

COMMERCIAL AIR CONDITIONING SYSTEM CONTROL INTERFACE

Operating 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.



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01. General Information

CONGRATULATIONS! The CL01-2 Control Interface is manufactured from the highest quality materials and designed to ensure years of satisfactory operation.

IN THIS MANUAL, You will find instructions on how to program and utilise the many advanced features this control interface has to offer. Please take time to familiarise yourself with all these features, apply their functions to suit your optimum comfort requirement and achieve energy cost savings at the same time. Thoroughly read this manual in order to ensure correct utilisation of your ActronAir air conditioner.

IMPORTANT NOTICE, ActronAir base the development of its air conditioning products on more than 30 years of experience in HVAC, sound and continuous investments in technological innovations and product improvements, advancement in manufacturing processes and quality control through 100% functional product testing. However, ActronAir cannot guarantee that all the aspects of the product and the software included with the product respond to the requirements of final application, despite the product being developed according to state of the art technology. The customer, both end user/specifier and installer, assume all liability and risks relating to the configuration of the product in order to reach the expected results in relation to the specific design and system installation. ActronAir, based on specific agreements, may be consulted for the positive commissioning, installation and application of the unit, however in no case does ActronAir accept liability for the correct operation of the final equipment/system.

Your ActronAir air conditioning unit is one of the most advanced and innovative products in the market. Its operation is specified in the technical documentation supplied with the product or which can be downloaded from our website: www.actronair.com.au. Your air conditioner requires set-up/configuration/programming in order to be able to operate in the best possible way to suit your requirement. Failure to complete such operations, may result in malfunction and/or damage to the unit, for which ActronAir accepts no liability.

Installation, commissioning and other technical services must only be carried out by a qualified technician. Ensure 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 connections to be as per electrical diagram provided. Always use appropriate PPE for your safety and protection. Make sure that any safety guards and covers are always firmly secured and not damaged. WH&S rules and regulations must be observed at all times and will take precedence during installation process and operation of the unit.

In addition, the following instructions must be observed:

- Prevent the electrical components and electronic circuits from getting wet.
- Do not install the controlling devices in hot environments as extreme temperatures may damage the electronic equipment.
- Do not attempt to open the controller and other electronic devices in any way other than described in this manual.
- Do not drop, shake or hit the devices, which can cause irreparable damage to its internal circuits and mechanisms.
- Do not use corrosive chemicals, solvents or other aggressive detergents to clean the unit and the control interface.
- Do not use the unit for applications other than those specified in the technical manual.
- Do not install the unit in environment with highly flammable, combustible and/or explosive articles and materials.
- This control interface must be installed in a location that complies with the temperature and humidity limits specified in this manual.

ActronAir is constantly seeking ways to improve the design of its products, therefore specifications are subject to change without prior notice. Please check with ActronAir Service Department on toll free number: **1800 119 229**.

SPECIFICATIONS:

- Voltage: 20VDC ($\pm 10\%$)
- Data: RS485 4 Core (2 Pair) Twisted Pair 7/0.20 (AWG24) Shielded Data Cable.
- Storage conditions: -20 to 70°C, < 90% RH non-condensing
- Operating conditions: -10 to 60°C, < 90% RH non-condensing

NOTE

Do not use ActronAir 4 Core Data Cable Part No. 4070-003.

02. Waste Electrical and Electronic Equipment Disposal Guidelines



1. Do not dispose off the waste electrical and electronic equipment with local council waste. These must be disposed off through the council designated hazardous waste collection centre.
2. The equipment may contain hazardous substances, improper or incorrect disposal may have a negative effect on human health and on the environment.

03. Maintenance

1. Keep the control interface clean with the use of a soft dry cloth only. If a cleaning solution is needed, use a very mild soap solution to dampen the cloth. Do not spray or squirt any liquid onto your control interface.
2. Do not use solvent base cleaner, which can cause damage to the control interface.
3. When cleaning, be careful not to accidentally press any buttons, TURN-OFF the unit to ensure that no adverse unit operation is initiated by accidentally pressing any buttons.
4. Be careful not to press hard into the display screen, as it may get damaged.
5. Ensure that the temperature sensor is always clean and free of dust or dirt build-up to maintain sensor accuracy.
6. Do not pull apart or attempt to service the control interface, should you need service to the device, contact ActronAir Service Department on **1800 119 229**.

04. 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 sound Lock Out and Tag Out procedures to ensure that power supply is not re-energised accidentally.
3. Beware of EC Motors with high power capacitors and which can have dangerous voltages at terminals for up to 5 min. after main power has been isolated. Wait at least 5 minutes after power isolation and test for high voltage before performing service work.
4. EC Plug Fan has dual power supplies, i.e. 415V/3Ph+N/50Hz motor power supply plus 10VDC control power supply. Care must be taken to ensure both are safely isolated to prevent personal injury and damage to the equipment.
5. This control interface has power supplied from ActronAir CM100 controller via screwed terminals and twisted pair data cable, with nominal voltage of 20VDC (+10%). Ensure that this unit is not installed on voltages other than specified.
6. Installation and servicing must be carried out by a qualified technician.
7. Ensure that the unit installation complies with relevant council regulations and building code standards. All electrical wiring must be in accordance with current electrical authority regulations and all wiring should follow the electrical diagrams provided.
8. WH&S rules and regulations must be observed and will take precedence during installation process.
9. Only use this control interface with an ActronAir air conditioner as described in this operating manual.

05. Operational Precautions

ACCESS PANELS AND GUARDS: NEVER remove any access panels or guards as this could cause injury from electric shock and burns from extremely hot components. Never allow any bodily parts such as fingers or objects to protrude through the fan guards or any other opening as they could cause personal injury and damage the air conditioner.

SUPERVISION OF CHILDREN AND INFIRM PERSONS: This appliance is not intended for use by young children or infirm persons unless they have been adequately supervised by a responsible person to ensure that they can use the appliance safely. Young children should be supervised to ensure that they do not play with the appliance.




RETURN AIR FILTER: The air conditioner must never be operated without a return air filter as this will cause a build up of dust and other contaminants on the indoor coil. This is very difficult to clean and causes the system to operate inefficiently or even fail.

CRANKCASE HEATER PRECAUTION: The main power (Outside switch board) to the system must be kept On at all times to prevent damage to the outdoor compressor unit. Should the main power be disconnected or interrupted for 6 hours or longer, then no attempt should be made to start the system for 2 hours after the power has been restored to outdoor unit. This allows the compressor to warm up, and remove any liquid refrigerant that may cause damage.

06. System Information

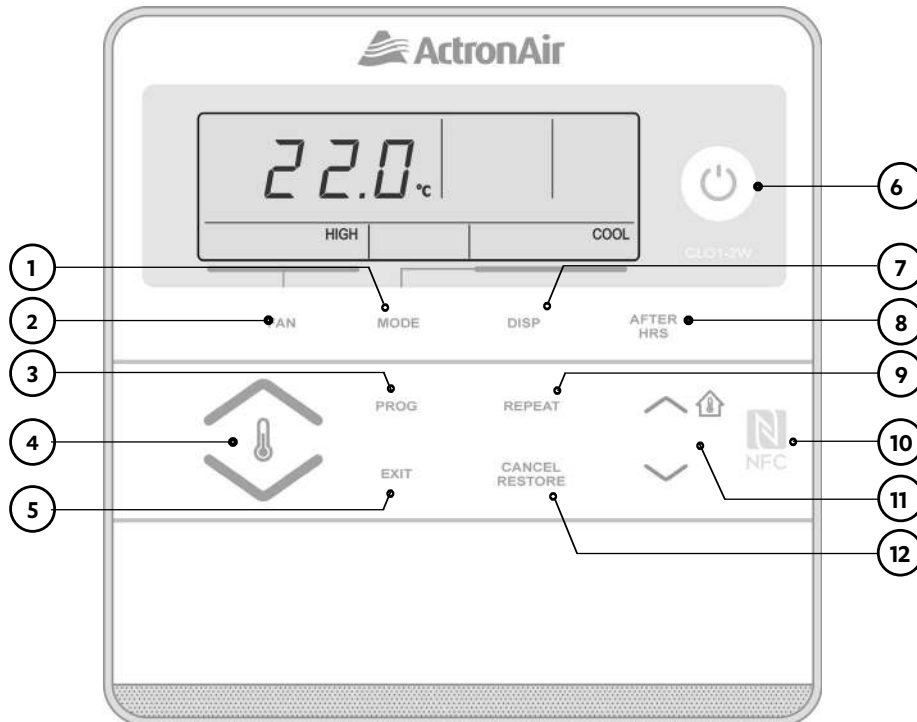
AIR CONDITIONER	
Model No.	
Serial No.	
The air conditioner model and serial number is situated on the access panel of the outdoor unit bottom left corner.	
WALL CONTROLLER	
Model No.	
The wall controller model number is situated in front of the wall controller.	
INSTALLER	
Company Name	
Phone Number	
Technicians Name	




07. Features

1	<p>LCD Display The LCD displays the system mode, operation status and error codes. The LCD has a capability to enable and disable the backlight. This is useful during night time or in areas with poor lighting condition. In addition, the brightness of the LCD backlight is easily adjustable.</p>
2	<p>Saves the Last Settings During Power Failure The controller will automatically reinstate the air conditioner to the previous settings after power failure.</p>
3	<p>7-Day/Programmable Time Clock with 2 Events per day The controller, through the 7-Day programmable time clock function can be programmed for each day of the week to turn your air conditioner On/Off. Each day can have two programmed events, wherein each event has On and Off time.</p>
4	<p>After Hours Timer Dedicated After Hours timer button available. This is useful when the system is required to start outside the pre-programmed time clock.</p>
5	<p>Adjustable Upper and Lower Limits and Lockable Set Temperature The default operating range is factory set at 16°C to 30°C. This range can be narrowed for better efficiency, however it is not advisable to operate the system beyond the factory set operating range as it can be detrimental to the system. The chosen setpoint can also be locked if required.</p>
6	<p>Averaging Temperature Readings The built-in temperature sensor can be used together with the factory supplied return air temperature sensor to average the building temperature readings. The CL01-2 can be located further away from the return air temperature sensor for improved temperature control.</p>
7	<p>Inside Temperature Display with One Touch Simply press the   button and the current building temperature will be displayed for 10 seconds.</p>
8	<p>Outside Temperature Display with One Touch Simply press the  button and the outside temperature will be displayed for 10 seconds.</p>
9	<p>Programmable Temperature Setback Function Temperature setback is useful in unoccupied times or during the night to maintain a maximum or minimum room temperature.</p>
10	<p>Self Diagnostic Alarm and Fault Display In the unlikely event that a fault develops with the air conditioner the microprocessor will diagnose the fault (where possible) and display a fault code on the wall controller.</p>
11	<p>Return Air Filter Alarm Indication This is a time based alarm control, which is used to indicate when the filters will need to be checked for cleaning or replacement. The controller will not stop the air conditioning system from operation, but will just indicate a warning alarm.</p>

08. Basic Operation

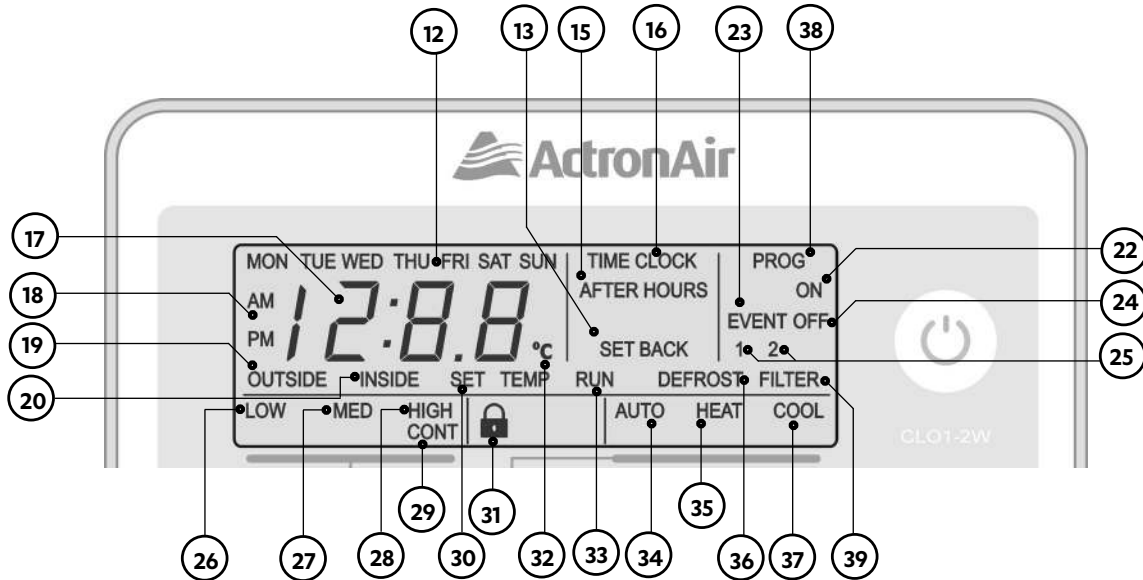
08.01. Control Interface Functions



- | | |
|---|--|
| <p>① Operation Mode button
Selects Auto/Heat/Cool Modes.</p> <p>② Fan Control button
Changes fan speed : High, Medium,Low (For Optional 3-Speed Fan only).
Selects continuous and non continuous fan operation.</p> <p>③ Program button
Sets the Clock and 7-Day Time Clock Events.</p> <p>④ Temp Setpoint Adjustment button
Raises and lowers temperature setpoint.
Also use to scroll Up or Down menu.</p> <p>⑤ Exit button
Quick exit from programming menu.</p> <p>⑥ Power ON/OFF button
To turn the system ON/OFF.</p> <p>⑦ Display button
Displays the temperature setpoint, current room temperature or current day and time.</p> | <p>⑧ After Hours button
To activate After Hours function.</p> <p>⑨ Repeat button
Repeats the previous settings for the current day time clock settings.</p> <p>⑩ NFC Tag</p> <p>⑪ Select Up/Down buttons
To adjust backlight level, time and day.
To select set back operating mode and temperature upper/lower limits. Also,
   : Displays building temperature
  : Displays outside temperature</p> <p>⑫ Cancel/Restore button
Cancel or restore time clock events.</p> |
|---|--|

NOTE

The Wall Controller must be turned On before operating this procedure.



- 12 Day Indicator**
Display the day of the week when the time is shown and which day is selected for programming.
- 13 Set Back**
Illuminates when set back is active.
- 14 Reserve**
- 15 After hours**
Illuminates when After Hours is enabled.
- 16 Time Clock Indicator**
- 17 Timer/Clock and Room/Setpoint Temperature Indicator**
Displays the setpoint and current room temperatures, current time, count down timer times and event times
- 18 AM/PM Indicator**
- 19 Outside Temperature Indicator**
Indicates outside temperature reading.
- 20 Inside Room Temperature Indicator**
Flashes to indicate current room temperature reading.
- 21 Reserve**
- 22 On Indicator**
- 23 Event Indicator**
Indicates which event of the day Time Clock is set.
- 24 Off Indicator**
- 25 1 and 2 Indicator**
Illuminates together with Event to show the programming event.
- 26 Low Speed Fan Indicator ***
- 27 Medium Speed Fan Indicator ***
- 28 High Speed Fan Indicator ***
*** Medium Speed**
(Default 1-Speed Fan Indicator)
Low/Medium/High Speed
(Applicable to Optional 3-Speed Fan only)
- 29 Continuous Indicator**
Illuminates when fan is set to continuous mode of operation.
- 30 Set Indicator**
Illuminates during time and time clock setting adjustments
- 31 Lock Symbol**
Shows when Turning On/Off backlight and during adjustments. Also indicates when keypad is locked.
- 32 Degree Centigrade Indicator**
Flashes to indicate current room temp/outside temp reading. Turns On when **SETPOINT** is being displayed.
- 33 Run Indicator**
Indicates the outdoor unit is in operation, flashes if on delay.
- 34 Auto Indicator**
Indicates the system will automatically select cooling or heating operation.
- 35 Heating Operation Indicator**
- 36 Defrost Indicator**
- 37 Cooling Operation Indicator**
- 38 Program Indicator**
- 39 Filter Indicator**

09. Turning Air Conditioner On/Off

NOTES

- The air conditioning system will re-start on your last setting and operating mode, i.e. 22°C set temperature, Auto, Cool or Heat mode.
- The display will show the Set Temperature, Fan Speed, Fan Mode and Mode of Operation.





09.01. Turning On and Off Air Conditioner

1. Press the  button once to turn it On and press the  button once again to turn it Off.







09.02. Setting Room Temperature Setpoint



Setpoint Temperature


Set the desired temperature by pressing either the  or  buttons.

NOTES


- Maximum temperature setting is 30°C.
- Minimum temperature setting is 16°C.
- For a WARMER room temperature, press the  button.
- For a COOLER room temperature, press the  button.
- Press and hold the  or  buttons will increase or decrease the temperature increment by 1.0°C.
- Pressing the  or  buttons will increase or decrease the temperature by 0.1°C, otherwise 1.0°C increments if the button is pressed and held.

09.03. Viewing Building /Outside Temperature

To View Inside Building Temperature

Press the  button to view your inside building temperature.






To View Outside Temperature

Press the  button to view your outside building temperature.


09.04. Backlight




To Adjust The Level Of LCD Backlight Brightness

1. Press and hold the **REPEAT** button, then press the  or  buttons to adjust the backlight level as follows:
 - To brighten the backlight press the  button.
 - To darken the backlight press the  button.
2. Release the buttons at the desired level of LCD brightness and the  symbol will appear for 3 seconds indicating the backlight level is set.

To Turn-On LCD Backlight

Press and hold the **REPEAT** button for 4 seconds. When the  symbol appear on the LCD, release the **REPEAT** button, the backlight will remain On.




To Turn-Off LCD Backlight

Press and hold the **REPEAT** button for 4 seconds. When the  symbol appear on the LCD, release the **REPEAT** button, the backlight will turn Off after 15 seconds.




To Turn-On The button Backlight

NOTE

CL01-2 must be turned On before operating this procedure.

1. Press and hold the **REPEAT** button, then press and release the  button.
2. Release the **REPEAT** button, the  symbol will appear for 3 seconds and the  button backlight will remain On.



To Turn-Off The button Backlight

1. Press and hold the **REPEAT** button, then press and release the  button.
2. Release the **REPEAT** button, the  symbol will appear and the  button backlight will turn On after 15 seconds.



09.05. Cooling and Heating Operation

09.05.01. Cooling Operation



1. Make sure the CL01-2 is turned On.
2. Press the **MODE** button until **COOL** appears on the display.
3. Set the desired temperature by pressing either the  or  buttons.

NOTE

- Maximum temperature setting 30.
- Minimum temperature setting 16.
- For a WARMER room temperature, press the  button.
- For a COOLER room temperature, press the  button.



4. Adjust the desired Indoor Fan speed by pressing the **FAN** button.

NOTE



LOW, MED or **HIGH** Fan Speed can only be selected if 3-Speed Fan setting option is available. Otherwise only **MED** is available.

09.05.02. Heating Operation



1. Make sure the CL01-2 is turned On.
2. Press the **MODE** button until **HEAT** appears on the display.
3. Set the desired temperature by pressing either the  or  buttons.

NOTE

- Maximum temperature setting 30.
- Minimum temperature setting 16.
- For a WARMER room temperature, press the  button.
- For a COOLER room temperature, press the  button.

- Adjust the desired Indoor Fan speed by pressing the **FAN** button.

NOTE

LOW, MED or **HIGH** Fan Speed can only be selected if 3-Speed Fan setting option is available. Otherwise only **MED** is available.

IMPORTANT NOTE

When the system is On, the Indoor Fan can run continuously and is indicated by the **CONT** indicator on LCD. This is generally preferred during the Cooling Mode to ensure maximum air circulation. However, for units with optional Outside Air, Indoor Fan operation should be specifically set to satisfy your application requirements.




09.06. Auto and Fan Only Operation

09.06.01. Auto Operation





NOTE

Automatically changes between heating and cooling mode.

- Press the  button, to make sure the CL01-2 is turned On.
- Press the **MODE** button until **AUTO** appears on the display.
- Set the desired temperature by pressing either the  or  buttons.

NOTE

- Maximum temperature setting 30.
- Minimum temperature setting 16.
- For a **WARMER** room temperature, press the  button.
- For a **COOLER** room temperature, press the  button.

- Adjust the desired Indoor Fan speed by pressing the **FAN** button.

NOTE

LOW, MED or **HIGH** Fan Speed can only be selected if 3-Speed Fan setting option is available. Otherwise only **MED** is available.

09.06.02. Fan Only Operation



1. Make sure the system is Off.
2. For 1-Speed Fan, press the **FAN** button.

NOTE

If Fan Speed is locked to 1-Speed Fan, CL01-2 will only allow **MED** speed.

3. For 3-Speed Fan, adjust the Indoor Fan speed (**LOW**, **MED** and **HIGH**) by pressing the **FAN** button successively until you reach the desired speed.

NOTE

3-Speed Indoor Fan operation is an optional feature.

IMPORTANT NOTE

When the system is On, the Indoor Fan can run continuously and is indicated by the **CONT** indicator on LCD. This is generally preferred during the Cooling Mode to ensure maximum air circulation. However, for units with optional Outside Air, Indoor Fan operation should be specifically set to satisfy your application requirements.

09.07. Setting the Clock

The air conditioning system must be turned On before performing these procedures.



1. Press the **PROG** button 3 times. TIME indicator will be flashing together with the hour field, i.e. 10:00 AM.
2. Press the or buttons to adjust the hour. **AM/PM** will adjust after 12.
3. Press the **PROG** button to enter the hour. **TIME** indicator will be flashing together with the minute field.
4. Press the or buttons to adjust the minute.
5. Press the **PROG** button to enter the minute. Day indicator will be flashing, i.e. **MON**.
6. Press the or buttons to adjust the day.

7. Press the **PROG** button to enter the set time/day and then press **EXIT** button to exit the set up procedure.
8. Press the **DISPLAY** button to make sure that you set the time and day correctly.

NOTES

- Current Fan Speed and Mode of Operation will also be displayed in the screen.
- During a Power Failure, the clock will retain the time and day via the backup battery inside the system.

09.08. Setting the Upper and Lower Temperature Limits







NOTES

1. Default Upper and Lower Limits:
 - Upper: 30°C
 - Lower: 16°C
2. The air conditioning system must be turned Off before performing these procedures.





This feature allows you to set the upper and lower temperature limits on your Control Interface .This can be used in a variety of ways:

- You may want the maximum set-temp limited to 25°C and the minimum set- temp to 20°C, thus stopping anyone from setting the temperature too high or too low.
- You may want to lock the set-temp to 22°C to stop anyone else adjusting the set-temp up and down. To do this, simply adjust the upper and lower limit until they are the same.

09.08.01. Setting Lower Limit

1. Press the  button and then the  button. You must press the two buttons in quick succession. The display will now show the lower limit for 3 seconds and this is confirmed by flashing **LOW** indicator.
2. While the lower limit is displayed, use the  or  buttons to adjust the lower limit up or down. After 5 seconds the lower limit will be automatically accepted. You cannot adjust the lower limit above your current set-temperature.

09.08.02. Setting Upper Limit

1. Press the  button and then the  button. You must press the two buttons in quick succession. The display will now show the lower limit for 3 seconds and this is confirmed by flashing **HIGH** indicator.
2. While the upper limit is displayed, use the  or  buttons to adjust the lower limit up or down. After 5 seconds the lower limit will be automatically accepted. You cannot adjust the upper limit below your current set-temperature.

09.09. Temperature Set Back







Normally, the air conditioning system is turned Off at unoccupied times or at night. The building temperature can get quite hot (e.g. 30°C) or quite cold (e.g. 12°C). When you turn on the air conditioning system, it takes a long time to achieve a comfortable temperature (e.g. 23°C). The temperature set back feature will maintain the building temperature at pre-determined and reasonable temperature closer to your chosen set temperature (e.g. 23°C), thus giving you a big head start in achieving your comfortable temperature.



NOTE



The air conditioning system must be turned Off before performing these procedures.

09.09.01. Setting the Temperature Set Back

1. Press and hold the **FAN** button. Press the **PROG** button and release them altogether. Menu **01** will be displayed with **PROG** indicator flashing.
2. Press the  button repeatedly until menu number **06** is displayed.
3. Press the **PROG** button to enter menu **06**.
4. Press the  or  buttons to select **ON** (to enable Setback feature).
5. Press the **EXIT** button to enable Setback feature.
6. Press the  button to get into menu **07** and then the **PROG** button to enter menu **07**.
7. Press the  or  buttons to select set back operating mode, i.e.
 - Cool mode only: **COOL** indicator will be illuminated.
 - Heat mode only: **HEAT** indicator will be illuminated.
 - Auto mode: **COOL** and **HEAT** indicators will be illuminated.
 When Setback is disabled, **SETBACK** and **OFF** will be flashing.
8. Press the **PROG** button to accept selection.



NOTE

Current Cool mode set back temperature will be displayed, **SETBACK** and **COOL** indicators will be illuminated and **ON** indicator will be flashing.

9. Press the  or  buttons to set your desired Cool mode set back temperature.
10. Press the **PROG** button to lock-in your desired Cool mode setback temperature.

NOTE

Current Heat mode set back temperature will be displayed, **SETBACK** and **HEAT** indicators will be illuminated and **ON** indicator will be flashing.

11. Press the  or  buttons to set your desired Heat mode set back temperature.
12. Press the **PROG** button to lock-in your desired HEAT mode setback temperature. **SET BACK** indicator will be illuminated to confirm that set back is now active.
13. Press the **EXIT** button twice to go back to Main screen.

10. 7-Day Programmable Function

10.01. Time Clock Operation



NOTES

- The 7-Day Time Clock feature of the CL01-2 controller allows you to set the air conditioning system to turn on and turn off at different times for each day of the week.
- Each day can have 2-Programmed Events.
- Each event has an On and Off time.
- Ensure that the current day and time are set correctly before proceeding with programming.

Example Of Typical Time Clock Set Up

		MON	TUE	WED	THU	FRI	SAT	SUN
EVENT 1	On Time	6:00am	6:00am	6:00am	6:00am	6:00am	7:00am	8:00am
	Off Time	10:00am	10:00am	10:00am	10:00am	10:00am	9:00am	11:00am
EVENT 2	On Time	4:00pm	4:00pm	4:00pm	4:00pm	1:00pm	-:--	-:--
	Off Time	10:00pm	10:00pm	10:00pm	10:00pm	11:00pm	-:--	-:--

10.02. Setting the Programmable Time Clock

1. Press the **PROG** button repeatedly until you get into Time clock setting screen. **TIME CLOCK, PROG, ON, EVENT 1, MON** and **SET** indicators and Time Fields will be shown in the screen. You can now set the Event 1 ON time for Monday.
2. Use the or buttons to adjust the time.
3. Press the **PROG** button to move to Event 1 Off time.
4. Follow step 2 above.
5. Press the **PROG** button to move to the next event. Press the **EXIT** button at any time if no further changes to later Days/Events are required.
6. Repeat the above steps until you have programmed all the events you require.

NOTES

During a Power Failure, the clock will retain the time and day inside the system.

10.03. Repeating Day's Events and Times

This feature allows you to automatically repeat the previous days, events, and times, into the succeeding days, therefore eliminating the need to re-enter the events and times into the succeeding days.



1. Go to the day you wish to copy the programmed events and times. See Section 10.02. Setting the Programmable Time Clock.
2. Press the **PROG** button until you reach the day you wish to paste the copied programmed events and times. **SET**, **EVENT 1**, **TIME CLOCK** and **ON** will be illuminated in the screen.
3. Press the **REPEAT** button. You have now copied the previous day's events into the current day displayed.
4. Repeat steps 2 and 3 above for the remaining days where you wish to repeat the programmed events and times.

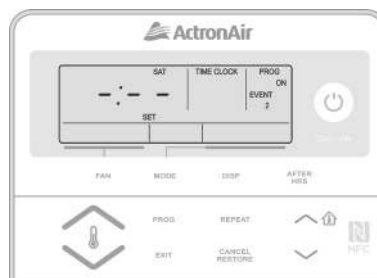
10.04. Programming Past Midnight

NOTES

- Event On times can be set up to 11:45 PM of the current day.
- Event Off times can be set to the following day up to 23 hours and 45 minutes after the On time.
- If you program Event 1 past midnight, Event 2 will be automatically cancelled.

10.05. Cancelling/Re-activating An Event

10.05.01. Cancelling An Individual Event



1. Press the **PROG** button repeatedly until the **ON** time for the event you wish to cancel is displayed.
2. Press and release the **CANCEL/RESTORE** button. **-:--** will be displayed indicating the event is cancelled.
3. Repeat step 2 above until you have cancelled all the desired events.

NOTES

- Cancelling Event 1 will cancel both Event 1 and Event 2.
- Cancelling Event 2 will only cancel Event 2.

10.05.02. Re-activating An Event




1. Press the **PROG** button repeatedly until the **ON** time for the event you wish to re-activate is displayed.
2. Press and release the **CANCEL/RESTORE** button. The event's **ON** time will be displayed indicating the event is re-activated.
3. Repeat step 2 above until you have re-activate all the cancelled events.

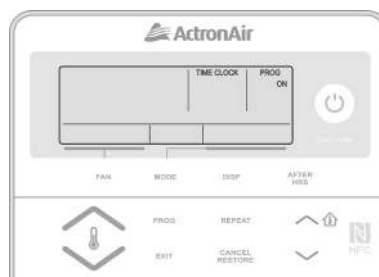
10.06. De-activating /Re-activating the 7-Day Time Clock

10.06.01. De-activating the 7-Day Time Clock




1. Press the **PROG** button 2 times. **TIME CLOCK** and **PROG** indicators will be illuminated in the screen and **ON** indicator will be flashing in the screen.
2. Press the  button. **TIME CLOCK** and **PROG** indicators are still illuminated. **OFF** indicator will be flashing in the screen, replacing **ON**.
3. Press the **EXIT** button. **TIME CLOCK** and **PROG** indicators will disappear from the screen, indicating that the Time Clock has been de-activated.

10.06.02. Re-activating the 7-Day Time Clock



1. Press the **PROG** button 2 times. **TIME CLOCK** and **PROG** indicators will be illuminated in the screen and **OFF** indicator will be flashing in the screen.

2. Press the  button. **TIME CLOCK** and **PROG** indicators are still illuminated. **ON** indicator will be flashing in the screen, replacing **OFF**.
3. Press the **EXIT** button. **TIME CLOCK** indicator will re-appear in the screen, indicating that the Time Clock has been re-activated.





11. After Hours

NOTES



- For the After Hours run timer to operate, the unit should be turned On (via CP05/CP10 Control Interface) and the Time Clock operation has to be enabled.
- If the After Hours run timer overlaps with the Time Clock start time, the unit will continue running with After Hours indicator displayed on the screen.
- If the After Hours run timer expires earlier than the current Time Clock, the unit will continue running to the end of the current Time Clock operation.



Turning-On After Hours Function

1. To start the air conditioner for a preset time outside of normal operating hours, Press the **AFTER HRS** button. **AFTER HOURS** indicator will appear and the **TIME CLOCK** indicator will be blinking. Alternatively, you can press the  button, if no scheduled event is On.
2. Press the   or  buttons to adjust the After Hours run timer duration. The After Hours run timer duration can be adjusted by 0.5 hour increment.
3. Press the **AFTER HRS** button to lock-in your desired After Hours run timer duration.

NOTES

- The screen will revert back to default display with **AFTER HOURS** indicator illuminated and the **TIME CLOCK** indicator will disappear.
- The air conditioning system will also turn back-on, after which it will turn-off at the completion of After Hours run timer duration.
- To cancel After Hours operation before the timer expiration, press the  button.
- The system saves the set After Hours timer. Simply press the **AFTER HRS** button (or the  button) to activate the After Hours in the future.





Important NOTES

- The After Hour default time is set to 2.0 hours.
- The user can adjust the setting from 0.5 hour (minimum) to 2.0 hours (maximum).
- Adjustments can be done in increments of 0.5 hour.


12. Filter timer



Setting The Filter Timer

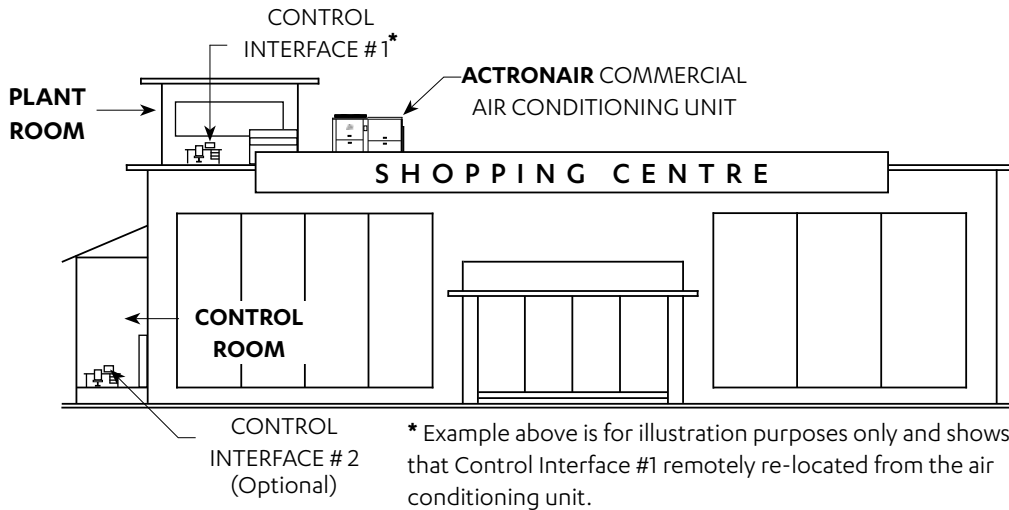
1. Press and hold the **FAN** button. Press the **PROG** button and release them altogether. Menu **01** will be displayed with **PROG** indicator flashing.
2. Press the  button repeatedly until menu number **03** is displayed.
3. Press the **PROG** button to enter menu **03**. Display will show the current filter run-hour timer. **TIMER**, **PROG** and **FILTER** indicators will be illuminated.
4. Press the   or  buttons to set your preferred filter run-hour timer. Timer can be set from 100 to 900 hours with time increments of 10 hours.
5. Press **EXIT** button twice to go back to Main screen.

Filter Notification Cancellation

Press the  button to reset Filter Notification.

13. Dual control operation

13.01. Mimic Control



Mimic Control Operation

- The air conditioning system can be operated from either of two control interfaces.
- Information displayed on the control interfaces are identical (Valid for CP05/CP10 only).
- Last control interface used has the priority.

Example 1:

Using Control Interface # 1, the cooling operation is started, both control interfaces will now show the system is in cooling mode. If another person uses Control Interface # 2 to select heating mode, the system will now change to heating operation and both controls will display that the system is in heating mode.

Example 2:

Using Control Interface # 2, the room setpoint temperature is set at 16.0°C, both control interfaces will now show that the room setpoint temperature is at 16.0°C. If another person uses Control Interface # 1 to change the setpoint temperature to 18.0°C, the system will now be operating at the new room setpoint temperature and both controls will display the same setpoint temperature.

NOTES

1. Only 1 CL01-2 Control Interface can be connected to each individual air conditioning unit.
2. CP05 Control Interface is factory supplied and fitted to outdoor unit/section electrical panel.

CONTROL INTERFACE COMPATIBILITY MATRIX FOR DUAL CONTROL		
Combination Options	Control Interface 1	Control Interface 2
Option 1	ActronAir CP05 or CP10	ActronAir CL01-2
Option 2	ActronAir CP05 or CP10	ActronAir CP05 or CP10
Option 3	ActronAir CL01-2 or CP05 or CP10	BMS Controller

14. Alarm Matrix

INDOOR BOARD FAULT ERROR CODES

Alarm Code	Description	Type	Alarm Condition	Reset Condition
E1	Auxiliary Sensor Error (OC/SC)	Alarm	No Sensor, Sensor OC/SC	Sensor OK
E2	Indoor Coil Sensor Error (OC/SC)	Alarm	Coil Sensor OC/SC	Sensor OK
E3	Over Current	Alarm	Input out of Range	Normal Operation
	Under Current		Indoor Fan not running	Normal Operation
E4	Wrong Dip switch Error	Alarm	Wrong Dipswitch Settings	Correct Settings
E5	Communication Error	Alarm	No communication with OD NOTE: Wait for 30 sec. before E5 is displayed.	Communication OK
E6	Indoor Fan Fault	Alarm	Not Operating	Normal Operation
E7	0-10VDC No Input	Alarm	Input is less than 0.1V when 3rd Party voltage control is selected on ID	Correct 0-10VDC Input
E8	Reserved for Other Errors	Alarm	---	---
E9	Reserved for Other Errors	Alarm	---	---

CM100 FAULT ERROR CODES

Alarm Code	Description	Type	Alarm Condition	Reset Condition
E10	All Other Alarms (See CP05 or CP10 for details)	Alarm	Various Alarms	Normal Condition
E11	Probe 1 Fault (CM100 Internal Error)	Alarm	Configuration Error	Correct Set up
E12	ID Coil Sensor 1 Fault	Alarm	Temperature out of Range	Temperature Normal
E13	Probe 3 Fault (CM100 Internal Error)	Alarm	Configuration Error	Correct Set up
E14	Probe 4 Fault (CM100 Internal Error)	Alarm	Configuration Error	Correct Set up
E15	Discharge Temperature 1 / High Pressure Comp 1 Fault	Alarm	Temperature out of Range	Temperature and Pressure Normal
			Compressor 1 High Pressure	
E16	OD Coil Sensor 1 Fault	Alarm	Temperature out of Range	Temperature Normal
E17	Discharge Temperature 2 / High Pressure Comp 2 Fault	Alarm	Temperature out of Range	Temperature and Pressure Normal
			Compressor 2 High Pressure	
E18	OD Coil Sensor 2 Fault	Alarm	Temperature out of Range	Temperature Normal
E19	Probe 9 Fault (CM100 Internal Error)	Alarm	Configuration Error	Correct Set up
E20	Outside Air Temperature Sensor Fault	Warning	Temperature out of Range	Temperature OK
E21	Multi Input 1 Fault	Alarm	Input out of Range	Input Normal
E22	Multi Input 2 Fault	Alarm	Input out of Range	Input Normal
E23	Outdoor Fan 1 Fault	Alarm	Not Operating	Normal Operation
E24	Outdoor Fan 2 Fault	Alarm	Not Operating	Normal Operation
E25	Indoor Fan Fault	Alarm	Not Operating	Normal Operation
E26	Return Air Temperature Sensor Fault	Warning	Temperature out of Range	Temperature OK
E27	Supply Air Temperature Sensor Fault	Warning	Temperature out of Range	Temperature OK
E28	Indoor Fan Overload Fault	Alarm	Circuit Breaker Tripped	Normal Operation
E29	Compressor 1 Overload Fault	Alarm	Circuit Breaker Tripped	Normal Operation
E30	Compressor 2 Overload Fault	Alarm	Circuit Breaker Tripped	Normal Operation
E31	Compressor 1 LP Fault	Alarm	Compressor 1 Low Pressure	Normal Pressure
E32	Compressor 2 LP Fault	Alarm	Compressor 2 Low Pressure	Normal Pressure
E33	Compressor 3 LP Fault	Alarm	Compressor 3 Low Pressure	Normal Pressure
E34	Compressor 1 HP Fault	Alarm	Compressor 1 High Pressure	Normal Pressure

CM100 FAULT ERROR CODES

Alarm Code	Description	Type	Alarm Condition	Reset Condition
E35	Compressor 2 HP Fault	Alarm	Compressor 2 High Pressure	Normal Pressure
E36	Compressor 3 HP Fault	Alarm	Compressor 3 High Pressure	Normal Pressure
E37	Compressor 1 LP Fault *** Lock Out ***	Alarm	3 Trips within 1 Hour	Re-cycle Power and Pressure Normal
E38	Compressor 2 LP Fault *** Lock Out ***	Alarm	3 Trips within 1 Hour	Re-cycle Power and Pressure Normal
E39	Compressor 3 LP Fault *** Lock Out ***	Alarm	3 Trips within 1 Hour	Re-cycle Power and Pressure Normal
E40	Compressor 1 HP Fault *** Lock Out ***	Alarm	3 Trips within 1 Hour	Re-cycle Power and Pressure Normal
E41	Compressor 2 HP Fault *** Lock Out ***	Alarm	3 Trips within 1 Hour	Re-cycle Power and Pressure Normal
E42	Compressor 3 HP Fault *** Lock Out ***	Alarm	3 Trips within 1 Hour	Re-cycle Power and Pressure Normal
E43	Discharge Temp 1 Fault	Alarm	Temperature out of Range	Temperature OK
E44	Discharge Temp 2 Fault	Alarm	Temperature out of Range	Temperature OK
E45	Discharge Temp 3 Fault	Alarm	Temperature out of Range	Temperature OK
FILTER	Filter Alarm	Alarm	Air Filter Timer Timed-Out	Clean/Replace Filter and Reset Timer

Important NOTE






All alarm fault conditions must be investigated and rectified before proceeding to reset or clear the alarm. If the cause of the fault condition has not been eliminated, the alarm fault conditions will be reported and logged in again on next data cycle. Repeated resetting and restarting can cause damage to the unit and may render your warranty null and void.

15. Near Field Communication (NFC) Tag

CL01-2 is NFC capable that allows the user to view and download the user manual. There are a wide variety of NFC reader Apps, below is an example of one App that can be used.

15.01. iOS Users

Note: Images may vary from those shown below.

<p>1. Go to App Store and download NFC Reader for iPhone.</p> 	<p>2. Open NFC App. Read through NFC App Information and Click on Let's get started.</p> 	<p>3. Place the mobile device close to NFC Tag on the controller. Follow the instructions on App.</p> 
<p>4. Once the tag has successfully scanned the image below will appear.</p> 	<p>5. A pop-up window will appear to redirect you to https://www.actronair.com.au/nfc</p> 	

6. List of Controller Models will appear on the screen of your mobile device.

Select the model number of your controller to view the operation manual. The Model number of your controller can be found underneath the Power On/Off button of the controller.

15.02. Android Users

Note: Images may vary from those shown below.

<p>1. Go to Settings and look for NFC and payment. Tap ON to activate NFC.</p> 	<p>2. Tap Android Beam</p> 	<p>3. Follow the on-screen instructions.</p> 
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4. Once successfully scanned, a pop-up window will appear to redirect you to external website.

<https://www.actronair.com.au/nfc>

5. List of Controller Models will appear on the screen of your mobile device.

Select the model number of your controller to view the operation manual. The Model number of your controller can be found underneath the Power On/Off button of the controller.

16. Troubleshooting Guide

Condition	Causes or Check Points
The system does not start	Check that 5 minutes has passed from Turn-On time, as the system has in built timers. Check that setpoint temperature settings are correct. Check that the setpoint temperature is set low enough for cooling or high enough for heating.
Air does not flow (Indoor Unit)	During heating operation, air does not flow out for approximately 15 seconds after start up, this prevents cold draft. Check for Auto Fan operation.
Cooling/Heating is not sufficient	The cooling/heating function may not work effectively when the indoor return air filter is clogged with dust and dirt. Make sure the air inlet and air outlet on the outdoor unit are not blocked. The outside temperature is above or below the design conditions.
Steam is coming out from the outdoor unit	It is caused by the defrosting of the outdoor unit in heating operation during cold ambient conditions. This is not a fault.
Water from the outdoor unit	This is normal during heating operation, which is due to water forming and running off the outdoor coil during defrost. This normal and it is not a fault.
Occurring of noises	When heating or cooling is started or stopped, a swishing or gurgling noise may be heard, This noise is generated by the refrigerant flowing between the outdoor and the indoor units. A swooshing noise may be heard from the outdoor unit during operation. This noise is generated when the refrigerant changes direction in the defrost operation. On start up, the outdoor unit may be louder than normal for a few seconds while the compressor reaches the designated speed and operating pressure. During defrost operation, the compressor may generate more noise than normal.
Setpoint temperature cannot be adjusted	The Control Interface has in built upper and lower limit setting. Setpoint temperature can only be adjusted within these limits.
7-Day Time Clock is not turning the air conditioner On and Off	Check that the time clock events are set correctly. Check that correct current day and time are set for the air conditioner to operate.
BEFORE CONTACTING YOUR INSTALLER, PLEASE HAVE YOUR AIR CONDITIONERS MODEL NO. AND SERIAL NO. WITH YOU. (SEE PAGE 5)	

Condition	Probable Cause	Recommended Actions/ Checkpoints
Evaporator coil freezes up during low ambient operation	System low on refrigerant. System low on airflow. Outdoor air sensor failure.	Check the pressures and the temps for suction and discharge. Check the ID fan speed through the Control Interface. Check the Alarm on the Control Interface. Check for dirty filters.
Economiser, outside air and/or spill air will not operate	Economiser connector not plugged into unit wiring harness Economiser, outside air, and/or spill air motor has failed. Wiring or terminal failure	Check the connection. Damper motor wiring needs to be checked and replaced as required. Wiring or terminal to be checked and replaced as required. Check if Economy Mode is enabled.
Control Interface buttons not operating	Control Interface not responding. Data cable failure.	Reset the power to the Control Interface by turning it Off/On. Replace data cable through service.
Control Interface does not power up	Wiring fault. Data cable fault.	Wiring to be checked as per the wiring diagram. Replace data cable through service.

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