Comfort Zone Controller

AUTO

8:20 AM

(((•)))   HEAT ON

FRI

WAKE

4

23.5 °C

ZONE

ON/OFF

HOME AWAY

B Braemar

WELCOME
to THE
Comfort
ZONE

INDEX

INTRODUCTION

Congratulations on choosing a Comfort Zone Controller to operate your Braemar TM Series Gas Central Heater. Your Controller is built from the highest quality materials and is engineered to provide many years of trouble free performance. The Comfort Zone Controller is one of the most intelligent Thermal Management electronic brains to be launched in Australia. By integrating zone control over seperate areas within your home, you can program many combinations of time and zone temperatures, exactly to suit your lifestyle.

Please take a moment to read these instructions and keep them for future reference.

The Comfort Zone Controller is suitable for use on the following Braemar TM Series Heaters.

Braemar
TM200i -   80 MJ Internal Heater
TM300i - 120 MJ Internal Heater
TM200e -   80 MJ External Heater
TM300e - 120 MJ External Heater

IMPORTANT.
Your Controller has been pre-programmed to operate your heater, and after installation is ready to use. If however the words "SET CLOCK" are flashing on the display, the time clock will need to be set before the heater can be operated.
To set the clock press the SET button twice.

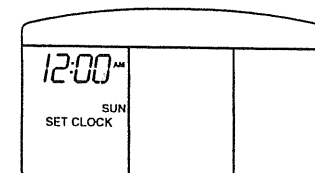Refer to the Set Clock section later in this manual to adjust the time.

GETTING STARTED

POWERING UP THE COMFORT ZONE CONTROLLER FOR THE FIRST TIME

Before the heater can be turned on the TIME must be set on the Comfort Zone Controller.

Turn on the Power to the Heater.

The display shows
SET CLOCK and 12:00 flashing

Open the front door.

Use the UP/DOWN buttons to adjust the time.

Press the SET button.
SET CLOCK and **SUN** flash.

Use the UP/DOWN buttons to set the DAY.

Press the SET button.

Clock setting is complete.

If you have set the TIME or the DAY incorrectly, simply press the SET button and start again.

To turn the heater ON,
Press the RESET button.
When the door is closed use the ON/OFF button to turn the heater On and Off.

The heater is now in Automatic Mode running under the control of the stored default program.
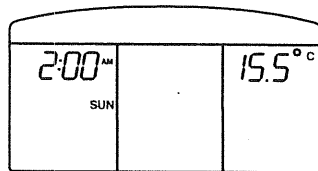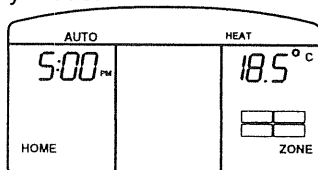
TURNING THE HEATER ON

Press the ON/OFF button
to turn the Comfort Zone Controller ON.
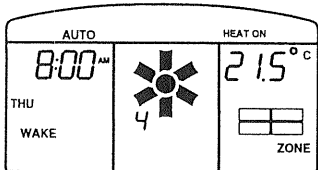
The Comfort Zone Controller has 3 visual states.

1. The Controller is OFF.
   The heater or cooler is OFF

```
2:00 AM          15.5 °C
     SUN
```

2. The Controller is ON in standby mode.
   The heater or cooler is in
   standby waiting for a
   heat/cool signal from
   the controller.

```
AUTO        HEAT
5:00 PM          18.5 °C

HOME              ZONE
```

3. THE Controller is ON
   The heater or cooler
   is operating.

```
AUTO        HEAT ON
8:00 AM    ❄    21.5 °C
THU         ¼
WAKE              ZONE
```
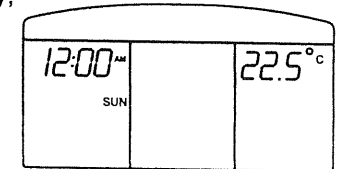
SETTING THE TIME

ADJUSTING THE TIME AND DAY IF THE COMFORT ZONE
CONTROLLER IS ALREADY ON.

To set the correct time or day,
Press the ON/OFF button
to turn the Controller OFF
The display shows only the
time, day and temperature.

```
12:00 AM         22.5 °C
     SUN
```

Open the front door.

Press the SET button,
SET CLOCK and **time of day** will flash.

Use the UP/DOWN buttons ▲ ▼ to adjust the time.

Press the SET button
SET CLOCK and the **DAY** flash.

Use the UP/DOWN buttons ▲ ▼ to set the DAY.

Press the SET button.

Clock setting is complete.

*If you have set the TIME or the DAY incorrectly,
simply press the SET button and start again.*

To turn the heater ON,
Press the RESET button.
When the door is closed use the ON/OFF button
to turn the heater On and Off.

**The heater is now in Automatic Mode running under the
control of the stored default program.**

Comfort Zone Controller Button Functions.

On / Off Button.
Turns the controller and heater On or OFF

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

Temporarily Increase Set Temperature

Temporarily Decrease Set Temperature

Reset Button.
Press to send a reset signal to the heater. Use if the CZC shows heater running but the heater is not.

Up Button.
Press to make adjustments in setting mode.

Down Button.
*Press to make adjustments in setting mode.*

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

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

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

Heat / Cool Button.
Press to set CZC to control heater or cooler.

Fan Button.
Press to override the set fan speed. The word fan will display for 5 seconds to allow adjustment to be made.

Comfort Zone Controller Display Functions.
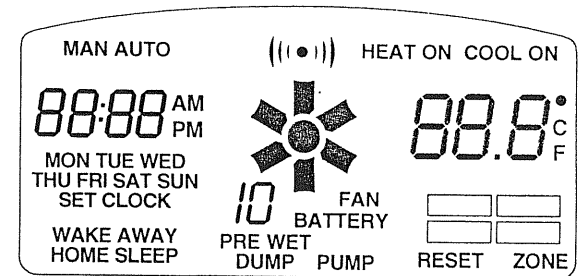
The picture above shows all parts of the Liquid Crystal display.

Detail of the display follows...

((ı ● ı)) Transmit Signal
Operates when the CZC is communicating with the heater.

AUTO *Automatic Operation*
Heater when operating is under the control of the stored automatic program.

MAN *Manual Operation*
Heater is operating manually according to the requirements of the owner.

HEAT *Heat Mode*
CZC is programmed to control a heater. CZC is in standby mode.

HEAT ON *Heater On*
Heater is operating, warming the home.

DISPLAY FUNCTIONS

COOL   *Cool Mode*
Controller is programmed to operate a cooler.
Controller is in standby mode.

COOL ON   *Cooler On*
Cooler is operating cooling the home.

I2:55 AM   *Time Display*
Displays the current time.

MON TUE WED
THU FRI SAT SUN   *Day Display*
Displays the current day of the week.

SET   *Auto Program Setting Mode.*
Press when the Controller is On.
The word "SET" flashes.
Changes can be made to the automatic program.

SET CLOCK   *Set the Time Clock.*
Press when the Controller is OFF.
The word SET CLOCK flashes.
Changes can be made to the Time and the Day.

22:5 °c   *Temperature Display.*
Displays the room temperature with the door closed.
Displays the set temperature with the door open.
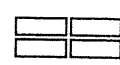
WAKE   *Wake Period.*
Displayed when the heater is under control of the automatic program
The time is typically between 6.00am and 8.30am.
(see default program setting)

DISPLAY FUNCTIONS

AWAY   *Away Period.*
Displayed when the heater is under control of the automatic program or in manual operation.
In Auto the time is typically between 8.30am and 5.00pm.
In Manual the heater will run in response to the demands of the Controller . The heater will run at a low temperature and will mostly be off.
(see default program setting)

HOME   *Home Period.*
Displayed when the heater is under control of the automatic program or in manual operation.
In Auto the time is typically between 5.00pm and 10.30pm.
In Manual the heater will run in response to the demands of the controller. The heater will run at higher temperatures and will be on more frequently.
(see default program setting)

SLEEP   *Sleep Period.*
Displayed when the heater is under control of the automatic program.
the time is typically between 10.30pm and 6.30am.
The heater will run at a low temperature and will mostly be off.
(see default program setting)

Zone Display
Displays the number of zones to be heated or cooled in the home.

ZONE   *Zone Setting Mode*
Flashes when selecting zones to be on or off when setting in the auto program mode.

DISPLAY FUNCTIONS

Fan On Symbol
Displays the speed of the heater room fan.

1 Indicates speed 1 - Low
2 Indicates speed 2
3 Indicates speed 3
4 Indicates speed 4 - High

Fan Symbol displayed rotating indicates the heater fan is On warming the home.

FAN   *Fan Override*
Displays when the operator overrides the pre-set room fan speed.
Speed can be increased or decreased as desired

SPECIAL FEATURES

Home / Away Function.

HOME/AWAY

Use the HOME / AWAY button when you have an unscheduled change to your daily routine.

If you arrive home early from work and the heater is not yet running in the next time period - HOME.
Pressing the HOME / AWAY button will bring the Home start time forward, and the heater will run at the auto program settings for home.

When you leave the home early in the morning and the heater is running in the WAKE time period, pressing the HOME / AWAY button will bring the AWAY period forward and the heater will run the auto program settings for away.

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

SPECIAL FEATURES

Overriding the Set Temperatures.
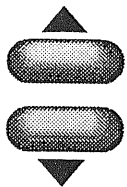
When the Controller is in Manual or Auto Mode, the temperature settings can be temporarily overridden by pressing the UP/DOWN buttons (with the door shut).

Multiple Gas Rates and Fan Speeds

All heaters in the range are capable of running at multiple gas rates. The gas rate selected depends on the number of zones and the fan speed you have set.

Shown on the display left, are the settings for maximum gas and maximum fan.
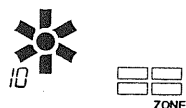
Press a zone button to turn a zone off (even if you don't have zones) and the gas and fan rates will drop to the default settings.

ie.   75 % Operation   50 % Operation   25% Operation
       Gas and Fan   Gas and Fan   Gas and Fan
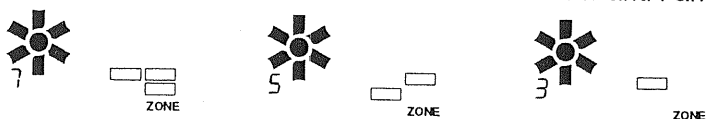
Press the fan button to override the set fan speed.
Adjust the fan speed (and gas rate) to suit your needs.
ie

       Max Fan   Med Fan   Min Fan
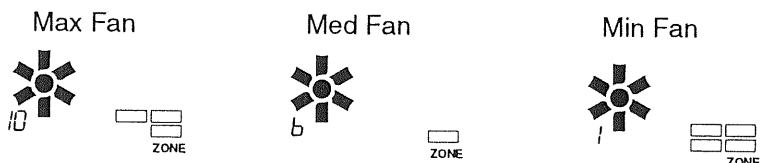
NOTE.
Setting either the fan speed or the zones will effect the gas rate the heater runs at.
The heater will automatically adjust, to the correct gas rate.

STORED AUTO PROGRAM

The table below lists all the default values in the Automatic Default Program. When you first power up the 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^{0}C Setting	Zones ON	Fan Speed
Default Wake	6:00	20	1-2-3-4	4
Your Settings	———	———	———	———
Default Away	8:30	14	1-2-3-4	4
Your Settings	———	———	———	———
Default Home	5:00	21	1-2-3-4	4
Your Settings	———	———	———	———
Default Sleep	10:30	14	1-2-3-4	4
Your Settings	———	———	———	———

CHANGING THE AUTO PROGRAMME

SETTING UP

Turn the Comfort Zone Controller ON.
The controller must be in standby
or heating mode to change the auto program.

Press the HEAT/COOL button to program the
controller for heater or cooler operation.

Press SET to enter programming mode.
SET, & Mon, Tue, Wed, Thu, Fri are flashing.
If you want to program individual week days, use
the UP/DOWN buttons to select a day.

SELECT THE DAYS OF THE WEEK PROGRAMMING
You can program Mon - Fri as a group,
or program a single day later by selecting
and programming that day.

Press the UP/DOWN buttons to select
the day options.
Mon - Fri as a block is easiest.

Press SET to accept the day option.

The Controller is now ready to have the
default auto program altered to suit your requirements.

**If during programming you need to exit or start again
press the RESET button.**

PROGRAMMING THE WAKE PERIOD

WAKE, SET, and 6.00 are flashing.

The display shows
all the functions
of the WAKE period.
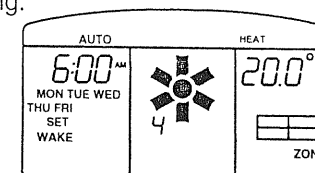
The display above shows programming of Mon- Fri as a group.
The same programming sequence detailed on the following pages
applies when setting single days.

To accept the settings as displayed,

Press the MAN/AUTO button.
The program will now go to setting the AWAY period.

To change the WAKE time to a new value.(say 6.30 am)

Press theUP/DOWN buttons,

Press the SET button to accept the new time.
The display now shows SET and 20.0 flashing,

Press the SET button if you want to accept this temperature
This is the temperature the home will
be heated to in the wake period.
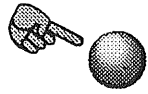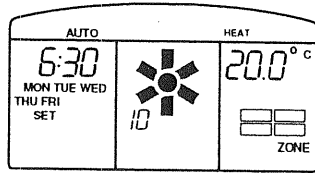
To change the WAKE temperature.

Press the UP/DOWN buttons

Press the SET button to accept the new temperature.
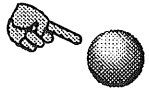*The display now shows SET & ZONE flashing.*

PROGRAMMING THE WAKE PERIOD
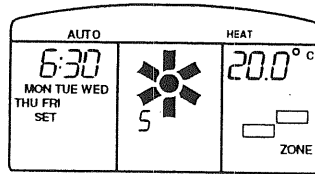
The display shows
SET and ZONE
flashing.

```
    AUTO          HEAT
   6:30    ✴    20.0 °c
MON TUE WED
THU FRI
  SET        10
                      ZONE
```

Press a ZONE button to turn the ZONE on or off
This display shows 2 zones turned OFF.

```
    AUTO          HEAT
   6:30    ✴    20.0 °c
MON TUE WED
THU FRI
  SET        5
                      ZONE
```

Press the SET button to accept heating
to the ZONES selected.

The 5 ✴ symbol is now flashing

Press the UP/DOWN buttons to
change the amount of air to the
Zones you want heated
*"1" displayed - minimum air ***
*"10" displayed - maximum air ***
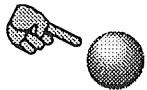
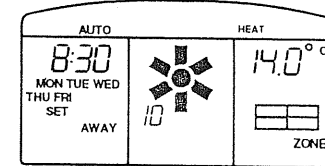Press the SET button to accept the Fan option.

Setting of the WAKE period is now complete.
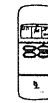
PROGRAMMING THE AWAY PERIOD

AWAY, SET, and 8.30 are flashing.

The display shows
all the functions
of the AWAY period.

```
    AUTO          HEAT
   8:30    ✴    14.0 °c
MON TUE WED
THU FRI
  SET        10
  AWAY
                      ZONE
```

To accept the settings as displayed,

Press the MAN/AUTO button.
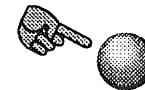The program will now go to setting the HOME period.

To make changes to the time the heater goes off in the morning ,

Press the UP/DOWN buttons.

Press the SET button to accept the new time.
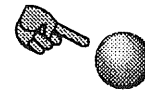*The display now shows 14.0 flashing,*

Press the SET button if you want to accept this temperature
*this is the temperature the home will
be heated to in the away period.*

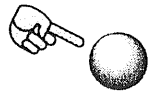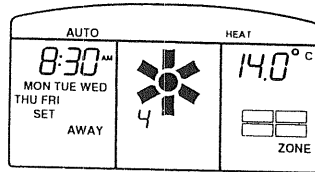To change the AWAY temperature.

Press the UP/DOWN buttons

Press the SET button to accept the new temperature.
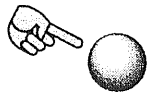*The display now shows SET & ZONE flashing.*

PROGRAMMING THE AWAY PERIOD

The display shows
SET and ZONE
flashing.

```
        AUTO              HEAT
       8:30 AM      ✳      14.0 °c
    MON TUE WED
    THU FRI
      SET          4
          AWAY                ZONE
```

Press a ZONE button to turn the ZONE on or off
This display shows 3 zones turned OFF.
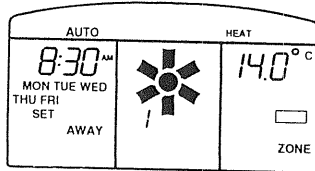
```
        AUTO              HEAT
       8:30 AM      ✳      14.0 °c
    MON TUE WED
    THU FRI
      SET          1
          AWAY                ZONE
```
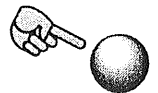
Press the SET button to accept heating
to the ZONES selected.

The ✳ *1* symbol is now flashing

Press the UP/DOWN buttons to
change the amount of air to the
Zones you want heated
*"1" displayed - minimum air ***
*"4" displayed - maximum air ***

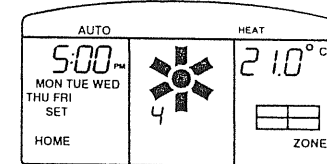Press the SET button to accept the Fan option.

Setting of the AWAY period is now complete.

PROGRAMMING THE HOME PERIOD

HOME, SET, and 5.00 are flashing.

The display shows
all the functions
of the HOME period.

```
        AUTO              HEAT
       5:00 PM      ✳      21.0 °c
    MON TUE WED
    THU FRI
      SET          4
      HOME                  ZONE
```
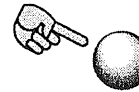
To accept the settings as displayed,

Press the MAN/AUTO button.
The program will now go to setting the SLEEP period.

To make changes to the time the heater comes on in the afternoon ,

Press the UP/DOWN buttons.

Press the SET button to accept the new time.
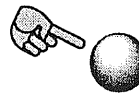*The display now shows 21.0 flashing,*

Press the SET button if you want to accept this temperature
this is the temperature the home will
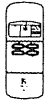*be heated to in the HOME period.*

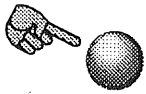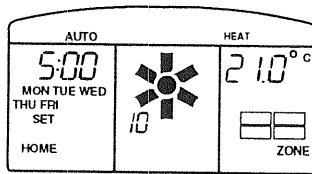To change the HOME temperature.

Press the UP/DOWN buttons

Press the SET button to accept the new temperature.
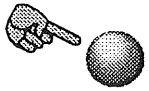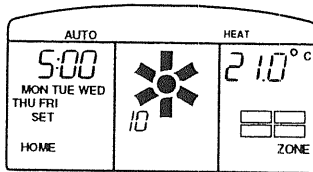*The display now shows SET & ZONE flashing.*

PROGRAMMING THE HOME PERIOD

The display shows
SET and ZONE
flashing.

Press a ZONE button to turn the ZONE on or off
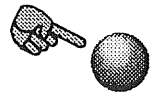*This display shows 4 zones turned ON.*

Press the SET button to accept heating
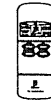to the ZONES selected.

The *10* symbol is now flashing

Press the UP/DOWN buttons to
change the amount of air to the
Zones you want heated
"1" displayed - minimum air *
"10" displayed - maximum air *

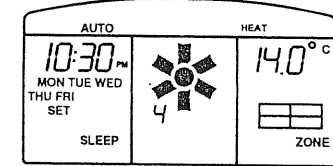Press the SET button to accept the Fan option.

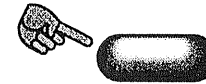Setting of the HOME period is now complete.

PROGRAMMING THE SLEEP PERIOD

SLEEP, SET, and 10.30 are flashing.

The display shows
all the functions
of the SLEEP period.
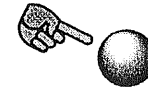
To accept the settings as displayed,

Press the MAN/AUTO button.
Program setting for the 5 days is now complete.

**Changes can be made to Saturday and Sunday Auto program.
Press SET and select SAT, program, then select Sunday.**

To make changes to the time the heater goes off in the evening ,

Press the UP/DOWN buttons.

Press the SET button to accept the new time.
The display now shows 14.0 flashing,

Press the SET button if you want to accept this temperature
*this is the temperature the home will
be heated to in the SLEEP period.*

To change the SLEEP temperature
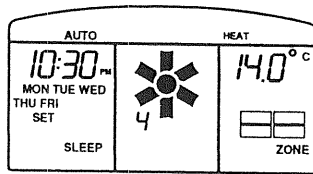
Press the UP/DOWN buttons

Press the SET button to accept the new temperature.
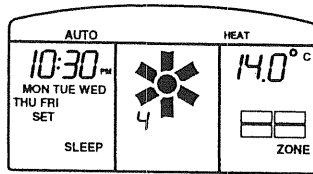*The display now shows SET & ZONE flashing.*

PROGRAMMING THE SLEEP PERIOD

The display shows
SET and ZONE
flashing.

Press a ZONE button to turn the ZONE on or off
This display shows 4 zones turned ON.

Press the SET button to accept heating
to the ZONES selected.

The 4 symbol is now flashing

Press the UP/DOWN buttons to
change the amount of air to the
Zones you want heated
*"1" displayed - minimum air ***
*"4" displayed - maximum air ***

Press the SET button to accept the Fan option.

Setting of the SLEEP period is now complete.

Trouble shooting.

If you have difficulty operating your heater Controller
check the trouble shooting guide before contacting your
nearest Service Centre on 1800 816 815.

Problem.
HEAT ON displayed but the heater is not working.
COOL ON displayed but the cooler is not working.
Open the front door on the controller, press the RESET button.
The heater / cooler should now operate.

Problem.
Heater is noisy when operating.
Check that there are enough outlets opened for the fan speed
selected. Lower the fan speed or open another zone to correct
problem.

Problem.
Not enough Heating.
Check the program running on the controller is correct.
Is the thermostat located in the common zone
according to the Installation Instructions.
Increase the SET temperature.