

**Honeywell**

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# 190795-DAD SET-UP UNIT

USER GUIDE



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## Overview

Elm's range of Tuscan controllers (Figure 1) can operate individually or as part of the Genus network.

The Setup Unit (Figure 2) is a hand-held display unit used to register a Tuscan controller — giving it a name that identifies it on the network.

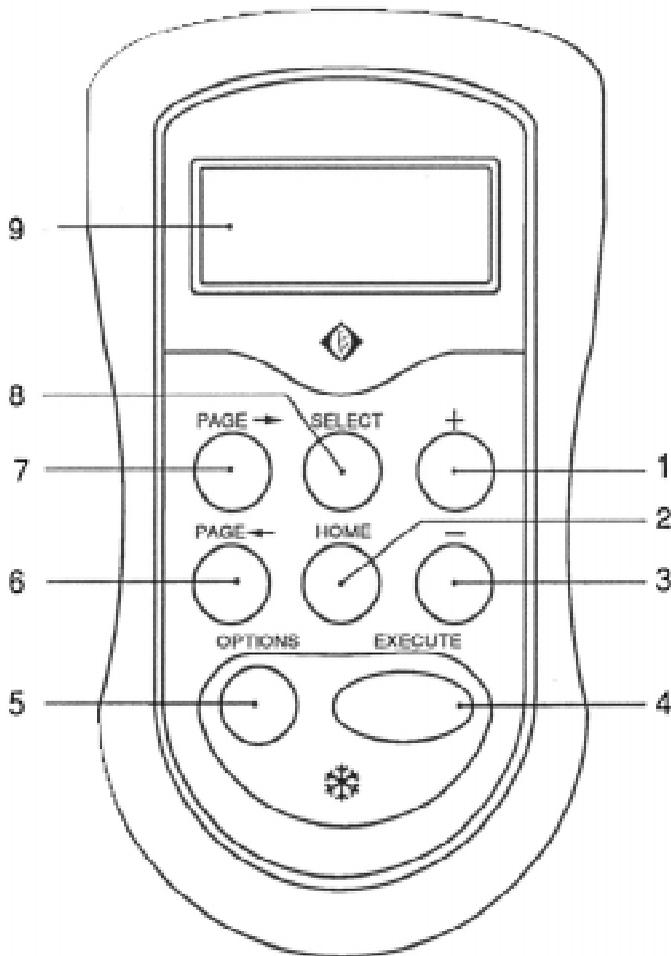
When plugged into a controller, the Setup Unit allows you to inspect and change the values of parameters that affect the way the controller works.

You can reset a controller to its original parameter values, set at the factory, or force a defrost.

The Setup Unit takes its power directly from the Tuscan controller (the unit switches on when connected to the Tuscan and switches off when disconnected).

A cable is supplied with the Setup Unit to connect it to the controller. Replacement cables are available from your Elm equipment supplier.

**Figure 1 : Tuscan Controller showing Setup Unit Socket**



- |                             |                        |
|-----------------------------|------------------------|
| 1 + button (increase value) | 2 Home button          |
| 3 - button (decrease value) | 4 Execute button       |
| 5 Options button            | 6 Page previous button |
| 7 Page next button          | 8 Select button        |
| 9 Display                   |                        |

Setup Unit Dimensions : 177mm x 96mm x 32mm approx.

**Figure 2 : Setup Unit**

## Switching the Setup Unit ON

Connect the Setup Unit to the controller to switch it ON. At first, if the Setup Unit hasn't been connected to this type of Tuscan controller before, the display shows:

```
Genus SUU DAD O3
SUU Logged on
```

After a few seconds **Type Unknown** appears followed by a number (15 in this example).

```
Genus SUU DAD OOa
SUU Logged on
Type Unknown-Loading
          15
```

The number on the bottom line counts down to zero, as the Setup Unit reads the controller's screen formats.

Once zero is reached, a **Type Known** message appears on-screen followed by:

```
Genus SUU DAD OOa
SUU Logged on
Loading Values   5
```

If the Setup unit has been connected to this type of Tuscan before, this is the first screen to appear.

The number counts down to 1 as values are loaded.

Finally, the controller's own Home screen (the first of the controller screens) is shown:

|   |
|---|
| Tuscan Generic<br>High Temp.<br>State : Normal<br>Selector : Normal |
|---|

for the Tuscan Universal Generic Controller, for example.

The bottom two lines of the screen show the current state of the controller, typically—**Initialise, Stabilise, Recovery, OT Alarm, UT Alarm, Defrost, Drain Down or Normal.**

Pressing  steps through each of the controller screens in sequence until you finally arrive at the Home screen.

Press  to return to the previous screen.

## The Main Menu

From any of the controllers' screens' you can call up the Main Menu by pressing .

(You can return to the controller screens from the Main Menu by pressing  again).

|          |         |
|----------|---------|
| Select : | Rename  |
| *Defrost | Info    |
| Reset    | Purge   |
| Network  | Default |

From the Main Menu screen you can:

- Force a defrost.
- Reset a controller.
- Register a controller on the network.
- Rename a controller.
- Display controller information.
- Purge a controller.

OR

- Reset a controllers values to their factory default settings.

To select an operation from the menu, press  until the asterisk (\*) is beside the operation and then press  to start.

The operations in the Main menu screen are now explained in greater detail.

## Changing Parameter Values

Whenever a controller screen is displayed, pressing  calls up the next screen in the sequence shown on the shortform for the controller. Pressing  calls up the previous screen in the sequence shown on the shortform for the controller.

Pressing  moves an asterisk from one parameter that can be changed, to the next (see the example in Appendix A).

Pressing  increases the value of a parameter,  decreases it.

To return to the controller's Home screen from any other controller screen press .

## Making the Values Permanent

Before the controller can use the new parameter values, they have to be written into the controller's non-volatile memory — its EEPROM.

Press , the display changes to:

Set slave values

Yes - Execute

No - Options

Press  to accept the changes. The following two screens appear, each one for a few seconds.

(OR if you decide not to make the changes press  to

return to the previous screen.

Setting values into  
Slave's EEPROM  
2, 11

Setting values into  
Slave's EEPROM  
  
EEPROM Updated

## Restoring Factory Default Values

You can reset parameters to the values set at the factory without removing the controller from the network. On the Main Menu, move the asterisk to **Default** and press

**EXECUTE** .

Resetting Slave to  
ROM Defaults

The setup unit returns to the Main menu screen.

|          |         |
|----------|---------|
| Select : | Rename  |
| *Defrost | Info    |
| Reset    | Purge   |
| Network  | Default |

A **Default** operation does not affect the controller's network name.

If the operation fails, try again.

## Resetting a Controller

This restarts a controller as if it has just been switched on. You may wish to reset a controller for a variety of reasons, for example; you may wish to reset to cancel a defrost or reset after changing the values of the compressor stages in a pack controller.

On the Main Menu, move the asterisk to **Reset** and press



The Setup Unit repeats its switching-on sequence, ending with the controller's Home screen.

|   |
|---|
| Tuscan Generic<br>High Temp.<br>State : Normal<br>Selector : Normal |
|---|

If reset fails repeatedly, then you may have an old controller which can't be reset.

## Purging a Controller

Purging a controller restores the controller's network name to 000000 (or --- for a Woodley system) and resets its operating parameters to their default values, set at the factory; it loses any values you have set.

On the Main Menu, move the asterisk to **Purge** and press



If the screen shows **Purge Completed** you can then register the controller on the network.

If the screen shows **Purge Failed**, try purging again.

## How to Clear Cache In SUU

Plug SUU into Controller and wait until the SUU has finished loading.

1. Press the OPTIONS key once
2. Hold down the HOME key and press the OPTIONS key once.
3. Press the SELECT key once, so that the \* is beside 'clear' then press EXECUTE once.

The SUU cache should now be clear

## Forcing a Defrost

On the Main Menu, move the asterisk to **Defrost** and press

 to start the defrost cycle.

The screen shows **Sending Defrost Cmnd**, followed by **Defrost Sent**.

Sending Defrost Cmnd

Sending Defrost Cmnd

Defrost sent

The Main menu screen appears.

|          |         |
|----------|---------|
| Select : | Rename  |
| *Defrost | Info    |
| Reset    | Purge   |
| Network  | Default |

## Registering onto a Genus Network

|          |         |
|----------|---------|
| Select : | Rename  |
| Defrost  | Info    |
| Reset    | Purge   |
| *Network | Default |

Make sure the network cable is plugged into the network socket on the Tuscan controller.

On the Main Menu, move the asterisk to **Network** and press .

If the screen that appears is similar to the one below — showing a name (CH04-1 in this example) then the controller is already registered.

|             |        |
|-------------|--------|
| Unit Name : | CH04-1 |
| Slv Type :  | 04     |
| Status :    | 02     |
| Address :   | 01AB   |

The **Slv Type** number helps to identify a controller when you are using the **reg** command on *InView*, *Outstation* or on the Command Line.

**Status** and **Address** are used by the Genus system supervisor when communicating with the controller.

If however, the screen shows **Unit Not Registered** then the controller must be given a name to be registered onto the Genus network. Insert a new name for the controller by replacing the six zeros on the screen.

|                     |
|---------------------|
| Unit Not Registered |
| Enter Name: 000000  |
| ^                   |
| - - - - -           |
| Register            |

Press  or  to change the first of the six characters. The characters change according to the following sequence:

|           |        |   |   |  |       |
|-----------|--------|---|---|--|-------|
| O,1.....9 | A to Z | - | : |  | Blank |
|-----------|--------|---|---|--|-------|

Pressing  changes the characters in the sequence shown above (0, 1, 2...9, A to Z....).

Pressing  changes the characters in reverse order to that shown above.

Press  to move to the second character once the first character is displayed correctly. The ^ character marks the place.

Change the remaining five characters in the same way as the first then press  to place the asterisk next to

**Register.**

|  |
|--|
| Unit Not Registered<br>Enter Name: CH04-1<br><br>*Register |
|--|

Press  to register the controller onto the network and return to the Main menu.

## Renaming a Controller on a Genus Network

At some point it may become necessary to rename a controller on the Genus network.

|          |         |
|----------|---------|
| Select : | *Rename |
| Defrost  | Info    |
| Reset    | Purge   |
| Network  | Default |

With the Main menu displayed press  to position the asterisk next to **Rename**.

Press  to display the screen below.

|            |           |
|------------|-----------|
| Old name : | CH04-1    |
| New name : | CH04-1    |
|            | ^ _ _ _ _ |
|            | Register  |

Press  or  to change the first character of the existing name C in this example) to the first character of the new name.

Press  to move to the next character.

Once you have changed the appropriate characters, press  to register the changes.

|                    |
|--------------------|
| Registering slave  |
| Register completed |

The Main menu screen appears.

## Confirming Registration

You can check the controller is registered on the network by returning to the Main Menu, selecting **Network** and pressing .

This time you should see a screen like:

|           |          |
|-----------|----------|
| Unit Name | : CH04-1 |
| Slv Type  | : 04     |
| Status    | : 02     |
| Address   | : 01AB   |

CH04-1 represents the name you gave the controller. The number on the next line identifies the type of controller. The status information is useful only to Elm personnel.

The Supervisor Unit on the Genus network automatically assigns an Address, in this case 01AB, to each controller that registers on the network.

Remember to make the new name permanent (see page ?) before you disconnect the Setup Unit.

## Problems: Registering

If the green network light on the display (or the °C symbol) goes off or continues flashing, instead of becoming steady, the controller has failed to register.

- if it goes off, purge the controller and try again.
- if it continues flashing, make the name permanent, then disconnect the Setup unit from the controller. If the green light (or the °C symbol) becomes steady within about 20 seconds, the controller is registered.
- if you still can't register the controller on the network, you need to check at the Supervisor console, in case there are already 32 names registered on that branch of the network. You may then be able to de-register one of the names to make room for your controller. It is also possible that another controller with the same name is already registered. In that case, try registering with a different name.

## Information Option

The Main menu has an option to display controller information. The information in this screen cannot be changed from the setup unit.

|          |         |
|----------|---------|
| Select : | Rename  |
| Defrost  | *Info   |
| Reset    | Purge   |
| Network  | Default |

With the Main menu displayed press  to position the asterisk next to **Info**.

Press  to display the information screen.

|                     |
|---------------------|
| Slave Information : |
| Version : YAD06     |
| Chksum : 678582     |
| BSW : 000000000011  |

**Version** identifies the software installed in the controller. The **Chksum** and **BSW** information is useful only to Elm personnel.

Press  to return to the Main menu screen.

## Logging onto a Woodley Network

There are versions of Tuscan controllers which connect directly to a Woodley Mk5 system. The procedure for logging on is different to registering on a Genus network.

Start by making sure that the network cable is plugged into its socket on the controller.

On the Main menu, press  until the asterisk is beside Network, and press  to display the address screen.

If the controller has not been used on the network before,

Address : \*- - -

Set

or if it has been purged, the address is blank. You can assign an address, in the range 1 to 255, to the controller — corresponding to the Woodley channels, 1 to 255. Each time you press the  button, the number on the address line changes — 1, 2, 3, 4 ....

When the number you want appears, press  to move the asterisk down beside Set, and then press  to assign this address to the controller.

Address : 27

\*Set

The screen returns to the Main menu:

To store the address in the controller's non-volatile memory,

press . Press  again to set the new values.

## Changing a Controller's Address

If you need to change the address of a controller, the procedure is similar. Press  until the asterisk is beside Network, then press  to display the address screen:

This time, the address screen shows the address already assigned to the controller.

Address : \* 27

Set

Press  to increase or  to decrease its value.

Write the new value into memory as described previously.

## Switching OFF

If you have no more changes to make disconnect the setup unit to switch it off.

## Appendix A : Example

Suppose you want to change the current setting of the cut-in temperature of a Tuscan controller.

Plug the Setup Unit into the Tuscan. After a few seconds the **Home** screen appears.

|                   |
|-------------------|
| Tuscan Generic    |
| High Temp.        |
| State : Normal    |
| Selector : Normal |

Press  to step through the screens until you come to the temperature control screen (remember that  steps through the screens in reverse order).

|                  |
|------------------|
| Control Settings |
| Cut-in -20.0°C   |
| Diff 4.0°C       |

Press  to place the asterisk (\*) beside the cut-in temperature.

|                  |
|------------------|
| Control Settings |
| Cut-in * -20.0°C |
| Diff 4.0°C       |

Press  to increase the value in steps of 0.5°C or press  to decrease the value in steps of 0.5°C.

In this example the **Cut-in** temperature value has been changed from  $-20^{\circ}\text{C}$  to  $-17.0^{\circ}\text{C}$ .

|                                  |
|----------------------------------|
| Control Settings                 |
| Cut-in * $-17.0^{\circ}\text{C}$ |
| Diff $4.0^{\circ}\text{C}$       |

Press **EXECUTE** to save any changes.

|                  |
|------------------|
| Set slave values |
| Yes - Execute    |
| No - Options     |

Press **EXECUTE** to accept the changes (or **OPTIONS** to return to the control screen without any changes). The two screens below appear for a few seconds each.

|                                       |
|---------------------------------------|
| Setting values into<br>Slave's EEPROM |
| 2, 11                                 |

|                                       |
|---------------------------------------|
| Setting values into<br>Slave's EEPROM |
| EEPROM Updated                        |

The control screen re-appears with the new settings.

|                                  |
|----------------------------------|
| Control Settings                 |
| Cut-in * $-17.0^{\circ}\text{C}$ |
| Diff $4.0^{\circ}\text{C}$       |



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Subject to change without notice. Printed in United Kingdom

ZF0795-DAD UK07 R00195