass** settings screen of the PZ-62DR-EA/EB.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Indoor temperature	
SW No.	Setting		Function No.	Setting Data			
N/A	-	-	54	0		15 °C or more	
	-	-		1	(Factory setting)		16 °C or more
	-	-		2			17 °C or more
	-	-		3			18 °C or more
	-	-		4			19 °C or more
	-	-		5			20 °C or more
	-	-		6			21 °C or more
	-	-		7			22 °C or more
	-	-		8			23 °C or more
	-	-		9			24 °C or more
	-	-		10			25 °C or more
	-	-		11			26 °C or more
	-	-		12			27 °C or more
	-	-		13			28 °C or more
	-	-		14			29 °C or more
-	-	15			30 °C or more		

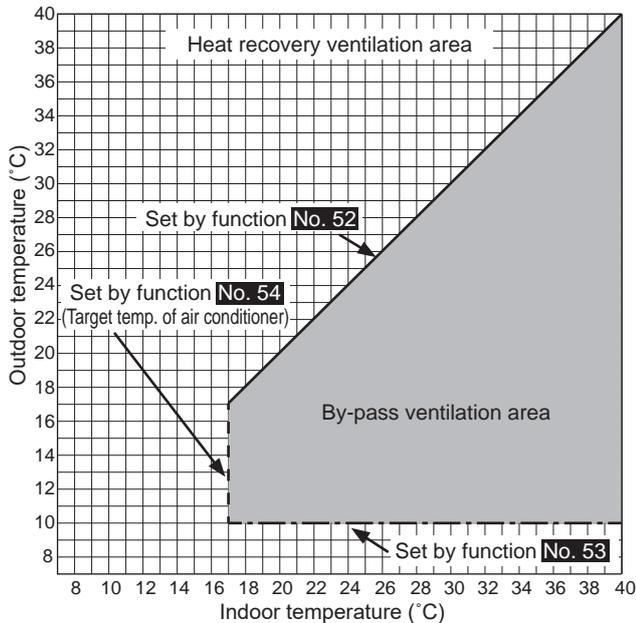
User can set conditions to go into By-pass mode in automatic ventilation mode by function **No. 52**, **No. 53**, and **No. 54**.

Setting examples are shown below.

Function **No. 52**, **No. 53**, and **No. 54** can also be set on the Auto bypass setting screen of PZ-62DR-EA/EB.

Example 1

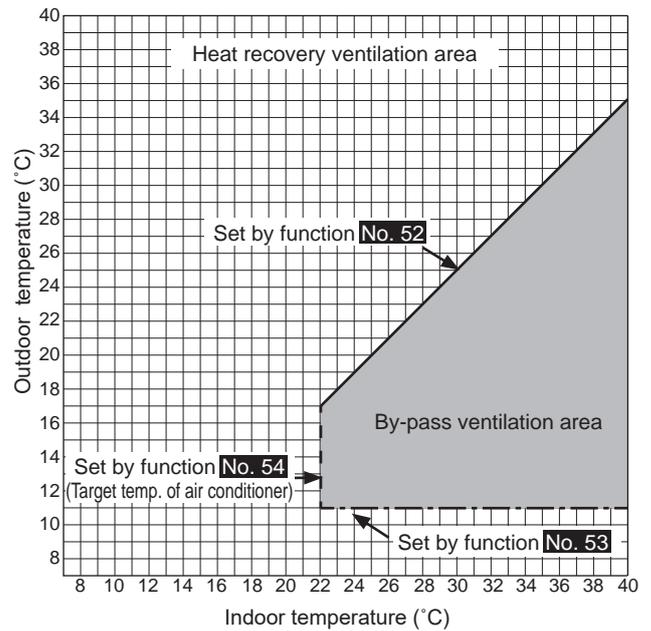
By-pass/Heat recovery ventilation map in automatic ventilation mode



Function No.	Setting Data
52	0 (0°C)
53	0 (10°C)
54	2 (17°C)

Example 2

By-pass/Heat recovery ventilation map in automatic ventilation mode



Function No.	Setting Data
52	5 (5°C)
53	1 (11°C)
54	7 (22°C)

When the setting of function **No. 53** is low, with using the pre-heater function, the outdoor temperature may be detected as higher and the mode may change to By-pass mode even in winter. Set the setting to 16°C or more, or use Heat recovery ventilation mode.

No.55, 56 Supply fan power up for Fan speed 4 Exhaust fan power up for Fan speed 4

Use these functions when the fan speed is needed to be up after installation.

Function **No. 55** is for supply fan power up and function **No. 56** is for exhaust fan power up.

When function **No. 1** is on and fan speed already reached the maximum power, this function is N/A.

These functions are N/A from Lossnay unit DIP-SW.

This function is only available for fan speed 4 and when it is set 100%.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Supply fan power up
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	55	0	(Factory setting)	N/A
	-	-		1		1 level up
	-	-		2		2 level up
	-	-		3		3 level up
	-	-		4		4 level up

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Exhaust fan power up
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	56	0	(Factory setting)	N/A
	-	-		1		1 level up
	-	-		2		2 level up
	-	-		3		3 level up
	-	-		4		4 level up

⚠ CAUTION

- This function is available when the unit is used at smaller air volume than the rating.

No.60 Pre-heater output setting 1) ON temperature

Set the outdoor temperature for Pre-heater output ON.
When detecting temp. becomes the setting or less, Pre-heater output starts.

This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB	Setting check	Outdoor temp. for Pre-heater output ON
SW No.	Setting		Function No.	Setting Data	
N/A	-	-	60	0 (Factory setting)	0 °C or less
	-	-		1	-1 °C or less
	-	-		2	-2 °C or less
	-	-		3	-3 °C or less
	-	-		4	-4 °C or less
	-	-		5	-5 °C or less
	-	-		6	-6 °C or less
	-	-		7	-7 °C or less

No.61 Pre-heater output setting 2) OFF interval

Set the Pre-heater output interval. Output stops according to the set hours.

This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB	Setting check	Pre-heater output OFF interval
SW No.	Setting		Function No.	Setting Data	
N/A	-	-	61	0 (Factory setting)	1 hr
	-	-		1	2 hrs
	-	-		2	3 hrs
	-	-		3	4 hrs
	-	-		4	5 hrs

No.62 LED usage setting for PZ-70CSW-E during non operation

Wall mount type CO₂ sensor PZ-70CSW-E has LED which indicate the concentration level.

It is possible to select lit or unlit during Lossnay unit is not operating. Refer to the Installation manual of PZ-70CSW-E for more detail.

This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB	Setting check	LED usage setting for PZ-70CSW-E
SW No.	Setting		Function No.	Setting Data	
N/A	-	-	62	0 (Factory setting)	Unlit
	-	-		1	Lit

No.64 Fan speed for air volume “High” input

Set the fan speed setting when receiving “High” signal from remote controllers (e.g. remote controller of City Multi and Mr. Slim, Lossnay simple remote controller) which have High/Low air volume.

DIP-SW		Setting check	PZ-62DR-EA/EB	Setting check	Operating fan speed
SW No.	Setting		Function No.	Setting Data	
SW2-6	-	-	64	0 (Factory setting)	DIP-SW priority
	OFF (Factory setting)			1	Fan speed 4
	ON			2	Fan speed 3

No.65 Fan speed for air volume “Low” input

Set the fan speed setting when receiving “Low” signal from remote controllers (e.g. remote controller of City Multi and Mr. Slim, Lossnay simple remote controller) which have High/Low setting for ventilation fan speed.

DIP-SW		Setting check	PZ-62DR-EA/EB	Setting check	Operating fan speed
SW No.	Setting		Function No.	Setting Data	
SW2-7	-	-	65	0 (Factory setting)	DIP-SW priority
	OFF (Factory setting)			1	Fan speed 2
	ON			2	Fan speed 1

No.66 CO₂ sensor or BMS setting

According to the type of external input, set this item.

Lossnay changes fan speed according to input voltage to CN26 when 3rd party's CO₂ sensor or BMS is setting.

When connecting with PZ-70CSW-E or PZ-70CSD-E, refer to their manuals for detail.

Do not set other than below settings.

* The function of [CO₂ control: No/Yes] on PZ-62DR-EA/EB is not applicable for this product. Do not change that setting.

Note

For LGH-160RVX3-E and LGH-200RVX3-E, PZ-70CSD-E can be installed only in one duct. Lossnay unit controls its fan speed according to CO₂ concentration of the connected duct. Even when actual CO₂ concentration of the other duct is high, Lossnay does not change its fan speed.

DIP-SW		Setting check	PZ-62DR-EA/EB	Setting check	CO ₂ sensor or BMS setting
SW No.	Setting		Function No.	Setting Data	
SW5-6 SW5-7 SW5-8	-	-	66	0 (Factory setting)	DIP-SW priority
	5-6 OFF 5-7 OFF 5-8 OFF (Factory setting)			1	No external fan speed control input
	5-6 OFF 5-7 OFF 5-8 ON			2	3rd party's CO ₂ sensor (0-10 VDC equals to 0-2000 ppm)
	5-6 OFF 5-7 ON 5-8 ON			4	BMS Refer to pattern Z below
	5-6 ON 5-7 OFF 5-8 OFF			5	PZ-70CSW-E
	5-6 ON 5-7 ON 5-8 OFF			7	PZ-70CSD-E

[Pattern Z]

Lossnay changes fan speed as the table below. (Connection example: BMS (Building Management System))

Input voltage[VDC]	Fan speed	Fan speed changing from Remote controller
0 - 1.0	-	Available
1.5 - 2.5	1	N/A
3.5 - 4.5	2	N/A
5.5 - 7	3	N/A
8.5 - 10	4	N/A

When the input voltage is in-between, it will cause unstable operation.

No.67 Threshold minutes for PZ-70CSW-E LED

LED turns from orange (MID) to red (HIGH) when the CO₂ level is kept over the limit concentration for decided minutes.

The threshold minutes can be changed.

Refer to the Installation manual of PZ-70CSW-E for more detail.

This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Threshold minutes for PZ-70CSW-E LED
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	67	0		10 min
	-	-		1		15 min
	-	-		2	(Factory setting)	20 min
	-	-		3		25 min
	-	-		4		30 min

No.68 Threshold concentration for PZ-70CSW-E LED

The threshold concentration for wall mounted CO₂ sensor LED from green (LOW) to orange (MID) can be changed.

Refer to the Installation manual of PZ-70CSW-E for more detail.

This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Threshold concentration for PZ-70CSW-E LED
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	68	0		1000 ppm
	-	-		1		1100 ppm
	-	-		2		1200 ppm
	-	-		3		1300 ppm
	-	-		4		1400 ppm
	-	-		5	(Factory setting)	1500 ppm
	-	-		6		1600 ppm
	-	-		7		1700 ppm
	-	-		8		1800 ppm
	-	-		9		1900 ppm
	-	-		10		2000 ppm

No.69 Emergency stop setting

This function can select the priority of Remote OFF signal to CN32.

When the emergency stop is selected and Lossnay receives remote off signal, Lossnay does not operate Night purge, after cooling or some other operations until remote off signal stops.

This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Mode	Lossnay operation
SW No.	Setting		Function No.	Setting Data			
N/A	-	-	69	0 (Factory setting)		Emergency stop	When stopped by Remote OFF input, Night purge, after cooling and some other operation does NOT work.
	-	-		1		Normal stop	When stopped by Remote OFF input, Night purge, after cooling and some other operation does work.

- When installing the centralized management devices (including the system controller) in Mitsubishi Electric Air-Conditioner Network System (MELANS), perform emergency stop by the centralized management devices. In this case, do not use the function **No. 69**.

No.70 Dx-coil unit connection selecting

Set the SW2-9 as below.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Contents
SW No.	Setting		Function No.	Setting Data		
SW2-9	-	-	70	0 (Factory setting)		DIP-SW priority
	OFF (Factory setting)			1		When the Dx-coil unit is NOT connected to Lossnay
	ON			2		When the Dx-coil unit is connected to Lossnay

Please set SW2-9 ON.

This function can also be set from PZ-62DR-EA/EB. After setting it from PZ-62DR-EA/EB, please power off for more than two minutes. And then power on again.

No.71 Selection of the operation mode from "Temp. priority mode" or "Fan speed priority mode" with DX-coil unit

Set the SW5-4 and SW5-5, or PZ-62DR-EA/EB as below.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Contents
SW No.	Setting		Function No.	Setting Data		
SW5-4 SW5-5	-	-	71	0 (Factory setting)		DIP-SW priority
	5-4 OFF 5-5 OFF (Factory setting)			1		Temp. priority mode
	5-4 ON 5-5 OFF			2		Fan speed priority mode
	5-4 OFF 5-5 ON			3		Fan speed priority mode after 1 hour temp. priority mode
	5-4 ON 5-5 ON			4		Fan speed priority mode after 2 hours temp. priority mode

This function can also be set from PZ-62DR-EA/EB.

This function needs to be set when Lossnay unit's fan speed is controlled by CO₂ sensor or BMS or an external input (0-10VDC (CN26) or a volt-free contact (CN17)).

No.73 -78, 87, 88 Airflow

Adjust the output of the fan speed. This function can also be set on the Airflow settings screen of the PZ-62DR-EA/EB.
This function is N/A from Lossnay unit DIP-SW.

PZ-62DR-EA/EB					PZ-62DR-EA/EB					PZ-62DR-EA/EB							
Function No.	Setting Data	Setting check	Fan output	Fan speed	Fan	Function No.	Setting Data	Setting check	Fan output	Fan speed	Fan	Function No.	Setting Data	Setting check	Fan output	Fan speed	Fan
87	0 (Factory setting)		100%	4	SA	75	0		100%	1	SA	77	0		100%	2	EA
	1		95%				1		95%								
	2		90%				2		90%								
	3		85%				3		85%								
	4		80%				4		80%								
	5		75%				5		75%								
	6		70%				6		70%								
	7		65%				7		65%								
	8		60%				8		60%								
	9		55%				9		55%								
	10		50%				10		50%								
	11		45%				11		45%								
	12		40%				12		40%								
	13		35%				13		35%								
	14		30%				14		30%								
	15		25%				15		25%								
73	0		100%	3	SA	88	0 (Factory setting)		100%	4	EA	78	0		100%	1	EA
	1		95%				1		95%								
	2		90%				2		90%								
	3		85%				3		85%								
	4		80%				4		80%								
	5 (Factory setting)		75%				5		75%								
	6		70%				6		70%								
	7		65%				7		65%								
	8		60%				8		60%								
	9		55%				9		55%								
	10		50%				10		50%								
	11		45%				11		45%								
	12		40%				12		40%								
	13		35%				13		35%								
	14		30%				14		30%								
	15		25%				15		25%								
74	0		100%	2	SA	76	0		100%	3	EA	76	0		100%	3	EA
	1		95%				1		95%								
	2		90%				2		90%								
	3		85%				3		85%								
	4		80%				4		80%								
	5		75%				5		75%								
	6		70%				6		70%								
	7		65%				7		65%								
	8		60%				8		60%								
	9		55%				9		55%								
	10 (Factory setting)		50%				10		50%								
	11		45%				11		45%								
	12		40%				12		40%								
	13		35%				13		35%								
	14		30%				14		30%								
	15		25%				15		25%								

- Fan output percentage of Fan speed 4 cannot be set to lower values than that of Fan speed 3.
Example: When function **No. 73** is set to "5" (75%), the setting data for function **No. 87** can be selected from "0" (100%) to "5" (75%).
- Fan output percentage of Fan speed 3 cannot be set to higher values than that of Fan speed 4, or lower values than that of Fan speed 2.
Likewise, fan output percentage of Fan speed 2 cannot be set to higher values than that of Fan speed 3, or lower values than that of Fan speed 1.
Example: When function **No. 87** is set to "2" (90%) and function **No. 74** is set to "7" (65%), the setting data for function **No. 73** can be selected from "2" (90%) to "7" (65%).
- Fan output percentage of Fan speed 1 cannot be set to higher values than that of Fan speed 2.
Example: When function **No. 74** is set to "5" (75%), the setting data for function **No. 75** can be selected from "5" (75%) to "15" (25%).
- Function **No. 55** and **No. 56** are available only when Fan output percentage of Fan speed 4 is set to "0" (100%).
- Fan speed 3 shall be set between 75% and 100%, when DX-coil unit is connected and operated in temp. priority mode.

No.83, 84 Filter maintenance interval setting

Filter cleaning sign is displayed on the remote controller according to the set interval in this function.
 The interval can be set from 100 hrs to 9900 hrs depending on the site situation.
 This function can also be set on the Maintenance interval settings screen of the PZ-62DR-EA/EB.
 This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Filter maintenance interval setting - Thousands digit
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	83	0		0
	-	-		1		1
	-	-		2		2
	-	-		3		3
	-	-		4		4
	-	-		5		5
	-	-		6		6
	-	-		7		7
	-	-		8		8
-	-	9		9		

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Filter maintenance interval setting - Hundreds digit
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	84	0		0
	-	-		(Factory setting)		1
	-	-		1		2
	-	-		2		3
	-	-		3		4
	-	-		4		5
	-	-		5		6
	-	-		6		7
	-	-		7		8
-	-	8		9		

No.85, 86 Lossnay core maintenance interval setting

Lossnay core maintenance sign is displayed on the remote controller according to the set interval in this function.
 The interval can be set from 100 hrs to 9900 hrs depending on the site situation.
 This function can also be set on the Maintenance interval settings screen of the PZ-62DR-EA/EB.
 This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Lossnay core maintenance interval setting - Thousands digit
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	85	0		0
	-	-		1		1
	-	-		2		2
	-	-		3		3
	-	-		4		4
	-	-		5		5
	-	-		6		6
	-	-		(Factory setting)		7
	-	-		7		8
-	-	8		9		

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	Lossnay core maintenance interval setting - Hundreds digit
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	86	0		0
	-	-		(Factory setting)		1
	-	-		1		2
	-	-		2		3
	-	-		3		4
	-	-		4		5
	-	-		5		6
	-	-		6		7
	-	-		7		8
-	-	8		9		

No.89, 90 CO2 sensor setting - maximum side

It is possible to set the CO2 concentration which fan speed turn into 4.
 When it is necessary to set 50 ppm, set Function **No. 90** as 1.
 This function can also be set on the CO2 control setting screen of the PZ-62DR-EA/EB.
 (For example, the target is 950 ppm, Function **No. 89** is 3 and **No. 90** is 1.)
 This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	CO2 sensor setting - maximum side - Hundreds digit
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	89	0		600 ppm
	-	-		1		700 ppm
	-	-		2		800 ppm
	-	-		3		900 ppm
	-	-		4		1000 ppm
	-	-		(Factory setting)		1100 ppm
	-	-		5		1200 ppm
	-	-		6		1300 ppm
	-	-		7		1400 ppm
	-	-		8		1500 ppm
	-	-		9		1600 ppm
	-	-		10		1700 ppm
	-	-		11		1800 ppm
	-	-		12		1900 ppm
-	-	13		2000 ppm		
-	-	14		2000 ppm		

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	CO2 sensor setting - maximum side - Tens digits
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	90	0		0 ppm
	-	-		(Factory setting)	1	50 ppm

No.91, 92 CO2 sensor setting - minimum side

It is possible to set the CO2 concentration which fan speed turn into 1.
 When it is necessary to set 50 ppm, set Function **No. 92** as 1.
 This function can also be set on the CO2 control setting screen of the PZ-62DR-EA/EB.
 (For example, the target is 950 ppm, Function **No. 91** is 6 and **No. 92** is 1.)
 This function is N/A from Lossnay unit DIP-SW.

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	CO2 sensor setting - minimum side - Hundreds digits
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	91	0		300 ppm
	-	-		1		400 ppm
	-	-		(Factory setting)		500 ppm
	-	-		2		600 ppm
	-	-		3		700 ppm
	-	-		4		800 ppm
	-	-		5		900 ppm
	-	-		6		1000 ppm
	-	-		7		1100 ppm
	-	-		8		1200 ppm
	-	-		9		1300 ppm
	-	-		10		1400 ppm
	-	-		11		1500 ppm
	-	-		12		1600 ppm
-	-	13		1700 ppm		
-	-	14		1700 ppm		

DIP-SW		Setting check	PZ-62DR-EA/EB		Setting check	CO2 sensor setting - minimum side - Tens digits
SW No.	Setting		Function No.	Setting Data		
N/A	-	-	92	0		0 ppm
	-	-		(Factory setting)	1	50 ppm

No.93 CO₂ sensor correction

CO₂ concentration can be corrected when PZ-70CSW-E or PZ-70CSD-E is connected.

In this function, the control value of CO₂ level is corrected.

On the other hand, **No. 44** changes the displayed CO₂ level only.

This function is N/A from Lossnay unit DIP-SW.

DIP-SW			PZ-62DR-EA/EB		CO ₂ sensor analogue correction
SW No.	Setting	Setting check	Function No.	Setting Data	
N/A	-	-	93	0	-250 ppm
	-	-		1	-200 ppm
	-	-		2	-150 ppm
	-	-		3	-100 ppm
	-	-		4	-50 ppm
	-	-		5 (Factory setting)	±0 ppm
	-	-		6	50 ppm
	-	-		7	100 ppm
	-	-		8	150 ppm
	-	-		9	200 ppm
-	-	10	250 ppm		

No.94, 95 Indoor negative / positive pressure setting at auto fan speed setting

At auto fan speed setting operation, supply fan or exhaust fan can be unbalanced to keep indoor negative or positive pressure.

This function is N/A from Lossnay unit DIP-SW.

Select supply fan or exhaust fan to be power down comparing to the other at **No. 94**.

The percentage of power down can be selected at **No. 95**.

The unbalance setting can not be kept when the lower side fan power reaches 25%.

DIP-SW			PZ-62DR-EA/EB		Fan that reduce air flow
SW No.	Setting	Setting check	Function No.	Setting Data	
N/A	-	-	94	0 (Factory setting)	N/A
	-	-		1	Supply fan
	-	-		2	Exhaust fan

DIP-SW			PZ-62DR-EA/EB		Percentage of power reduction comparing to opposite fan
SW No.	Setting	Setting check	Function No.	Setting Data	
N/A	-	-	95	0 (Factory setting)	N/A
	-	-		1	5%
	-	-		2	10%
	-	-		3	15%
	-	-		4	20%
	-	-		5	25%
	-	-		6	30%
	-	-		7	35%
	-	-		8	40%
	-	-		9	45%
	-	-		10	50%
	-	-		11	55%
	-	-		12	60%
	-	-		13	65%
	-	-		14	70%
-	-	15	75%		

No. 100 Initialization (No.1~99)

Set to initialize the remote PZ-62DR-EA/EB setting.

All settings which are changed by users are cancelled.

DIP-SW			PZ-62DR-EA/EB		Initialization
SW No.	Setting	Setting check	Function No.	Setting Data	
N/A	-	-	100	0 (Factory setting)	N/A
	-	-		1	Available

6. Check points after installation work

After installation work has been completed, check the following points once again.

If any failure is detected, be sure to fix it.

Check the following points before trial operation, and place a check mark in the corresponding check box.

	Reference page	Check box
(1) Check points - Main unit installation work		
The duct connecting flanges are securely attached by using the supplied screws.	4.1. <i>Installing the Lossnay unit</i>	
The length of 1.0 m or more (for LGH-15 to 65RVX3)/2.5 m or more (for LGH-80 and 100RVX3)/3 m or more (for LGH-160 and 200RVX3) is provided for the outdoor side ducts (OA, EA) from a building wall surface.	3. <i>Standard installation examples</i> 4.1.5 <i>Connecting the ducts</i>	
A downward gradient of 1/30 or more toward a building wall is provided for the outdoor side ducts (OA, EA).	3. <i>Standard installation examples</i> 4.1.5 <i>Connecting the ducts</i>	
The two outdoor side ducts (OA, EA) are covered with a heat-insulating material.	4. <i>Installation method</i>	
(2) Check points - Wiring work		
A combination of power supply voltage, model name, and remote controller is correct.	4.2 <i>Electrical installation</i>	
The wires are correctly connected according to the wire connection diagram.	4.2 <i>Electrical installation</i>	
The wires are securely connected to the terminal blocks.	4.2 <i>Electrical installation</i>	
The wires are securely fixed.	4.2 <i>Electrical installation</i>	
The connectors on the circuit board are securely connected.	4.2 <i>Electrical installation</i>	
The grounding cable is installed.	4.2 <i>Electrical installation</i>	
The cables are correctly fixed by using the cord clips and cable glands.	4.2 <i>Electrical installation</i>	
In terms of size and specification, the proper power supply cable and transmission cables are used.	4.2 <i>Electrical installation</i>	
The cable is U trapped before entering the control box.	4.2 <i>Electrical installation</i>	
(3) Check points - Function setting		
The "Main" Lossnay is correctly set.	5. <i>Function settings</i>	
The address setting switches (SW11, SW12) are correctly set.	5. <i>Function settings</i>	
The function selection switches (SW2, SW5) are correctly set.	5. <i>Function settings</i>	
The function settings by the remote controller are correct. (For details, refer to the Installation Manual of the remote controller PZ-62DR-EA/EB.)	5. <i>Function settings</i>	
(4) Check points - Vertical installation		
The maintenance cover faces up.	4.2.4 <i>Installing Lossnay unit vertically</i>	
The ceiling suspension fixture of upper side are also fixed to sufficient structure.	4.2.4 <i>Installing Lossnay unit vertically</i>	
The unit is installed where it is not easily access.	4.2.4 <i>Installing Lossnay unit vertically</i>	
There is enough space around the unit to put horizontally for servicing and maintenance work.	4.2.4 <i>Installing Lossnay unit vertically</i>	
There is no abnormal vibration when the unit is operating.	4.2.4 <i>Installing Lossnay unit vertically</i>	

To prevent early failures, be sure to check the check points after installation work.

7. Trial operation

After the system has been installed and before the ceiling panel is installed, make sure that wires are properly connected, then test the system's operation, referring to the operation manual for the remote controller.

7.1 Trial operation using the remote controller (PZ-62DR-EA/EB)

Follow the procedure shown in the operation manual for the remote controller the functions below.

- (1) Start operation
- (2) Fan speed selection
- (3) Ventilation mode selection
- (4) Stop operation

7.2 Lossnay trial operation

This function can be used in the following situations.

- When there is no remote controller installed for operating the Lossnay
- When heater output, malfunction monitor output, operation monitor output, and other output are connected
- When the outdoor temperature is 8 °C or lower (To check By-pass damper operation)

- (1) Supply power to the Lossnay unit.
- (2) Turn the trial operation switch (DIP-SW SW2-1) "On."

Operation of Fan Speed and Ventilation mode

		Minutes					0					1					2					3					4				
		Seconds					0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	0	10	20	30	40	50	
TM3		PZ-4GS-E & PZ-62DR-EA/EB		Fan speed		STOP	4					STOP	4																		
DIP-SW	Function No.	Setting data	Function No.	Setting data	Ventilation mode	Bypass										Lossnay															
5-1 OFF 5-2 OFF	12	1	13-16	0	Lossnay operation monitor											ON															
5-1 ON 5-2 OFF				1	Malfunction monitor output											ON															
5-1 OFF 5-2 ON				2	2	Bypass monitor output	OFF	ON					OFF																		
5-1 ON 5-2 ON				3	3	SA fan monitor output	OFF	ON					OFF	ON																	
-				4	4	EA fan monitor output	OFF	ON					OFF	ON																	
-				5	5	Pre-heater output	OFF															ON									
-				6	6	SA fan monitor output with delay operation (for After heater)	OFF															ON									

Error code "0900" appears on the remote controller.
The timing in the chart is a general guideline.

- (3) Check each function is operating normally.
- (4) Turn the trial operation switch (DIP-SW SW2-1) "Off."

7.3 Lossnay trial operation in a whole system

7.3.1 For Interlock system with air conditioners or external devices

- Use the remote controller for the air conditioner or the operating switches for the external device to check that the air conditioner and Lossnay are interlocked.
- When delay start time is set (when City Multi or Mr. Slim that is connected using a Slim-Lossnay interlocking cable starts operating), check Lossnay operation after the delay start time has passed.

7.3.2 For MELANS system

- Check Lossnay operation by using the Mitsubishi Electric Air-Conditioner Network System (MELANS).

7.4 If trouble occurs during trial operation

Symptom	Remedy																						
Lossnay does not operate even when the operation switch of the remote controller (PZ-62DR-EA/EB) is pressed.	<ul style="list-style-type: none"> Check the power supply. (The specified power supply is single-phase 220-240 V 50Hz / 220 V 60Hz) Check for a short circuit or disconnection in the transmission cable. (Check that the voltage between terminals in the transmission cables is 10 to 13 VDC for the PZ-62DR-EA/EB.) Check that a clearance of 5 cm is provided between the transmission cable and the power supply cable and other transmission cables. Operate Lossnay independently using the trial operation switch (SW2-1) to see if it operates properly or not. <table border="1" style="width: 100%;"> <tr> <td>Lossnay operates</td> <td>⇒</td> <td>Check the signal lines</td> </tr> <tr> <td>Lossnay doesn't operate</td> <td>⇒</td> <td>Check the power supply</td> </tr> </table> Check if there are three or more remote controller connected. (The maximum is two.) 	Lossnay operates	⇒	Check the signal lines	Lossnay doesn't operate	⇒	Check the power supply																
Lossnay operates	⇒	Check the signal lines																					
Lossnay doesn't operate	⇒	Check the power supply																					
When M-NET is used, the Lossnay does not operate by M-NET system controller.	<ul style="list-style-type: none"> Check the power supply. (Specified power supply: single-phase 220-240 V 50Hz / 220 V 60Hz, cable diameter, switch capacity) Check if the power supply unit is connected or not, and if the power is supplied or not (For a system with Lossnay only, it is necessary to install the power supply unit.) Check the transmission cable for short-circuit or broken wire (Check if 20 - 30 VDC is detected between the terminals of transmission cable). Check that a clearance of 5 cm is provided between the transmission cable and the power supply cable and other transmission cables. Operate Lossnay independently to see if it operates properly or not. <table border="1" style="width: 100%;"> <tr> <td>Lossnay operates</td> <td>⇒</td> <td>Inspect the transmission cable</td> </tr> <tr> <td>Lossnay doesn't operate</td> <td>⇒</td> <td>Check the power supply</td> </tr> </table> Check Lossnay registration condition in the system remote controller. 	Lossnay operates	⇒	Inspect the transmission cable	Lossnay doesn't operate	⇒	Check the power supply																
Lossnay operates	⇒	Inspect the transmission cable																					
Lossnay doesn't operate	⇒	Check the power supply																					
Air conditioner indoor unit or external device does not interlock.	<ul style="list-style-type: none"> Check if the pulse input switch (SW2-2) is off. (Can be set from PZ-62DR-EA/EB) Check the overall cable length between the indoor unit or external device and Lossnay. (Refer to technical manuals or other such documents.) Check the connections at the external control input terminal block (TM2). In the case of voltage charged 12 or 24 VDC output device: Connect to external control input terminals ① and ②. In the case of Volt-free contact output device: Connect to external control input terminals Y and Z. In the case of Mr. Slim (A control or K control): Connect to external control input terminals ① and ②. Perform the registration using the remote controller for the air conditioner or MELANS. (Refer to the installation instructions for the remote controller for the air conditioner or MELANS.) Check if the delay start time has been set. Check the following items after removing the transmission cable from external device. <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th>Operation signal</th> <th>Stop signal</th> </tr> </thead> <tbody> <tr> <td>Charged 12 or 24 VDC output device</td> <td>12 or 24 VDC</td> <td>0 VDC</td> </tr> <tr> <td>Volt-free contact output device</td> <td>Resistance: 0 Ω</td> <td>Unlimited resistance Ω</td> </tr> <tr> <td>Mr. Slim</td> <td>2 to 6 VDC (pulse signal)</td> <td>2 to 6 VDC (pulse signal)</td> </tr> </tbody> </table> When multiple Lossnay units are connected, check the external signal is inputted into the main unit. 		Operation signal	Stop signal	Charged 12 or 24 VDC output device	12 or 24 VDC	0 VDC	Volt-free contact output device	Resistance: 0 Ω	Unlimited resistance Ω	Mr. Slim	2 to 6 VDC (pulse signal)	2 to 6 VDC (pulse signal)										
	Operation signal	Stop signal																					
Charged 12 or 24 VDC output device	12 or 24 VDC	0 VDC																					
Volt-free contact output device	Resistance: 0 Ω	Unlimited resistance Ω																					
Mr. Slim	2 to 6 VDC (pulse signal)	2 to 6 VDC (pulse signal)																					
Lossnay does not stop.	<ul style="list-style-type: none"> Check that the trial operation switch (SW2-1) is set to off. 																						
The inspection indicator lamp (LED 1 Green) in the control box flashes.	<table border="1" style="width: 100%;"> <tbody> <tr> <td>1 flash</td> <td>Fault on supply fan motor</td> <td rowspan="9" style="text-align: center; vertical-align: middle;">Turn the power off and consult your dealer.</td> </tr> <tr> <td>2 flashes</td> <td>Fault on exhaust fan motor</td> </tr> <tr> <td>4 flashes</td> <td>Fault on OA thermistor</td> </tr> <tr> <td>5 flashes</td> <td>Fault on RA thermistor</td> </tr> <tr> <td>8 flashes</td> <td>Fault on Pre-heater capacity or relay</td> </tr> <tr> <td>9 flashes</td> <td>Fault on remote controller communication</td> </tr> <tr> <td>10 flashes</td> <td>Fault on function setting</td> </tr> <tr> <td>11 flashes</td> <td>Fault on power supply to remote controller</td> </tr> <tr> <td>12 flashes</td> <td>Fault on CO₂ sensor, PZ-70CSD-E or PZ-70CSW-E</td> </tr> <tr> <td>13 flashes</td> <td>Fault on DX-coil unit</td> <td></td> </tr> </tbody> </table> <ul style="list-style-type: none"> 15 or 30 minutes in the delay start setting, LED lits ON. LED blinks just after power supply ON. 	1 flash	Fault on supply fan motor	Turn the power off and consult your dealer.	2 flashes	Fault on exhaust fan motor	4 flashes	Fault on OA thermistor	5 flashes	Fault on RA thermistor	8 flashes	Fault on Pre-heater capacity or relay	9 flashes	Fault on remote controller communication	10 flashes	Fault on function setting	11 flashes	Fault on power supply to remote controller	12 flashes	Fault on CO ₂ sensor, PZ-70CSD-E or PZ-70CSW-E	13 flashes	Fault on DX-coil unit	
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13 flashes	Fault on DX-coil unit																						
The inspection indicator lamp (LED 2 Red) in the control box flashes.	<table border="1" style="width: 100%;"> <tbody> <tr> <td>1 to 8 flashes</td> <td>Error in M-NET communication</td> <td>Turn off the power and immediately contact your dealer.</td> </tr> </tbody> </table>	1 to 8 flashes	Error in M-NET communication	Turn off the power and immediately contact your dealer.																			
1 to 8 flashes	Error in M-NET communication	Turn off the power and immediately contact your dealer.																					

■ When an error code blinks on the remote controller, follow the procedures shown in the installation and operating manuals provided with the remote controller.

■ If the remote controller is not used, operate after approximately 2 minutes of turning on the power for the Lossnay.

MITSUBISHI ELECTRIC CORPORATION

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