# ROTENSO®
## Live better

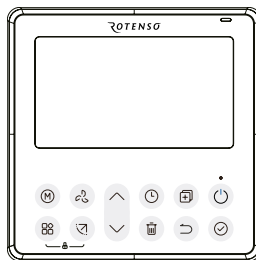# AKC
S E R I E S

CONTROLLER

## USER MANUAL

**MODELS:**
SAVA X - WIRED CONTROLLER

**SAVA X - WIRED CONTROLLER**

## Installation and Owner's Manual

## Content

## SAFETY PRECAUTION

> ### ⚠ WARNING
>
> Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

**Read the following if you use the device in European countries:**

The device can not be operated by children under 7 years old, disabled people and oraz people without experience and knowledge. Instructions should include a description of the correct and safe handling of the device and oraz information about possible dangers. Children should not play with the device. Cleaning and servicing should be carried out by authorized persons.
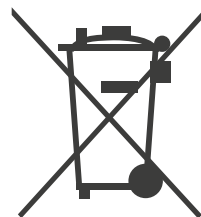
**SAFETY PRECAUTION**

## UTILIZATION:

Do not dispose of this product together with unsorted municipal waste. It's necessary to transfer this type of waste for special processing. It's illegal to throw the device together with other household waste. There are several ways to get rid of this type of equipment:

A. The city organizes electronic waste collection, you can pass the device without the cost.

B. When you buy a new device the seller will accept the old device without any fees.

C. Manufacturer will take the product from buyer produkt without charging it with costs.

D. Products of this type, contains valuable elements, it can be sold sprzedane on purchase of metals.

Throwing the device „on wild" exposes you to the risk of losing your health. Dangerous substances from the device can penetrate to groundwater screating a danger of getting through to people's food chain.

**SAFETY PRECAUTION**

## ⚠ WARNING

- Do not uninstall the unit randomly.
- Random uninstalling may lead to abnormal operation, heating or fire of the air condition.
- Do not install the unit in a place vulnerable to leakage of flammable gases. Once ammable gases are leaked and left around the wire controller, re may occure.
- Do not operate with wet hands or let water enter the wire controller. Otherwise, electric shock may occur.
- The wiring should adapt to the wire controller current. Otherwise, electric leakage or heating may occur and result in fire.
- The specied cables shall be applied in the wiring. No external force may be applied to the terminal. Otherwise, wire cut and heating may occur and result in fire.

## INSTALLATION ACCESSORY

### 1. SELECT THE INSTALLATION LOCATION

Don't install at the place where cover with heavy oil, vapor or sulfureted gas, otherwise, this product would be deformed that would lead to system malfunction.

### 2. PREPARATION BEFORE INSTALLATION

| No. | Name | Qty. | Remarks |
|-----|------|------|---------|
| 1 | Wire controller | 1 | - |
| 2 | Installation and owner's manual | 1 | - |
| 3 | Screws | 3 | M3.9 x 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 | Optional |
| 8 | Screws | 1 | M4X8 (For Mounting the connective wire group) |

## INSTALLATION ACCESSORY

Please conrm that all the following parts you have been supply.

### 3. PREPARE THE FOLLOWING ASSEMBLIES ON THE SITE

| No. | Name | Qty. (embeded into wall) | Specication (only for reference) | Remarks |
|-----|------|------|------|------|
| 1 | Switch box | 1 | - | - |
| 2 | Wiring Tube (Insulating Sleeve and Tightening Screw) | 1 | - | - |

## INSTALLATION ACCESSORY

### 4. PRECAUTION OF INSTALLINGTHE WIRE CONTROLLER

1. This manual provides the installation method of wired controller. Please refer to the wiring diagram of this installation manual to connect the wire controller with indoor unit.

2. The wired controller works in low voltage loop circuit. Forbid to directly contact the cable of high voltage above, like 115V,220V,380V, and don't wire this kind of wire in the said loop; wiring clearance between congured tubes should be at the range of 300~500mm or above.

3. The Shielded wire of the wired controller must be grounded firmly.

4. Upon nish the wire controller connection, do not employed tramegger to detect the insulation.

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⚠ **WARNING**

- The wiring should adapt to the wire control current. Otherwise, electric leakage or overheating may occur and result in fire.
- The specified cables shall be used in the wiring. No external force may be applied to the terminal. Otherwise, the wire may be damaged and heating may occur and result in fire.
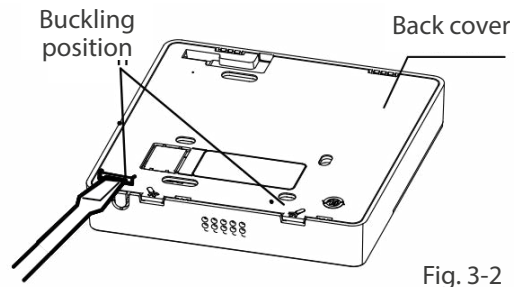
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## INSTALLATION METHOD

### 1. WIRED REMOTE CONTROLLER STRUCTURAL DIMENSIONS

Fig. 3-1
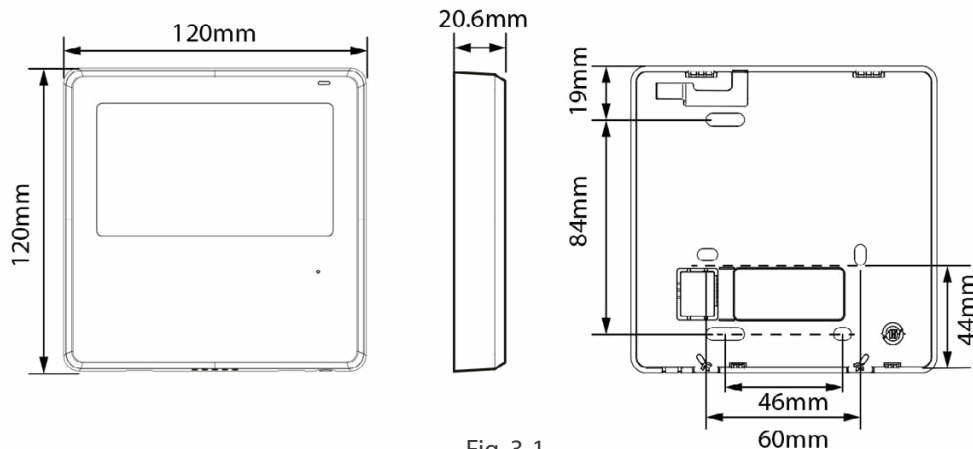
### 2. REMOVE THE UPPER PART OF WIRED CONTROLLER

- Insert a slot screwdriver into the slots in the lower part of the wired controller (2 places), and remove the upper part of the wire controller (Fig.3-2).

Buckling position

Back cover

Fig. 3-2

## INSTALLATION METHOD

⚠ **NOTE**

- Do not pry up and down, you can only rotate the screwdriver.
- The PCB is mounted in the upper part of the wired controller. Be careful not to damage the board with the slot screwdriver.

### 3. 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. (Fig.3-3)

Back plate
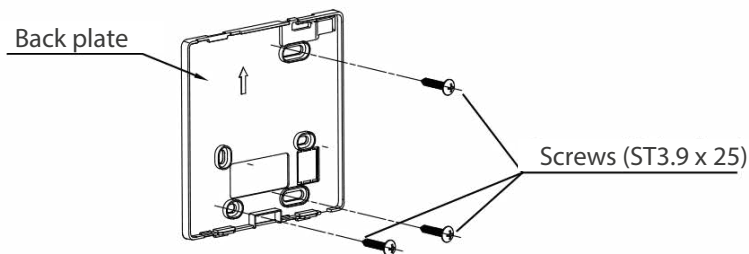
Screws (ST3.9 x 25)

Fig. 3-3

## INSTALLATION METHOD

- Use two M4X25 screws to install the back cover on the 86 switch box, and use one ST3.9 x 25 screw to x to the wall.



Screw hole xed on the wall,use one ST3,9 x 25mm

Screw hole installed on 86 switch box, use two M4X25mm
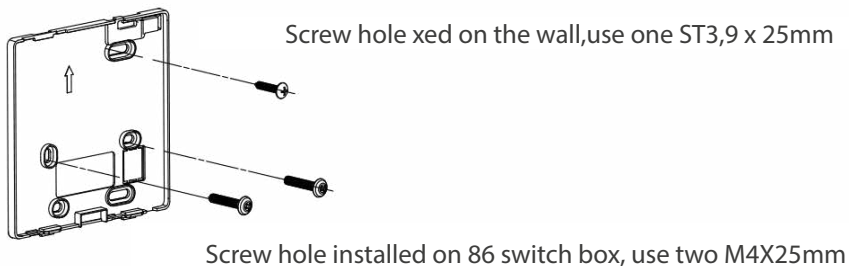
Fig. 3-4

## ⚠ NOTE

Put on a at surface. Be careful not to distort the back plate of the wire controller by overtightening the mounting screws.

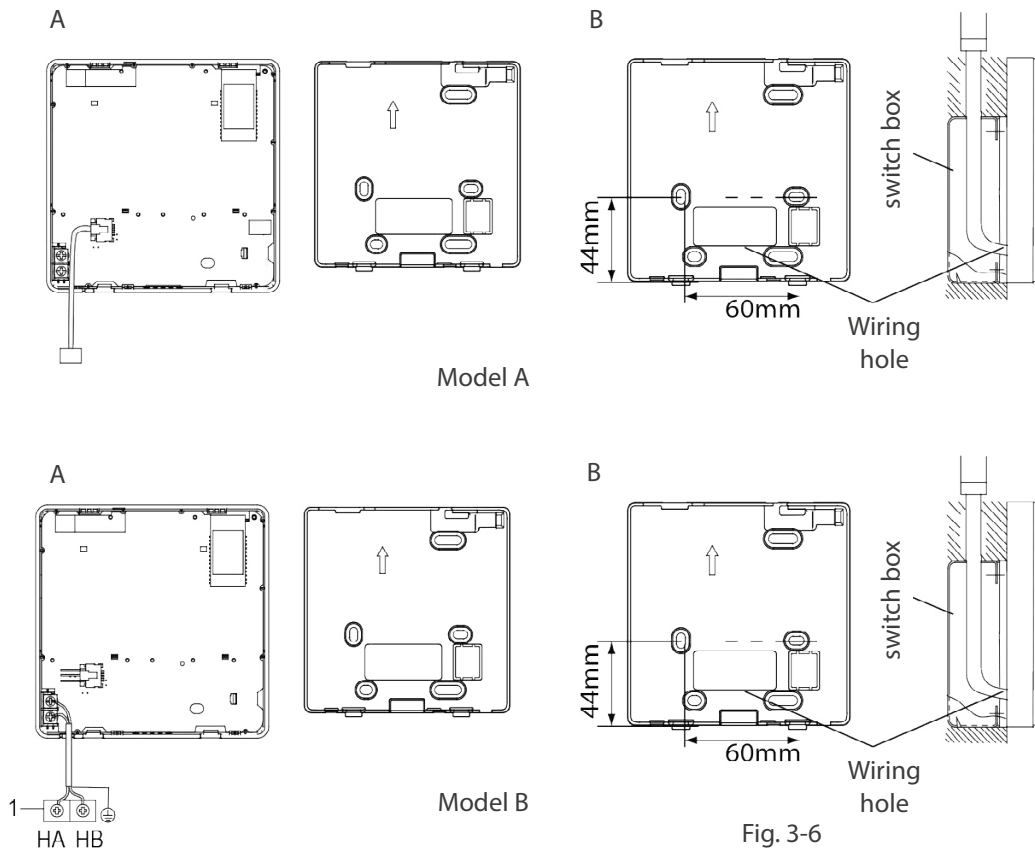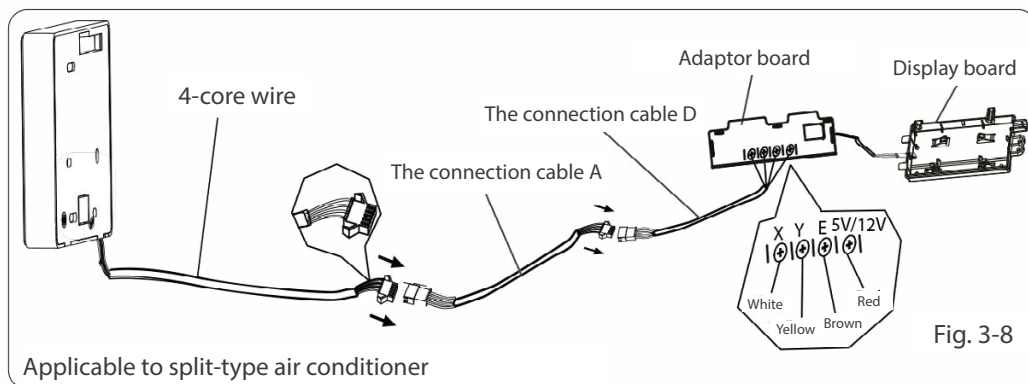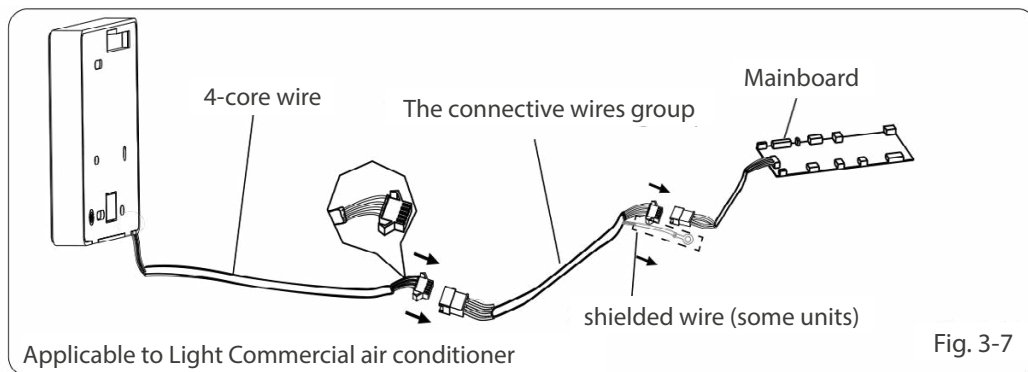## INSTALLATION METHOD

### 5. WIRE WITH THE INDOOR UNIT

A

B

Model A

A

B

Model B

HA  HB

Fig. 3-6

44mm

60mm

switch box

Wiring
hole

44mm

60mm

switch box

Wiring
hole

1

## INSTALLATION METHOD

Model A

Connect the wire from the display panel of the indoor unit to a connecting cable. Then connect the other side of the connecting cable to the remote control.

Mainboard

4-core wire

The connective wires group

shielded wire (some units)

Applicable to Light Commercial air conditioner

Fig. 3-7

Adaptor board

Display board

4-core wire

The connection cable D

The connection cable A

X  Y  E 5V/12V

White

Red

Yellow  Brown

Applicable to split-type air conditioner

Fig. 3-8

## INSTALLATION METHOD

Model B

Notch the part for the wiring to pass through with nippers, etc.

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

---

### ⚠ NOTE

- DO NOT allow water to enter the wired control. Use the trap and putty to seal the wires.
- Connecting wires must be xed reliably and cannot be pulled.

## INSTALLATION METHOD

For some units, the wired controller connects to the unit HA and HB ports through the HA and HB ports. There is no polarity between HA and HB (see fig. 3-9).
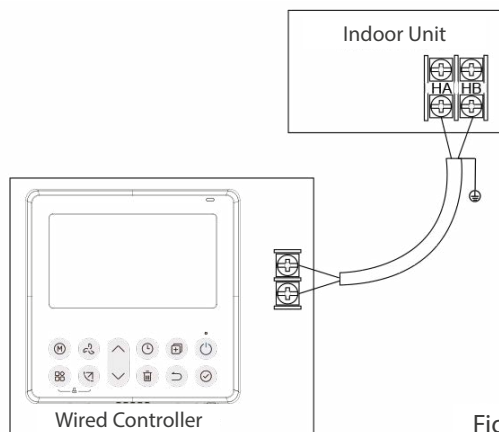


Fig. 3-9

The main/secondary wired controller can be used to enable two wired controllers to control one unit, and the wired controllers connect to the unit HA and HB ports through the HA and HB port on the controller. There is no polarity between HA and HB (see fig. 3-10).

## INSTALLATION METHOD
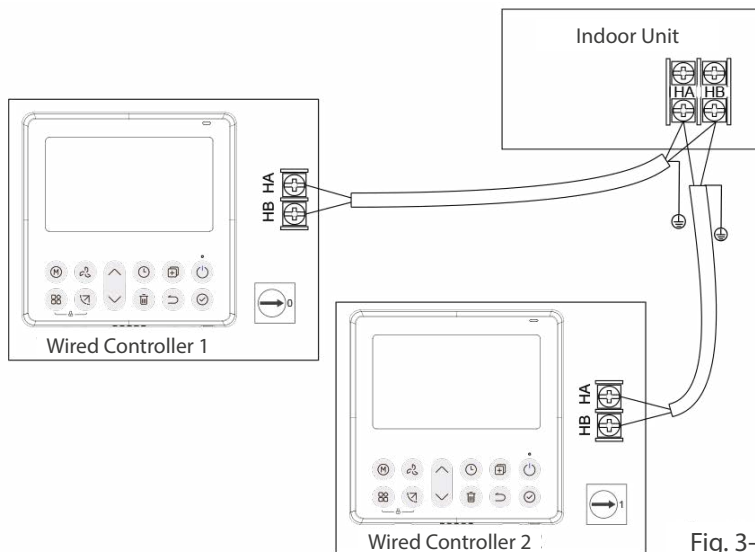


Fig. 3-10

## ⚠ NOTE

Wire controller with Wireless function does not have this function.

## INSTALLATION METHOD

For some units, one wired controller can support multiple units (a maximum of 16 units). In this case, the wired controller and unit need to be connected to the HA and HB ports at the same time. In group control, there will be no error displayed on the wired controller (see fig. 3-11).
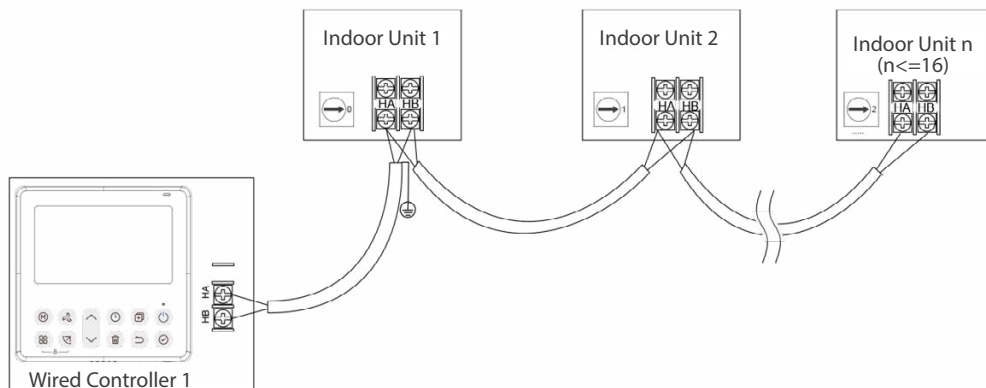


Fig. 3-11
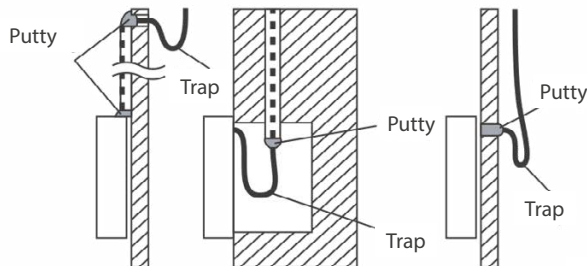


Fig. 3-12

## INSTALLATION METHOD

### 6. REATTACH THE UPPER PART OF THE WIRED CONTROLLER

After adjusting the upper case and then buckle the upper case; avoid clamping the wiring during installation (fig 3-13).
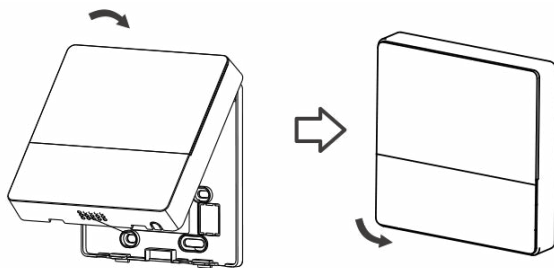


Fig. 3-13

All the pictures in this manual are for explanation purpose only. Your wire controller may be slightly different.The actual shape shall prevail.

## SPECIFICATION

| | |
|---|---|
| **Input voltage** | 12V |
| **Ambient temperature** | 0~43°C (32~110°F) |
| **Ambient humidity** | RH40%~RH90% |

### ⚠ NOTE

Suggested to use the connective wire of 6 meters length.

## FEATURE AND FUNCTION OF THE WIRED CONTROLLER
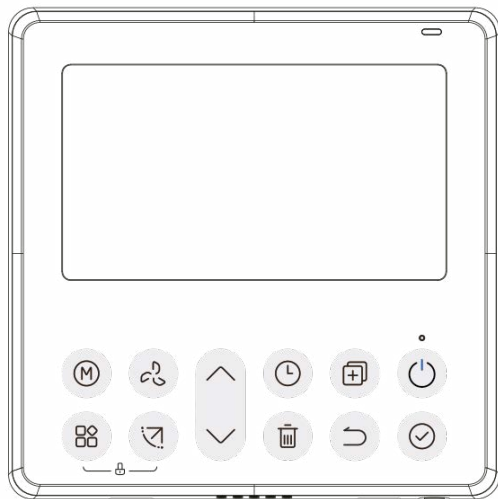
**Feature:**

- LCD display.
- Malfunction code display: it can display the error code, helpful for service.
- 4-way wire layout design, no raised part at backside, more convenient to place the wires and install the device.
- Room temperature display.
- Weekly Timer.

**Function:**

- Mode: Choose Auto-Cool-Dry-Heat -Fan
- Fan speed: Auto/Low/Med/High speed
- Swing(on some models)
- Timer ON/OFF
- Temp setting
- Weekly timer

## FEATURE AND FUNCTION OF THE WIRED CONTROLLER

**Function:**
- Follow me (some models)
- Turbo (some models)
- 24-hour System
- 12-hour System
- Auto-restart
- Individual louver control (on some models)
- Automatic airow test
- Rotation&Back-up (some models)
- Dual Control (some models)
- Group Control (some models)
- Child Lock
- LCD display
- Clock

## NAME ON THE LCD OF THE WIRED CONTROLLER

**MODE display**

Displays the current mode, including:

AUTO COOL DRY HEAT AUX FAN

**Temperature display**

**Lock display**

**Weekly Timer / ON/ OFF Timer display**

**Clock display**

**FAN SPEED display**

Displays selected fan speed:

| | |
|---|---|
| LOW | ᢗ **IIII** |
| MED | ᢗ **IIIIII** |
| HIGH | ᢗ **IIIIIIIII** |
| AUTO | ᢗ **IIIIIIIII** AUTO |

△ HORIZONTAL SWING display

◁ VERTICAL SWING display

**SUB** Secondary unit display

| | |
|---|---|
| °F | °C / °F display |
| ⌂ | Room temperature display |
| RH | Relative humidity display* |
| �=== | Wireless control feature display* |
| ⅄ | Follow me feature display* |
| ⅄ | Breeze away display* |
| ⅄ | Delay off display |
| 🐿 | Turbo feature display* |
| ECO | ECO feature display* |
| ⅁ | Purify feature display* |
| ▦ | Filter reminder display* |
| ☾ | SLEEP feature display |
| GEAR | GEAR feature display* |
| ᢒ | Breezeless display* |
| ⊙ | Rotation display* |
| ⚡ | Active clean display* |
| ⊙ | Intelligent eye display* |
| ⑪ | Electric heating display* |
| Ⓐⓑ | Main unit and secondary unit display* |
| | * some models |

## NAME OF BUTTON ON THE WIRED CONTROLLER
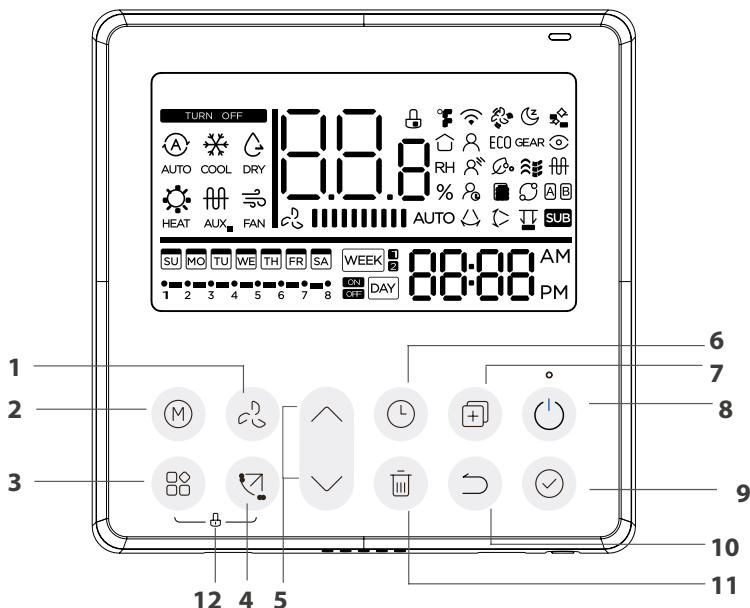


1 - FAN SPEED button

2 - MODE button

3 - FUNC. button

4 - SWING botton

5 - ADJUST button

6 - TIMER button

7 - COPY button

8 - POWER button

9 - CONFIRM button

10 - BACK botton

11 - DAY OFF/DELAY button

12 - CHILD LOCK button

## PREPARATORY OPERATION

Set the current day and time.

| | | |
|---|---|---|
| **1** | | Press the Timer button for 2 seconds or more. The timer display will ash. |
| **2** | ∧ ∨ | Press the button "∧" or "∨" to set the date. The selected date will ash. SU → MO → TU → WE → TH → FR → SA |
| **3** | | The date setting is nished and the time setting is prepared after pressing Timer button or CONFIRM button or there is no pressing button in 10 seconds. |
| **4** | ∧ ∨ | Press the button "∧" or "∨" to set the current time. Press repeatedly to adjust the current time in 1-minute increments. Press and hold to adjust the current time continuous. MO 11:20 |
| **5** | | The setting is done after pressing CONFIRM button or there is no pressing button in 10 seconds. |
| **6** | | Time scale selection: press the buttons "⊙" and "🗑" for 2 seconds will alternate the clock time display between the 12h & 24h scale. |

## OPERATION

### 1. TO START/STOP OPERATION

Press the Power button.

### 2. 8 DEGREE HEATING FUNCTION (on some models)

When the heating mode is 10°C (50°F) / 16°C (60°F) / 17°C (62°F) / 20°C (68°F), press the down button twice within 1 second to turn on the 8° heating function, and press the Power, Mode, adjust, Fan speed, Timer, and Swing button to cancel the 8° heating function.

### ⚠ NOTE

For some models, the 8° heating function can only be set by remote control, you can not choose this function by wired controller.

## OPERATION

### 3. TO SET THE OPERATION MODE

Operation mode setting (Heat mode is invalid for cool only type unit).

Press this button to select the operation mode:
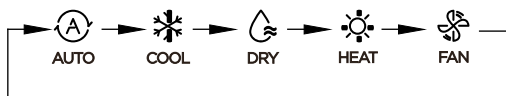


If the indoor unit has Electric heating (Emergent heating) feature, press this button to select the operation mode:
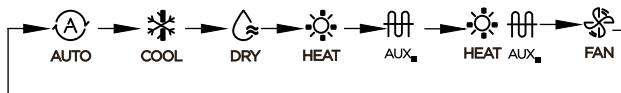


- When the mode is selected as emergency heating (or electric heating) mode, is ⌯ displayed, the fan speed is Auto. The Sleep, 8-degree heating, Turbo, and Rotation functions are not available in emergency heating mode. (some models)

- When the mode is selected as heating & electric heating mode, ☼⌯ HEAT AUX. is displayed, and the Turbo and Rotation functions are disable.

**OPERATION**

#### 4. ROOM TEMPERATURE SETTING

∧

∨

Press the button "∧" or "v" to set the room temperature. Indoor Setting Temperature Range : 10/16/17~30°C (50/60/62~86°F) or 20~28°C (68~82°F). (Model dependent)
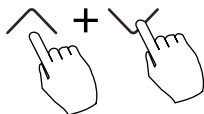
°C & °F scale selection (on some models)

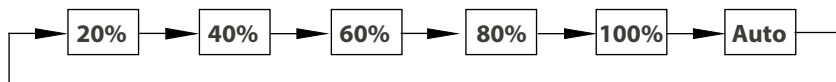Press the buttons "∧" and "v" for 3 seconds will alternate the temperature display between the °C & °F scale.

#### 5. FAN SPEED SETTING

Press the Fan speed button to set the fan speed. (This button is unavailable under Auto or Dry mode)

**Auto** → **LOW** → **MED** → **HIGH**
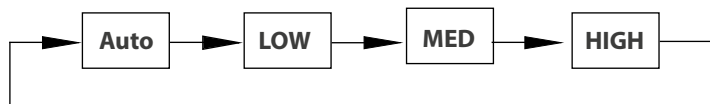
When stepless speed regulation is supported, press the fan speed key to cycle through:

**20%** → **40%** → **60%** → **80%** → **100%** → **Auto**

Press the buttons Ⓜ and ⑬ together for 3 seconds to turn on or turn off the keypad tone.

## OPERATION

### 6. CHILD LOCK FUNCTION

Press the buttons "⊛" and "⊚" for 3 seconds to activate the child lock function and lock all buttons on the wire controller. You can't press the button to operate and receive the remote control signal after the child lock is activate. Press these two buttons again for 3 seconds to deactivate the child lock function.

When the child lock function is activated, the "🔒" mark appears.

### 7. SWING FUNCTION (for the units with horizontal & vertical swing features only)

### 7.1. Up-Down swing

Press the SWING button to start up-down swing function. The "◇" mark appears. Press it again to stop.

### 7.2. Left-Right swing (some models)

Press the Swing button for 2 seconds to start Left-Right swing function. The "◇" mark appears. Press it for 2 seconds again to stop.

## OPERATION

### 8. SWING FUNCTION (for the units without vertical swing function )

• Use Swing button to adjust the Up-down airow direction and start the auto swing function.

1. Each time you press this button, the louver swings an angle of 6 degrees. Press this button until the desired direction reaches.

2. If press and hold the button for 2 seconds, the auto swing is activated. The "◇" mark appears. Press it again to stop. (some units)

• For the units with four Up-Down louvers, it can be operated individually.

1. Press the Swing button to activate the Up-Down adjusting louver function. The ◇ mark will ash. (not applicable to all the models)

2. Pressing the button "^" or "v" can select the movement of four louvers. Each time you push the button, the louver will be selected in a sequence as:
( -0 means the four louvers move at the same time.)

-0 → -1 → -2 → -3 → -4

## OPERATION
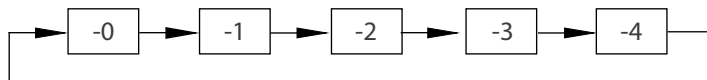
3. And then use Swing button to adjust the Up-Down airow direction of the selected louver.

### 9. FUNC. BUTTON

Press the FUNC. button to scroll through operation functions as followings

[*]: Model dependent. If the indoor unit has no this function, it will not display. The select function icon will ash, then press the Conrm button to conrm the setting.
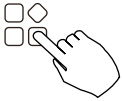
### 10. TURBO FUNCTION (on some models)
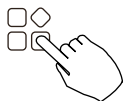
Under COOL/HEAT mode, press the FUNC. button to activate the turbo function. Press the button again to deactivate the turbo function. When the turbo function is activated, the "🌀" mark appears.

**OPERATION**

### 11. PTC FUNCTION (on some models)

In heating operation, for the units with electric heating feature, press this button to activate electric heating mode. When the PTC function is activated,the "⊞" mark appears.

⚠ **NOTE**

The electric auxiliary heating function of the AHU model is switched by the MODE button, and the FUNC. button is a turbo function.

### 12. FOLLOW ME FUNCTION INDICATOR (some models)

Press the FUNC. button to select whether the room temperature is detected at the indoor unit or the wire controller.

## OPERATION

When the follow me function ጸ indicator appears, the room temperature is detected by the wire controller.
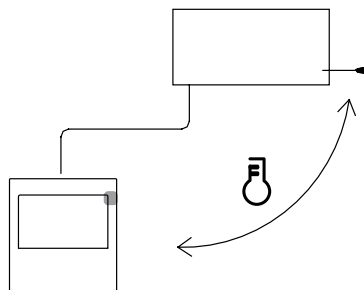
Press the button again to cancel the follow me function.

### 12.1. Intelligent eye display ⊙ (some models)

1. This function is valid in any mode of power-on state.

2. When the indoor unit sending wire controller has the smart eye function, press the function key to select the smart eye icon, press the OK key to turn on the smart eye, and light up the smart eye icon at the same time; when the smart eye is turned off, the smart eye icon goes out.

3. Shutdown, switch mode, turn on self-cleaning, turn on 8-degree heating function will automatically cancel the smart eye function.

### 12.2. Filter reset function ⊞

After the indoor unit sends the wire controller lter usage time, the lter cleaning prompt icon lights up, press the function key to select the lter cleaning prompt icon, and press the OK key to reset the lter screen time. The lter cleaning reminder icon goes out.

**OPERATION**

### 12.3. Humidity setting function (some models)

1. When the indoor unit sending wire controller has dual control function of temperature and humidity, in dehumidication mode, press the function key to select the RH icon, press the conrm key to enter the humidity control mode, the RH icon ashes, press the up and down keys to adjust the humidity, the setting range is OFF->35%~85%, adjusted with 5% humidity. Exit humidity adjustment state after 5 seconds of inactivity.

2. After entering the humidity control mode, press the up and down keys to adjust the set temperature and display the set temperature for 5 seconds, and then restore the set humidity display.

3. After switching the mode, exit the humidity control mode.

### 12.4. GEAR function  (some models)

When the indoor unit sending wire controller has the GEAR function, in the boot cooling mode, press the function key to select the GEAR icon, press the conrm key to enter the GEAR control mode, and rst display the current GEAR status. 50%->75%->OFF can be switched by the up and down keys within 5 seconds. After 5 seconds, the set temperature will be displayed, press the up and down keys to adjust the set temperature.

Turn off, switch to mode or turn on sleep, ECO, strong, self-cleaning functions to cancel the GEAR function.

## OPERATION

### 13. ROTATION & BACK-UP INDICATION (some models)

When there are two units, press the button to select the rotating function, and press "Conrm"to turn on or o the rotating function.

1. Step 1: press "Conrm" to set the rotating time,then press the button "^" or "v" to set time. Setting time Range: 1~99h,the default time is 10 hours.

2. Step 2: set high temperature co-open temperature -- or 26~32 degrees -- that is, this function is invalid. When the ambient temperature is 26~32 degrees, when the ambient temperature is greater than or equal to the set temperature, the two machines will run 24 degrees at the same time in the COOL mode.

3. Step 3: set the low-temperature co-open temperature -- or 5-15 degrees -- that is, this function is invalid. When the ambient temperature is 5-15 degrees, when the ambient temperature is lower than the set temperature, the two units will run at the same time for 24 degrees to make the heating mode.

4. Step 4: set which machine will run rst. Select A or B.

5. After this function is turned on, as long as the air conditioner is running at the setting hour, it will automatically turn on another air conditioner and turn o the current air conditioner. Press the POWER button to switch to another one immediately. A or B icons icker to indicate the corresponding air conditioning failure. Automatically switch to another machine when running time is reached or machine failure occurs.

## TIMER FUNCTIONS

**WEEKLY timer**

WEEK

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

**On timer**

ON DAY

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

**Off timer**

OFF DAY

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

**On and Off timer**

ON
OFF DAY

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.

## TIMER FUNCTIONS

To set the On or Off TIMER

| | | |
|---|---|---|
| **1** | | When "day on" or "day off" is selected, the [ 🔵 ]or [ 🔴 ] icon will flash and the temperature display area will also flash.<br><br>WEEK ➊ → WEEK ➋ → 🔵 DAY → 🔴 DAY → 🔵🔴 DAY → No display |
| **2** | ∧ ∨ | 🔴 DAY  **7.5**<br><br>ex.Off timer set of 7.5h<br><br>Use the " ∨ " or " ∧ " keys to select the timer duration, in 0.5-hour increments. |
| **3** | ✓ | Press the confirm key to activate the timer and complete the setting. |

**TIMER FUNCTIONS**

Set "day on off"

| | | |
|---|---|---|
| **1** | | When "day on off" is selected, the [ ⌧ ] icon will flash and the [ ⌧ ] icon will light up. |
| **2** | ∧ ∨ | Use the " ∨ " or " ∧ " keys to selected the "on" timer duration, in o.5-hour increments. |
| **3** | | Press the confirm key to activate the "on" timer duration; at this point, the [ ⌧ ] icon will light up and the [ ⌧ ] icon will flash. |
| **4** | ∧ ∨ | Use the " ∨ " or " ∧ " keys to selected the "off" timer duration, in 0.5-hour increments. |
| **5** | | Press the confirm key to activate the "off" timer duration and complete the setting. |

## ⚠ NOTE

The secondary wire controller cannot set the timer.

## WEEKLY TIMER 1

### 1. WEEKLY TIMER SETTING

Press the Timer button to select the and then press WEEK ▣ 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 Conrm button to conrm the setting.
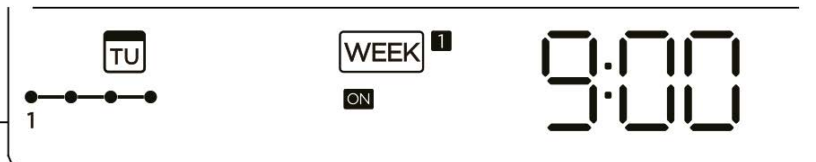
SU → MO → TU → WE → TH → FR → SA
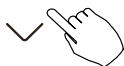
### 3. ON TIMER SETTING OF TIMER SETTING 1

Press the button "∧" or "v" to set the time of On timer and then press the Conrm button to conrm the setting.

**WEEKLY TIMER 1**



ex.Tuesday time scale 1

Up to 4 timer settings can be saved for each day of the week. It is conventent 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 Conrm button to conrm the setting.
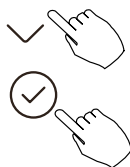


ex.Tuesday time scale 1

**WEEKLY TIMER 1**

**5. DIERENT TIMER SETTINGS CAN BE SETTED BY REPEATING STEP 3 TO 4.**

**6. OTHER DAYS IN ONE WEEK CAN BE SETTED BY REPEATING STEP 2 TO 5.**

⚠️ **NOTE**

The weekly timer setting can be returned to the previous step by pressing Back button. The time of timer setting can be delete by pressing Day o botton The current setting will be restored and withdrawn the weekly timer setting automatically when there is no operation for 30 seconds.

**7. WEEKLY TIMER OPERATION**

To activate WEEKLY TIMER operation

Press the Timer button while WEEK ■ is displayed on the LCD.

ex.
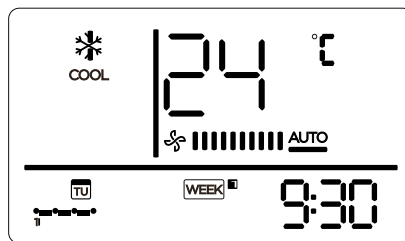
**WEEKLY TIMER 1**

To deactivate WEEKLY TIMER operation

Press the Timer button while WEEK **1** is disappear from the LCD.

## 8. TO TURN O THE AIR CONDITIONER DURING THE WEEKLY TIMER

1. If press the Power button once and quickly, the air conditioner will turn o temporarily. And the air conditioner will turn on automatically until the time of On timer.
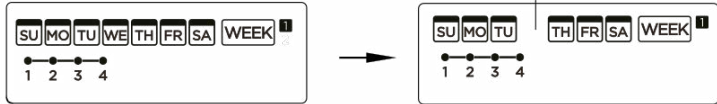
| ON | OFF | ON | OFF |
|----|-----|-----|-----|

8:00    10:00    12:00    14:00    17:00
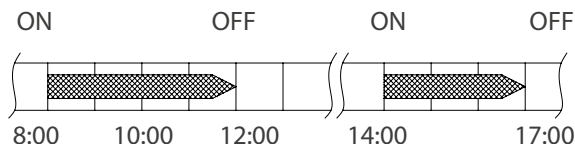
ex. If press the POWER button once and quickly at 10:00, the air conditioner will turn on at 14:00.

2. When press the Power button for 2 seconds, the air conditioner will turn o completely, at the same time cancel the timing function.
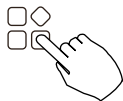
## WEEKLY TIMER 1

To set the DAY OFF (for a holiday)

| 1 | | During the weekly timer, press the Confirm button. |
|---|---|---|
| 2 | ∧ ∨ | Press the button "∧" or "v" to select the day in this week. |
| 3 | | Press the Day o button to set the DAY OFF. The WE mark is hidden SU MO TU WE TH FR SA WEEK 1 2 3 4 → SU MO TU TH FR SA WEEK 1 2 3 4 ex.The DAY OFF is set for Wednesday |
| 4 | - | The DAY OFF can be setted for other days by repeating the steps 2 and 3. |
| 5 | | Press the Back button to back to the weekly timer. |

To cancel: Follow the same procedures as those for setup.

**WEEKLY TIMER 1**

⚠ **NOTE**

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

### 9. DELAY FUNCTION

During the weekly timer, press the FUNC. button , select the delay function and press the Confirm button, display " $\square h$ , $\,$ $\parallel h$ " $\square h$ " and wait 3 seconds to confirm. When the delay function is activated, the " $\%$ " mark appears. The delay function can only be enabled in Weekly Timer 1 and Weekly Timer 2.

ex. If press select " $\square h$ " at 18:05, the air conditioner will delay to turn off at 20:05.
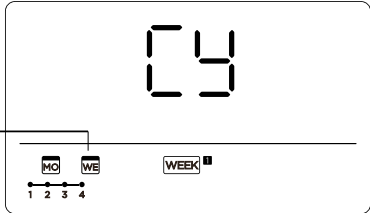
### 10. COPY OUT THE SETTING IN ONE DAY INTO THE OTHER DAY

A reservation made once can be copied to another day of the week. The whole reservation of the selected day of the week will be copied. The effective use of the copy mode ensures ease of making reservations.

| **1** |  | During the weekly timer, press the Confirm button. |
|---|---|---|

**WEEKLY TIMER 1**

| 2 | ∧ ∨ | Press the button "∧" or "v" to select the day to copy from. |
|---|---|---|
| 3 | ⊞ | Press the Copy button, the letter "CY" will be shown on the LCD. |
| 4 | ∧ ∨ | Press the button "∧" or "v" to select the day to copy to. |
| 5 | ⊞ | Press the Copy button to confirm.<br><br>The WE mark ashes quickly<br><br>MO WE WEEK<br>1 2 3 4<br><br>ex. Copy the setting of Monday to Wednesday |
| 6 | - | Other days can be copied by repeating step 4 and 5. |
| 7 | ✓ | Press the Confirm button to conrm the settings. |
| 8 | ↰ | Press the button "∧" or "v" to select the day to copy to. |

**WEEKLY TIMER 2**

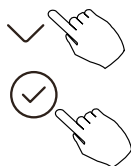### 1. WEEKLY TIMER SETTING
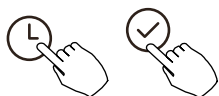
Press Timer to select the WEEK■      and press Confirm.
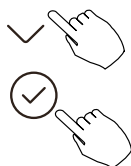
### 2. DAY OF THE WEEK SETTING

Press "^" or "v" to select the day of the week and then press CONFIRM.

SU → MO → TU → WE → TH → FR → SA
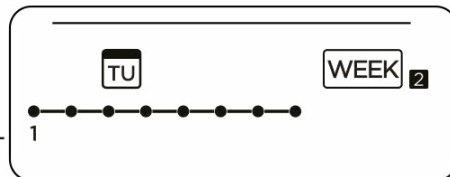
### 3. ON TIMER SETTING OF TIMER SETTING 1

Press "^" or "v" to select the setting time. The setting time, mode, temperature and fan speed appear on the LCD. Press CONFIRM to enter the setting time process.
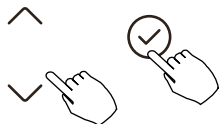
## WEEKLY TIMER 2

IMPORTANT: Up to 8 scheduled events can be set on one day. Various events can be scheduled in either MODE, TEMPERATURE and FAN speeds.
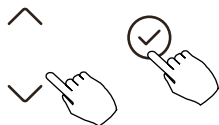
TU WEEK 2

1

ex.Tuesday time scale 1

### 4. TIME SETTING
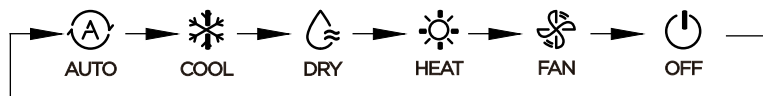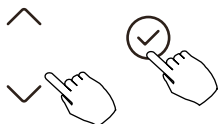
Press "^" or "v" to set the time, then press CONFIRM.

### 5. OPERATION MODE SETTING

Press "^" or "v" to set the operation mode then press CONFIRM.

AUTO → COOL → DRY → HEAT → FAN → OFF

**WEEKLY TIMER 2**

### 6. ROOM TEMPERATURE SETTING

Press "^" or "v" to set the room temperature, then press CONFIRM.

⚠️ **NOTE**

This setting is unavailable in the FAN or OFF modes.

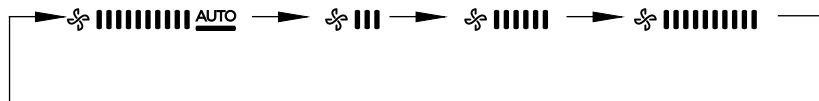### 7. FAN SPEED SETTING
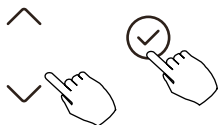
Press "^" or "v" to set the fan speed then press CONFIRM.

⚠️ **NOTE**

This setting is unavailable in the AUTO, DRY or OFF modes.

→ ⚙ IIIIIIIIII AUTO → ⚙ III → ⚙ IIIIII → ⚙ IIIIIIIIII →

### 8. DIFFERENT SCHEDULED EVENTS CAN BE SET BY REPEATING STEPS 3 THROUGH 7.

## WEEKLY TIMER 2

### 9. ADDITIONAL DAYS, IN A ONE WEEK PERIOD, CAN BE SET BY REPEATING STEPS 3 THROUGH 8.

 **NOTE**

The weekly timer setting can be returned to the previous step by pressing BACK. The current setting is restored. The controller will not save the weekly timer settings if there is no operation within 30 seconds.

### 10. WEEKLY TIMER OPERATION

To start

Press Timer to select the WEEK ■, and then the timer starts automatically.

**WEEKLY TIMER 2**

To cancel

Press the Power buttons for 2 seconds to cancel the timer mode. The timer mode can also be canceled by changing the timer mode using Timer.

## 11. TO SET THE DAY OFF (for a holiday)

| | | |
|---|---|---|
| **1** | | After setting the weekly timer, press CONFIRM. |
| **2** | ∧ ∨ | Press the button "∧" or "v" to select the day of the week. |
| **3** | | Press DAY OFF to create an off day. The **WE** mark is hidden. SU MO TU WE TH FR SA WEEK 2  1 2 3 4 → SU MO TU TH FR SA WEEK 2  1 2 3 4  ex. The DAY OFF is set for Wednesday |
| **4** | - | Set the DAY OFF for other days by repeating the steps 2 and 3. |
| **5** | | Press BACK to revert to the weekly timer. |

## WEEKLY TIMER 2

To cancel, follow the same procedures used for setup.
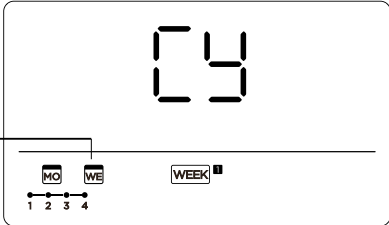
⚠️ **NOTE**

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

### 12. COPY OUT THE SETTING IN ONE DAY INTO THE OTHER DAY.

A scheduled event, made once, can be copied to another day of the week. The scheduled events of the selected day of the week will be copied. The effective use of the copy mode ensures the ease of reservation making.
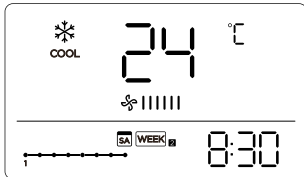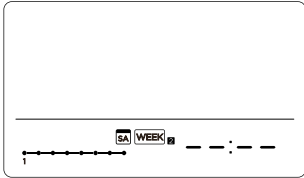
| 1 | | In the weekly timer, press CONFIRM. |
|---|---|---|
| 2 | ∧ ∨ | Press "∧" or "v" to select the day to copy from. |
| 3 | ⊞ | Press COPY, the letters CY appear on the LCD. |
| 4 | ∧ ∨ | Press "∧" or "v" to select the day to copy to. |

**WEEKLY TIMER 2**

| | | |
|---|---|---|
| **5** | | Press the Copy button to confirm.<br><br>$\sqsubset \mathsf{Y}$<br><br>The WE mark flashes quickly — MO  WE    WEEK<br>1 2 3 4<br><br>ex. Copy the setting of Monday to Wednesday |
| **6** | - | Other days can be copied by repeating step 4 and 5. |
| **7** | | Press the Confirm button to confirm the settings. |
| **8** | | Press BACK to revert to the weekly timer. |

## WEEKLY TIMER 2

Delete the time scale in one day.

| 1 | | During the weekly timer setting, press CONFIRM. |
|---|---|---|
| 2 | | Press "^" or "v" to select the day of the week and then press CONFIRM. |
| 3 | | Press "^" or "v" to select the setting time want to delete. The setting time, mode, temperature and fan speed appear on the LCD. The setting time, mode, temperature and fan speed can be deleted by pressing the DEL (day off). |

ex. Delete the time scale 1 in saturday

## FAULT ALARM HANDING

If the system does not properly operate except the above mentioned cases or the above mentioned malfunctions is evident, investigate the system according to the following procedures.

| Malfunction & protection define | Display digital tube |
|---|---|
| Error of communication between wire controler and indoor unit | EHb3 |

The error displayed on the wire controller are dierent from those on the unit. If error code appears, please check the Owner's And Installation Manual and SERVICE Manual.

## TECHNICAL INDICATION AND REQUIREMENT

EMC and EMI comply with the CE certication requirements.

## QUERIES AND SETTINGS

When the air conditioning unit is switch machine, Long press "COPY" for 3 seconds , rst display P:00, if connected to an indoor unit, display P:00, if connected to multiple indoor units, press "^" or "v" to display P:01, P:02, and then press "Confirm" to enter the query indoor unit Tn(T1~T4) temperature and fan fault(CF), press "^" or "v" to select.

Not operating keys 15 seconds or press "Back" or press "ON/OFF" drop out of query temperature.

When the air conditioning unit is off, into the query function of temperature, press "^" or "v" to select SP, press "Confirm" to adjust the static pressure value.

When the air conditioning unit is o, into the query function of temperature, press "^" or "v" to select AF, press "Confirm" into test mode, press "Back" or press "ON/OFF" or press "Confirm"drop out of test mode.In AF mode, 3~6 minutes test completion automatically exits, if the test process, press "Back" or press "ON/OFF"or press "Confirm" , the test exits will be interrupted.

## QUERIES AND SETTINGS

Follow me function temperature compensation.

When the air conditioning unit is o, into the query function of temperature, press "^" or "v" to select tF. The compensation temperature Range : -5~5°C. Press "Confirm" into setting state, press "^" or "v" to select the temperature, then press "Confirm" to complete it.
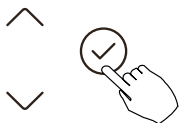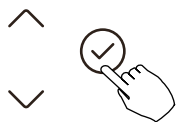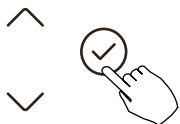
tF : compensation temperature

When the air conditioning unit is o, into the query function of temperature, press "^" or "v" to select tyPE. Press "Confirm" into setting state, press "^" or "v" to select the type, then press "Confirm" to complete it.

CH: AUTO COOL DRY HEAT FAN    HH: HEAT FAN    CC: COOL DRY FAN    NA: COOL DRY HEAT FAN

## QUERIES AND SETTINGS
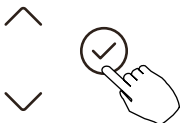
Set the highest and lowest temperature values.

When the air conditioning unit is o, into the query function of temperature, press "^" or "v" to select tHI or tLo. Press "Confirm" into setting state, press "^" or "v" to select the temperature, then press "Confirm" to complete it. The highest setting temperature range : 25~30℃ The lowest setting temperature range: 17 ~24℃.

tHI: Highest value setting function.

tLO: Minimum value setting function.

Remote control function selection of wire controller.

When the air conditioning unit is o, into the query function of temperature, press "^" or "v" to select rEC. ON or OF will be displayed in the temperature area to indicate whether it is valid or invalid. When the selection is invalid, the wire controller does not process any remote control signals. Press "Confirm" into setting state, press "^" or "v" to select , then press "Confirm" to complete it.
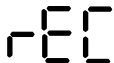
### QUERIES AND SETTINGS

Two - line controller address selection.

∧
∨
✓

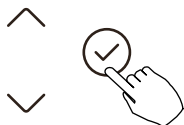When the air conditioning unit is o, into the query function of temperature, press "∧" or "v" to select Adr, the temperature zone will display -- or A, B. Where -- refers to the code setting of the wirecontroller. Press "Confirm" into setting state, press "∧" or "v" to select, then press "Confirm" to complete it.

-- : The code setting ⊖ of the wire controller shall prevail.

Adr

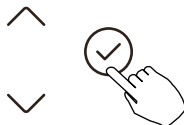Adr : The wire controller address setting.

Restore factory Settings.

∧
∨
✓

When the air conditioning unit is o, into the query function of temperature, press "∧" or "v" to select INIt, the temperature zone displayed --. Press "Confirm" into setting state, press "∧" or "v" to select to „ON" , then press "Confirm" to complete it.

INIt

INIt : Restore factory Settings.

## QUERIES AND SETTINGS

After the wire controller resumes the factory parameter setting, the rotating parameter setting is restored to 10 hours (the highest and lowest temperature are not set); The compensation of body temperature is uncompensated; COOL and HEAT/single COOL mode is restored to COOL and HEAT model;

Restore the temperature range to the factory setting.

Remote receiving function is restored to be eective;

The address of the two-control rst-line controller is restored to the code switch.

Set Day Off to Automatically Start on Power On:

1. Use the up or down key to select dy:1, displaying the current setting value.
2. Press the conrm key to enter the option for enabling the Day O auto-start function. The setting value will start ashing.
3. Use the up or down key to change the setting value. A value of 1 enables the function, while a value of 0 disables it.
4. Press the conrm key to apply the setting. This will take you to the maximum timer setting option for Day O, dy:2, displaying the current setting value. The value represents the timer duration in hours, with increments of 0.5 hours.
5. Use the up or down key to change the setting value.
6. Press the conrm key to apply the setting and complete the conguration.

***Note:*** *Once the Day O auto-start function is enabled, the device will automatically start the Day O function with the last set timer duration each time it is powered on.*

**QUERIES AND SETTINGS**

Set Up Network Time Synchronization (NTP) (some models)

1.  Use the up or down key to select NTP and display the current setting.
2.  Press the conrm key to enter the function setting.
3.  Use the up or down key to choose the setting value, where 0 means turning off the network time synchronization function and 1 means turning it on.
4.  Press confirm to apply the setting and complete the setup.

## WIRELESS CONTROL CONNECTION

This device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

- Wireless: 2400 - 2483.5MHz, TX Power: < 20dBm
- BLE: 2402 - 2480MHz, TX Power: < 10dBm

### 1. SAFETY PRECAUTION

- Read the safety precautions carefully before installing the unit.
- Stated below are important safety issues that must be obeyed. Applicable system: IOS, Android. (Suggest: IOS 9.0 and above, Android 6.0 and above.)

⚠️ **NOTE**

Due to special situation may be occured, we explicitly claim below: Not all of the Andriod and IOS systems are compatible with APP. We will not be responsible for any issues as a result of the incompatibility.

## WIRELESS CONTROL CONNECTION

⚠️ **NOTE**

WI-FI function available in selected controllers with selected indoor units.

### 1.1. Wireless safety strategy

• Smart kit only support WPA-PSK/WPA2-PSK encryption and none encryption .
WPA-PSK/WPA2-PSK encryption is recommended.

⚠️ **WARNING**

• Please Check The Service Website For More Information.

• Smart Phone camera needs to be 5 million pixels or above to make sure scan QR code well.

• Due to different network situation, sometimes, request time-out could happen, thus, it is necessary to do network conguration again.

• Due to different network situation, control process may return time-out sometimes. If this situation occurs, the display between board and App may not be the same, please do not feel confused.

## WIRELESS CONTROL CONNECTION

> ⚠️ **NOTE**
>
> Company will not be liable for any issues and problems caused by Internet, Wireless Router and Smart Devices.
>
> Please contact the original provider to get further help.

### 2. DOWNLOAD AND INSTALL APP

On an app market (Google Play Store, Apple App Store), search for „NetHome Plus" and nd the NetHome Plus app. Download and install it on your phone, You can also download the app by scanning the QR code below.

Android                                   iOS

## WIRELESS CONTROL CONNECTION

- Please ensure your mobile device is connected to Wireless Network router. Also, the Wireless Network router has already connected to Internet before doing user registration and network conguration.

- Make sure your mobile device has already been connected to the Wireless Network which you want to use. Also, you need to forget other irrelative Wireless Network in case it inuences your coguration process.
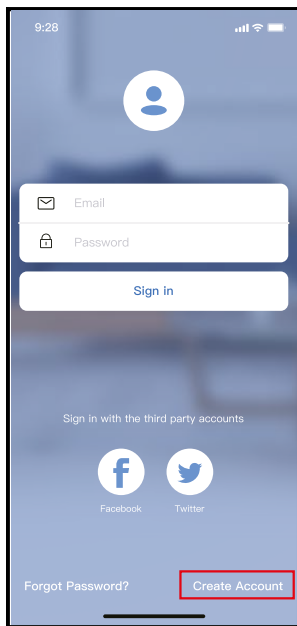
### 3. NETWORK CONFIGURATION

> ⚠ **WARNING**
>
> - It is necessary to forget any other around network and make sure the Android or IOS device just connect to the Wireless Network you want to congure.
>
> - Make sure the Android or IOS device Wireless Network function works well and can be connected back to your original Wireless Network network automatically.
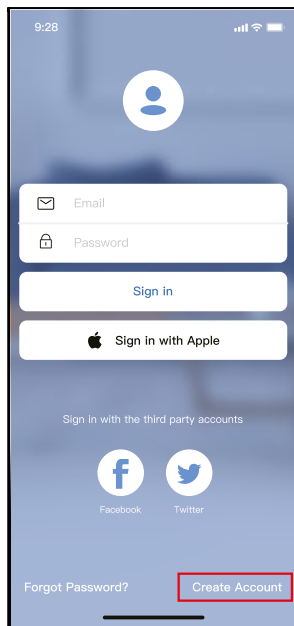
### 3.1. How to enter AP distribution network

Press the FUNC. button until the 📶 icon is selected and then press the CONFIRM buttton. AP mode is activiated if the 📶 icon is blinked.

## APPLICATION CONFIGURATION AND USAGE

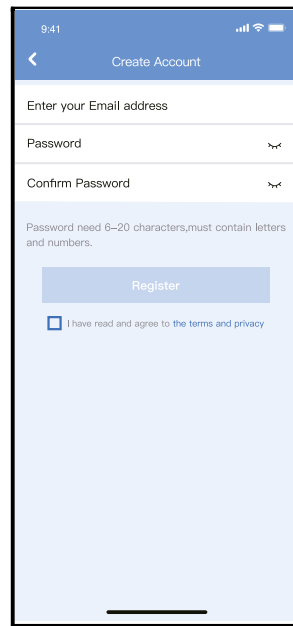### 1. USER REGISTRATION



*Android*

*iOS*

*Pic. 1.1*



*Pic. 1.2*

1. Click "Create Account" *(Pic. 1.1)*
2. Enter your email address and password, and then click "Register".

## APPLICATION CONFIGURATION AND USAGE

- Please ensure your mobile device is connected to Wireless router. Also, the Wireless router has already connected to Internet before doing user registration and network configuration.
- It is better to log in your email box and active your registration account by clicking link in case you forget the password. You can log in with the third party accounts.

## 2.  NETWORK CONFIGURATION

*Cautions*
- *It is necessary to forget any other around network and make sure the Android or iOS device just connect to the Wireless network you want to configure.*
- *Make sure the Android or i OS device Wireless function works well and can be connected back to your original Wireless network automatically.*
- *User must finish all the steps in 8 minutes after powering on device, otherwise you need to power on it again.*

### 2.1. Using Android or iOS device to do network configuration
1. Make sure your mobile device has already been connect to the Wireless network which you want to use. Also, you need to forget other irrelevant Wireless network in case it influences your configuration process.
2. Disconnect the power supply of AC.
3. Connect the power supply of AC, and continuously press the " LED DISPLAY" or "DO NOT DISTURB" button seven times in 10 seconds.
4. When the unit AC displays "AP", it means that the air conditioner wireless has already entered into "AP" Mode.

## APPLICATION CONFIGURATION AND USAGE

⚠ **NOTE**
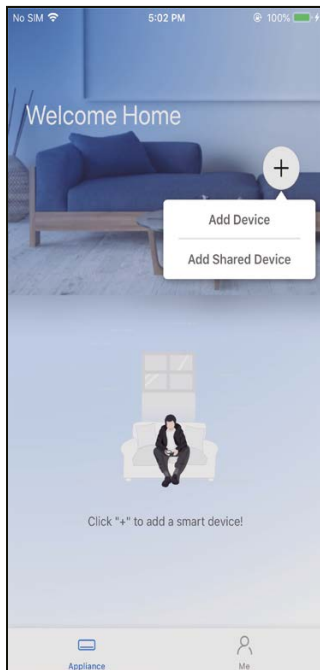
There are two ways to finish the network configuration:
- Network configuration by Bluetooth scan
- Network configuration by select appliance type
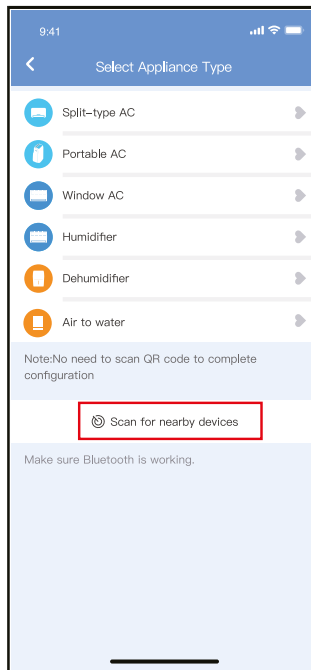
### 2.2. Network configuration by Bluetooth scan

**Note:** *Make sure the bluetooth of your mobile device is working.*

1. Press " + Add Device ". *(Pic. 2.21)*
2. Press "Scan for nearby devices". *(Pic. 2.2.2)*
3. Wait smart devices to find, then click to add it. *(Pic. 2.2.3)*
4. Select homen network connection, enter the password. *(Pic. 2.2.4)*
5. Wait connecting to the network. *(Pic. 2.2.5)*
6. Configuration Success, you can modify the default name. *(Pic. 2.2.6)*
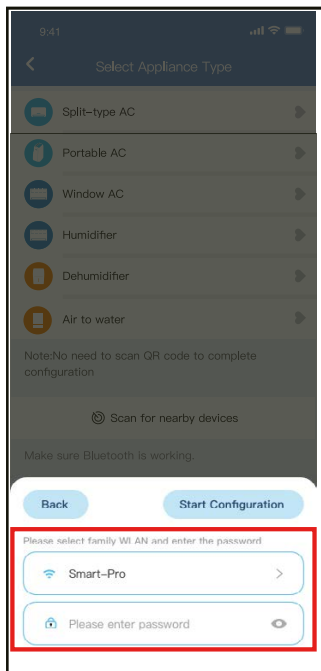
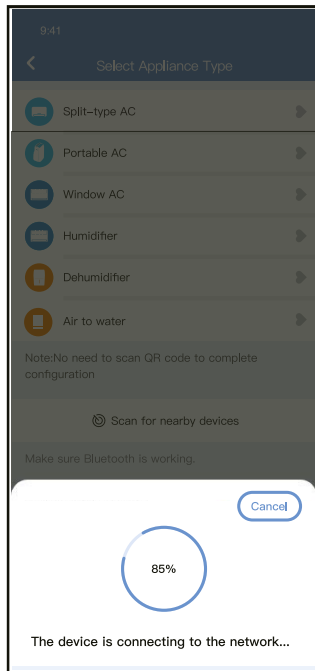**APPLICATION CONFIGURATION AND USAGE**



*Pic. 2.2.1*



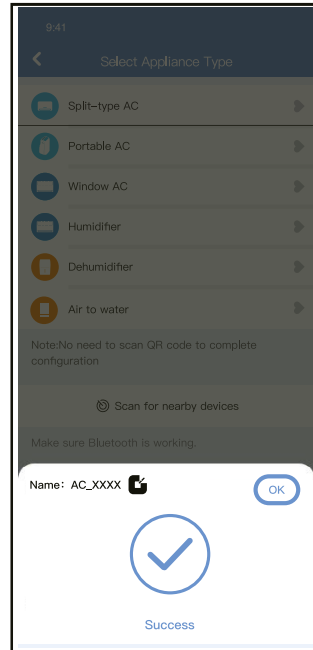*Pic. 2.2.2*
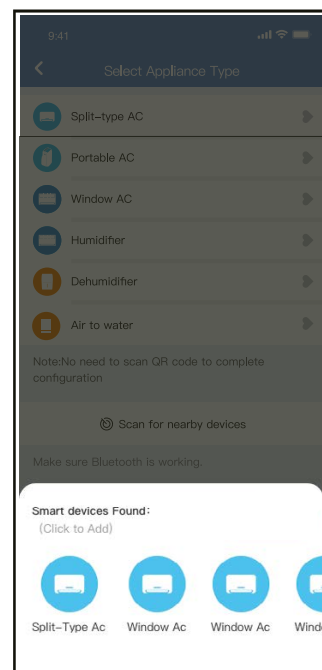


*Pic. 2.2.3*

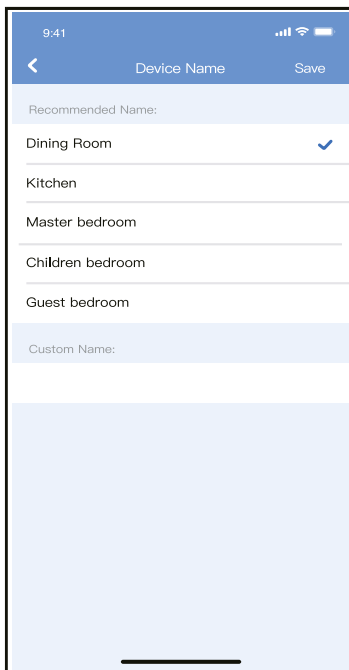## APPLICATION CONFIGURATION AND USAGE
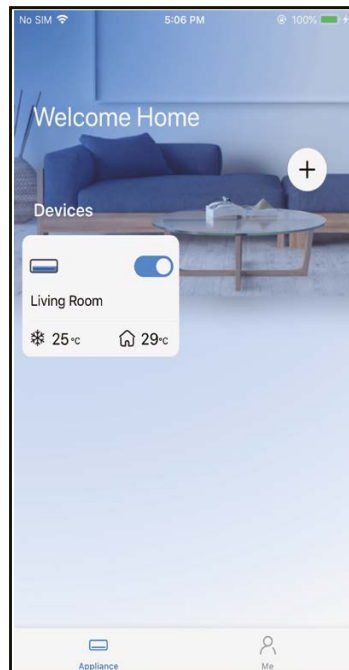


*Pic. 2.2.4*



*Pic. 2.2.5*



*Pic. 2.2.6*

**APPLICATION CONFIGURATION AND USAGE**

7. You can choose an existing name or customize a new name. *(Pic. 2.2.7)*
8. Bluetooth network configuration is successful, now you can see the device in the list. *(Pic. 2.2.8)*



*Pic. 2.2.7*



*Pic. 2.2.8*

## APPLICATION CONFIGURATION AND USAGE

### 2.3. Network configuration by select appliance type
Wybierz tę metodę konfiguracji, jeśli konfiguracja poprzez Bluetooth nie powiedzie się.
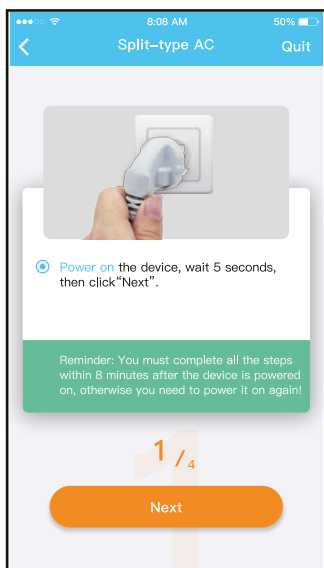
1. If the bluetooth network cofiguration is failure, please select the appliance type. *(Pic.2.3.1)*
2. Please follow the steps to enter "AP" mode.*(Pic. 2.3.2)*
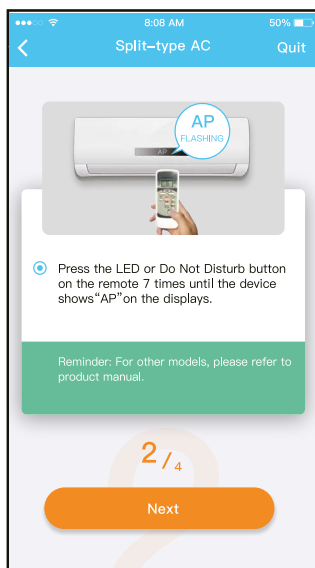3. Wybierz metodę konfiguracji sieci. *(Pic. 2.3.3)*
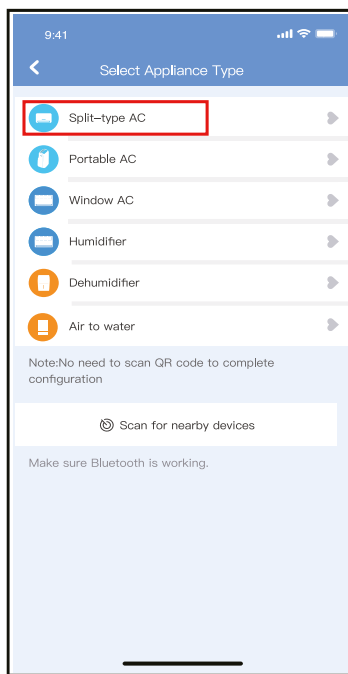


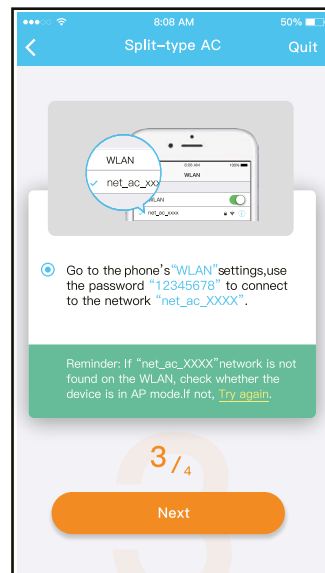*Pic. 2.3.1*

## APPLICATION CONFIGURATION AND USAGE

4. WWhen choose the method (Android). Connect to the wireless network (iOS). *(Pic. 2.3.3)*
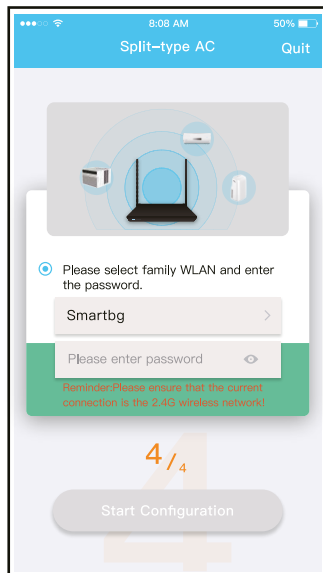


*Pic. 2.3.2*

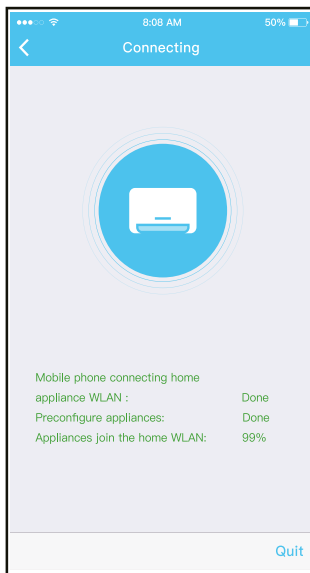*Pic. 2.3.3*

## APPLICATION CONFIGURATION AND USAGE

5. Please enter password. *(Pic. 2.3.4)*
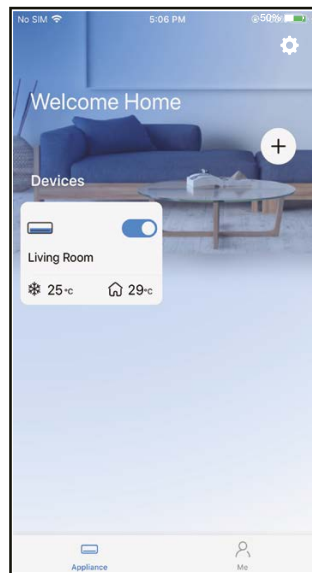6. Network configuration is successful. *(Pic. 2.3.5)*
7. Configuration Success, you can see the device in the list. *(Pic. 2.3.6)*



Pic. 2.3.4



Pic. 2.3.5



Pic. 2.3.6

## APPLICATION CONFIGURATION AND USAGE
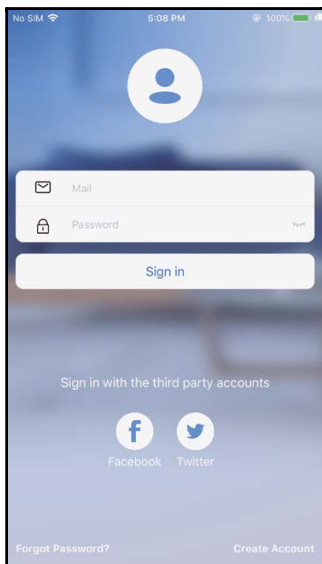
***Note:***
- *When finishing network configuration, APP will display success cue words on the screen.*
- *Due to different internet environment, it is possible that the device status still display "offline" . If this situation occurs, it is necessary to pull and refresh the device list on the APP and make sure the device status become "online" . Alternatively, user can turn off the AC power and turn on it again, the device status will become "online" after few minutes.*

### 3. HOW TO USE APP

Please ensure both your mobile device and air conditioner are connected to the Internet before using app to control the air conditioner via internet, please follow the next steps:

1. Click "Sign in". *(Pic. 3.1)*
2. Choose the device. *(Pic. 3.2)*
3. Thus, user can control air conditioners on/off status, operation mode, temperature, fan speed and so on. *(Pic. 3.3)*
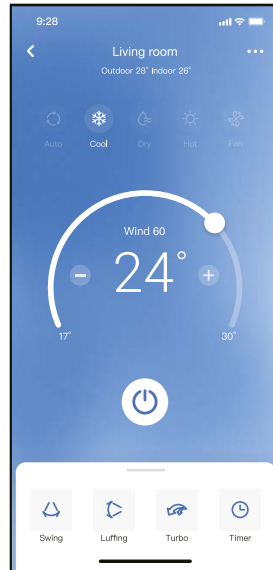
## APPLICATION CONFIGURATION AND USAGE



Pic. 3.1
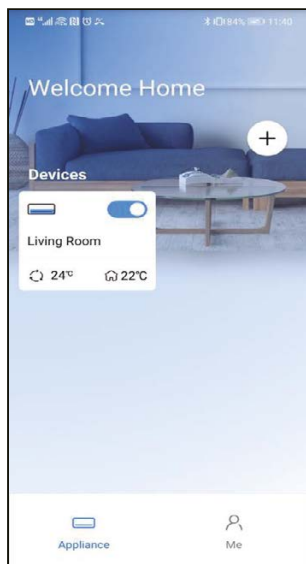


Pic. 3.2



Pic. 3.3

**NOTE:**

*Not all the function of the APP is available on air conditioner.*
*For example: ECO, Turbo, Swing function, please check the user manual to find more information.*

## APPLICATION CONFIGURATION AND USAGE

### 4. SPECIAL FUNCTIONS

#### 4.1. SCHEDULE
Weekly, user can make an appointment to turn on or off AC on specific time. User also can choose circulation to keep the AC under schedule control every week.
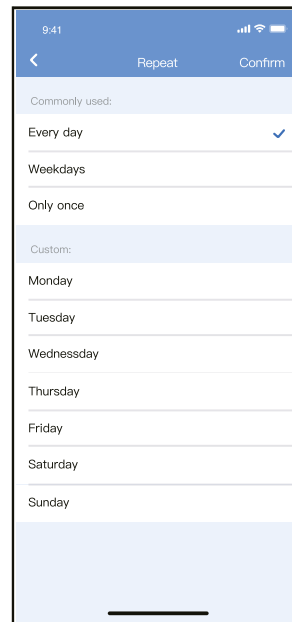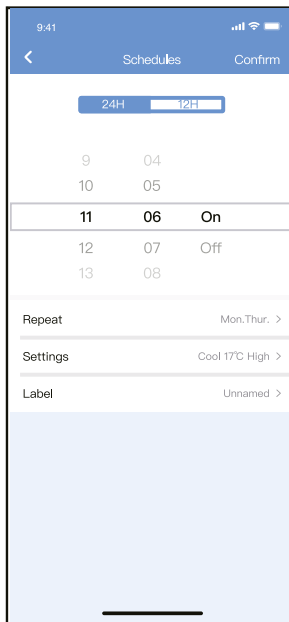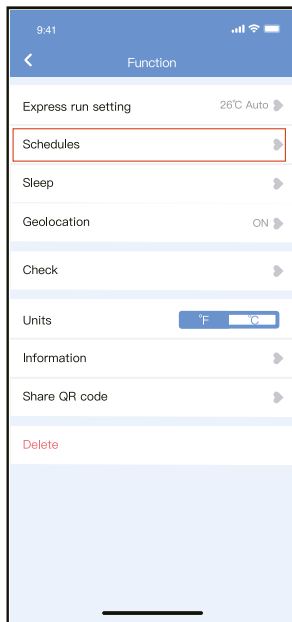
## APPLICATION CONFIGURATION AND USAGE

### 4.2. Sleep

User can customize their own comfortable sleep by setting target temperature.
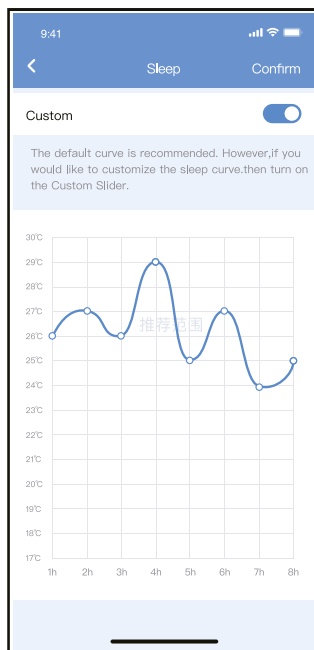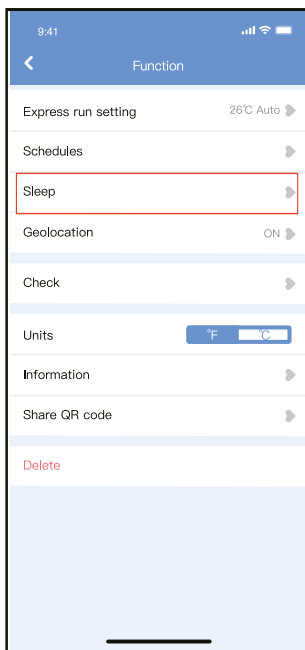
## APPLICATION CONFIGURATION AND USAGE

**4.4. Check**
User can simply check the AC running status with this function. When finishing this procedure, it can display the normal items, abnormal items, and detail information.
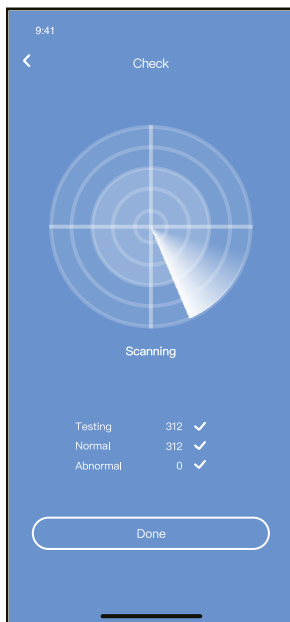


**4.4. Share Device**
The device can be controlled by multi-users at the same time by Share Device function.
1. Click "Shared QR code". *(Pic. 4.4.1)*

## APPLICATION CONFIGURATION AND USAGE

2. QR code display. *(Pic. 4.4.2)*
3. The other users must log in NetHome Plus app first, then click "Add Share Device" on their own mobile, then ask them to scan the QR code. *(Pic. 4.4.3)*
4. Now the others can add the shared device. *(Pic. 4.4.4)*.
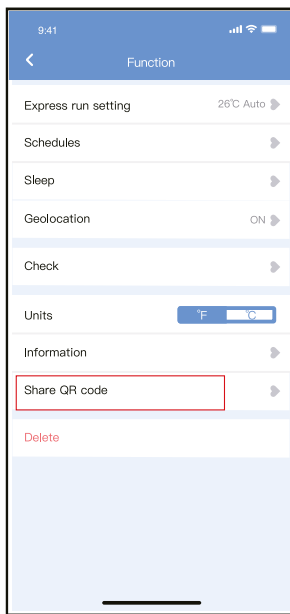


*Pic. 4.4.1*



*Pic. 4.4.2*

## APPLICATION CONFIGURATION AND USAGE



*Pic. 4.4.3*



*Pic. 4.4.4*

### 5. APP DECLARATION

Only operate the device in accordance with the instructions supplied. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with FCC radiation exposure limits set

## APPLICATION CONFIGURATION AND USAGE

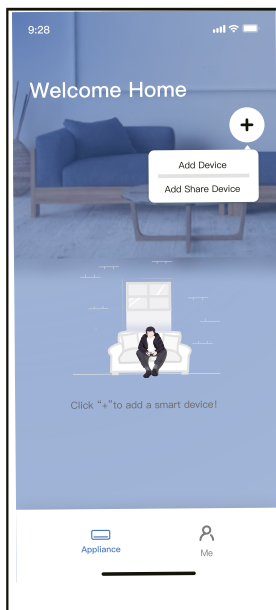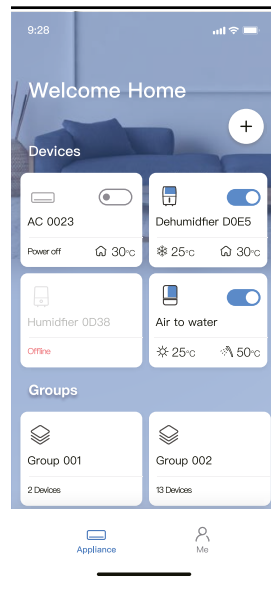forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

⚠️ **NOTE**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.
However, there is no guarantee that interference will not occur in a particular installation.

## APPLICATION CONFIGURATION AND USAGE

⚠ **NOTE**

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Hereby, Rotenso® declare that this AC is in compliance with the essential requirements and other relevant provisions of RE Directive 2014/53/EU. A copy of the full DoC is attached. Rotenso® will not be liable for any issues and problems caused by Internet, Wireless Router and Smart Devices. Please contact the original provider to get further help.
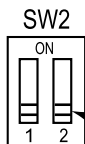
## SERVICE SETTINGS

### BREEZELESS FUNCTION OF DIP SWITCH

⚠ **NOTE**

This feature is only available under cool mode.

This feature is for some models.

SW2

Switch DIP SW2-2 set to the „OFF"
position restores factory settings.

# RED Declaration of Conformity (DoC)

Unique identification of this DoC: NO.20250519001

**We,**

ROTENSO SP. Z O.O.
ul. Szyb Walenty 16, 41-700 Ruda Śląska, POLAND

## declare under our sole responsibility that the product:

product name: WIRED REMOTE CONTROLLER
trade name: Rotenso
type or model: SAVA X WI-FI, SAVA XD WI-
relevant supplementary information: N/A
<span style="font-size:smaller">(e.g. lot, batch or serial number, sources and numbers of items)</span>

**to which this declaration relates is in conformity with the essential requirements and other relevant requirements of the RE Directive (2014/53/EU).**
**The product is in conformity with the following standards and/or other normative documents:**

HEALTH & SAFETY (Art. 3(1)(a)): EN 62311:2008, EN IEC 62311:2020, EN IEC 60730-2-9:2019+A1:2019, EN50665:2017; EN IEC 60730-2-7:2020, EN 60730-1:2016+A1:2019

EMC (Art. 3(1)(b)): EN 301 489-17 V3.2.4 (2020-09), EN 301 489-1 V2.2.3 (2019-11) , EN IEC 55014-1:2021, EN IEC 55014-2:2021, EN 61000-6-3:2007+A1:2011, EN IEC 61000-6-3:2021; EN IEC 61000-6-1:2019

SPECTRUM (Art. 3(2)): ETSI EN 300 328 V2.2.2 (2019-07)

OTHER (incl. Art. 3(3)d: EN 18031-1:2024

Limitation of validity (if any): N/A

Supplementary information: N/A

Notified body involved: N/A

Technical file held by: GD Midea Air-Conditioning Equipment Co., Ltd.

Place and date of issue (of this DoC): Poland/ Ruda Śląska/2025-05

Signed by or for the manufacturer:

ROTENSO

Rotenso Sp. z o o          NIP: 634-288-30-98
41-700 Ruda Śląska      KRS: 0000654508
ul. Szyb Walenty 16      tel 32 285-10-39

Name and Surname: Krzysztof Burzyński
Title: Business Development Director

email: info@rotenso.com

INSTALLER STAMP

RO_AC_WC_SAVA-X_UM_EN_20250701

**rotenso.com**