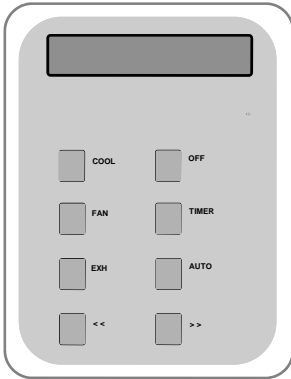
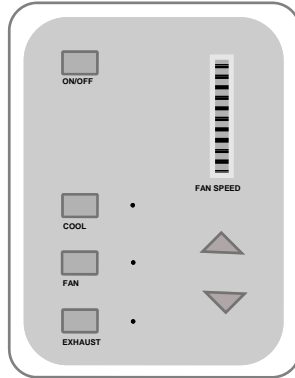


OWNER'S GUIDE

QA CONTROLLER



QM CONTROLLER



Installer to supply information below and to complete Conditions of Warranty at the back of this guide.

Model No. _____

Serial No. _____

Installation Date _____

FOR SERVICE

PHONE 1300 364 220 or **www.airgroup.com.au**

Before calling for service check the following:

- Is the power connected?
- Is the water supply to the unit turned on at the isolator tap?

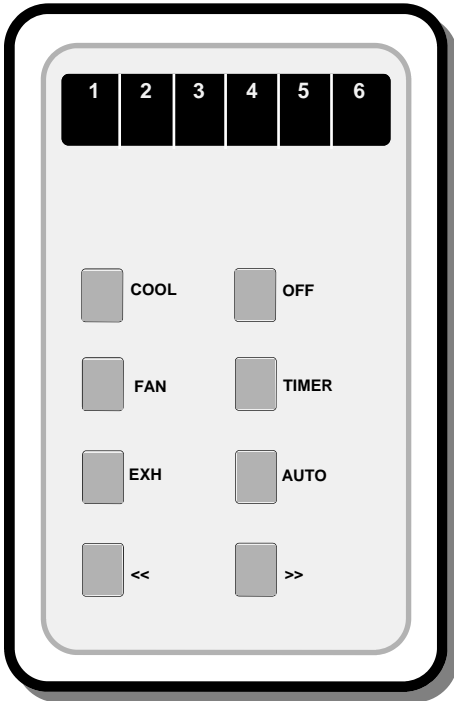
For service calls attended during the warranty period:

- 1) Provide the service person with proof of purchase, ie Invoice from installing dealer.
- 2) Where no fault has been found, service charges will be payable at the standard service rate.

NOTE: The air conditioning system is to be operated by a responsible adult or under the supervision of a responsible adult.

QA CONTROLLER

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-elapsd 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

QA CONTROLLER

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.

QA CONTROLLER

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. The fan will come on when the temperature is 1 degree below the set temperature.

When the ambient temperature reaches 3 degrees 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

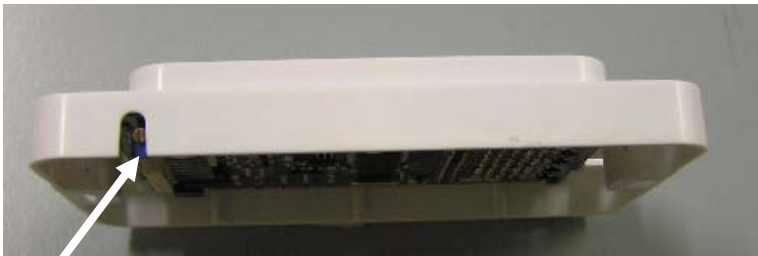
When the keypad is OFF the ambient temperature is displayed if this temperature is not accurate the temperature sensor can be re-set as described below.

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

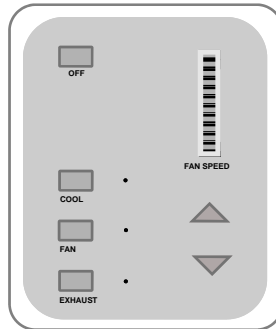
Use an accurate thermometer, preferably one that has been calibrated. Check the temperature which is being displayed on the keypad against the calibrated thermometer.

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.

QM CONTROLLER

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 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



1) Adjusts fan speed.

2) Dims or brightens the LED indicators when the system is in OFF mode .

QM CONTROLLER

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 set at 5 hours. This can be changed if required.

On the rear of the keypad are four Dip switches. They function as follows:-

- DRAIN - Dip switch "3" in off position if no periodic drain cycle and flush cycle is required.
- WASH - 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 - Dip switch "1" in on position - 2.5 hour periodic cycle.
 - Dip switch "1" in off position - 5 hour periodic drain cycle.

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 Celdek 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 Celdek 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. Electrical components to be maintained by qualified service people.

1. Isolate power at property's main supply board. Disconnect unit's' power plug from the mains supply. If cable damaged have it replaced by qualified person.
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.
6. Turn on the power. Operate the system in COOL Mode, check that the drain valve closes and the tank fills with water.
7. Adjust the water level if necessary. Ideally this level should be 10mm below the overflow.
8. Check that the water is being evenly distributed over the pads and that there are no obstructions in the water distributor, located above the pads.
9. 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 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 pads. Carry the pads to the ground and gently hose down both sides of the 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.
6. In areas where winter temperatures go below freezing the filter is to be drained of water at the end of the summer season.

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 it's 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 4.0m² 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.

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

CONDITIONS OF WARRANTY - AUSTRALIA

OWNER - PLEASE MAKE SURE THAT THIS FORM HAS BEEN FULLY COMPLETED BY YOUR DEALER
FOR INSTALLATIONS OUTSIDE AUSTRALIA CONTACT YOUR INSTALLING DEALER

PROOF OF PURCHASE IE. SUPPLIERS INVOICE MUST BE PROVIDED TO SUBSTANTIATE WARRANTY CLAIMS

Name _____

Dealer _____

Address _____

Address _____

Post Code _____

Post Code _____

Unit Details

Model _____ Install Date ____/____/____

Dealer's Phone Number _____

INSTALLER PLEASE CONFIRM TICK

Serial Number _____

1. Water level checked & adjusted if required.

Number of Units on site _____

2. Weather seal (if fitted) operating freely.

3. Operation of system explained to customer.

For Service contact

AIR GROUP AUSTRALIA Tel. 1300 364 220 28/30 Division Street, Welshpool, Western Australia 6106

COMPLETE UNIT WARRANTY

Except as noted in the Exclusions Section the products described in this certificate are warranted against defects in material or workmanship under normal use and maintenance.

ALL COMMERCIAL INSTALLATIONS INCLUDING MOBILES

2 years parts 2 years labour

RESIDENTIAL INSTALLATIONS / APPLICATIONS

5 years parts 3 years labour

A surcharge will apply if access to the air conditioner is restricted and two technicians and/or safety equipment are required.

In areas where we do not have an approved Service Agent or the closest approved Service Agent is situated more than twenty-five (25) kilometres from the installation, we are not obligated to arrange warranty repairs or cover any travel charges and/or additional labour charges incurred.

Should the installation date be unavailable, the date of manufacture plus six (6) months will apply.

No other person is authorised to provide a warranty greater than this undertaking given by ourselves.

Any part replaced within the warranty period is warranted until the expiry of the original unit warranty.

EXTENDED CASING WARRANTY

In addition to the above Complete Unit Warranty, the casing is warranted for a total of ten (10) years against defects in material and UV degradation.

EXCLUSIONS

This warranty does not include Celdek pads and batteries. Service and maintenance including float level adjustment (where applicable), cleaning of filters & Celdek pads, cleaning of water distributor, scale or build-up caused by poor water quality.

The express warranties contained herein are in lieu of all other warranties.

Implied warranties including warranties or merchantability are limited to the duration of the complete unit warranty described herein.

Consequential or incidental damages for the breach of any warranty whether express or implied, including but not limited to extra utility expenses or losses to persons or property arising out of the failure of this equipment to operate for any reason whatsoever are excluded.

This warranty does not apply to loss or damage due to:

1. Corrosion or discolouration due to exposure of the unit to man made or adverse natural atmospheric conditions.
2. Actions or negligence of the Installer or servicer of the unit that result in losses or damage of any kind including those due to inadequate: (a) sizing of the unit to the area (b) air distribution and (c) power supply.
3. Components or other accessories not compatible with the unit.
4. Acts of God.
5. Installations outside of Australia and New Zealand.
6. Failure to comply with servicing requirements as per owner's and installation guides.
7. Relocation from the place originally installed.
8. Damage due to transportation of unit (mobile).

Should you require in-warranty parts under the terms stated above, contact the installing dealer. Should you be unable to obtain warranty parts through the installing dealer contact the Service Agent listed above.

