NEXUS ZONE CONTROL BOX Installation and Commissioning Guide

Model: WZC-01



IMPORTANT NOTE:

Please read this manual carefully before installing or operating your zone control box. Please keep this manual for future reference.



NOTE:

- This document highlights potential hazards that can be incurred through the installation process.
- Please read this document to ensure correct installation.
- All pictures are for illustration purposes only, your product may have differences to what is being shown.

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01. Safety Precautions

- Please entrust a professional to install the unit
- Improper installation or installation by other persons may lead to imperfect installation, electric shock, or fire.
- Adhere to this installation manual.
- Do not uninstall the unit randomly. Random uninstallation may lead to abnormal operation, heating or fire of the air conditioner, and damage to the zone system.
- Reinstallation and uninstallation must be performed by professionals.

- Carry out voltage testing before commencement of works. Improper test and tag can result in contact with Voltage.
- Assess the mounting surface for internal cables and pipes before carrying out work
- Consider Actron's installation requirements along with AS/NZS 3000 when carrying out works to this system
- The wiring diagram and layout is not to be modified under any circumstance.
- Ensure interconnecting cable and enclosure are installed in accordance to AS/NZS 3000
- Redundant dot point
- Water and debris ingress can damage the product, and will be hazardous
- Ensure surfaces are clean and appropriate PPE is worn before commencing works.

NOTE

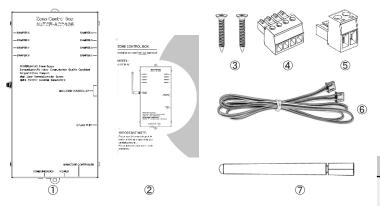
- The wiring should adapt to the zone control box current. Otherwise, electric leakage or heating may occur and result in fire.
- The specified cables shall be applied in the wiring. No external force may be applied to the terminal. Otherwise, wire ut and heating may occur and result in fire.
- Ensure that cable size and type adhere to AS/NZS 3000
- Do not apply excess force to the enclosure, such as using an impact drill as this may damage the cable insulation resulting in damage to the system and or installer

02. Installation accessories

02.01. Preparation before installation

Ensure that your zone kit has the components listed bellow.

No.	Name [Remark]	Qty.
1	Zone control box	1
2	Installation and Set-up Manual	1
3	Screws [CM 3.5*25 (For Mounting on the wall)]	2
4	4 wire communication terminal	1
5	Power cable terminal	1
6	Communicate cable (4 wires 6 m)	1
\bigcirc	Antenna	1



NOTE

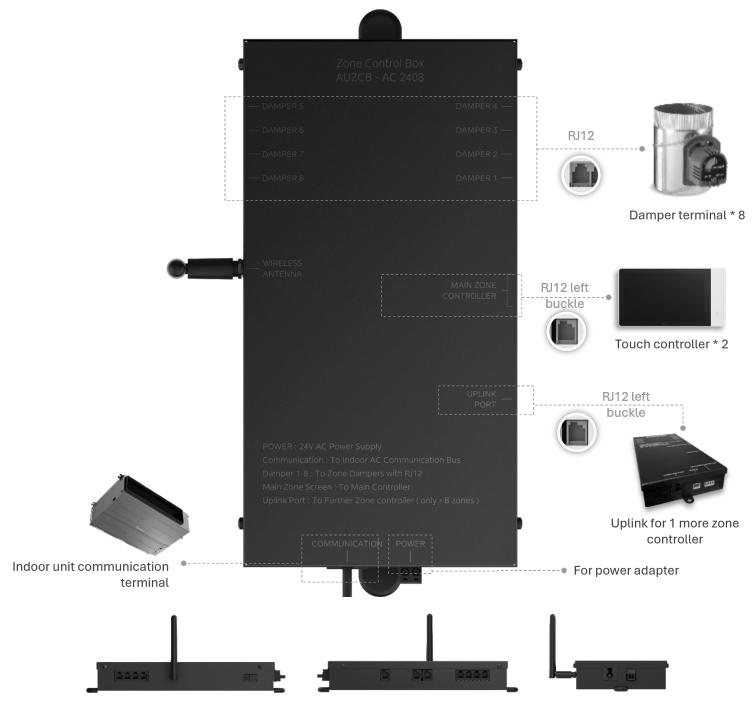
Installer will require tools to mount the control box based on mounting location.

02.02. Select the installation location

NOTE

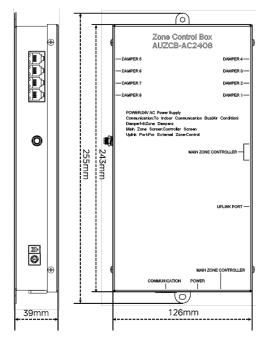
- Control Box to be installed out of reach of consumer as there is a risk to contact with 240V.
- Control Box does not have an appropriate IP rating for installation in damp or wet environments. Additional protections may be required for these situations. (Refer to AS/NZS 3000).
- Control Box is not blast proof, and not suitable for gaseous or flammable environments .

03. Zone Control Box Overview



04. Installation method

04.01. Dimensions



04.02. 485 Commissioning

NOTE

For UltraSlim AS & CS series, wiring should be via the 4-wire communication (RS485) on the zone control box connected to HA/HB terminals on the indoor main Board

04.02.01. Remove the upper cover of the zone control box.

Remove 4 screws from the zone control box to remove the lid.

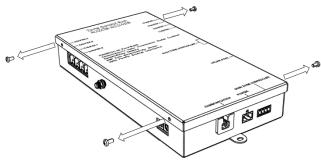
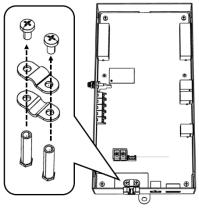


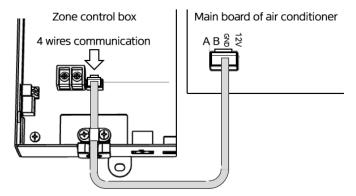
Fig 3.2.1

04.02.02. Remove the metal clip.



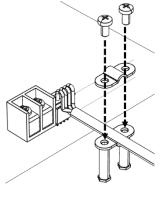






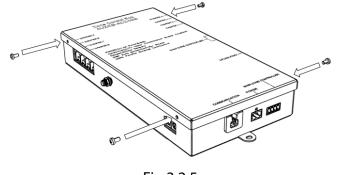


04.02.04. Reinstall the metal clip to fasten the communication wires.





04.02.05. Reinstall the upper cover of the zone control box.

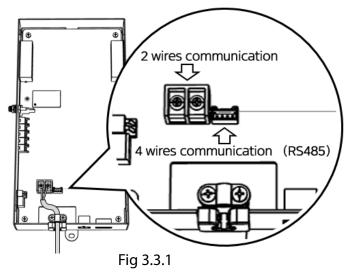


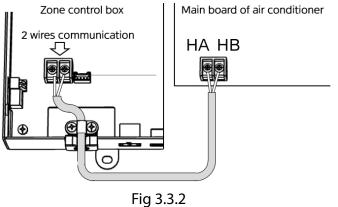


04.03. HA/HB Commissioning

NOTE

- The control box is pre-wired for the HA/HB wiring layout
- The wiring scheme for this control product will depend on whether the air conditioner can communicate through HA/ HB or 485A / 485B. Please refer to air conditioning system's wiring diagram.
- For ducted systems with HA/HB terminals on the main indoor board, please connect the 2-wire communication terminal and the HA/HB terminal with 2-wires (Fig 3.3.2)





04.04. Antenna Installation

Install the antenna to the wireless antenna base as shown in Fig 3.4.1.

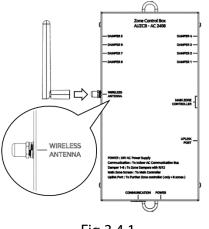


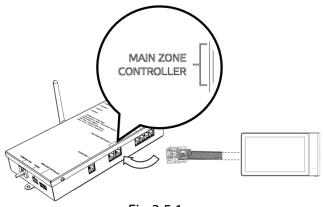
Fig 3.4.1

04.05. Zone connections

NOTE

• If the communication cable is found to be faulty, please replace it.

Use the RJ12 6P6C (left buckle) cable to connect the main controller.





04.06. Damper connections

Use the RJ12 6P6C cable to connect dampers.

NOTE

RJ12 cables are sold separately from ActronAir (4070-035)

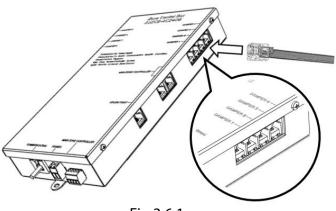


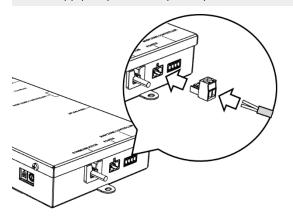
Fig 3.6.1

04.07. Connect the power supply adapter

Use the power cable terminal to connect the power supply adapter and the zone control box. The main active feed from the transformer is to be connected at the power terminal using the supplied plug base.

NOTE

Power supply adaptor sold separately from ActronAir (WPS-01)



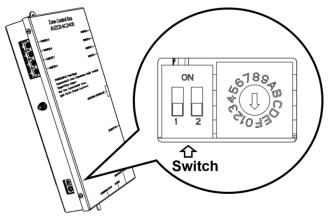
05. Master and Slave zone box

05.01. Switch setting

NOTE

- If you require more then 8 zones, a second control box can be added.
- Using the below dip switches, the two boards must be set as master and slave
- The zone control box and touch controller connected should be set up with the same designation either both as master or both as slave.

The above mentioned dip switches can be found on the control board as shown bellow. (Fig 4.1.1)





Master dip switch settings. (Fig 4.1.2)

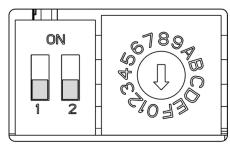


Fig 4.1.2

Slave dip switch settings. (Fig 4.1.3)

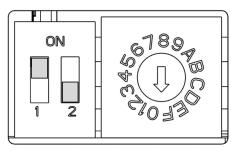


Fig 4.1.3

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