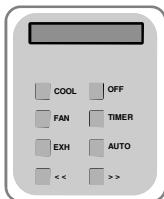


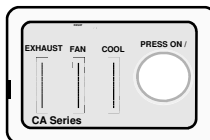
# OWNER'S GUIDE

1. Identify, using the pictures below, which controller type you have installed and turn to the relevant page for the operating instructions.
2. General information applies to all controllers.

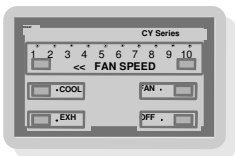
TYPE A



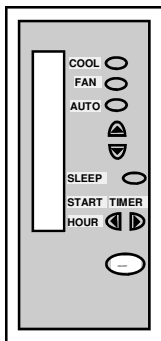
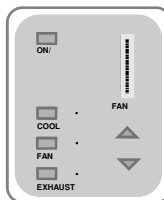
TYPE C



TYPE B



OR

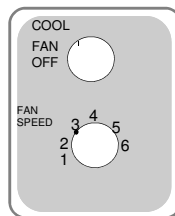


TYPE D

TYPE E

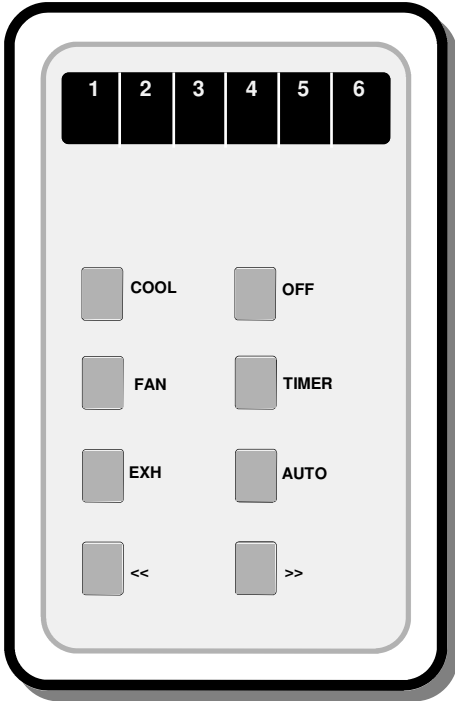


TYPE F



# CONTROLLER TYPE A

## SYSTEM OPERATION



- COOL** Switches the system on in COOL Mode.
- FAN** Switches on in FAN only Mode. Outside air is drawn in without being cooled.
- EXHAUST** Operates in EXHAUST Mode, with each outlet acting as an extraction fan. No direct cooling is possible in this mode.
- OFF** Switches off and cancels any un-elapsed time in the TIMER Mode.
- TIMER** A count down timer, to switch the system on or off.
- AUTO** Switches to AUTO Temperature Mode. Fan speed and water are regulated automatically according to the "set" temperature.
- << >>**
  1. Dims or brightens the display in OFF Mode .
  2. Adjusts fan speed in MANUAL mode.
  3. Adjusts the "set" temperature in degrees Celsius in AUTO Mode.

## DISPLAY

Digit 1

A	AUTO Mode
Blank	MANUAL Mode

Digit 2

C	COOL
F	FAN
E	EXHAUST

Note: ' - ' flashes during a housekeeping or 'wait' time cycle.

Digits 3 - 5

MANUAL Mode	Fan speed % (1 - 100)
AUTO Mode	Temperature degrees Celsius. (10 -40)

Digit 1 - 6

TIMER Mode - Unelapsd time

# CONTROLLER TYPE A

## COOL

The fan speed is expressed in percentage points between 1% and 100%.

The system has been pre-set to provide a 5 minute WASH cycle before the fan starts. Water is circulated over the pads to wash off any dust. To by-pass this WASH cycle, press FAN and then COOL.

Every 5 hours a periodic drain cycle empties the tank of water. This 5 hour cycle may be altered if required. See reference Water Manager Periodic Drain Time.

When the air conditioning system is switched off, the water tank is emptied and a fresh tank of water is taken in. This fresh water is used to perform an 8 minute FLUSH cycle. Fresh water rinses and cleans the pads of any impurities or minerals left from the cooling evaporation process. To by-pass this FLUSH cycle, press FAN then OFF.

As a final process, the tank is emptied of water leaving it clean and dry.

Once the end of day FLUSH cycle has commenced it takes 15 minutes to complete. The FLUSH cycle can be stopped sooner than 15 minutes by pressing FAN before OFF.

## FAN

The FAN mode is useful when the outside ambient temperature has dropped and no direct cooling is required.

## EXHAUST

A delay occurs when switching to EXHAUST mode. This protects the motor and allows it time to stop before the rotation is reversed.

Exhaust mode is useful for expelling odours from the home without the in-rush of air experienced with the COOL and FAN modes. It is particularly useful in winter when a cold draft of air is not desirable.

## OFF

OFF Mode displays the current ambient temperature.

## TIMER

Each subsequent press of the TIMER key, increments the timer by 30 minutes, up to a maximum of 99 hours, 30 minutes.

Pressing the OFF key, or any of the mode keys cancels any unelapsed time from the timer.

If the air conditioning system is turned off, pressing the TIMER key switches it on in COOL mode when the timer reaches zero.

Conversely, if the system is operating in either COOL, FAN, or EXHAUST modes, the system switches off when the timer reaches zero.

# CONTROLLER TYPE A

## AUTO

Press the AUTO key, "A" is shown in digit one on the display. Now press COOL, FAN or EXHAUST (it is not usual to operate the unit in AUTO EXHAUST).

The "set" temperature is displayed for 5 seconds. Whilst the "set" temperature is displayed, alter to the desired setting. To redisplay the "set" temperature press the << key.

The fan speed is automatically adjusted to maintain the desired temperature level. The greater the variation between the ambient and "set" temperatures, the faster the fan speed and greater the cooling effect.

When the ambient temperature reaches a point below the "set" temperature, the fan switches off. The pump continues to operate for 1 hour after the fan has switched off. After one hour of 'no fan operation' the system shuts down.

A temperature that is set at an unrealistically low level will not be achieved, due to the limitations of evaporative air conditioning. A low temperature setting causes the system to operate at maximum fan speed. continuously.

If either "AC", "AF" or "AE" are displayed and the fan is not operating, the system is active and will automatically switch ON when the ambient temperature reaches the "set" temperature.

If only "A" is displayed, the system is in AUTO Mode, but not switched on.

The Timer operates in AUTO Mode as well. The system switches on, only if the temperature rises above the 'set' temperature, and only once the Timer period has elapsed.

The temperature displayed is accurate for the purpose of operating the AUTO feature of your air conditioning system. Do not obstruct the ventilation slots in the keypad base as this may cause an incorrect temperature reading.

## BUSHFIRE MODE

This mode is activated by pushing the "COOL" button twice. The fan remains off so that smoke will not be introduced into the house. The pump circulates water keeping the pads wet. The periodic drain cycle will function as normal.

To operate this mode:

- If the system is operating in COOL mode. Press "COOL". The "C" on the keypad display will change to a flashing "P". The fan will turn off and the pump will continue to circulate water.
- If the system is off. Press COOL / COOL. The display will show a flashing "P" and in approximately 60 seconds the pump will start circulating water keeping the pads wet.

To return to "COOL" mode press the "COOL" button and the fan will come on. The "P" on the display will be replaced with a "C".

## AMENDING THE WATER MANAGER PERIODIC DRAIN TIME

The Water Management System has a default five hour drain cycle. This five hour drain cycle is adequate for most water supplies. Consult your dealer for advice.

With different water qualities it may be necessary to vary this cycle as follows:-

Press the AUTO key and keep it depressed. Press the TIMER key until the required drain cycle time is reached, and release the AUTO key. Press the OFF key. The periodic drain cycle has now been altered to the displayed time.

Do not adjust the periodic drain cycle to an unrealistic high number. Regular drain cycles are required to maintain water purity and cooling efficiency.

# ADJUSTING THE TEMPERATURE SENSOR ON THE QA KEYPAD

When the keypad is OFF the ambient temperature is displayed if this temperature is not accurate the temperature sensor can be re-set as described below.

## LOCATING THE TEMPERATURE SENSOR POT

Remove the outer cover from the keypad as shown in the picture



The temperature sensor pot is located on the right hand side of the keypad 15mm from the lower edge



Side view of keypad showing the slot in the housing and the temperature pot in the background.

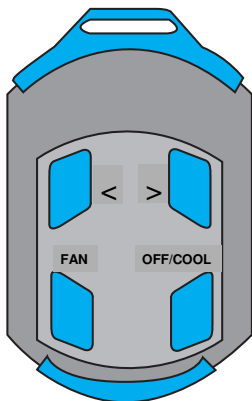
## SETTING THE TEMPERATURE SENSOR POT

Use an accurate thermometer, preferably one that has been calibrated. Check the temperature which is being displayed on the keypad against the calibrated thermometer.

Use a small screwdriver to adjust the pot. Place it in the slot of the temperature sensor pot, turn several times (clockwise to increase the reading), there is a time lag between the turning of the pot and the keypad display changing so wait for the temperature reading on the keypad to change. This process may need to be repeated several times before the desire temperature is attained.

Once the temperature is set replace the keypad cover.

# CONTROLLER TYPE A - WITH REMOTE



- Press either FAN or COOL to turn the system on.
- Adjust FAN SPEED < down or >up.
- OFF/COOL button is dual purpose. If the system is running, pressing the OFF/COOL button will switch it off.
- If the system is off, pressing the OFF/COOL button will switch it on in COOL mode.

## NOTE:

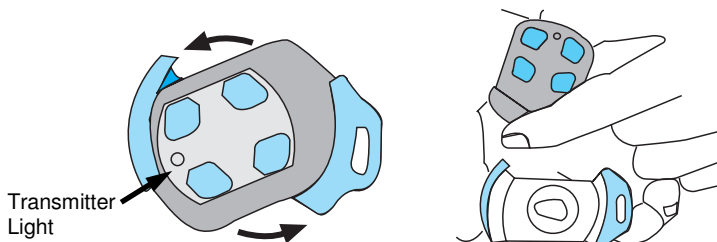
To select COOL mode directly from FAN mode, press the OFF/COOL button twice - once to select OFF and once to select COOL.

If the OFF/COOL button is pressed several times in quick succession and is not responding to further button presses, the system will have started a WASH cycle. Press the FAN button to cancel the WASH cycle and OFF/COOL to switch OFF. Then select the required mode.

## REPLACING THE BATTERY IN THE TRANSMITTER

If the light on the transmitter stops flashing when a button is pressed, replace the battery as follows:

1. Rotate the inner casing and remove it from the outer clip.



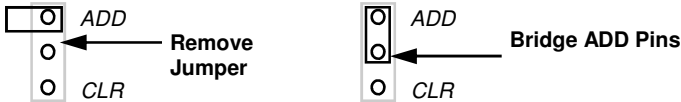
2. Using a coin separate the two halves of the case.
3. Replace the battery with a GP23 type 12V-23A Alkaline.
4. Note polarity.

# CONTROLLER TYPE A - WITH REMOTE

## PROGRAMMING EXTRA TRANSMITTERS

The receiver and transmitter are pre-programmed. To attach additional transmitters, program as follows:-

1. Power to remain connected.
2. Remove the wall controller from its mounting plate and locate the 'ADD' pins and jumper on the rear of the controller circuit board.
3. Remove the jumper from the top pin and bridge the 'ADD' pins with the jumper. The red LED will illuminate.



4. Press each button on the transmitter once. The LED will flash once, indicating that the button pressed has been accepted.
5. Remove the jumper from the 'ADD' pins and replace it on the top pin.



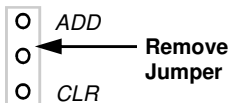
## RESOLVING A CONFLICT SITUATION

If the transmitter is operating other devices in the home (even a neighbour's home), or another remote transmitter operates the air conditioning system, the transmitter will need to be replaced with a new one, and the wall controller re-programmed.

1. With the power connected, bridge the 'CLR' pins with the jumper.



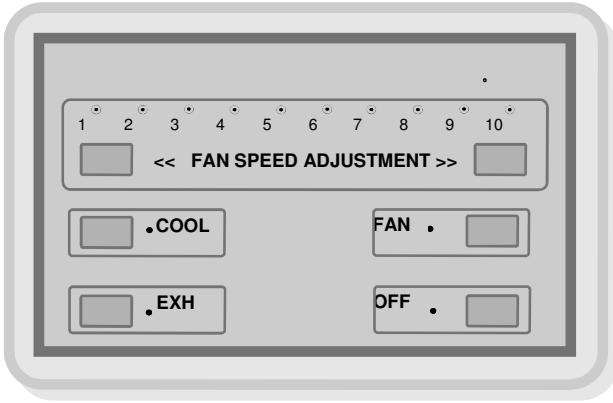
2. The LED will flash slowly 12 times, then stay on.
3. Remove the jumper. The LED will flash rapidly as the memory is erased.



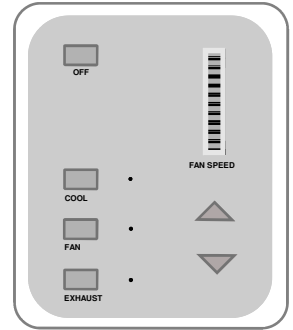
4. Select a new transmitter and repeat 'PROGRAMMING EXTRA TRANSMITTERS' steps 3 to 5.

# CONTROLLER TYPE B

## SYSTEM OPERATION



OR



- COOL Switches the system on in COOL Mode.
  - FAN Switches on in FAN Only Mode. Outside air is drawn in without being cooled.
  - EXHAUST Operates in EXHAUST Mode with each room outlet acting as an extraction fan. No direct cooling is possible in this mode.
  - OFF Switches Off.
  - FAN SPEED Fan speed indicator lights.
  - FLASHING LED One of the function LED's flashes during a 'housekeeping' cycle or 'wait' time
- << & >>  
or  
▲  
▼
- 1) Adjusts fan speed.
  - 2) Dims or brightens the LED indicators when the system is in OFF mode .



# CONTROLLER TYPE B

## COOL

The system has been pre-set to provide a 5 minute wash cycle before the fan starts. Water is circulated over the pads to wash off any dust. To bypass this wash cycle, press FAN and then COOL. After each 5 hours of operation a periodic drain cycle empties the tank of water. This 5 hour cycle may be altered if required. See “Water Management System Settings”.

When the air conditioning system is switched off, the water tank is emptied and a fresh tank of water is taken in. This fresh water is used to perform an 8 minute FLUSH cycle. Fresh water rinses and cleans the pads of any impurities or minerals left from the cooling evaporation process. To by-pass this FLUSH Mode, press FAN then OFF.

As a final process, the tank is emptied of water leaving it clean and dry.

Once the end of day FLUSH cycle has commenced it takes 15 minutes to complete. The FLUSH cycle can be stopped sooner than 15 minutes by pressing FAN then OFF.

## FAN

The FAN Mode is useful when the outside ambient temperature has dropped and no direct cooling is required.

## EXHAUST

A delay occurs when switching to EXHAUST Mode. This is to protect the motor and allow it time to stop, before the rotation is reversed.

Exhaust mode is useful for eliminating odours from the home without the in-rush of air experienced with the COOL and FAN modes. It is particularly useful in winter when a cold draft of air is not desirable.

## OFF

Turns the system off.

## WATER MANAGER SYSTEM SETTINGS

**The Water Manager System has been factory fitted (5 hours) and set up by your installer.**

On the rear of the keypad, three ‘Jumpers’ or a Dip switch are fitted. They function as follows:-

**DRAIN** - Remove jumper / Dip switch “3” in off position if no periodic drain cycle and flush cycle is required.

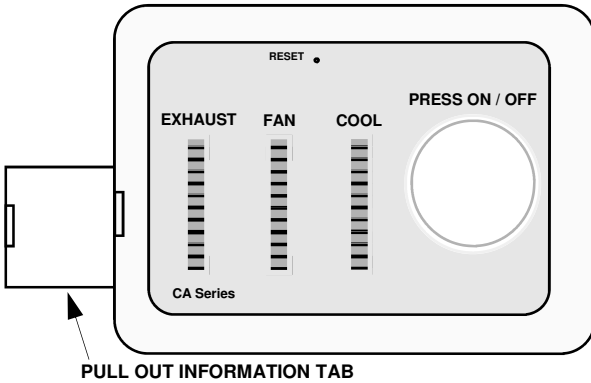
**WASH** - Remove jumper / Dip switch “2” in off position if a DRAIN after WASH cycle is required. This function is useful for dusty environments. The tank of water is emptied after the 5 minute WASH cycle.

**LONG** - With jumper fitted /dip switch “1” in on position - 2.5 hour periodic cycle.  
- Without jumper fitted / dip switch “1” in off position - 5 hour periodic drain cycle.

**NOTE** - A “jumper” is a small black oblong plastic plug. When fitted it covers both steel pins.

# CONTROLLER TYPE C

## SYSTEM OPERATION



## DISPLAY

There are 3 sets of bar graph indicator lights on the front of the keypad. The more segments that are lit, the greater the fan speed. When all 10 segments are lit, the motor is running at it's maximum speed. When the system is turned off, a single segment will remain lit, indicating the last-used mode and motor speed setting.

The brightness of the display may be adjusted by rotating the rotary knob in OFF mode.

- |              |  |
|--------------|--|
| COOL         | Switches the system on in COOL Mode.   |
| FAN          | Switches on in FAN Only Mode. Outside air is drawn in without being cooled.  |
| EXHAUST      | EXHAUST Mode. The system operates in EXHAUST Mode, with each room outlet acting as an extraction fan. No direct cooling. |
| ON/OFF       | Switches the system ON or OFF. Changes modes & adjusts fan speed.  |
| FLASHING LED | A flashing LED indicates that the system is in a 'housekeeping' cycle or 'wait' time.                                    |

## COOL

Press and hold the rotary knob in, rotate until the COOL Bar Graph is lit and then release. Press the rotary knob to turn the system on.

Adjust the fan speed up or down by turning the knob.

The system has been pre-set to provide a 5 minute wash cycle before the fan starts. Water is circulated over the pads to wash off any dust. To bypass this wash cycle, select FAN then COOL..

Every 4 hours, a periodic drain cycle empties the tank of water. This 4 hour cycle may be altered if required. (Refer to Water Manager System Setting).

When the air conditioning system is switched off, the water tank is emptied and a fresh tank of water taken in. This fresh water is used to perform a FLUSH cycle. Fresh water rinses and cleans the pads of any impurities or minerals left over from the evaporation process. To bypass this FLUSH Mode, select FAN then OFF.

As a final process, the tank is emptied of water leaving it clean and dry. Once the end of day flush cycle has commenced it will take 15 minutes to complete. The FLUSH Mode can be stopped sooner than 15 minutes by selecting FAN then OFF.

# CONTROLLER TYPE C

## FAN

Press and hold the rotary knob in, rotate until the FAN Bar Graph is lit and then release.

Press the rotary knob to turn the system on.

The FAN Mode is useful when the outside ambient temperature has dropped and no direct cooling is required.

## EXHAUST

Press and hold the rotary knob in, rotate until the EXHAUST Bar Graph is lit then release.

Press the rotary control to turn the system on.

A delay occurs when switching between forward and reverse modes. This is to protect the motor and allow the motor time to stop before the direction is reversed.

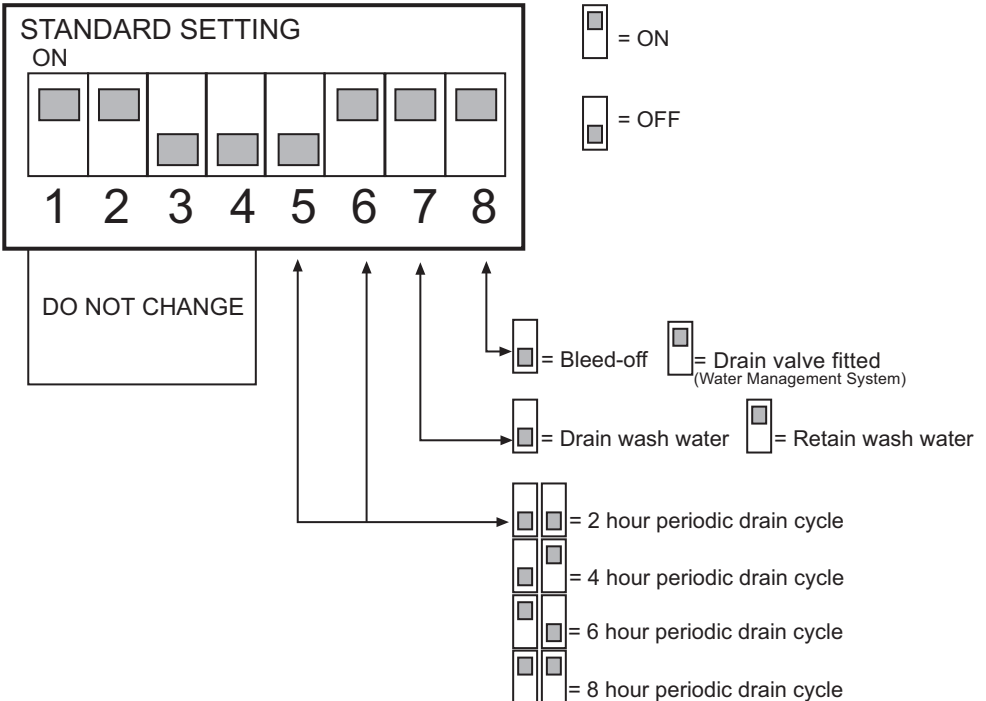
A useful mode for eliminating odours from the home without the in-rush of air experienced with the COOL and FAN modes. It is particularly useful in winter when a cold draft of air is not desirable but some form of ventilation is required.

## OFF

Press Rotary control knob.

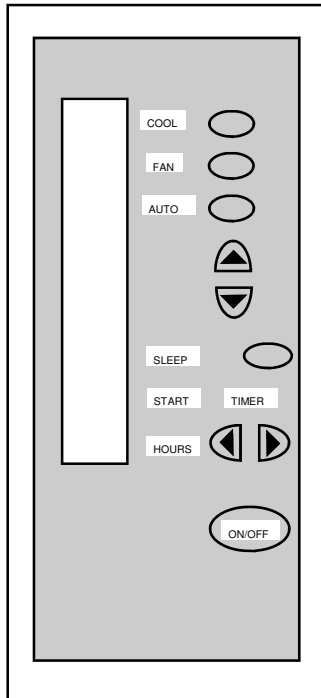
## WATER MANAGER SYSTEM SETTING

The Water Manager System has been factory fitted and set up by your installer. On the back of the keypad a dip switch panel can be located. Settings are as follows :-



# CONTROLLER TYPE D

## SYSTEM OPERATION



## BUTTON FUNCTIONS

- |        |  |
|--------|--|
| COOL   | Turns on COOL mode. Only possible when FAN is on.        |
| FAN    | Turns on FAN mode.                                       |
| AUTO   | Switches between AUTO and MANUAL mode.                   |
| ▲<br>▼ | Adjusts the fan speed in MANUAL or AUTO mode.            |
| TIMER  | System will switch ON or OFF in the SET time.            |
| ◀▶     | Adjusts the SET time.                                    |
| ON/OFF | Power Control. Always turns on at the last used setting. |

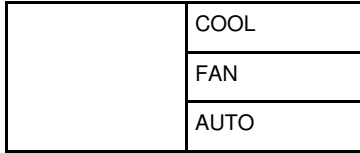
# CONTROLLER TYPE D

Set the **COOL**, **FAN**, **AUTO** and **FAN SPEED** indicators to the required setting. (As per the diagrams below).

Operate the system using the ON/OFF button.

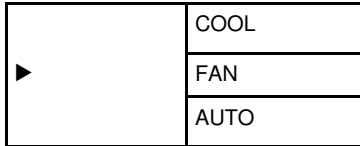
## MANUAL

### OFF



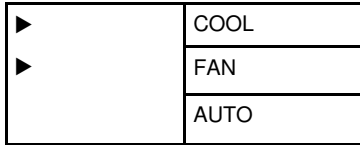
### FAN - MANUAL

Press ▲ ▼ to adjust the fan speed



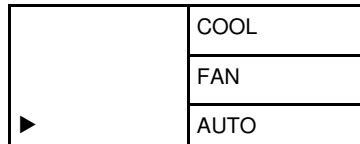
### COOL - MANUAL

Press ▲ ▼ to adjust the fan speed

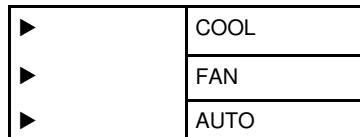


## AUTO

### AUTO STANDBY



### AUTO OPERATING



# CONTROLLER TYPE D

The AUTO function automatically adjusts fan speed and water to maintain a desired temperature.

Press the AUTO key to enter AUTO STANDBY mode. AUTO will be displayed.

## RISING TEMPERATURE

The fan will now automatically start when the ambient temperature at the wall controller reaches 21.5 °C .

At 21.5 °C the fan starts on speed 1 (1 bar displayed) with the water pump off.

At 22 °C, the water pump turns on and the fan moves to speed 2 (2 bars displayed). The fan continues to increase speed, in increments of 10% (1 bar) for every 0.5 °C increase in temperature.

At 26.0 °C and above, the fan runs at maximum speed. (All bars displayed)

The fan speed is automatically adjusted up or down to maintain the desired temperature setting—within the constraints of evaporative air conditioning.

## FALLING TEMPERATURE

The fan switches off when the ambient temperature drops down to 21 °C. The water pump will continue to run. If the ambient temperature remains at 21 °C or less for 30 minutes, the water pump switches off, water is drained from the base and the system enters AUTO STANDBY mode.

In AUTO STANDBY mode, AUTO is displayed and the system will continue to monitor the ambient temperature to begin cooling at the start of a new cycle.

It should not be necessary to alter the factory automatic temperature settings. If however you prefer cooler or warmer air temperatures, see Appendix 1 at the end of the Owners section, on how to alter the settings for more or less cooling.

# TIMERS

## TIMER - SLEEP

▶	SLEEP
	START
12	HOURS

For a delayed "switch off" when the air conditioner is running in either AUTO or MANUAL, press the SLEEP button.

Set the required number of hours with the ◀▶ buttons.

The air conditioner will switch off in the number of hours displayed.

# CONTROLLER TYPE D

## TIMER - START

▶	SLEEP
	START
12	HOURS

To set the air conditioner for a delayed start in either AUTO or MANUAL, press the TIMER START button.

Set the required number of hours to start-up with the ◀▶ buttons.

For AUTO, press the AUTO button.

For MANUAL, set either FAN only or FAN and COOL and set the required fan speed.

## WASH CYCLE IN COOL

When starting in COOL, an automatic pre-wet of the filter pads or WASH cycle of approximately 6 minutes is started.

The fan starts when the WASH cycle has completed.

## PERIODIC DRAIN CYCLE IN COOL

An automatic PERIODIC DRAIN CYCLE drains the tank of water after each 5 hours of operation and replenishes it with a tank of fresh water.

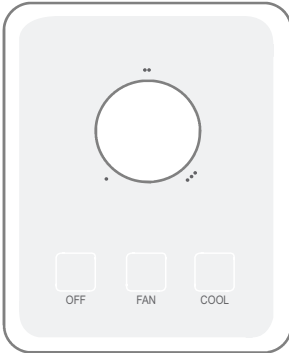
This PERIODIC DRAIN CYCLE is necessary for the maintenance of water purity.

## OPTIONAL REMOTE CONTROL

When installed, the remote control, operates the ON/OFF button of the wall controller.

# CONTROLLER TYPE E

## SYSTEM OPERATION



OFF	Switches system off.
FAN	Switches system on in FAN ONLY. No cooling.
COOL	Switches on both FAN and COOL.
ROTARY KNOB	Fan speed adjustment

### FAN

Press FAN and adjust fan speed.

### COOL

Press COOL. An automatic pre-wet or WASH cycle of approximately 6 minutes is started.

The fan starts when the WASH cycle has completed.

During the WASH cycle the COOL indicator flashes.

To bypass the WASH cycle in COOL, press FAN before COOL. The fan starts immediately.

Adjust the fan speed to the desired level.

An automatic PERIODIC DRAIN CYCLE drains the tank of water every 5 hours and replenishes it with a tank of fresh water. This PERIODIC DRAIN CYCLE is necessary for the maintenance of water purity.

### OFF

Press OFF. The fan is turned off and the system enters an automatic end-of-day FLUSH cycle.

The FLUSH cycle drains the water in the tank, refills with fresh water, rinses the filter pads and drains the rinse water before switching off.

The total duration of the FLUSH cycle is approximately 12 minutes.

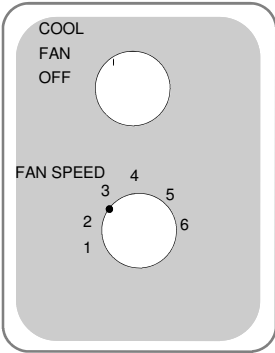
During the FLUSH cycle the cool indicator flashes.

To bypass the FLUSH cycle when switching off, press FAN before OFF.



# CONTROLLER TYPE F

## SYSTEM OPERATION

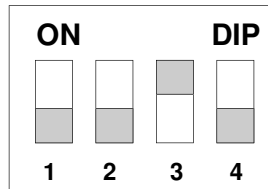
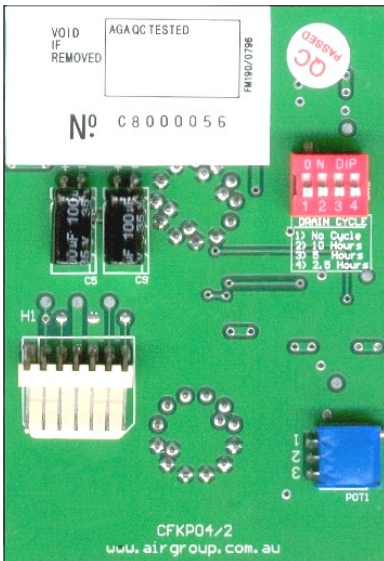


- OFF** Switches system off.
- FAN** Switches system on in FAN ONLY NO COOLING.
- COOL** Switches on both FAN and COOL.
- FAN SPEED** Select desired fan speed.

## AUTO-DRAIN INSTALLED

An automatic PERIODIC DRAIN CYCLE drains the tank of water and replenishes it with a tank of fresh water. This periodic drain cycle is variable from 0 (NO PERIODIC CYCLE) 2.5 HOURS, 5 HOURS and 10 HOURS. It is factory set at 5 HOURS. Set the dip switches on the rear of the keypad to vary the drain cycle times as per the diagram below.

PERIODIC DRAIN CYCLE is necessary for the maintenance of water purity. When the air conditioner is switched OFF the tank is drained of water.



**Dip switch set to ON**

### **CYCLE**

- 1) No Cycle**
- 2) 10 Hours**
- 3) 5 Hours**

Factory Setting Displayed - Switch 3 set to ON

# GENERAL INFORMATION

Applicable to all controller types

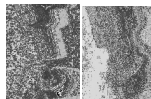
- If the unit appears to surge at times, check that strong wind drafts are not the cause. A strong gust of wind may cause the fan to race momentarily as it is 'wind assisted'.
- At times of high humidity, cooling performance is diminished. Operate the fan only.
- The cooling ability of a system is not only related to the efficiency of the unit design, but also to the duct design and professional installation. Insulated ceilings will lower internal temperatures significantly over non-insulated ceilings.
- During operation in Cool Mode, water discharges from the overflow pipe. This water has been re-circulated through the pads many times. The evaporation process results in a build-up of minerals and solids in the water. This water, if channelled onto the garden may be harmful to some plants. It is not suitable for animal or human consumption. Test the water on plants in small amounts before fully discharging into the garden.
- Never operate the system if the room vents have been closed off. This may cause overheating and damage to the motor.
- At the time of initial start-up an odour may be detected. This odour is characteristic of filter pads. It is neither harmful nor particularly unpleasant and will dissipate within 2-3 days. The fan motor may also have an 'electrical' type smell for a short period as it heats up initially, and residual varnish is 'burnt off' the motor's surface.
- When the COOL mode commences, the tank is filled with water. This takes approximately 90 seconds, during which time the pump remains switched off. When the pump starts, water is pumped up into the filter pads which quickly lowers the water level. For a short period of up to one minute the water being pumped up into the filter pads exceeds the amount of fresh water flowing into the base. The pump may make an intermittent "slurping" noise until the water level is balanced. This is not harmful to the pump nor always audible, but please be aware of it should you hear it.

## PRE SEASON MAINTENANCE

We recommend an annual service, to keep your system in top operating condition.

The Service Centre telephone number together with the unit size and serial number are recorded on the front and back of this guide.

1. Isolate power if necessary.
2. Remove the lid.
3. If necessary, clean the base.
4. Close the water shut-off valve. Remove and clean shut-off valve filter. Open shut-off valve.
5. Turn on the power. Operate the system in COOL Mode, check that the drain valve closes, and the tank fills with water.
6. Adjust the water level if necessary. Ideally this level should be 10mm below the overflow.
7. Check that the water is being evenly distributed over the pads and that there are no obstructions in the water distributor, located above the filter pads.
8. Replace the lid and secure it by firmly tightening the lid bolts. Do not over-tighten.



SHUT-OFF VALVE & FILTER

# GENERAL INFORMATION

## END OF SEASON MAINTENANCE

At the end of each season, carry out the following steps.

1. Isolate the power to the air conditioner which will normally be located in the meter box. An internal isolator is located on the electrical box inside the unit.
2. Turn off the water supply to the unit.
3. Remove the lid and filter pads. Carry the pads to the ground and gently hose down both sides of the filter pads to remove any dust or pollen.
4. Gently but thoroughly clean the base of the unit. A mild detergent may be used, but no solvent type product which may react with the polymer.
5. Replace the lid and ensure that it is securely fastened.

## RELIEF AIR

An evaporative air conditioner operates on one very important principle. Large amounts of fresh air displace warm stale air through doors, windows and security vents. If the system is unable to expel the fresh air, the area will become pressurised and the fan motor will automatically begin to “coast” and its effectiveness will be reduced. COOL AIR IN - WARM AIR OUT. A very simple principle.

It is also possible to regulate cooling through this principle. By closing the window of an unused room, the air will exit through the door channelling the air to other rooms. It is usual to install outlets away from windows. Opening a window will allow the air to pass through the room and cool it. By closing all windows and opening the door, the air will exit directly through the door.

For persons not wishing to leave doors and windows open, particularly at night, a relief vent may be fitted. This is a grille usually situated in the ceiling with a self closing mechanism. When the air conditioner is operating the vents will be forced open by the air pressure. This has the added advantage of cooling the roof space. During hot days, the relief vent will be unable to maintain adequate air relief and it will be necessary to open additional doors and windows. During the evenings when the temperature reduces, the relief vent should be sufficient. If the timer is set to switch the system on, ensure there is adequate relief air.

Allow approximately 1.0 sqm of relief air for each 60 units of model number. For example allow 4.0m<sup>2</sup> for a model 240. The model number of your unit may not exactly match one of the following. Choose the one nearest. Use the table below as a guide.

The fan speed increases when a door is opened and increases the relief air.

<b>Model</b>	90	100	125	165	200	220	230	240	255	260	400	500
<b>Opening m<sup>2</sup></b>	1.5	1.5	2.0	3.0	3.5	3.5	4.0	4.0	4.5	4.5	6.5	8.5

# APPENDIX 1 - CONTROLLER TYPE D

The following Table 1 shows the factory-set room temperature settings and related fan speeds in AUTO mode.

**TABLE 1**

Temperature °C	Fan Speed (Number of bars displayed)
Up to 21.0	Off
21.5	1 Fan
22.0	2 Fan & Pump
22.5	3 Fan & Pump
23.0	4 Fan & Pump
23.5	5 Fan & Pump
24.0	6 Fan & Pump
24.5	7 Fan & Pump
25.0	8 Fan & Pump
25.5	9 Fan & Pump
26.0 and over	10 Fan & Pump

For example, in AUTO mode, on the standard factory setting and a 24 °C room temperature, the fan will operate at speed setting number 6.

To change the factory-set temperature settings the system should be operating with the COOL, FAN and AUTO displayed.

TO INCREASE COOLING CAPACITY - PRESS ▲  
TO DECREASE COOLING CAPACITY - PRESS ▼

Each key press of the ▲ or ▼ key, changes the relationship between the ambient temperature and the fan speed by one fan speed bar.

The fan speed scale is moved up or down one position with each press of the ▲ or ▼ keys.

## **MORE COOLING**

For example, pressing the ▲ key twice increases cooling capacity by raising the fan speed by 2 bars - more fan speed = greater cooling after the adjustment, at 21 °C , the fan will now operate on fan speed 2.

## **LESS COOLING**

For example pressing the ▼ key 4 times decreases cooling capacity by lowering the fan speed by 4 bars. After the adjustment, the fan will only operate when the ambient temperature reaches 23.5 °C

Pressing the ON/OFF key cancels any amended temperature settings and restores the factory-set temperature setting as per Table 1.

To retain amended settings, leave the system in AUTO STANDBY mode. It will automatically cycle on and off daily.