

Spectrolink Comfort Controller

Home Owner's Manual

Heating

2006

baby,
it's **COLD**
outside

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E C O S T ★ ★ ★ ★ ★ R

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HEATING COOLING



SERVICE: 1300 650 644

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Or
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For all your sales enquiries

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Seeley International Pty Ltd ACN 23 054 687 035
Albury Manufacturing
77 North Street Albury, NSW 2640



www.seeley.com.au

Manufacturers and Designers of Technically Advanced Quality Heating and Cooling Products

IMPORTANT

Record Model, Model No. & Serial No. of the heater here.



Date of Installation: ____ / ____ / ____

Installer: _____

Phone No: _____

SERVICE

Before calling for service have you:

1. Checked through the trouble shooting guide. (page 16)
2. Noted the Model, Model No. & Serial No. of the heater
(if they are not recorded above, the numbers are located on the end of the heater)
3. Spoken to your Braemar Dealer / Installer.

FOR SERVICE CALL: 1 300 650 644

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This Manual details the operation and set-up of the Braemar Comfort Controller when used to operate Braemar 3 Star, 4 Star and 5 Star Gas Ducted Heaters.

Detail is provided for Comfort Controller operation of the Breezair, Braemar and Coolair range of Evaporative Airconditioners. The Spectrolink Comfort Controller will also operate Add-On Refrigeration systems.



- DO NOT** Operate this appliance before reading the instruction booklet.
- DO NOT** Place articles on or against this Appliance.
- DO NOT** Use or Store flammable materials near this Appliance.
- DO NOT** Operate with panels, covers or guards removed from this Appliance.
- DO NOT** Spray aerosols in the vicinity of this Appliance while it is in operation.



TO BE INSTALLED BY AN AUTHORISED PERSON ONLY

DELIVERY CHECKS

The customer or installer, upon delivery of the heater should ensure that the model number and gas type is as requested. A data label on the end of the heater details both the model number and gas type. Please check the heater and report any freight damage.

If the time on the Comfort Controller is incorrect and needs adjusting, simply Turn the Comfort Controller to OFF, Open the door and Press and hold the SET button for 3 seconds.

Use the UP/DOWN buttons to set the TIME - Press SET

Use the UP/DOWN buttons to set the DAY - Press SET.

Clock Setting Complete.

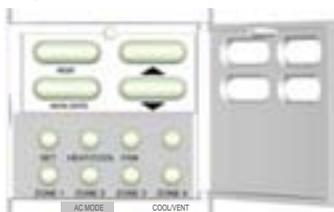
If the power is ON and the time has been set, go to the next page.

If the power to the heater has been OFF you will need to set the time and day.

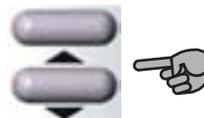
1. Turn on the power to the heater
The display flashes SET and 12:00 pm.



2. Open the front door



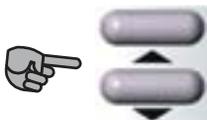
3. Use the UP/DOWN buttons to set the time.
Hold down button for rapid adjustment.



4. **Press** the SET button to set the current time
The display shows SET and WED flashing.



5. Use the UP/DOWN buttons to set the day



6. **Press** the SET button to set the current day



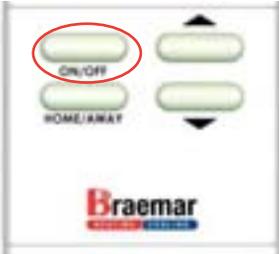
7. Close the door
Clock setting is complete.



Turning ON the Heater

Simply follow the steps below :

1. Ensure the gas and power at the heater is turned on.
2. Check that the Comfort Controller is in HEAT mode.
(Open the door and **press** the AC MODE button).
3. With the Door Closed turn the Comfort Controller ON.

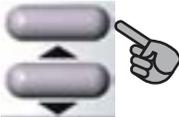


Press the ON / OFF button.



4. The heater will restart in the mode of operation in which it was last turned off.

5. **Manual Mode** - **Press** UP button until the desired set temperature is displayed. The heater will continue to operate at this setting until switched off or switched to Auto mode.



*NOTE - With Door Open - Set Temperature Displayed
With Door Closed - Room Temperature Displayed*

6. **Automatic Mode** - In AUTO the heater will operate according to the programmed settings.



Below is an explanation of the stages the display of the Comfort Controller will show during normal heater operation.

1. The Comfort Controller is OFF.

When the heater is not in use the Comfort Controller displays as shown.
The heater is OFF.



Press the ON / OFF button.

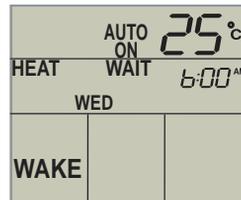


2. The Comfort Controller is in standby Auto mode.

The heater is waiting for the room temperature to fall below the set temperature.

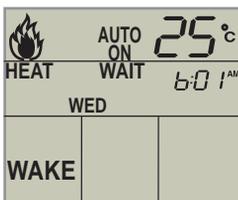
3. Comfort Controller is calling for HEAT.

Heater is in start up mode.
ON & WAIT are flashing.



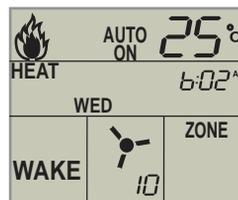
4. Heater has Lit (Gas Burning).

Pre fan period.
WAIT & Flame symbol flashing.



5. The Comfort Controller is ON.

The Fan symbol & Speed appear.
Normal operation

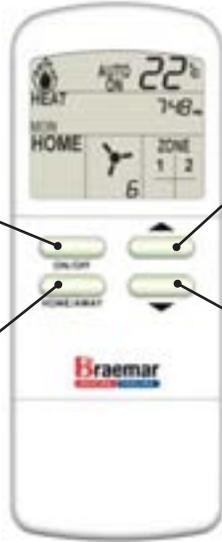


Button Functions

WITH DOOR CLOSED

ON / OFF Button.
Turns the Comfort Controller ON or OFF

Home / Away Button.
Press to switch between Home operation and Away operation.



Temporarily Increase Set Temperature.

Temporarily Decrease Set Temperature.

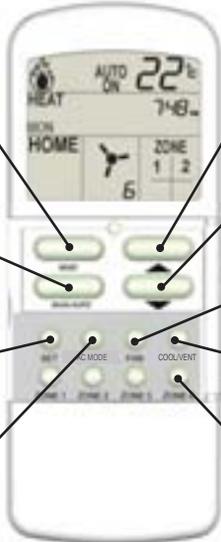
WITH DOOR OPEN

Reset Button
If RESET is shown on the display Open the door and press the RESET button.

Auto/ Manual Button
Press to switch between Automatic and Manual heater control.

Set Button
Press to enter the Clock or Program setting mode.

AC Mode Button
Press to set Comfort Controller to control heater or cooler.



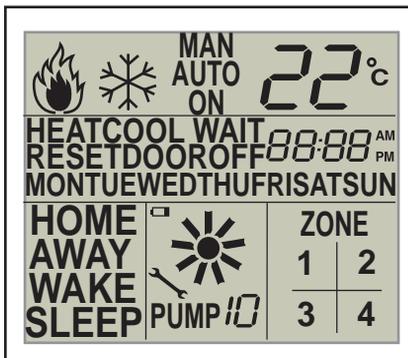
Up Button
Press to make adjustments in setting mode.

Down Button
Press to make adjustments in setting mode.

Fan Button *
Press to override the set fan speed.

Cool / Vent Button
Press to turn PUMP on or off in Evap Cool mode

Zone Buttons *
Press to turn heating or refrigerated cooling to a Zone on or off.



FLAME.

Shows HEAT mode is selected and gas is burning

Full Flame - High Gas Small Flame - Low Gas



SNOW FLAKE

In EVAPORATIVE COOLING mode the PUMP is on.
In REFRIGERATED COOLING mode COOLING is on.

MAN

MAN

Man displayed when Comfort Controller is in Manual mode.

AUTO

AUTO

Auto displayed when operating the Automatic program.

22°C

TEMPERATURE

Displays the room temperature with door closed.
Displays programmed temperature with the door open.

WAIT

WAIT

In HEAT mode, WAIT and ON are displayed flashing at the start of a heating cycle.

In COOL mode, WAIT is displayed flashing at the start of a cooling cycle.

HEAT

HEAT

Heat is displayed when the heater is set for HEAT mode.

COOL

COOL

Cool is displayed when set for COOL mode.

SET

SET

Displayed flashing together with another segment (ie. time) to indicate other function must be set.

RESET

RESET

Is displayed flashing if a fault occurs.

Press the RESET button to restart the heater.

MONTUEWEDTHUFRISATSUN

DAYS of WEEK

The current day is displayed.

Day must be set by home owner.

6:00^{AM}

TIME

The current time is displayed.

Time must be set by home owner.

AWAY**AWAY**

Displayed when the Comfort Controller is in Auto or Manual Mode.

In Auto, the time is typically between 8.30am and 5.00pm.

In Manual the heater will run at the set temperature.

HOME**HOME**

Displayed when the Comfort Controller is in Auto or Manual Mode.

In Auto, the time is typically between 5.00pm and 10.30pm.

In Manual the heater will run at the set temperature.

SLEEP**SLEEP**

Displayed when the Comfort Controller is in Auto Mode.

The time is typically between 10.30pm and 6.00am, and a temperature of 12 - 16 degrees programmed.

WAKE**WAKE**

Displayed when the Comfort Controller is in Auto Mode.

In Auto, the time is typically between 6.00am and 8.30am, and a temperature of 18 - 22 degrees programmed.

**FAN SPEED**

In heat mode, fan symbol rotates and fan speed is displayed.

In cool mode, fan symbol rotates.

ZONE

1	2
3	4

ZONE

The word ZONE and 1, 2, 3, 4 are displayed in Heat and Refrigerated Cooling mode when zones are present & set. A number displayed indicates the ZONE is active. Zones are not displayed unless set by the installer. Zones are only available on 4 & 5 Star heaters.

**BATTERY**

Battery symbol is displayed when the power supply to the heater is off. Comfort Controller will hold current settings for up to one hour, and retain program indefinitely

DOOR**DOOR**

DOOR is displayed flashing when the door is open for more than 30 seconds. Symbol will disappear after any button press. Heater will not turn off if door is open.

**SPANNER**

Displayed when heater requires attention from a Braemar Service technician

ON

ON is displayed when the Heater is ON
ON will be flashing at heater start.
Steady ON when gas is burning.
Steady ON in cool.

OFF

OFF is displayed when the Heater is Off

Home / Away Function.



Use the HOME / AWAY button when you have an unscheduled change to your daily routine. If you arrive home early from work and your heater is not yet operating, pressing the HOME / AWAY button will bring forward the next scheduled time period.

Example: HOME period is set to change at 5:00pm, but you arrive home at 4:30pm. Pressing the HOME / AWAY button will bring forward the Home period settings.

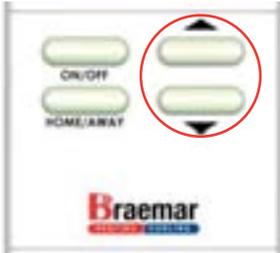
Example: AWAY period is set to change at 9:00am, but you leave home early at 8:00am. Pressing the HOME / AWAY button will bring forward the AWAY period settings.

With the Comfort Controller in Manual mode, the heater will operate according to the Home or Away settings.

Pressing the HOME / AWAY button while the heater is operating shifts the operation between the Home and Away settings.

The default settings for HOME / AWAY are set during auto programming.

Overriding the Set Temperatures



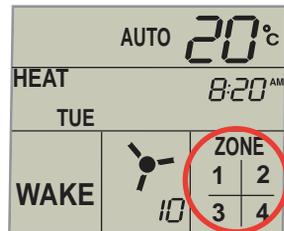
When the Comfort Controller is in Auto mode, the temperature settings can be temporarily overridden by pressing the UP/DOWN buttons. At the next time period the temperature will revert to the programmed value.

In Manual mode, when the set temperature is overridden, the new setting becomes the default temperature.

Zoning

Braemar 4 & 5 Star heaters can be zoned. Zoning allows you to heat individual areas of your home to meet your specific requirements.

If your heating system has been installed with one zone, the display will show the word ZONE and "1". If more zones are installed, numbers corresponding to the zones will be displayed . Your heating system can have to 4 zones.



The table below lists all the default values in the Automatic Default Program.

When you first power up the Comfort Controller, the default program will run with the values shown.

Changes can be made to any times, temperatures, zones or fan speeds.

Refer to the set AUTO program function detailed in this manual.

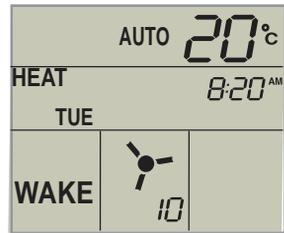
If changes are made to the auto program record them here for future reference.

Time Period		Time ON	Temp °C Setting	Zone ON	Fan ON
WAKE	Heat	6:00	20	1-2-3-4	10
	Cool	6:00	20	1-2-3-4	10
	Your Settings	_____	_____	_____	_____
AWAY	Heat	8:30	14	1-2-3-4	10
	Cool	8:30	14	1-2-3-4	10
	Your Settings	_____	_____	_____	_____
HOME	Heat	5:00	21	1-2-3-4	10
	Cool	5:00	21	1-2-3-4	10
	Your Settings	_____	_____	_____	_____
SLEEP	Heat	10:30	14	1-2-3-4	10
	Cool	10:30	14	1-2-3-4	10
	Your Settings	_____	_____	_____	_____

The Comfort Controller has a built in program that can be used to operate the heater Automatically. The AUTO program will turn the heater ON and OFF a number of times a day, at different temperatures and allow different zones to be heated. The AUTO program can be changed to suit your own personal needs. The default values for the AUTO program are shown on page 12.

To change the AUTO program the Comfort Controller must be in Standby Mode.

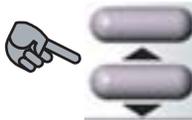
Press the HEAT / COOL button for Heat or Cool program setting.



Press SET to enter program setting



Press the UP / DOWN buttons to select the individual DAY or GROUP of DAYS you want to Program



Press the SET button to accept the DAYS option you require.



The Comfort Controller is now ready to have the default Auto program changed to suit you requirements. Record your changes in the Table on page 12

You can exit the program changes at any time by simply pressing the RESET button

Any changes you have made will be saved in memory.

Changing AUTO Program

The AUTO program has 4 separate time periods of WAKE, AWAY, HOME and SLEEP.

Programming follows the sequence below.

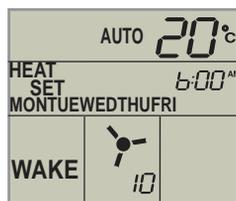


Note: If no Zones are fitted to the heating system, the zone setting step will not appear.

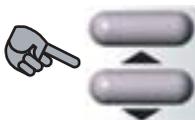
Setting of the WAKE period is shown in detail below; AWAY, HOME and SLEEP follow the same routine.

The display shows the default settings for the WAKE period. (no Zones)

In the following example, Monday thru Friday are to be SET.



After the DAYS have been set, the display shows **SET and TIME flashing**.



Press the UP / DOWN buttons to change the TIME.



Press the SET button to accept the new TIME.

The WAKE period will commence at the TIME you have set.

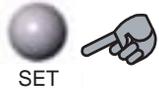
SET and TEMPERATURE are now flashing



Press the UP/ DOWN buttons to change the TEMPERATURE.



Press the SET button to accept the new TEMPERATURE



During the WAKE period, your home will be heated to the TEMPERATURE you have set.

If your heating system has no zones, zone setting will not appear. SET and ZONE are now flashing



The display shows a heating system with 2 zones

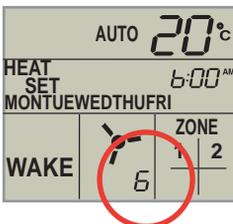
Press a Zone button to turn OFF the heating to that Zone



Press the SET button to accept the zone heating



SET and FAN are now flashing.



Press the UP / DOWN buttons to adjust the amount of heating to the Zones.



Press the SET button to accept the new fan speed.



Setting of the WAKE period is now complete

AWAY, HOME and SLEEP can now be set following the procedure above

If you have difficulty operating your Heater check the trouble shooting guide before calling for service.

➔ Problem?

RESET flashing with a number displayed in-place of the time.

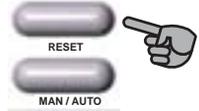
Open the front door on the control, press the RESET button.

The heater should operate after about 20 seconds.

If RESET reappears, wait 10 minutes, press the RESET button.

The heater should now start.

If heater fails to start contact your service agent.



➔ Problem?

Home is not heating effectively.

Check that there are enough outlets opened for the fan speed selected.

Open more outlets or another Zone to correct the problem.

Is the return air filter blocked? We recommend cleaning every fortnight.

Check the program running on the Comfort Controller is correct.

Is the Comfort Controller located in the common area as recommended.

(refer to Installation Manual Part No.623467 for more information)

Increase the SET temperature.

➔ Problem?

Heater comes on at wrong time.

Check the time AM or PM.

Check the Heater is in HEAT mode (not cool).

Check the SET temperature is correct.

Check the programmed "ON" times.

➔ Problem?

Spanner Displayed

When the spanner is displayed, call a service agent to look at the heater



MAINTENANCE SCHEDULE

Periodic maintenance of the heater will ensure a long and satisfactory service life with the heater operating at optimum performance. Maintenance should be performed on a regular basis (start of each heating season) by an Authorised person trained in the service of Braemar Heaters.

CLEAN FILTERS EVERY 2 WEEKS AND REPLACE ANNUALLY

Spectrolink Comfort Controller

Home Owner's Manual

Cooling



★★★★★
Come home to
E C O S T ★ ★ ★ ★ ★ R

Braemar[®]
HEATING COOLING

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Maintenance	8-9
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Congratulations on choosing a new Evaporative Cooler for your home.

Your cooler is built from the highest quality materials and engineered to provide many years of economical, trouble free cooling.

Please take a few minutes to read these instructions so you have a full understanding of how to operate your cooler. Your installer should demonstrate the features and procedures set out in these instructions. The installer should also provide you with a Model and Serial number which can be filled out below.

EFFECTIVE COOLING

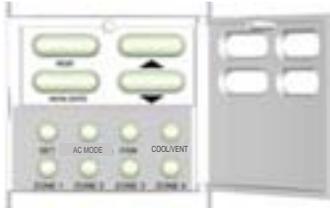
To provide efficient cooling or ventilation the building must have sufficient exhaust openings to the outdoors in the form of doors, windows or other vents. To assist air circulation, open windows or doors that are furthest from the outlet vent in each room. In every room that has an outlet vent, provide an exhaust opening 2 to 2.5 times the vent size of the room. Where the design of the building prevents adequate exhaust, consideration should be given to the provision of mechanical extraction such as an exhaust fan.

Model No. _____ Serial No. _____

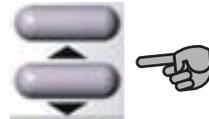
1. Turn on the power to the cooler. The display shows SET and 12:00pm flashing.



2. Open the front door.



3. Use the UP/DOWN buttons to set the time. Hold down button for rapid adjustment.



4. **Press** the SET button to set the current time. The display shows SET and WED flashing.



5. Use the UP/DOWN buttons to select current day.



6. **Press** the SET button to set current day.



7. Close the door.

Clock setting is complete.

If you have set the TIME or DAY incorrectly, open the door and hold down the SET button to start again.



Adjusting the Time - Turn the Comfort Control OFF, open the door, press and hold the SET button for 3 seconds and go to Step 3

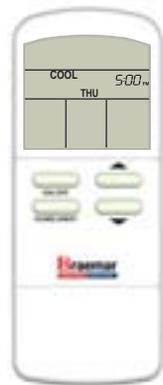
Simply follow the steps below:

1. Ensure the water and power at the cooler is turned on.
2. Check that the Comfort Control is in COOL mode. (Open the door and **press** the AC MODE button).

With the Door Closed turn the Comfort Control ON.



Press the ON / OFF.

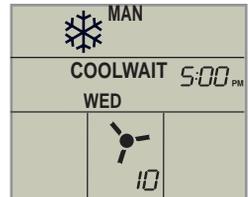


4. The cooler will restart in the mode of operation in which it was last turned off.

5. **Manual Mode** - **Press** the UP button until the desired fan speed is displayed.

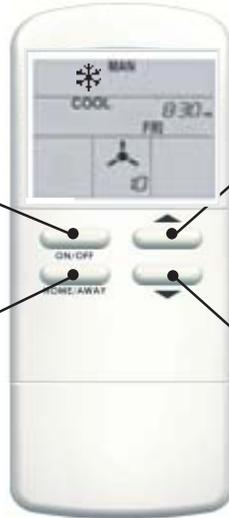


If the cooler has been off for more than 10 minutes ❄️, WAIT, and FAN speed will flash indicating filter pad pre-wet cycle (2 minutes).



6. **Automatic Mode** - In AUTO the cooler will operate according to the ambient temperature sensed by the Comfort Control. As the ambient temperature varies up and down the the Comfort Control will adjust the fan speed to suit.

WITH DOOR CLOSED



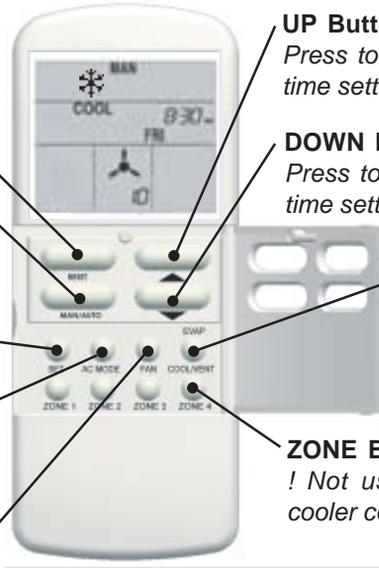
ON/OFF Button
Turns the comfort control On or OFF.

UP Button
Decreases Fan speed in Manual.
Decreases Cooling in Automatic.

HOME/AWAY Button
! Not used for Evaporative cooler operation.

DOWN Button
Decreases Fan speed in Manual.
Decreases Cooling in Automatic.

WITH DOOR OPEN



RESET Button
! Not used for Evaporative cooler operation.

UP Button
Press to make adjustments in time setting mode.

AUTO / MANUAL Button
Press to switch between Automatic and Manual cooler control.

DOWN Button
Press to make adjustments in time setting mode.

SET Button
Press to enter the Clock or Auto Timer setting mode.

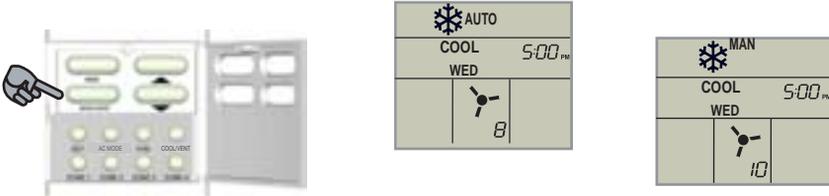
COOL / VENT
Press to turn Pump On and OFF.

AC MODE Button
Press to set Comfort Control to Heater or Cooler operation.

ZONE Buttons
! Not used for Evaporative cooler control.

FAN Button
! Not used for Evaporative cooler operation.

Automatic and Manual Mode - To switch between Automatic and Manual operation open the Comfort Controller door and Press the MAN/AUTO button. The display will change to indicate the mode of operation.



Automatic - In Automatic mode the Comfort Control will set the Pump function and Fan speed according to the ambient temperature sensed by the Comfort Control. As the ambient temperature increases or decreases the Comfort Control will adjust the Cooler accordingly. If the automatic setting is not cold enough or too cold the automatic level can be overridden.



Press the UP or Down button to override the Automatic cooling level to your comfort level.

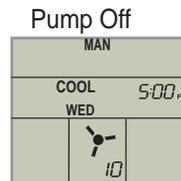
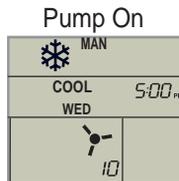
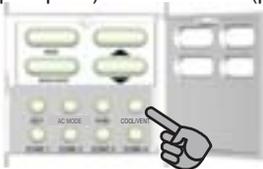
Any changes to the automatic setting will revert to the default setting when the cooler is turned off and then restarted.

Manual - In Manual mode the Fan speed and Pump operation are both controlled by the home owner.



Press the UP or Down button to set the fan speed.

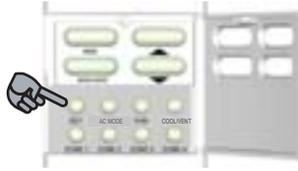
By *pressing* the COOL/VENT button the home owner can choose between cooled air (pump on) or ventilation (pump off).



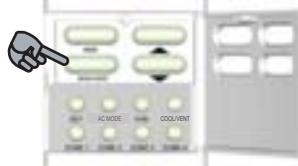
In manual mode the cooler will continue to operated in the selected options until changed or turned off.

A feature of the Comfort Control is the option for the home owner to program a start and stop time.

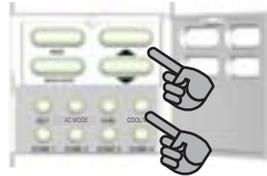
1. With the Comfort Control turned off open the door and *press* the SET button.



2. Press the MAN/AUTO button to select mode of operation. (The last mode of operation will be displayed first).

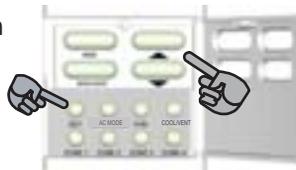


3. If Auto is selected go to step 4* . For manual mode *press* the UP ▲ or DOWN ▼ button to select Fan speed and the COOL/VENT button for Cold Air or Ventilation.



4. To set the start time *press* SET and then the UP ▲ or Down ▼ button to set the ON time.

5. To set the stop time *press* SET and then the UP ▲ or DOWN ▼ button to set the OFF time.



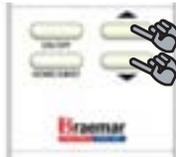
7. The Start and Stop times will remain for each day until the stop button is *pressed*.

*If Automatic is selected fan speed and pump operation will be determined by the ambient temperature sensed by the Comfort Control at time of starting.

Automatic Drain - If an automatic drain valve system has been installed into your cooler, the cooler will automatically drain the water, if water salinity becomes too high or when the pre-set time period has expired. This ensures the water is always fresh and helps maintain your cooler in good condition to ensure optimum cooling performance.

The drain will be activated by 1 of 4 conditions:

1. Water salinity is too high
2. Pre-set time period expires (can be adjusted by your installer).
3. If the cooler is turned off for a continuous 72 hours.
4. Manually by pressing the UP ▲ and Down ▼ buttons simultaneously with the Comfort Control off and door closed. The display will show "dr" to confirm the operation has activated.



During a drain operation all buttons are in-operable and on restarting your cooler a delay will be experienced while the tank refills with fresh water.

Bleed System - During operation the bleed system will drain a small amount of water from the cooler to ensure fresh water is continually added.

The amount of bleed will depend on local conditions and will set by your installer.

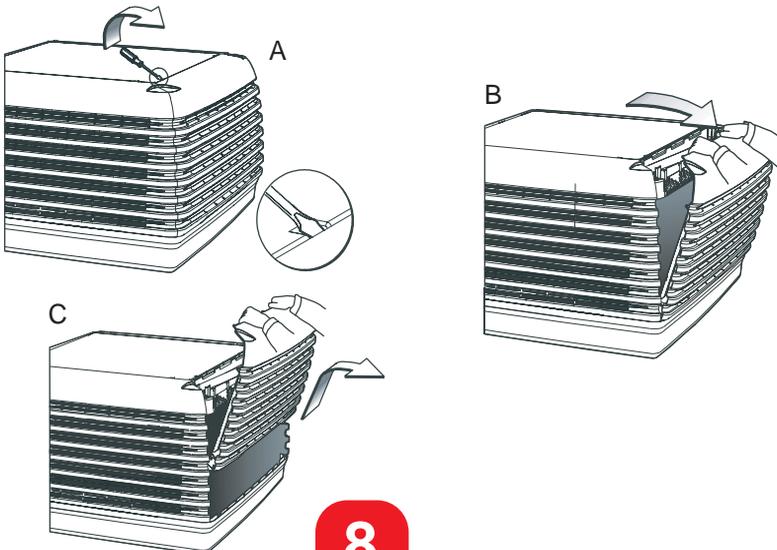
Draining water from your cooler at the end of the summer season is not required if your cooler is fitted with an automatic drain valve system. However it is a requirement to check the cooler, it's operation, the pump, drain valve, solenoid and fan motor after the first year and then every two (2) years as routine maintenance.

If the bleed system is fitted then maintenance should be conducted before and after every summer season as outlined below.

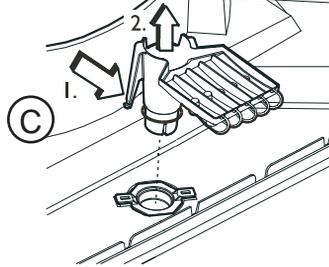
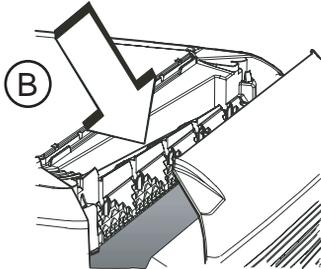
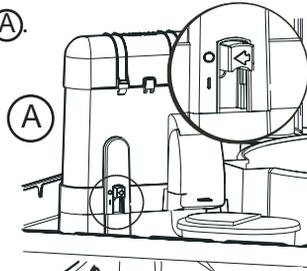
WARNING: Seeley International recommends that is carried out by an authorised service agent. Climbing onto the roof is hazardous and could result in personal injury or property damaged. Failure to carry out maintenance will affect your warranty coverage.

End of Season Maintenance

1. Turn off power to cooler.
2. Turn off water to cooler.
3. Remove the pad frame assemblies - insert a flat screwdriver tip into the slot (A) and lever until disengagement occurs. Take hold of the pad frame and pull it towards you (B) until the internal side clips disengage. Pivot the pad frame outward and lift up (C) . Take care not to damage the pad. Repeat for all pad frames.



4. Turn off power switch inside the cooler (A).
5. Check and clean the lid water channels (B).
6. If fitted, unclip and remove the bleed system. Allow water to drain, take care not to lose the o-ring (C).



7. Thoroughly clean the tank and pump filter, DO NOT replace the bleed system.
8. Refit the pad frames.

Preseason Maintenance

1. Turn off power to the cooler.
2. Remove the pad frames.
3. Ensure power switch in cooler is off.
4. Gently wash the pads to remove any dust build up during winter. If pads are poor condition, replace them.

CAUTION : Do not damage the pads with high pressure water spray.

5. If removed replace bleed system and ensure the o-ring is fitted.
6. Turn on power switch in cooler.
7. Turn on water, power, refit pad frames and run the cooler.

Caution : Do not run the cooler with the pad frames removed.

If you have difficulty operating your Cooler or consider that the cooler requires service check the trouble shooting guide before calling the service agent.

→ Problem?

Unpleasant Odour.

Odour from new pads - Allow time to condition by running the cooler.

→ Problem?

Inadequate Cooling.

Dry Pads - Check water flow to pads.

- Ensure water supply is turned on.

Insufficient exhaust openings - Ensure sufficient openings for conditioned air.

Excessive ambient humidity - On days during summer when the ambient humidity is high, the cooler will not cool as effectively as on dry days.

→ Problem?

Wall Control Flashes "  "

An operational fault has been detected. - Ensure the water and power supply has been turned on.

Check that the cooler drain pipe is not blocked.

Turn off wall control and record the number displayed on the screen.

Call a service agent quote the displayed number and the cooler serial number shown on page 1.