

# Commercial Control Interface

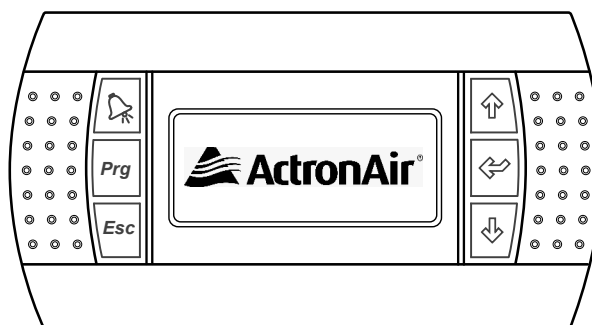
## CP05/CP10

### Operation Manual

**Model Number**  
**CP05**  
**(Supplied as Standard)**



**Model Number**  
**CP10**  
**(Optional)**



**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!** On your purchase of the latest ActronAir commercial range air conditioning system. With the application of an intelligent interactive software technology controller, this system has been designed to give you many years of reliable service and the convenience of menu-driven control. Your controller is manufactured from the highest quality materials and has passed numerous in house and external inspection procedures to ensure years of satisfactory operation.

**IN THIS MANUAL:** You will find instructions on how to program and utilise the many advanced features this controller 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 installation and the safe 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](http://www.actronair.com.au). Your air conditioner requires setup/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:

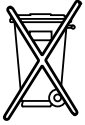
- Prevent the electrical components and electronic circuits from getting wet.
- Do not install the controlling devices in a particularly hot environment as extreme temperatures may damage the electronic equipment.
- Do not attempt to open the controller and other electronic devices in any way other than 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. Contact ActronAir for technical data.
- Do not install the unit in environment with highly flammable, combustible and/or explosive articles and materials.
- The product, particularly the controlling devices, must be stored and 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 your ActronAir Technical Support Department on toll free number: **1800 119 229**.

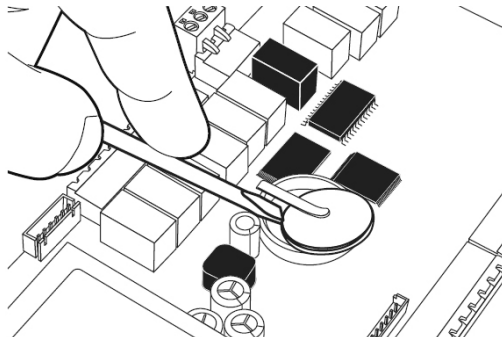
### Storage and Operating Conditions

- Storage conditions: -20 to 70°C, 90% RH non-condensing
- Operating conditions: -10 to 60°C, 90% RH non-condensing

## 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 terminal contains a battery that must be removed and separated from the rest of the product before disposing off the terminal.
3. The equipment may contain hazardous substances, improper or incorrect disposal may have a negative effect on human health and on the environment.



## 02. Safety and Operational 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 power from mains supply by removing fuse or switching the circuit breaker to the Off position before installation or servicing this control interface.
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. Follow sound LOCK OUT/TAG OUT (LOTO) procedures to ensure that power supply is not re-energised accidentally.
6. This control interface has power supply from the control board via telephone connector, with voltage of 18 - 30VDC Class II and maximum power input of 0.5W. Ensure that this unit is not installed on voltages higher than 30V DC supply.
7. Installation and/or servicing must be carried out by a qualified installer or technician.
8. 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 connections to be as per electrical diagram provided.
9. WH&S rules and regulations must be observed and will take precedence during installation process.
10. Only use this wall controller with an ActronAir air conditioner as described in this operating manual.

## 03. 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.

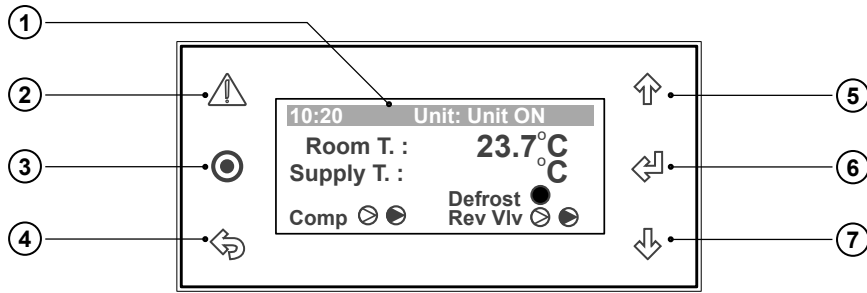
**RETURN AIR FILTER:** The air conditioner must never be operated without a return air filter as this will allow a build up of dust or dirt on the indoor coil. This is very difficult to clean and can cause the system to operate inefficiently or even fail.

**CRANKCASE HEATER PRECAUTION:** The main power (switch board) to the system must be kept ON at all times to prevent damage to the outdoor compressor. 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.

## 04. Advance Features

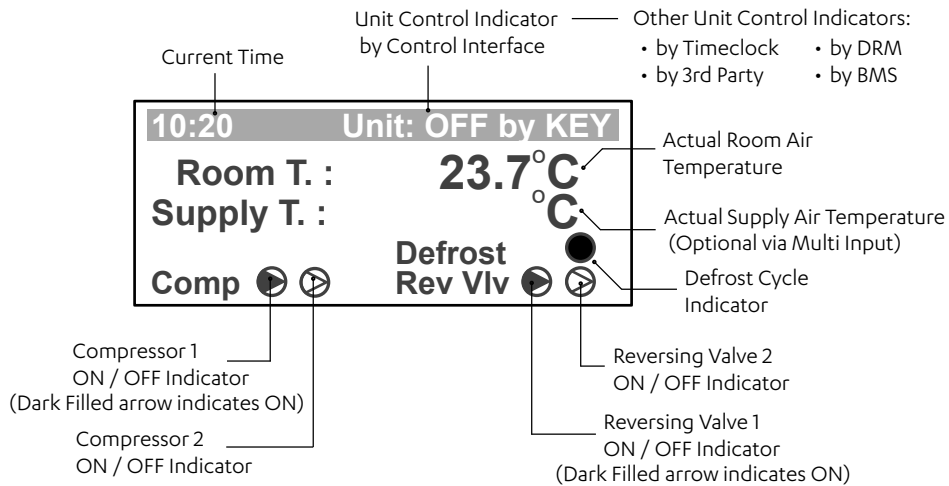
1	<p><b>Menu Tree Based Program Navigation</b> The control system features ease of operation via menu tree.</p>
2	<p><b>LCD Display</b> The LCD displays the system mode, operation and fault diagnostics log.</p>
3	<p><b>LCD Backlight</b> The LCD backlight features instant On/Off backlighting to suit individual preferences in viewing the displays. It can also be set to automatically Turn-Off after pressing the last button and to instantly Turn-On at the press of any button.</p>
4	<p><b>7-Day Time Clock with 2 On/Off Events per Day</b> The Control Interface, through the 7-Day time clock function, can be programmed for each day of the week to turn on or off your air conditioner. Each day has 2 ON / Off events which you can set for your individual control preference.</p>
5	<p><b>12 Programmable Special Days with 2 On/Off Events per Day</b> 12 Special Days can also be programmed within the year which provide you control flexibility to satisfy your individual requirements.</p>
5	<p><b>Auto Defrost Function (Heating Mode)</b> At certain outdoor conditions (low temperature) there may be a build up of frost on the outdoor heat exchanger. This gradual build up of frost reduces the performance of the air conditioner. The controller will detect this frost build up and will automatically activate the defrost mode.</p>
6	<p><b>Hot Start Function (Heating Mode)</b> When the air conditioner starts in heating mode, the indoor fan is delayed for a short period of time, this allows the heat exchanger to warm up before the air flow starts, thus preventing cold drafts. The hot start feature also activates itself when the system finishes defrosting.</p>
7	<p><b>Auto-Restart After Power Failure</b> On the event of power failure, the controller will automatically restart the air conditioner to the previous state when the power is restored.</p>
8	<p><b>Return Air Filter Alarm Indication</b> 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>
9	<p><b>Dual Control Interface Operation ( Optional )</b> Two Control Interfaces can be installed on the commercial range air conditioning system. Either of the controllers can control the air conditioning system and mimic each other, displaying the same control parameters for ease of system control management.</p>
10	<p><b>Fault Diagnostics</b> In the unlikely event that a fault develops with the air conditioner the control system will diagnose the fault (where possible) and display a date and time stamped fault log, with up to 100 events memory.</p>

## 05. Control Interface Functions



- ① **LCD Display**  
Displays the setting and operation conditions (see menu page for details).
- ② **Alarm / Reset Button**  
Alarm Indication and Reset Button.
- ③ **Program Button**  
To bring-up programming Main Menu screen. (Display will revert back to default screen after 5 minutes idle time at any stage of programming).
- ④ **ESC Button**  
To exit programming menu.
- ⑤ **Scroll Up / Increment Button**  
To scroll up from existing menu or to increase setting parameter.
- ⑥ **Enter Button**  
To lock the selected menu or to enter set parameters.
- ⑦ **Scroll Down / Decrement Button**  
To scroll down from existing menu or to decrease setting parameter.

### System Default Screen



### NOTES

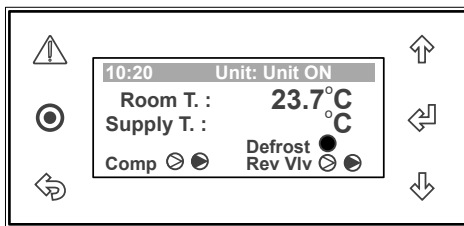
**CP05** and **CP10** are two identical control interfaces with the same display and functions. The only differences are the interface buttons and front case appearances. **CP05 is supplied as standard**, while **CP10 is supplied as optional** control interface for commercial range air conditioning systems. This manual covers operations applicable to both control interfaces, however CP05 control interface features are shown for ease of illustrations.

## POWER-UP (INITIALIZATION DISPLAYS)

### Display Progression

When the control interface is powered ON for the first time, The display will be blank for 5 - 10 seconds

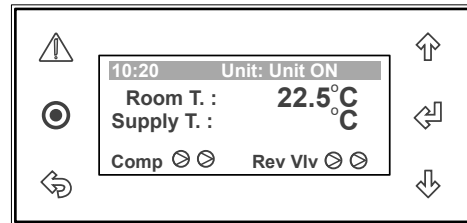
ActronAir logo will then be displayed for the next 5 - 10 seconds



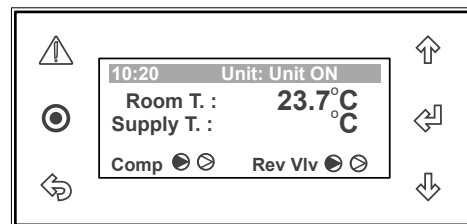
System Screen (default) provides an overview of system status, showing the Room Temperature, Supply Temperature, Compressors, Reversing Valves ON/OFF status and System Defrost indicator.

## COMPRESSORS AND REVERSING VALVE STATUS INDICATIONS

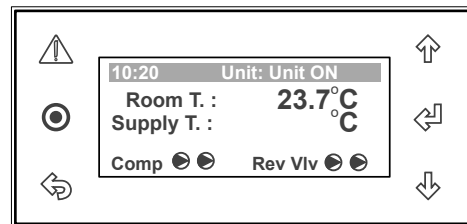
### Display Progression



Both Compressors and Reversing Valves are Off, as indicated by clear triangles



Compressor 1 and Reversing Valve 1 are On. (System in Heat Mode), first triangles are darkened



Compressors 1 and 2 and Reversing Valves 1 and 2 are On. (Systems are in Heat Mode), all triangles are darkened

## NOTES

Displays for two compressors and reversing valves are shown above for illustration purposes only. The number of compressors / reversing valves displayed will depend on the air conditioning system model.

## Compressor 1 Defrost Operation

1		Normal Heating Operation
2		Call for Defrost System 1
3		Comp. 1 Off
4		Comp. 1 and Rev. Valve 1 Off
5		Comp. 1 On Rev. Valve 1 Off
6		Defrost Complete
7		Comp. 1 and Rev. Valve 1 Off
8		Comp. 1 Off Rev. Valve 1 On
9		Normal Heating Operation


## Compressor 2 Defrost Operation

1		Normal Heating Operation
2		Call for Defrost System 2
3		Comp. 2 Off
4		Comp. 2 and Rev. Valve 2 Off
5		Comp. 2 On Rev. Valve 2 Off
6		Defrost Complete
7		Comp. 2 and Rev. Valve 2 Off
8		Comp. 2 Off Rev. Valve 2 On
9		Normal Heating Operation

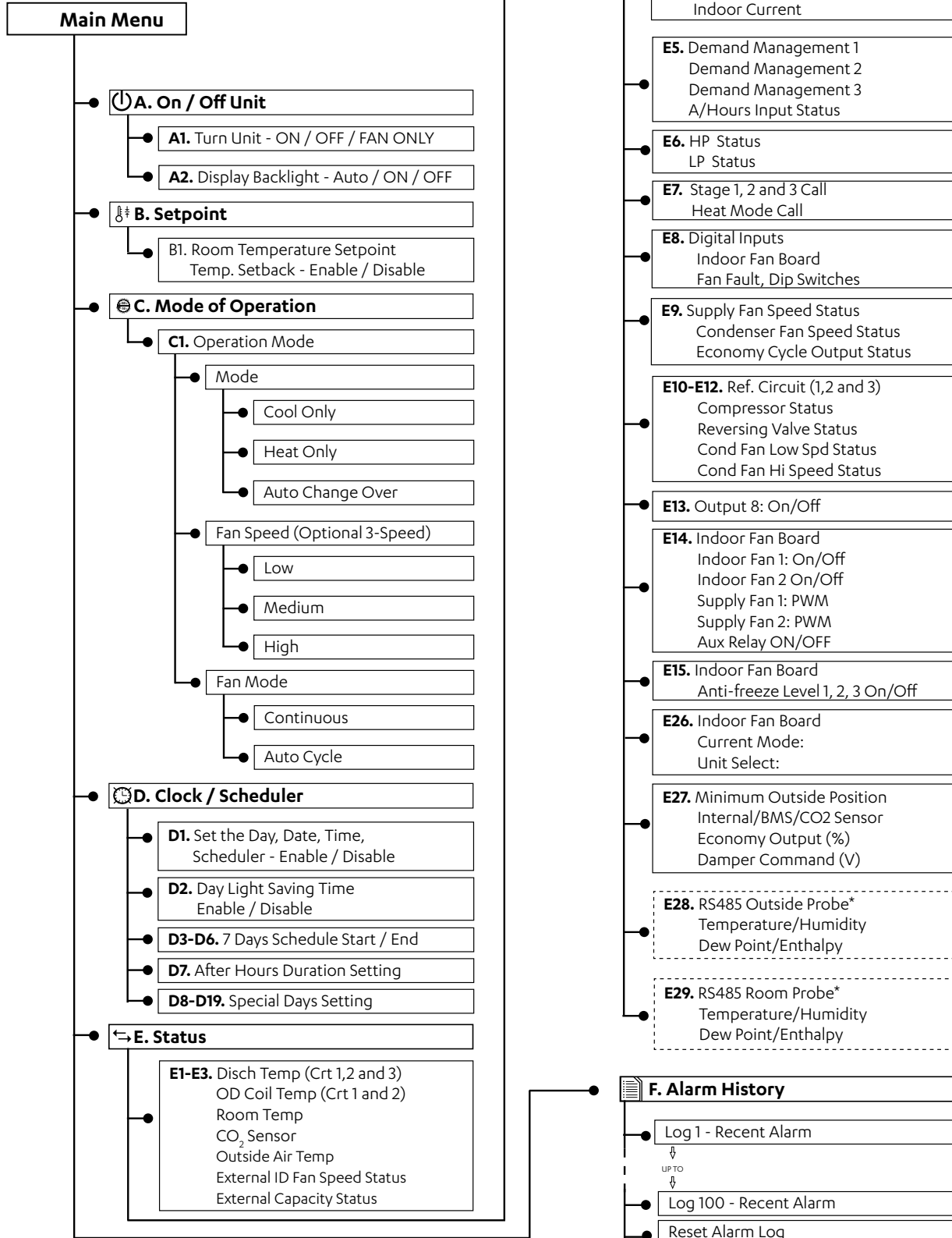


## 06. Menu Tree

### CONSUMER / END USER MEN

**Note:** To scroll Up or Down from existing menu, press  or  **Button**.

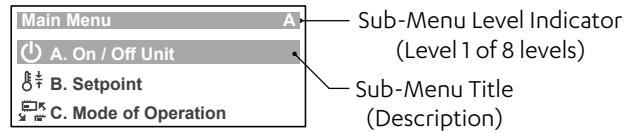
\*Available when enabled via Service Menu.



## 07. Sub Menu Level Descriptions

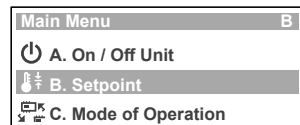
### A. On/Off Unit Sub-Menu

Menu screen to Turn ON / OFF the unit.



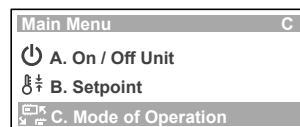
### B. Setpoint Sub-Menu

Menu screen to set the setpoint temperature / setback temperature.



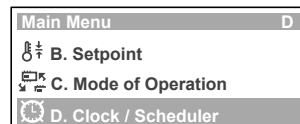
### C. Mode of Operation Sub-Menu

Menu screen for selection of COOL, HEAT or AUTO CHANGEOVER operation.



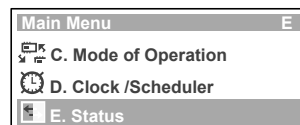
### D. Clock/Scheduler Sub-Menu

Menu screen to set the date and time.



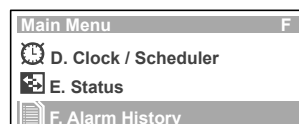
### E. Status Sub-Menu

Read only Menu screen to view the unit running conditions, such as Room Air temperature, Fan Speed, Outside temperature, LP/HP, Discharge Temperature, OD Fan Speed, etc...



### F. Alarm History Sub-Menu Level

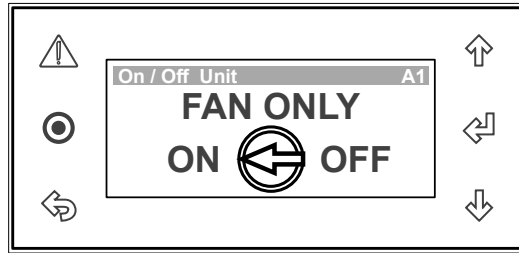
Read only Menu screen that indicates the alarm history



#### NOTE

Only up to level 6 covered by this manual are accessible by the end user.

## 08. Turn On /Off



1. Press **Power Button** to get into the Main Menu. Display will show Main Menu and highlighted Sub-Menu **A1. On / Off Unit**.
2. Press **Return Button** to enter Sub-Menu **A1. On / Off Unit**. Display will show the On/Off Unit page with switch symbol pointing towards **OFF** position, indicating the unit is Turned-Off. (Symbol will be pointing towards **ON** position when the unit is Turned-ON or **FAN ONLY** when the unit is running in **FAN ONLY** mode.

### TO TURN-ON THE UNIT

3. Press **Return Button**, the cursor **█** will appear and start blinking near **ON**.
4. Press **Up** or **Down Button** to select switch **ON** position. Display will show the On/Off Unit page with switch symbol pointing towards **ON** and the cursor **█** will still be blinking.
5. Press **Enter (Enter) Button** to Turn-On the unit. The cursor **█** will disappear and the unit will Turn-On.

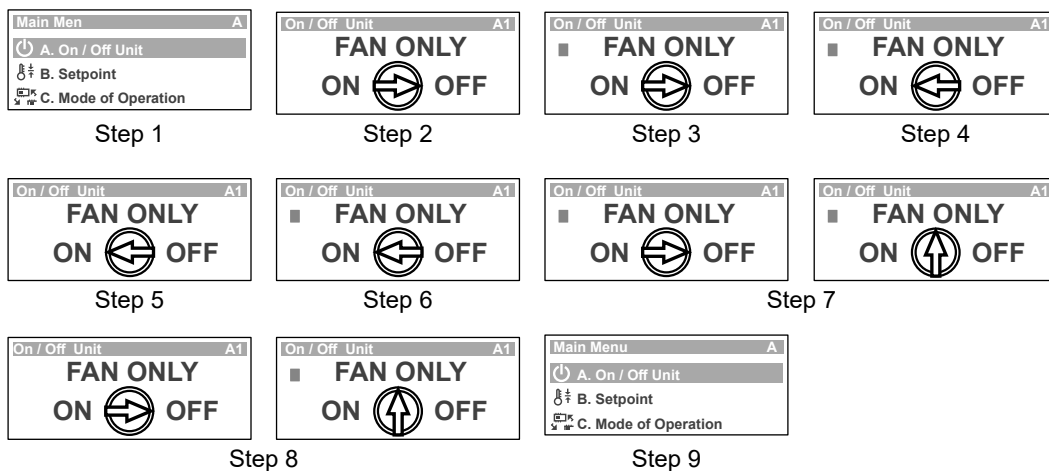
### TO TURN-OFF THE UNIT / SELECT FAN ONLY MODE

6. Repeat Steps 1 and 2, then press **Return Button**, cursor **█** will appear and start blinking near **ON**.
7. Press **Down** or **Up Button** to select switch **OFF** or **FAN ONLY** position. Display will show the On/Off Unit page with switch symbol pointing towards **OFF** or **FAN ONLY** and the cursor **█** will still be blinking .
8. Press **Return Button** to Turn-Off the unit or switch to the **FAN ONLY** mode. The cursor **█** will disappear and the unit will Turn-Off or switch to **FAN ONLY** mode.

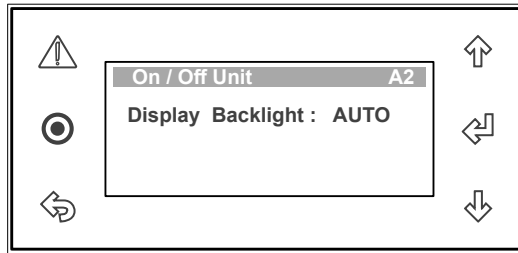
### TO RETURN TO THE MAIN MENU

9. Press **Escape / Return Button** twice to return to the Main Menu. Otherwise press **Power Button**.

### Display Progression



## 09. Backlight



1. Press **⊙ Button** to get into the Main Menu. Display will show Main Menu and highlighted Sub-Menu **A. On / Off Unit**.
2. Press **↵ Button** to enter Sub-Menu **A. On / Off Unit**.
3. Press **↑** or **↓ Button** to get into the **Display Backlight** sub-level menu.
4. Press **↵ Button** to select the **Display Backlight** page and the cursor **■** will appear on the first letter of the current display backlight setting.
5. Press **↑** or **↓ Button** to select the backlight setting from either **AUTO, ON** or **OFF**.
6. Press **↵ Button** to lock-in the selected display backlight setting and the cursor **■** will disappear. The backlight will immediately Turn ON / OFF, depending on the selected mode.

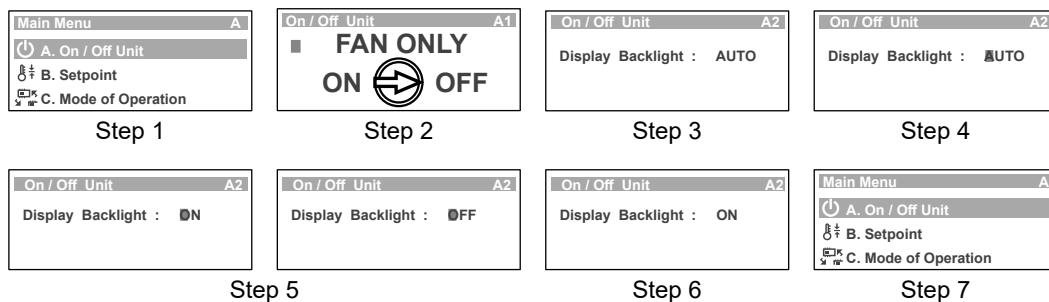
### NOTES

On **AUTO** mode, the Backlight will Turn Off in 5 minutes after the last button is pressed.  
Backlight will instantly Turn ON / OFF when either of the mode is selected.

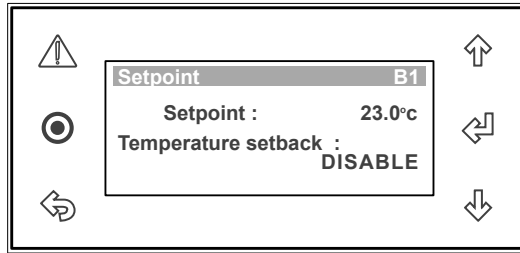
### TO RETURN TO THE MAIN MENU

7. Press **↵ (Escape / Return) Button** twice to return to the Main Menu. Otherwise press **⊙ Button**.

### Display Progression



## 10. Setting Room Temperature Setpoint



1. Press **⊙ Button** to get into the Main Menu. Display will show Main Menu and highlighted Sub-Menu A. On / Off Unit.
2. Press **↓ Button** to scroll down to B. Setpoint sub-menu.
3. Press **↵ Button** to enter B. Setpoint sub-menu. Room setpoint (room set point temperature) screen will appear.
4. Press **↵ Button** cursor **■** will appear and blink next to the setpoint temperature.
5. Press **↓** or **↑ Button** to change room temperature setting.

### NOTES

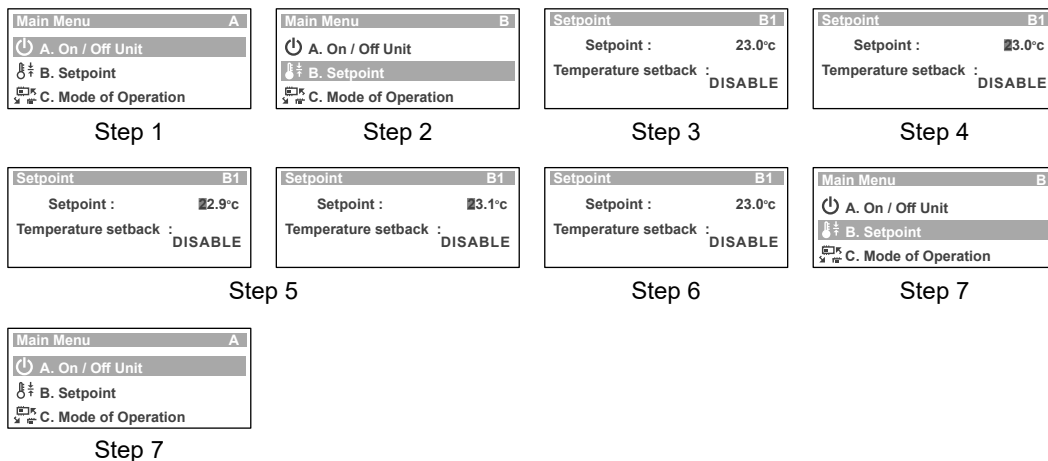
Temperature setpoint can be changed with an incremental/decremental value of 0.1°C.

6. Press **↵ Button** to lock-in your desired room set point temperature. The cursor **■** will disappear and the new room setpoint temperature will be displayed.

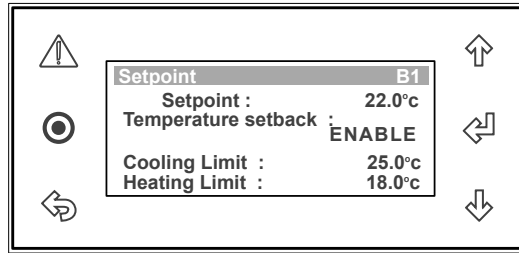
### TO RETURN TO THE MAIN MENU

7. Keep pressing **↵ (Escape / Return) Button** until you get to the Main Menu screen. Otherwise press **⊙ Button**.

### Display Progression



## 11. Setting The Temperature Setback



1. Press **⊙ Button** to get into the Main Menu. Display will show Main Menu and highlighted Sub-Menu **A. On / Off Unit**.
2. Press **↓ Button** to scroll down to **B. Setpoint** sub-menu.
3. Press **↵ Button** to enter **B. Setpoint** sub-menu. Room setpoint (room set point temperature and temperature setback) screen will appear.
4. Press **↵ Button** twice and the cursor **█** will appear and blink next to temperature setback **DISABLE** prompt.
5. Press **↓** or **↑ Button** to change the temperature setback prompt from **DISABLE** to **ENABLE**.
6. Press **↵ Button** to enable temperature setback function and the cursor **█** will move next to the cooling temperature setback setting.
7. Press **↓** or **↑ Button** to change the cooling temperature setback setting.

### NOTES

Temperature can be changed with an incremental/decremental value of 0.1°C.  
Cooling temperature setback can be selected between 26°C to 30°C.

8. Follow steps 6 and 7 above, to set the heating temperature setback.

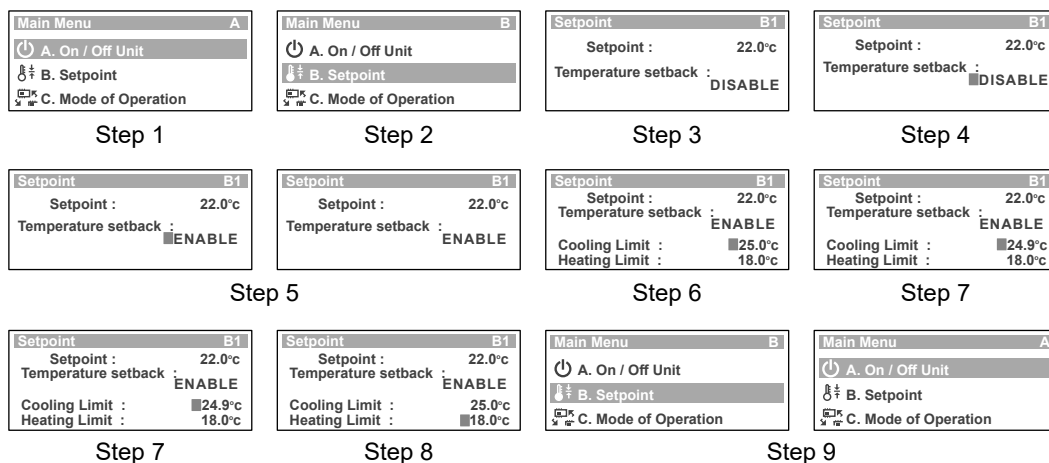
### NOTE

Heating temperature setback can be selected between 10°C to 20°C

### TO RETURN TO THE MAIN MENU

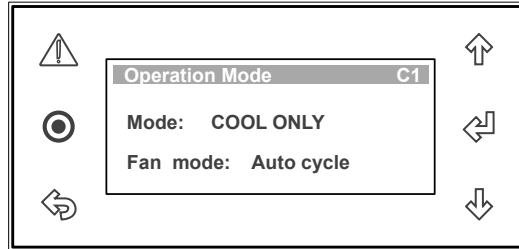
9. Keep pressing **↵ (Escape/Return) Button** until you get to the Main Menu screen. Otherwise press **⊙ Button**.

### Display Progression



## 12. Operation Mode

### CHANGING THE MODE OF OPERATION



1. Press **⊙ Button** to get into the Main Menu. Display will show Main Menu and highlighted Sub-Menu **A. On / Off Unit**.
2. Press **↓ Button** to scroll down to **C. Mode of Operation** sub-menu.
3. Press **↵ Button** to go into **C. Mode of Operation** sub-menu. Display will change to Operation Mode and Fan Mode selection menu, showing the current Mode and Fan mode.

#### NOTE

For Optional 3 Speed Fan Operation, Fan Speed will be shown and can be selected via the service menu (See Display Progression Step 3A below).

4. Press **↵ Button** to change the mode and the cursor **█** will be blinking at the first letter of the current mode.

#### TO SELECT COOL ONLY MODE (from HEAT ONLY mode)

5. Press **↓** or **↑ Button** to scroll to **COOL ONLY** mode. Display will show **COOL ONLY** mode with the cursor **█** still blinking.
6. Press **↵ Button** to select **COOL ONLY** mode, the cursor **█** will move to the next menu item indicating that the operation is now in **COOL ONLY** mode.

#### NOTES

- Mode of Operation menu will be locked for 3 min after changing mode as a safety time delay in order to prevent frequent mode changes.
- To select **HEAT ONLY** or **AUTO CHANGE OVER** mode, follow steps 4 to 6 above.

#### CHANGING THE FAN MODE

7. Follow steps 1 to 4 above and then press **↵ Button** to get into the **FAN** mode selection menu. The **█** will be blinking at the first letter of the current **FAN** mode setting.
8. Press **↓** or **↑ Button** to select **AUTO CYCLE** or **CONTINUOUS FAN** mode.
9. Press **↵ Button** to lock-in your desired **FAN** mode.

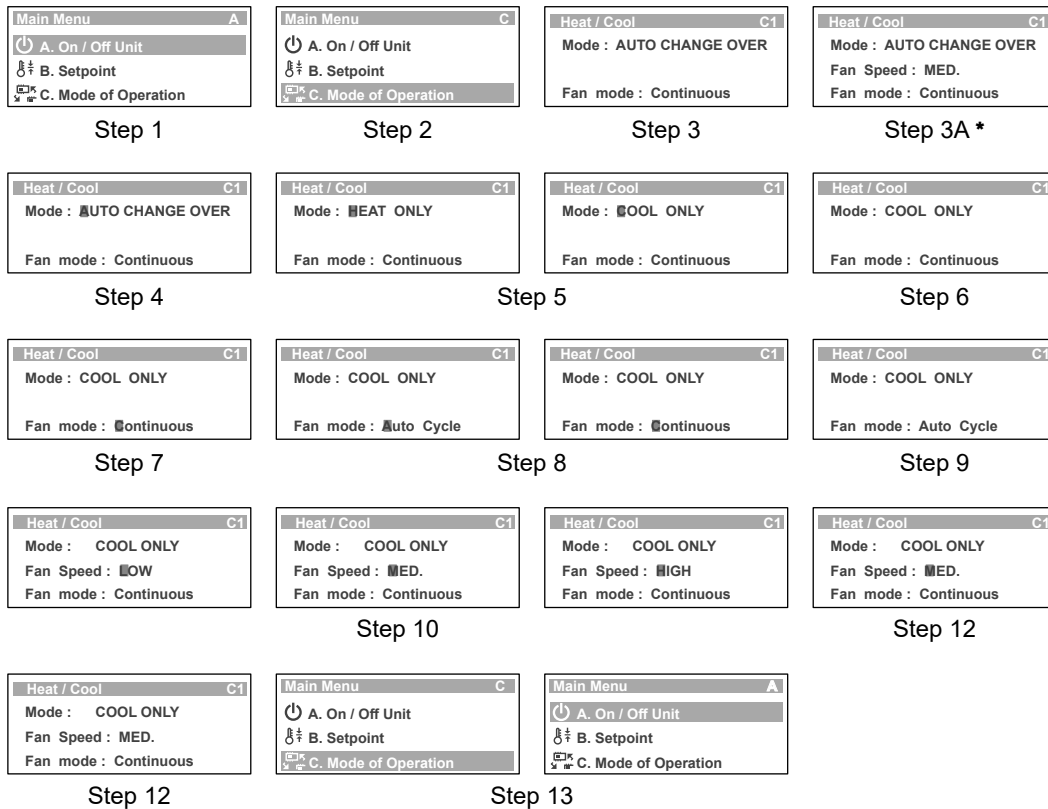
#### CHANGING THE FAN SPEED (For 3 Speed Fan Operation, when applicable)

10. Follow steps 1 to 4 above and then press **↵ Button** to get into the Fan Speed selection menu. The **█** will be blinking at the first letter of the current Fan Speed setting.
11. Press **↓** or **↑ Button** to select **LOW**, **MED** or **HIGH** fan speed.
12. Press **↵ Button** to lock-in your desired Fan Speed.

#### TO RETURN TO THE MAIN MENU

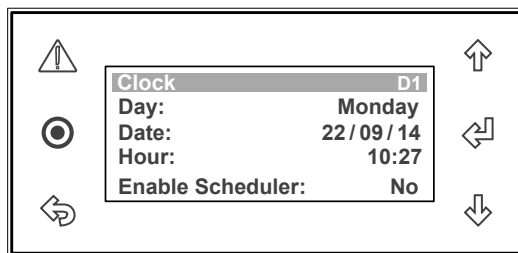
13. Keep pressing **↵ (Escape / Return) Button** until you get to the Main Menu screen. Otherwise press **⊙ Button**.

## Display Progression



\*For Optional 3 Speed Fan Operation, when applicable (See Display Progression Step 3A above).

## 13. Setting The Clock



1. Press **⊙ Button** to get into the Main Menu. Display will show Main Menu and highlighted **A. On / Off Unit** main menu.
2. Press **↓ Button** to scroll down to **D. Clock / Scheduler** main menu.
3. Press **↵ Button** to enter **D. Clock/ Scheduler** main menu. Display will show the Day, Date, Hour page and Enable Scheduler status.
4. Press **↵ Button** and the cursor **█** will appear next to the date indicator and the corresponding day will be shown, i.e. Monday, 22/09/14 (22nd September 2014 ).
5. Press **↓** or **↑ Button** to change the date.

### NOTE

Day changes corresponding to the change in date as follows:  
 Sunday, 21/09/14 (21st September 2014),  
 Tuesday, 23/09/14 (23rd September 2014).



- Press **Button** to lock-in the Date and the cursor will move next to the month indicator.
- Press **Button** or **Button** to change the month.

### NOTE

Day changes corresponding to the change in month as follows:

Friday, 22/08/14 (22nd August 2014),  
 Wednesday, 22/10/14 (22nd October 2014).

- Press **Button** to lock-in the Month and the cursor will move next to the year date.
- Press **Button** or **Button** to change the year.

### NOTE

Day changes corresponding to the change in year as follows:



Sunday, 22/09/13 (22nd September 2013),  
 Tuesday, 22/09/15 (22nd September 2015).

### Display Progression

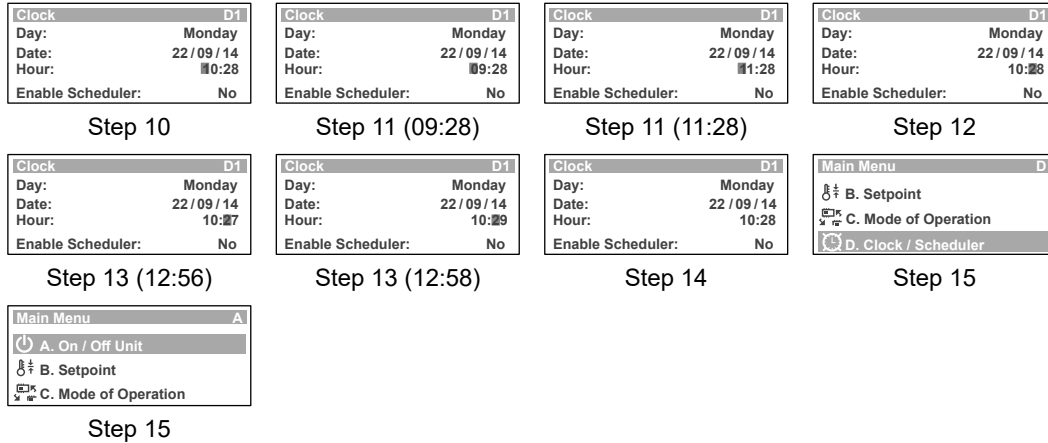
<p><b>Main Menu</b> A</p> <p>A. On / Off Unit</p> <p>B. Setpoint</p> <p>C. Mode of Operation</p>	<p><b>Main Menu</b> D</p> <p>B. Setpoint</p> <p>C. Mode of Operation</p> <p>D. Clock / Scheduler</p>	<p><b>Clock</b> D1</p> <p>Day: Monday</p> <p>Date: 22/09/14</p> <p>Hour: 10:27</p> <p>Enable Scheduler: No</p>	<p><b>Clock</b> D1</p> <p>Day: Monday</p> <p>Date: 22/09/14</p> <p>Hour: 10:27</p> <p>Enable Scheduler: No</p>
Step 1	Step 2	Step 3	Step 4
<p><b>Clock</b> D1</p> <p>Day: Sunday</p> <p>Date: 21/09/14</p> <p>Hour: 10:27</p> <p>Enable Scheduler: No</p>	<p><b>Clock</b> D1</p> <p>Day: Tuesday</p> <p>Date: 23/09/14</p> <p>Hour: 10:27</p> <p>Enable Scheduler: No</p>	<p><b>Clock</b> D1</p> <p>Day: Monday</p> <p>Date: 22/09/14</p> <p>Hour: 10:27</p> <p>Enable Scheduler: No</p>	<p><b>Clock</b> D1</p> <p>Day: Friday</p> <p>Date: 22/08/14</p> <p>Hour: 10:27</p> <p>Enable Scheduler: No</p>
Step 5	Step 6	Step 7	Step 8
<p><b>Clock</b> D1</p> <p>Day: Wednesday</p> <p>Date: 22/10/14</p> <p>Hour: 10:27</p> <p>Enable Scheduler: No</p>	<p><b>Clock</b> D1</p> <p>Day: Monday</p> <p>Date: 22/09/14</p> <p>Hour: 10:28</p> <p>Enable Scheduler: No</p>	<p><b>Clock</b> D1</p> <p>Day: Sunday</p> <p>Date: 22/09/13</p> <p>Hour: 10:28</p> <p>Enable Scheduler: No</p>	<p><b>Clock</b> D1</p> <p>Day: Tuesday</p> <p>Date: 22/09/15</p> <p>Hour: 10:28</p> <p>Enable Scheduler: No</p>
Step 7	Step 8	Step 9	

- Press **Button** to lock-in the Year and Date and the cursor will move next to the hour indicator.
- Press **Button** or **Button** to change the hour.
- Press **Button** to lock-in the hour and the cursor will move next to the minute indicator.
- Press **Button** or **Button** to change the minute.
- Press **Button** to lock-in the minute and the cursor will disappear.

## TO RETURN TO THE MAIN MENU

15. Keep pressing  (Escape / Return) **Button** until you get to the Main Menu screen. Otherwise press  **Button**.

### Display Progression



Step 10

Step 11 (09:28)

Step 11 (11:28)

Step 12

Step 13 (12:56)

Step 13 (12:58)

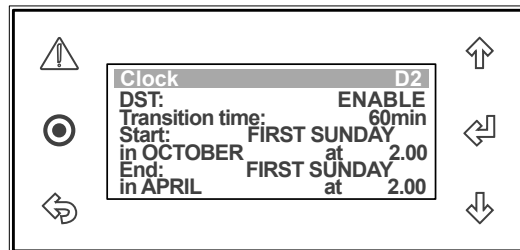
Step 14










Step 15

### NOTE

Use the  or  **Button** to toggle on the **D. Clock / Scheduler** sub-menu functions.







## 14. Daylight Saving Time Enable



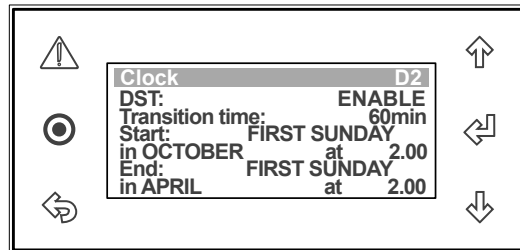
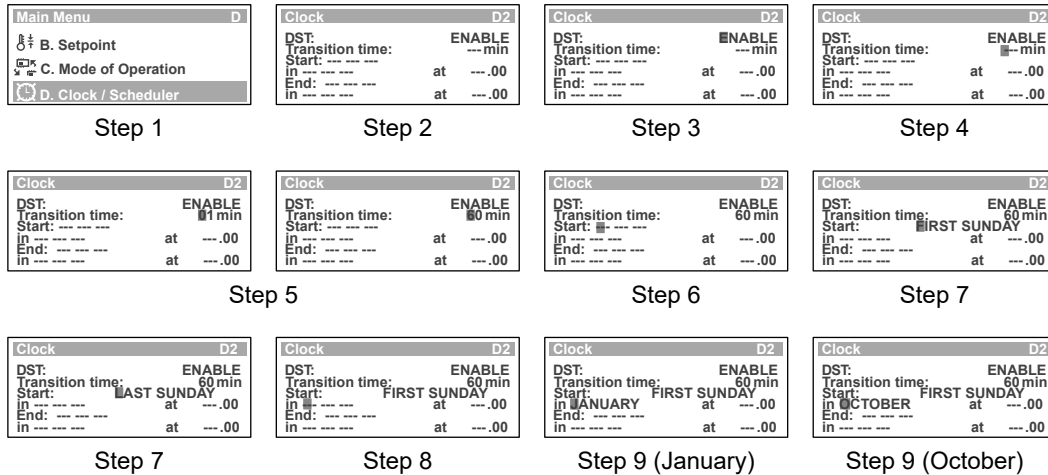
1. From the main menu, scroll down to **D. Clock / Scheduler** menu following the procedures from Setting the Clock section.
2. Press  **Button** to enter **D. Clock/ Scheduler** main menu.
3. Press  **Button** to scroll down to **Daylight Saving Time** sub-menu.
4. Press  **Button** to enter **Daylight Saving Time** sub-menu and the cursor  will appear on **ENABLE** indicator. If the indicator shows **DISABLE**, press  **Button** to change to **ENABLE**.
5. Press  **Button** again to enable **Daylight Saving Time** mode and the cursor  will move to the Transition time segment.
6. Press  or  **Button** to select the number of minutes for transition into daylight saving time.

### NOTE

The transition time can be set in 1 minute increment up to 60 minutes maximum.

7. Press  **Button** to lock-in the selected length of transition time, i.e. 60min. The cursor  will next move to the order of the week (First, Second, etc..) for the start of transition to occur.
8. Press  or  **Button** to select the First, Second, Third, Fourth or Last for transition into daylight saving time, e.g. FIRST.
9. Press  **Button** to lock-in FIRST and the cursor  will next move to the Day for the start of the transition to occur.

## Display Progression



10. Press **↓** or **↑** **Button** to select the Day for transition into daylight saving time, e.g. SUNDAY.
11. Press **↵** **Button** to lock-in Sunday for the transition to occur, i.e. FIRST SUNDAY. The cursor **█** will next move to the starting month selection segment.
12. Press **↓** or **↑** **Button** to select the Month for transition into daylight saving time.
13. Press **↵** **Button** to lock-in the Month for transition to occur, i.e. October. The cursor **█** will next move to the starting time selection segment.
14. Press **↓** or **↑** **Button** to select the hour on Sunday for transition into daylight saving time.

### NOTE

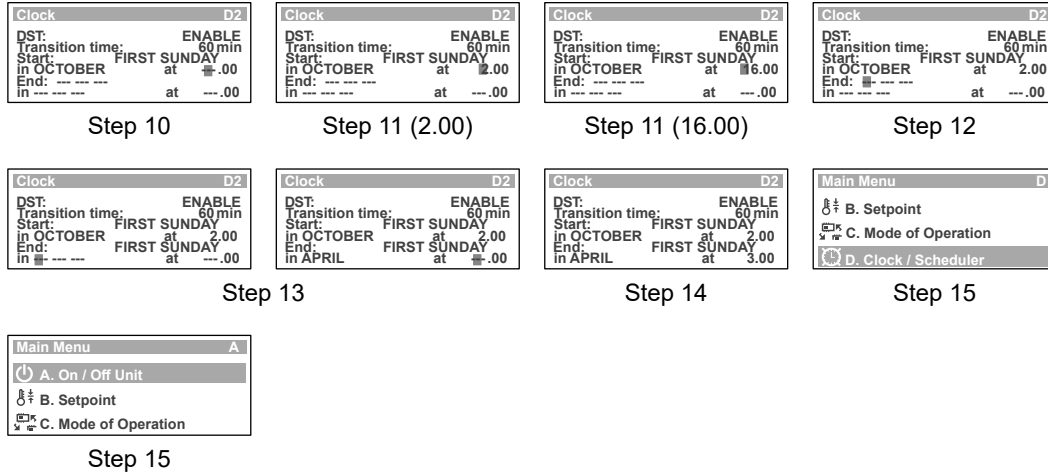
The time clock is in 24:00 format, i.e. 2:00 AM will be 2.00 and 8:00 PM will be 20.00.

15. Press **↵** **Button** to lock-in the time on the FIRST SUNDAY for transition to occur, i.e. 2.00. The cursor **█** will next move to the transition to end condition of **Daylight Saving Time**.
16. Repeat steps 8- 15 to set up the end of **Daylight Saving Time** parameters.
17. Press **↵** **Button** to enable the **Daylight Saving Time** and lock-in the parameters.

## TO RETURN TO THE MAIN MENU

18. Keep pressing (Escape / Return) **Button** until you get to the Main Menu screen. Otherwise press **Button**.

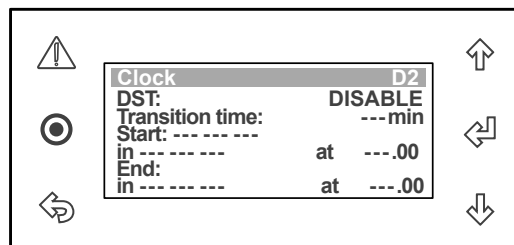
### Display Progression



### NOTE

Use the or **Button** to toggle on the **D. Clock / Scheduler** sub-menu functions.

## 15. Daylight Saving Time Disable



1. From the main menu, scroll down to **D. Clock / Scheduler** menu following the procedures from Setting the Clock section.
2. Press **Button** to enter **D. Clock / Scheduler** main menu.
3. Press **Button** to scroll down into **Daylight Saving Time** sub-menu.
4. Press **Button** to enter **Daylight Saving Time** sub-menu and the cursor will appear on **ENABLE** indicator.
5. Press or **Button** to select the **DISABLE Daylight Saving Time** function.

### NOTE

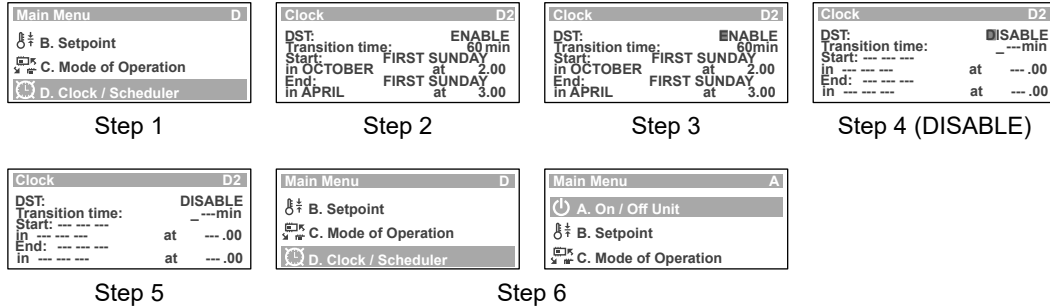
The segment will change from **ENABLE** to **DISABLE**.

6. Press **Button** to disable the **Daylight Saving Time** function. The cursor will disappear and the **DISABLE** sub-menu screen will be displayed.

## TO RETURN TO THE MAIN MENU

- Keep pressing (Escape/Return) **Button** until you get to the Main Menu screen. Otherwise press **Button**.

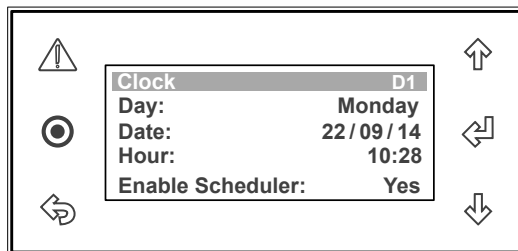
### Display Progression



### NOTES

- Use the or **Button** to toggle on the **D. Clock / Scheduler** sub-menu functions.
- The programmed Day Light Saving Time parameters will be retained until next time Day Light Saving Time is enabled.

## 16. 7-Day Programming



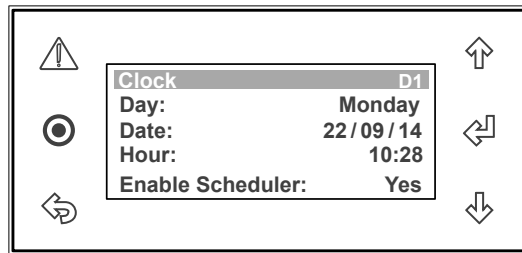
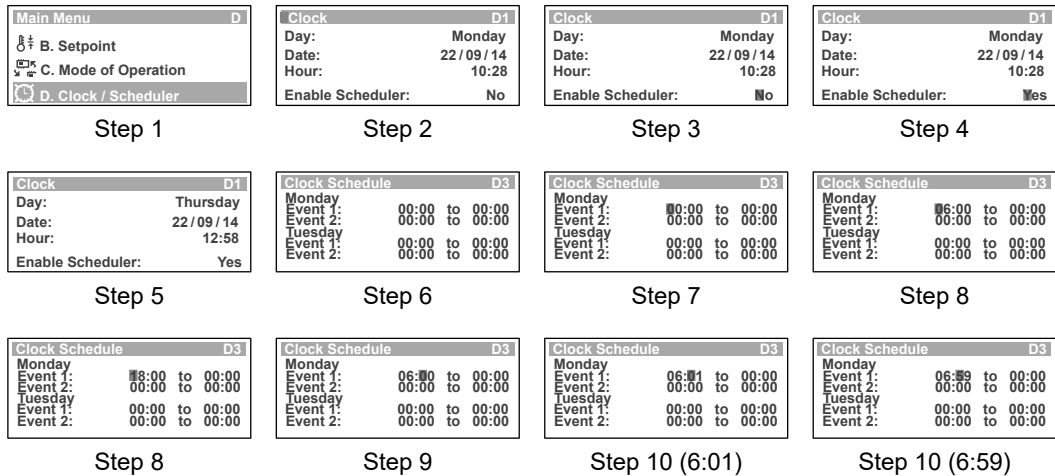
- From the main menu, scroll down to **D. Clock / Scheduler** menu following the procedures from Setting the Clock section.
- Press **Button** to enter **D. Clock/ Scheduler** main menu.
- Press **Button** repeatedly until the cursor gets down to **Enable Scheduler** sub-menu.
- Press or **Button** to prompt Enable Scheduler, **Yes** will replace **No** in this sub-menu with the cursor flashing.
- Press **Button** to enable the scheduler sub-menu, note the cursor will disappear.
- Press **Button** to scroll down to **Clock Schedule D3** sub-menu.
- Press **Button** to enter the **Clock Schedule D3** sub-menu and the cursor will appear on Monday Event 1 starting hour indicator.
- Press or **Button** to change the hour.

### NOTE

The time clock is in 24:00 format, i.e. 6:00 AM will be 06:00 and 6:00 PM will be 18:00.

- Press **Button** to lock-in the time and the cursor will move next to Event 1 starting minute indicator.
- Press or **Button** to change the minute.

## Display Progression



11. Press **Button** to lock-in Monday Event 1 starting time, the cursor will now move to Monday Event 1 ending hour indicator.  
**Example:** Monday starting time is set at 6:00 AM, i.e. 06:00.
12. Repeat steps 7- 10 to set up Monday Event 1 ending time and the cursor will next move to Monday Event 2 starting hour indicator.  
**Example:** Monday ending time is set to 9:30 AM, i.e. 09:30.
13. Repeat steps 7- 11 to set up Monday Event 2 starting and ending time and the cursor will next move to Tuesday Event 1 starting hour indicator.  
**Example:** Monday Event 2 starting and ending times are at 17:30 and 22:00, respectively.
14. Repeat steps 7- 12 to set up the succeeding days programming start and end times.

### NOTES

- The scheduled program for each nominated day will be in operation every time each nominated day occurs during the year, i.e. the program for Monday will be repeated on every Monday, until the program is revised.
- The scheduled time may need to be synchronized with the daylight saving time.
- See daylight saving time set-up procedures.

### TO RETURN TO THE MAIN MENU

15. Keep pressing (Escape/Return) **Button** until you get to the Main Menu screen. Otherwise press **Button**.

## Display Progression

Clock Schedule		D3
Monday		
Event 1:	06:00 to 00:00	
Event 2:	00:00 to 00:00	
Tuesday		
Event 1:	00:00 to 00:00	
Event 2:	00:00 to 00:00	

Step 11

Clock Schedule		D3
Monday		
Event 1:	06:00 to 09:30	
Event 2:	00:00 to 00:00	
Tuesday		
Event 1:	00:00 to 00:00	
Event 2:	00:00 to 00:00	

Step 12

Clock Schedule		D3
Monday		
Event 1:	06:00 to 09:30	
Event 2:	17:30 to 22:00	
Tuesday		
Event 1:	00:00 to 00:00	
Event 2:	00:00 to 00:00	

Step 13

Clock Schedule		D3
Monday		
Event 1:	06:00 to 09:30	
Event 2:	17:30 to 22:00	
Tuesday		
Event 1:	05:30 to 09:00	
Event 2:	15:30 to 20:00	

Step 14

Clock Schedule		D4
Wednesday		
Event 1:	05:30 to 09:30	
Event 2:	14:30 to 23:00	
Thursday		
Event 1:	06:30 to 09:00	
Event 2:	16:30 to 21:00	

Step 14

Clock Schedule		D5
Friday		
Event 1:	06:30 to 09:30	
Event 2:	14:00 to 22:00	
Saturday		
Event 1:	07:30 to 10:00	
Event 2:	17:30 to 22:00	

Step 14

Clock Schedule		D6
Sunday		
Event 1:	07:30 to 10:30	
Event 2:	15:00 to 23:00	

Step 14

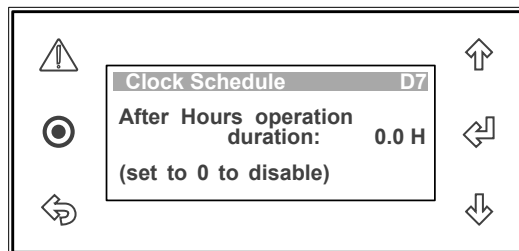
Main Menu		A
⏻	A. On / Off Unit	
⚙️	B. Setpoint	
⚙️	C. Mode of Operation	

Step 15

## NOTES

- Use the ⬇️ or ⬆️ **Button** to toggle all of the **Clock Schedule** sub-menu functions.
- If the event end time is set before the event start time, then the event end time will happen on the next day.  
 Example: Monday Event 1 start time is set at 04:00 and the end time is set at 03:58  
 Monday Event 2 start time is set at 18:00 and the end time is set at 22:00,  
 The unit will then start at 4:00 AM on Monday and will end at 3:58 AM on Tuesday and the Event 2 for Monday will be ignored even if it is set.

## 17. After Hours Timer



- From the main menu, scroll down to **D. Clock / Scheduler** menu following the procedures from Setting the Clock section.
- Press ⏻ **Button** to enter **D. Clock/ Scheduler** main menu.
- Press ⬇️ **Button** to scroll down to **Clock Schedule D7** (After Hours operation duration) sub-menu.
- Press ⏻ **Button** to lock-in **A / H operation duration** sub-menu and the cursor ■ will appear on After Hours time indicator.
- Press ⬆️ or ⬆️ **Button** to select the duration of after hours timer.

## NOTES

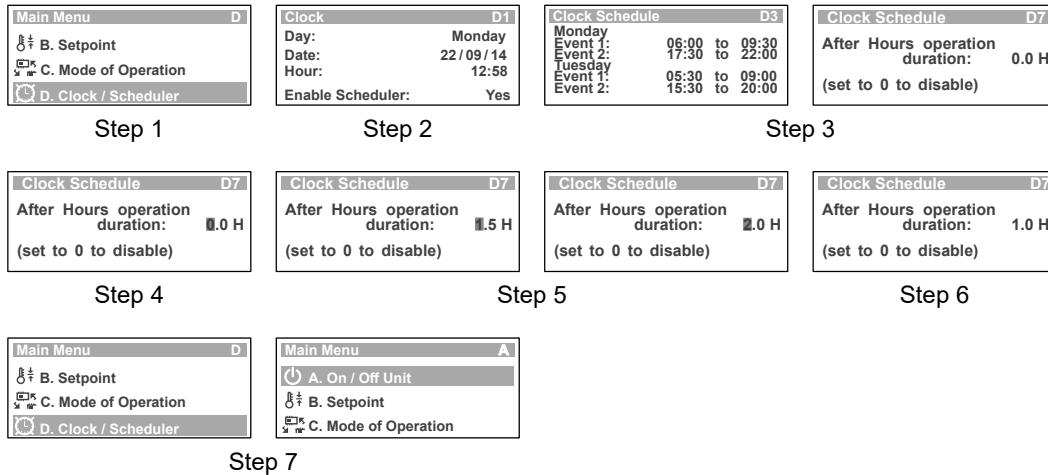
The A / H function can be enabled when it's duration is set and disabled when set to 0.  
 The duration of the after hours timer can be set in 0.5 hour increment up to 2.0 hours maximum.

- Press ⏻ **Button** to lock-in the selected after hours duration, note the cursor ■ will disappear and the selected duration will be displayed. i.e. 1 hour (1.0 H).

## TO RETURN TO THE MAIN MENU

- Keep pressing (Escape / Return) **Button** until you get to the Main Menu screen. Otherwise press **Button**.

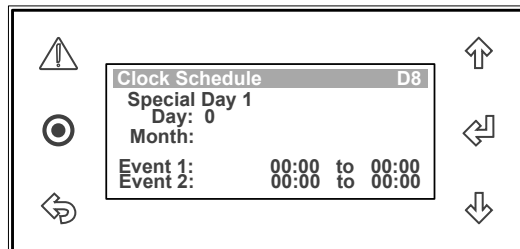
### Display Progression



### NOTES

- Use the or **Button** to toggle all of the **Clock Schedule** sub-menu functions.
- The remote push button needs to be pressed for 5 seconds while activating the After Hours.
- Refer After Hours wiring details in wiring diagram provided in the unit's electrical panel, before enabling this function.

## 18. 12 Programmable Special Days



- From the main menu, scroll down to **D. Clock / Scheduler** menu following the procedures from Setting the Clock section.
- Press **Button** to enter **D. Clock / Scheduler** main menu.
- Press **Button** to scroll down to **Clock Schedule D8** (365-Day Programming) sub-menu.
- Press **Button** to enter **Clock Schedule D8** sub-menu and the cursor will appear on the day of the month of Special Day 1.

### NOTES

There are 12 Special Days that can be scheduled within the 365-Day program. Use the or **Button** to toggle on all of the **Clock Schedule (D8-D19)** sub-menu functions.

- Press or **Button** to change the day (Date) of the month.
- Press **Button** to lock-in the day of the month and the cursor will move next to the month.
- Press or **Button** to change the month.
- Press **Button** to lock-in the month and the cursor will move next to Special Day 1, Event 1 starting time.





9. Follow steps 7- 12, procedures in setting up Events 1 and 2, from 7-Day Programming section and the cursor will move to the next **Clock Schedule** sub-menu.
10. Repeat steps 4- 8 above to set up the succeeding special days programming start and end times.



### NOTES

- The scheduled program events for each nominated special day will be in operation every time each nominated day and events occurs during the year, i.e. the program events for Special Day 1 will be repeated every year, until the program is revised.
- Leave the scheduled event untouched, should you not wish any of the particular programmable event to occur.
- The scheduled events may need to be synchronized with the daylight saving time.
- See daylight saving time set-up procedures.
- The 365-Day Special Day program will override the 7-Day program events.

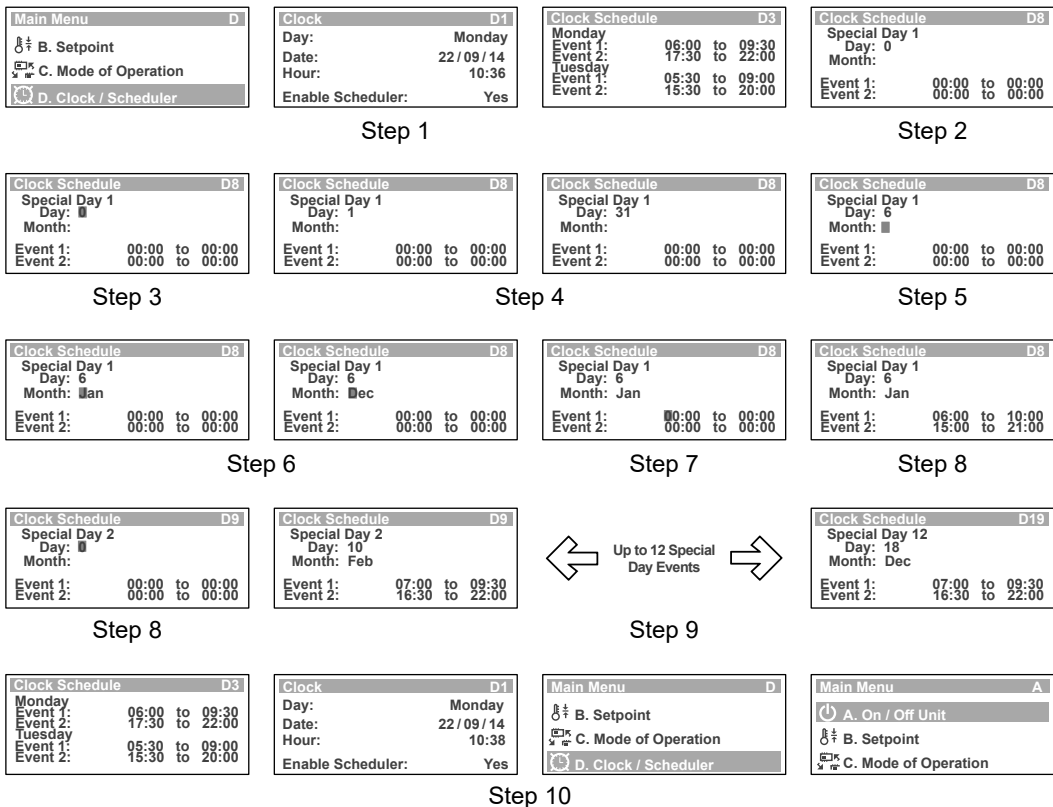
### TO RETURN TO THE MAIN MENU

11. Keep pressing  (Escape / Return) **Button** until you get to the Main Menu screen. Otherwise press  **Button**.

### NOTES

- Use the  or  **Button** to toggle all of the **Clock Schedule** sub-menu functions.
- To Turn-Off any Special Days, simply set the **Day** to **0**, this will then disable the selected Special Day.

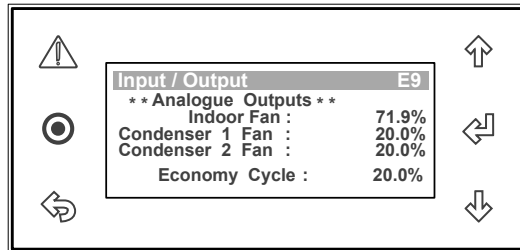
### Display Progression



### NOTE

The 365-Day 12 special days programmed events will override the 7-Day programmed events.

## 19. Status

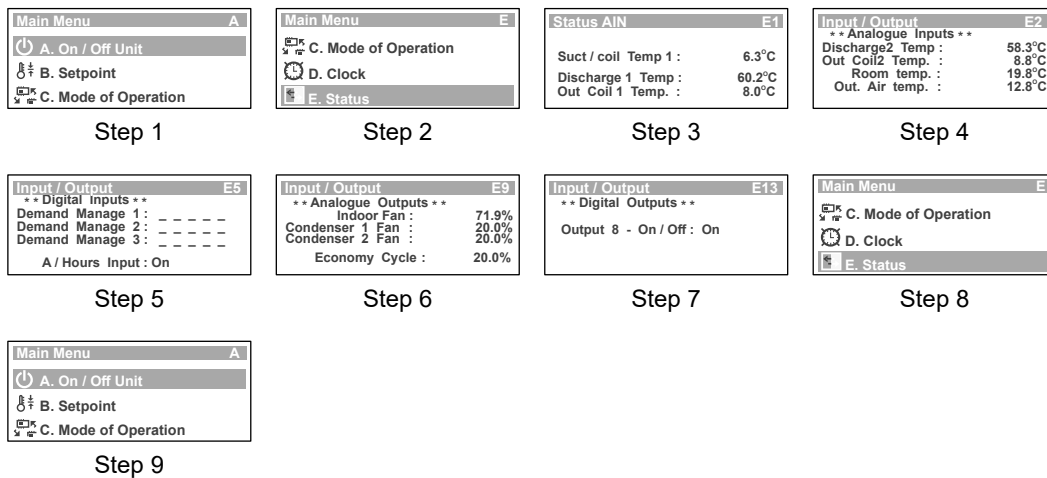


1. Press **⊙ Button** to get into the Main Menu. Display will show Main Menu and highlighted Sub-Menu **A. On/Off Unit**.
2. Press **↓ Button** to scroll down to **E. Status** sub-menu.
3. Press **↵ Button** to enter **E. Status E1** sub-menu. Display will show the first screen under this sub-menu.
4. Press **↓ Button** to scroll down to the second screen and view the operating parameters.
5. Press **↓ Button** repeatedly to scroll down to the next succeeding operating parameter screens.
6. Press **↑ Button** to scroll up and to view the previous screens.

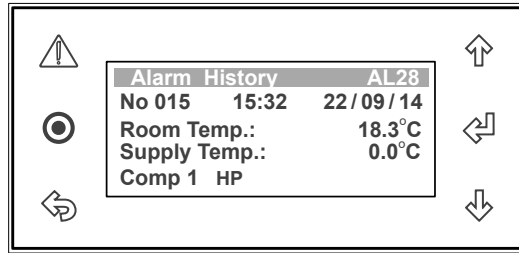
### TO RETURN TO THE MAIN MENU

7. Keep pressing **↵ (Escape / Return) Button** until you get to the Main Menu screen. Otherwise press **⊙ Button**.

### Display Progression



## 20. Alarm History



1. Press **⊙ Button** to get into the **Main Menu**. Display will show Main Menu and highlighted Sub-Menu **A. On/Off Unit**.
2. Press **↓ Button** to scroll down to **F. Alarm History** main menu.
3. Press **↵ Button** to enter **F. Alarm History** main menu. Display will show the first screen under this sub-menu.

### NOTE

Alarm History is time and date stamped.

4. Press **↓ Button** to scroll down to the second screen and view the alarm history.
5. Press **↓ Button** repeatedly to scroll down to the next succeeding screens and view the other alarm log.
6. Press **↑ Button** to scroll up and to view the previous alarm history screens.

### TO RESET THE ALARM

7. Press the **⚠ Button** twice to reset the alarm.

### NOTE

The alarm log will not be cleared but remain in the alarm history (See Warning Note below).

### TO CLEAR THE ALARM HISTORY

8. From the **F. Alarm History** menu, press **↵ Button** two times to get into Reset alarm log screen. (Press the **↵ Button** if you are in any of the alarm log).
9. Press the **↵ Button**. The cursor will appear on the **No** option.
10. Press **↓** or **↑ Button** to change the prompt to **Yes**, and then press the **↵ Button** again to clear the Alarm History.

### NOTE

After 2 seconds, the prompt will revert back to **No**, signifying that the Alarm History has been cleared.

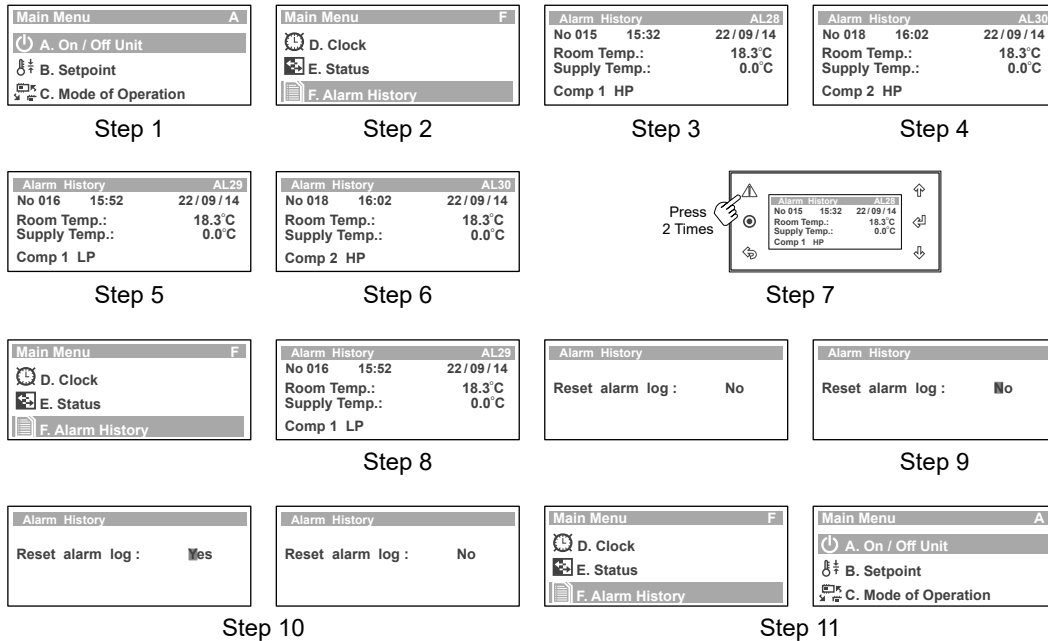
### TO RETURN TO THE MAIN MENU

11. Keep pressing **↵ (Escape / Return) Button** until you get to the Main Menu screen. Otherwise press **⊙ Button**.

### WARNING

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.**

## Display Progression



## 21. Alarm Matrix

Description	Type	Alarm Condition	Reset Condition
Discharge Temperature 1 / High Pressure Comp 1 Fault	Alarm	Temperature out of Range	Temperature and Pressure Normal
		Compressor 1 High Pressure	
Discharge Temperature 2 / High Pressure Comp 2 Fault	Alarm	Temperature out of Range	Temperature and Pressure Normal
		Compressor 2 High Pressure	
Compressor 1 LP Fault	Alarm	Compressor 1 Low Pressure	Normal Pressure
Compressor 2 LP Fault	Alarm	Compressor 2 Low Pressure	Normal Pressure
Outdoor Coil Temp1 Fault	Warning	Temperature out of Range	Temperature OK
Outdoor Coil Temp2 Fault	Warning	Temperature out of Range	Temperature OK
Room Air Temperature Sensor Fault	Warning	Temperature out of Range	Temperature OK
Outside Air Temperature Sensor Fault	Warning	Temperature out of Range	Temperature OK
Filter Alarm	Alarm	Air Filter Timer Timed-Out	Clean / Replace Filter and Reset Timer
Anti-Freeze Protection	Warning	Indoor Coil Temperature Too Low	Normal Operating Temperature
Indoor Coil Sensor Fault	Warning	Temperature out of Range	Temperature OK

### 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.**

## 22. Troubleshooting Guide

Condition	Causes Or Checkpoints
The system does not start	<ul style="list-style-type: none"> <li>• Check that 5 minutes has passed from Turn-On time, as the system has inbuilt timers.</li> <li>• Check that setpoint temperature settings are correct.</li> <li>• Check that the setpoint temperature is set low enough for cooling or high enough for heating.</li> </ul>
Air does not flow (Indoor Unit)	<ul style="list-style-type: none"> <li>• During heating operation, air does not flow out for approximately 15 seconds after start up, this prevents cold draft.</li> </ul>
Cooling/Heating is not sufficient	<ul style="list-style-type: none"> <li>• The cooling/heating function may not work effectively when the indoor return air filter is clogged with dust and dirt.</li> <li>• Make sure the air inlet and air outlet on the outdoor unit are not blocked.</li> <li>• The outside temperature is above or below the design conditions.</li> </ul>
Steam is coming out from the outdoor unit	<ul style="list-style-type: none"> <li>• It is caused by the defrosting of the outdoor unit in heating operation during cold ambient conditions.</li> </ul>
Water from the outdoor unit	<ul style="list-style-type: none"> <li>• This is normal during heating operation, which is due to water forming on the heat exchanger.</li> </ul>
Occurring of noises	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• During defrost operation, the compressor may generate more noise than normal.</li> </ul>
Setpoint Temperature cannot be adjusted	<ul style="list-style-type: none"> <li>• The Control Interface has in built upper and lower limit setting. Setpoint temperature can only be adjusted within these limits.</li> </ul>
7-Day Timeclock is not turning the air conditioner On and Off	<ul style="list-style-type: none"> <li>• Check that the timeclock is activated (see pages. 21-22).</li> </ul>

## 23. Maintenance

### Maintenance Procedures

This section describes the specific maintenance procedures that must be performed as a part of normal maintenance program. Always disconnect electrical power to the unit before performing these procedures. It is always a safe practice to observe all safety warnings and cautions when conducting maintenance tasks.

#### DANGER

##### Live Electrical Connections !

It may be necessary to work near live electrical components on certain maintenance tasks. Only qualified technicians, who are competently trained, are allowed to perform service tasks.

#### WARNING

##### Hazardous Voltage !

- Always make sure that all power supplies, including remote controls, are isolated before performing maintenance.
- 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.
- 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.
- Observe proper LOCK-OUT/TAG-OUT (LOTO) procedures to ensure that power cannot be inadvertently energised.
- Failure to isolate power before maintenance procedures can result in serious injury or death.

### Periodic Maintenance Checkpoint

- Perform all monthly maintenance inspections
- Inspect coil surfaces for cleanliness. Clean as required, apply cleaning procedures based on prevailing industry standard.
- Inspect unit air filters, clean or replace as required.

### Annual Maintenance Checklists

- Perform general maintenance inspections.
- Perform scheduled start-up checks.
- Leak test refrigerant circuits.
- Inspect contacts of all contactors and relays. Replace all worn contacts as required.
- Inspect, clean and tighten all electrical connections.
- Check fans for balanced operation. Make sure that there are no loose screws/bolts, no fan blades interference and no damage to the fans and guards.
- Inspect unit air filters, clean or replace as required.
- Clean and repaint any corroded panel surface.

### Cleaning the Control Interface

Wipe the control interface with dry cloth. Do not use water or any other solvent based solutions as it can cause damage to the outer case and electronic components of the controller.

### Air Filter Maintenance.

Regularly check the air filters for cleanliness or when a filter alarm is indicated on the control interface.

### Cleaning the Condenser Coils

Clean the coils at least once a year or more frequently if unit is located in a dusty and/or dirty environment, in order to maintain your system's proper operating performance. High discharge pressures are a good indication that the coils need cleaning. When using detergent or solvents to clean the coils, follow the manufacturer's instructions to avoid potential damage to the coils and to the unit.

To clean the refrigerant coils, use a soft brush and water spray, such as garden hose or pressure washer with low pressure nozzle.

### Outdoor Maintenance

Do not obstruct airflow to the outdoor coil to ensure your air conditioner operates efficiently. Use light detergent solutions to clean the surface of the panels. Repaint corroded panel surface, as required.

## 24. System Information

### Completing Settings Log Procedures

1. Switch-Off all motor start circuit breakers (MSCB), leaving circuit breakers CB1, CB2 and CB3 Switched-On.
2. Fill-in all current settings and information in SETTINGS LOG below:

### Settings Log:

**NOTE**

Please log all required information below, before any software changes are to be made. Failure to do so will cause difficulties in restarting the unit operation back to original settings. Leave this manual in a secure location near the unit.

### INSTALLATION INFORMATION

CUSTOMER	Name:		Tel. No.
	Address:		
INSTALLER	Name:		Tel. No.
	Address:		
SITE ADDRESS:			Date:

### MODE OF OPERATION

Mode	<input type="checkbox"/> Auto	<input type="checkbox"/> Cool Only	<input type="checkbox"/> Heat Only
Indoor Fan Mode	<input type="checkbox"/> Continuous	<input type="checkbox"/> Auto Cycle	
Return Air Temperature Setpoint	°C		
Temp. Setback	°C	<input type="checkbox"/> Enabled	<input type="checkbox"/> Disabled
Enable Scheduler	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Daylight Saving Time Set	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Transition Time	min.	Start	in at

### INDOOR FAN SETTINGS

% ID Fan Speed		%
After Hours Operation Duration		H
End	in at	

### TIMECLOCK SETTINGS

	Event 1		Event 2	
Monday	_____	to _____	_____	to _____
Tuesday	_____	to _____	_____	to _____
Wednesday	_____	to _____	_____	to _____
Thursday	_____	to _____	_____	to _____
Friday	_____	to _____	_____	to _____
Saturday	_____	to _____	_____	to _____
Sunday	_____	to _____	_____	to _____

### SPECIAL DAYS SETTINGS

	Day / Month	Event 1	Event 2		Day / Month	Event 1	Event 2
Day 1	_____	_____	_____	Day 7	_____	_____	_____
Day 2	_____	_____	_____	Day 8	_____	_____	_____
Day 3	_____	_____	_____	Day 8	_____	_____	_____
Day 4	_____	_____	_____	Day 10	_____	_____	_____
Day 5	_____	_____	_____	Day 11	_____	_____	_____
Day 6	_____	_____	_____	Day 12	_____	_____	_____

**SYSTEM CONFIGURATIONS (To access this menu, please enter the Service password: 7378).**

**G. Service → e. Communicate config.**

Ge1	Address:	Protocol:	Speed:
Ge2	Enable BMS to turn the unit On/Off <input type="checkbox"/> Yes <input type="checkbox"/> No		
	On loss of communication turn off / turn on / use timeclock		
Ge3	Enable Din4 to turn the unit On/Off <input type="checkbox"/> Yes <input type="checkbox"/> No		

**G. Service → f. Service settings → a. Working hour set**

Cfa1	Indoor Filter:	_____	hours
	Filter Fault relay:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Indoor Fan:	_____	hours
	Compressor:	_____	hours

**G. Service → f. Service settings → b. Probe adjustment**

(Return Air Temperature) Room Temp cal : \_\_\_\_\_ °C

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

Gfc1

Room Temperature Setpoint:	_____	°C
Dead band:	_____	°C
Cool Proportion band:	_____	°C
Heat Proportion band:	_____	°C
Integral Time:	_____	second

Gfc8

Multi Input 1		<input type="checkbox"/> Yes	<input type="checkbox"/> No
SUPPLY AIR TEMP	<input type="checkbox"/>	Probe Type	
ECONOMY ENABLE	<input type="checkbox"/>	NTC	<input type="checkbox"/>
NIGHT MODE ENABLE	<input type="checkbox"/>	0-5V	<input type="checkbox"/>
0-10V STAGE CONT	<input type="checkbox"/>	ON/OFF	<input type="checkbox"/>
0-10V IN FAN SPD	<input type="checkbox"/>	4-20mA	<input type="checkbox"/>
VIEW ONLY INPUT	<input type="checkbox"/>	0-20mA	<input type="checkbox"/>
CO <sub>2</sub> SENSOR	<input type="checkbox"/>	0-10V	<input type="checkbox"/>
PHASE FAIL RELAY	<input type="checkbox"/>		

Gfc2

After Hour	SW and Temp.	<input type="checkbox"/>	SW Only	<input type="checkbox"/>
Room temp. probe weight value				

Multi Input 2

Multi Input 2		<input type="checkbox"/> Yes	<input type="checkbox"/> No
SUPPLY AIR TEMP	<input type="checkbox"/>	Probe Type	
ECONOMY ENABLE	<input type="checkbox"/>	NTC	<input type="checkbox"/>
NIGHT MODE ENABLE	<input type="checkbox"/>	0-5V	<input type="checkbox"/>
0-10V STAGE CONT	<input type="checkbox"/>	ON/OFF	<input type="checkbox"/>
0-10V IN FAN SPD	<input type="checkbox"/>	4-20mA	<input type="checkbox"/>
VIEW ONLY INPUT	<input type="checkbox"/>	0-20mA	<input type="checkbox"/>
CO <sub>2</sub> SENSOR	<input type="checkbox"/>	0-10V	<input type="checkbox"/>
PHASE FAIL RELAY	<input type="checkbox"/>		

Gfc4

Supply Fan Min. Speed	_____	%
Supply Fan Med. Speed	_____	%
Supply Fan Max. Speed	_____	%
Supply Fan Min. Temp.	_____	°C
Supply Fan Max. Temp.	_____	°C

Gfc11

Unit Control Mode:		
Internal Sensors		<input type="checkbox"/>
Remote Terminal		<input type="checkbox"/>
Remote Demand		<input type="checkbox"/>
External Input		<input type="checkbox"/>

Supply Fan Control: \_\_\_\_\_

Select Wall Control: \_\_\_\_\_

Gfc5

Supply Fan Gen. 3	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Supply Fan Continuous	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Cycle on de-ice	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
One Speed Fan	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Speed Fan	<input type="checkbox"/> Low	<input type="checkbox"/> Med	<input type="checkbox"/> High
Supply Fan Run-on	_____	second	
Heat Start Delay	_____	second	

Gfc6

Setpoint Limit Min. by user	_____	°C
Setpoint Limit Max. by user	_____	°C
User Setpoint	_____	
User Mode Sel	_____	
Modelock timer	_____	second

Gfc12

Unit Series:	_____
Unit Model:	_____
Variations:	_____

Gfc7

Enable Night Mode by Scheduler	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Start Time:	_____	
Finish Time:	_____	
Max Cond fan Spd:	_____	%
cct 2 max Spd:	_____	%

Gfc13

Type of fans fitted	
Supply:	_____
Outdoor:	_____
Outdoor Init Speed	_____
OF1:	_____
OF23:	_____
Econ. Cycle Fitted:	<input type="checkbox"/> Yes <input type="checkbox"/> No
Econ. Type:	



G. Service → f. Service settings → c. Thermoregulation (Continuous)

Gfc15	
Room Temp / Humidity	
Sensor fitted:	<input type="checkbox"/> Yes <sup>(2)</sup> <input type="checkbox"/> No
Use this sensor temp. instead of AI9:	<input type="checkbox"/> Yes <input type="checkbox"/> No

Gfc16	
Outside Temp / Humidity	
Sensor fitted:	<input type="checkbox"/> Yes <sup>(3)</sup> <input type="checkbox"/> No
Use this sensor temp. instead of AI10:	<input type="checkbox"/> Yes <input type="checkbox"/> No

Gfc17	
Alarm Disable	_____
Outdoor Unit	_____
RTN AIR Sensor:	<input type="checkbox"/> Yes <input type="checkbox"/> No

Gfc18	
Alarm Disable	_____
Indoor Unit	_____
RTN AIR Sensor:	<input type="checkbox"/> Yes <input type="checkbox"/> No

Gfc19	
Damper Scaling	
Command Start:	_____ %
Command End:	_____ %
Output Start:	_____ %
Output End:	_____ %

Gfc31 <sup>(1)</sup>			
CO <sub>2</sub> Control			
Start:	_____ ppm	End:	_____ ppm
Alarm Output:	<input type="checkbox"/> Enabled	<input type="checkbox"/> Disable	
Sensor Fault:	< _____ ppm	> _____ ppm	

<sup>(1)</sup> will be visible when <sup>(4)</sup> is enabled

Gfc32	
Compressors	
1st Stage Start:	_____ %
Stop:	_____ %
2nd Stage Start:	_____ %
Stop:	_____ %
3rd Stage Start:	_____ %
Stop:	_____ %

SYSTEM CONFIGURATIONS: G. Service → f. Service settings → d. Economy Setting

Gfd1	
Min Outside Air	
CO <sub>2</sub> Sensor Disabled	Damper Position: _____ %
CO <sub>2</sub> Sensor Disabled	
CO <sub>2</sub> Sensor Enabled <sup>(4)</sup>	_____ ppm _____ ppm
CO <sub>2</sub> Level	_____ % _____ %
Damper Position	

Gfd3	
Economy Cycle	
Outside Air Max Limit	_____
Temperature:	<input type="checkbox"/> Yes <input type="checkbox"/> No °C
<sup>(5)</sup> Humidity:	<input type="checkbox"/> Yes <input type="checkbox"/> No %
<sup>(5)</sup> Enthalpy:	<input type="checkbox"/> Yes <input type="checkbox"/> No kJ/kg
<sup>(5)</sup> Moisture:	<input type="checkbox"/> Yes <input type="checkbox"/> No g/kg
<sup>(5)</sup> Dew Point:	<input type="checkbox"/> Yes <input type="checkbox"/> No °C

Gfd2	
Economy Cycle	
Enabled	<input type="checkbox"/> Yes <input type="checkbox"/> No
Temperature Difference:	_____ °C
Outside Air Minimum Limit	<input type="checkbox"/> Yes <input type="checkbox"/> No
Temperature:	_____ °C

Gfd4 <sup>(6)</sup>	
Economy Cycle	
Enthalpy	<input type="checkbox"/> Yes <input type="checkbox"/> No
Difference:	_____ kJ/kg

<sup>(6)</sup> will be visible when <sup>(2)</sup> and <sup>(3)</sup> are set to Yes

<sup>(5)</sup> will be visible when <sup>(3)</sup> outside temp/humidity sensor is set to Yes

## UNIT INFORMATION

**Model Number:**

**Serial Number:**

The air conditioner model and serial number is situated on the side panel of the unit's bottom left corner, near the compressor compartment.

**Date Installed:**



# ActronAir

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