

MITSUBISHI ELECTRIC
Lossnay Component for residential, commercial or light-industrial use
Lossnay Remote Controller
PZ-60DR-E
Installation Manual

This instruction manual describes how to install the Lossnay unit. Please read this manual thoroughly and install the remote controller accordingly. For information on how to wire and install the Lossnay units, refer to the Lossnay unit installation manual. After the installation, hand over this manual to users.

1 Safety Precautions

- Read these Safety Precautions and perform installation work accordingly.
- The following two symbols are used to dangers that may be caused by incorrect use and their degree:
 - WARNING** This symbol denotes what could lead to serious injury or death if you misuse the PZ-60DR-E.
 - CAUTION** This symbol denotes what could lead to a personal injury or damage to your property if you misuse the PZ-60DR-E.

After reading this installation manual, give it and the indoor unit installation manual to the end user. The end user should keep this manual and the indoor unit installation manual in a place where he or she can see it at anytime. When someone moves or repairs the PZ-60DR-E, make sure that this manual is forwarded to the end user.

WARNING

Ask your dealer or technical representative to install the unit. Any deficiency caused by your own installation may result in an electric shock or fire.

Install in a place which is strong enough to withstand the weight of the PZ-60DR-E. Any lack of strength may cause the PZ-60DR-E to fall down, resulting in personal injury.

Firmly connect the wiring using the specified cables. Carefully check that the cables do not exert any force on the terminals. Improper wiring connections may produce heat and possibly a fire.

Never modify or repair the PZ-60DR-E by yourself. Any deficiency caused by your modification or repair may result in an electric shock or fire. Consult with your dealer about repairs.

CAUTION

Do not install in any place exposed to flammable gas leakage. Flammable gases accumulated around the body of PZ-60DR-E may cause an explosion.

Do not use in any special environment. Using in any place exposed to oil (including machine oil), steam and sulfuric gas may deteriorate the performance significantly or give damage to the component parts.

When installing the remote controller in a hospital or communication facility, take ample countermeasures against noise. Inverters, emergency power supply generators, high-frequency medical equipment, and wireless communication can cause the remote controller to malfunction or to fail. Radiation from the remote controller may affect communication equipment and prevent medical operations on the human body or interfere with image transmission and cause noise.

Wire so that it does not receive any tension. Tension may cause wire breakage, heating or fire.

Completely seal the wire lead-in port with putty etc. Any dew, moisture, insects entering the unit may cause an electric shock or a malfunction.

Do not install in any place at a temperature of more than 40°C or less than 0°C or exposed to direct sunlight. Doing so may cause deformation or malfunction.

Do not apply AC100V or AC200V to the remote controller. The maximum voltage that can be applied to the remote controller is 15V. The remote controller may be damaged or may generate heat and cause a fire.

Do not install in any steamy place such as a bathroom or kitchen. Avoid any place where moisture is condensed into dew. Doing so may cause an electric shock or a malfunction.

Do not install in any place where acidic or alkaline solution or special spray are often used. Doing so may cause an electric shock or malfunction.

Use standard wires in compliance with the current capacity. A failure to this may result in an electric leakage, heating or fire.

Do not touch any control button with your wet hands. Doing so may cause an electric shock or a malfunction.

Do not wash with water. Doing so may cause an electric shock or a malfunction.

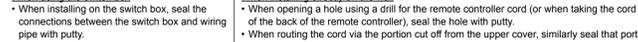
Do not press any control button using a sharp object. Doing so may cause an electric shock or a malfunction.

Put on gloves during installation. It could cause injury.

2 Confirming the Supplied Parts

Confirm that the box includes the following parts, in addition to this installation manual:

- Remote controller (cover, body).....1
- Cross recessed pan head screw (M4 × 30).....2
- Wood screw (M4.1 × 16, used for directly hooking to the wall).....2



3 How To Install

1. Choose a place in which to install the remote controller (switch box). Be sure to observe the following steps.

- When installing on either the switch box or the wall, allow extra space around the remote controller as shown in the figure at the right.
- Parts (2) which must be supplied on site:
 - Switch box for two units
 - Thin-copper wiring pipe
 - Lock nut and bushing
 - Surface raceways

2. Seal the remote controller cord with putty in order to prevent the possible entry of dew, water droplets, cockroaches, other insects, etc.

- When installing on the switch box, seal the connections between the switch box and wiring pipe with putty.
- When routing the cord via the portion cut off from the upper cover, similarly seal that portion with putty.
- When taking the remote controller cord from back of the controller, use surface raceways.

3. Remove the remote controller cover. Insert a flathead screwdriver into one of the open slots and move the screwdriver in the arrow direction.

4. Install the lower case on the switch box or directly on the wall. When using the switch box, use the cross recessed pan head screw. When installing directly on the wall, use the wood screw.

5. Connect the remote control cord to the remote controller terminal block. For the remote control, obtain a 2-core cable between 0.3 and 1.25 mm² at the site.

6. Do not tighten the screws too tight. Doing so may deform or crack the lower cover.

NOTE: Choose a flat plane for installation. Fasten the switch box at more than two places when installing directly on the wall. When reinstalling on the wall, fasten securely using anchors.

7. Connect the remote control cord to the remote controller terminal block. There is no polarity.

8. Do not use crimp terminals to connect to remote controller terminal blocks. The terminals may contact the board and cause trouble or contact the cover and damage the cover.

9. Prevent remote cord chips from getting into the remote controller. Electric shock or malfunction may result.

4 Test Run

1. Starting the Lossnay unit. Press the [ON/OFF] button and confirm that the Operation lamp turns on.

2. Setting the ventilation mode. Press the Function selector button. Each time it is pressed, the corresponding display will change in accordance with the sequence [HEAT EX.] (non-automatic) → [BY-PASS] (non-automatic) → [AUTO].

3. Selecting the fan speed. Press the Fan Speed Adjustment button to select either Low or High (Extra High) fan speed. High and Extra-High can be selectable by initial setting.

4. Selecting the Extra Low fan speed. Press the "Extra Low" fan speed button. Extra low operation will begin. Pressing the Fan Speed Adjustment button will cause the fan speed to revert to its original speed (before the Extra low mode began). Pressing the Extra Low fan speed button again will return operation to Extra low mode.

5. Stopping the Lossnay unit. Press the [ON/OFF] button. (Press the [ON/OFF] button to turn off the Operation lamp.)

Operation	Relevant display items	Sequence
Starting the Lossnay unit	Operation lamp	Press the [ON/OFF] button and confirm that the Operation lamp turns on.
Setting the ventilation mode	HEAT EX. "High" "HEAT EX." non-automatic	Press the Function selector button. Each time it is pressed, the corresponding display will change in accordance with the sequence [HEAT EX.] (non-automatic) → [BY-PASS] (non-automatic) → [AUTO].
Selecting the fan speed	"Low" "Extra High"	Press the Fan Speed Adjustment button to select either Low or High (Extra High) fan speed. High and Extra-High can be selectable by initial setting.
Selecting the Extra Low fan speed	"Extra Low"	Press the "Extra Low" fan speed button. Extra low operation will begin. Pressing the Fan Speed Adjustment button will cause the fan speed to revert to its original speed (before the Extra low mode began). Pressing the Extra Low fan speed button again will return operation to Extra low mode.
Stopping the Lossnay unit	Operation lamp	Press the [ON/OFF] button. (Press the [ON/OFF] button to turn off the Operation lamp.)

* If you press a button for a feature that is not installed at the Lossnay unit, the remote controller will display the "NOT AVAILABLE" message. * If set to "24-hour Ventilation", pressing the [ON/OFF] button will cause this to be displayed in the dot display "24HR VENTILATION", and the operation will switch to Extra low fan speed mode. To stop operation, press the [ON/OFF] button twice within 3 seconds, or press and hold the [ON/OFF] button for 5 seconds.

If error code is displayed, refer to the following table.

Error code	Cause	Action
0900	The SW2 trial-operation switch from the Lossnay control box is ON.	Turn off the trial-operation switch.
6608	If two or more Lossnay units are not performed, "6608" may indicate that the correct settings has been taken using the main/sub switches. If two remote controllers are used together, "6608" may indicate that one of the controllers is not connected. If two remote controllers are used together, "6608" may indicate that both of these controllers are not set automatically when the power is turned on.	Turn off the power supply and use the main/sub switches to specify one Lossnay unit as the main and the others as sub. Turn the power supply back on. Note that all Lossnay units are specified as main before shipment from the manufacturing plant. Turn off the power supply, disconnect the remote controller, then turn the power supply back on.
4116	A circuit error has occurred in the Lossnay unit.	Turn off the power supply and contact the distributor.
3126	Temperature error (OA side).	For the applied transmission cable, wire the transmission cables away from the other transmission cable.
5101	An error has occurred in the Lossnay thermostat (OA side).	Turn off the power supply and contact the distributor.
5102	An error has occurred in the Lossnay thermostat (RA side).	Turn off the power supply and contact the distributor.
3602	An error has occurred in the damper motor.	Turn off the power supply and contact the distributor.
6600	Multiple address error (M-NET side)	Turn off the power supply and contact the distributor.
6602	Communication error (M-NET side)	Turn off the power supply and contact the distributor.
6603	Communication error (M-NET side)	Turn off the power supply and contact the distributor.
6606	Communication error (M-NET side)	Turn off the power supply and contact the distributor.

5 Function Selection

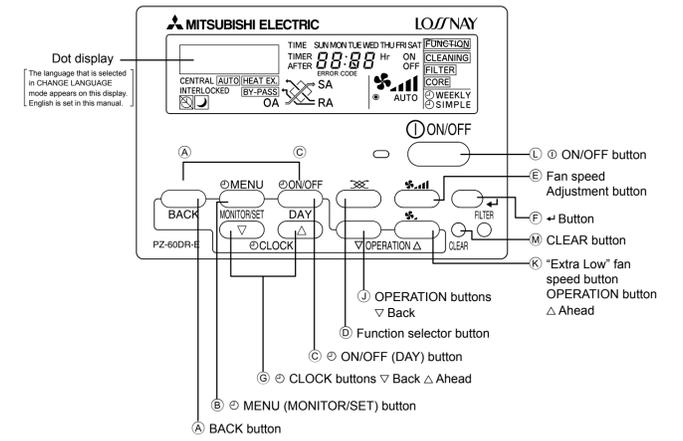
Function selection of remote controller The setting of the following remote controller functions can be changed using the remote controller function selection mode. Change the setting when needed.

Item 1	Item 2	Item 3 (Setting content)
(1) Change Language ("CHANGE LANGUAGE")	Language setting to display	Display in multiple languages is possible.
(2) Function limit ("FUNCTION SELECTION")	(1) Operation function limit setting (operation lock) ("LOCKING FUNCTION") (2) 24-hour ventilation setting** ("24HR VENTILATION")	Setting the range of operation limit (operation lock). Sets whether the [ON/OFF] button stops operation completely or initiates Extra low operation.
(3) Mode selection ("MODE SELECTION")	(1) Use of clock setting* ("CLOCK") (2) Timer function setting ("WEEKLY TIMER") (3) Contact number setting for error situation ("CALL")	Setting the use or non-use of clock function. Setting the timer type. Contact number display in case of error. Setting the telephone number.
(4) Display change ("DISP MODE SETTING")	(1) Filter cleaning setting ("MAINTENANCE SIGN") (2) Lossnay cores cleaning setting ("MAINTENANCE SIGN")	Set the schedule for "FILTER" indicator to appear after 3000-hour use, or no indication. Set the schedule for "CORE" indicator to appear after 6000-hour use, or no indication.
(5) Installation settings* ("LOSSNAY SETTINGS")	(1) Supply fan speed setting ("SA SETTING") (2) Exhaust fan speed setting ("EA SETTING") (3) Power supply/exhaust when operation starts ("POWER VENT START") (4) Subordinate Lossnay settings** ("SUB SET") (5) Power supply ON/OFF/AUTO ("RECOVERY SETTING") (6) Operation monitor output selection ("OPERATION MONITOR") (7) Exhaust fan speed selection for cold region intermittent operation ("EA SETTING INTERMIT") (8) Night purge setting* ("NIGHT PURGE") (9) Bypass automatic ventilation priority setting ("BYPASS SETTINGS")	Sets Extra High/High fan speed selection, and Multi Ventilation modes. Sets Extra High/High fan speed selection, and Multi Ventilation modes. Power supply / exhaust is performed at start-up. (After 30 minutes, the system switches to enable fan speed adjustment from the remote controller). Enables/disables subordinate Lossnay unit supply and exhaust fan speed settings. Controls stop and start operation by turning the power supply (220-240 V) for the Lossnay on and off. Sets whether the operation monitor will apply to the exhaust fan or the supply fan. Sets exhaust fan speed for cold region intermittent operation. Enables/disables Night purge. Selects the auto ventilation adjustment (AUTO) pattern.
(6) Interlocking settings** ("INTERLOCK SETTINGS")	(1) Interlock mode setting ("INTERLOCK MODE") (2) Pulse input setting ("INPUT SIGNAL") (3) Delayed operation settings ("DELAY OPERATION") (4) Exhaust operation settings for air conditioner defrosting ("EA SETTING DEFROST")	These settings indicate how Lossnay should operate when external devices are started or stopped. Set when pulse signal equipment is connected to an external input. Setting for delay of (of operation at startup of heating or cooling). Stopping exhaust fan when defrosting air conditioner.
(5) Installation settings and (6) Interlocking settings are selection modes that allow overriding of Lossnay unit Dip switches settings via remote controllers.		

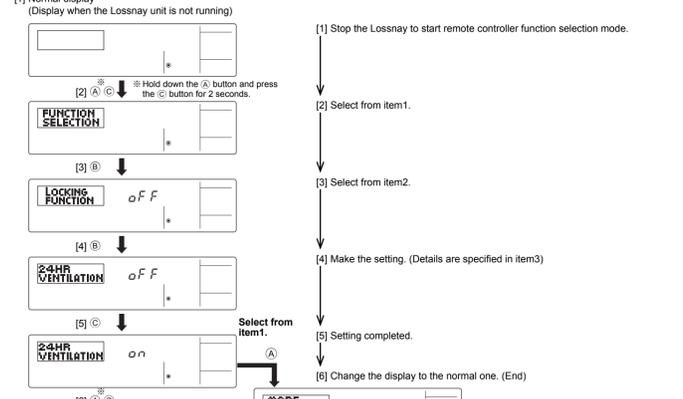
* When a remote controller is set to factory setting, the system operates according to the main unit Dip switch settings. When the remote controller settings are changed from the defaults, the system operates according to those settings. (The main unit switch settings are overridden). ** If two remote controllers are used, these settings can be performed only for the "main" remote controller. These settings will be skipped for the "sub" remote controller and may not be modified. The designation of main and sub remote controller and are determined automatically upon main unit power-up. The remote controller for which (5) and (6) are displayed in the Function Selection mode is the main remote controller. * Clock use must be set for Weekly timer and Night purge operation. * Applies only to the following functions: (Supply fan), (Exhaust fan). (Start up power supply and exhaust) * Indicates Dip switches in the Lossnay control box. * For the Lossnay models without those functions, those setting items will be nondisplay.

NOTE: When the functions of the Lossnay unit were changed by function selection after installation, always indicate the set contents by entering () or other mark in the appropriate check field of the tables shown in page 7 and 8. (Settings may be lost if the remote controller malfunctions.) When replacing a remote controller, specify the same settings as before the replacement.

5 Function Selection



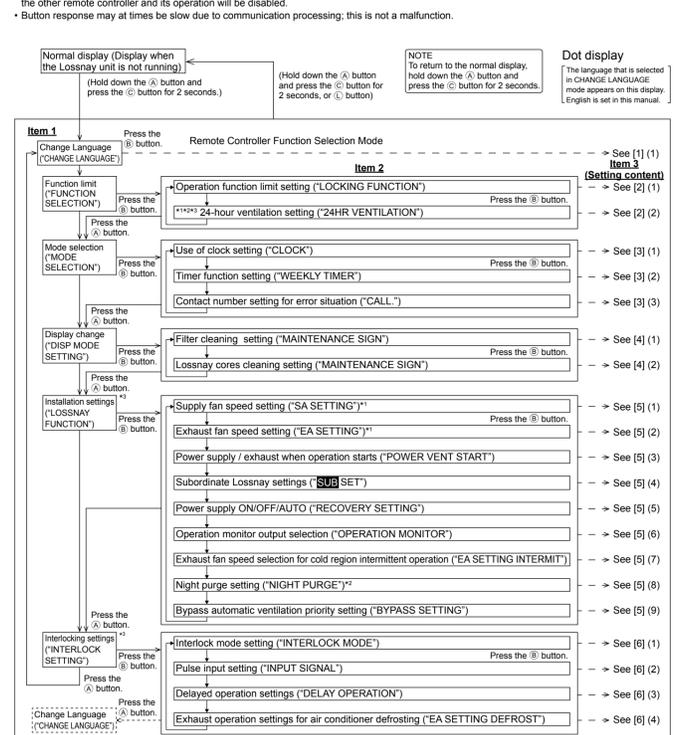
[Function selection flowchart] (1) Normal display (Display when the Lossnay unit is not running)



* If the remote controller Function Selection mode is entered during timer operation, the timer operation will be cancelled. Set timer operation after completing the remote controller Function Selection mode. * When using two remote controllers, if one remote controller is set to remote controller Function Selection mode, "FUNCTION" will be displayed in the other remote controller and its operation will be disabled. * Button response may at times be slow due to communication processing; this is not a malfunction.

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Remote Controller Function Selection Mode



* For the Lossnay models without those functions, those setting items will be nondisplay. * Those settings can be disabled depending on the other setting conditions. * When two remote controllers are used, the settings will be displayed only in the main remote controller.

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(1) Change Language

The language that appears on the dot display can be selected. Press the [MENU] button to change the language. Japanese (日本語) (ja), English (en), German (de), Spanish (es), Russian (ru), Italian (i), Chinese (zh), French (fr)

Dot display	Display	Other indicators	Function	Check
	off	CLEANING FILTER	With maintenance sign (cumulative operation time: 3000 hours)*	
	on	CLEANING FILTER	No maintenance sign (Factory setting)	

* For Extra low fan speed, half of the actual operation time is added to the normal cumulative time.

(2) Function limit

(1) Operation function limit setting (operation lock) To switch the setting, press the [ON/OFF] button.

Dot display	Display	Function	Check
	off	Operation lock setting is not made. (Factory setting)	
	no1	Operation lock setting is made on all buttons other than the [ON/OFF] button.	
	no2	Operation lock setting is made on all buttons.	

* To make the operation lock setting valid on the normal screen, it is necessary to press buttons (Press and hold down the [FILTER] and [ON/OFF] buttons at the same time for 2 seconds) on the normal display after the above setting is made. * The same operation is used to cancel the lock.

(2) 24-hour ventilation setting

Sets whether to stop operation completely or initiate Extra low operation by pressing the [ON/OFF] button during operation. 24-hour Ventilation cannot be set when the pulse input setting is ON in the interlocking settings. To switch the setting, press the [ON/OFF] button.

Dot display	Display	Function	Check
	off	Pressing the [ON/OFF] button during operation stops operation. (Factory setting)	
	on	Pressing the [ON/OFF] button during operation initiates Extra low operation. Pressing the [ON/OFF] button twice within three seconds, or pressing and holding it for five seconds, stops operation.	

* When 24-hour Ventilation is set to on, "24HR VENTILATION" will be displayed in the dot display during Extra low operation. The supply fan will stop and the exhaust fan will perform no-rotch operation if the system enters cold region intermittent mode during 24 hours operation. * For the Lossnay models without those functions, those setting items will be nondisplay.

(3) Mode selection

(1) Use of clock setting To switch the setting, press the [ON/OFF] button.

Dot display	Display	Function	Check
	off	The clock function cannot be used. (Factory setting)	
	on	The clock function can be used. (Factory setting)	

* Set to ON to enable Weekly timer and Night purge.

(2) Timer function setting Selects whether to use a Weekly timer, Simple timer, or not to use any timer. To switch the setting, press the [ON/OFF] button.

Dot display	Display	Function	Check
	WEEKLY TIMER	The weekly timer can be used. (Factory setting) When the use of clock settings is OFF, the "WEEKLY TIMER" cannot be used.	
	SIMPLE TIMER	The simple timer can be used.	
	TIMER MODE OFF	The timer mode cannot be used.	

(3) Contact number setting for error situation To switch the setting, press the [ON/OFF] button.

Dot display	Display	Function	Check
	CALL 0120	The set contact numbers are not displayed in case of error. (Factory setting)	
	CALL 0120 XXXXXXXX	The set contact numbers are displayed in case of error.	

* The set contact numbers. To set the contact numbers, follow the following procedures. Move the flashing cursor to set numbers. Press the OPERATION buttons to move the cursor to the right. Press the [ON/OFF] button to set the numbers. Pressing the CLEAR button will clear the set number.

(5) Installation settings

(1) Supply fan speed setting Set supply to Extra High/High fan speed notch selection or Low fixed (multi ventilation mode). To switch the setting, press the [ON/OFF] button.

Dot display	Display	Function	Check
	SH L	Used at "Extra High" and "Low" fan speed	
	H L	Used at "High" and "Low" fan speed (Factory setting)	
	L	Fixed at "Low" fan speed (multi ventilation mode)	

(2) Exhaust fan speed setting Set exhaust fan to Extra High/High fan speed notch selection or Low fixed (multi ventilation mode). To switch the setting, press the [ON/OFF] button.

Dot display	Display	Function	Check
	SH L	Used at "Extra High" and "Low" fan speed	
	H L	Used at "High" and "Low" fan speed (Factory setting)	
	L	Fixed at "Low" fan speed (multi ventilation mode)	

(3) Power supply / exhaust when operation starts Set whether or not to perform power exhaust (30 minutes of fixed High (Extra High) fan speed) at start-up. When set to 24-hour Ventilation, pressing the [ON/OFF] button stops and re-starts operation. To switch the setting, press the [ON/OFF] button.

Dot display	Display	Function	Check
	SA SETTING 1	Normal (Factory setting)**	
	SA SETTING 2	Outdoor air cooling priority mode**	

* If power supply / exhaust is performed at start-up, the notch can be changed with the Fan speed Adjustment button. ** When the night purge is set by the remote controller, night purge operation starts at a temperature of 28°C (within 24 hours). * When the night purge is set by the remote controller, night purge operation starts at a temperature of 17°C (within 24 hours).

(6) Interlocking settings

(1) Interlock mode setting These settings indicate how Lossnay should operate when external devices are started or stopped. To switch the setting, press the [ON/OFF] button.

Dot display	Display	Function	Check
	on	ON/OFF Interlock (Factory setting)	
	off	ON interlock	
	off	OFF interlock	
	oUF*	External input given priority	

* External input signal priority cannot be set when the pulse input setting is on.

(2) Pulse input setting Set as shown when connecting the pulse signal equipment from a building maintenance system to an external input. To switch the setting, press the [ON/OFF] button.

Dot display	Display	Function	Check
	INPUT SIGNAL	No pulse input. (Factory setting)	
	on	Pulse input	

* 24-hour Ventilation cannot be set when the pulse input setting is on.

(3) Delayed operation settings Selects whether or not to perform delayed operation when either an air conditioner or external equipment is running. To switch the setting, press the [ON/OFF] button.

Dot display	Display	Function	Check
	OFF	No operation delay. (Factory setting)	
	on	Operation delay of 30 minutes	

* Delayed operation cannot be used when the pulse input setting is on.

(4) Exhaust operation settings for air conditioner defrosting Set the operation of the exhaust fan (with the air supply fan is stopped) during Mitsubishi air conditioner defrost mode when the Lossnay unit is connected to the air conditioner with a duct. To switch the setting, press the [ON/OFF] button.

Dot display	Display	Function	Check
	EA SETTING DEFROST	Stop	
	on	Operation (Factory setting)	

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