USER INSTRUCTIONS FOR HEATMISER

INDEX

NORMAL MODE.

On approaching the unit, press **SCROLL** (if necessary) until the day/date/ time display is reached. This will be similar to below:

Day (SUN - SAT) ..... | MON 23 - 12 - 90 | .....Date (Day-Month-Year)
Time (Hrs. Min. Sec) ..... | 12.46.59 NIGHT | .On/Off period (Day or Night)

Press **SCROLL**. Zone status screen will be displayed, as shown below.

Target temperature —— Actual Temperature

Zone Temperatures..... | ZONE 1 (22) : 20 |
Zone Status ..... | RELAY ON | ..... ON / OFF

To operate the fan, press the FAN key. Then when asked, press Enter to bring the fan on. Repeat operation to turn the fan off."

OVERRIDE

If the unit is set to allow the users to override programming then the maximum time that the unit can be overridden will have been set by the installer.

Pressing **OVERRIDE** during Normal (Run) mode will enable the control units programming to be overridden for a specified period. This is to allow the heating system to be switched to day or night mode manually at exceptional times when the rooms are not being used to schedule.

A display similar to below will be shown:

OVERRIDE TO
1) ON or 2) OFF

Press **1** or **2** to select on to Day settings or off to Night settings. The display will change similar to below:

ENTER OVERRIDE
(04 HRS max) : 00

The maximum hours displayed is preset by the installer. Two digits must now be entered, the time of the override period required, in hours.
The **DEL** key may be used to correct mistakes, press **ENTER** when correct. The display will return to the Normal (Run) mode displays with the addition that a similar display to that shown below will be shown approx. every 10 seconds until the override period is completed.

OVERRIDE TIME
LEFT IS 01 hrs

To end override before the set time is reached, re-enter override mode and set the override Period to 00.

PROGRAM MODE.

From any of the Normal (Run) Mode screens pressing **PROG** will obtain the following screen:

Enter Code to continue :

At this point you must enter the passcode to enter the program mode. This passcode is set to 0000 when first installed but may be changed at anytime by the user to ensure security. This process will be explained under 3) CODE. When the 4 digit code has been entered by pressing **ENTER**, the following will be displayed if the code is not entered correctly:

THE CODE ENTERED WAS INCORRECT

This display will change back to the normal run mode display after a few seconds. If the code is entered correctly, then the display below will be shown:

1) DATA 2) TIME 3) CODE 4) HOLS

This is the set-up menu display. Pressing **1, 2, 3** or **4** will now allow the settings to be altered as explained on the following pages:

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1 DATA

This is the section used to change the temperature and on/off time settings (referred to as DAY/NIGHT settings as the **HEATMISER** is not just a time switch, the night settings will maintain any temperature set although this is usually a low temperature for use when the rooms are unoccupied). Pressing **1** will obtain a display similar to below:

ENTER REQUIRED DAY TEMP. :22

Press two digits for the required temperature in degrees Centigrade and then press **ENTER.** The display will change as below:

ENTER REQUIRED NIGHT TEMP. : 10

Press two digits for the required temperature in degrees Centigrade and then press **ENTER.** The display will change as below:

ENTER ZONE SWITCHING TIMES

This display will automatically change after approx. 2 seconds to one similar to below:

DAY PERIOD 1 MON S :00.00 E : 00.00

You may now enter four digits for the Hour:Minutes required for the start of DAY TEMPERATURE Period 1 on each Monday (Mistakes may be rectified by pressing **DEL.**) and then pressing **ENTER.** Another four digits must now be entered for the Hour: Minutes for the end of DAY TEMPERATURE Period 1 on each Monday. Press **ENTER** when setting is correct.

The display will now change to PERIOD 2 MON and again two sets of four digits may be entered for the start and end of DAY PERIOD 2. Pressing **ENTER** after the second set of digits will change the display to PERIOD 3 MON allowing a third DAY TEMPERATURE period to be set up. (The procedure is exactly the same as for DAY PERIOD 1.). Again the display will change to DAY PERIOD 4 to allow the setting of a fourth DAY TEMPERATURE period. The display will change again after the fourth period has been entered to show DAY PERIOD 1 TUE.

At this point the copy button can be pressed to copy all the times from Monday to Tuesday. Pressing copy again will repeat the operation for Wednesday, etc.

The instructions above apply for the seven days of the week after which the display will return to the set-up menu. You may now return to normal run mode by pressing **RUN**, or enter one of the other three set-up programs.

Note 1: *24 hour clock notation must be used throughout.*

Note 2: *It is not necessary to allow a warm-up period prior to the start of the required day temperature as this is automatically calculated by the HEATMISER giving the required temperature at the time set.*

Note 3: *Any day period may be skipped or unused by leaving both start and end settings at 00.00.*

Note 4: *At any time during these setting displays, pressing **ENTER** without changing the figures will accept the figures already displayed.. Pressing **RUN** at any time will return the HEATMISER to the set-up menu display. These features will allow minor changes to individual DAY TEMPERATURE Periods to be made without having to re-program the whole system.*

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2 TIME

This is the section used to set the **HEATMISER** to the correct time and date. The internal timer is extremely accurate and therefore time settings should only be necessary for changes from Greenwich Mean Time to British Summer Time etc. The display will change similar to below showing the current set time and allowing the entry of a new time in Hours:Minutes.

TIME IS : 15.59
NEW TIME : .

Mistakes may be rectified by pressing **DEL,** press **ENTER** when new time is correct. The display will now change as below to allow changes to the date to be made.

DATE IS: 25-10-90 NEW ONE: - -

Again press **ENTER** when correct and the display will return to the set-up menu. You may now return to normal run mode by pressing **RUN**, or enter one of the other three set-up programs.

Note: *If **ENTER** is pressed at any display then current setting will be retained.*

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3 CODE

This is the section used to set the passcode. Setting the passcode occasionally will ensure that the system cannot be reprogrammed or tampered with by unauthorised persons. On entering this mode, a display similar to that shown below will appear:

1) MANAGER CODE 2) OVERRIDE CODE

Pressing 1 will allow you to change the code for programming the unit.
Pressing 2 will allow you to change the code needed for the override button.

CODE IS : 0000 NEW CODE :

You may now enter a new four digit code of your own choosing.
Enter the code carefully, it will not be displayed, do not forget the new code , as without it you will not be able to alter the programming etc.
Mistakes may be rectified by pressing **DEL.** Press **ENTER** when satisfied; you may wish to return to this display to check the setting before leaving set-up mode completely. You may now return to normal run mode by pressing **RUN**, or enter one of the other three set-up programs.

Note: *In the event that the code is forgotten, you will need to contact your installer.*

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4 HOLS

This is the section used to set known periods in the year when the controlled zone will not be in use. Five periods can be preset, this is done by entering the start date and then the number of days the holiday lasts. A display similar to the one shown below will appear:

HOLIDAY PERIOD 1 S : 00 - 00 - 00 L : 00

You must now enter the date of the start of the required holiday period in the format DD - MM - YY, mistakes may be rectified by pressing **DEL**, press **ENTER** when correct. A two digit figure for the length of the holiday in days may now be entered, again press ENTER when correct. The display will now change to HOLIDAY PERIOD 2 and again you can enter a start date and the length of the holiday period. This will be repeated for all five holiday periods it

is possible to program. After entering the final length on HOLIDAY period 5, the display will again return to the set-up menu. You may now return to the normal run mode by pressing **RUN**, or enter one of the other three set-up programs

Note 1: *If **ENTER** is pressed at any display then current setting will be retained.*

Note 2: *To cancel a holiday period whilst it is in progress it is only necessary to bring the holiday period up on the display and then return to run mode. This will cancel the present holiday period only.*

TECHNICAL SPECIFICATION

Enclosure Matl. ABS — Weight 1.1 Kg
Dimensions 158 x 62 x 199mm — Supply 230V AC – 10% 50Hz

RELAY OUTPUTS	–	Single pole normally open contacts 3 amp 250V AC (Resistive)
SENSORS	–	Only use Heatmiser Sensors wiring with twin screen cable (Beldon 8451)
NETWORK	–	RS485 wired using twin screen cable (Beldon 8451)
BATTERY BACK-UP	–	Lithium cell maintains data memory and time clock for 10 years minimum at 25°C.

HEATMISER ENGINEER'S SETUP

To access the engineer's section, press programme and enter a code of ..... You will then be given the following options:-

1) DATA 2) CODE

SELECT 1 – DATA

The screen will now show:-

CALIBRATION No. 1 SETTING : 00

To calibrate sensor Number 1, you should have first got an accurate temperature reading from the zone, e.g. 21°C and also made a note of the temperature the heatmiser was indicating, e.g. 17°C. The heatmiser in this example is reading 4°C too low, therefore because the unit works in ½ degree steps a figure of 08 should be entered to make it read 4 degrees higher.

The same principal is used to calibrate the other sensors.

Calibration No. 1 setting is for room sensor.
Calibration No. 2 setting is for the spare sensor input.

After calibrating these sensors the screen now shows:-

ENTER MAXIMUM OVERRIDE : 00

This is the maximum number of hours that the override button can be made to work. Setting this at 00 will disable the override button completely.

ENTER MAXIMUM PREHEAT HRS. :03

This is the maximum number of hours before the entered switching time that the unit could come on to get the building up to the temperature. The maximum setting is 6 hours but an average setting is 3 hours.

ENTER RATE OF CHANGE m/C : 20

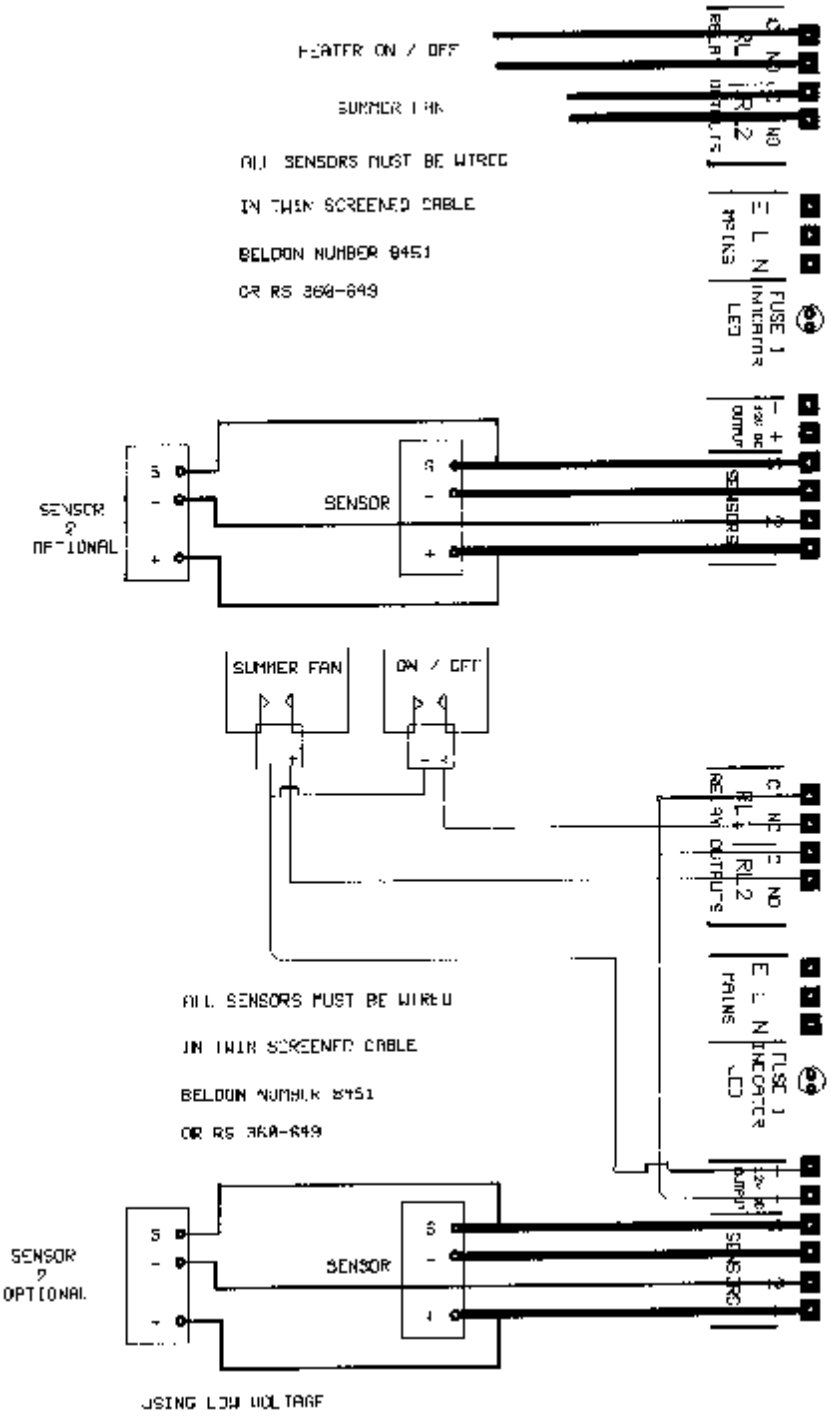
This is the amount of time the building takes to rise in temperature by 1°C. An average starting point would be 20 minutes but because the unit is self learning, it will alter itself by 1 minute per day to adjust itself to the correct setting.

SELECT 2 – CODE

The Code section will work as normal and is used to set the user's code.

CONTROL SETTINGS

	SETTINGS	
PREHEAT RATE OF CHANGE MON. TUE . WED . THUR. FRI. SAT. SUN.		**SETUP** OPTIMISING ONLY **DATA** CALIBRATION SETTINGS– 1: 2: MAXIMUM OVERRIDE:–


HEATER ON / OFF
SUMMER FAN
ALL SENSORS MUST BE WIRED
IN TWIN SCREENED CABLE
BELDON NUMBER 8451
OR RS 366-849
SENSOR 2 OPTIONAL
SENSOR
SUMMER FAN
ON / OFF
ALL SENSORS MUST BE WIRED
IN TWIN SCREENED CABLE
BELDON NUMBER 8451
OR RS 366-849
SENSOR 2 OPTIONAL
SENSOR
USING LOW VOLTAGE