















Controllers

A wide variety of control options to meet the requirements of different applications.

OPERATION SYSTEM	INDIVIDUAL CONTROL SYSTEMS			
Requirements	High-spec operation	Normal operation	Operation from anywhere in the room	Normal operation
External appearance				
Type, model name	Deluxe Wired Remote Controller CZ-RTC5B	Timer Remote Controller (Wired) CZ-RTC4	Wireless Remote Controller Controller: CZ-FRWS3 Receiver: CZ-FRWRU3 CZ-FRWRL3 CZ-FRWRD3 CZ-FRWRT3 CZ-FRWRC3	Wired Remote Controller CZ-RD52CP
Built-in thermostat	●	●	—	—
ECONAVI on/off control	●	●	●	—
Number of indoor units which can be controlled	1 group, 8 units	1 group, 8 units	1 group, 8 units	1 unit
Use limitations	• Up to 2 controllers can be connected per group (When using ECONAVI sensor, only one remote controller is possible to connect at indoor unit)	• Up to 2 controllers can be connected per group. (When using ECONAVI sensor, only one remote controller is possible to connect at indoor unit)	• Up to 2 controllers can be connected per group.	• Only 1 controller for 1 indoor unit.
Function ON/OFF	●	●	●	●
Mode setting	●	●	●	●
Fan speed setting	●	●	●	●
Temperature setting	●	●	●	●
Air flow direction	●	●	●	●
Permit/Prohibit switching	—	—	—	—
Weekly program	●	●	—	—

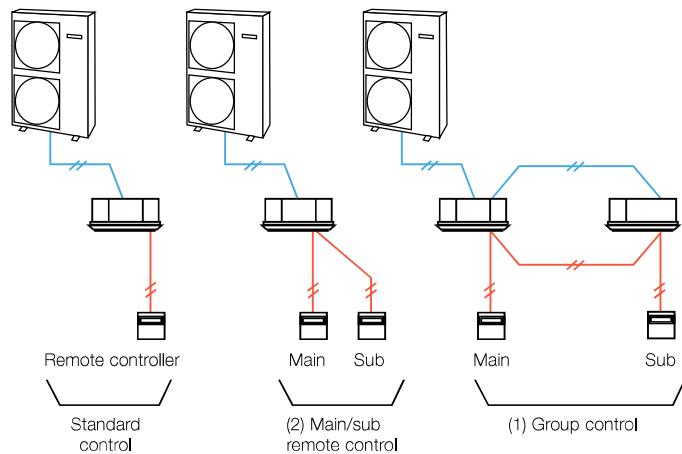
1. Setting is not possible when a remote control unit is present. (Use the remote controller for setting.)
All specifications subject to change without notice.

CENTRALISED CONTROL SYSTEMS			SMART CONTROL SYSTEMS		
Operation with various function from centre station	Only ON/OFF operation from centre station	Simplified load distribution ratio (LDR) for each tenant Touch screen panel	Connection with 3rd Party Controller	Cloud connectivity, operation from anywhere	Schneider Electric room controller
					
System Controller	ON/OFF Controller	Intelligent Controller	CZ-CAPDC2	WLAN Smart Adaptor Comfort Cloud App	PAC smart connectivity+
CZ-64ESMC3	CZ-ANC3	CZ-256ESMC3 (CZ-CFUNC2)	Interface adaptor	CZ-TAGG1 / CZ-CAPWFC1	SER8150 (room controller)
—	—	—		—	●
●	—	●	CZ-CAPC3	—	—
64 groups, max, 64 units	16 groups, max, 64 units	64 units x 4 links, max, 256 units	Seri-Para I/O unit for each indoor unit	1 adaptor : 1 group, 8 units. Multiple adaptors for each indoor units : 200 units(10 location x 20 units)	1 group, 8 units
• Up to 10 controllers, can be connected to one system. • Main unit/sub unit (1 main unit + 1 sub unit) connection is possible. • Use without remote controller is possible.	• Up to 8 controllers (4 main units + 4 sub units) can be connected to one system. • Use without remote controller is impossible.	• A communication adaptor (CZ-CFUNC2) must be installed for three or more links.		• Mobile device, free App and internet router is required separately. • Wired remote controller (master) required.	• Comparing to RTC5B, up to 1 controller can be connected per IDU. • Wired to R1/R2. • VFF and PAC(S-link) model only.
●	●	●	CZ-CAPBC2	●	●
●	—	●	Communication Adaptor	●	●
●	—	●		●	●
●	—	●	CZ-CFUNC2	●	●
●	—	●	LonWorks Interface	●	●
●	●	●		●	●
●	—	●	CZ-CLNC2	—	—
●	—	●	—	●	—

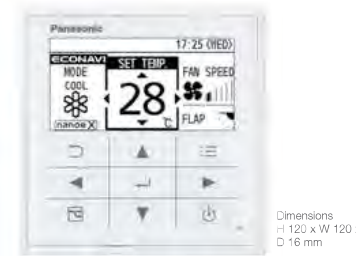
Individual Control Systems

Control contents	Part name, model No.	Quantity
Standard Control <ul style="list-style-type: none"> Control of the various operations of the indoor unit by wired or wireless remote controller. Cooling or heating mode of the outdoor unit is decided by the first priority of the remote controller. 	Wired remote controller CZ-RTC4 / CZ-RTC5B Wireless remote controller + Receiver CZ-RWS3 (Wall Mounted/ Mini Cassette) CZ-RWS3 + CZ-RWRU3 (4-WAY Cassette) CZ-RWS3 + CZ-RWRT3 (Under Ceiling) CZ-RWS3 + CZ-RWRC3 (All split type)	1 unit each
(1) Group control <ul style="list-style-type: none"> Batch remote control on all indoor units. Operation of all indoor cells in the same mode. Up to 8 units can be connected. The sensor is the body sensor, and thermostat ON/OFF setting in regard to the temperature set by the remote controller is possible for each indoor unit. 	Wired remote controller CZ-RTC4 / CZ-RTC5B Wireless remote controller + Receiver CZ-RWS3 (Wall Mounted/ Mini Cassette) CZ-RWS3 + CZ-RWRU3 (4-WAY Cassette) CZ-RWS3 + CZ-RWRT3 (Under Ceiling) CZ-RWS3 + CZ-RWRC3 (All split type)	As required
(2) Main/sub remote control <ul style="list-style-type: none"> Max 2 remote controllers per indoor unit, (Main remote controller can be connected) The button pressed last has priority. Timer setting is possible even with the sub remote controller. When using ECONAVI sensor, only one remote controller is possible to connect at indoor unit. 	Main or sub Wired remote controller CZ-RTC4 / CZ-RTC5B Wireless remote controller + Receiver CZ-RWS3 (Wall Mounted/ Mini Cassette) CZ-RWS3 + CZ-RWRU3 (4-WAY Cassette) CZ-RWS3 + CZ-RWRT3 (Under Ceiling) CZ-RWS3 + CZ-RWRC3 (All split type)	As required

SYSTEM EXAMPLE



Deluxe wired remote controller (CZ-RTC5B)



Energy Saving

- ECONAVI on/ off*
- Temperature Auto Return
- Temperature Setting Range
- Auto Shutoff
- Schedule peak cut
- Repeat off timer

Backup control by using CZ-RTC5B
 Group wiring of 2 systems of PAC
 can do auto individual control

- Rotation operation
- Backup operation
- Support operation

Basic Operation

- Individual Louver Control (Lock individual flap for 4-WAY cassette)
- ON/ OFF timer
- Weekly Timer
- Filter information*
- Outing function
- Quiet operation mode*
- Power consumption monitor*
- Energy saving*
- Initial settings
- Ventilation
- nanoeX*

Maintenance Function

- Outdoor unit error data
- Service Contact address
- RC setting mode
- Test Run
- Sensor Information*
- Service check
- Simple/ Detailed Settings
- Auto address

* Subject to the connected model

Timer remote controller (CZ-RTC4)



Dimensions
 H 120 x W 120 x D 20 mm

Basic remote controller ON/OFF

- Operation mode changeover (Cooling, Heating, Dry, Auto, Fan).
- Temperature setting (Cooling/Dry: 18-30 °C Heating: 16-30 °C).
- Fan speed setting H/ M/ L and Auto.
- Air flow direction adjustment.
- ECONAVI on/ off*

Time Function 24 hours real time clock

- Day of the week indicator.

Weekly Programme Function

- A maximum of 6 settings/day and 42 settings/week can be programmed.

Outing Function

- This function can prevent the room temperature from dropping or rising when the occupants are out for a long time.

Sleeping Function

- This function controls the room temperature for comfortable sleeping.

Maximum 8 indoor units can be controlled from one remote controller

Remote control by main remote controller and sub controller is possible

Maximum 2 remote controllers (main remote controller and sub controller) can be installed for one indoor unit.

* Depending on the model, some menus cannot be used.

Wireless remote controller



For 4-WAY Cassette type CZ-RWS3 +CZ-RWRU3

Remote control by main remote controller and sub controller is possible

- Maximum 2 remote controllers (main remote controller and sub controller) can be installed for one indoor unit.

When CZ-RWS3+CZ-RWRC3 is used, wireless control becomes possible for all indoor units

- When a separate receiver is set up in a different room, control from that room also becomes possible.
- Automatic operation by means of the emergency operation button is possible even when the remote controller has been lost or the batteries have been exhausted.

In addition, there are other functions such as temperature setting, operation switching, wind direction/fan speed setting, etc

Ventilation independent operation is possible

When commercial ventilation fans or heat-exchange ventilation fans have been installed, they can be operated with this remote control (interlocked operation with the indoor unit or independent ventilation ON/OFF).



For all Ducted types CZ-RWS3 +CZ-RWRC3



For Under Ceiling type CZ-RWS3 +CZ-RWRT3

Wired remote controller (CZ-RD52CP)



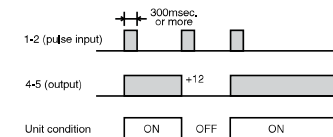
T10 Terminal for External Control (Digital Connection)

Connecting an indoor unit to an external device is easy. The T10 Terminal featured in the electronic circuit board of all indoor units enables digital connection to external devices,



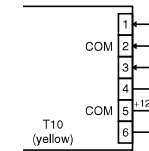
1. T10 Terminal Specification (T10:CN061 at indoor unit PCB)

- Control items: 1. Start/stop input
2. Remote controller prohibit input
3. Start signal output
4. Alarm signal output



NOTE: The wire length from indoor unit to the Relay must be within 2.0m. Pulse signal changeable to static with JP cutting. (Refer to JP001)

• Example of wiring



Condition

- 1, 1-2 (Pulse input): Unit ON/OFF condition switching with a pulse signal. (1 pulse signal: shortage status more than 300msec, or more)
- 2, 2-3 (Static input): Open/ Operation with Remote is permitted, (Normal condition) Close/ Remote controller is prohibited.
- 3, 4-5 (Static output): 12V output during the unit ON, / No output at OFF.
- 4, 5-6 (Static output): 12V output when some errors occur / No output at normal.

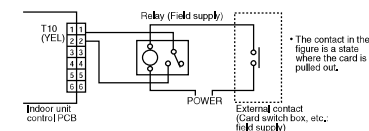
2. Usage Example

Forced OFF control

• Condition

1-2 (Static input): Close/ Operation with Remote is permitted. (Normal condition) Open/ Unit is forcibly OFF and Remote controller operation is prohibited.

• Example of wiring



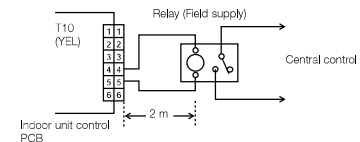
NOTE: The wire length from indoor unit to the Relay must be within 2.0m

Operation ON/OFF signal output

• Condition

4-5 (Static output): 12V output during the unit ON / No output at OFF

• Example of wiring



NOTE: The wire length from indoor unit to the Relay must be within 2.0m. Pulse signal changeable to static with JP cutting. (Refer to JP001)

ECONAVI

Reducing inefficient air conditioning

Providing outstanding energy-saving performance, Panasonic's large capacity air conditioners can be connected to ECONAVI to detect when energy is being wasted. ECONAVI senses the presence or absence of people and the level of activity in each area of a room. When unnecessary heating or cooling is detected, indoor units are individually controlled to match room conditions for energy-saving operation.



ECONAVI Sensor CZ-CENSC1
Applicable to all 5-types of indoor units*
* Except 18,0 - 22,4kW models

How 2 sensors work for human detection



Detection of the level of activity enables optimum power saving

Presence or absence of people and the level of activity in the room are detected in real time. Set temperature is automatically adjusted to optimise the power consumption.



Sensors are remotely located to maximise the energy-saving effect

When sensors are built into the indoor unit, pillars, walls, cabinets and other fittings can obstruct the sensors, reducing the area of detection and lowering the energy-saving effect. Panasonic sensors can be located any where in the room which enables the optimum layout for sensors in any location.

Case study at coffee shop



In the morning
Reduced cooling when there are fewer people.

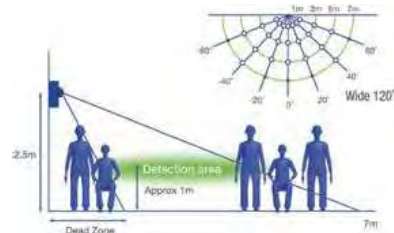


In the afternoon
Thorough cooling when there is a high level of activity.



At night
Automatic Thermo Off depending on conditions at the end of the day.

Wide detection area

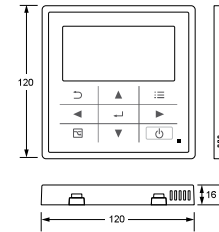


A sensor is remotely set to maximise the detection area.

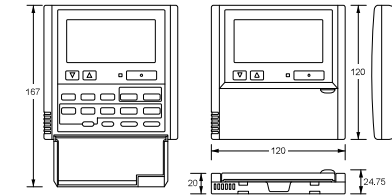
Installation flexibility for indoor unit layout changes.

Remote Controller External Dimensions

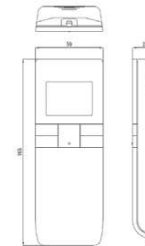
DELUXE WIRED REMOTE CONTROLLER (CZ-RTC5B)



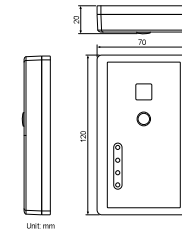
TIMER REMOTE CONTROLLER (CZ-RTC4)



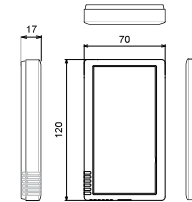
WIRELESS REMOTE CONTROLLER (CZ-RWS3)



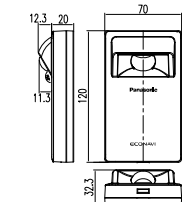
SEPARATE RECEIVER FOR WIRELESS REMOTE CONTROLLER (CZ-RWRC3)



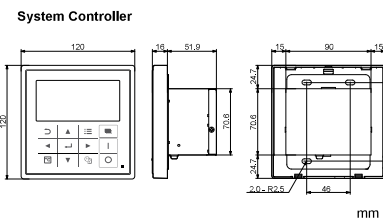
REMOTE SENSOR (CZ-CSRC3)



ECONAVI SENSOR (CZ-CENSC1)



SYSTEM CONTROLLER (CZ-64ESMC3)



Switch Box

