

Lossnay Remote Controller

### PZ-62DR-E

#### Installation Manual



#### For distribution to dealers and contractors

This installation manual describes how to install the Lossnay Remote Controller.

Please be sure to read this installation manual before proceeding with the installation.

Failure to follow the instructions may result in equipment damage.

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

- . Thoroughly read the following safety precautions prior to installation.
- Observe these precautions carefully to ensure safety.

$\wedge$	WARNIN	G

Indicates a risk of death or serious injury.

**↑** CAUTION

Indicates a risk of serious injury or structural damage.

- After reading this manual, pass it on to the end user to retain for future reference.
- Keep this manual for future reference and refer to it as necessary. This manual should be made available to those who repair or relocate
  the controller. Make sure that the manual is passed on to any future users.

All electric work must be performed by qualified personnel.

#### **General precautions**

#### **⚠ WARNING**

Do not install the unit in a place where large amounts of oil, steam, organic solvents, or corrosive gases, such as sulfuric gas, are present or where acidic/alkaline solutions or sprays are used frequently. These substances can compromise the performance of the unit or cause certain components of the unit to corrode, which can result in electric shock, malfunctions, smoke, or fire.

To reduce the risk of shorting, current leakage, electric shock, malfunctions, smoke, or fire, do not wash the controller with water or any other liquid.

To reduce the risk of electric shock, malfunctions, smoke or fire, do not operate the switches/buttons or touch other electrical parts with wet hands.

To reduce the risk of injury or electric shock, before spraying a chemical around the controller, stop the operation and cover the controller.

To reduce the risk of injury or electric shock, stop the operation and switch off the power supply before cleaning, maintaining, or inspecting the controller.

Properly install all required covers to keep moisture and dust out of the controller. Dust accumulation and water can cause electric shock, smoke, or fire.

To reduce the risk of injury, keep children away while installing, inspecting, or repairing the controller.

#### **⚠** CAUTION

To reduce the risk of fire or explosion, do not place flammable materials or use flammable sprays around the controller.

To reduce the risk of damage to the controller, do not directly spray insecticide or other flammable sprays on the controller.

To reduce the risk of electric shock or malfunctions, do not touch the display or buttons with a pointy or sharp object.

To reduce the risk of injury and electric shock, avoid contact with sharp edges of certain parts.

To avoid injury from broken glass, do not apply excessive force on the glass parts.

To reduce the risk of injury, wear protective gear when working on the controller.

#### Precautions during installation

#### ↑ WARNING

Do not install the controller where there is a risk of leaking flammable gas. If flammable gas accumulates around the controller, it may ignite and cause a fire or explosion.

Properly dispose of the packing materials. Plastic bags pose suffocation hazard to children.

Take appropriate safety measures against earthquakes to prevent the controller from causing injury.

To prevent injury, install the controller on a flat surface strong enough to support its weight.

#### **↑** CAUTION

To reduce the risk of shorting, current leakage, electric shock, malfunctions, smoke, or fire, do not install the controller in a place exposed to water or in a condensing environment.

Controller must be installed by qualified personnel according to the instructions detailed in the Installation Manual. Improper installation may result in electric shock or fire.

When attaching the cover and the top casing to the bottom casing, push it until it they click into place. If they are not properly locked into place, they may fall, causing personal injury, controller damage, or malfunctions.

#### Precautions during wiring

#### **⚠ WARNING**

To reduce the risk of damage to the controller, malfunctions, smoke, or fire, do not connect the power cable to the signal terminal block.

Properly secure the cables in place and provide adequate slack in the cables so as not to stress the terminals. Improperly connected cables may break, overheat, and cause smoke or fire.

To reduce the risk of injury or electric shock, switch off the main power before performing electrical work.

All electric work must be performed by a qualified electrician according to the local regulations, standards, and the instructions detailed in the Installation Manual. Capacity shortage to the power supply circuit or improper installation may result in malfunction, electric shock, smoke, or fire.

To reduce the risk of current leakage, overheating, smoke, or fire, use properly rated cables with adequate current carrying capacity.

#### **⚠ CAUTION**

To reduce the risk of electric shock, shorting, or malfunctions, keep wire pieces and sheath shavings out of the terminal block.

To reduce the risk of shorting, current leakage, electric shock, or malfunctions, keep the cables out of contact with controller edges.

To reduce the risk of electric shock, malfunctions, or fire, seal the gap between the cables and cable access holes with putty.

#### Precautions for moving or repairing the controller

#### **↑ WARNING**

The controller should be repaired or moved only by qualified personnel. Do not disassemble or modify the controller. Improper installation or repair may cause injury, electric shock, or fire.

#### **↑** CAUTION

To reduce the risk of shorting, electric shock, fire, or malfunction, do not touch the circuit board with tools or with your hands, and do not allow dust to accumulate on the circuit board.

#### Additional precautions

To avoid damage to the controller, use appropriate tools to install, inspect, or repair the controller.

This controller is designed for exclusive use with the Lossnay by Mitsubishi Electric. The use of this controller for other systems or for other purposes may cause malfunctions.

Take appropriate measures against electrical noise interference when installing the Lossnay in hospitals or facilities with radio communication capabilities. Inverter, high-frequency medical, or wireless communication equipment as well as power generators may cause the Lossnay to malfunction. Lossnay may also adversely affect the operation of these types of equipment by creating electrical noise.

To avoid malfunctions, do not bundle power cables and signal cables together, or place them in the same metallic conduit.

To prevent malfunctions, do not remove the protective film or the circuit board from the casing.

To avoid damage to the controller, do not overtighten the screws.

Use a flat-head screwdriver with a blade width of 4-7 mm (5/32-9/ 32 inch). The use of a screwdriver with a narrower or wider blade tip may damage the controller casing.

To prevent damage to the controller casing, do not force the driver to turn with its tip inserted in the slot.

To avoid discoloration, do not use benzene, thinner, ethanol, hypochlorous acid or chemical rag to clean the controller. To clean the controller, wipe with a soft cloth soaked in water with mild detergent, wipe off the detergent with a wet cloth, and wipe off water with a dry cloth.

To avoid damage to the controller, provide protection against static electricity.

Do not use solderless terminals to connect cables to the terminal block

Solderless terminals may come in contact with the circuit board and cause malfunctions or damage the controller cover.

To avoid damage to the controller, do not make holes on the controller cover.

Do not install in the highly humid place such as inside the shower room etc. The relative humidity range shall be 30% to 90% without condensation.

Do not install the controller on the control panel door. Vibrations or shocks to the controller may damage the controller or cause the controller to fall.

Hold the cables in place with clamps to prevent undue force from being applied to the terminal block and causing cable breakage.

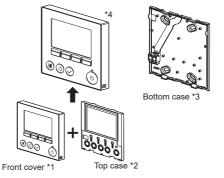
To prevent cable breakage and malfunctions, do not hang the top controller casing hang by the cable.

# 2. Component names and supplied parts

The following parts are included in the box.

• •		
Parts name		Appearance
Remote controller (front cover)		Right figure *1
Remote controller (top case)	1	Right figure *2
Remote controller (bottom case)	1	Right figure *3
Roundhead cross slot screws M4×30	2	
Wood screw 4.1×16 (for direct wall installation)	2	
Simple manual	1	

<sup>\*4</sup> The front cover (\*1) is already installed on the top case (\*2) at factory shipment.



<sup>\*5</sup> Remote controller cable is not included.

# 3. Field-supplied parts/Required tools

#### (1) Field-supplied parts

The following parts are field-supplied parts.

Parts name	Qty.	Notes	
Double switch box	1		
Thin metal conduit	Necessary	Not required for direct wall installation	
Lock nut and bushing	Necessary		
Cable cover	Necessary	Required for routing remote controller cable along a wall	
Putty	Reasonable		
Molly anchor	Necessary		
Remote controller cable (Use a 0.3 mm² (AWG22) 2-core sheathed cable.)	Necessary		

#### (2) Field-supplied tools

- Flat-tip screwdriver (Width: 4-7 mm (5/32-9/32 inch))
- Knife or Nipper
- Miscellaneous tools

# 4. Selecting an installation site

This remote controller is for the wall installation. It can be installed either in the switch box or directly on the wall. When performing direct wall installation, wires can be thread through either back or top of the remote controller.

#### (1) Selecting an installation site

To prevent injury, install the controller on a flat surface strong enough to support its weight.

#### Important

To reduce the risk of shorting, current leakage, electric shock, malfunctions, smoke, or fire, do not install the controller in a place exposed to water or in a condensing environment.

To reduce the risk of malfunctions and damage to the controller, avoid installing the remote controller on an electrically conductive surface, such as an unpainted metal sheet.

To avoid deformation and malfunction, do not install the remote controller in direct sunlight or where the ambient temperature may exceed 40°C (104°F) or drop below 0°C (32°F).

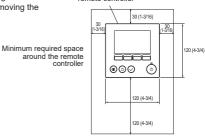
Do not install in the highly humid place such as inside the shower room etc. The relative humidity range shall be 30% to 90% without condensation.

#### (2) Installation space

Leave a space around the remote controller as shown in the figure at right, regardless of whether the controller is installed in the switch box or directly on the wall. Removing the remote controller will not be easy with insufficient space.

Also, leave an operating space in front of the remote controller.

External dimensions of remote controller



unit: mm(in)

# 5. Installation/Wiring work

#### (1) Installation work

Controller can be installed either in the switch box or directly on the wall. Perform the installation properly according to the method.

#### 1 Drill a hole in the wall.

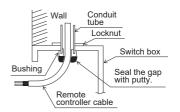
- Installation using a switch box
  - Drill a hole in the wall, and install the switch box on the wall.
  - Connect the switch box to the conduit tube.
- Direct wall installation
  - Drill a hole in the wall, and thread the cable through it.

#### 2 Seal the cable access hole with putty.

- Installation using a switch box
  - Seal the remote controller cable access hole at the connection of switch box and conduit tube with putty.

To reduce the risk of electric shock, malfunctions, or fire, seal the gap between the cables and cable access holes with putty.

③ Prepare the bottom case of the remote controller.





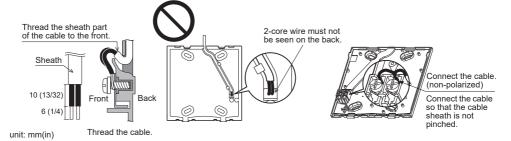


Front cover and top case

Bottom case

#### Connect the remote controller cable to the terminal block on the bottom case.

Peel off 6 mm of the remote controller cable sheath as shown in the figure below, and thread the cable from behind the bottom case. Thread the cable to the front of the bottom case so that the peeled part of the cable cannot be seen behind the bottom case. Connect the remote controller cable to the terminal block on the bottom case.



#### ■ Direct wall installation

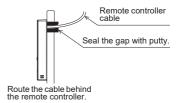
. Seal the hole through which the cable is threaded with putty.

To reduce the risk of electric shock, shorting, or malfunctions, keep wire pieces and sheath shavings out of the terminal block.

#### Important

Do not use solderless terminals to connect cables to the terminal block.

Solderless terminals may come in contact with the circuit board and cause malfunctions or damage the controller cover.

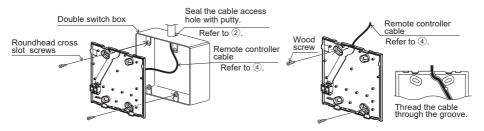


#### (5) Install the bottom case.

- Installation using a switch box
  - Secure at least two corners of the switch box with screws.
- Direct wall installation
  - Thread the cable through the groove.
  - Secure at least two corners of the remote controller with screws.
  - Be sure to secure top-left and bottom-right corners of the remote controller (viewed from the front) to prevent it from lifting.
     (Use molly anchor etc.)

■ Installation using a switch box

■ Direct wall installation



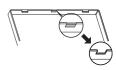
#### Important

To avoid damage to the controller, do not overtighten the screws.

To avoid damage to the controller, do not make holes on the controller cover.

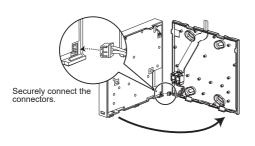
#### 6 Cut out the cable access hole.

- Direct wall installation (when running the cable along the wall)
  - Cut out the thin-wall part on the cover (indicated with the shaded area in the right figure) with a knife or a nipper.
  - Thread the cable from the groove behind the bottom case through this access hole.



#### 7 Route the wire to the top case.

Connect the connector on the bottom case to the connector on the top case.





#### Important

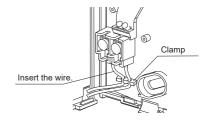
To prevent malfunctions, do not remove the protective film or the circuit board from the casing.

To prevent cable breakage and malfunctions, do not hang the top controller casing by the cable.

#### 8 Route the wire to the top case.

#### Important

Hold the cables in place with clamps to prevent undue force from being applied to the terminal block and causing cable breakage.



#### 9 Install the front cover and top case on the bottom case.

Two mounting tabs are at the top of the top case. (A cover is already installed on the case at the time of factory shipment.)
Hook those two tabs onto the bottom case, and click the top case into place. Check that the case is securely installed and not lifted.

#### Important

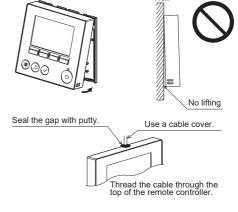
When attaching the cover and the top casing to the bottom casing, push it until it they click into place.

If they are not properly locked into place, they may fall, causing personal injury, controller damage, or malfunctions.

- Direct wall installation (when running the cable along the wall)
  - Thread the cable through the access hole at the top of the remote controller.
  - . Seal the cut-out part of the cover with putty.
  - Use a cable cover.

Installation is complete.

Follow the instructions below when uninstalling them.



#### (2) Uninstalling the front cover and top case

1 Uninstalling the front cover

Insert a flat-tip screwdriver into either of the two latches at the bottom of the remote controller, and move it in the direction of the arrow as shown in the figure at right.

#### (2) Uninstalling the top case

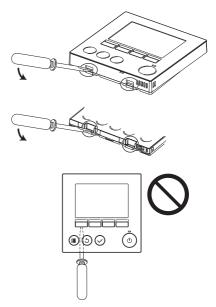
Insert a flat-tip screwdriver into either of the two latches at the bottom of the remote controller, and move it in the direction of the arrow as shown in the figure at right.

#### Important

Use a flat-head screwdriver with a blade width of 4-7 mm (5/32-9/32 inch). The use of a screwdriver with a narrower or wider blade tip may damage the controller casing.

To prevent damage to the controller casing, do not force the driver to turn with its tip inserted in the slot.

To prevent damage to the control board, do not insert the driver into the slot strongly.



③ Installing the cover and top case Two mounting tabs are at the top of the top case. Hook those two tabs onto the bottom case, and click the top case into place.

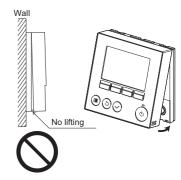
Install the cover on the top case in the same way as with the top case.

Check that the top case is securely installed and not lifted.



When attaching the cover and the top casing to the bottom casing, push it until it they click into place. If they are not properly locked into place, they may fall, causing personal injury, controller damage, or malfunctions.

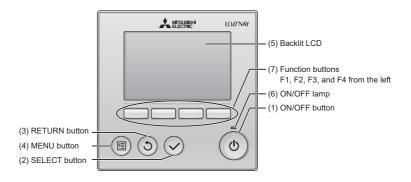




# 6. Important

- Refer to section 9 "Initial setting menu" in this Manual for remote controller main/sub setting.
- At the time of factory shipment, protective sheet is on the operation interface of the front cover. Peel off the protective sheet on the operation interface prior to use.

#### 7. Remote controller button functions



#### (1) ON/OFF button

Press to turn ON/OFF the Lossnay unit.

(2) SELECT button

Press to save the setting.

#### (3) RETURN button

Press to return to the previous screen.

#### (4) MENU button

Press to bring up the Main menu.

#### (5) Backlit LCD

Operation settings will appear.

When the backlight is off, pressing any button turns the backlight on and it will stay lit for a certain period of time depending on the screen.

#### (6) ON/OFF lamp

This lamp lights up in green while the unit is in operation. It blinks while the remote controller is starting up or when there is an error.

#### (7) Function buttons

Use to select the Ventilation mode and fan speed on the Main display. Use to select items on other screens.

Note: When the backlight is off, pressing any button turns the backlight on and does not perform its function. (except for the 💿 button)

Pressing the 📵 button will bring up the Main menu as shown below.

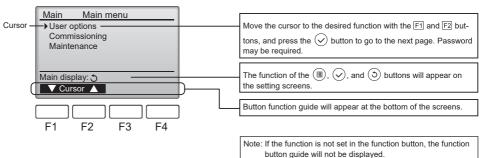
(Refer to section 8.(2) "Main display" for details.)

User options \*1, \*3 Commissioning \*1, \*2, \*3 Maintenance \*1, \*3

- \*1 Refer to the Instructions Book for details.
- \*2 Explained in this manual.
- \*3 If no buttons are pressed for 10 minutes (2 hours on some screens), the screen will automatically return to the Main display. Any settings that have not been saved will be lost.

The available items on the menu depend on the connected Lossnay unit model. For items not described in the manuals that are enclosed with the remote controller, refer to the manuals that came with the Lossnay units.

#### Button operations on the Main menu



# 8. Turning on the power

Make sure that the remote controller is properly installed according to the instructions in the Installation Manual and that the Lossnay unit installation has been completed before turning on the power.

#### (1) When the power is turned on, the following screen will appear.



#### Note:

- · Only the first time, the «Language selection» screen will be appeared.
- The product will not start-up without language selection.
- See 9. (6) Language selection.

Normal start up (indicating the percentage of process completion)

#### (2) Main display

After the successful startup, the Main display will appear.





#### Note:

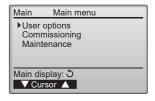
- When connecting two remote controllers, be sure to designate one as a main and the other as a sub controller. Refer to section 9 "Initial setting menu" for how to make the Main/Sub setting.
- Refer to the Instructions Book for the icons on the display.

Main display (While the unit is not in operation)

Main display (While the unit is in operation)

#### (3) Main menu

Press the MENU button, this screen appear.



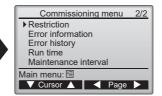
Press the F1, F2 button to move the cursor.

Press the (v) button to go to the next screen.

#### (4) Commissioning menu

You can use Commissioning menu.





Press the F1, F2, F3, F4 button to move the cursor or page.

Press the 🔾 button to go to the next screen.

· Administrator password is required. See 9. (5) Administrator password.

# Initial setting menu (Remote controller settings) Administrator password is required.>

From the Main display, select Commissioning menu>Initial setting, and make the remote controller settings on the screen that appears.





Press the F1, F2, F3, F4 button to move the cursor

Press the vobutton to go to the next screen.

#### (1) Main/Sub setting

When connecting two remote controllers, one of them needs to be designated as a sub controller. [Button operation]

- [1] When the F3 or F4 button is pressed, the currently selected setting will appear highlighted. Select "Sub", and press the 🕢 button to save the change.
- [2] Press the (III) button to return to the Main menu screen. (This button always brings up the Main menu screen.)



#### (2) Clock setting

[Button operation]

- [1] Move the cursor with the F1 or F2 button to the desired item.
- [2] Change the date and time with the F3 or F4 button, and press the button to save the change. The change will be reflected on the clock display on the Main display.

Note: Clock setting is necessary for setting the time, Fan speed timer, ON/OFF timer, Weekly timer, Night-purge setting and Error history. Make sure to perform Clock setting when the product is used for the first time.



#### (3) Display contrast

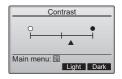
[Button operation]

Adjust LCD contrast with the F3 or F4 button.

The current level is indicated with a triangle.

Note: Adjust the contrast to improve viewing in different lighting conditions or installation locations.

This setting can not improve viewing from all directions.



#### (4) Remote controller display details setting

Make the settings for the remote-controller-related items as necessary.

Press the button to save the changes.

## [1] Clock display

[Button operation]

- Select "Clock" from the remote controller display details setting screen, and press the F4 button (Change) to bring up the clock display setting screen.
- Use the F1 through F4 buttons to select "Yes" (display) or "No" (non-display) and its format for the Main display.
- Save the settings with the 🗸 button.
- Administrator password is required. See (5) Administrator password. (The factory settings are "Yes" (display) and "24 h" format.)

Clock display: Yes (Time is displayed on the Main display.)

No (Time is not displayed on the Main display.)

Display format: 24-hour format

12-hour format

AM/PM display (Effective when the display format is 12-hour): AM/PM before the time

AM/PM after the time

Note: Time display format will also be reflected on the timer and schedule setting display. The time is displayed as shown below.

12-hour format: AM12:00 ~ AM1:00 ~ PM12:00 ~ PM 1:00 ~ PM11:59 24-hour format: 0:00 ~ 1:00 ~ 12:00 ~ 13:00 ~ 23:59

#### [2] Temperature unit setting

[Button operation]

Move the cursor to the "Temperature" on the display details setting screen, and select the desired

temperature unit with the F3 or F4 button. (The factory setting is Centigrade (°C).)

- " °C": Temperature is displayed Centigrade. Temperature is displayed in 0.5- or 1-degree increments, depending on the model of indoor units.
- " °F ": Temperature is displayed Fahrenheit.

#### [3] Sensor value

[Button operation]

Move the cursor to "Sensor value" on the display details screen, and select the desired setting with

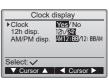
the F3 or F4 button. (The factory setting is "No.")

- · Yes: Outdoor, return, and supply temperatures appear on the Main display.
- No: Outdoor, return, and supply temperatures do not appear on the Main display.

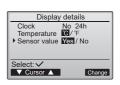
#### Note

- Sensor value includes [Outdoor temperature], [Return temperature], [Supply temperature] or [CO<sub>2</sub> concentration].
- The outdoor and return temperatures are detected by the thermometer of the product.
- PZ-70 series CO<sub>2</sub> sensor must be connected to display the [CO<sub>2</sub> concentration].
- The supply temperature is calculated based on the standard heat-exchange efficiency.
- · The values will differ from the actual outdoor, return, supply temperatures.









#### (5) Administrator password setting

[Button operation]

[1] To enter the current Administrator password (4 numerical digits), move the cursor to the digit you want to change with the F1 or F2 button, and set each number (0 through 9) with the F3 or F4 button.

[2] Press the 🗘 button.

Note: The initial administrator password is "9999". Change the default password as necessary to prevent unauthorized access. Have the password available for those who need it.

Note: If you forget your administrator password, you can initialize the password to the default password "9999" by pressing and holding the F1 and F2 buttons simultaneously for three seconds on the administrator password setting screen.

- [3] If the password matches, a window to enter a new password will appear. Enter a new password in the same way as explained above, and press the  $(\checkmark)$  button.
- [4] Press the Authon (OK) on the password change confirmation screen to save the change. Press the Button (Cancel) to cancel the change.

Note: The administrator password is required to make the settings for Commissioning menus.

Refer to the Instruction Book for the detailed information about how to make the settings for these items.







#### (6) Language selection

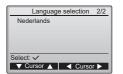
[Button operation]

Move the cursor to the language you desire with the F1 through F4 buttons.

Press the (v) button to save the setting.

Note: Selectable language are different by each remote controller model.





# 10. Service menu <Administrator password is required.>

Select "Service menu" from the Main menu > Commissioning and press the  $\bigcirc$  button. The service menu will appear.



#### (1) Input maintenance Info.

Select "Input maintenance Info." from the Service menu to bring up the Maintenance information screen. Refer to the Lossnay unit Installation Manual for how to make the settings.

The service menu will appear.

#### Note:

The following settings can be made from the Maintenance Information screen.

- · Registering model names and serial numbers
  - Enter the model names and serial numbers of Lossnay unit. The information entered will appear on the Error information screen. Model names can have up to 18 characters, and the serial numbers can have up to 8 characters.
- · Registering dealer information
  - Enter phone number of a dealer. The entered information will appear on the Error information screen. Phone number can have up to 13 characters.
- · Initializing maintenance information

Select the desired item to initialize the above settings.



# Maintenance information Model name input Serial No. input Dealer information input Initialize maintenance info. Main menu:

#### (2) Function setting

Make the Lossnay units' function settings from the remote controller as necessary.

- Refer to the Lossnay unit Installation Manual for information about the factory settings of Lossnay units, function setting numbers, and setting values.
- · When changing the Lossnay units' function settings, record all the changes made to keep track of the settings.
- · Refer to the Instruction Book for the remote controller.

#### (3) Initializing the settings of the remote controller

Refer to the Instruction Book for the remote controller.



# **Manual Download**

Go to the website below to download manuals, select model name, then choose language.



http://www.mitsubishielectric.com/ldg/ibim/

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Eng-14 May 2021