

WALL CONTROL

Installation Instructions



Control Interface Model Number

CL01-2W (White)

CL01-2G (Grey)

AVAILABLE AS AN OPTIONAL ACCESSORY
FOR TRI-CAPACITY MODELS ONLY

IMPORTANT NOTE:

Please read this manual carefully before installing or operating your air conditioning unit.

That's better. That's Actron.



Table of Contents

01. Safety Precautions	3
02. Specifications	3
03. Installation	3
04. Wiring Diagram	5
05. Assigning Sensor	6

01. Safety Precautions

1. Read all instructions in this manual before operating the air conditioning unit. Failure to do so may result in damage to the unit and void your warranty.
2. Turn off the power supply to the unit and follow necessary Lock Out & Tag Out procedures to ensure that power supply is not re-energised accidentally.
3. This control interface has power supply from ActronAir CM100 controller via screwed terminals and twisted pair data cable. Ensure that this unit is not installed on voltages other than specified.
4. Make sure that the unit installation complies with all relevant council regulations and building code standards. All electrical wiring must be in accordance with current electrical authority regulations and all wiring connection must follow the electrical diagrams provided.
5. WH&S rules and regulations must be observed and will take precedence during installation process.
6. Only use this Control Interface with an ActronAir air conditioner as described in this installation guide.

02. Specifications

- Voltage: 12VDC +/- 10%
- Operating conditions: -10 to 60°C, < 90% RH non-condensing
- Storage conditions: -20 to 70°C, < 90% RH non-condensing
- Data: RS485 / 4 Core (2 Pair) Twisted Pair 7/0.20 (AWG24) Shielded Data Cable, Maximum Cable Length up to 200m

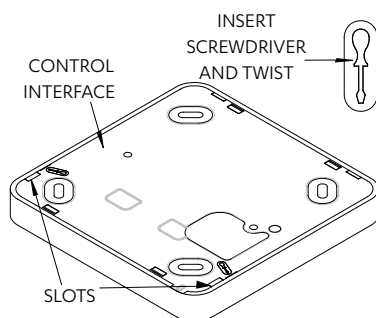
NOTE

Do not use ActronAir 4 Core Data Cable Part Numbers: 4070-003 / AMDC4 or Non-Twisted Pair multi core cable.

03. Installation

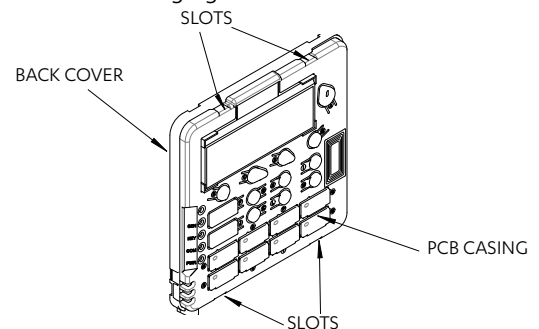
1. Remove front cover, as shown in the diagram below

- Insert and gently twist screwdriver into the slot at the side of the Control Interface. Do this procedure alternately between the two slots until the front of the control separates from the back cover.
- Use large enough flat blade screwdriver to fit into the slot in order to avoid damaging the Control Interface.



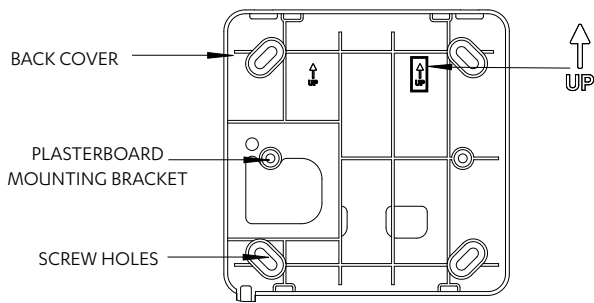
2. Remove back cover, as shown in the diagram below

- Insert and gently twist screwdriver into the slot at the top and the bottom of the Control Interface. Do this procedure alternately between the four slots until the back cover of the control separates.
- Use large enough flat blade screwdriver to fit into the slot in order to avoid damaging the Control Interface.



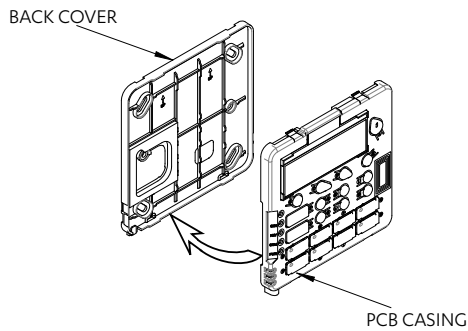
3. Mount back cover to the wall

- Mount the back cover to the wall with screws via screw holes. If required, the use of a plasterboard mounting bracket is recommended to mount the back cover to the wall.
- Ensure that the Control Interface back cover is aligned and leveled on the wall before tightening the screws.



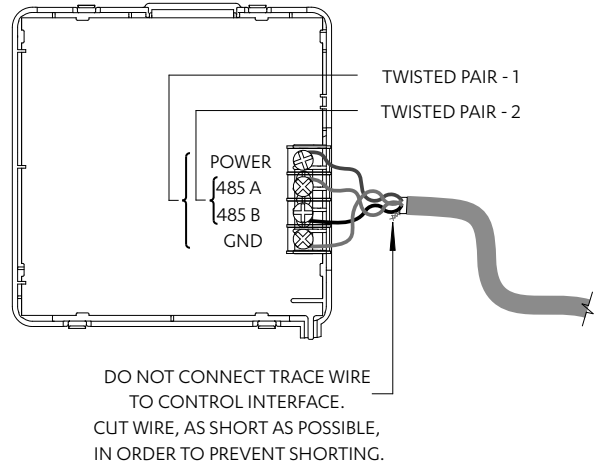
5. Attach PCB casing to the back cover

- Attach the PCB casing by aligning with the back cover mounted on the wall.
- Ensure the PCB casing makes a 'click' sound after mounting.



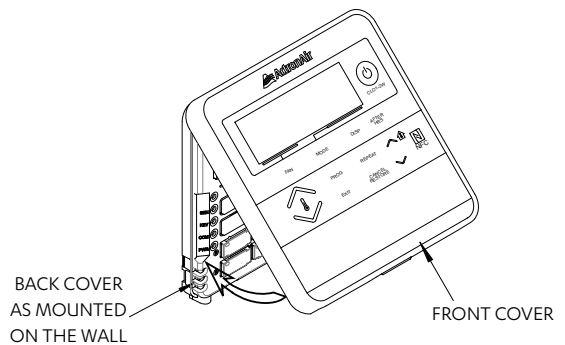
4. Connect wiring at the back of Control Interface

- Ensure that all wiring is tightly connected. All wiring must be in accordance with the provided wiring diagram.



6. Attach the front cover, as shown in the diagram below

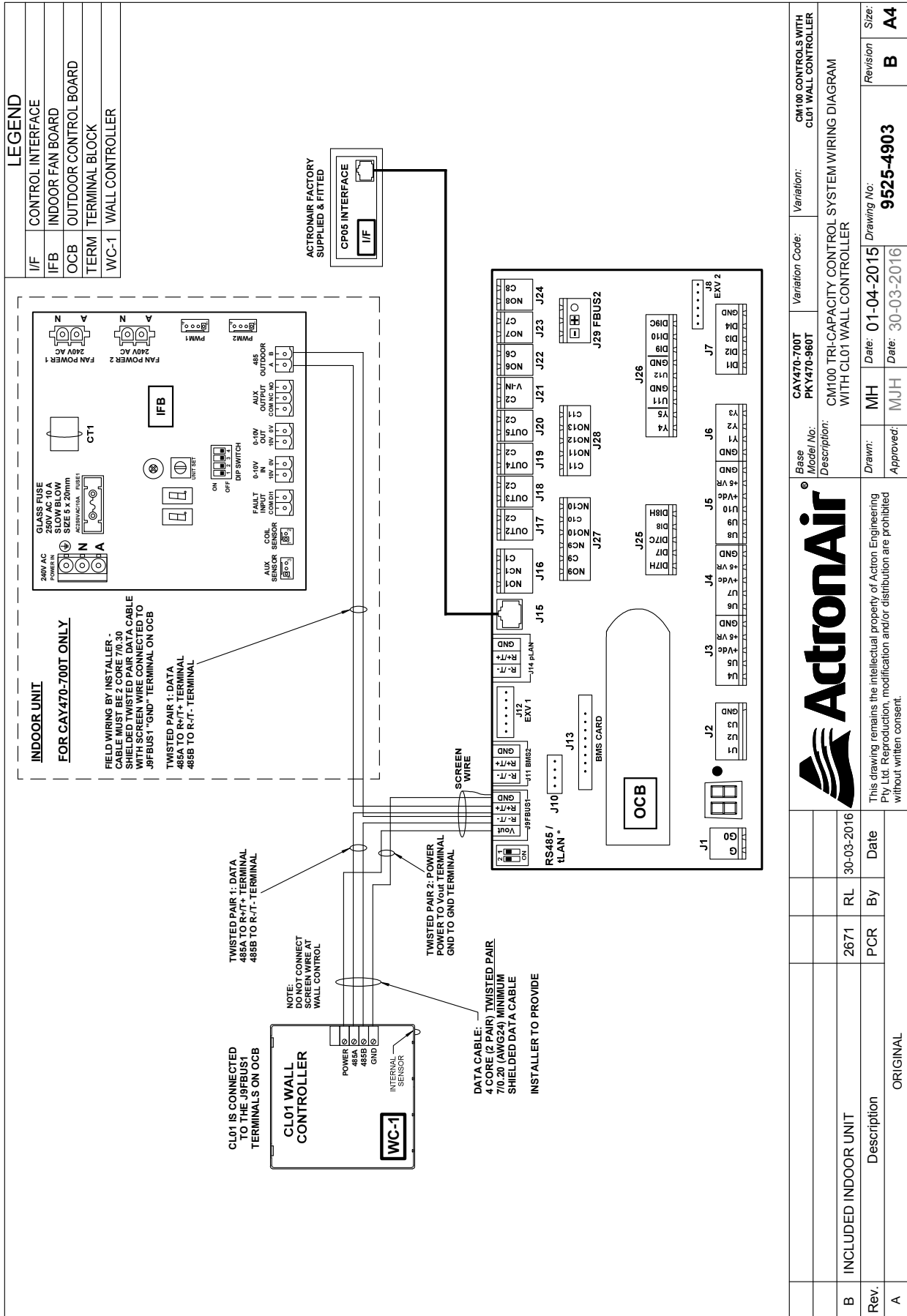
- After attaching the front cover, check that the Control Interface is aligned and leveled on the wall.



NOTE

Front cover can be removed even after installation. Press at the bottom of the control interface and pull the front cover.

04. Wiring Diagram



Base Model No:	CAY470-700T	Variation Code:	CM100 CONTROLS WITH CL01 WALL CONTROLLER
Description:	PKY470-980T	Description:	CM100 TRI-CAPACITY CONTROL SYSTEM WIRING DIAGRAM WITH CL01 WALL CONTROLLER
Drawn:	MH	Date:	01-04-2015
Approved:	MJH	Date:	30-03-2016
Revision	B	Drawing No:	9525-4903
Size:	A4		

Rev.	2671	By	PCR	Date	30-03-2016
A					
ORIGINAL					

Important Notes for Return Air Temperature Sensor

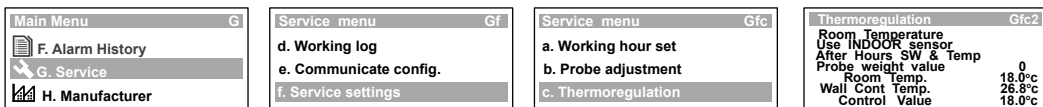
- SPLIT DUCTED UNITS (CAY/EVY or ELY)**
 Leave the factory fitted Return Air Temperature Sensor in place. If disconnected, a fault will be registered and displayed in the screen. See the Split System Installation Guide, **Air Temperature Setup** for more details.
- PACKAGE UNITS (PKY)**
 You must connect the factory supplied Return Air Temperature Sensor. If not connected, a fault will be registered and displayed in the screen. Please refer to wiring diagram provided with your unit. See the Split System Installation Guide, **Air Temperature Setup** for more details.
- Follow the steps for assigning sensors, below, for the weighting of influence for both the return air temperature sensor and the built-in CL01-2 sensor. Note that the Control Interface displays shown below are for Split Ducted Units, these are for illustration purposes only. Displays for Package Units are without **Use INDOOR sensor** parameter.

05. Assigning Sensor

The CL01-2 Control Interface built-in sensor can be used to read your room temperature in combination with the return air temperature sensor. This can be assigned via Service menu, as follows:

Service Menu → f. Service settings → c. Thermoregulation → Thermoregulation 02

Display Progression:



G. Service → f. Service settings → c. Thermoregulation → Thermoregulation 02

NOTE

Thermoregulation is under Service settings sub-level menu and password protected, enter the Service Password (7378) in order to access this sub-menu.

From **Thermoregulation 02** sub-level menu, you have the option to use 0% up to 100% CL01-2 sensor reading as follows:

Probe weight value	CL01-2 Sensor Reading	Room Air Temp Sensor Reading	Example Display * (CP05 / CP10)
0**	0%	100%	
40	40%	60%	
50	50%	50%	
100	100%	0%	

*** Legend:**

Room Temp. = Return Air Temp Sensor Reading
Wall Cont Temp. = CL01-2 Built -In Sensor Reading

NOTE

The Control Value is determined by the following example:

Control Value calculation at Probe weight value of 50%:

$$\begin{aligned} \text{Control Value} &= 50\% \text{ Room Temp} + 50\% \text{ Wall Cont Temp} \\ &= (0.5 \times 18.0) + (0.5 \times 26.8) \\ &= 9.0 + 13.4 \\ &= 22.4^\circ\text{C} \text{ (Displayed on CL01-2 as **INSIDE** temperature when } \wedge \uparrow \text{ button is pressed)} \end{aligned}$$

Important Note For Split Ducted Tri-Capacity Models:

By default, the Return Air Temperature Sensor is connected to the Indoor Board. As an option, this can be wired to the Outdoor Board which will require changing the sensor setting from **INDOOR sensor** to **OUTDOOR sensor** via Thermoregulation **Gfc2**, as shown on the right.

Thermoregulation		Gfc2
Room Temperature		
Use OUTDOOR sensor	←	
After Hours SW & Temp		
Probe weight value		50
Room Temp.		18.0°C
Wall Cont Temp.		26.8°C
Control Value		18.0°C

Change setting from **INDOOR sensor** to **OUTDOOR sensor**



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