



HOME OWNER'S MANUAL

DUCTED GAS HEATER

(with Spectrolink Comfort Control)



(English)(623528m Version 23-09-14)



This document is the Owner's Manual for your ducted gas heater.**HEATER IDENTIFICATION AND INSTALLATION**

Model No _____
 Serial No: _____
 Installation date: _____
 Installer: _____
 Installer phone No: _____

This information is to
 be completed by the
 installer

IMPORTANT MAINTENANCE (AND WARRANTY) INFORMATION

As with any product that has moving parts or is subject to wear and tear, it is **VERY IMPORTANT** that you maintain your ducted gas heater and have it regularly serviced. It is a condition of warranty cover for your ducted gas heater that you comply with all of the maintenance and service requirements set out in this Owner's Manual. Compliance with these requirements will prolong the life of your ducted gas heater. Further, it is also a condition of warranty cover that each item in the Maintenance Schedule on the page 14 of this Owner's Manual is performed with the frequency indicated, by a qualified, licensed technician, and that the Maintenance Schedule is properly filled out (ie names, signature, date, and action taken) when the item is completed. **ANY FAILURE TO CARRY OUT THE REQUIRED MAINTENANCE AND SERVICING REQUIREMENTS, AND ANY FAILURE TO PROPERLY FILL OUT THE MAINTENANCE SCHEDULE, WILL VOID YOUR WARRANTY.**

Home Owner/User Maintenance

- The return air filter (where fitted) must be checked and cleaned by the owner/user at least once every 2 weeks during the heating season. If you have one it will be in the return air grille. This grille is part of the ductwork, and is usually fitted by the installer to a wall inside the house. You can use a vacuum cleaner to clean the return air filter. If you are unsure how to find, remove, and clean the return air filter, then please contact your local Braemar Dealer or your installer. Cleaning the return air filter regularly will help to keep the heater running efficiently. An inefficient heater results in higher gas bills. You will also have to pay the costs of any service call associated with a failure to clean the return air filter.
- If the heater is installed outside the home, the owner/user must do a yearly visual check to ensure that vegetation (plants, branches, weeds etc) has not grown into or around the unit and that the external cabinet is clean and free from debris that may build up over time (eg leaves and the like).

IMPORTANT SAFETY INFORMATION

THIS APPLIANCE MUST BE INSTALLED AND SERVICED BY AUTHORISED PERSONNEL ONLY.

DO NOT: Operate this appliance before reading these instructions.

DO NOT: Place articles on or against this appliance.

DO NOT: Use or store flammable materials near this appliance or its flue terminal.

DO NOT: Spray aerosols in the vicinity of this appliance or its flue terminal while it is operating.

DO NOT: Operate this appliance with any parts removed.

DO NOT: Modify this appliance.

DO NOT: Fit filters to warm air outlet registers.

For 3 and 4 star heaters, it is recommended that a flue guard be fitted where children may be able to touch the flue terminal - flue guard part No 079073.

IF YOUR HEATER STOPS WORKING

Before requesting a service call please run through the simple checks in the "Troubleshooting" section of this manual.

If required, call Braemar Service on 1300 650 644.

For spare parts call 1300 367 437.

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HEATER OPERATION

This section of the manual covers operation of your Braemar TH or THM series gas ducted heater using your Spectrolink Comfort Controller/s (SCC) - note that some functions are not available with 3 star models. Turn the manual over for instructions on operation of a Braemar, Breezair or Coolair evaporative cooler, or operation of a refrigerated cooling system.

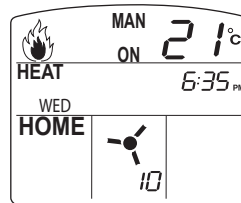
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QUICK START - MANUAL OPERATION

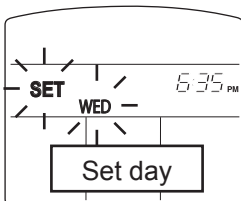
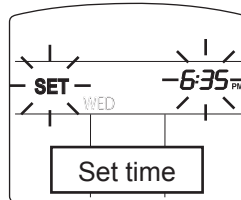
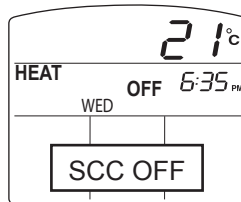
- 1 Set the time and day on the SCC (see below).
- 2 Press the ON/OFF button to turn the SCC on.
- 3 Select HEAT mode - press AC MODE button if required to switch between HEAT and COOL mode.
- 4 If AUTO is displayed open the SCC door and press the SET button (and hold) and press the MAN/AUTO button to set to MANUAL mode - MAN will now be displayed.
- 5 Increase temperature setting by pressing the UP arrow button until the set temperature is as required.

Normal display with heater running in MANUAL mode.

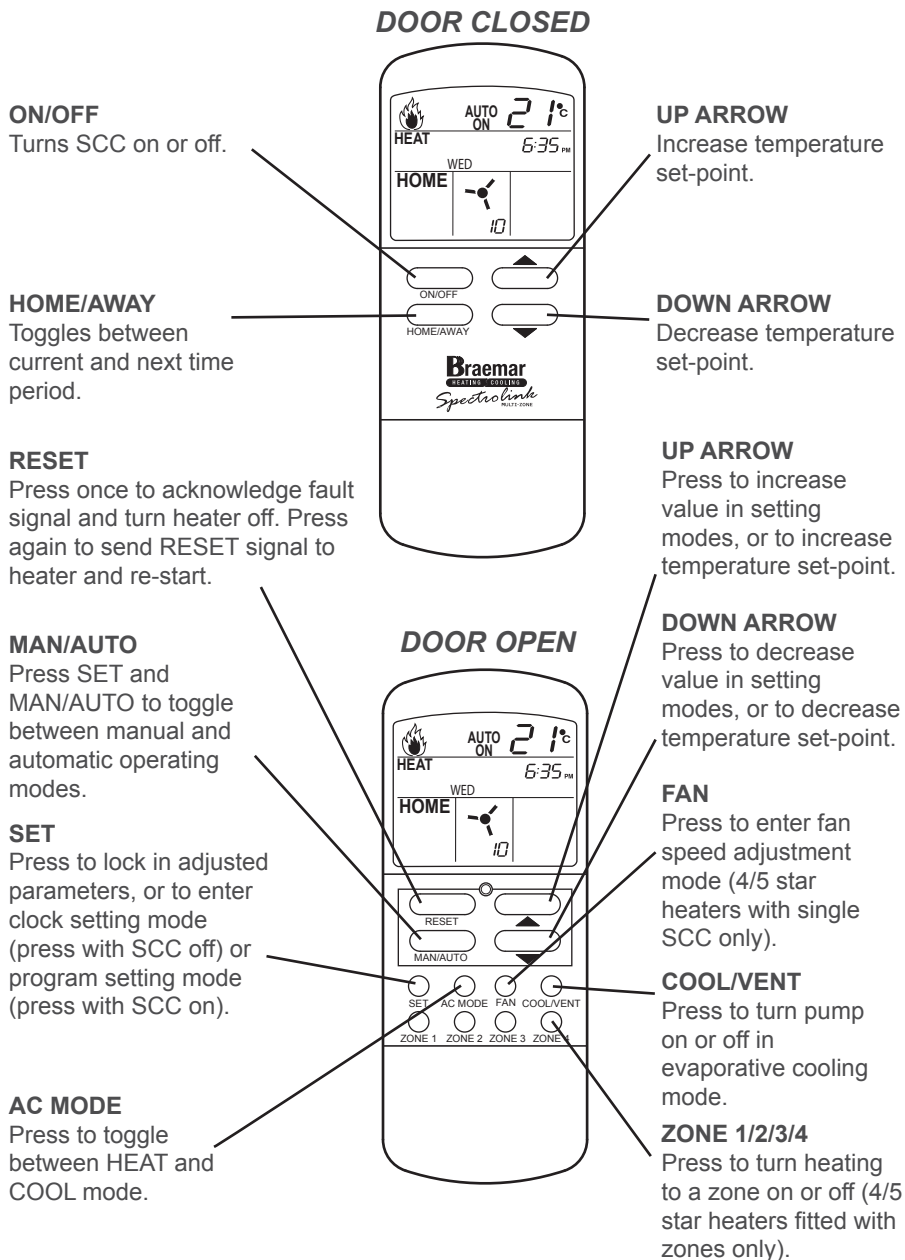


SETTING THE TIME AND DAY

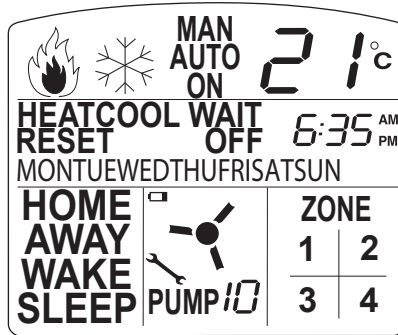
- 1 Press the ON/OFF button to turn the SCC OFF.
- 2 With the SCC turned off, press and hold the SET button for 3 seconds - SET and the time display will flash.
- 3 Press the UP or DOWN arrow button to adjust to the current time - ensure that AM/PM is correct. Hold button for rapid adjustment.
- 4 Press the SET button when the time is correct.
- 5 SET and the day display will flash.
- 6 Press the UP or DOWN arrow button to adjust to the current day.
- 7 Press the SET button when the day is correct to return to normal operation.





BUTTON FUNCTIONS






DISPLAY FEATURES



	<ul style="list-style-type: none"> • Burners are alight: <ul style="list-style-type: none"> • Inner flame flashing - low gas rate. • Outer flame flashing - high gas rate.
	<ul style="list-style-type: none"> • Evaporative or refrigerated air-conditioner (where installed) is operating.
MAN	<ul style="list-style-type: none"> • SCC is in MANUAL operation mode.
AUTO	<ul style="list-style-type: none"> • SCC is in AUTOMATIC operation mode.
21°C	<ul style="list-style-type: none"> • Temperature: <ul style="list-style-type: none"> • Displays approximate room temperature. • Temporarily displays set temperature when the up or down arrow is pressed, reverts back to current temperature after 5 seconds. • Temperature is not displayed in evaporative cooling mode.
WAIT	<ul style="list-style-type: none"> • WAIT and ON are displayed flashing at the start of a heating or evaporative cooling cycle.
HEAT	<ul style="list-style-type: none"> • HEAT mode is selected on SCC.
COOL	<ul style="list-style-type: none"> • COOL mode is selected on SCC.
SET	<ul style="list-style-type: none"> • SET is displayed flashing with another segment to indicate the item being set or adjusted.
RESET	<ul style="list-style-type: none"> • RESET is displayed flashing (along with a number in the time display) when the control system has detected a fault.

DISPLAY FEATURES cont.

<p>MON TUE WED THU FRI SAT SUN</p>	<ul style="list-style-type: none"> Days of the week: <ul style="list-style-type: none"> Displays current day once it has been set.
<p>6:35^{AM} _{PM}</p>	<ul style="list-style-type: none"> Displays current time once it has been set.
<p>HOME AWAY WAKE SLEEP</p>	<ul style="list-style-type: none"> Four daily time periods: <ul style="list-style-type: none"> In AUTO mode they can be pre-programmed with a start time and temperature each day.
	<ul style="list-style-type: none"> Fan symbol and fan speed: <ul style="list-style-type: none"> In HEAT mode - fan symbol rotates and speed is displayed. In COOL mode - fan symbol rotates.
<p>ZONE 1 2 3 4</p>	<ul style="list-style-type: none"> ZONE display: <ul style="list-style-type: none"> ZONE and zone numbers are only displayed if they have been installed and enabled by the installer (4/5 star heaters only). Only enabled zones can be displayed. A zone number displayed indicates that a zone is on.
	<ul style="list-style-type: none"> "Battery" symbol is displayed when the power to the heater is off or the SCC is disconnected. Current time and day settings will be retained for approximately 1 hour. Note: This SCC is hard-wired to the heater and does not use batteries.
	<ul style="list-style-type: none"> Service call required. Contact your local Braemar dealer or contact Braemar Service on 1300 650 644.
<p>ON</p>	<ul style="list-style-type: none"> ON indicates that the SCC has been turned on to operate the heater or cooler (where installed). ON flashes when the heating or cooling cycle is starting.
<p>OFF</p>	<ul style="list-style-type: none"> OFF indicates that the SCC is turned off.

MANUAL MODE OPERATION

When operating in MANUAL mode the heater will turn on and off to maintain the set temperature until turned off by the user.

Turning the Heater ON and Selecting MANUAL Mode

- 1 Press the ON/OFF button.
- 2 Press and hold the SET button and press the MAN/AUTO button to set the remote control to MAN mode (the MAN/AUTO button must be pressed within less than 3 seconds of pressing the SET button).
- 3 To turn the heater on use the up arrow button increase the set temperature above room temperature.
- 4 The display will flash ON and WAIT during the start-up sequence.
- 5 The flame and fan symbols will appear once the burners ignite and the room fan starts.

Turning the Heater OFF

- 1 Press the ON/OFF button.
- 2 The display will revert to OFF mode.
- 3 The room fan will continue to run until the heater has cooled sufficiently.

Adjusting the Room Temperature

- 1 Increase set temperature: Press the UP arrow to increase set temperature by 1°C.
- 2 Decrease set temperature: Press the DOWN arrow to decrease set temperature by 1°C.

Adjusting the Fan Speed

- 1 With the SCC on press and hold the FAN button for 3 seconds - the fan speed and fan symbol will flash.
- 2 Press the up or down arrow buttons to adjust to the required fan speed.
- 3 The SCC will revert to the normal ON state after a few seconds.
- 4 The fan speed is not user-adjustable in multiple SCC systems or on 3 star heaters.

Note: A minimum of one outlet must remain open at all times when the heater is operating.

Using HOME/AWAY in MANUAL Mode

The HOME/AWAY button allows you to set and switch between two temperature settings as follows:

- 1 When HOME is selected adjust to the required "HOME" set temperature.
- 2 When AWAY is selected, adjust to the required "AWAY" set temperature.
- 3 Press HOME/AWAY to switch between these settings.

AUTO MODE OPERATION

- When operating in AUTO mode the heater will automatically turn on and off to maintain the programmed temperature.
- The SCC will automatically advance through the 4 time periods (WAKE, AWAY, HOME and SLEEP) each day and adjust the set temperature to the pre-programmed temperature you have set for each time period (see pages 7 & 9).

Turning the Heater ON and Selecting AUTO Mode

- 1 Press the ON/OFF button to turn the SCC on.
- 2 Press and hold the SET button and press the MAN/AUTO button to set the SCC to AUTO mode (the MAN/AUTO button must be pressed within less than 3 seconds of pressing the SET button).
- 3 If the set temperature is greater than the room temperature for the current time period the heater will start.
- 4 The SCC will display the time period and run according to the temperature set for that time period.
- 5 The SCC will automatically advance to the next time period and operate according to the set temperature for the new time period.

Turning the Heater OFF

- 1 Press the ON/OFF button.
- 2 The display will revert to OFF mode.
- 3 The room fan will continue to run until the heater has cooled sufficiently.

Adjusting the Room Temperature

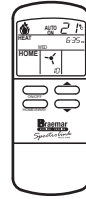
- 1 The set temperature can be temporarily adjusted while operating in AUTO mode.
- 2 Increase set temperature: Press the UP arrow to increase set temperature by 1°C.
- 3 Decrease set temperature: Press the DOWN arrow to decrease set temperature by 1°C.
- 4 At the start of the next programmed time period, the set temperature will revert to the pre-programmed temperature you have set for that time period.

Using HOME/AWAY in AUTO Mode

- 1 Press the HOME/AWAY button to advance to the next time period. Normal program settings will resume at the end of the next period. Following is an example of how this can be used:
 - If the SLEEP period is programmed to start at 10pm and you go to bed early at 9pm, pressing HOME/AWAY will bring forward the SLEEP period settings.

SETTING THE AUTO PROGRAM - SINGLE SCC

- In a SINGLE-SCC system the SCC can be programmed to operate the heater over the 4 time periods of WAKE, AWAY, HOME and SLEEP.
- For each of these time periods you can set the following:
 - START TIME
 - SET TEMPERATURE
 - ZONES HEATED (where zones have been installed - 4/5/6 star only)
 - FAN SPEED
- Use the table below to record your program settings.
- The table includes factory-default program settings (in brackets).



PROGRAM SETTINGS					
Time period	Time ON	Temperature (°C)	Zones ON (where fitted)	Fan speed	
HEAT	WAKE	(6:00am)	(20)	(1-2-3-4)	(10)
	AWAY	(8:30am)	(15)	(1-2-3-4)	(10)
	HOME	(5:00pm)	(21)	(1-2-3-4)	(10)
	SLEEP	(10:30pm)	(15)	(1-2-3-4)	(10)
COOL	WAKE	(6:00am)	(24)	(1-2-3-4)	(10)
	AWAY	(8:30am)	(28)	(1-2-3-4)	(10)
	HOME	(5:00pm)	(24)	(1-2-3-4)	(10)
	SLEEP	(10:30pm)	(28)	(1-2-3-4)	(10)

Sample AUTO Heater Operation:

- Using the above default times and temperatures, the SCC will operate as follows:
 - 6.00am: WAKE period starts, heater will turn on/off as required to maintain a temperature of 20°C.
 - 8.30am: AWAY period starts, heater will turn on/off as required to maintain a temperature of 15°C
 - 5.00pm: HOME period starts, heater will turn on/off as required to maintain a temperature of 21°C
 - 10.30pm: SLEEP period starts, heater will turn on/off as required to maintain a temperature of 15°C

SETTING THE AUTO PROGRAM - SINGLE SCC

Enter Program Setting Mode

- 1 Press the ON/OFF button to turn the SCC ON.
- 2 Press the SET button and hold for 3 seconds (the SCC will enter program setting mode, SET & MON will flash).

Select Day or Group of Days to Program

- 1 Press the UP or DOWN arrow buttons to scroll through the day selection options:
 - Individual days - MON, TUES, WED, THU, FRI, SAT, SUN
 - Blocks of days - [MON-FRI], [SAT-SUN], MON-SUN]
- 2 Press SET when the required day or group of days is displayed.

Set WAKE Period Program Values

Set WAKE period start time:

- 1 Press UP or DOWN arrow buttons to adjust to required start time for displayed time period.
- 2 Ensure that 'AM' or 'PM' is correct.
- 3 Press SET when the required start time is displayed.

Set WAKE period temperature:

- 1 Press UP or DOWN arrow buttons to adjust to required set temperature for displayed time period.

- 2 Press SET when required temperature is displayed.

Set WAKE period zones (where fitted):

- 1 Where zones have been fitted (and enabled by the installer when setting up the system), zones can be set to be either on or off for the displayed time period.
- 2 Press ZONE buttons 1-2-3-4 to turn zones on or off for displayed time period.
- 3 Only zones that have been enabled by the installer can be selected.

Set WAKE period fan speed:

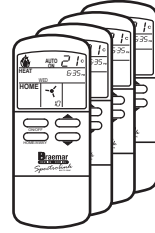
- 1 Press UP or DOWN arrow buttons to adjust to required fan speed for displayed time period.
- 2 Press SET when required fan speed is displayed.

Set Program Values for AWAY, HOME and SLEEP Periods

- 1 Repeat the above steps for AWAY, HOME and SLEEP time periods.
- 2 The SCC will automatically advance to the next time period once the previous one has been set.
- 3 The SCC will automatically exit program setting mode once all time periods have been set.

SETTING THE AUTO PROGRAMS - MULTIPLE SCC'S

- In a MULTIPLE-SCC system each zone must have a SCC.
- Each SCC can be programmed with its own individual times and temperatures for WAKE, AWAY, HOME and SLEEP time periods.
- Each zone will operate independently with the SCC sensing the temperature of a zone and opening or closing that zone as required to maintain the desired temperature for that zone.
- The fan speed is automatically adjusted to suit zones in operation at any time based on individual zone fan speeds set by your installer.
- Use the table below to record your program settings.
- The table includes factory-default program settings (in brackets).



PROGRAM SETTINGS									
Time period		ZONE 1		ZONE 2		ZONE 3		ZONE 4	
		Time ON	Temp' (°C)	Time ON	Temp' (°C)	Time ON	Temp' (°C)	Time ON	Temp' (°C)
HEAT	WAKE	(6:00am)	(20)	(6:00am)	(20)	(6:00am)	(20)	(6:00am)	(20)
	AWAY	(8:30am)	(15)	(8:30am)	(15)	(8:30am)	(15)	(8:30am)	(15)
	HOME	(5:00pm)	(21)	(5:00pm)	(21)	(5:00pm)	(21)	(5:00pm)	(21)
	SLEEP	(10:30pm)	(15)	(10:30pm)	(15)	(10:30pm)	(15)	(10:30pm)	(15)
COOL	WAKE	(6:00am)	(24)	(6:00am)	(24)	(6:00am)	(24)	(6:00am)	(24)
	AWAY	(8:30am)	(28)	(8:30am)	(28)	(8:30am)	(28)	(8:30am)	(28)
	HOME	(5:00pm)	(24)	(5:00pm)	(24)	(5:00pm)	(24)	(5:00pm)	(24)
	SLEEP	(10:30pm)	(28)	(10:30pm)	(28)	(10:30pm)	(28)	(10:30pm)	(28)

SETTING THE AUTO PROGRAMS - MULTIPLE SCC'S

Enter Program Setting Mode

- 1 Press the ON/OFF button on the "Master" SCC. The "Master" SCC must be ON to enable "Slave" controls to be turned ON.
- 2 Press the ON/OFF button on SCC you wish to program to turn it ON.
- 3 Press the SET button and hold for 3 seconds - the SCC will enter program setting mode, SET & MON will flash).

Select Day or Group of Days to Program

- 1 Press the UP or DOWN arrow buttons to scroll through the day selection options:
 - Individual days - MON, TUES, WED, THU, FRI, SAT, SUN
 - Blocks of days - [MON-FRI], [SAT-SUN], MON-SUN
- 2 Press SET when the required day or group of days is displayed.

Set WAKE Period Program Values

Set WAKE period start time:

- 1 Press UP or DOWN arrow buttons to adjust to required start time for displayed time period.
- 2 Ensure that 'AM' or 'PM' is correct.
- 3 Press SET when the required start time is displayed.

Set WAKE period temperature:

- 1 Press UP or DOWN arrow buttons to adjust to required set temperature for displayed time period.

- 2 Press the ON/OFF button on the "Master" SCC. The "Master" SCC must be ON to enable "Slave" controls to be turned ON.
- 3 Press the ON/OFF button on SCC you wish to program to turn it ON.
- 4 Press SET when required temperature is displayed.

Set Program Values for AWAY, HOME and SLEEP periods

- 1 Repeat the above steps for AWAY, HOME and SLEEP time periods.
- 2 The SCC will automatically advance to the next time period once the previous one has been set.
- 3 The SCC will automatically exit program setting mode once all time periods have been set.

Set Program Values for Remaining SCC's

- 1 Repeat the above steps for all other SCC's on the system.
- 2 Each can be set with its own times and temperatures, independent of others SCC's on the system.

ADJUSTING THE FAN SPEED AND GAS RATE

Adjusting the Fan Speed - Single SCC Systems Only

- 1 With the SCC on press and hold the FAN button for 3 seconds.
- 2 The fan speed and fan symbol will flash.
- 3 Press the up or down arrow buttons to adjust to the required fan speed.
- 4 The SCC will revert to the normal ON state after a few seconds.
- 5 The fan speed is not user-adjustable:
 - In multiple SCC systems, or
 - With 3-star heaters.

Adjusting the Fan Speed and Maximum Gas Rate - THM Series Heaters Only

- 1 With the SCC off press and hold the up-arrow button and press the SET button.
- 2 The current maximum gas rate setting will be displayed - 100%, 75%, 50% or 25%.
- 3 Press the up or down arrow buttons to adjust to the required maximum gas rate then press SET (maximum fan speed will also be adjusted automatically).
- 4 Important note - this feature should only be used in milder weather and should be returned to 100% when full heating capacity is required.

USING THE FAN-ONLY FEATURE

Single SCC Systems

- 1 Turn the SCC OFF (press ON/OFF

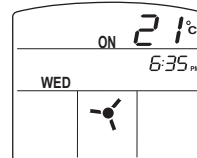
button if required).

- 2 Press and hold the FAN button for 3 seconds - the heater fan will start and increase to its maximum speed.
- 3 To get air flow to zones (where fitted) press the corresponding zone button.
- 4 The fan speed is not adjustable in "FAN-only" mode.
- 5 Press the ON/OFF button to turn the fan off.

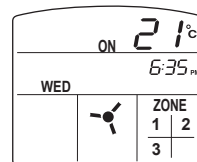
Multiple SCC Systems

- 1 Turn the "Master" SCC OFF (press ON/OFF button if required).
- 2 Press and hold the FAN button on the "Master" SCC for 3 seconds - the heater fan will start and increase to its maximum speed.
- 3 To get air flow to zones press the ON/OFF button on the "Slave" SCC IN EACH REQUIRED ZONE to turn it on.
- 4 The fan speed is not adjustable in "FAN-only" mode.
- 5 To turn FAN-only mode off press the ON/OFF button on the "Master" SCC.

Fan-only display with no zones enabled - single SCC.

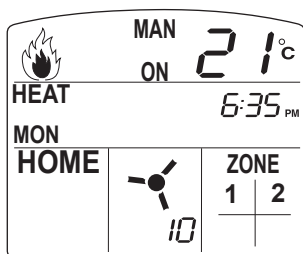


Fan-only display with zones 1, 2 and 3 on - single SCC with zones, or multiple SCC system.

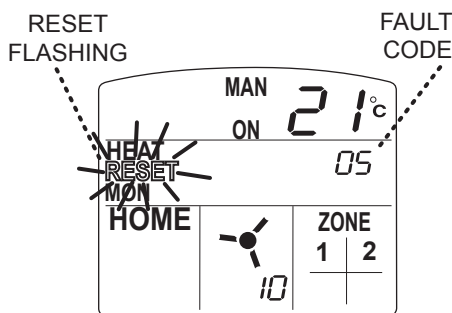


TROUBLESHOOTING

Your Braemar gas ducted heater uses inbuilt fault diagnosis software to help determine the source of a fault. If a fault is detected the heater will turn off. In some cases the heater will automatically attempt to re-start - if the fault still exists the SCC will flash RESET and a fault code number where the time is normally displayed.



NORMAL DISPLAY



DISPLAY WITH FAULT DETECTED

If a fault is displayed follow the instructions below and on the following page.

If you are unable to reset the fault and are requesting a service call please quote the displayed fault code number - this may enable the fault to be fixed over the phone.

Resetting a Fault

- If RESET is flashing and a fault code is displayed:
- Open the SCC door and press RESET once - this acknowledges the fault and turns the SCC and heater off.
- Press RESET again to send a RESET signal to the heater and turn the heater on.
- If the heater fails to start, wait 10 minutes and repeat the above steps.
- If the heater still fails to start contact your installer, your local Braemar service agent, or call 1300 650 644.

If a Spanner is Displayed



- The system has detected a fault that requires a service call.
- Contact your local Braemar service agent or call 1300 650 644.

TROUBLESHOOTING cont.

CAUSE	REMEDY
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PROBLEM: House is not heating effectively

- Check that SCC is set to required temperature (Set temperature must be above room temperature for heater to start) - increase set temperature if required.
- Fan speed may be set too low - try increasing the fan speed.
- Check that outlets/zones are open to all areas that require heating.
- Check the return air grille is not obstructed.
- Check that the return air grille and filter are clean - clean if required.
- Check that the SCC is set to HEAT mode - press AC MODE button to change to HEAT mode if required.
- If operating in MANUAL mode check that HOME is selected on SCC - press HOME/AWAY button if required.
- Check that doors and windows are closed.

PROBLEM: Heater operates at wrong times in AUTO mode

- Check that the time and day displayed are correct.
- Check that AM/PM is correct in the AUTO program settings.
- Check time, temperature, zones and fan speed settings in the AUTO program.

PROBLEM: Heater does not start - fault code 07 displayed

- Check that gas is turned on at gas meter. If the gas is turned off contact your installer or gas supplier.

It is a condition of your warranty cover that the items in the Schedule below are checked (and action taken as required) every two (2) years after the date of installation by a qualified, licenced technician, and that the Schedule is properly filled out (ie names, signature, date, and action taken). Even after the warranty period expires, please continue to have the product maintained every two years as per the items in the Schedule. This will help to prolong the life of the product and keep it running efficiently.

Maintenance Schedule

Year	2	4	6	8	10
Name of Technician and company (Print)					
Signature of Technician					
Date of attendance					

Cabinet and components

Cabinet					
Heat exchanger					
Combustion air inlet louvres					
Condensate drain (If applicable)					

General installation

Return air grille and filter					
Duct condition					
Flue system, cowl					
Electrical and gas connections					

Electrical

Electrical wiring					
Room fan motor / impellor					
PCB's and ignition module					
Pressure switch/s and hoses					
Combustion fan suction pressure					

Gas, burners, ignition

Burners and injectors					
Ignition electrode					
Flame sense electrode					

Operation

Start up and run sequence					
Control operation					
Cross-lighting					
Gas inlet pressure		kPa	kPa	kPa	kPa
Gas test point pressure High		kPa	kPa	kPa	kPa
Gas test point pressure Low		kPa	kPa	kPa	kPa
Return air temperature					
Outlet air temperature					
Thermistor temperature					
Zone operation (If applicable)					

Action taken key:

✓ = Inspected and working correctly no action required

A = Adjustment of part

C = Cleaning of part

R = Replaced part

To owner/user: please note that as explained in your Warranty Card, installation is not covered by the warranty (for example, ductwork, the return air grille and filter, and electrical and gas connections to the ducted gas heater). However, we still require that you have these things checked, because they can affect the performance (and/or safety) of the heater. This is why we have included them in the Maintenance Schedule.



HOME OWNER'S MANUAL

Spectrolink Comfort Control - Cooling



(English)(623528m Version 23-09-14)

EVAPORATIVE AND REFRIGERATED COOLING

This manual tells you how to use your Spectrolink Comfort Control to operate your Braemar, Breezair or Coolair evaporative cooler. If you purchased a Braemar refrigerated cooling unit, then it also has a section on how to use the Spectrolink Comfort Control to operate your refrigerated cooling unit.

Please note: There are separate Owner's Manuals for the evaporative cooler and for the refrigerated cooling unit. Your dealer or installer should have given you this manual (the one you are now reading) plus a separate owner manual for your evaporative cooler/refrigerated cooling unit. If not, then please contact them **urgently** and ask them to provide you with the owner manual for your evaporate cooler/refrigerated cooling unit. It has very important information in it, and very important instructions that you need to follow.

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Evaporative Cooling

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GENERAL

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 using your Spectrolink Comfort Control.

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 outlet vent size.

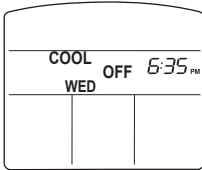
Where the design of the building prevents adequate exhaust, consideration should be given to the provision of mechanical extraction such as an exhaust fan.

Model No: _____ Serial No: _____

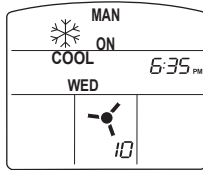
EVAPORATIVE COOLING OPERATION

Selecting COOL Mode

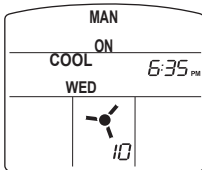
- 1 Open the SCC door.
- 2 Press the AC MODE button to switch between HEAT and COOL mode.



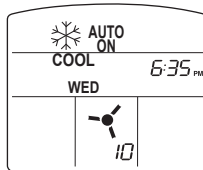
COOL mode selected.
Cooler off.



COOL mode selected.
Manual selected.
Cooler on in COOL mode.



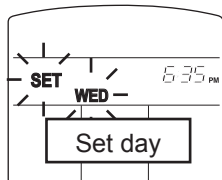
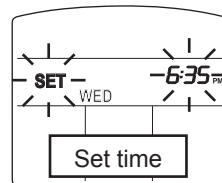
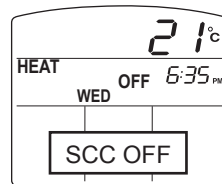
COOL mode selected.
Manual selected.
Cooler on in VENTILATION mode.



COOL mode selected.
AUTO selected.
Cooler on in COOL mode.

Setting the Time and Day

- 1 Press the ON/OFF button to turn the SCC OFF.
- 2 With the SCC turned off, press and hold the SET button for 3 seconds - SET and the TIME display will flash.
- 3 Press the UP or DOWN arrow button to adjust to the current time - ensure that AM/PM is correct. Hold button for rapid adjustment.
- 4 Press the SET button when the time is correct.
- 5 SET and the DAY display will flash.
- 6 Press the UP or DOWN arrow button to adjust to the current day.
- 7 Press the SET button when the day is correct to return to normal operation.



BUTTON FUNCTIONS

DOOR CLOSED

ON/OFF

Turns SCC on or off.

HOME/AWAY

Not used in evaporative cooling mode.

RESET

Not used in evaporative cooling mode.

MAN/AUTO

Press to toggle between manual and automatic operating modes.

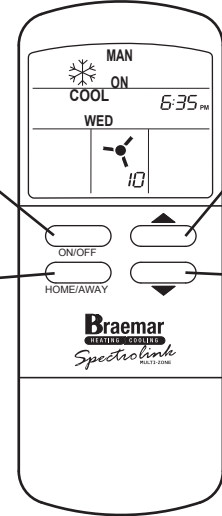
SET

With SCC off:

- Press once to enter timer setting mode.
- Press and hold to enter clock setting mode.

AC MODE

Press to toggle between HEAT and COOL mode.



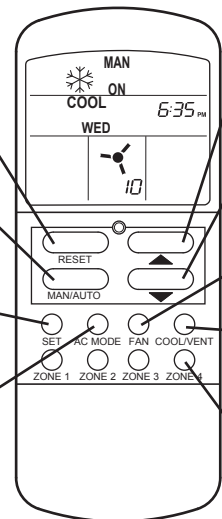
UP ARROW

- Press to increase fan speed in MANUAL mode.
- Press to increase cooling output in AUTO mode.

DOWN ARROW

- Press to decrease fan speed in MANUAL mode.
- Press to decrease cooling output in AUTO mode.

DOOR OPEN



UP ARROW

Press to make adjustments in timer and time setting modes.

DOWN ARROW

Press to make adjustments in timer and time setting modes.

FAN

Not used for evaporative cooler operation.

COOL/VENT

Press to turn pump on or off in MANUAL evaporative cooling mode.

ZONE 1/2/3/4

Not used for evaporative cooler operation.

TURN ON AND MANUAL OR AUTO SELECTION

Turning the Cooler ON or OFF

- 1 Press the AC MODE button to select COOL mode if required.
- 2 Press the ON/OFF button to turn the SCC on.

Select MANUAL or AUTO Mode

- 1 Press the MAN/AUTO button to switch between MANUAL and AUTO operating modes.

Note: In multiple SCC systems, the evaporative cooler can be operated from the "Master" SCC only. Zones do not operate in evaporative cooling mode.

MANUAL OPERATION

When operating in MANUAL mode the user controls both the fan speed and operation of the cooler pump.

Adjusting the Fan Speed

- 1 Press the UP or DOWN arrow buttons to increase or decrease the fan speed.

Turning the Pump On or Off

- 1 Press the COOL/VENT button to turn the pump on or off.
- 2 Pump ON - evaporative cooling mode.
- 3 Pump OFF - ventilation only mode.
- 4 With the pump turned on the SCC will flash WAIT at the start of a cooling cycle while waiting for the

cooler tank to fill with water and to pre-wet the cooler pads. The "snowflake" symbol is displayed when the pump is on.

AUTO OPERATION

When operating in AUTO mode the user controls the cooling output. The cooler controls the pump and fan speed automatically.

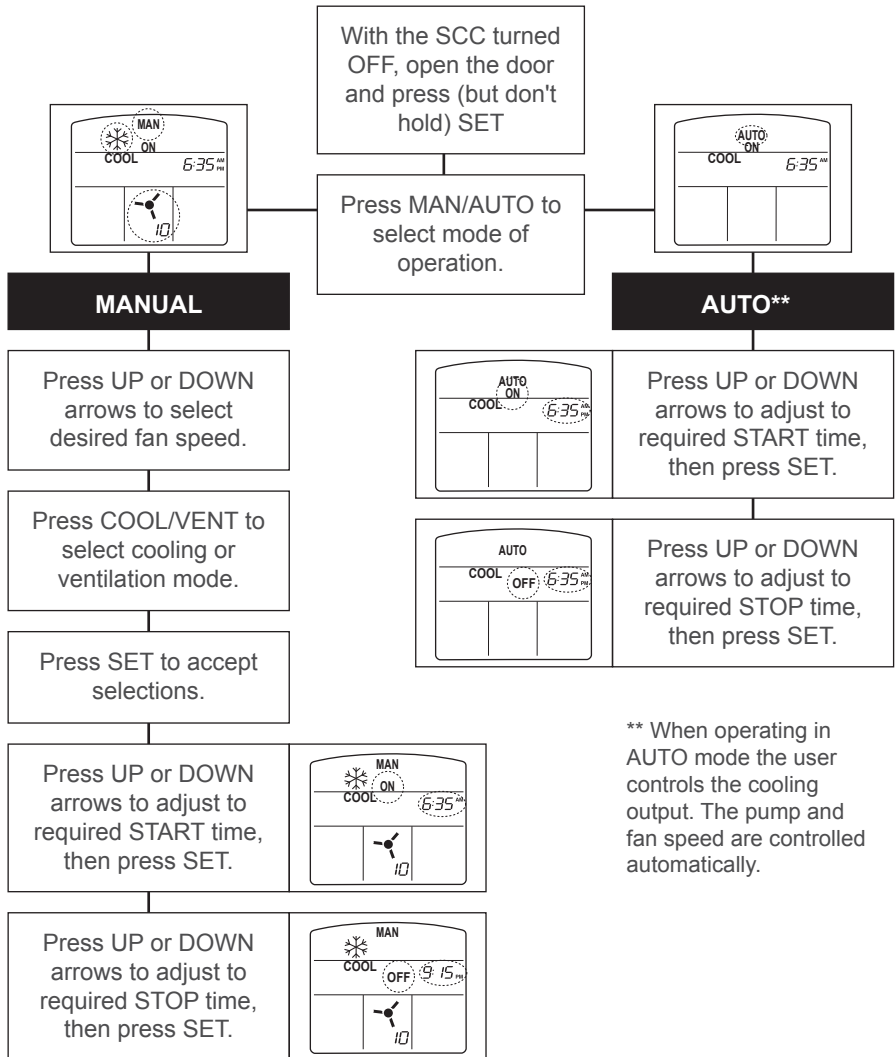
To Increase or Decrease Cooling Output

- 1 Press the UP or DOWN arrow buttons to increase or decrease the cooling output.
- 2 The cooler will automatically adjust the fan speed and pump operation based on the temperature sensed at the SCC.

TIMED START AND STOP

The SCC can be set to start and stop your evaporative cooler at times that you select. The cooler can be operated in either:

- MANUAL mode - cooling or ventilation, or
- AUTO mode - cooling only.

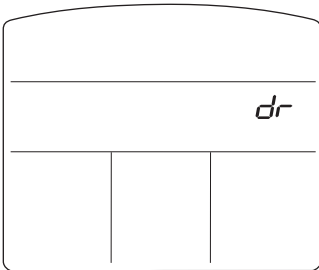


AUTOMATIC WATER DRAIN

If an automatic drain valve system has been installed with your cooler, the cooler will automatically drain the water. This helps ensure the water remains fresh and helps maintain your cooler in good condition to ensure optimum cooling performance.

The drain is activated by the following conditions:

- High water salinity (standard on Braemar and Breezair models only),
- Pre-set auto-drain time period has expired (standard Coolair models),
- If the cooler is turned off for a continuous 72 hours (3 days), or
- A manual drain can be initiated at any time by pressing the UP and “DOWN” arrow buttons simultaneously with the SCC off and door closed. The display will show “dr” to confirm the operation has activated.



During the drain operation all buttons are in-operative. When the cooler is re-started, there will be a delay while the cooler tank is re-filled with fresh water.

WATER BLEED SYSTEM

During cooler operation the bleed system drains a small amount of water from the cooler to ensure that fresh water is continually added. This is set by your installer and depends on local conditions. This continuous bleed system is used where a drain valve is not installed.

MAINTENANCE

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, water level, 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 maintenance is carried out by an authorised service agent. Climbing onto the roof is hazardous and could result in personal injury or property damage. Failure to have maintenance carried out may affect your warranty coverage. The following instructions are provided for you to pass on to your service agent, if required, to ensure that the correct maintenance is carried out.

End of Season Maintenance

- 1 Turn off power to cooler.
- 2 Turn off water to cooler.
- 3 Remove the pad frame assemblies - take care not to damage the pads.
- 4 Turn off power switch inside the cooler.
- 5 Check and clean the lid water channels.
- 6 If fitted, unclip and remove the bleed system. Allow water to drain. Take care not to lose the o-ring.

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

CAUTION: DO NOT RUN COOLER WITH PAD FRAMES REMOVED

TROUBLESHOOTING

Before requesting a service call please run through the simple checks in the following "Troubleshooting" section.

If required, call Braemar Service on 1300 650 644.

CAUSE	REMEDY
PROBLEM: Unpleasant odour	
	<ul style="list-style-type: none"> • Some odour from new cooler pads is normal. Allow time for the pads to be conditioned by running the cooler.
PROBLEM: Inadequate cooling	
	<p>Dry pads:</p> <ul style="list-style-type: none"> • Check water flow to pads. • Ensure that water is turned on to cooler. <p>Not enough doors and windows open in house:</p> <ul style="list-style-type: none"> • Open more doors and windows, particularly in the areas that require more cooling. <p>High ambient humidity:</p> <ul style="list-style-type: none"> • It is normal for an evaporative cooler to not cool as effectively on days of high ambient humidity compared to days of low humidity.
PROBLEM: SCC flashes the spanner symbol	
	<p>An operational fault has been detected by the cooler's in-built diagnostic software. Check the following:</p> <ul style="list-style-type: none"> • Ensure that the water supply and power have been turned on to the cooler. • Check the cooler drain pipe is not blocked. <p>Record the number displayed on the screen - this will be where the time is usually displayed.</p> <p>If required, call Service on 1300 650 644 and quote the number displayed on the SCC screen and the serial number of the cooler as recorded at the front of the cooler section of this manual.</p>

REFRIGERATED COOLING - GENERAL

Your refrigerated cooling system has been installed in conjunction with your Braemar Ecostar gas ducted heater. The cooling system utilises the heater fan and uses the same ducting as the heater to distribute cool air throughout your home.

Your installer should demonstrate the features and procedures set out in these instructions. The installer should also provide you with a Make, Model number and Serial number which can be filled out below.

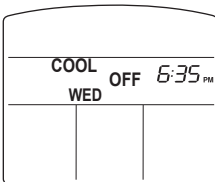
Cooler Make: _____

Model No: _____

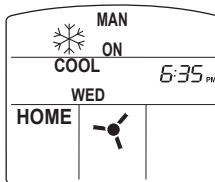
Serial No: _____

SELECTING COOL MODE

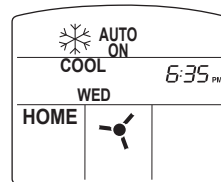
- 1 Open the SCC door.
- 2 Press the AC MODE button to switch between HEAT and COOL mode.



COOL mode selected.
Cooler off.



COOL mode selected.
Manual selected.
Cooler on in COOL mode.



COOL mode selected.
AUTO selected.
Cooler on in COOL mode.

SETTING THE TIME AND DAY

Refer to page 1 of the HEATER OPERATION section of this manual. The time and day can be set with either HEAT or COOL mode selected.

BUTTON FUNCTIONS

DOOR CLOSED

ON/OFF

Turns SCC on or off.

HOME/AWAY

Toggles between current and next time period.

RESET

Not used in refrigerated cooling mode.

MAN/AUTO

Press SET and MAN/AUTO to toggle between manual and automatic operating modes.

SET

Press to lock in adjusted parameters, or to enter clock setting mode (press with SCC off) or program setting mode (press with SCC on).

AC MODE

Press to toggle between HEAT and COOL mode.

UP ARROW

Increase temperature set-point.

DOWN ARROW

Decrease temperature set-point.

UP ARROW

Press to increase value in setting modes, or to increase temperature set-point.

DOWN ARROW

Press to decrease value in setting modes, or to decrease temperature set-point.

FAN

Press and hold (SCC off) to enter fan-only operation mode.

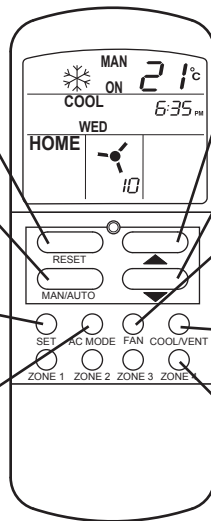
COOL/VENT

Not used in refrigerated cooling mode.

ZONE 1/2/3/4

Press to turn refrigerated cooling to a zone on or off.

DOOR OPEN



MANUAL MODE OPERATION

When operating in MANUAL mode the cooler will turn on and off to maintain the set temperature until turned off by the user.

WARNING: Seeley International recommends that maintenance is carried out by an authorised service agent. Climbing onto the roof is hazardous and could result in personal injury or property damage. Failure to have maintenance carried out may affect your warranty coverage. The following instructions are provided for you to pass on to your service agent, if required, to ensure that the correct maintenance is carried out.

Turning the Cooler ON

- 1 Press the ON/OFF button.
- 2 Press and hold the SET button and press the MAN/AUTO button to set the remote control to MAN mode (the MAN/AUTO button must be pressed within less than 3 seconds of pressing the SET button).
 - If the set temperature is less than the room temperature the room fan and cooler compressor will start.
 - The snowflake and room fan symbols will appear.
 - The SCC has a built-in 2 minute delay to prevent the compressor from re-starting within less than 2 minutes of last turning off - this is to prevent damage to the compressor.

Turning the Cooler OFF

- 1 Press the ON/OFF button.

- The display will revert to OFF mode.
- The room fan and compressor will turn off immediately.

Adjusting the Room Temperature

- 1 Decrease set temperature: Press the DOWN arrow to decrease set temperature by 1°C.
- 2 Increase set temperature: Press the UP arrow to increase set temperature by 1°C.

Adjusting the Fan Speed

- 1 With the SCC on press and hold the FAN button for 3 seconds - the fan speed and fan symbol will flash.
- 2 Press the up or down arrow buttons to adjust to the required fan speed - adjustable between 3 and 10 in refrigerated cooling mode.
 - The SCC will revert to the normal ON state after a few seconds.
 - The fan speed is not user-adjustable in multiple SCC systems.

Using HOME/AWAY in MANUAL Mode

The HOME/AWAY button allows you to set and switch between two temperature settings as follows:

- 1 When HOME is selected adjust to the required "HOME" set temperature.
- 2 When AWAY is selected, adjust to the required "AWAY" set temperature.
- 3 Press HOME/AWAY to switch between these settings.

AUTO MODE OPERATION

- When operating in AUTO mode the cooler will automatically turn on and off to maintain the programmed temperature.
- The SCC will automatically advance through the 4 time periods (WAKE, AWAY, HOME and SLEEP) each day and adjust the set temperature to the pre-programmed temperature you have set for each time period (see page 6).

Turning the Cooler ON and Selecting AUTO Mode

- 1 Press the ON/OFF button to turn the SCC on.
- 2 Press and hold the SET button and press the MAN/AUTO button to set the SCC to AUTO mode (the MAN/AUTO button must be pressed within less than 3 seconds of pressing the SET button).
 - If the set temperature is less than the room temperature for the current time period the cooler will start.
 - The SCC will display the time period and run according to the temperature set for that time period.
 - The SCC will automatically advance to the next time period and operate according to the set temperature for the new time period.
 - The SCC has a built-in 2 minute delay to prevent the compressor from re-starting within less than 2 minutes of last turning off - this is to prevent damage to the compressor.

Turning the Cooler OFF

- 1 Press the ON/OFF button.
 - The display will revert to OFF mode.
 - The room fan and compressor will turn off immediately.

Adjusting the Room Temperature

- The set temperature can be temporarily adjusted while operating in AUTO mode.
- 1 Decrease set temperature: Press the DOWN arrow to decrease set temperature by 1°C.
 - 2 Increase set temperature: Press the UP arrow to increase set temperature by 1°C.
 - 3 At the start of the next programmed time period, the set temperature will revert to the pre-programmed temperature you have set for that time period.

Using HOME/AWAY in AUTO Mode

- 1 Press the HOME/AWAY button to advance to the next time period. Normal program settings will resume at the end of the next period. Following is an example of how this can be used:
 - If the SLEEP period is programmed to start at 10pm and you go to bed early at 9pm, pressing HOME/AWAY will "bring forward" the SLEEP period settings.

SETTING THE AUTO PROGRAM

Single SCC Systems:

- Refer to HEATER OPERATION section of this manual - pages 7 & 8.

Multiple SCC Systems:

- Refer to HEATER OPERATION section of this manual - pages 9 & 10.

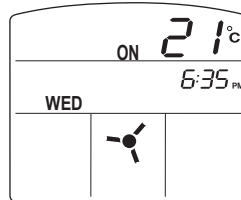
- 4 To turn FAN-only mode off press the ON/OFF button on the "Master" SCC.

USING THE FAN-ONLY FEATURE

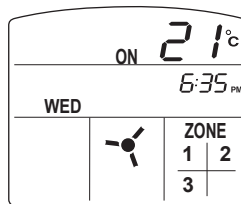
SINGLE SCC SYSTEMS

- 1 Turn the SCC OFF (press ON/OFF button if required).
- 2 Press and hold the FAN button for 3 seconds - the heater fan will start and increase to its maximum speed.
- 3 To get air flow to zones (where fitted) press the corresponding zone button.
 - The fan speed is not adjustable in "FAN-only" mode.
- 4 Press the ON/OFF button to turn the fan off.

Fan-only display with no zones enabled - single SCC.



Fan-only display with zones 1, 2 and 3 on - single SCC with zones, or multiple SCC system.



Multiple SCC Systems

- 1 Turn the "Master" SCC OFF (press ON/OFF button if required).
- 2 Press and hold the FAN button on the "Master" SCC for 3 seconds - the heater fan will start and increase to its maximum speed.
- 3 To get air flow to zones press the ON/OFF button on the "Slave" SCC IN EACH REQUIRED ZONE to turn it on.
 - The fan speed is not adjustable in "FAN-only" mode.

TROUBLESHOOTING

CAUSE	REMEDY
PROBLEM: House is not heating effectively	
	<ul style="list-style-type: none"> • Check that SCC is set to required temperature - decrease if required. Temperature set point must be less than the room temperature sensed by the SCC for the cooler to operate. • Check that outlets/zones are open to all areas that require cooling. • Check the return air grille is not obstructed. • Check that the return air grille and filter are clean - clean if required. • Check that the SCC is set to COOL mode - press AC MODE button to change to COOL mode if required. • If operating in MANUAL mode check that HOME is selected on SCC - press HOME/AWAY button if required. • Check that doors and windows are closed.
PROBLEM: There is airflow from the outlets but it is not cool	
	<ul style="list-style-type: none"> • If it is accessible, check that power is turned on to the cooling unit. • Check that the SCC is set to COOL mode - press AC MODE button to change to COOL mode if required. • Allow 10 to 15 minutes for the system to operate then check again. • If the air is still not cool contact your installer or the cooling unit manufacturer.
PROBLEM: No airflow from outlets	
	<ul style="list-style-type: none"> • If it is accessible, check that power is turned on to the heater. • Check that the SCC is set to COOL mode - press AC MODE button to change to COOL mode if required. • Check that SCC is set to required temperature - decrease if required. Temperature set point must be less than the room temperature sensed by the SCC for the cooler and heater fan to operate. • Where zones have been installed, check that the required zones are turned on. • If there is still no airflow from the outlets, contact your installer, or call Seeley International Service on 1800 650 644.
PROBLEM: Cooling unit cycles on and off	
	<ul style="list-style-type: none"> • This may be normal operation due to low air flow. • When the outlet temperature drops below a pre-set value the cooling unit turns off to stop the cooling freezing. The cooling unit re-starts after the outlet temperature has increased enough and the compressor re-start delay timer has elapsed. • Increasing the fan speed will reduce the rate of cycling.

