

# Panasonic

## CONEX Zone Controller

Product Presentation  
2022/2023



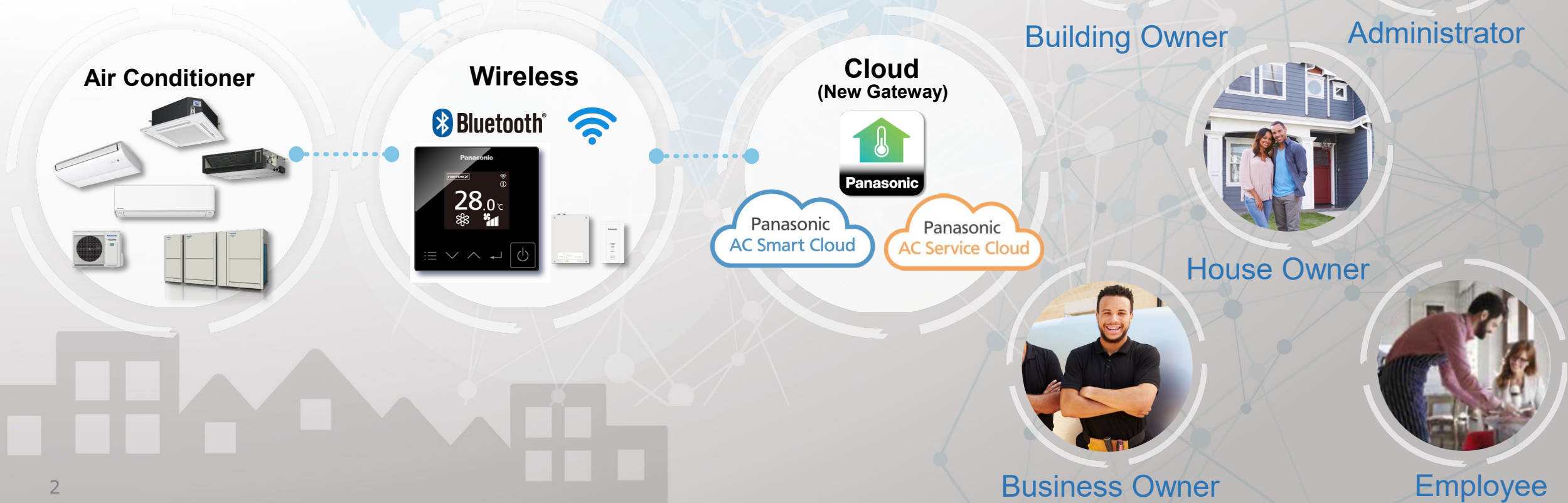
**CONEX**  
Zone controller

\* Image is for illustrative purposes only.

# Panasonic Cooling and Heating Solutions

## Providing A New Gateway that Creates New Value for the Air Conditioning Business

Panasonic utilises advanced IoT technology and cloud service to provide new value that go beyond just cooling and heating solutions.



# Panasonic IoT Solution (Cloud & App)

Maintenance & Service

CONEX ZONE x App

CONEX x Cloud & App

Remote

On-site



For Home Owners

For Small Business Owners

For Apartments

Single site

Multi site



Comfort Cloud App



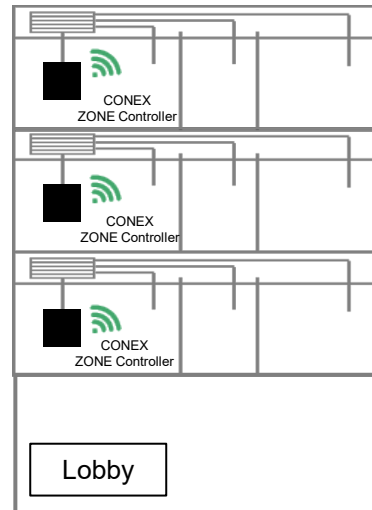
Comfort Cloud App



CZ-RTC6Z



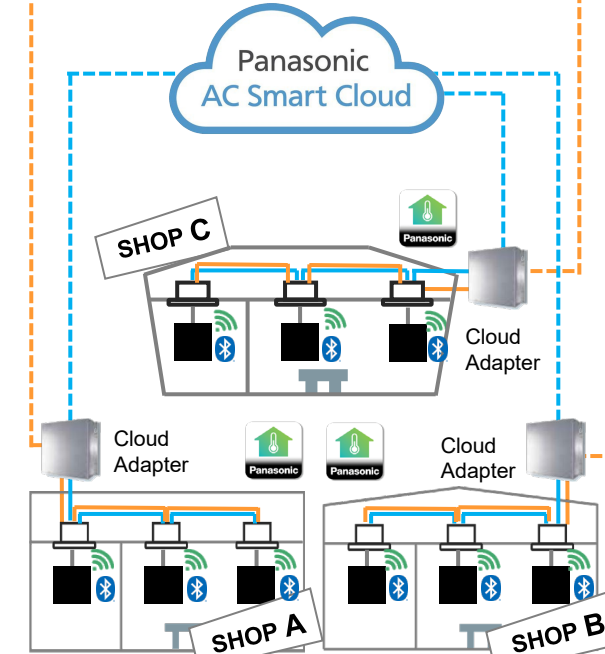
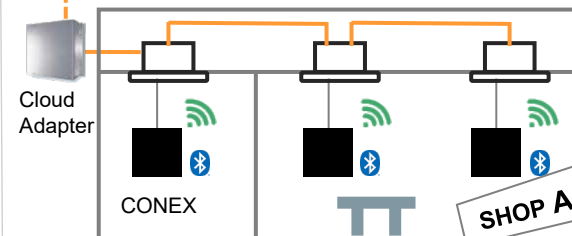
CONEX Zone controller



CZ-RTC6BLW



CONEX



User

Residential

Light commercial

\*If owners have a multisite business, they can also use Smart/Service Cloud for total management.

# A New Gateway for Smart Zone Air Conditioning

**CONEX**  
Zone controller

Comfortable zone control  
in line with your needs

24hr Clean air

Precise temperature control

Optimal air flow volume for relaxing

Comfort and clean air for family

**New Gateway**

Comfort Cloud App

Stress-free operation  
with no restrictions on location or time

Control from any room

Pre-Cooling from outside

Control by any family member

Energy saving check

## Next generation one-touch control, anywhere, anytime

Air Conditioning for Each Zone Anywhere, Anytime According to Your Needs.

Enabled by the Fusion of Panasonic's IoT Technology and Cloud Service.

**Panasonic**

# Required System for Zone Control

## Zone Control System/Component Parts

Check the following pieces of connected items before putting together the system.

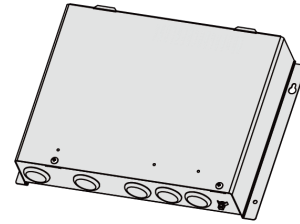


### Zone Controller

**NEW** ///

#### **CZ-RTC6Z**

A maximum of 2 Zone Controllers can be connected.  
At least 1 Zone Controller needs to be connected to a RC terminal board.



### Zone Control Box

**NEW** ///

#### **CZ-CAPZ1M** (Multiple Opening Step model) **CZ-CAPZ1S** (On/Off model)

Use one of the above Zone Control Box models.



### Comfort Cloud App

**NEW** ///

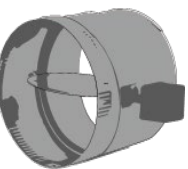
Added new feature for zone control.  
Intuitive individual zone control  
anytime, anywhere via Comfort Cloud App



### Remote Temperature Sensor (optional)

#### **CZ-CSRC3**

A maximum of 2 Temperature Sensors  
can be connected.



### Damper and Damper Motor (local supply)

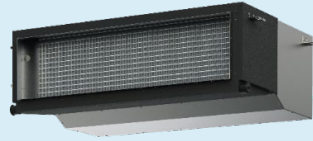
Only drive open, drive close damper motors can be  
connected. (Spring motor dampers cannot be used.)  
A maximum of 8 dampers can be connected.

### Transformer (local supply)

Use suitable model only for the damper motors.

# Product Overview

## **NEW** Zone Control System



### Intuitive Control with Comfort Cloud App



### Zone Controller



Built-in WLAN



CZ-RTC6Z

**Zone Control Box** CZ-CAPZ1M (Multiple Opening Step model)  
CZ-CAPZ1S (On/Off model)

**Remote Temperature Sensor** CZ-CSRC3 (optional)

**Damper and Damper Motor** (local supply)

**Transformer** (local supply)

Regarding system components, please refer to page 5.

## Smart Zone Control via Comfort Cloud App

**NEW**



- Intuitive individual zone control anytime, anywhere via Comfort Cloud App
- Each family member can control home AC from multiple devices

## Manage up to 8 Zones Smartly

**NEW**

- Easy management to maintain comfort and save energy

## Precise Airflow Volume Control for Better Comfort

**NEW**

- Precise airflow adjustment in 10% increments: CZ-CAPZ1M
- Simple zone control with On/Off: CZ-CAPZ1S

## Ideal Temperature Control with Temperature Sensors (optional)

- Up to 2 remote temperature sensors enable individual temperature control of zones

## Convenient Weekly Timer to Suit Your Lifestyle

**NEW**

- Weekly Timer can be used to set various AC operations

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Smart Zone Control via the Comfort Cloud App

# Smart Zone Control via the Comfort Cloud App/Main Function Overview



Various operations can be performed for each zone with a smartphone via the Comfort Cloud App.

### Main Device Screen

Outdoor Air Temperature

Indoor Ambient Temperature

Set Temperature Display

Operation Modes

Setting Temperature Change

ON/OFF Air Conditioner

Fan Speed Adjustment

### 1 Zone Status

### 2 Damper Position Control

### 3 ON/OFF nanoe™ X

### 4 Weekly Timer

### 5 Statistics

### 6 Notification

Requirements for Connecting with the Panasonic Comfort Cloud App



Zone Control Network  
Zone Control remote controller equipped with built-in Wi-Fi/CZ-RTC6Z



Other Hardware Requirements\*  
Router – Internet – Smartphone  
(2.4GHz transmission channel required)  
\*Purchase and subscribe separately.

Compatible Device And Browsers  
1. iOS 9.0 or above  
2. Android™ 5.0 Lollipop or latest

Download Free Panasonic Comfort Cloud App





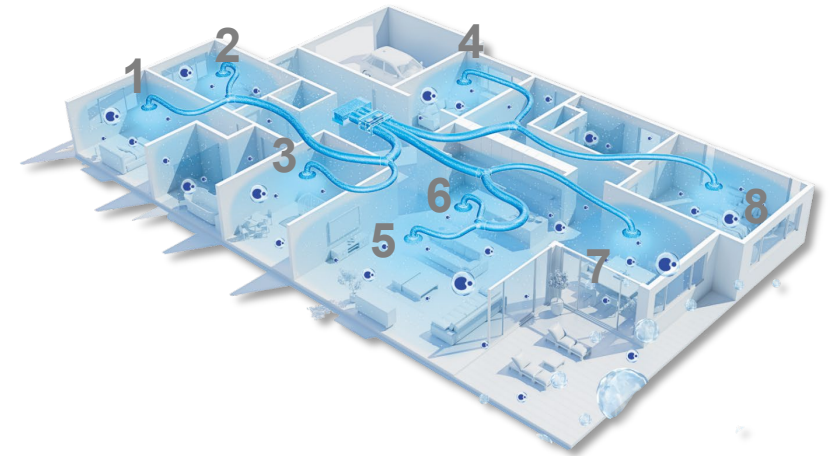
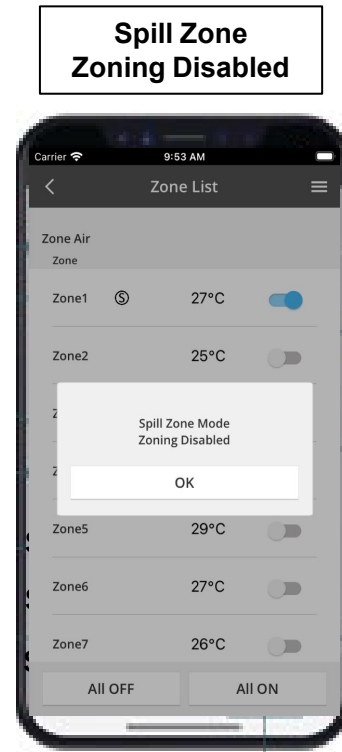
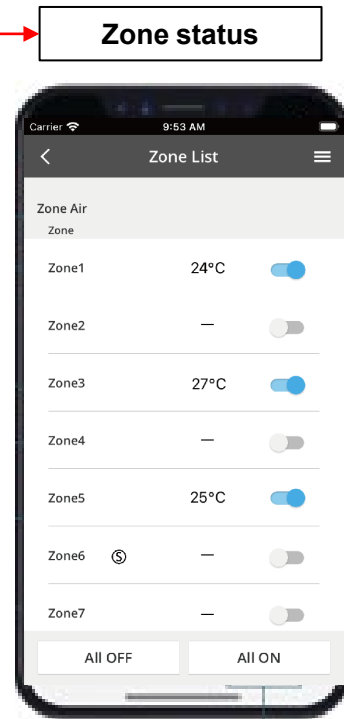
# Manage Up to 8 Zones Smartly

Control Up to 8 zones and save energy with a fingertip anywhere, anytime.



## Smart Air Conditioner Control

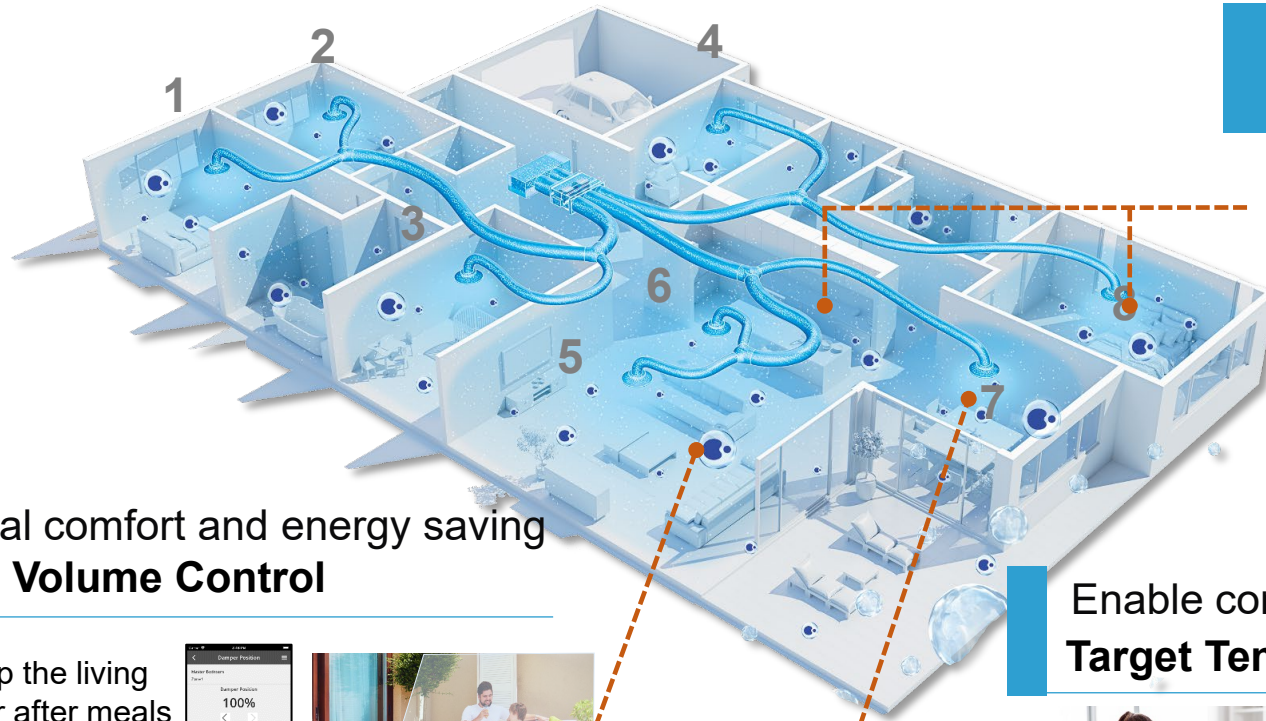
- Controlled by multiple users
- Controlled from anywhere, anytime via the App



“S” on the Zone status means Spill Zone, and if it is displayed, you cannot operate the zone. The spill zone is set at the time of installation, and the damper automatically opens to reduce the static pressure when the static pressure is likely to exceed the PQ chart. It's not displayed when installed with the Common Zone.

# Advanced Zone Control Benefits

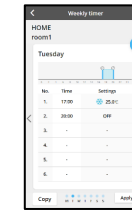
The combination of CFC App and Zone Controller offers a variety of benefits.



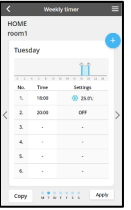
## Auto-optimised comfort for your lifestyle Weekly timer

E.g.) Pre-cooling is set according to the time you return home. Also thanks to nanoe™, clean the room air even while you're away from home.

Cooling usually starts before 5 o'clock

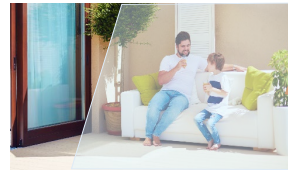


Efficient by delaying the start time for late days



## Individual comfort and energy saving Airflow Volume Control

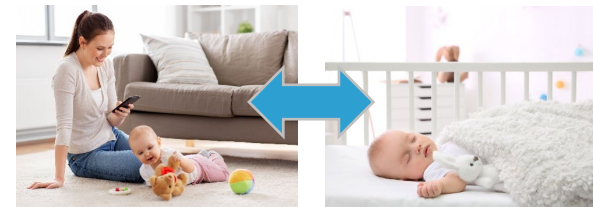
E.g.) Open up the living room damper after meals for comfort.



Decrease the dining room damper opening after meals for energy saving.



## Enable comfort for the whole family Target Temperature Control with Optional Remote Temperature sensor



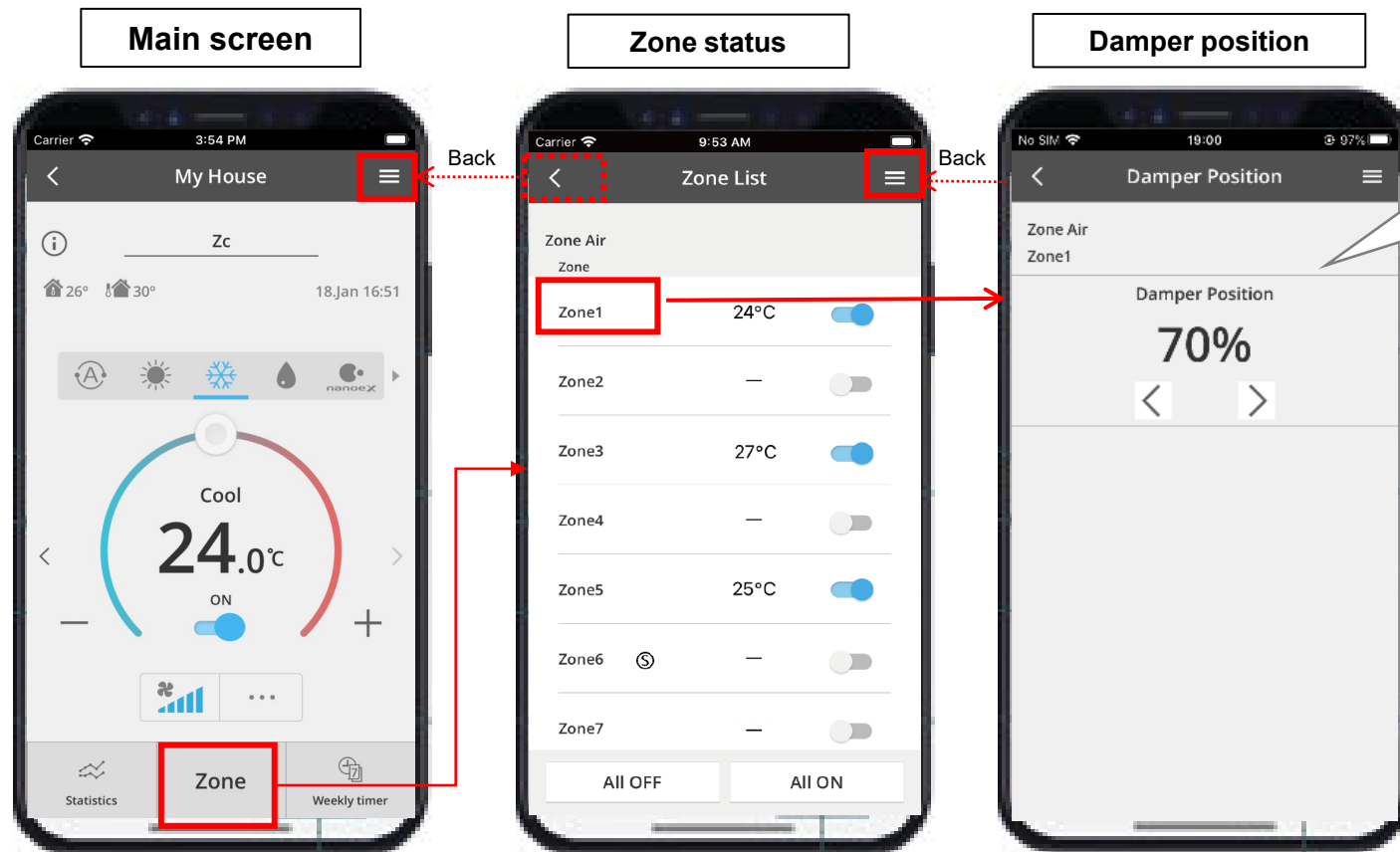
E.g.) Control AC based on the bedroom temp for a comfortable sleep, and when gathering in the living room, switch to AC control based on the living room temp, aiming for a comfortable room temp.

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# Airflow Volume Control

The damper opening of each zone can be controlled with the CFC App to achieve both individual zone comfort and energy saving.

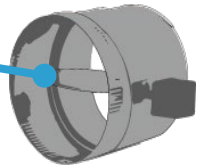
(CZ-CAPZ1M: When using the multiple opening step model \*) \*The CZ-CAPZ1S can only turn the damper ON/OFF



Achieves step control of damper opening

# 10%-100%

Adjustable in 10% increments



A diagram of a damper component with a blue line indicating its adjustable range from 10% to 100%.

With a timer, such convenient control is possible

The living room damper opening is increased according to the time when the family gathers.



For daily naps, reduce the air volume so that it doesn't get too cold.



Two images illustrating damper control: a family sitting on a sofa and a baby sleeping in a bed, both with a clock icon indicating a timer function.

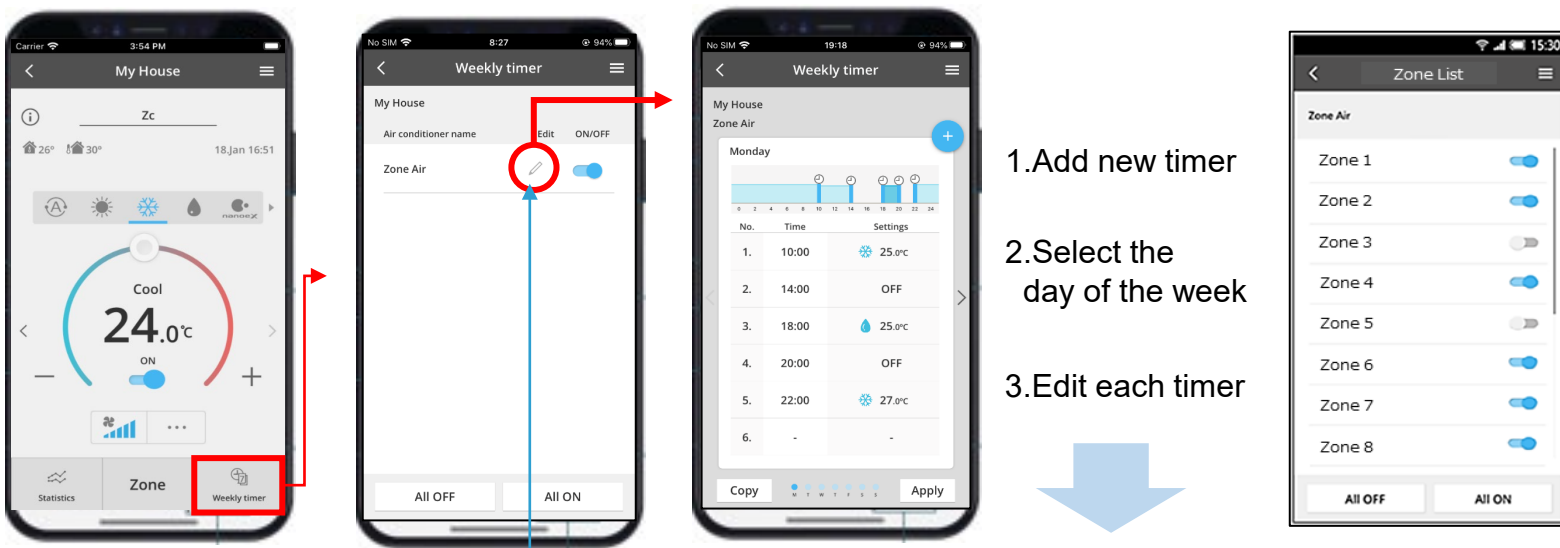
# Weekly Timer

Setting timers according to your lifestyle for a week automatically provides comfortable air conditioning.

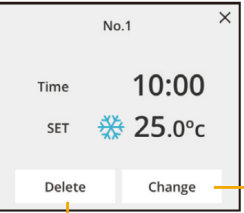
Main screen

Weekly timer

Add/delete/edit timer



- 1. Add new timer
- 2. Select the day of the week
- 3. Edit each timer



No.1

Time 10:00

SET 25.0°C


Delete Change

- Temp setting
- Change timer
- Delete timer


The operation mode, temp setting, and air conditioning zone can be set with a timer.

## Able to set 6 timers/day


Realise optimal air conditioning for your lifestyle with timers



Clean the air with the nanoe™ mode when you go out. Pre-cool the living zone according to the time you return home.



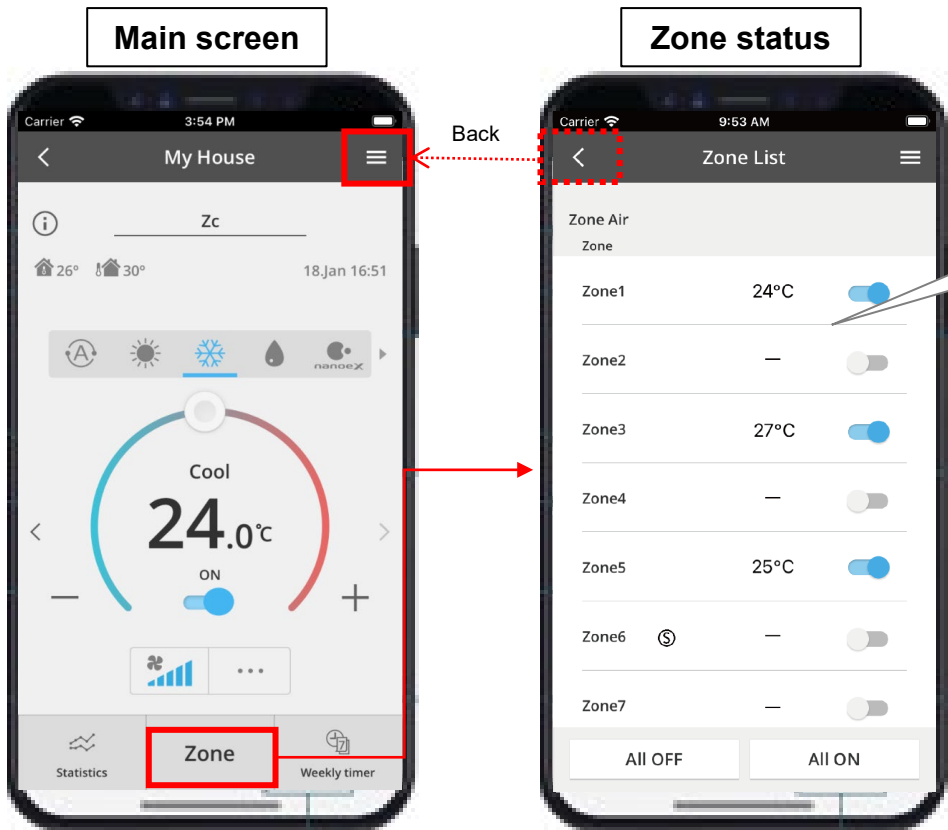
Pre-cool 30 minutes before going to bed. Cooling in the living zone is switched OFF 30 minutes later.



Cool your bedroom on weekend mornings if you want to sleep longer.

# Target Temperature Control

Easy switching of temp in targeted zones makes the whole family comfortable.



Optional temperature sensors enable precise temperature control. From a max 5 temp sensors, you can choose the Master temp sensor, and use it to set the targeted zone for AC control.

1. IDU return sensor
2. Main RC sensor
3. Sub RC sensor



4. Optional remote temp sensor
5. Optional remote temp sensor

\*When shipped from the factory, Indoor unit sensor is set as the master sensor.

## Auto mode

AC runs to reach to the lowest temp sensor (cooling) among all sensors. Possible to change master sensor manually.

\*If set to AUTO mode, it will automatically change to the optimal master sensor, no need to manually set the sensor.

The temp in the targeted zone can be switched easily according to how you and your family spend time, making the whole family comfortable.



## 24-hour nanoe™ X Air purification\*

While the general filters in air purifiers are effective against airborne bacteria and viruses, nanoe™ X also works to inhibit longer-living, adhered bacteria and viruses. As well as this, the Comfort Cloud App gives you access to your air conditioner anywhere, anytime, so you can turn nanoe™ X on even while you're out and enjoy 24-hour quality air in your home.

\* The nanoe™ X mode can be run independently from cooling or heating mode, and needs to be on for the 24 hour air purification to function.



# 24hr nanoe™ X Comfort, Wherever You Are, Anywhere, Anytime



Get 24 hr Quality Air for you and your loved ones by turning nanoe™ X on using Panasonic Comfort Cloud even when you're out, and enjoying clean air when you're at home. nanoe™ X functions in both cooling and heating modes and is maintenance-free, helping you keep your costs down with cleaner air.

\*Low energy consumption with fan mode 70W per hour for a single unit. Energy consumption may vary depending on models and the external static pressure.  
 \*2 No maintenance required for nanoe™ X generator device.

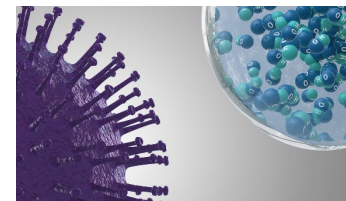
## 7 effects of nanoe™ X

Can deodorise and inhibit certain pollutants in the air and on surfaces, even on fabrics.

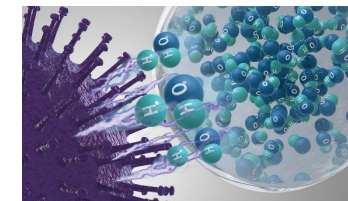
|            |                                |       |           |        |                      |               |
|------------|--------------------------------|-------|-----------|--------|----------------------|---------------|
| Deodorises | Inhibits 5 types of pollutants |       |           |        |                      | Moisturises   |
|            |                                |       |           |        |                      |               |
| Odours     | Certain bacteria and viruses   | Mould | Allergens | Pollen | Hazardous substances | Skin and hair |

## nanoe™ X Technology

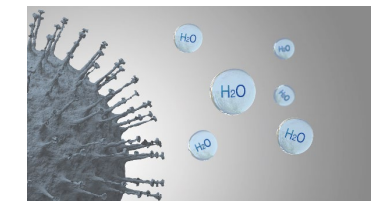
Thanks to the nanoe™ X properties, several types of pollutants can be inhibited.



nanoe™ X reliably reaches pollutants.



Hydroxyl radicals transform pollutants' proteins.



Pollutants activity is inhibited.



# How to Activate nanoe™ X



With the Comfort Cloud App, you can easily turn on nanoe™ anywhere, anytime.



Turn ON the nanoe™ Mode with Cooling or Heating ON

Clean the room air even while you're away from home

Turn ON the nanoe™ Mode





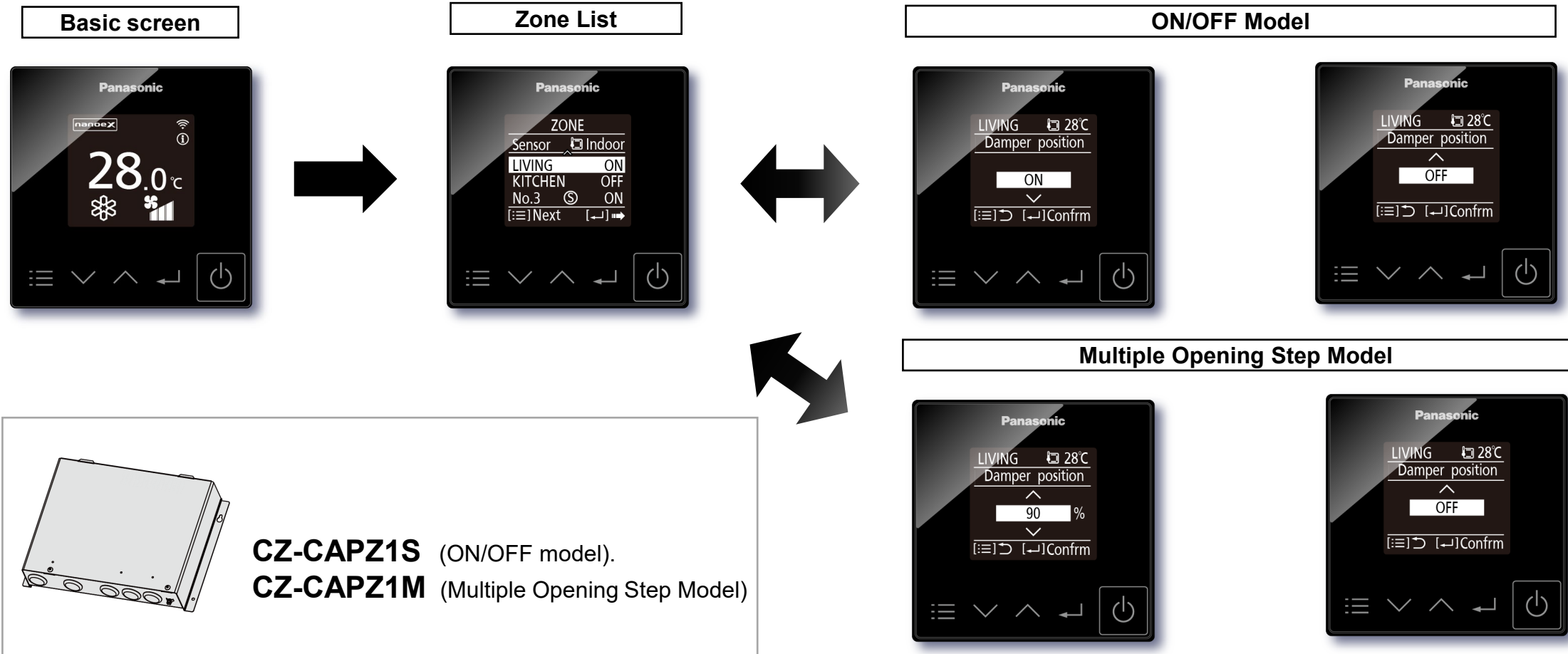
# Panasonic

Smart Zone Control via the Zone Controller

# CONEX Zone Controller

Easy-to-read screen display.

2 damper screen settings for both the ON/OFF model and Multiple model.



# Basic Operation

## Easy-to-operate Temp Setting/Mode Select/Fan Speed



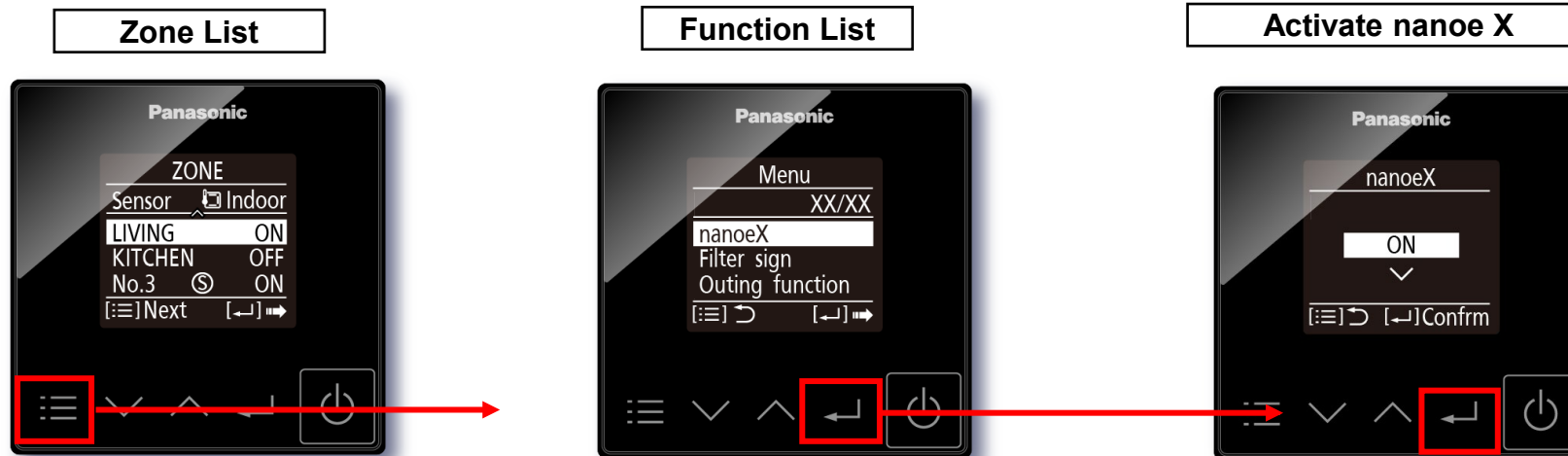
“S” on the Zone status means Spill Zone, and if it is displayed, you cannot operate the zone.

\*The spill zone is set at the time of installation, and the damper automatically opens to reduce the static pressure when the static pressure is likely to exceed the PQ chart.

# How to Activate nanoe™ X

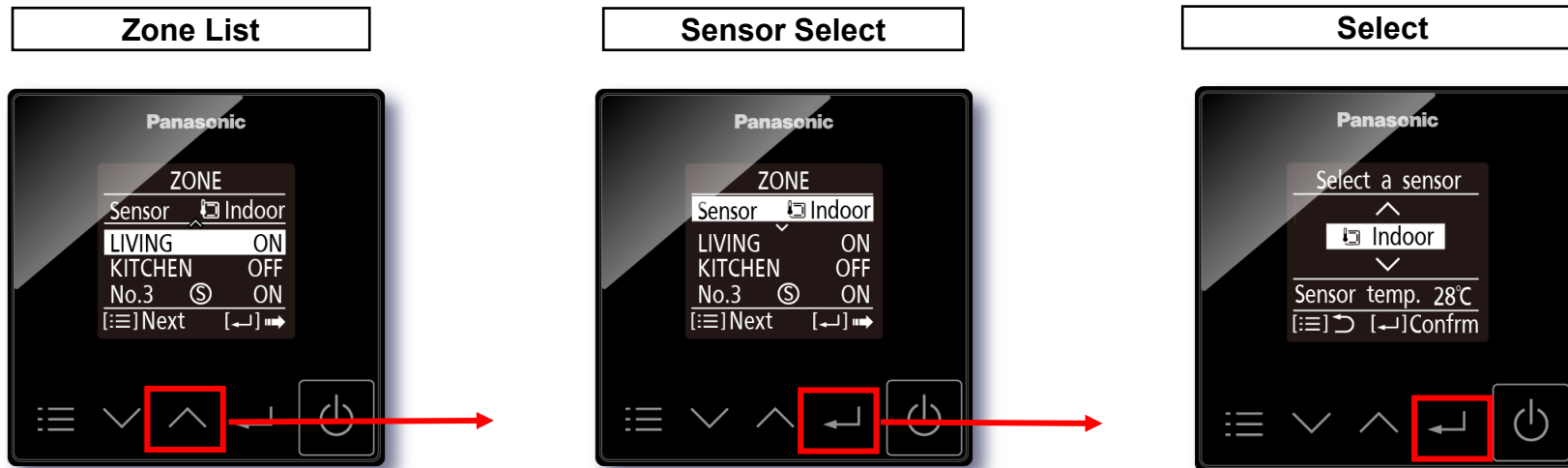


With the CONEX Zone Controller, you can easily turn on nanoe™ anytime. Thanks to the properties of nanoe™ X, several types of pollutants can be inhibited.



# How to Select Remote Temperature Sensors

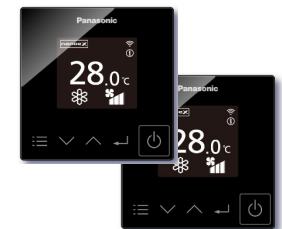
With CONEX Zone, easily select remote temperature sensors.



If set to AUTO mode, it will automatically change to the optimal master sensor, no need to manually set the sensor.

Optional temperature sensors enable precise temperature control. From a max 5 temp sensors, you can choose the Master temp sensor, and use it to set the targeted zone for AC control.

1. IDU return sensor
2. Main RC sensor
3. Sub RC sensor





4. Optional remote temp sensor
5. Optional remote temp sensor

\*When shipped from the factory, Indoor unit sensor is set as the master sensor.

## Auto mode

AC runs to reach to the lowest temp sensor (cooling) among all sensors. Possible to change master sensor manually.

# Controllable Function List, Remote Control and App

| Function                 | Zone Controller (CZ-RTC6Z)  |                   | Comfort Cloud   |
|--------------------------|---|-------------------|---|
|                          | ON/OFF (CAPZ1S)   | Multiple (CAPZ1M) | APP   |
|                          |  |                   |  |
| Power ON/OFF             | ✓   | ✓                 | ✓   |
| Temperature setting      | ✓   | ✓                 | ✓   |
| Fun Speed Setting        | ✓   | ✓                 | ✓   |
| Mode Selection           | ✓   | ✓                 | ✓   |
| Zone ON/OFF              | ✓   | ✓                 | ✓   |
| Damper Step Settings     | –   | ✓                 | ✓   |
| Weekly Timer             | –   | –                 | ✓   |
| nanoe™ X ON/OFF          | ✓   | ✓                 | ✓   |
| WLAN Settings            | ✓   | ✓                 | –   |
| Enter Zone Names         | ✓   | ✓                 | ✓   |
| Temperature Zone Setting | ✓   | ✓                 | ✓   |
| Auto Sensor              | ✓   | ✓                 | –   |
| Spill Zone Settings      | ✓   | ✓                 | ✓   |
| Spill Zone Notification  | ✓   | ✓                 | ✓   |
| Field Settings           | ✓   | ✓                 | ✓   |
| Test Run                 | ✓   | ✓                 | –   |
| Operate from Outside     | –   | –                 | ✓   |
| Operate from Any Room    | –   | –                 | ✓   |
| Multiple Users           | –   | –                 | ✓   |

# Panasonic

Specifications and Installation

# Required System for Zone Control

## Zone Control System/Component Parts

Check the following pieces of connected items before putting together the system.

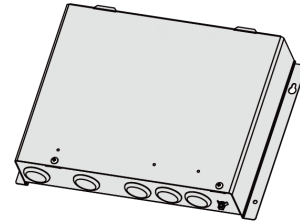


### Zone Controller

**NEW** ///

#### CZ-RTC6Z

A maximum of 2 Zone Controllers can be connected.  
At least 1 Zone Controller needs to be connected to an RC 1 terminal board.



### Zone Control Box

**NEW** ///

#### CZ-CAPZ1M (Multiple Opening Step Model) CZ-CAPZ1S (ON/OFF Model)

Use one of the above Zone Control Box models.



### Comfort Cloud App

**NEW** ///

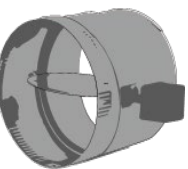
Added new feature for zone control.  
Intuitive individual zone control  
anytime, anywhere via Comfort Cloud App



### Remote Temperature Sensor (optional)

#### CZ-CSRC3

A maximum of 2 Temperature Sensors  
can be connected.



### Damper and Damper Motor (local supply)

Only drive open, drive close damper motors can be  
connected. (Spring motor dampers cannot be used.)  
A maximum of 8 can be connected.

### Transformer(local supply)

Use models suitable for the damper motors.



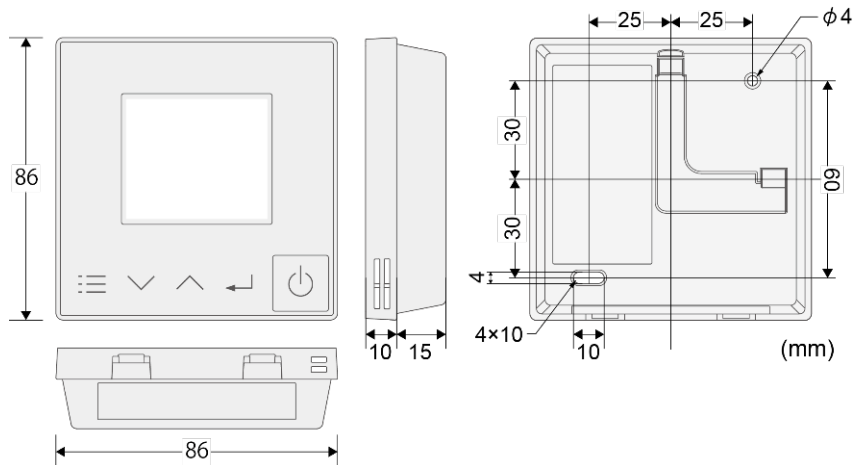
# Product Specifications

## Zone Remote Controller

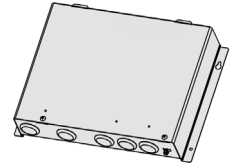


### Specs & dimensions

|  |  |
|--|--|
| <b>Model No.</b>                               | CZ-RTC6Z   |
| <b>Dimensions</b>                              | (H) 86 mm x (W) 86 mm x (D) 25 mm                                |
| <b>Weight</b>                                  | 0.10 kg  |
| <b>Temperature / Humidity range</b>            | 0°C to 40°C / 20% to 80% (No condensation)<br>· Indoor use only. |
| <b>Power Source</b>                            | DC16 V (supplied from indoor unit)                               |
| <b>Wireless LAN standard</b>                   | IEEE 802.11 b/g/n  |
| <b>Frequency range</b>                         | 2.4 GHz band   |
| <b>Encryption</b>                              | WPA2-PSK (TKIP/AES)  |
| <b>OS version on the mobile device for CFC</b> | iOS: 9.0 or later<br>Android™: 5.0 or later                      |

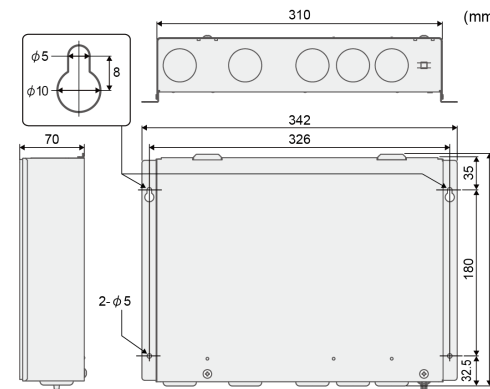


## Zone Control Box



### Specs & dimensions

|                   |                                     |
|-------------------|-------------------------------------|
| <b>Model No.</b>  | CZ-CAPZ1S/CZ-CAPZ1M                 |
| <b>Dimensions</b> | (H) 250 mm x (W) 342 mm x (D) 70 mm |
| <b>Weight</b>     | 1.9 kg                              |



### Symbols on the controller



This symbol indicates "Protective earth".



This symbol indicates "Functional earthing".

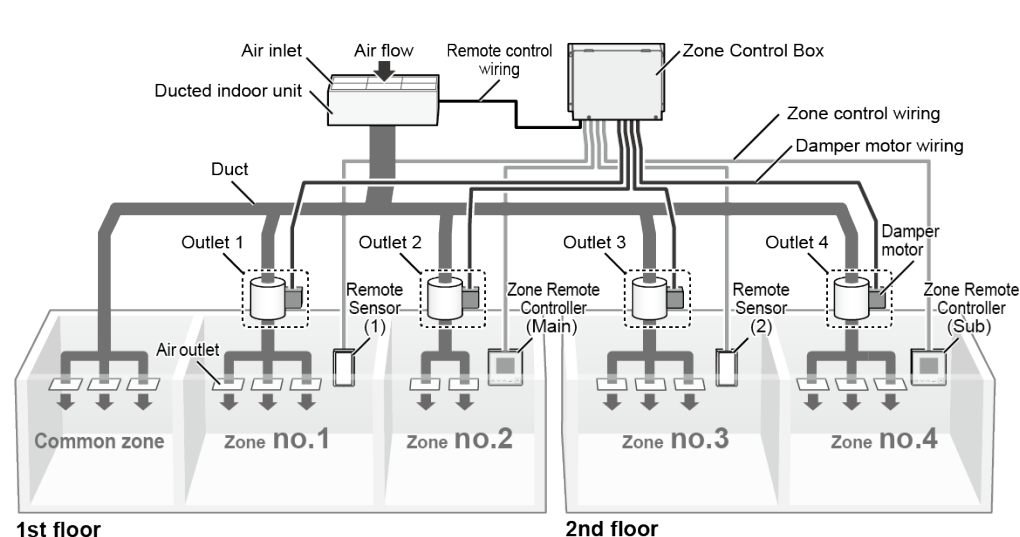
- iOS is the name of the OS of Apple Inc. iOS is a trademark or registered trademark of Cisco in the US and other countries where it is licensed for use.
- Apple and the Apple logo are trademarks of Apple Inc. that are registered in the US and other countries. App Store is a service mark of Apple Inc.
- Android™, Google Play™ and Google Play™ logos are registered trademarks of Google LLC.

# Duct Work Design

Flexible duct design is possible. Choose between the two duct designs below.

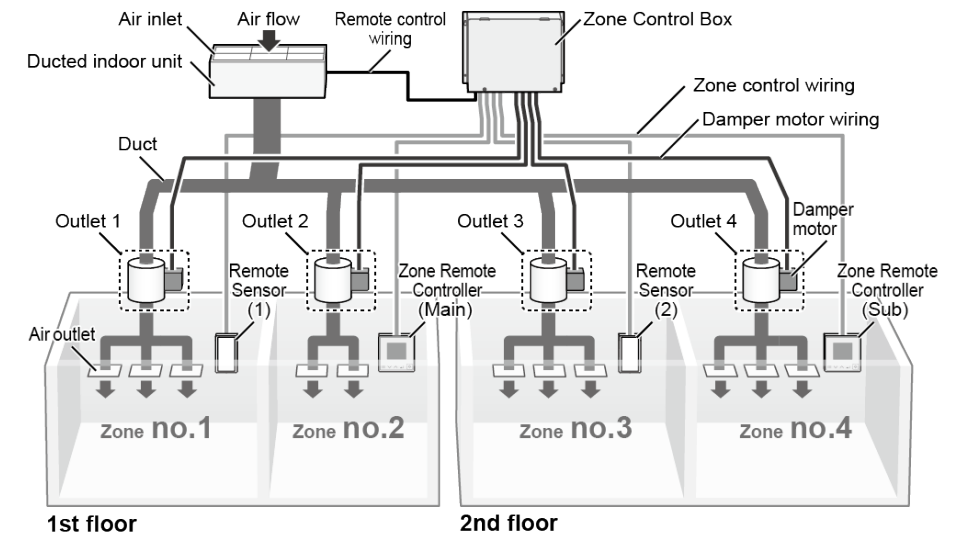
## Common Zone

Install a common zone that is always open so that the static pressure is within the indoor fan curve (the PQ diagram) range regardless of the open/closed state of the damper.



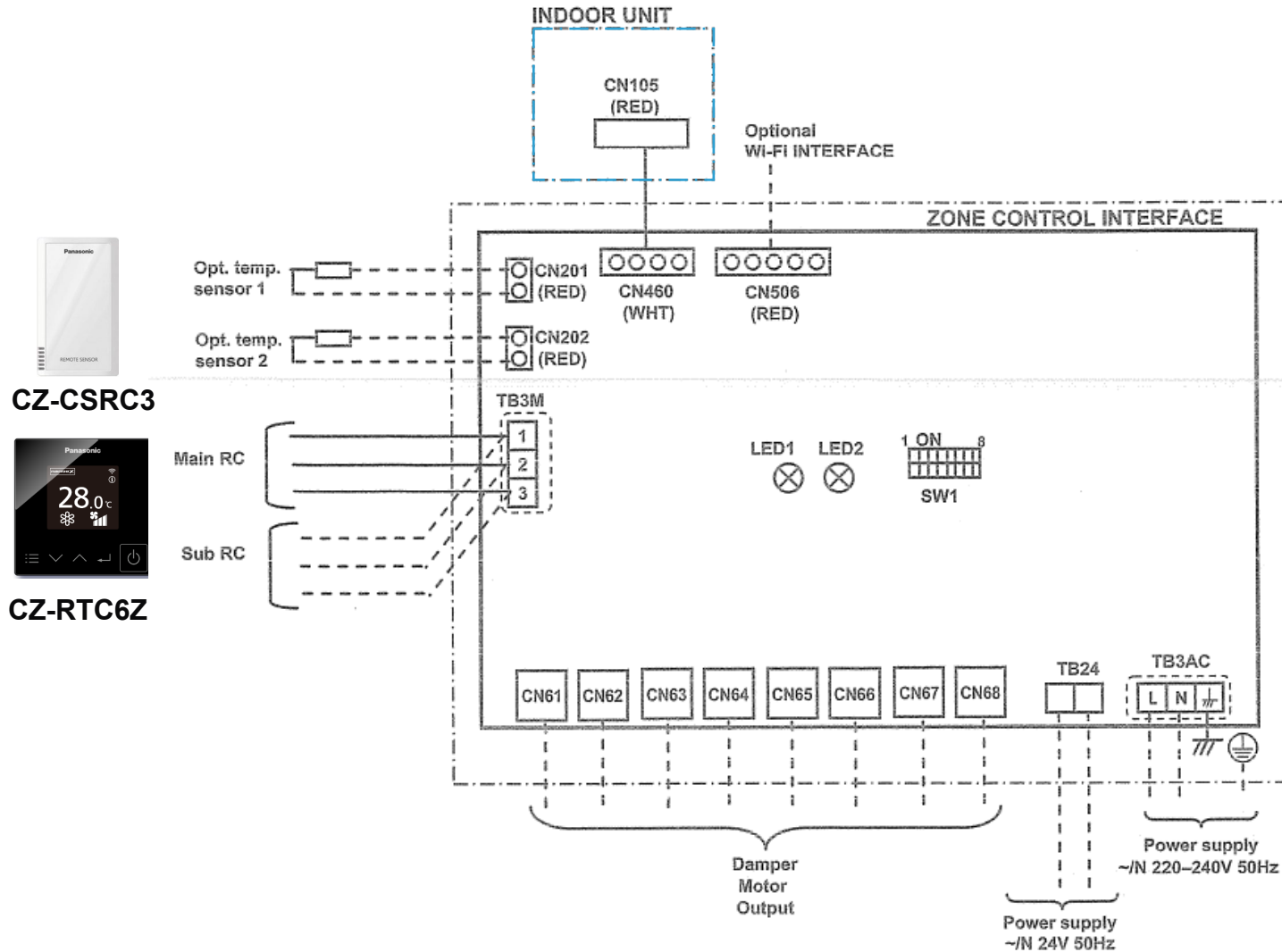
## Using the Spill Zone

This is the installation method in which the damper specified by the installer is automatically opened fully according to the load conditions to release the air to avoid excessive static pressure.



\*Install a Common outlet for Common Zone design. \*\* Design ducting to fit into the PQ diagram of IDU even when all dampers are fully opened or closed.  
\*\*\* In the case of Spill zone design, do not install a Common zone as it cannot be combined with a Spill Zone. \*\*\*\* Design at least one Spill Zone.  
Refer to the Installation Instructions for the Zone Control Box for setting details.

# System Diagram

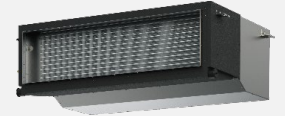


CZ-CSRC3



CZ-RTC6Z

## Usable indoor units



Zone Controller can be connected with 3.6kW to 22.4 kW Ducted (PE3 and PF3) indoor units and VRF Ducted (M1, E1, E2, E1R, F2, F3 and Z1) indoor units. \*Connectable to selected Panasonic ducted models only. Please consult Panasonic for more details.

### PAC

| Series   | PE3            | PF3            |
|----------|----------------|----------------|
| Capacity | 6.0 kW-22.4 kW | 3.6 kW-14.0 kW |

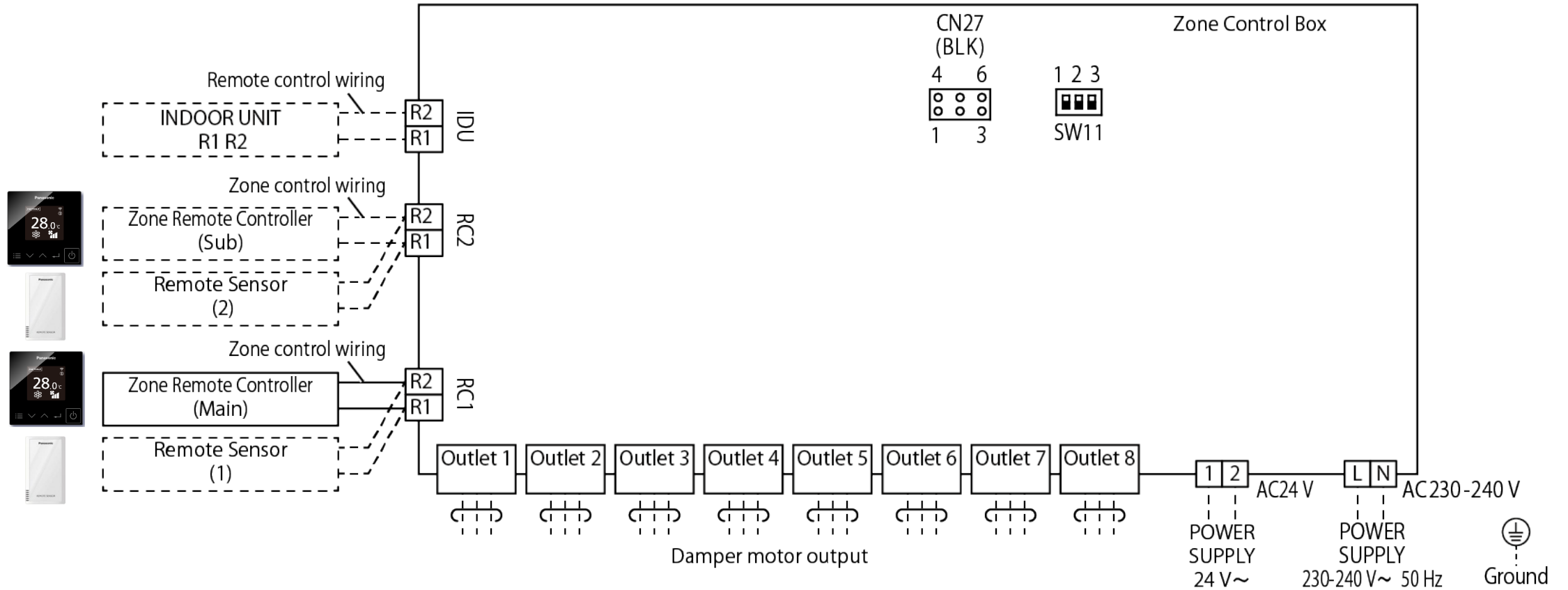
### VRF

| Series   | ME1            | ME2             | ME1R           |
|----------|----------------|-----------------|----------------|
| Capacity | 7.3 kW-14.0 kW | 18.0 kW-28.0 kW | 9.0 kW-16.0 kW |

| Series   | MM1           | MF3            | MZ1           |
|----------|---------------|----------------|---------------|
| Capacity | 2.2 kW-5.6 kW | 2.2 kW-16.0 kW | 2.2 kW-7.3 kW |

# Installation

## Wiring Diagram



# Installation/Electrical Wiring

## Damper motor wiring

- Confirm that the damper motor and damper motor cable you are using both meet the following specifications.
- Damper motor & damper motor cable

| Specifications     |  |   |
|--------------------|--|---|
| Damper motor       | Voltage                                | 24 V ~  |
|                    | Frequency                              | 50-60 Hz  |
|                    | Maximum Operation Current (per damper) | 360 mA or less  |
|                    | Maximum Electric Power (per damper)    | 7 VA or less  |
| Damper motor cable | Wire diameter (mm <sup>2</sup> )       | 0.48 mm <sup>2</sup> or more (Min. 0.48 mm <sup>2</sup> ) |
|                    | Maximum wiring length                  | 30 m or less  |
|                    | Type                                   | RJ12 6-poler, 6-core                                      |
| Transformer        | Input Voltage                          | 240 ~   |
|                    | Output Voltage                         | 24 V ~  |

\*Minimum 0.36A for one damper motor.

## Wire length and wire diameter

- Two types are used; the power supply cable (B) and the control wiring (C).
- Power supply

|   |                                     |
|---|-------------------------------------|
| (B) Power supply                            | Time delay fuse or circuit capacity |
| 2 mm <sup>2</sup> (Min. 2 mm <sup>2</sup> ) |                                     |
| Max. 30 m                                   | 10-16 A                             |

- Remote control wiring & Zone control wiring
- No polarity

|  |
|--|
| (C) Remote control wiring & Zone control wiring  |
| 0.75 mm <sup>2</sup> to 1.25 mm <sup>2</sup> (AWG#18 to AWG#16) (Min. 0.75 mm <sup>2</sup> ) |
| Max. 50 m  |

### NOTE

- With ring-type wire terminal.

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