ECO

ET2

Digital Programmable Thermostat
For
Weekday/Weekend Setting

INSTRUCTION MANUAL

TFC Group LLP, Tower House,
Vale Rise, Tonbridge, Kent TN9 1TB

http://www.tfc-group.co.uk

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ET 2 LCD Programmable Thermostat
A, Installation & Mounting:

> **Caution:**
> Turn off the ET2 and any electrical devices that are to be connected after installation. The installation must be carried out by a qualified electrician and conform to current IEE regulations.

1, Installation Location:

The thermostat should be mounted on an inner wall 1.5m above the floor in a position where it is readily affected by changes in the ambient room temperature. Prevent direct exposure sunlight and moisture. Do not place this unit where air circulation is low, or where it is susceptible to rapid temperature changes (e.g. near a door or window). Do not position near heating/cooling appliances.

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2, Wiring:
There are three terminals at the bottom of the ET2, labelled as "Com" (Common), "NO" (normally open) and "NC" (normally closed). Connect the appliance to the "NO" and "Com" terminals. Leaving the "NC" terminal empty.

- Refer to the circuit diagram printed on rating label on the back of the product.

- Push all wiring into wall prior to mounting to avoid trapping wires.

- The thermostat should be protected by the fused spur supplying the heating system using a fuse with a current rating no larger than 5A.
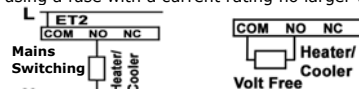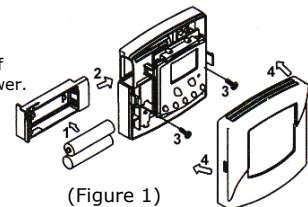

3, Mounting:
Mount the ET2 using the screw accessories provided through slots/holes on rear face of the unit.

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Battery installation / Replacement:

Caution: Turn off electrical devices and disconnect the supply to any connected appliances before installing or replacing batteries. Replace only with the same (AAA Alkaline) or equivalent batteries. Do not dispose of used batteries with household waste. Refer to your local area for correct disposal method.

1, Pull out the battery draw.
2, Place new batteries taking note of orientation of +/- on battery drawer.
3, Dispose old batteries properly.
4, Slide battery draw into position.
5, Check operation and press reset if not functioning correctly.

(Figure 1)

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B, Start/Reset:
1, After wiring and mounting, switch off all connected devices. Place 2 new AAA 1.5V alkaline batteries ensuring correct orientation of battery polarity. LCD display will show.
2, Press 'RST' to reset. The ET2 is now ready to control the heater/cooler.
3, Switch on the heater/cooler. The heater/cooler will remain off until the ET2 activates the output, with 🔥 or ❄ displayed depending on configuration for a heating or cooling application.

C, Normal Time Mode:
1, Temperature detection starts and LCD displays the room temperature.
2, If the battery is low, 🔋 will be flashing. If 🔋 has been flashing for 48 hours and the batteries have not been replaced, the ET2 will stop measuring the room temperature and the LCD will go blank. The ET2 will turn off the output and the heater/cooler will cease to operate. The system will only function once the discharged batteries are removed and new batteries are fitted.

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3, In heating mode frost protection is activated automatically if the ambient temperature falls below 5^0C. ❄ Will show in the display and the output will be forced ON for heating or OFF if the ET2 is configured for cooling.
4, If the ambient temperature is below 0^0C "LO" will show in the display.
5, Above 40^0C "HI" will show in the display.

D. Setting the real-time clock:
1, Press < 🕐 >, the day of week (1-7) will flash 1=Monday. Press < ▲ > , < ▼ > To select the current day of the week.
2, Press < 🕐 >, the hour will flash, press < ▲ > , < ▼ > to set the hour.
3, Press < 🕐 >, the minute will flash, press < ▲ > , < ▼ > to set the minute.
4, Pressing < 🕐 > will return back to step 1 (day setting).
5, Press < ↵ > to confirm settings and return to the default screen.

Note: If no buttons are pressed within 10 seconds the ET2 will return to the default screen

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E, Factory Defined Programs:

The heater/cooler turns on according to the activated program and the control temperature setting. When the heater/cooler is ON, the program number and 🔥 or ❄ will appear in the display.

The pre-defined programs are as below:

Cooler mode:

	Mon ~ Fri	Sat	Sun
P1	06:00 (24°C)	08:00 (24°C)	08:00 (24°C)
P2	08:00 (29.5°C)	10:00 (29.5°C)	10:00 (29.5°C)
P3	18:00 (29.5°C)	18:00 (29.5°C)	18:00 (29.5°C)
P4	22:00 (26°C)	23:00 (26°C)	23:00 (26°C)

Heater mode:

	Mon ~ Fri	Sat	Sun
P1	06:00 (21°C)	08:00 (21°C)	08:00 (21°C)
P2	08:00 (16°C)	10:00 (16°C)	10:00 (16°C)
P3	18:00 (21°C)	18:00 (21°C)	18:00 (21°C)
P4	22:00 (16°C)	23:00 (16°C)	23:00 (16°C)

F, Setting Your Own Program:

Mon to Fri, Sat and Sun are divided into four periods P1 to P4. The time set for each period is the start time for that period. To set your own program you should set the period start time and the temperature to be achieved during that period.

e.g. In the table above P1 starts at 6am Monday and will hold the temperature at 21°C until period 2 (P2) starts at 8am, when the temperature will be lowered to 16°C until period 3 (P3) & the temperature

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will raise to 21°C until period 4 (P4). P4 will hold the temperature at 16°C until period 1 (P1) 6am. You can edit the preset times/temperature values by following the steps below.

1, Press **<PRG>**, the hour will flash, Press **<▲>** , **<▼>** to change the hour setting.
2, Press **<PRG>**, the minute will flash, Press **<▲>** , **<▼>** to change the minute setting.
3, Press **<PRG>**, the temperature will flash, Press **<▲>** , **<▼>** to change the temperature set-point.
   Repeat this sequence for P2, P3 & P4 (Mon-Fri)

4, Press **<PRG>**, the hour will flash for P1 day 6 (Saturday), Press **<▲>**, **<▼>** to change the hour setting.
5, Press **<PRG>** , the minute will flash, Press **<▲>** , **<▼>** to change the minute setting.
6, Press **<PRG>**, the temperature will flash, Press **<▲>** , **<▼>** to change the temperature set-point.
   *Repeat this sequence for P2, P3 & P4 (Saturday)*

7, Press **<PRG>**, the hour will flash for P1 day 7 (Sunday), Press **<▲>**, **<▼>** to change the hour setting.
8, Press **<PRG>** , the minute will flash, Press **<▲>** , **<▼>** to change the minute setting.
9, Press **<PRG>**, the temperature will flash, Press **<▲>** , **<▼>** to change the temperature set-point.
   Repeat this sequence for P2, P3 & P4 (Sunday)

10, Press **<↵ >** to confirm changes and return to default screen.

Selecting Temporary ⓣ or Permanent ⓟ Override Mode:

1, Press **<⚡>** to change the mode from normal to Temporary Override. The icon will be displayed.
2, Press **<⚡>** again and the mode changes from Temporary to Permanent Override mode. ⓟ Icon will be displayed.
3, Press **<⚡>** once more and the mode changes from Permanent Override to normal timed operation.

Review and adjust the Override temperature:

1, With the ET2 in Temporary ⓣ or Permanent ⓟ override, press **<▲>** or **<▼>** to display the Override temperature.
2, Press **<▲>** or **<▼>** for 2 seconds, the Override temperature will flash.
3, Release **<▲>** or **<▼>** and then use **<▲>** or **<▼>** to adjust the Override temperature .
3, Press **<↵ >** to exit Override temperature setting.
The ET2 will return to the default screen if no buttons are pressed after 10 seconds.

G, Temporary Override mode:

The Temporary Override mode is maintained until the start of the next timed period.

Permanent Override mode:

The room temperature will be maintained at the Override temperature set-point until the Override mode is released.

Releasing Override mode:

1, When the ET2 is in Temporary Override ⓣ Press **<⚡>** twice to return to normal timed operation.
2, When the ET2 is in Permanent Override ⓟ Press **<⚡>** once to return to normal timed operation.

### H, Control Off / Sleep Mode:

1, Press **<⏻>** to select the sleep mode and control off mode. The sequence is as below:
   Normal mode ➡ Sleep mode ➡ Control Off mode ➡ Normal mode ➡ ….
2, Press any other button to exit the Control Off / Sleep mode and return to normal operation.

Sleep Mode:

When the ET2 is in sleep mode the **<Ⓢ>** icon is displayed. The ET2 stops measuring and controlling the temperature. The heater/cooler is turned off, irrespective of the current setting temperature.

Control Off mode:

When the ET2 is in Sleep mode and **<Ⓢ>** icon is displayed, pressing **<⏻>** will put the ET2 into Control Off mode. The LCD display and the heater / cooler are turned off, irrespective of the current control temperature setting.

I, Jumper Selection:

Delay / No Delay Jumper

	Heater	Cooler
No Delay	10sec	4mins
Delay	4mins	4mins

Choose the Delay option if compressor heat is connected.

a = 12/24 hours
b = Delay / No delay
c = Heater / Cooler

12-hour / 24-hour mode jumper:
When the 12-hour option is selected, the time is shown in 12 hour mode. Otherwise the time is displayed in-24 hour mode.

Heater / Cooler Jumper:
The ET2 can be set for a heating or cooling configuration via internal

J. Specification:

1, Temperature measurement:	0°C to 40°C (0.1°C/step)
2, Accuracy:	± 0.5°C
3, Temperature control range:	5°C to 35°C (0.5°C/step)
4, Switching:	24..250V AC 50/60Hz 5(3.5)A max
5, Terminals:	2.5mm² cable
6, Electronic control:	Type 2.B action
7, Battery:	2 x 1.5V AAA Alkaline battery
8, Operating temperature:	0°C to 50°C
9, Storage temperature:	-10°C to 60°C
10, Sensing element:	NTC thermister

TFC Group LLP, Tower House, Vale Rise, Tonbridge, Kent TN9 1TB
tel: 01732 351680   email: sales@tfc.uk.com   web:tfc-group.co.uk