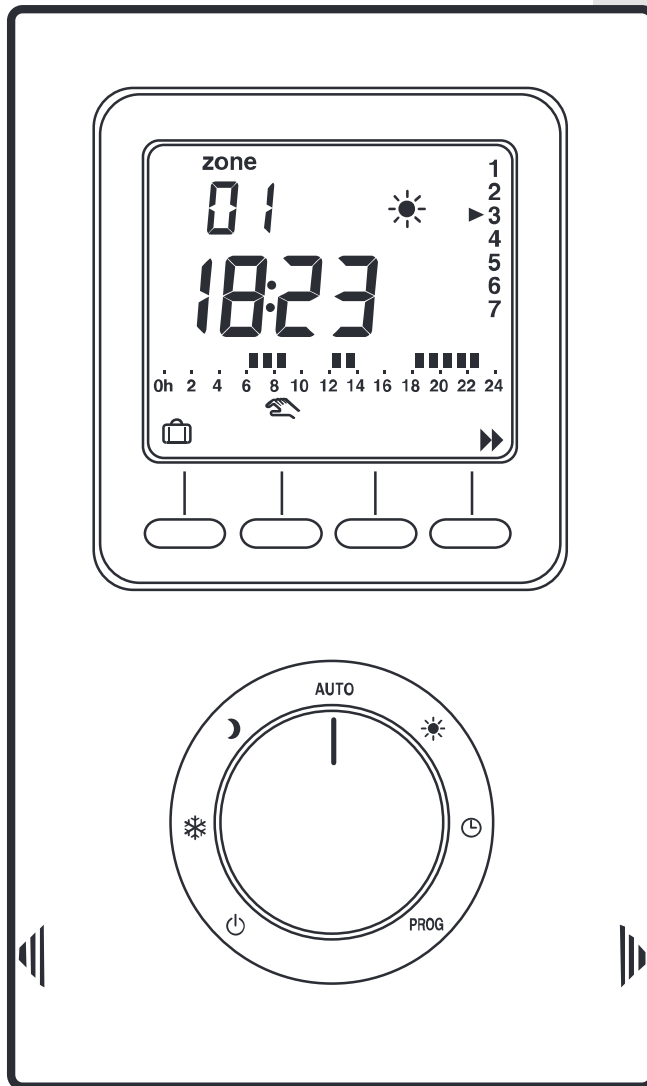# Dimplex®

A world of expertise
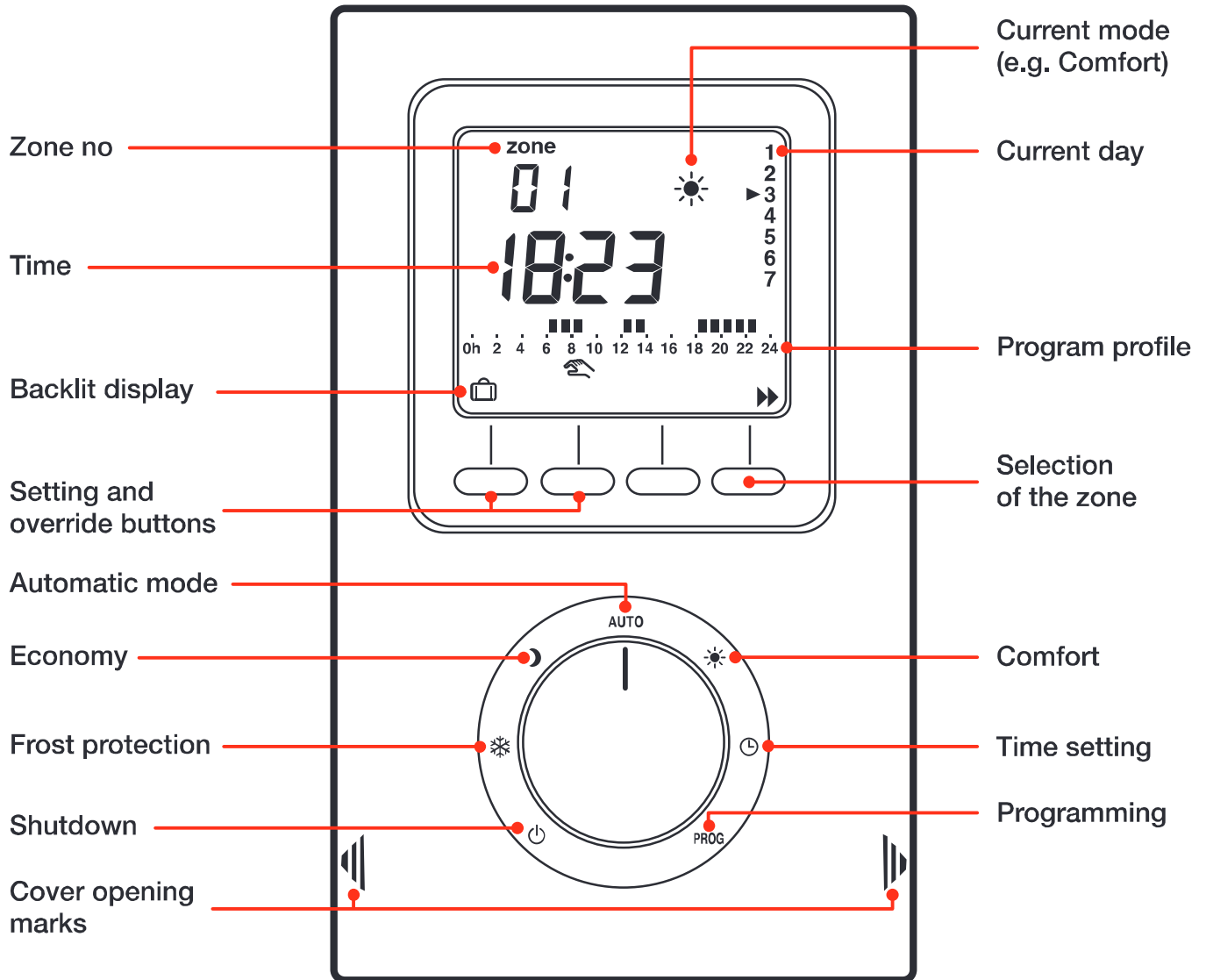
OPERATING INSTRUCTIONS MANUAL

4-Zone Pilot Wire Programmer

Models: RXPW4N

These instructions should be read carefully and retained for future use. Note also the information presented on the appliance.

Current mode (e.g. Comfort)

Zone no

Current day

Time

Program profile

Backlit display

zone

01

18:23

0h 2 4 6 8 10 12 14 16 18 20 22 24

Setting and override buttons

Selection of the zone

Automatic mode

AUTO

Economy

Comfort

Frost protection

Time setting

Shutdown

Programming

PROG

Cover opening marks

Contents

INSTALLATION

OPERATION

THESE INSTRUCTIONS SHOULD BE READ AND RETAINED FOR FUTURE USE

IMPORTANT SAFETY ADVICE

WARNING this product must be installed by a competent person or electrician in conjunction with the current IEE wiring Regulations and relevant Building Regulations.

DO NOT cover or obstruct the air inlet or air outlet vents

DO NOT recess the unit in to a wall, as this will cause overheating and potentially be a fire risk

DO NOT install the unit in the immediate vicinity of a bathroom or swimming pool

PILOT WIRE CONNECTION

IMPORTANT

DO NOT connect the pilot wire to earth

Care should be taken with the installation of the pilot wire(s) as when switching to background (setback) they become energised at 240V although only at a current of 1 mA. In every case a suitable means of isolation must be provided for the pilot wire and marked to indicate that two sources of supply may be present at the heater.

Where pilot wires are installed separately from the heater final sub-circuit they should be protected. Double insulated and carry their own integral earth continuity conductor.

NOTE: *Pilot wire installations are appropriate for single phase connection only.*

This device lets you set your heating to Comfort or Economy mode in four separate zones.

To control the heaters, the programmer uses a Pilot Wire. Independent from the power supply of the heat emitter, the Pilot Wire is used to send the Comfort, Economy, Frost Protection or Shutdown orders requested by the programmer.

Programmer

Heater
(e.g. Pilot wire convector)

Pilot wire
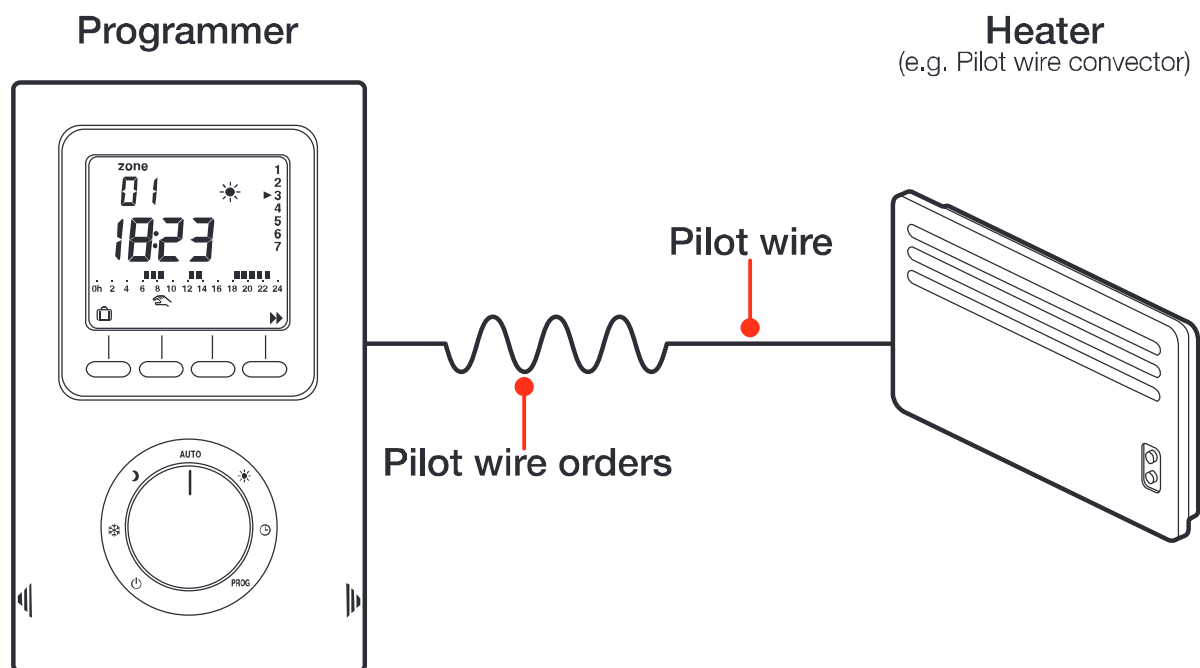
Pilot wire orders

The required temperature is set on the thermostat of each heater.

IMPORTANT: The heater must be in automatic mode, PROG, AUTO or 🕐 to receive orders from the programmer.

Pilot Wire Mode	Setting on the heater	Room Temperature
Comfort ☀	Comfort setting (thermostat control) example: 19°C	19°C
Economy 🌙	Comfort –X°C Example -4°C (depending on heater)	Example 15°C
Absence 🧳	Frost protection set to 7°C or 8°C (depending on model)	7°C
Shutdown ⏻	Heating shutdown	No heating

## It is advisable to install your device:

- Where there is easy access, such as a corridor, living room or entrance hall

- Close to a power supply and pilot wire entry point(s)

- On an internal wall at a height of approximately 1.5 m

approx 1.5m
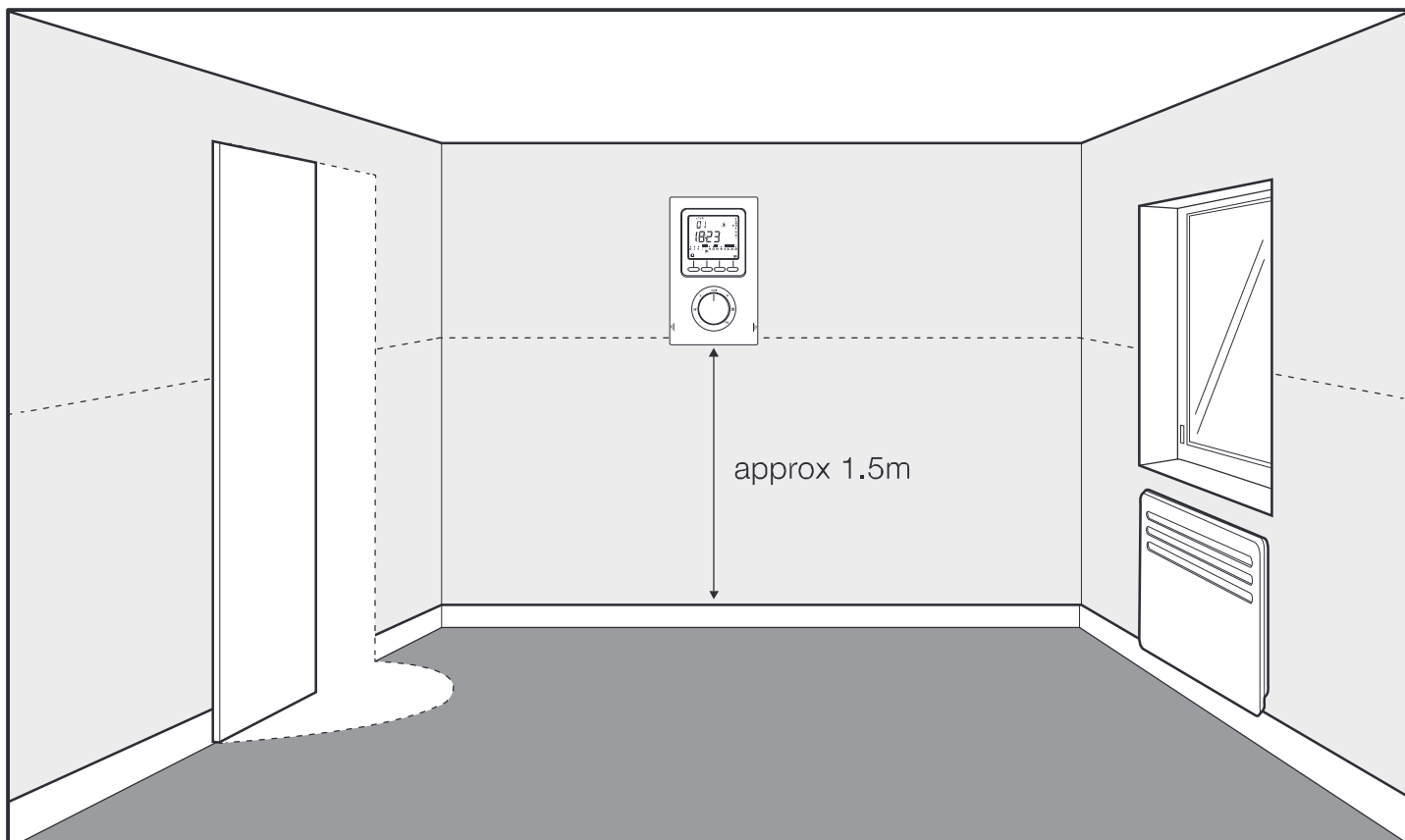
Switch off the mains power before handling the device.

- Lift off the cover by using a screwdriver. - See **Fig.1**

- Space the programmer from its base by loosening the clamp screw **1** (captive screw). - See **Fig.2**
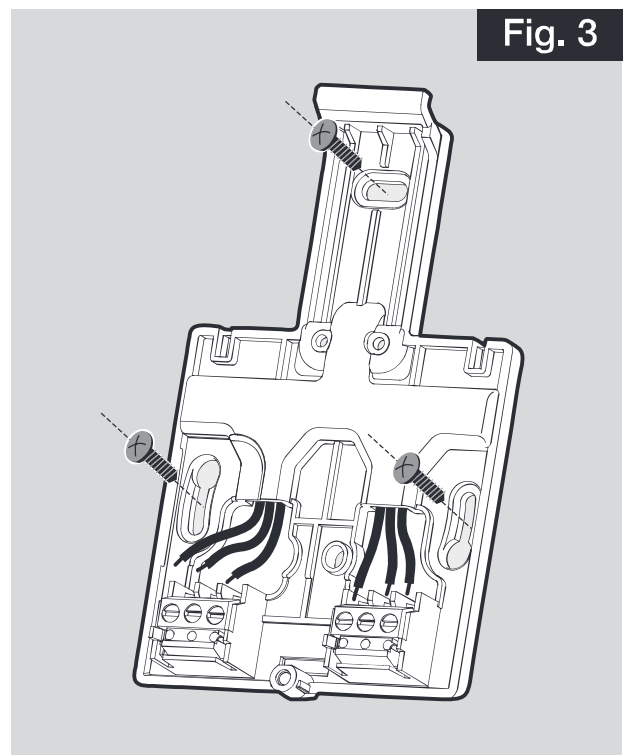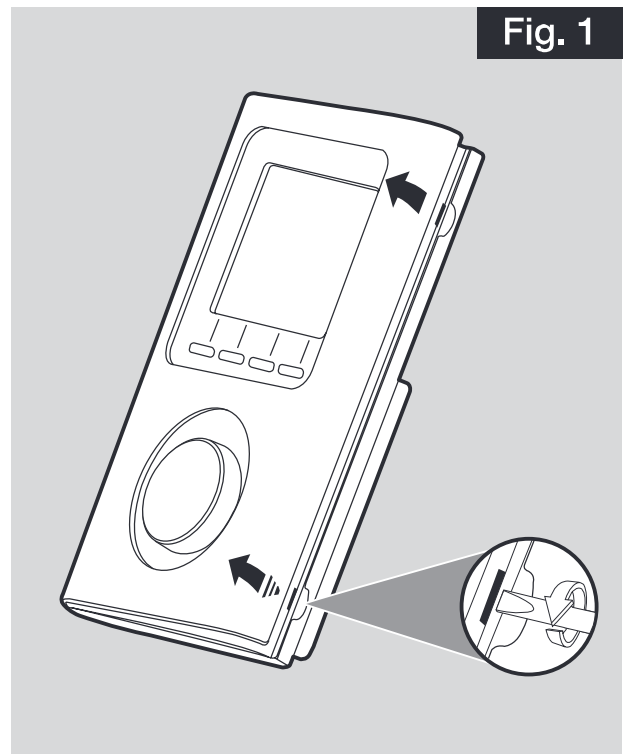
Fig. 1

Fig. 2
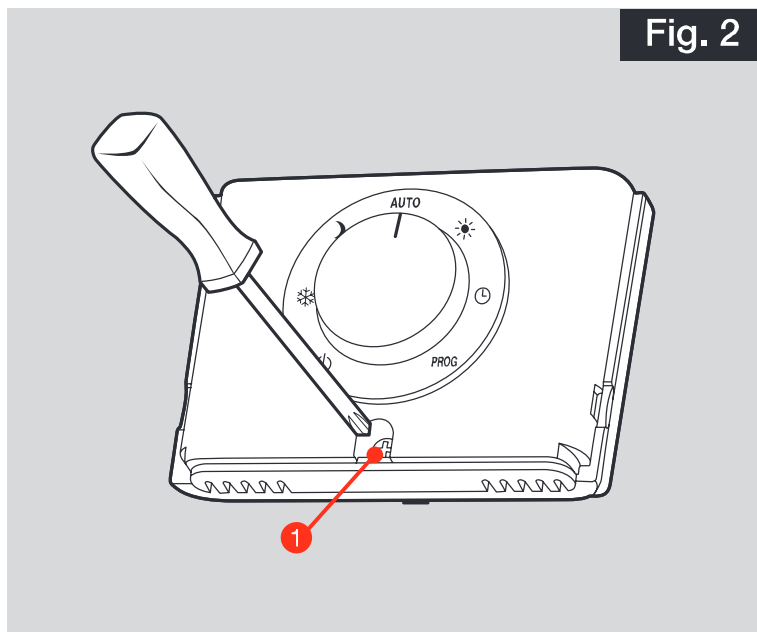
- Secure the base using three screws or fit onto a flush-mounted box (distance between centres 60mm). - See **Fig.3**

Fig. 3

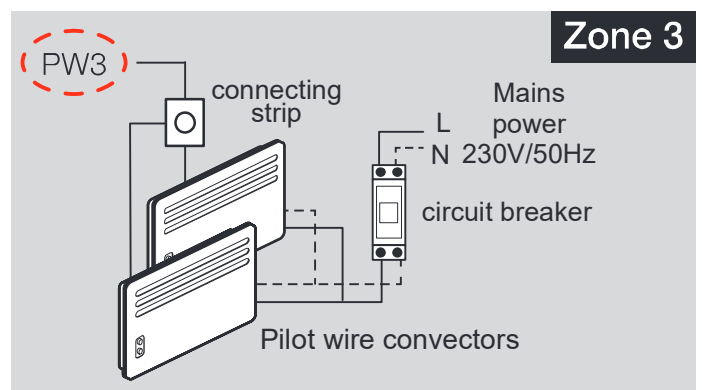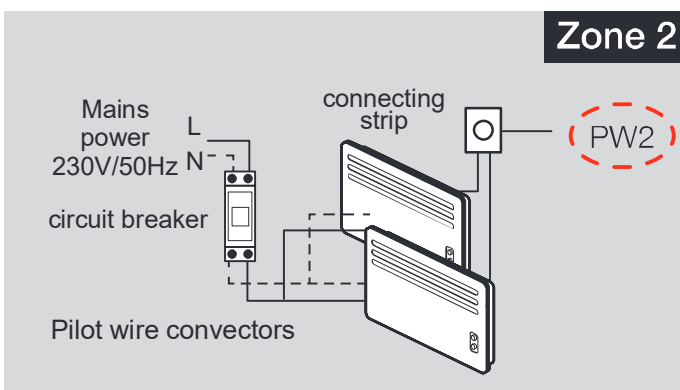**NOTE:** *The base must be secured using three screws.*

NOTE: *To protect the power supply to the programmer, you must use a 10A circuit breaker at least (do not use a 2A circuit breaker).*

To connect the programmer you will need:

- A 230V mains power supply (live and neutral)

- Entry point(s) behind the unit for the pilot wire(s) controlling one or more heaters

- If you want to connect more than one pilot wire to the programmer, you must use a connecting strip (terminal block) so that the pilot wires are not all directly connected to the terminal

- Circuit breakers (not supplied) fitted in the electrical switchboard

Zone 1

Mains power 230V/50Hz

L
N

circuit breaker

connecting strip

PW1

Pilot wire convectors

Zone 4

PW4

connecting strip

Mains power 230V/50Hz

L
N

circuit breaker

Pilot wire convectors

Zone 2

Mains power 230V/50Hz

L
N

circuit breaker

connecting strip

PW2

Pilot wire convectors

Zone 3

PW3

connecting strip

Mains power 230V/50Hz

L
N

circuit breaker

Pilot wire convectors

- Connect the two power
  leads to terminals 1 and 2
- Connect the control wires:
  PW 1 zone = terminal 3
  PW 2 zone = terminal 4
  PW 3 zone = terminal 5
  PW 4 zone = terminal 6
  - See **Fig.1**

Fig. 1
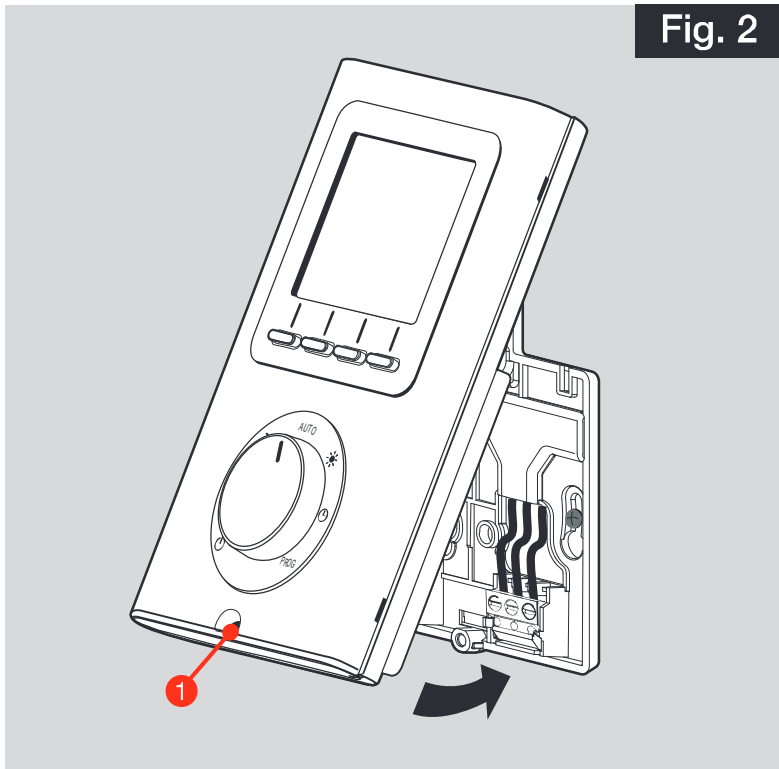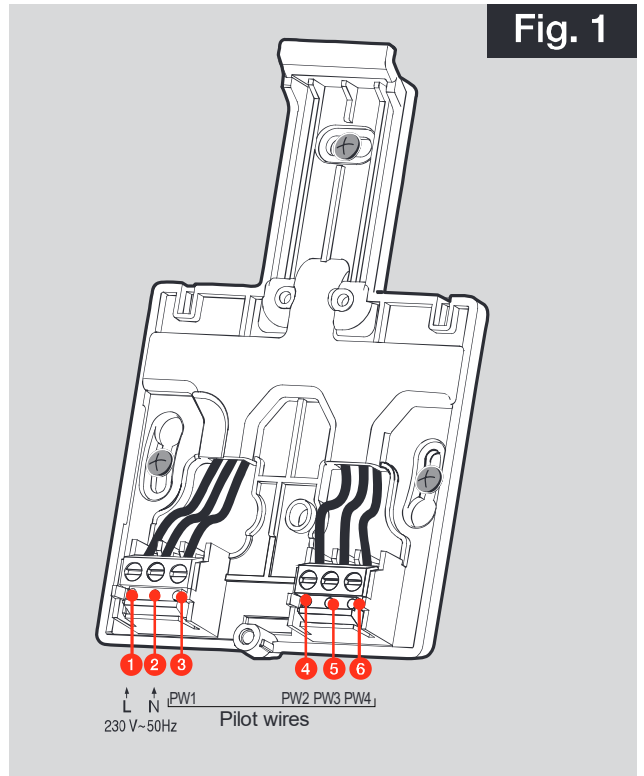
Fig. 2

Fit the programmer onto
the tab of the base and secure
it with the clamp screw ❶
- Place the cover back on
the programmer
- The programmer is ready to
be used
- See **Fig.2**
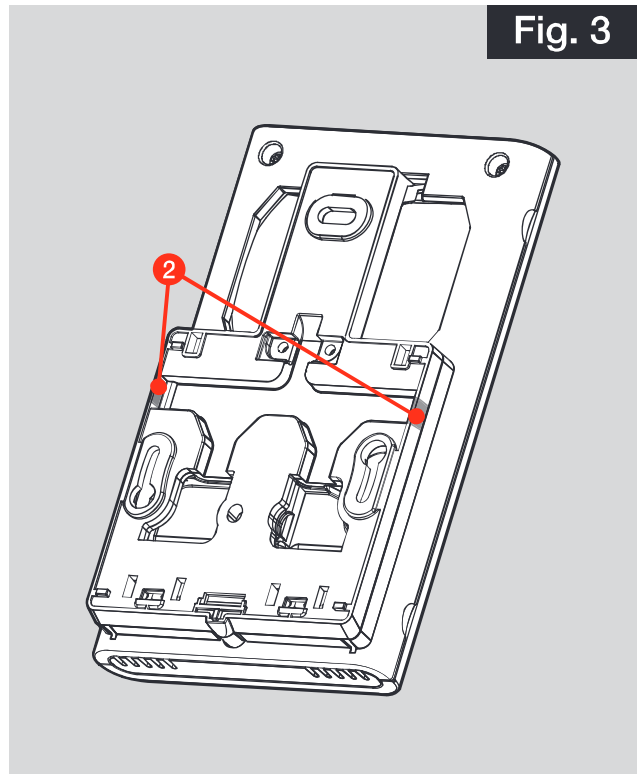
Fig. 3

Partitions (❷) that can be removed
by pliers are provided for passing
the connection wires if required.
- See **Fig.3**

Turn the control dial to ↑ and press
the **right-hand** button for 5 seconds until P540 is displayed (maintenance menu reserved for the installer).

Press **OK**.
The screen displays CF01.

```
P540
 ᴜ 1:00
        OK
```

5 sec.
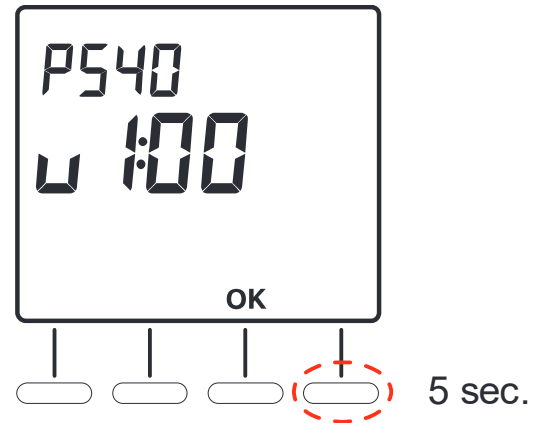
CF01 - Select **AUTO** mode operation preference from the three modes below. Press **+** to make your choice, **OK** to confirm it and exit the maintenance menu.

```
CF01      ☽



    +   OK
```

CF01 Operating mode selection	Comfort / Economy (default) Mode
	Comfort / Frost protection Mode
	Comfort / Shutdown Mode

Checking the pilot wire connections

When the unit is first switched on, place all the heaters in Comfort mode (with the thermostat on its maximum setting). If the display remains "normal", this means that no problem has been detected. If the programmer detects a problem, it displays:

Pb
FP
OK
5 sec.
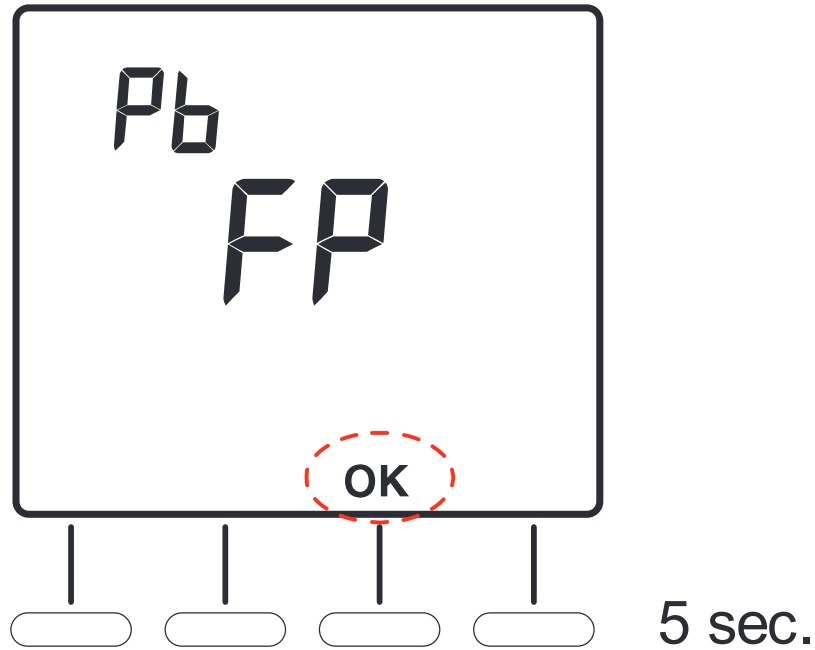
Check the connection of the pilot wires to the heaters and resolve any connection problems. When the check has been carried out, test the pilot wire again by pressing OK for 5 seconds (time taken for the test to complete: approx. (1 minute 30 sec).

Turn the control dial to ⏲.
The days flash.
Press **+** or **-** to make your choice, **OK** to confirm and go to the next setting.

Hours   Day

```
1
2
3
18:23  4
       5
       6
       7
```

Minutes

  –   **+**   **OK**
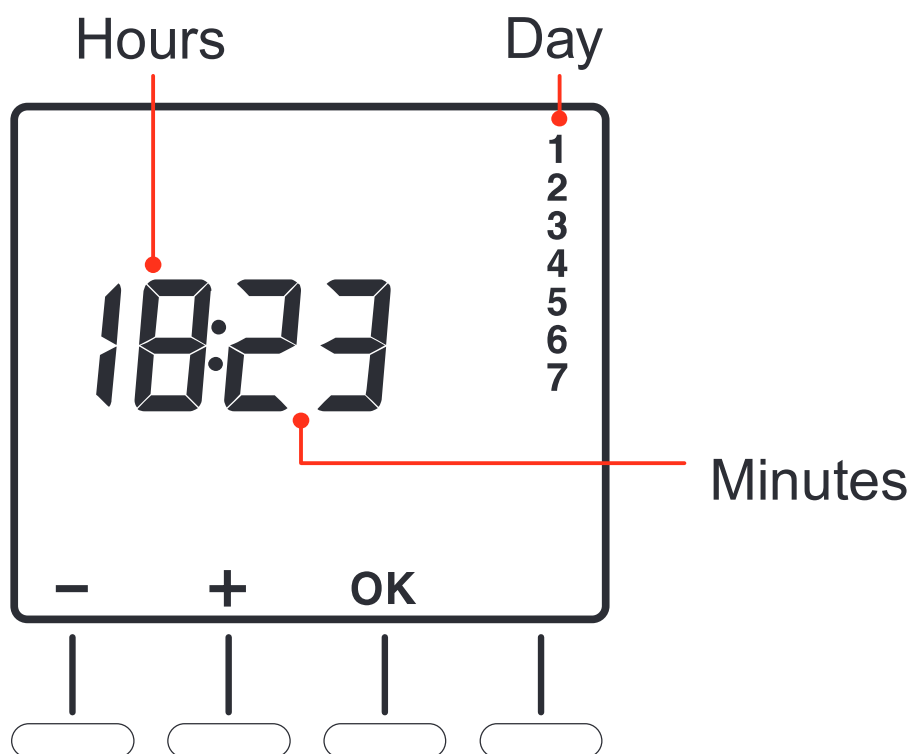
Repeat the operation to set the hours and minutes. Turn the control dial to exit the setting mode.

When starting up, Comfort mode is active from 6am to 11pm across all days of the week and all zones. Turn the control dial to **PROG** to change the programming.
The first time slot of zone 1 flashes.

Day

zone

01

00:00

1
2
3
4
5
6
7

Time slot consulted

First time slot

0h 2 4 6 8 10 12 14 16 18 20 22 24

Program profile

OK

Economy mode for 1 hour

Comfort for 1 hour

Confirm and go to the next day

Selection of the zone
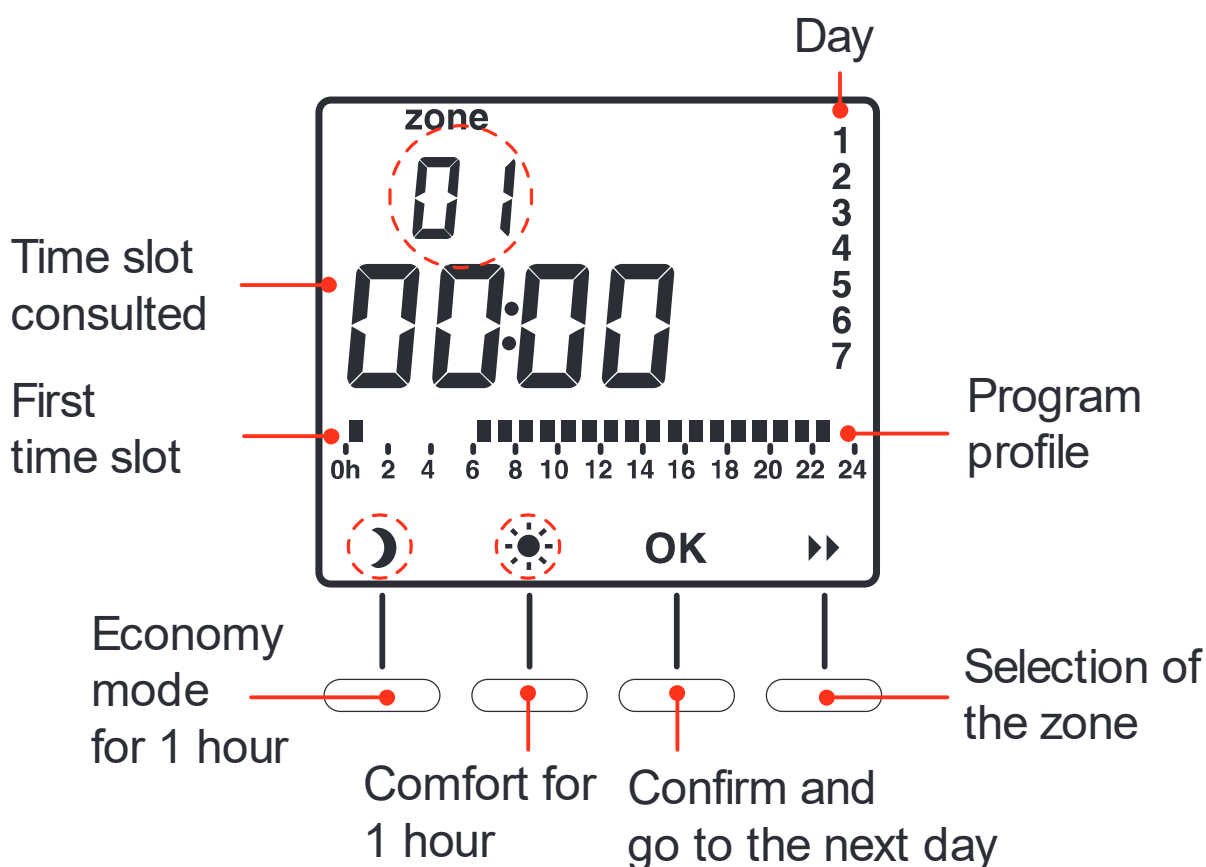
1. SELECT THE ▶▶ ZONE TO PROGRAM
Press the button.

2. CREATE YOUR PROGRAM
Programming starts on day 1 at midnight. Press buttons ☽ or ☀ to set your Comfort or Economy periods.

3. CONFIRM THE PROGRAM

Press the **OK** button to confirm and continue on to the next day to program it separately. Turn the control dial to **exit** the programming mode.

4. CONFIRM AND COPY THE PROGRAM

On the same zone for the next day
- See **Fig.1**

Fig. 1

Day 1 ▪▪▪▶ Day 2

| Z1 | Z2 | OK | Z1 | Z2 |
| Z3 | Z4 | 3 sec. | Z3 | Z4 |
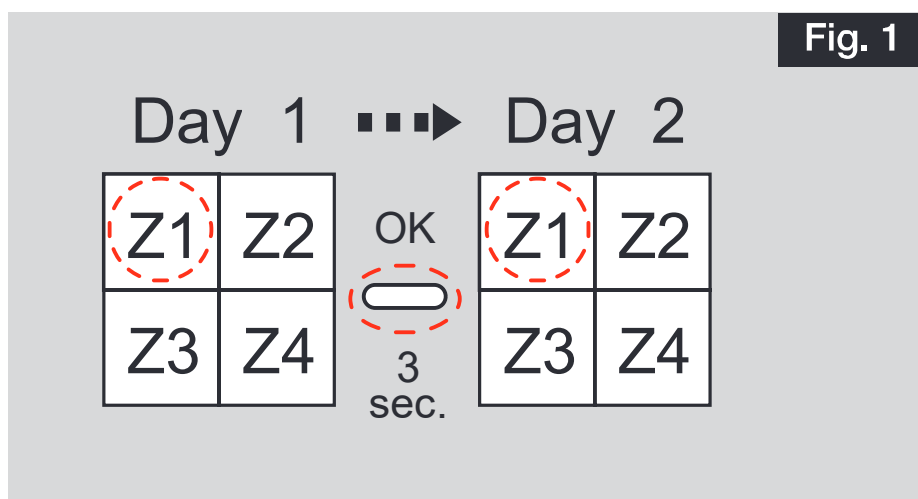
OR

On the next zone for the same day
- See **Fig.2**

Fig. 2

Day 1 ▪▪▪▶ Day 2

| Z1 | Z2 | OK | Z1 | Z2 |
| Z3 | Z4 | 3 sec. | Z3 | Z4 |
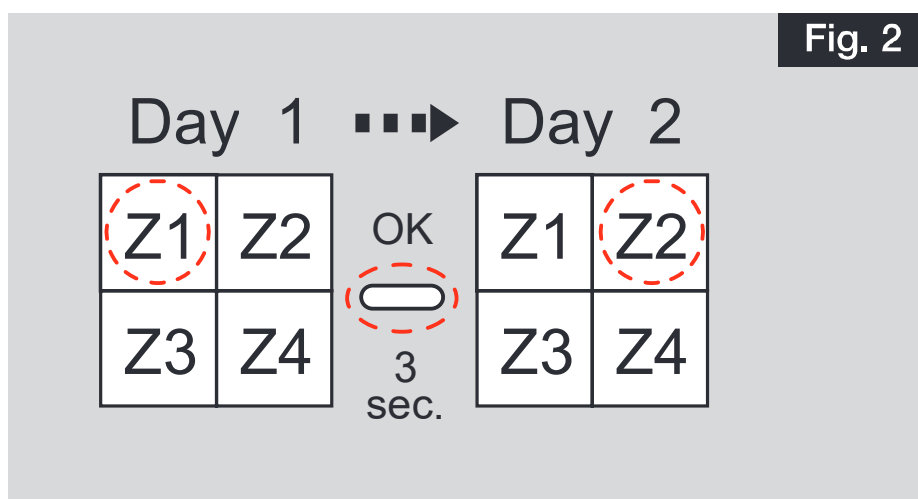
Example: Comfort from 6:00 to 8:00 and from 17:00 to 23:00 in zone 3
Press the ▸▸ button to change the zone.

zone	zone	zone
03 **00:00**	**03** **06:00**	**03** **08:00**

Press and hold ☽ until you reach 06:00

Press and hold ☀ until you reach 08:00

Press and hold ☽ until you reach 17:00

zone	zone	zone
03 **00:00**	**03** **23:00**	**03** **17:00**

Confirm

Press and hold ☽ until you reach 00:00

Press and hold ☀ until you reach 23:00
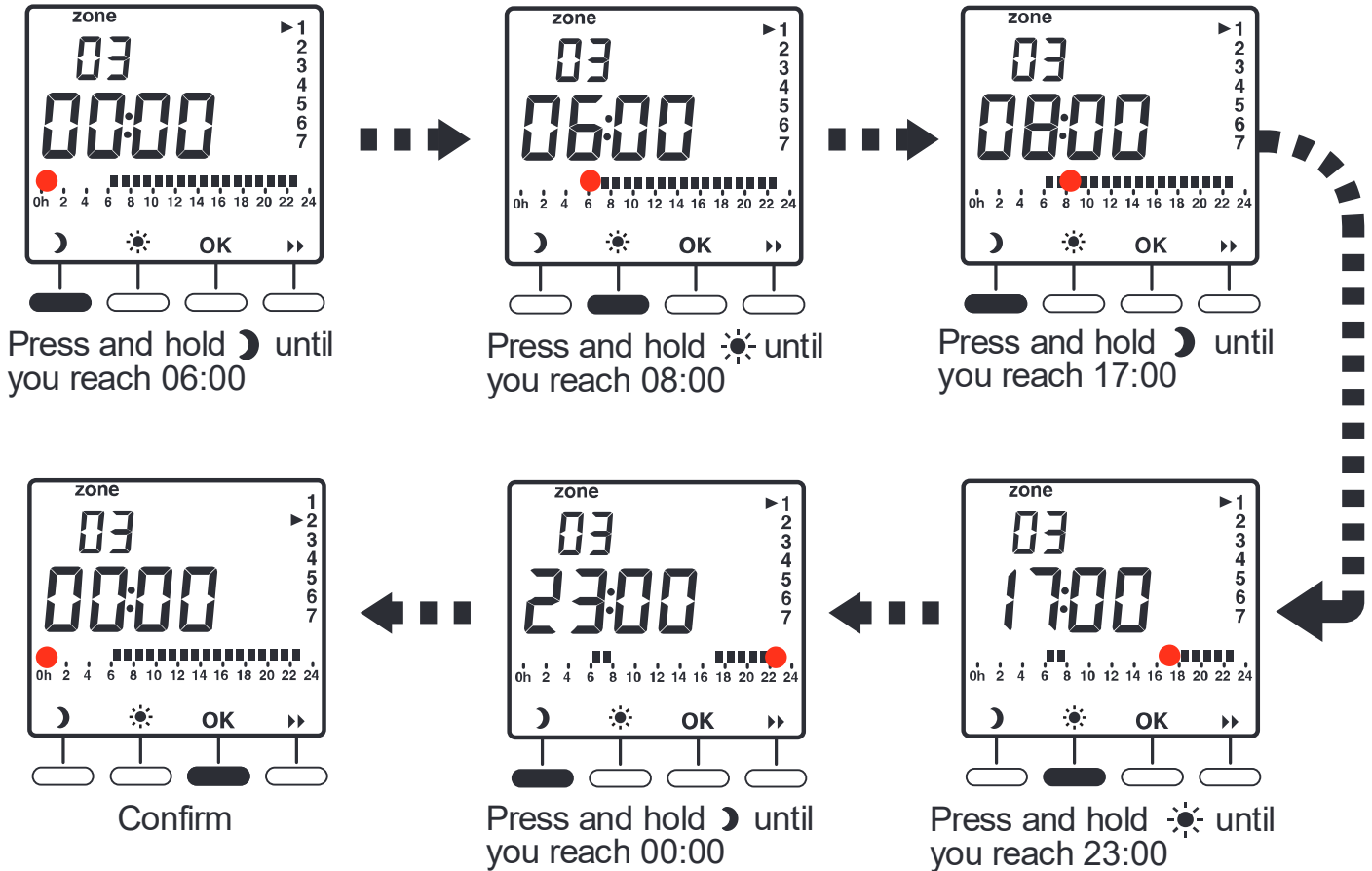
Automatic Mode

Turn the control dial to **AUTO**.

Current mode
(e.g comfort)

Heating
zone

Time

zone
01
☀
18:23

1
2
3
4
5
6
7

0h 2 4 6 8 10 12 14 16 18 20 22 24

Day

Current
program

Absence
mode

Comfort or economy
manual mode
(up to the next program change)
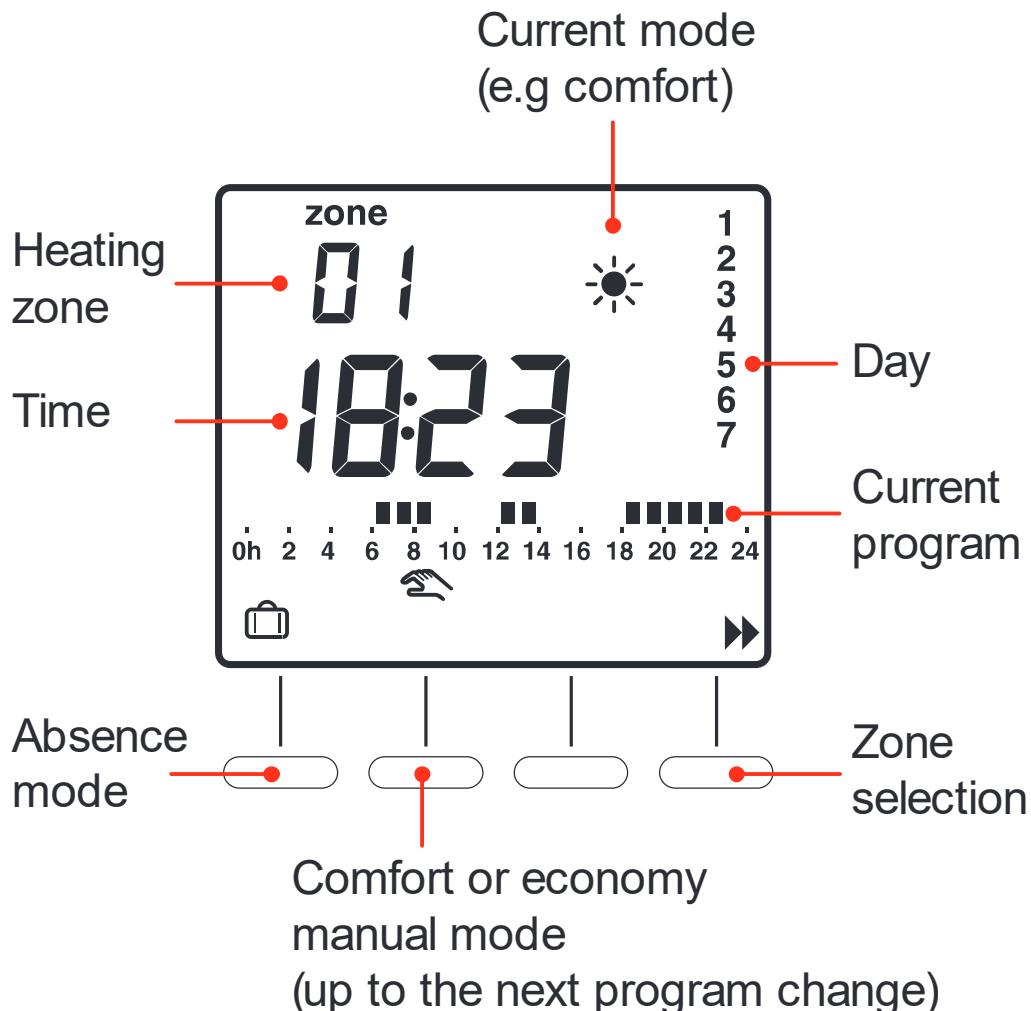
Zone
selection

In Auto mode the device follows the program set.
Press the ▸▸ button to select the zone to consult.

13

Absence mode

This mode is used to set all the heating zones to Frost Protection mode for an adjustable period of 1 to 365 days.

From the automatic mode (AUTO), press the 🧳 button. The number of days flash on and off.

Press **+** or **-** to set the number of days.

```
zone                        1
 01            ☀            2
                            3
                            4
18:23                     ▶5
                            6
                            7
0h  2  4  6  8 10 12 14 16 18 20 22 24
          ✍
🧳                          ▶▶
```

Press **OK** to confirm.

```
              🧳

              9

   –    +    OK    C
```
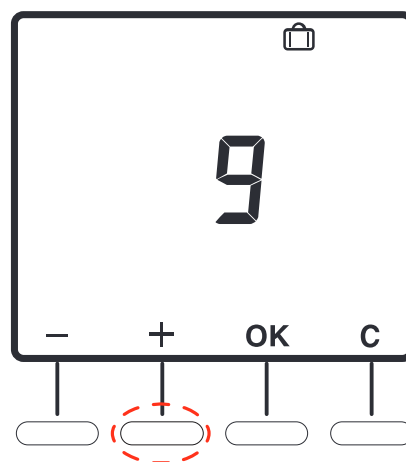
Example:
Leaving on 10 January, returning on 19 January, indicate 9 days. Automatic operation will restart on 19 January at 00.00 h. Press OK to confirm. To cancel the absence mode (e.g. when returning early), press the C button or turn the control dial.

Manual Mode

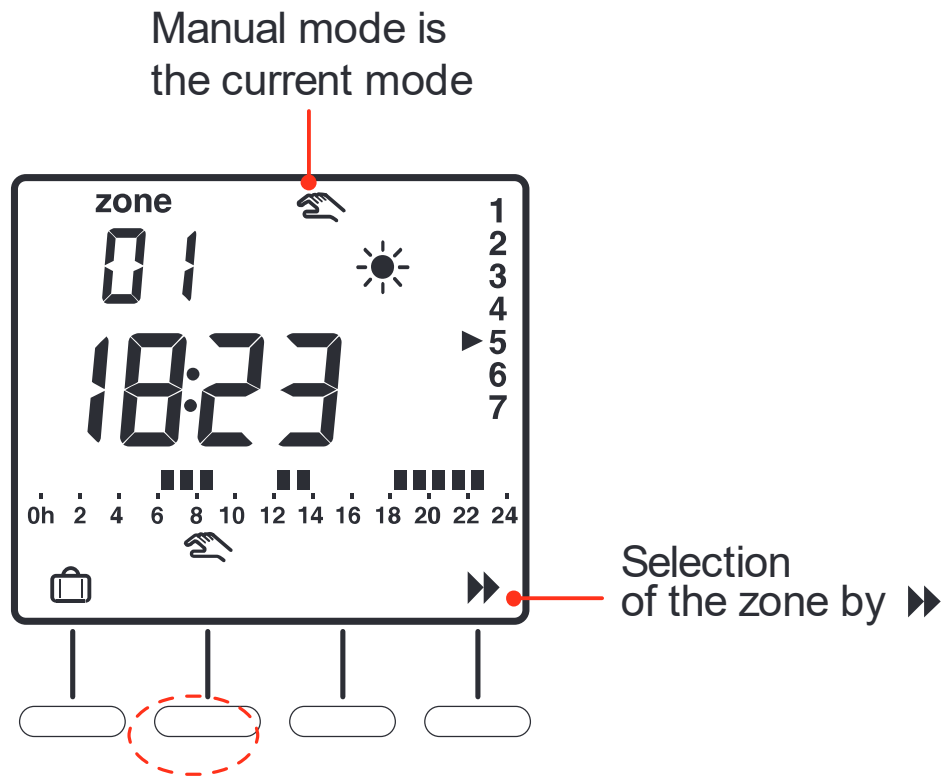This mode is used to go from Comfort to Economy mode (depending on the setting in menu CF01) or conversely until the next program change for the zone.

Manual mode is
the current mode

Selection
of the zone by ▶▶

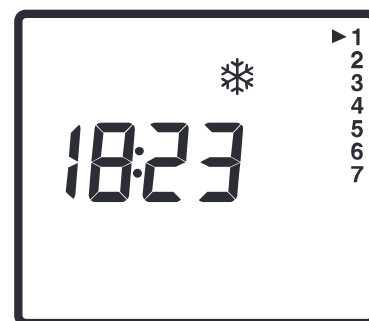Press the ▶▶ button to select the zone and press the ✍ button.

Example:
When in Economy mode, pressing the ✍ button allows you to go to Comfort mode. To cancel the Manual mode, press the ✍ button again or turn the control dial.
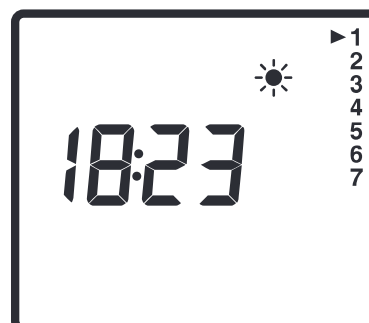
Continuous mode

To set the heating to Frost
Protection mode for an
indefinite duration.
Turn the control dial to ❄

```
        ❄        ►1
                  2
  18:23           3
                  4
                  5
                  6
                  7
```

To set the heating to
Comfort mode for an in-
definite duration.
Turn the control dial to ☀

```
              ☀  ►1
                  2
  18:23           3
                  4
                  5
                  6
                  7
```

To set the heating to
Economy mode for an
indefinite duration.
Turn the control dial to ☽

```
            ☽    ►1
                  2
  18:23           3
                  4
                  5
                  6
                  7
```
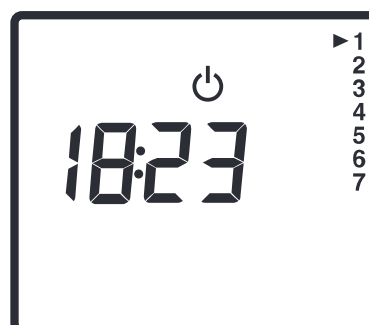
Shutdown mode

To shut down the heating
(in summer, for example).
Turn the control dial to ⏻

```
        ⏻        ►1
                  2
  18:23           3
                  4
                  5
                  6
                  7
```

You can carry out a general reset to return to the factory settings:

- Return to the default program.

Turn the control dial to ⏻
then press the **left-hand button** for
5 seconds until **in it** is displayed.

To cancel the reset, **press C**.

Press **OK** to confirm, an hourglass is displayed during the time needed for
the reset operation (approx. 15 seconds).

Return to the shutdown mode display.

10 sec.
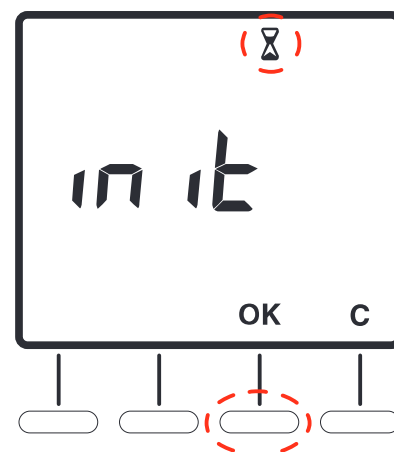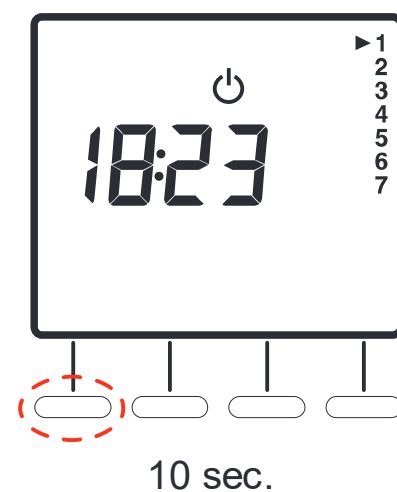
This product has a battery back-up, however you may still need to reset the time after a lengthy mains outage.

When the power is restored, the time and date will flash.

```
 00:00            ►1
                   2
                   3
                   4
                   5
                   6
                   7
  _    +    OK
```

Reset the time.
Turn the control dial to 🕐 .
The days flash.
Press **+** or **-** to make your choice, **OK** to confirm it and go to the next setting.

Hours   Day

```
 18:23            1
                  2
                 ►3
                  4
                  5
                  6
                  7
  _    +    OK
```

Minutes

Repeat the operations to set the hours and minutes.

Turn the control dial to exit the setting mode.
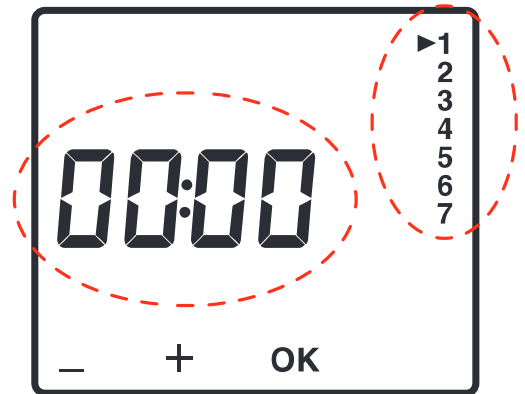
NOTE: *All other settings are stored and so will remain unchanged.*

Characteristics

- 230V, 50 Hz power supply, +/- 10%
- Clock back-up in event of mains outage: 4 hours permanent back-up of the programming
- Power consumption: 2 VA
- Class II insulation
- Dimensions 134 x 80 x 25 mm
- In glass protection: IP 30
- Wall-mounted
- Install in an environment with normal pollution levels
- Storage temperature: -- 10°C to +70°C
- Operating temperature: 0°C to +40°C
- Four pilot wire outputs max. 40 mA, 230 V (GIFAM standard)
- Max. cable length 50m

After Sales Service

Your product is guaranteed for two years from the date of purchase.

Within this period, we undertake to repair or exchange this product free of charge (subject to availability) providing it has been installed and operated in accordance with these instructions. Your rights under this guarantee are additional to your statutory rights, which in turn are not affected by this guarantee.

Should you require after sales service you should contact our Customer Services Help desk on 0844 879 3588. It would assist us if you can quote the model number, date of purchase, and nature of the fault at the time of your call. The Customer Services help desk will also be able to advise should you need to purchase any spares.

Please do not return a faulty product to us in the first instance as this may result in loss or damage and a delay in providing you with a satisfactory service. Check that the supply voltage is the same as that stated on the heater.

Please retain your receipt as proof of purchase.

Dimplex®
A world of expertise

GDC UK Ltd
Millbrook House
Grange Drive
Hedge End
Southampton
SO30 2DF

Customer Help Line
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Republic of Ireland
Tel: 01 842 4833