

# Wired Controller Manual

KJR-120N



**kaden°**  
your perfect climate



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## Important note

Read this manual carefully before installing or operating your new air conditioning unit. Make sure to save this manual for future reference.

# 1. Safety precautions

## Read safety precautions before operation and installation

Read the safety precautions carefully before installing the unit. Stated below are important safety issues that must be obeyed.



Means improper handling may lead to personal death or severe injury.



Means improper handling may lead to personal injury or property loss.



### WARNING

- Please ensure a professional installs the unit.
- Installation by other persons may lead to incorrect installation, electric shock or fire. Adhere to this installation manual.



### CAUTION

- **Do not** install the unit in a place vulnerable to leakage of flammable gases. Leaking flammable gases around the controller can result in fire.
- **Do not** operate with wet hands or let water enter the wired controller. Otherwise, electric shock may occur.
- The wiring should adapt to the wired controller current. Otherwise, electric leakage or over heating may occur and result in fire.
- The specified cables shall be used in the wiring. No external force should be applied to the terminal.
- This may result in damaged wiring and/or overheating which can create a fire hazard.



### WARNING

#### KEEP OUT OF REACH OF CHILDREN

This product contains button / coin cell batteries. Keep new and used batteries away from children. A swallowed button or coin cell battery can cause internal chemical burns and death in as little as two hours. Dispose of unused batteries immediately. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.



'If it is suspected a button/coin battery has been swallowed or otherwise placed inside any part of the body, a person should contact the Australian Poisons Information Centre on 13 11 26 or National Poisons Centre on 0800 764 766 (New Zealand) immediately for 24/7 fast, expert advice.'




## 2. Accessories

### Select the installation location

**Do not** install in areas that contain oil, vapour or sulfureted gas, otherwise, this product can deform which could permanently damage the product.

### Preparation before installation

1. Please confirm that you have all the following parts.

No.	Name	Quantity	Remarks
1	Wired controller	1	
2	Wired controller manual	1	
3	Screws	3	ST3.9*25 (for mounting on the wall)
4	Wall plugs	3	For mounting on the wall
5	Screws	2	M4X25 (for mounting on switch box)
6	Plastic screw bars	2	For fixing on switch box
7	The connective wires group-1	1	Optional
8	The connective wires group-2	1	Connect to mainboard
9	Battery 	1	

2. Prepare the following assemblies on the site..

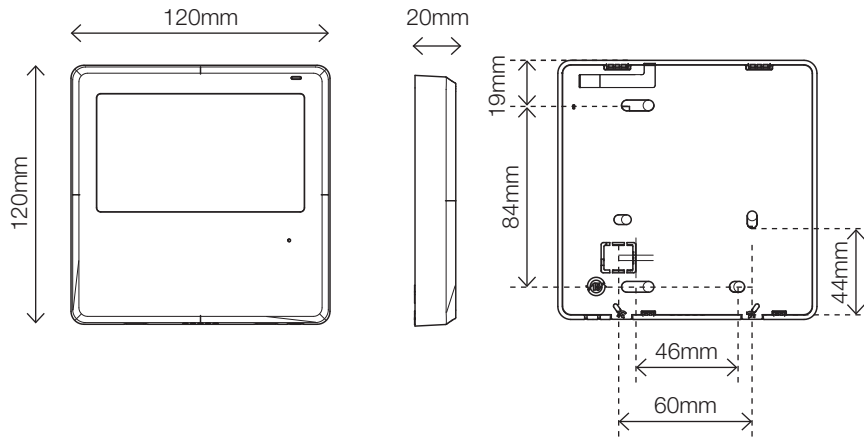
No.	Name	Quantity (embedded into wall)
1	Switch box	1
2	Wiring tube (insulating sleeve and tightening screw)	1

### Precautions

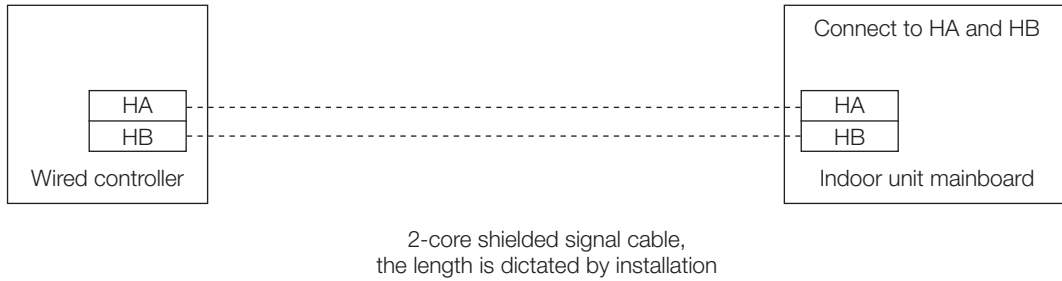
- This manual explains the installation requirements for the wired controller. Please refer to the wiring diagram of this installation manual to correctly wire the controller to the indoor unit.
- The wired controller operates in a low voltage loop circuit. **Do not** directly connect the cable to 220V-240V power or 380V high voltage power. **Do not** wire in a loop; wiring clearance between configured tubes should be at the range of 300mm – 500mm or above.
- The shielded wire of the twin shielded signal cable used for the wired controller must be grounded.
- Upon completing the wired controller connection, **do not** use a mega to measure the insulation as this may cause damage to the controller.
- The connective twin shielded signal cable of the wired controller should not be longer than 20 meters.

# 3. Installation method

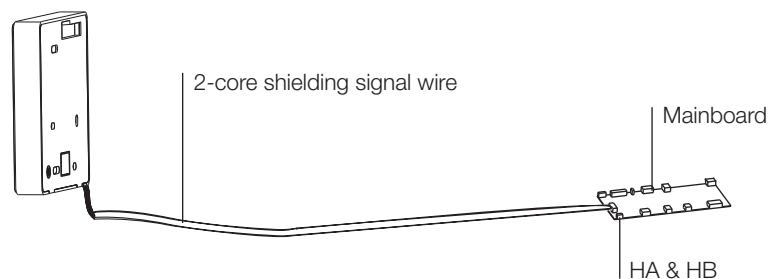
## 1. Wired controller size



## 2. Wiring principle sketch



## 3. Wiring figure



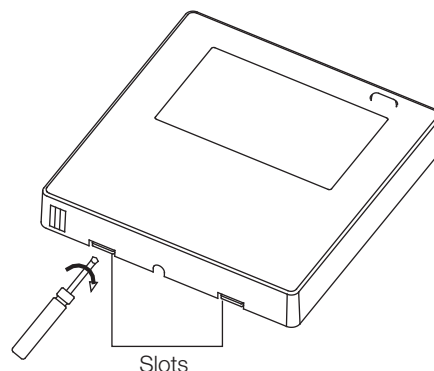
Connect the terminals on the wired controller (HA ,HB), and the terminals of the indoor unit (HA ,HB). (HA and HB are not polarity sensitive).

## 4. Remove the upper part of the wired controller

Insert a slotted screwdriver into the slots in the lower part of the wired controller (2 places), and remove the upper part of the wired controller.

### WARNING

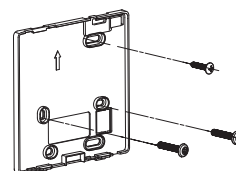
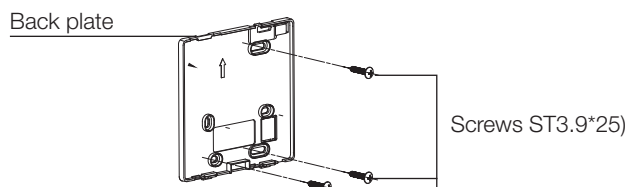
The PCB is mounted in the upper part of the wired controller. Be careful not to damage the board with the slotted screwdriver.



## 5. Fasten the back plate of the wired controller

For exposed mounting, fasten the back plate on the wall with the 3 screws (ST3.9 x 25) and plugs.

For flush-mounting, fasten the back plate on the switch box with 2 screws (M4 x 25) and fasten it on the wall with 1 screw (ST3.9 x 25).

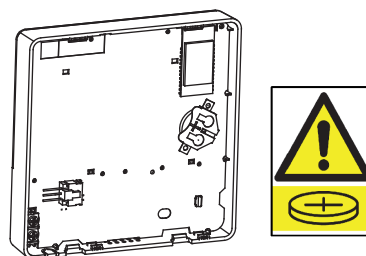


### WARNING

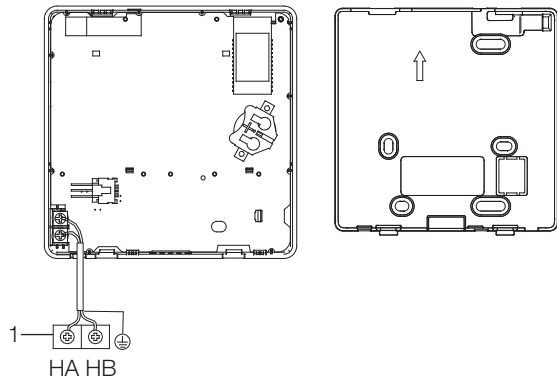
Put on a flat surface. Be careful not to distort the back plate of the wired controller by over-tightening the mounting screws.

## 6. Battery installation

- Put the battery into the installation site and make sure the positive side of the battery is in accordance with the positive side of installation site. (See figure opposite.)
- Please set the time during first operation. Batteries in the wired controller can fail during a power failure. When power is restored, if the time displayed is not correct, it means the battery is dead and requires replacing.



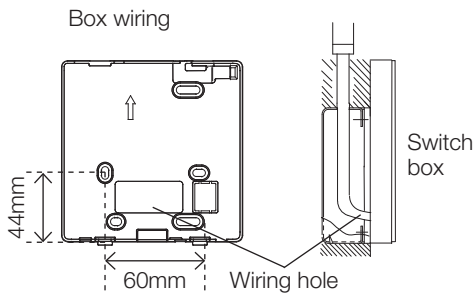
## 7. Wiring



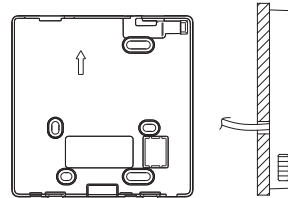
### ! CAUTION

- Avoid water ingress into the wired controller, use trap and putty to seal the connectors of wires during wiring installation.
- During installation, leave some length of the connecting wires for convenient maintenance, when the controller needs to be removed from its location.

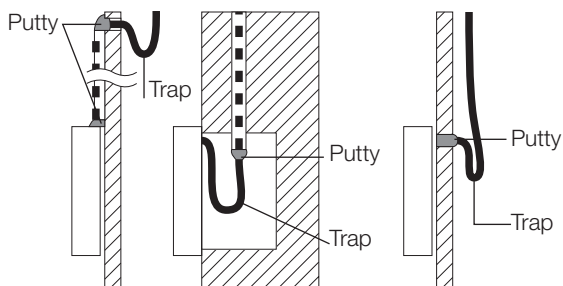
### B. Shielded wiring



### Wiring through the wall



Wall hole and wiring hole diameter of wall hole:  
ø20mm





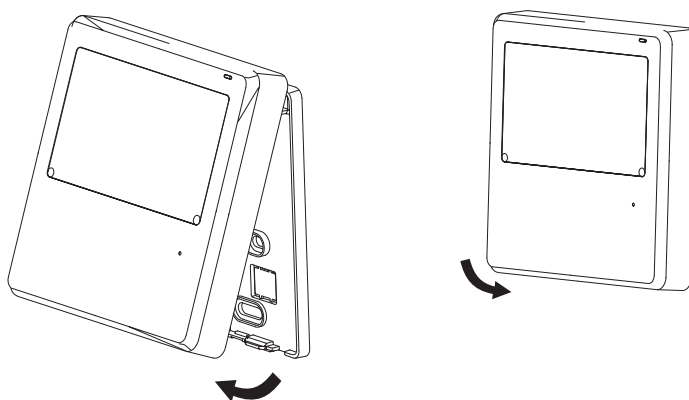
## 8. Reattach the upper part of the wired controller

After adjusting the upper case click it into place; avoid clamping the wiring during this process.

## Note

All the pictures in this manual are for explanation purpose only.

Your wired controller may be slightly different. In this case the actual shape shall prevail.

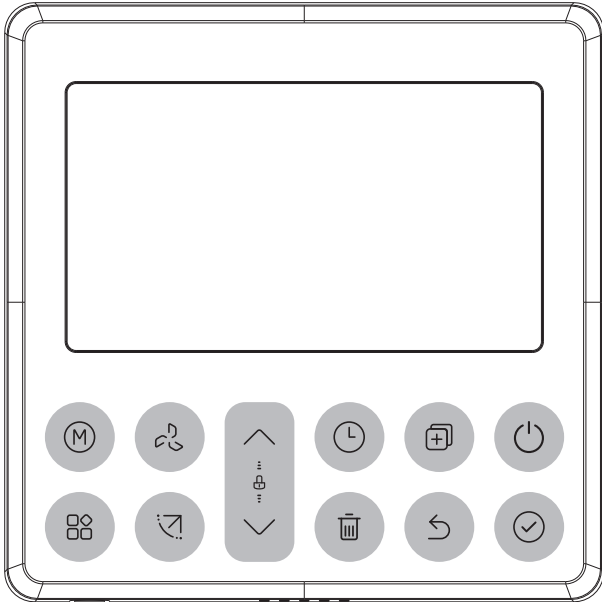


# 4. Specification

Input voltage	Ambient temperature	Ambient humidity
DC 5V/DC 12V	-5 – 43°C	RH40% – RH90%

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## 5. Features and functions



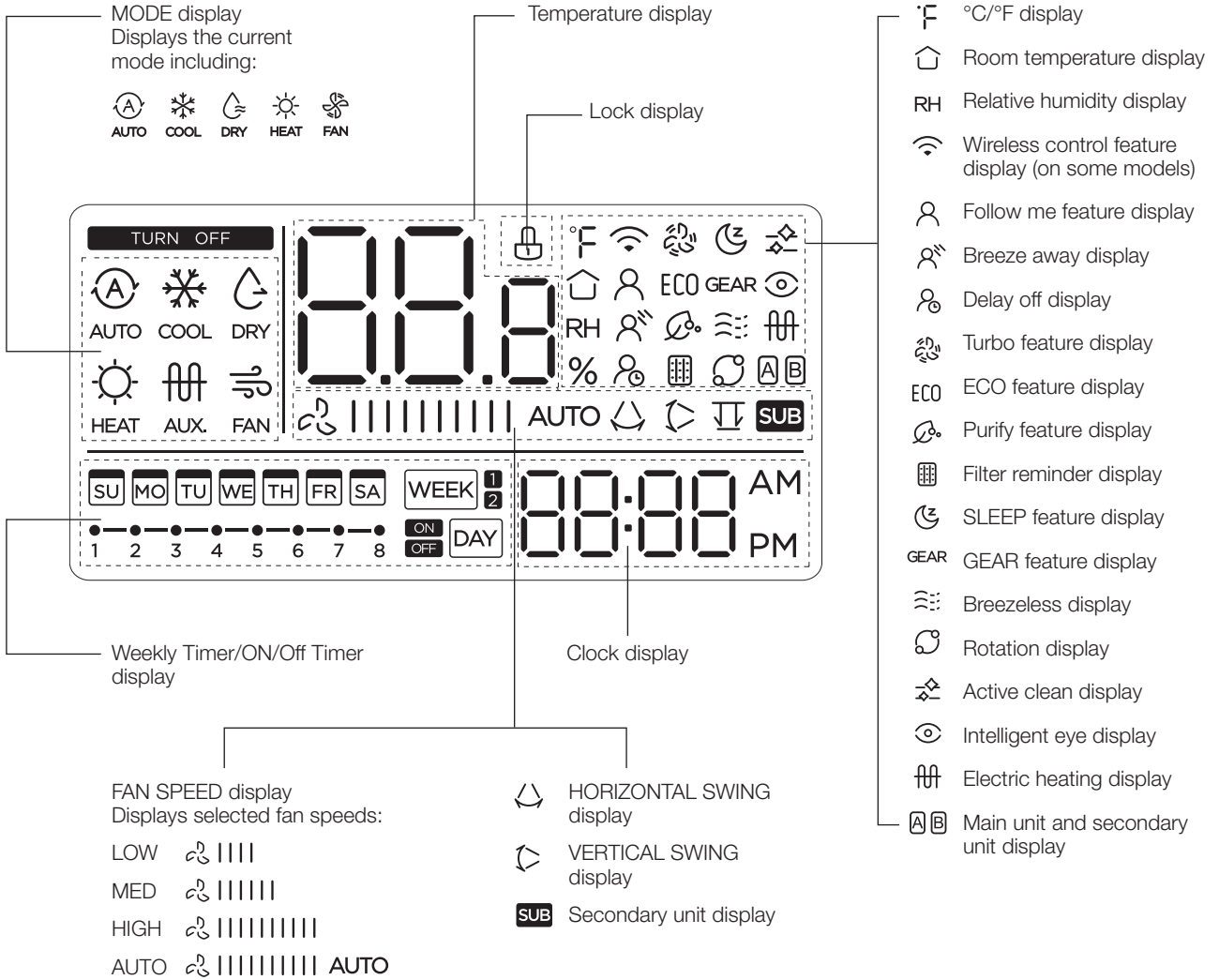
### Features

- LCD display
- Malfunction code display: displays error codes
- 4-way wire layout design, no raised part at back, more convenient to place the wires and install the device
- Room temperature display
- Weekly timer

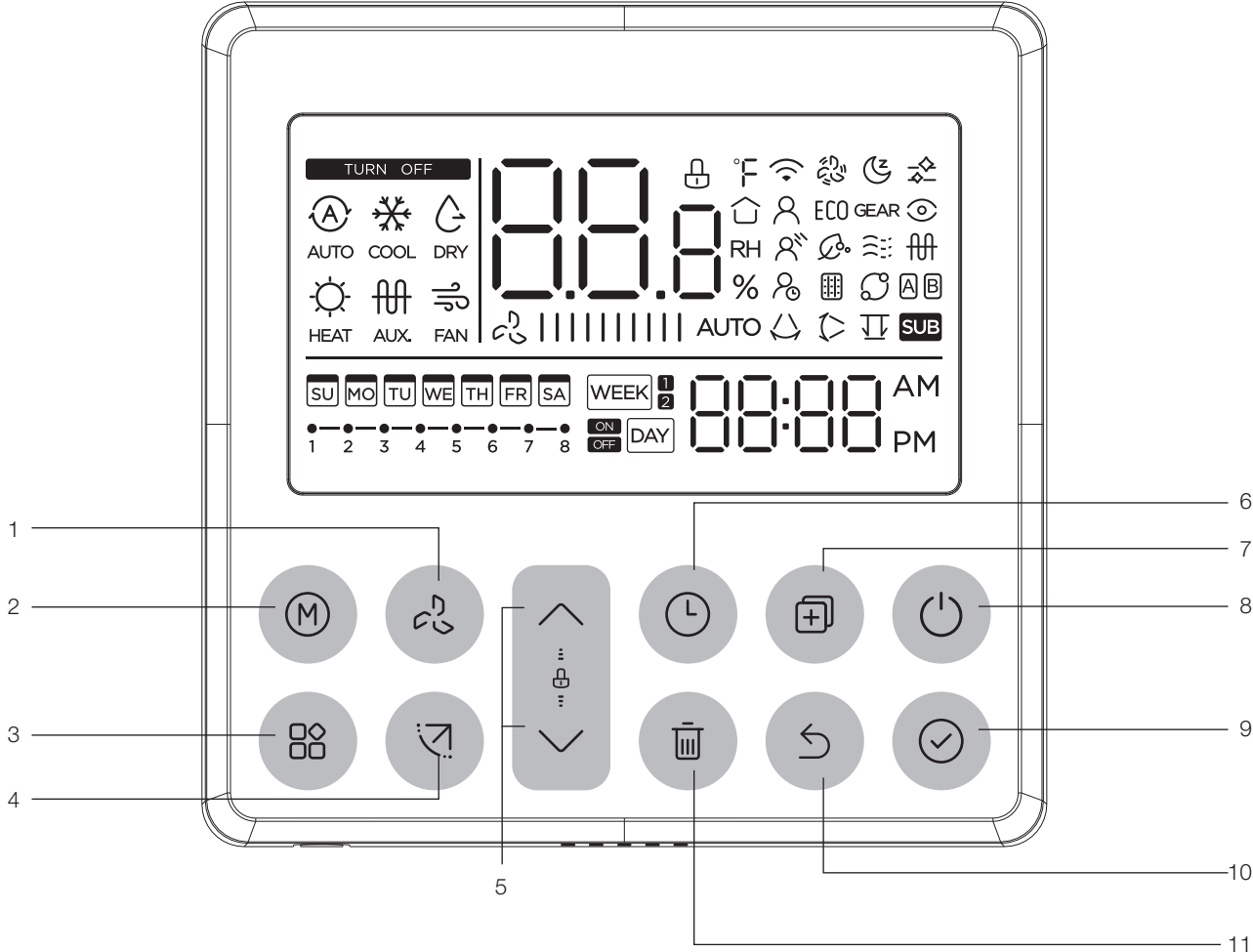
### Functions

- Mode: Auto – Cool – Dry – Heat – Fan
- Fan speed: Auto/Low/Med/High
- Timer ON/OFF
- Temp setting
- Weekly timer
- Follow me
- Child lock
- LCD display
- Clock
- Turbo mode
- Swing (on some models)

# 6. Display screen



# 7. Buttons



- 1. Fan-speed
- 2. Mode
- 3. Function
- 4. Swing
- 5. Adjust
- 6. Timer
- 7. Copy
- 8. Power
- 9. Confirm
- 10. Back
- 11. Day off/delay

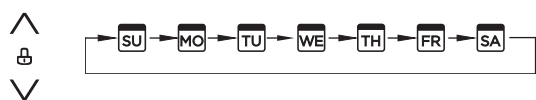
# 8. Operation

## Set the current day and time

1. Press the TIMER button for 3 seconds or more. The timer display will flash.



2. Press the button “^” or “v” to set the day. The selected day will flash.



3. The day setting is finished and the time setting is ready to set after pressing TIMER button or if you don't press a button in 10 seconds.



4. Press the button “^” or “v” to set the current time. Press repeatedly to adjust the current time in 1 minute increments. Press and hold to adjust the current time quickly.



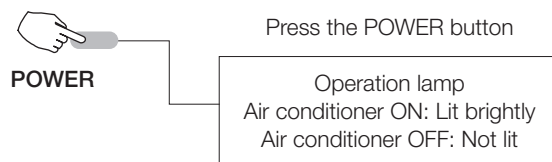
5. The setting is done after pressing TIMER button or if you don't press a button in 10 seconds.



6. Time scale operation  
Press the buttons “⌚” and “🗓️” for 2 seconds will alternate the clock time display between the 12h and 24h scale.

## To start/stop operation

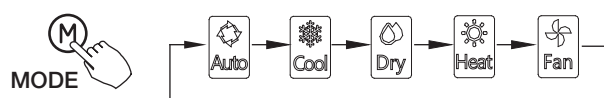
1. Press the TIMER button for 3 seconds or more. The timer display will flash.



## To set the operation mode

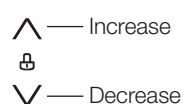
### Mode setting

Press the MODE button to set the mode.



### Room temperature

Press the button “^” or “v” to set the room temperature. Indoor Setting Temperature Range: 17 – 30°C.



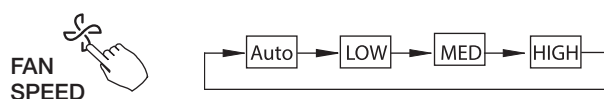
### °C & °F scale selection

Press the buttons “CONFIRM” and “^” button for 3 seconds to alternate the temperature display between the °C & °F scale.



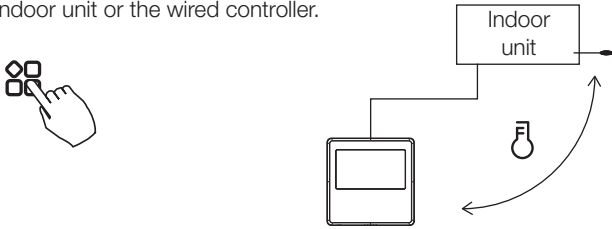
### Fan speed setting


Press the FAN SPEED button to set the fan speed. (This button does not work when in Auto or Dry mode.)



## Room temperature sensor selection

Press the “FUNC” button until the “FOLLOW ME” sign appears to select whether the room temperature is detected at the indoor unit or the wired controller.




When the Follow Me function indicator appears , the room temperature is detected at the wired controller.

## Turbo mode (on some models)


While in COOL/HEAT mode, press the “FUNC” button to activate turbo mode. Press the button again to deactivate the turbo mode.



When TURBO MODE is activated the  icon mark appears.

## Child lock function

Press the button “^” and “v” simultaneously for 3 seconds to activate the child lock function and lock all buttons on the wired controller. Press the buttons again for 3 seconds to deactivate the child lock function.

When the child lock function is activated, the  icon mark appears.



## Keypad tone setting

Press the buttons “Swing” and “FUNC” together for 3 seconds to turn on or turn off the keypad tone.



## Swing function (for units with swing features only)

### Left-right swing

Press the “SWING” button to for 2 seconds to start left-right swing function.



When the swing function is activated the  icon will appear.

### Up-down airflow direction and swing

Press the “SWING” button to start the UP-DOWN swing function.



When the swing function is activated the  icon will appear.

# 9. Timer functions

**WEEK**

## WEEKLY timer

Use this timer function to set operating times for each day of the week.

**ON DAY**

## On timer

Use this timer function to start air conditioner operation. The timer operates and air conditioner operation starts after the time has passed.

**OFF DAY**

## Off timer

Use this timer function to stop air conditioner operation. The timer operates and air conditioner operation stops after the time has passed.

**ON OFF DAY**

## On and Off timer

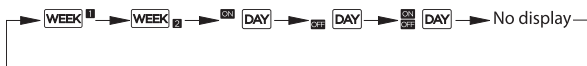
Use this timer function to start and stop air conditioner operation. The timer operates and air conditioner operation starts and stops after the time has passed.

### To set the On or Off TIMER

1. Press the TIMER button to select the **ON DAY** **OFF DAY**



TIMER



2. Press the CONFIRM button and the Clock display will flash.



CONFIRM

3. Press the button “^” or “v” to set the time. After the time is set, the timer will start or stop automatically.



**OFF DAY**

18:00

Example: Off timer set at 6:00PM

4. Press the CONFIRM button again to finish.



CONFIRM

### To set the On and Off TIMER

1. Press the TIMER button to select the **ON DAY** **DAY**



TIMER

2. Press the CONFIRM button and the Clock display will flash.



CONFIRM

3. Press the button “^” or “v” to set the time of On timer, and then press the CONFIRM button to confirm.



CONFIRM

4. Press the button “^” or “v” to set the time of Off timer.



5. Press the CONFIRM button to finish.



CONFIRM

# 10. Weekly timer 1

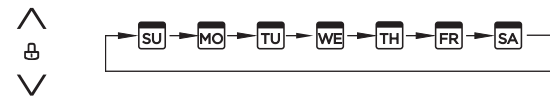
## 1. Weekly timer setting

Press the TIMER button to select the **WEEK** and then press the CONFIRM button to confirm.



## 2. Day of the week setting

Press the button “^” or “v” to select the day of the week and then press the CONFIRM button to confirm the setting.



## 3. ON timer setting of timer setting 1

Press the button “^” or “v” to set the time of On timer and then press the CONFIRM button to confirm the setting.



Example: Tuesday time scale 1

Up to 4 timer settings can be saved for each day of the week. It is convenient if the WEEKLY TIMER is set according to the user's life style.

## 4. Off timer setting of timer setting 1

Press the button “^” or “v” to set the time of Off timer and then press the Confirm button to confirm the setting.



## 5. Different timer settings can be set by repeating steps 3 to 4.

## 6. Other days in one week can be set by repeating steps 2 to 5.

### Note

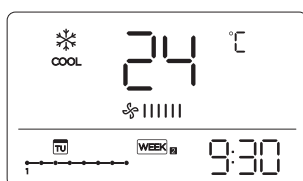
- In the weekly timer setting you can return to the previous step by pressing the BACK button.
- The time of the timer setting can be deleted by pressing the DAY OFF button.
- The current setting will be restored and withdrawn automatically when there is no operation for 30 seconds.



## WEEKLY timer operation

### To activate WEEKLY TIMER function

Press the TIMER button while **WEEK** is displayed on the LCD screen.

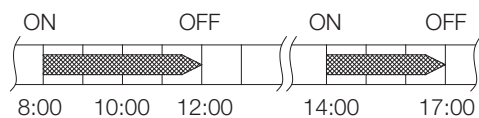


### To deactivate WEEKLY TIMER function

Press the TIMER button while **WEEK** disappears from the LCD screen.

### To turn off the air conditioner during the weekly timer

1. If you press the POWER button once and quickly, the air conditioner will turn off temporarily. And the air conditioner will turn on automatically until the time of On timer.



Example: If you press the POWER button once and quickly at 10:00, the air conditioner will turn on at 14:00.

2. When you press the POWER button for 2 seconds, the air conditioner will turn off completely.

## To set the DAY OFF (for a holiday)

1. During the weekly timer, press the CONFIRM button.



**CONFIRM**

2. Press the button “^” or “v” to select the day in the week.



3. Press the DAY OFF button to set the DAY OFF.



**DELAY**



Example: the DAY OFF is set for Wednesday

4. The DAY OFF can be set for other days by repeating steps 2 and 3.
5. Press the BACK button to go back to the weekly timer.



**BACK**

## Note

- To cancel: Follow the same procedures as those for setup.
- The DAY OFF setting is cancelled automatically after the set day has passed.

## DELAY function

During the weekly timer, press the FUNC button, select the DELAY function then press the confirm. The display will show “0h” “1h” “2h”, wait 3 seconds to confirm. When the delay function is activated the “⌚” icon will appear.

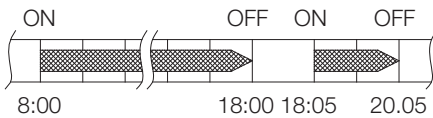
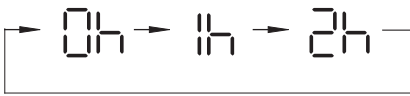


Pressing this button twice, displays 1h and wait 3 seconds to confirm. It means the unit will override 1 hours.

Pressing this button three times, displays 2h and wait 3 seconds to confirm. It means the unit will override 2 hours.



DELAY/DAY OFF



Example: If you press the DELAY button to select 2h at 18:05, the air conditioner will delay to turn off to 20:05.

## Copy the setting from one day to another day

A timer made once can be copied to another day of the week. The setting of the selected day of the week will be copied. The effective use of the copy mode ensures ease of making other timer settings.

1. During weekly timer, press the CONFIRM button.



CONFIRM

2. Press the button “^” or “v” to select the day to copy from.



3. Press the COPY button, the letters “CY” will be shown on the LCD screen.



COPY

4. Press the button “^” or “v” to select the day to copy to.

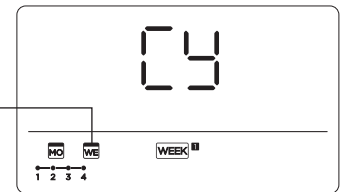


5. Press the COPY button to confirm.



COPY

The **WE** mark flashes quickly



Example: copied the setting of Monday to Wednesday

6. Other days can be copied by repeating steps 4 and 5.
7. Press the Confirm button to confirm the settings.



CONFIRM


8. Press the Back button to go back to the weekly timer.

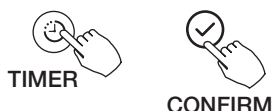


BACK

# 11. Weekly timer 2

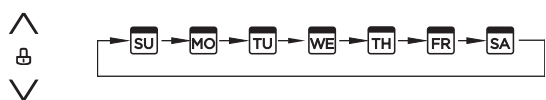
## 1. Weekly timer setting

Press the TIMER button to select the **WEEK**  and then press the CONFIRM button to confirm.



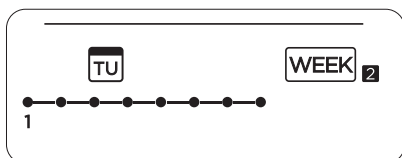
## 2. Day of the week setting

Press the button “^” or “v” to select the day of the week and then press the CONFIRM button to confirm the setting.



## 3. ON timer setting of timer setting 1

Press the button “^” or “v” to set the time of On timer and then press the CONFIRM button to confirm the setting.



Example: Tuesday time scale 1

Up to 8 scheduled events can be set on one day. Various events can be scheduled in either MODE, TEMPERATURE and Fan speeds to suit the user's life style.

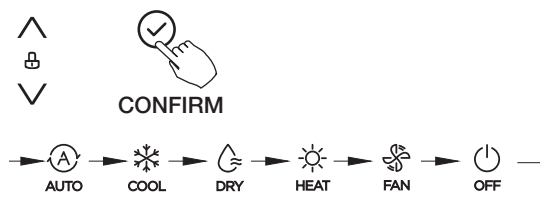
## 4. Time setting

Press the button “^” or “v” to set the time, timer then press the Confirm button.



## 5. Operation mode setting

Press the button “^” or “v” to set the operation mode, then press the Confirm button.



## 6. Room temperature setting

Press the button “^” or “v” to set the operation mode, then press the Confirm button. NOTE: This setting is unavailable in the FAN or OFF modes.

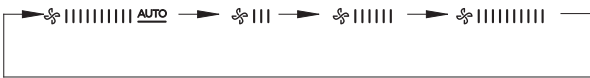


### Note

- In the weekly timer setting you can return to the previous step by pressing the BACK button.
- The time of the timer setting can be deleted by pressing the DAY OFF button.
- The current setting will be restored and withdrawn automatically when there is no operation for 30 seconds.

## Fan speed setting

Press the TIMER button to select the press the CONFIRM button to confirm. NOTE: This setting is unavailable in the AUTO, DRY and OFF modes.



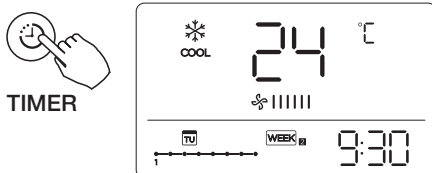
## Note

- Different scheduled events can be set by repeating steps 3 to 7.
- Additional days, in a one week period, can be set by repeating steps 3 to 8.
- The current setting will be restored and withdrawn automatically when there is no operation for 30 seconds.
- The weekly timer setting can be returned to the previous step by pressing BACK. The current setting will then be restored. The controller will not save the weekly timer settings if there is no operation within 30 seconds.

## WEEKLY timer operation

### To activate WEEKLY TIMER function

Press the TIMER button while **WEEK** is displayed on the LCD screen.



### To deactivate

Press the POWER button for 2 seconds to cancel the timer mode.



## To set the DAY OFF (for a holiday)

1. After setting the weekly timer, press the CONFIRM button.



2. Press the button “^” or “v” to select the day in the week.



3. Press the DAY OFF button to set the DAY OFF.



Example: the DAY OFF is set for Wednesday

4. Set the day OFF for the other days by repeating the steps 2 and 3
5. Press BACK to revert to the weekly timer.



## Note

The DAY OFF setting is cancelled automatically after the set day has passed.

## Copy the setting from one day to another day

A timer made once can be copied to another day of the week. The setting of the selected day of the week will be copied. The effective use of the copy mode ensures ease of making other timer settings.

1. During weekly timer, press the CONFIRM button.



2. Press the button “^” or “v” to select the day in the week.



3. Press the COPY button, the letters “CY” will be shown on the LCD screen.



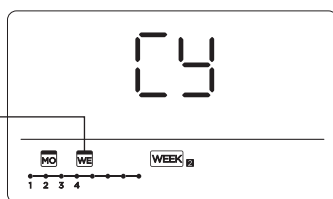
4. Press the button “^” or “v” to select the day to copy to.



5. Press the COPY button to confirm.



The **WE** mark flashes quickly



Example: copied the setting of Monday to Wednesday

6. Other days can be copied by repeating steps 4 and 5.
7. Press the Confirm button to confirm the settings.



8. Press the Back button to go back to the weekly timer.



## Delete the time scale in one day

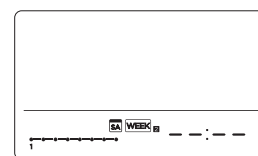
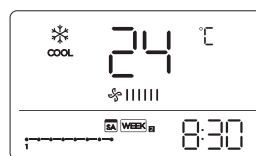
1. During the weekly timer, press the CONFIRM button.



2. Press the button “^” or “v” to select the day in the week, then press the CONFIRM button.



3. Press the button “^” or “v” to select the setting time you want to delete. The setting time, mode, temperature and fan speed will appear on the LCD. The setting time, mode, temperature and fan speed can be deleted by pressing the DEL button.



## Wi-Fi operation setup

For instructions on setting up Wi-Fi connectivity for your Kaden air conditioner, please scan the QR code below, or visit [kadenair.com.au](http://kadenair.com.au)



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# 12. Fault alarms

If the system does not properly operate, investigate according to the following procedures.

Number	Cause	Display digital tube
1	Error of communication between wired controller and indoor unit	EH63

# Notes

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