

Persimmon Homes

Autumn / Winter 2020/21

Home information and user guides

FIRS Fibre Integrated Reception System leaflet

OFNL information on internet service providers

OFNL and Sky (web page)

Logic Combi user guide

Honeywell programmer user guide

dMEV guide

Firehawk smoke/heat alarm manual

Deta CO alarm guide

Management of open spaces information



Open Fibre Networks

Wholesale

Fibre Integrated Reception System (FIRS)

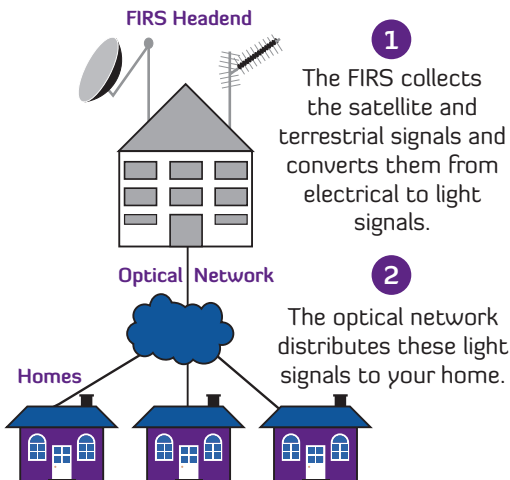
What is FIRS?

FIRS delivers entertainment services, including satellite and terrestrial TV and Digital Audio Broadcast Radio (DAB) to many homes, across the Fibre-to-the-Home network.

FIRS uses satellite dishes and aerials, mounted in a central on-development location. This negates the need for TV aerials or satellite dishes mounted onto new homes!

Freeview, Freesat and Sky are all available, so customers can swap from terrestrial to satellite TV whenever they wish.

OFNL installs FIRS onto developments, utilising their Fibre-to-the-Home network



Benefits of FIRS

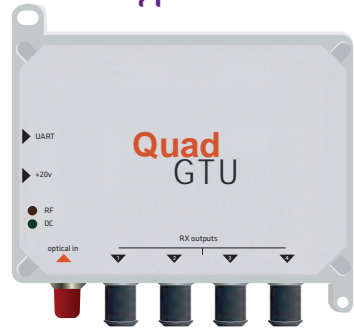
- ✓ No need for the installation of traditional terrestrial aerials for Freeview or DAB digital radio
- ✓ No unsightly aerials/dishes on the home
- ✓ No need for the installation of a satellite dish when using Freesat or subscribing to Sky services
- ✓ Lower cost than professional installation of conventional aerials
- ✓ Can carry all broadcast TV services to the home, including HD and 3D TV
- ✓ Easy to use and compatible with all standard digital televisions and Set Top Boxes
- ✓ Easy Sky or Freesat installation

GTU and how FIRS works

The Gateway Terminal Unit (GTU) which is situated within the home, will be connected via the installed cabling to media plates (aerial sockets) to enable the customer to connect satellite (Sky or Freesat) or terrestrial (Freeview) set top boxes, or directly into a digital ready TV or DAB radio.

The IRS is installed using the same fibre network that the Telecom services utilise. The developer will define where the customer can locate TVs and Radios within the home. However, it is possible to install additional aerial outlets in a similar manner as a traditional aerial installation.

A typical GTU



GTU model and colour may vary

The GTU will typically be discretely located in a cupboard or under the stairs (defined by the developer) as there is no requirement to access it every day.

Frequently asked questions

What is FIRS?

FIRS is a facility that distributes satellite, terrestrial TV and radio signals from centralised aerials and dishes to all of the houses across the development. It is distributed through Fibre Optic cables which have already been installed; giving you excellent signal quality and reliable service.

What type of equipment can connect to the FIRS?

Freeview

Connect to the TV or Digibox aerial socket

Freesat

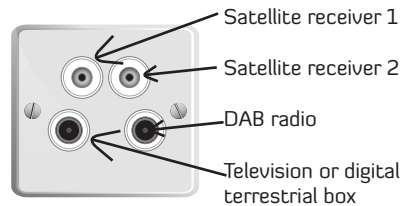
Connect to satellite receiver dish inputs 1 and 2

Sky (+, HD, 3D)

Connect to satellite receiver dish inputs 1 and 2

DAB Radio

Connect to DAB radio aerial Socket



What should I do if I have a fault?

In the first instance, you should check the GTU is powered on and there is not a fault with your equipment, e.g. your TV, Freesat or Sky Set top box.

If you have multiple TV points in your property and only one of these points is not working then there could be a fault with your internal wiring.

Before reporting faults to OFNL please check your internal wiring or use a local TV repair company for assistance. Once you have eliminated this possibility, and you are sure the fault is not with your equipment or internal wiring, please contact **OFNL Customer Services on 02921 678 550**.

Voice, Ultrafast broadband and TV networks

Choice of Service Providers on the OFNL Network for Residential Customers.

Introduction

OFNL are passionate about providing quality, value and choice to residents who live in homes connected to its high-speed Fibre-to-the-Home network.

OFNL provides an 'Open Access' network designed to make it easy for service providers to connect and offer choice to residents, however before they can offer service there is a requirement for them to connect to the OFNL fibre network, either locally at the housing development or at OFNL's national hand-off location.

Choice of Service Providers:

OFNL is in discussions with a number of UK telecom brands and actively encourages service providers to connect to the fibre network. OFNL are excited

by this interest and the benefits it will bring to residents and details will be published when new service providers become available.

OFNL enables service providers to meet government targets of offering all residents on the Open Fibre Network Super-Fast broadband. Superfast is defined as greater than 24Mbps. OFNL delivers ultrafast speeds of up to 360Mbps.

There are currently 10 service providers who can deliver residential services.

Service Providers on the OFNL Network:

Listed below are the details of the residential service providers available across the OFNL network.

Available residential service providers





1+1 ONT User Guide



Who are OFNL?

OFNL operates an 'Open Access' fibre optic network to new build residential and commercial developments across the UK.

OFNL uses Fibre to the Home (FTTH) to provide voice, ultra-fast broadband and television services.

For more information or to find out which service providers operate on the OFNL network, visit www.ofnl.co.uk or call 02921 678 550.

Your fibre equipment

OFNL uses a device you may not have seen before; an Optical Network Terminal (ONT) - this is where the fibre enters your home and terminates.




The ONT can connect to your router to provide you with broadband, and your telephone for voice services.



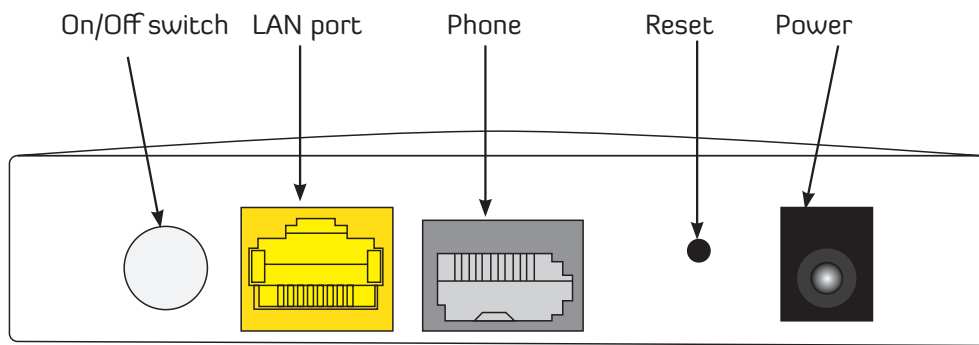
The lights on your ONT

Your ONT has several indicator lights which identify its status. These lights can be useful to help you troubleshoot any problems with your connection.

Check your ONT is plugged in correctly and the lights are on. If you are having problems, call your internet service provider.

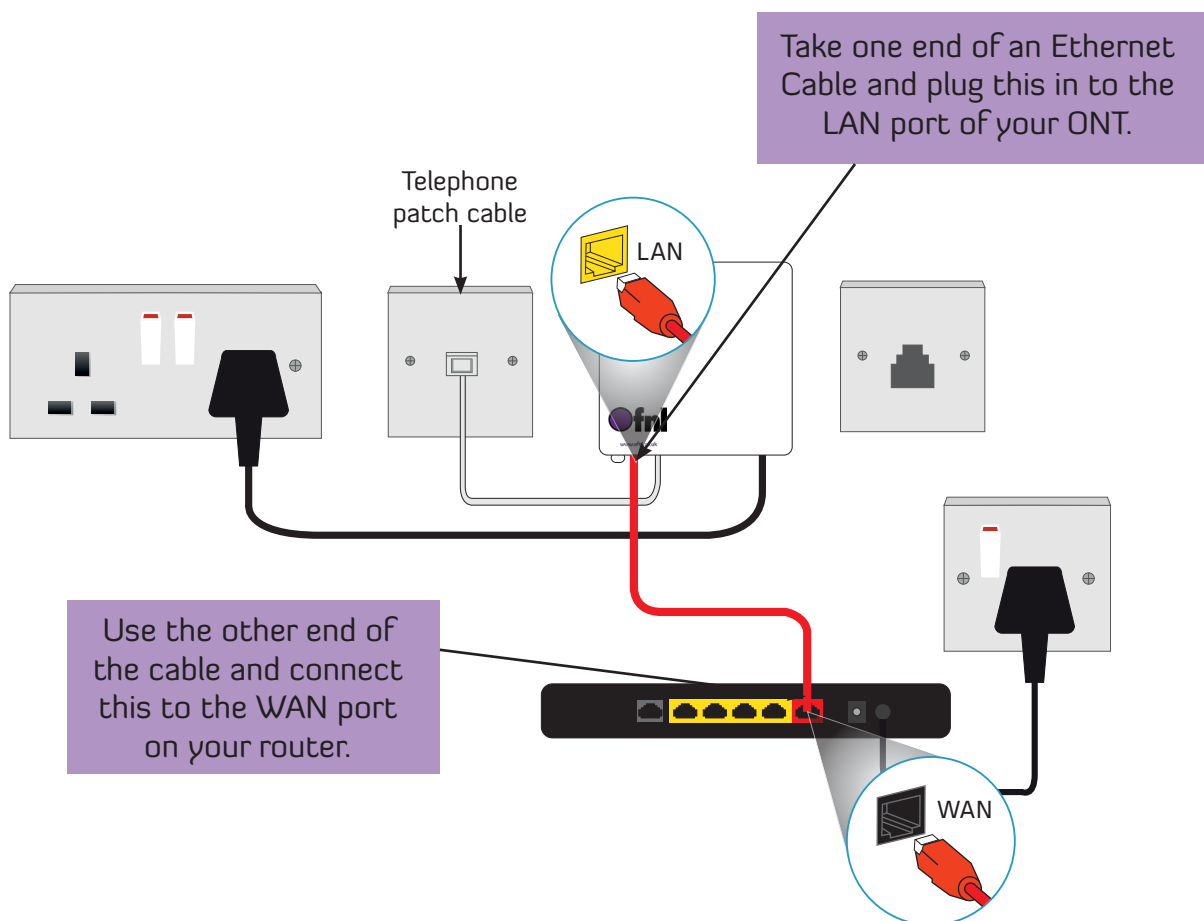
Type	Colour	State	Description
LAN 	Green	On	The LAN port is enabled and connected.
		Off	The LAN port is not connected. Check your cable between your router and the ONT.
WAN 	N/A	Off	Your ONT is not receiving a signal from the fibre network. Please contact your service provider.
	Green	Blinking	Your ONT is receiving a signal from the fibre network but there is a network problem. Please contact your service provider.
		Solid	Your ONT is working as expected and is receiving a signal from the fibre network.
Phone 	N/A	Off	Your phone line is disabled.
	Green	Blinking	Your phone line is enabled but there is a problem. Please contact your service provider.
		Solid	Your phone line is connected and working.
Device	Green	Blinking	Your ONT is powering on.

The ports on your ONT



Connecting your ONT to your router*

Connect directly to your ONT



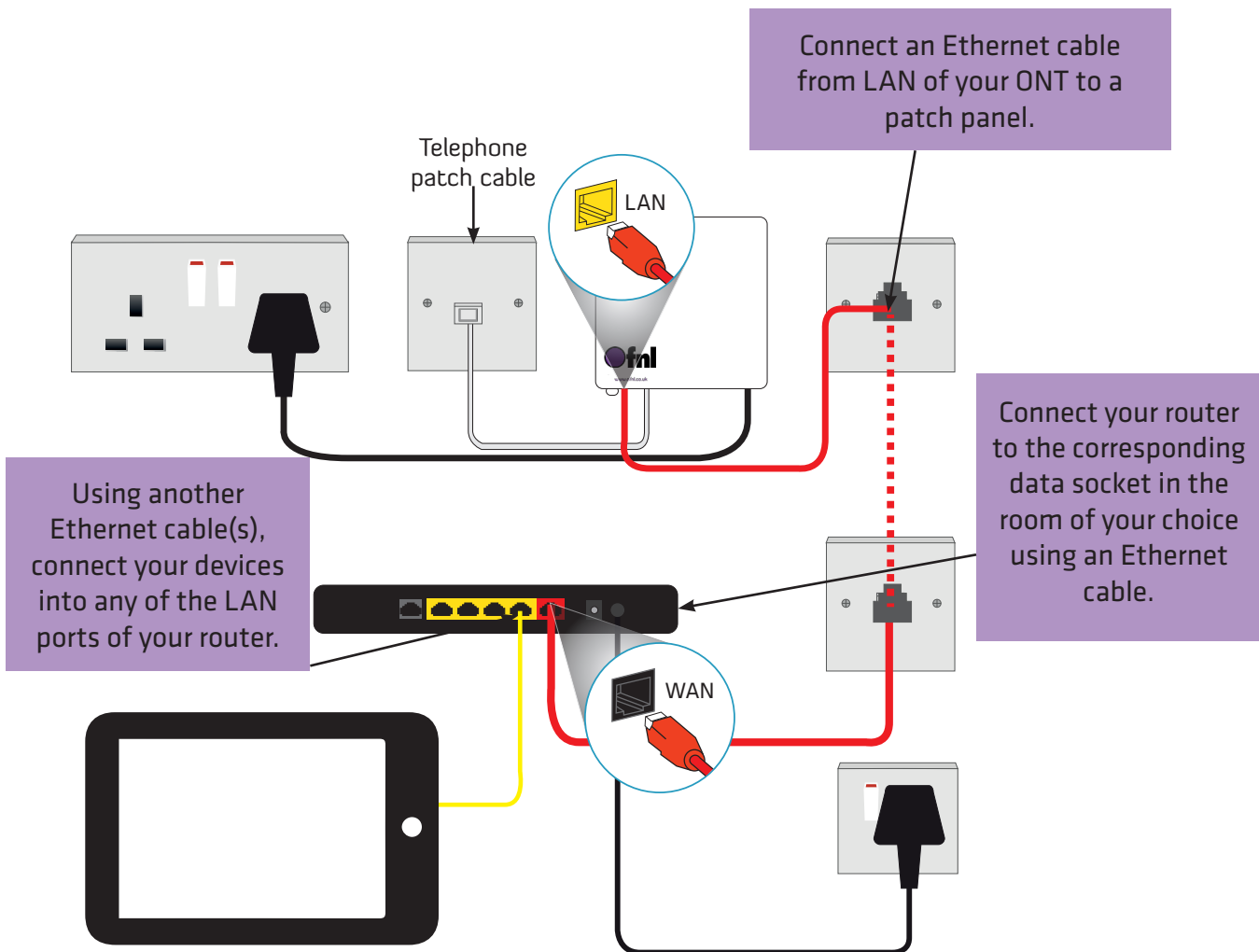
To connect your router to your internet enabled devices using a wired connection;

- Using another Ethernet cable, plug one end into any of the LAN ports on your router.
- Take the other end of the cable and plug this directly into your device.

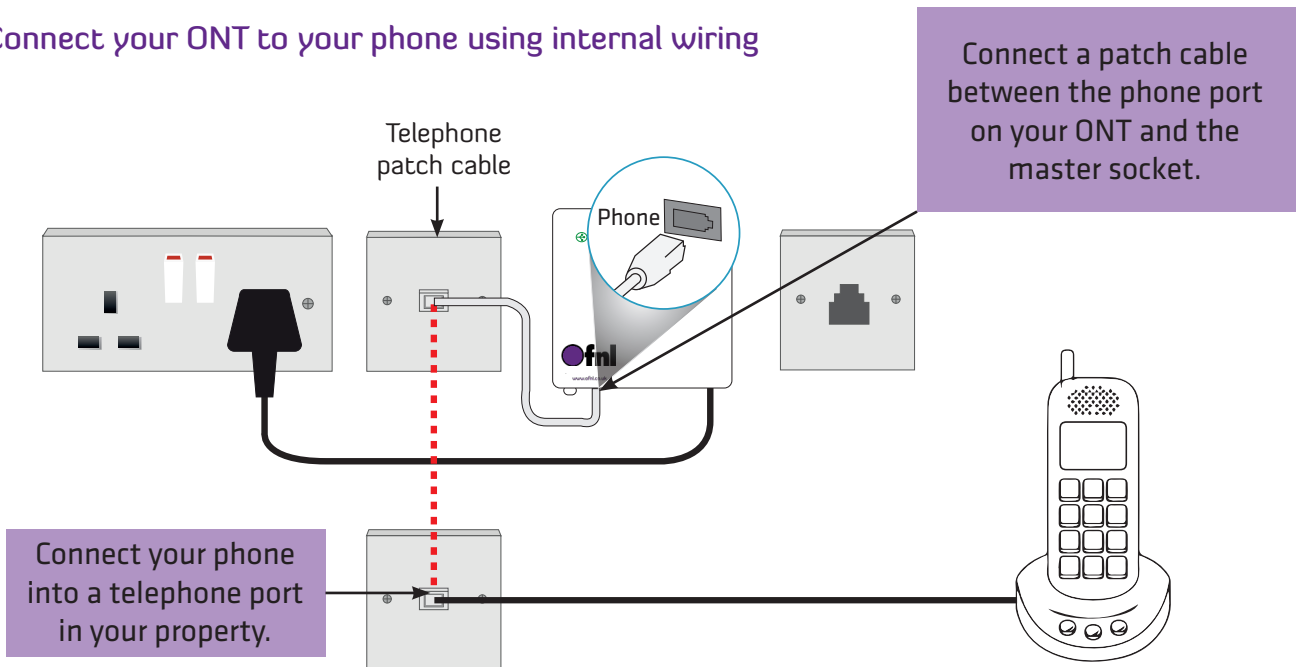
*The router colour and model may vary depending on the service provider you choose

Connect your ONT to your router using internal wiring

If your property has internal wiring, you may be able to connect devices to the internet using this, or use it to relocate your router into a room of your choice.



Connect your ONT to your phone using internal wiring





USER GUIDE

LOGIC COMBI ESP1 24 30 35

When replacing any part on this appliance, use only spare parts that you can be assured conform to the safety and performance specification that we require. Do not use reconditioned or copy parts that have not been clearly authorised by Ideal Boilers.

For the very latest copy of literature for specification and maintenance practices visit our website www.idealboilers.com where you can download the relevant information in PDF format.

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1. INTRODUCTION

The Logic Combi ESP1 range is a combination boiler providing both central heating and instantaneous domestic hot water. Featuring full sequence automatic ignition and fan assisted combustion.

Due to the high efficiency of the boiler, condensate is produced from the flue gases and this is drained to a suitable disposal point through a plastic waste pipe at the base of the boiler. A condensate 'plume' will also be visible at the flue terminal.

SAFETY

Current Gas Safety (Installation & Use) Regulations or rules in force.

In your own interest, and that of safety, it is the law that this boiler must be installed by a Gas Safe Registered Engineer, in accordance with the above regulations.

In IE, the installation must be carried out by a Registered Gas Installer (RGI) and installed in accordance with the current edition of I.S. 813 "Domestic Gas Installations", the current Building Regulations and reference should be made to the current ETCI rules for electrical installation.

It is essential that the instructions in this booklet are strictly followed, for safe and economical operation of the boiler.

ELECTRICITY SUPPLY

This appliance must be earthed.

Supply: 230 V ~ 50 Hz. The fusing should be 3A.

IMPORTANT NOTES

- This appliance must not be operated without the casing correctly fitted and forming an adequate seal.
- If the boiler is installed in a compartment then the compartment **MUST NOT** be used for storage purposes.
- If it is known or suspected that a fault exists on the boiler then it **MUST NOT BE USED** until the fault has been corrected by a Gas Safe Registered Engineer or in IE a Registered Gas Installer (RGI).
- Under **NO** circumstances should any of the sealed components on this appliance be used incorrectly or tampered with.
- This appliance can be used by children 8 years and above. Also persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, provided they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

All Gas Safe Register installers carry a Gas Safe Register ID card, and have a registration number. Both should be recorded in the Benchmark Commissioning Checklist. You can check your installer by calling Gas Safe Register direct on 0800 4085500.

Ideal Boilers is a member of the Benchmark scheme and fully supports the aims of the programme. Benchmark has been introduced to improve the standards of installation and commissioning of central heating systems in the UK and to encourage the regular servicing of all central heating systems to ensure safety and efficiency.

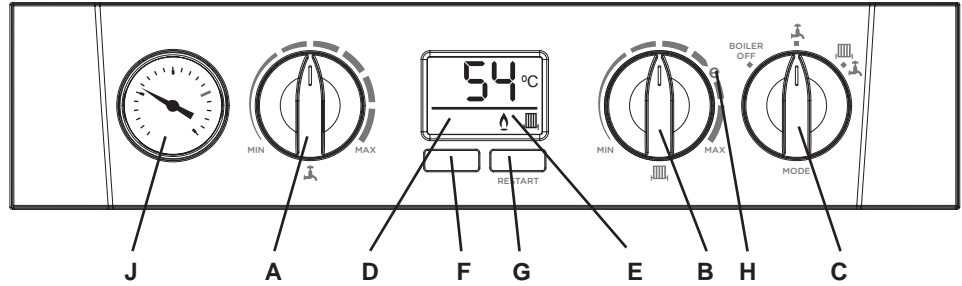
THE BENCHMARK SERVICE INTERVAL RECORD MUST BE COMPLETED AFTER EACH SERVICE



2. BOILER OPERATION

Legend

- A. Domestic Hot Water Temperature Knob
- B. Central Heating Temperature Knob
- C. Mode Knob
- D. Boiler Status Display
- E. Burner 'on' Indicator
- F. Installer Function Button
- G. Restart Button
- H. Central Heating Economy Setting
- J. Pressure Gauge



TO START THE BOILER

If a programmer is fitted refer to separate instructions for the programmer before continuing.

Start the boiler as follows:

1. Check that the electricity supply to boiler is off.
2. Set the mode knob (C) to 'BOILER OFF'.
3. Set the Domestic Hot Water temperature knob (A) and Central Heating temperature knob (B) to 'MAX'.
4. Ensure that all hot water taps are turned off.
5. Switch on electricity to the boiler and check that all external controls, e.g. programmer and room thermostat, are on.
6. Set the mode knob (C) to '🔥' (winter).

The boiler will commence ignition sequence, supplying heat to the central heating, if required.

Note. In normal operation the boiler status display (D) will show codes:

- Standby - no demand for heat.
- 🔥 Central Heating being supplied
- 🔥 Domestic hot water being supplied
- FP Boiler frost protection
- boiler will fire if temperature is below 5°C.

During normal operation the burner on indicator '🔥' will remain illuminated when the burner is lit.

Note: If the boiler fails to light after five attempts the fault code L2 will be displayed (refer to Fault Code page).

OPERATION MODES

Winter Conditions - (Central Heating and Domestic Hot Water required)

Set the mode knob (C) to '🔥' (winter).

The boiler will fire and supply heat to the radiators but will give priority to domestic hot water on demand.

Summer Conditions - (Domestic Hot Water only required)

Set the mode knob (C) to '🔥' (summer).

Set the central heating demand on the external controls to OFF.

Boiler Off

Set the mode knob (C) to 'BOILER OFF'. The boiler mains power supply must be left on to enable frost protection (see Frost Protection).

CONTROL OF WATER TEMPERATURE

Domestic Hot Water

The domestic hot water temperature is limited by the boiler controls to a maximum temperature of 65°C, adjustable via the domestic hot water temperature knob (A).

Approximate temperatures for domestic hot water:

Knob Setting	Hot Water Temperature (approx.)
Minimum	40°C
Maximum	65°C

Due to system variations and seasonal temperature fluctuations domestic hot water flow rates/temperature rise will vary, requiring adjustment at the tap: the lower the flow rate the higher the temperature, and vice versa.

Central Heating

The boiler controls the central heating radiator temperature to a maximum of 80°C, adjustable via the central heating temperature knob (B).

Approximate temperatures for central heating:

Knob Setting	Central Heating Radiator Temperature (approx.)
Minimum	30°C
Maximum	80°C

For economy setting 'e' refer to Efficient Heating System Operation.

EFFICIENT HEATING SYSTEM OPERATION

The boiler is a high efficiency, condensing appliance which will automatically adjust its output to match the demand for heat. Therefore gas consumption is reduced as the heat demand is reduced.

The boiler condenses water from the flue gases when operating most efficiently. To operate your boiler efficiently (using less gas) turn the central heating temperature knob (B) to the 'E' position or lower. In winter periods it may be necessary to turn the knob towards the 'MAX' position to meet heating requirements. This will depend on the house and radiators used.

Reducing the room thermostat setting by 1°C can reduce gas consumption by up to 10%.

WEATHER COMPENSATION

When the Weather Compensation option is fitted to the system then the central heating temperature knob (B) becomes a method of controlling room temperature. Turn the knob clockwise to increase room temperature and anti-clockwise to decrease room temperature. Once the desired setting has been achieved, leave the knob in this position and the system will automatically achieve the desired room temperature for all outside weather conditions.

BOILER FROST PROTECTION

The boiler is fitted with frost protection that operates in all modes, provided the power supply to the boiler is always turned on. If the water in the boiler falls below 5°C, the frost protection will activate and run the boiler to avoid freezing. The process does not guarantee that all other parts of the system will be protected.

If a system frost thermostat has been installed, the boiler must be set in winter mode, '❄️', for the system frost protection to run.

If no system frost protection is provided and frost is likely during a short absence from home it is recommended to leave the system heating controls or built in programmer (if fitted) switched on and run at a reduced temperature setting. For longer periods, the entire system should be drained.

BOILER RESTART

To restart the boiler, when directed in the listed fault codes (see section 8) press the restart button (G). The boiler will repeat its ignition sequence. If the boiler still fails to start consult a Gas Safe Registered Engineer or an IE Registered Gas Installer (RGII).

MAINS POWER OFF

To remove all power to the boiler the mains power switch must be turned off.

3. SYSTEM WATER PRESSURE

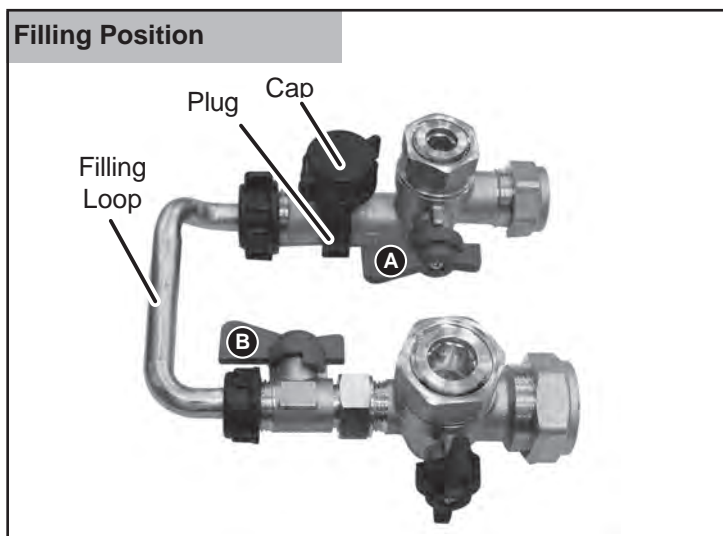
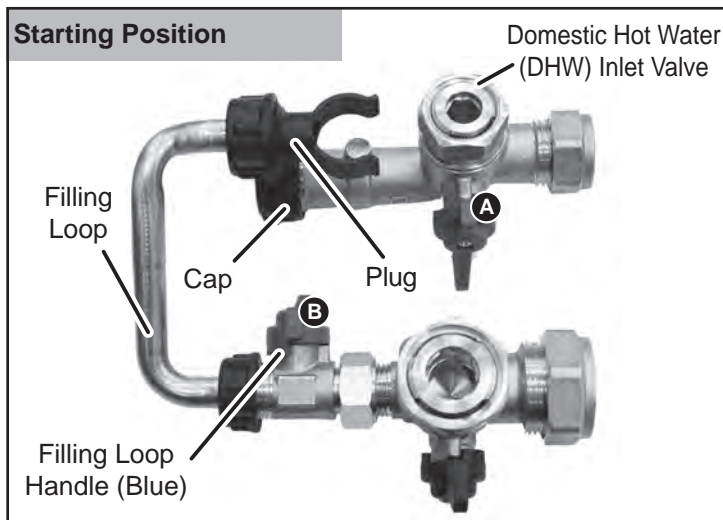
The system pressure gauge indicates the central heating system pressure. If the pressure is seen to fall below the original installation pressure of 1-2 bar over a period of time and continue to fall then a water leak may be indicated. In this event re-pressurise the system as shown below. If unable to do so or if the pressure continues to drop a Gas Safe Registered Engineer or in IE a Registered Gas Installer (RGII) should be consulted.



THE BOILER WILL NOT OPERATE IF THE PRESSURE HAS REDUCED TO LESS THAN 0.3 BAR UNDER THIS CONDITION.

To Top up the system :-

1. Ensure both **A** & **B** handles (blue) are in closed position (as shown below)
2. Remove the plug and cap and retain.
3. Connect the filling loop to the Domestic Hot Water (DHW) inlet and tighten. Also ensure that the other end of filling loop is hand tight.



4. Turn the Domestic Hot Water (DHW) Inlet **A** blue handle to the horizontal position.
5. Ensuring no leaks are seen, gradually turn the filling loop handle (blue) **B** to the horizontal position.
6. Wait for the pressure gauge to reach 1 to 1.5 bar.
7. Once pressure is reached turn valves **A** & **B** back to the closed position.
8. Disconnect the filling loop, replace cap and plug. Note there can be some water spillage at this point.

4. CONDENSATE DRAIN

This appliance is fitted with a siphonic condensate trap system that reduces the risk of the appliance condensate from freezing. However should the condensate pipe to this appliance freeze, please follow these instructions:

- a. If you do not feel competent to carry out the defrosting instructions below please call your local Gas Safe Registered installer for assistance.
- b. If you do feel competent to carry out the following instructions please do so with care when handling hot utensils. Do not attempt to thaw pipework above ground level.

If this appliance develops a blockage in its condensate pipe, its condensate will build up to a point where it will make a gurgling noise prior to locking out an "L2" fault code. If the appliance is restarted it will make a gurgling noise prior to it locking out on a failed ignition "L2" code.

To unblock a frozen condensate pipe;

1. Follow the routing of the plastic pipe from its exit point on the appliance, through its route to its termination point.
Locate the frozen blockage. It is likely that the pipe is frozen at the most exposed point external to the building or where there is some obstruction to flow. This could be at the open end of the pipe, at a bend or elbow, or where there is a dip in the pipe in which condensate can collect. The location of the blockage should be identified as closely as possible before taking further action.
2. Apply a hot water bottle, microwaveable heat pack or a warm damp cloth to the frozen blockage area. Several applications may have to be made before it fully defrosts. Warm water can also be poured onto the pipe from a watering can or similar. **DO NOT** use boiling water.
3. Caution when using warm water as this may freeze and cause other localised hazards.
4. Once the blockage is removed and the condensate can flow freely, restart the appliance. (Refer to "To Light the boiler")
5. If the appliance fails to ignite, call your Gas Safe Registered engineer.

Preventative solutions

During cold weather, set the central heating temperature knob (B) to maximum (must return to original setting once cold spell is over).

Place the heating on continuous and turn the room thermostat down to 15°C overnight or when unoccupied. (Return to normal after cold spell).

5. GENERAL INFORMATION

BOILER PUMP

The boiler pump will operate briefly as a self-check once every 24 hours, regardless of system demand.

MINIMUM CLEARANCES

Clearance of 165mm above, 100mm below, 2.5mm at the sides and 450mm at the front of the boiler casing must be allowed for servicing.

Bottom Clearance

Bottom clearance after installation can be reduced to 5mm.

This must be obtained with an easily removable panel, to enable the system pressure gauge to be visible and to provide the 100mm clearance required for servicing.

EXPANSION

NOTE. If a water meter is fitted into the incoming water mains there may be a requirement for a domestic hot water expansion vessel Kit. Contact a Gas Safe Registered Engineer or in IE a Registered Gas Installer (RGII).

ESCAPE OF GAS

Should a gas leak or fault be suspected contact the National Gas Emergency Service without delay. **Telephone 0800 111 999.**

Ensure that;

- **All naked flames are extinguished**
- **Do not operate electrical switches**
- **Open all windows and doors**

CLEANING

For normal cleaning simply dust with a dry cloth. To remove stubborn marks and stains, wipe with a damp cloth and finish off with a dry cloth. **DO NOT use abrasive cleaning materials.**

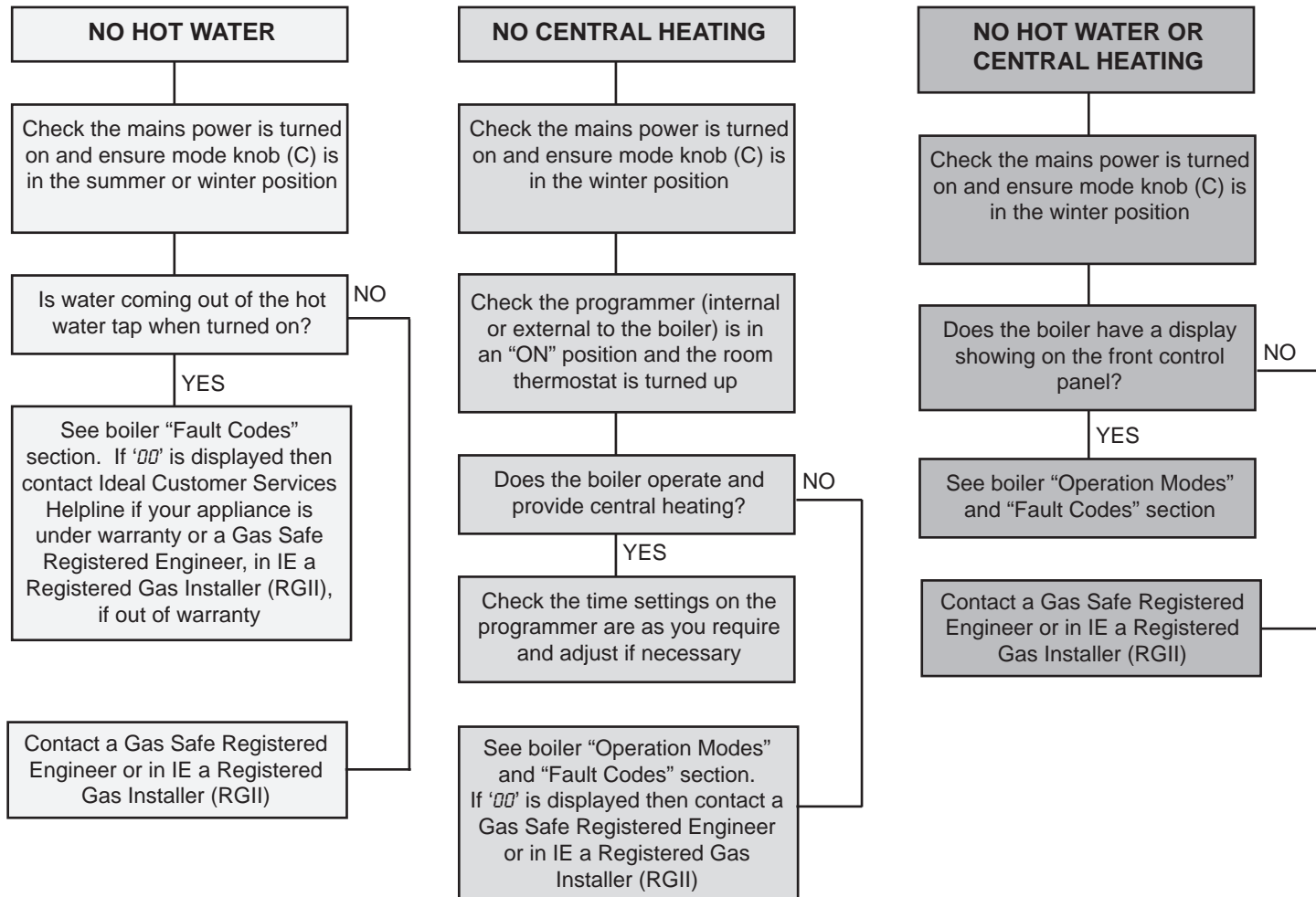
MAINTENANCE

The appliance should be serviced at least once a year by a Gas Safe Registered Engineer or in IE a Registered Gas Installer (RGII).








6. POINTS FOR THE BOILER USER

Note. In line with our current warranty policy we would ask that you check through the following guide to identify any problems external to the boiler prior to requesting a service engineer's visit. Should the problem be found to be other than with the appliance we reserve the right to levy a charge for the visit, or for any pre-arranged visit where access is not gained by the engineer.

TROUBLESHOOTING



7. NORMAL OPERATION DISPLAY CODES

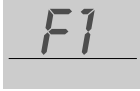

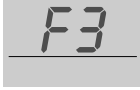



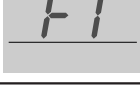



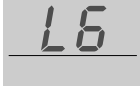
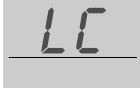



DISPLAY CODE ON BOILER	DESCRIPTION
	The boiler is in standby operation awaiting either a central heating call or hot water demand.
	The boiler has a call for central heating but the appliance has reached the desired temperature set on the boiler.
	The boiler has a call for hot water but the appliance has reached the desired temperature set on the boiler.
	The boiler is operating in central heating mode.
	The boiler is operating in domestic hot water mode.
	The boiler is operating in frost protection.
	The boiler mode knob (C) is in the off position, rotate fully clockwise for hot water and central heating operation.

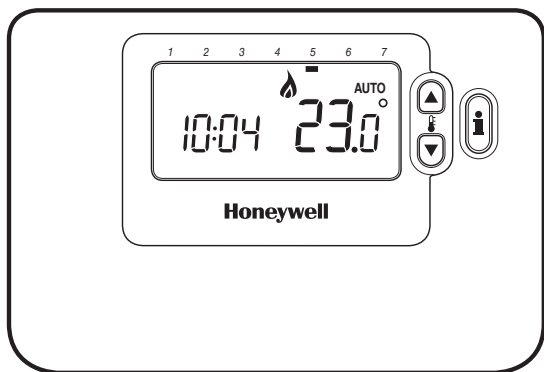
**FOR ANY QUERIES PLEASE RING THE
IDEAL CONSUMER HELPLINE : 01482 498660**

NOTE. BOILER RESTART PROCEDURE -

To restart the boiler press the RESTART button. The boiler will repeat the ignition sequence if a heat demand is present.

8. FAULT CODES

DISPLAY CODE ON BOILER	DESCRIPTION	ACTION
	Low Water Pressure	Check system water pressure is between 1 & 1.5bar on the system pressure gauge. To re-pressurise the system see Section 3. If the boiler still fails to operate then please contact Ideal (if under warranty) or alternatively a Gas Safe Registered Engineer if outside of the warranty period. In IE contact a Registered Gas Installer (RGII).
	Flame Loss	<ol style="list-style-type: none"> 1. Check other gas appliances in the house are working to confirm a supply is present in the property. 2. If other appliances do not work or there are no other appliances, check the gas supply is on at the meter and/or pre payment meter has credit. If the boiler fails to operate then please contact Ideal (if under warranty) or alternatively a Gas Safe Registered Engineer if outside of the warranty period. In IE contact a Registered Gas Installer (RGII).
	Fan Fault	Restart the appliance - if the boiler fails to operate then please contact Ideal (if under warranty) or alternatively a Gas Safe Registered Engineer if outside of the warranty period. In IE contact a Registered Gas Installer (RGII).
	Flow Thermistor	Restart the appliance - if the boiler fails to operate then please contact Ideal (if under warranty) or alternatively a Gas Safe Registered Engineer if outside of the warranty period. In IE contact a Registered Gas Installer (RGII).
	Return Thermistor	Restart the appliance - if the boiler fails to operate then please contact Ideal (if under warranty) or alternatively a Gas Safe Registered Engineer if outside of the warranty period. In IE contact a Registered Gas Installer (RGII).
	Outside Sensor Failure	Restart the appliance - if the boiler fails to operate then please contact Ideal (if under warranty) or alternatively a Gas Safe Registered Engineer if outside of the warranty period. In IE contact a Registered Gas Installer (RGII).
	Low Mains Voltage	Contact a qualified electrician or your electricity provider.
	Unconfigured PCB	Unconfigured PCB. Please contact Ideal (if under warranty) or alternatively a Gas Safe Registered Engineer if outside of the warranty period. In IE contact a Registered Gas Installer (RGII).
	Flow Temperature Overheat or No Water Flow	Check system water pressure is between 1 & 1.5bar on the system pressure gauge. To re-pressurise the system see Section 3. If the boiler fails to operate then please contact Ideal (if under warranty) or alternatively a Gas Safe Registered Engineer if outside of the warranty period. In IE contact a Registered Gas Installer (RGII).
	Ignition Lockout	<ol style="list-style-type: none"> 1. Check condensate Pipe for blockages (refer to Section 4) 2. Check other gas appliances in the house are working to confirm a supply is present in the property. 3. If other appliances do not work or there are no other appliances, check the gas supply is on at the meter and/or pre payment meter has credit. If the boiler fails to operate then please contact Ideal (if under warranty) or alternatively a Gas Safe Registered Engineer if outside of the warranty period. In IE contact a Registered Gas Installer (RGII).
	False Flame Lockout	Restart the appliance - if the boiler fails to operate then please contact Ideal (if under warranty) or alternatively a Gas Safe Registered Engineer if outside of the warranty period. In IE contact a Registered Gas Installer (RGII).
	5 Boiler Resets in 15 minutes	<ol style="list-style-type: none"> 1. Turn electrical supply to boiler off and on. 2. If the boiler fails to operate please contact Ideal (if under warranty) or alternatively a Gas Safe Registered Engineer if outside of the warranty period. In IE contact a Registered Gas Installer (RGII).
	Negative Differential Flow/Return Thermistor	If the boiler fails to operate then please contact Ideal (if under warranty) or alternatively a Gas Safe Registered Engineer if outside of the warranty period. In IE contact a Registered Gas Installer (RGII).
	Flow/Return Differential > 50°C	If the boiler fails to operate then please contact Ideal (if under warranty) or alternatively a Gas Safe Registered Engineer if outside of the warranty period. In IE contact a Registered Gas Installer (RGII).
	Diverter Valve in mid-position for service	Rotate all knobs fully clockwise, turn boiler power off and on then press restart



CM7012-6

CM7077-11

USER GUIDE

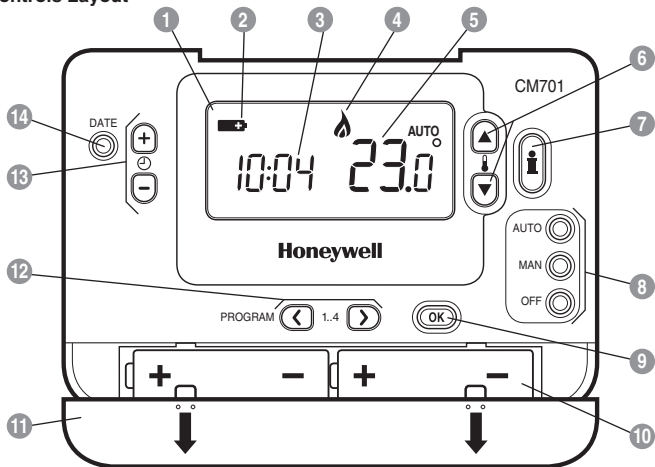
Description

The Honeywell CM701 is a programmable room thermostat designed to control your heating system efficiently, providing comfortable temperatures when you are at home and energy savings when you are away. The following instructions explain how to program and use the thermostat to provide the most home comfort at the least cost.

Features

- Ergonomic user interface featuring an 'OK-button'.
- Large LCD (Liquid Crystal Display) Screen with backlight.
- 4 independent temperature levels (from 5°C to 35°C).
- Automatic Summer/Winter Time Change.
- Optimum Start to achieve the right temperature at the right time.
- Built-in Memory holds the user program indefinitely.

Controls Layout



- | | | |
|-------------------------|------------------------------|-----------------------|
| ① LCD Screen | ⑥ Temperature Change Buttons | ⑪ Battery Cover |
| ② Battery Low Indicator | ⑦ Temperature Enquiry Button | ⑫ Program Buttons |
| ③ Time Display | ⑧ Operating Mode Buttons | ⑬ Time Change Buttons |
| ④ Burner On Indicator | ⑨ Green OK Button | ⑭ Set Date Button |
| ⑤ Temperature Display | ⑩ Battery Compartment | |

This section shows you how to setup and run the thermostat in 3 simple steps:

STEP 1: Installing the Batteries

Note: Please follow the instructions in this section only if the thermostat screen is blank (no symbols or digits are displayed). If the room temperature is already displayed move on to Step 2: Setting the Date and Time.

To install the Batteries:

- Lift up the front cover of the thermostat to reveal the battery cover and product controls.
- Remove the battery cover by pressing down and sliding out.
- Insert the 2 x AA LR6 Alkaline Batteries supplied with the thermostat, ensuring the correct orientation (see '**Controls Layout**' on page 2).
- After a short pause the thermostat will display information on the screen and is now ready for use.
- Replace the battery cover by sliding it firmly back into the front of the thermostat.

STEP 2: Setting the Date and Time

To set the Date and Time:

- Press the **DATE** button to begin setting the date. When you set the date for the first time after the batteries are inserted, the display will show:



Press the \ominus \oplus or \ominus buttons to set the current day of the month (e.g. *d 01* = 1st day of the month) then press the green **OK** button to confirm.

- Press the \ominus \oplus or \ominus buttons to set the current month of the year (e.g. *m 01* = January) then press the green **OK** button to confirm.



- Press the \ominus \oplus or \ominus buttons to set the current year (e.g. *yr 06* = 2006) then press the green **OK** button to confirm.

The date is now stored.



- Use the \ominus \oplus or \ominus buttons to set the correct time then press the green **OK** button to confirm. Each press of the buttons will change the time by one minute and holding them down will change the time slowly at first and get progressively quicker.



Note: If this mode is entered accidentally then press the **AUTO**, **MAN** or **OFF** buttons to exit.

STEP 3: Running the Built-in Heating Program

The thermostat is now ready for operation. Press the **AUTO** button and the built-in heating program will start running. **Note:** The built-in heating program has been designed to provide normal comfort requirements, but if you want to customise the settings please see the next section '**Programming the CM701**'.

The Built-in Heating Program

The built-in heating program has 4 temperature level changes that can be set between 3.00am and 2.50am the following day - allowing you to maintain the evening temperature after midnight. Each temperature level can be set between 5°C and 35°C, and adjusted in 0.5°C increments. The factory default program for heating is as follows.

Period	1	2	3	4
Time	6:30	8:00	18:00	22:30
Temperature	21°C	18°C	21°C	16°C

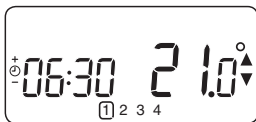
Reviewing the Heating Program

To review or edit the heating program use the **PROGRAM** (◀) or (▶) buttons to navigate between the 4 individual programming periods.

Modifying the Heating Program

To change the heating program:

a. Press either of the **PROGRAM** (◀) or (▶) buttons to enter the programming mode. The time / temperature settings for period (1) will be flashing as shown. The active period is highlighted by a flashing square around the numbers at the bottom of the screen.



b. To adjust the period start time use the (⏪) (+) or (⏩) (-) buttons, the display will stop flashing and the 'OK?' indicator will be displayed. Holding the button down will change the time quickly.

Note: If you are pressing the (⏪) (+) or (⏩) (-) buttons and the display flashes the next period, it means the next period will be pushed forward.

c. Once the required time is reached press the green (OK) button to confirm.

Note: If the original time setting did not require adjustment press the green (OK) button to move to step 'd'.

d. The temperature setting for period (1) will now be flashing. To adjust this press the (▲) (▲) or (▼) (▼) buttons and confirm the setting again by pressing the green (OK) button.

e. The next time and temperature period will now be active. Adjust this by repeating steps b - d above until all 4 periods are set or press the **AUTO** button to run the program as set, at any time.

Disabling / Enabling Time Periods

The thermostat has 4 periods that can be programmed, but you may not need all of these switch points for your heating requirements. Therefore, any period from 2 to 4 can be removed from (or returned to) the heating program profile.



To disable or enable time periods:

a. To disable unwanted periods go to the desired period (2 to 4) using the **PROGRAM** (◀) or (▶) buttons to navigate, ensure the correct period is highlighted with the flashing square symbol. Press and hold the (⏸) button for at least 2 seconds and the display will indicate the period has been removed from the program.

b. To enable periods again follow the same procedure as above, navigating to the already disabled period. To enable this period again press and hold the (⏸) button for at least 2 seconds.


Choosing the Operating Mode

The thermostat can operate in three different modes: Automatic, Manual or Off. To set the operating mode press either of the **AUTO**, **MAN** or **OFF** buttons. The screen indicates which mode is currently active by displaying **AUTO**, **MAN** or **OFF**.






- **AUTO (automatic)** mode sets the thermostat to follow the built-in temperature program (default or personalised). Operating the thermostat in this mode is the best way to maintain a high level of temperature comfort whilst maximising your energy savings.
- **MAN (manual)** mode sets the thermostat to act as a simple thermostat with a fixed setpoint throughout the day. The setpoint can be adjusted from 5°C to 35°C by using the  or  buttons. The thermostat will continue to maintain this temperature until another operating mode or temperature is selected.
- **OFF** mode sets the thermostat to control to a minimum temperature setting of 5°C (default) that acts as a frost protection measure for your home.

During Normal Operation

• Temperature Enquiry




In **AUTO**, **MAN** and **OFF** operating modes the thermostat will display the current room temperature. To review the programmed '**target**' temperature (the temperature which the thermostat is trying to maintain) press the  button. This 'target' temperature value will be displayed flashing for 5 seconds before returning to the current room temperature value.

• Temperature Override

During normal operation (**AUTO** mode) the programmed temperature can be adjusted manually by pressing the  or  buttons or the  button. The 'target' temperature will be displayed and flash for 5 seconds - during this time the  or  buttons can be used to modify the set value.

Note: This temperature override is cancelled at the next programmed temperature change.

Adjusting the Time

To adjust only the time during normal operation use the  or  buttons to adjust the time and press the green  button again to confirm any changes.

Using the Special Features

- **Display Backlight**

The CM701 has a backlit display that will illuminate when a button is pressed for easier viewing of the display in low light conditions.

- **SERVICE indicator**

Note: This option only works if activated by your installer.

The 'SERVICE' indicator is displayed at set intervals as a reminder that your heating system requires a routine check. Please call your installer to arrange a maintenance visit.

The 'SERVICE' indicator will remain on the display of the CM701 until it is either reset or disabled by your installer. The CM701 and heating system will continue to operate as normal.






- **Automatic Summer/Winter Time Change**

The CM701 has a built-in Automatic Summer/Winter Time Change feature that will automatically adjust the clock forward or backward by one hour for 'Daylight Saving Time'. This is carried out on the last Sunday of March and October each year.


- **Optimum Start**

Optimum Start is a program which ensures that the optimum temperature conditions are achieved at the required times. This is an Energy Efficiency feature that adjusts the start time of your heating system depending upon how cold it is. For example, on cold days your heating system will be started earlier to ensure that your home is warm when you get up (at the target temperature) and on warmer days the heating system will be started later to save energy. So, if the Optimum Start Feature is used, then the time / temperature settings which are entered into the thermostat should be set to when you want to be warm by and not when you want the heating system to start.



Symptom	Remedy
Blank Display (Power Loss).	<p>Check batteries are installed by removing the battery cover.</p> <p>Check batteries have been installed in the correct orientation.</p> <p>Replace the batteries.</p>
Display shows flashing  symbol.	<p>The batteries in the thermostat are low on power - Replace the batteries.</p>
Display shows  symbol.	<p>A fault has occurred in your heating system. Remove and re-insert the batteries.</p> <p>If the  symbol does not clear after a few minutes contact your installer.</p>
Display shows the word ' SERVICE '	<p>Your installer has set a scheduled maintenance alert period on your CM701 as a recommendation that your heating system should receive a routine inspection.</p> <p>Call your installer to arrange a maintenance visit.</p> <p>Note: The CM701 and heating system will continue to operate as normal.</p>

FAQ's

How do I change the batteries on the thermostat when they run out?

The thermostat constantly monitors the battery power level, which typically lasts for about 2 years before needing replaced. When the power is running low a flashing  symbol will be displayed on the screen. To change the batteries follow the steps in the above section ('**STEP 1: Installing the Batteries**' on page 3), replacing the used batteries with new ones in Step c. Note: While changing the batteries your program settings will be stored but you may need to adjust the time settings to be correct.

How do I set one temperature for the whole day?

To operate as a simple thermostat with one temperature throughout the day, select the manual operating mode by pressing the **MAN** button. Adjust the temperature by pressing the  or  buttons - this can be set anywhere from 5°C to 35°C in 0.5°C steps. The thermostat will continue to maintain this temperature until another operating mode is selected or the temperature is adjusted.

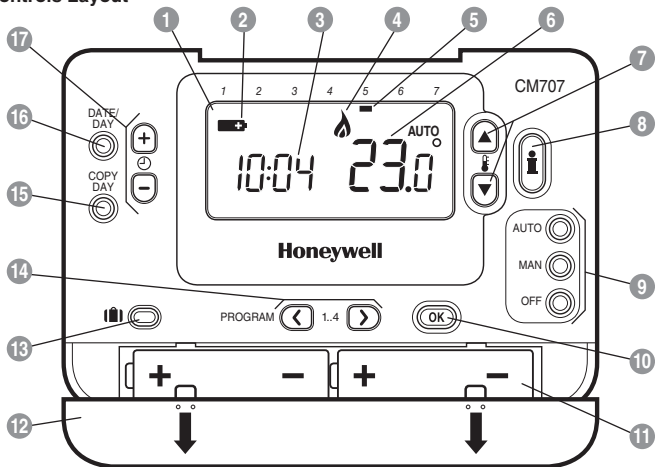
Description

The Honeywell CM707 is a programmable room thermostat designed to control your heating system efficiently, providing comfortable temperatures when you are at home and energy savings when you are away. The following instructions explain how to program and use the thermostat to provide the most home comfort at the least cost.

Features

- Ergonomic user interface featuring an 'OK-button'.
- Large LCD (Liquid Crystal Display) Screen with backlight.
- 7-day heating program to match your lifestyle, whilst maximising energy savings.
- 4 independent temperature levels per day (from 5°C to 35°C).
- Holiday button saves energy by letting you reduce the temperature for 1 to 99 days.
- Automatic Summer/Winter Time Change.
- Optimum Start to achieve the right temperature at the right time.
- Built-in Memory holds the user program indefinitely.

Controls Layout



- | | | |
|-------------------------|------------------------------|----------------------------|
| 1 LCD Screen | 7 Temperature Change Buttons | 13 Holiday Function Button |
| 2 Battery Low Indicator | 8 Temperature Enquiry Button | 14 Program Buttons |
| 3 Time Display | 9 Operating Mode Buttons | 15 Copy Day Button |
| 4 Burner On Indicator | 10 Green OK Button | 16 Set Date/Day Button |
| 5 Day Indicator | 11 Battery Compartment | 17 Time Change Buttons |
| 6 Temperature Display | 12 Battery Cover | |

This section shows you how to setup and run the thermostat in 3 simple steps:

STEP 1: Installing the Batteries

Note: Please follow the instructions in this section only if the thermostat screen is blank (no symbols or digits are displayed). If the room temperature is already displayed move on to **Step 2: Setting the Date and Time**.

To install the Batteries:

- Lift up the front cover of the thermostat to reveal the battery cover and product controls.
- Remove the battery cover by pressing down and sliding out.
- Insert the 2 x AA LR6 Alkaline Batteries supplied with the thermostat, ensuring the correct orientation (see '**Controls Layout**' on page 8).
- After a short pause the thermostat will display information on the screen and is now ready for use.
- Replace the battery cover by sliding it firmly back into the front of the thermostat.

STEP 2: Setting the Date and Time

To set the Date and Time:

- Press the **DATE/DAY** button to begin setting the date. When you set the date for the first time after the batteries are inserted, the display will show:



Press the \ominus \oplus or \ominus buttons to set the current day of the month (e.g. *d 01* = 1st day of the month) then press the green **OK** button to confirm.

- Press the \ominus \oplus or \ominus buttons to set the current month of the year (e.g. *m 01* = January) then press the green **OK** button to confirm.



- Press the \ominus \oplus or \ominus buttons to set the current year (e.g. *yr 06* = 2006) then press the green **OK** button to confirm.

The date is now stored and the Day Indicator will be displayed under the current day of the week (e.g. 1 = Monday, 2 = Tuesday, etc.)



- Use the \ominus \oplus or \ominus buttons to set the correct time then press the green **OK** button to confirm. Each press of the buttons will change the time by one minute and holding them down will change the time slowly at first and get progressively quicker.



Note: If this mode is entered accidentally then press the **AUTO**, **MAN** or **OFF** buttons to exit.

STEP 3: Running the Built-in Heating Program

The thermostat is now ready for operation. Press the **AUTO** button and the built-in heating program will start running. **Note:** The built-in heating program has been designed to provide normal comfort requirements, but if you want to customise the settings please see the next section '**Programming the CM707**'.

The Built-in Heating Program

The built-in heating program has 4 temperature level changes per day that can be set between 3.00am and 2.50am the following day - allowing you to maintain the evening temperature after midnight. Each temperature level can be set between 5°C and 35°C, and adjusted in 0.5°C increments. The factory default program for heating is as follows.

Monday to Friday (Day 1 to 5)

Period	1	2	3	4
Time	6:30	8:00	18:00	22:30
Temperature	21°C	18°C	21°C	16°C

Saturday & Sunday (Day 6 & 7)

Period	1	2	3	4
Time	8:00	10:00	18:00	23:00
Temperature	21°C	21°C	21°C	16°C

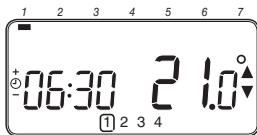
Reviewing the Heating Program

To review or edit the heating program use the **PROGRAM** (◀) or (▶) buttons to navigate between the 4 individual programming periods for that day. Use the **DATE/DAY** button to step through each day of the week, so the complete 7 day heating program can be reviewed or edited.

Modifying the Heating Program

To change the heating program:

- Press either of the **PROGRAM** (◀) or (▶) buttons to enter the programming mode. The time / temperature settings for period **1** on Monday (Day 1) will be flashing as shown. The active period is highlighted by a flashing square around the numbers at the bottom of the screen and the selected day is shown with the day indicator.



- To adjust the period start time use the (⊖) (+) or (-) buttons, the 'OK?' indicator will be displayed to confirm the change. Holding the button down will change the time quickly.

Note: If you are pressing the (⊖) (+) or (-) buttons and the display flashes the next period, it means the next period will be pushed forward.

- Once the required time is reached press the green (OK) button to confirm.

Note: If the original time setting did not require adjustment press the green (OK) button to move to step 'd'.

- The temperature setting for period **1** on Monday (Day 1) will now be flashing. To adjust this press the (▲) or (▼) buttons and confirm the setting again by pressing the green (OK) button.
- The next time and temperature period will now be active. Adjust this by repeating steps b - d above until all 4 periods are set for Monday or press the **AUTO** button to run the program as set, at any time.

You now have a choice of how to set the program for the next day:

- f. i) Press the **COPY DAY** button to copy Monday's program into Tuesday. The display will go blank apart from the 'non flashing' day indicator, which indicates the day copied and the 'flashing' target day to copy the program to. To accept this day press the green **OK** button. To select a different target day press the **DATE/DAY** button until the 'flashing' day indicator is under the required day, then accept it by pressing the green **OK** button. **Note:** *Once the target day is confirmed it becomes the day that is copied if the **COPY DAY** button is pressed again.*

OR





- ii) Press the **DATE/DAY** button to move the day indicator to Tuesday (Day 2). The program for that day can then be adjusted by following steps **b to e**. Programs for the remaining days can be set in the same way, using the **DATE/DAY** button to move to the next day.

To exit the programming mode select the desired operating mode by pressing the **AUTO**, **MAN** or **OFF** buttons. **Note:** *To run the adjusted program select the **AUTO** mode.*

Disabling / Enabling Time Periods



The thermostat has 4 periods each day that can be programmed, but you may not need all of these switch points for your heating requirements. Therefore, any period from 2 to 4 can be removed from (or returned to) the heating program profile.

To disable or enable time periods:

- To disable unwanted periods go to the desired period (2 to 4) using the **PROGRAM**  or  buttons to navigate, ensure the correct period is highlighted with the flashing square symbol. Press and hold the  button for at least 2 seconds and the display will indicate the period has been removed from the program.
- To enable periods again follow the same procedure as above, navigating to the already disabled period. To enable this period again press and hold the  button for at least 2 seconds.


Choosing the Operating Mode

The thermostat can operate in three different modes: Automatic, Manual or Off. To set the operating mode press either of the **AUTO**, **MAN** or **OFF** buttons. The screen indicates which mode is currently active by displaying **AUTO**, **MAN** or **OFF**.






- AUTO (automatic)** mode sets the thermostat to follow the built-in temperature program (default or personalised). Operating the thermostat in this mode is the best way to maintain a high level of temperature comfort whilst maximising your energy savings.
- MAN (manual)** mode sets the thermostat to act as a simple thermostat with a fixed setpoint throughout the day. The setpoint can be adjusted from 5°C to 35°C by using the  or  buttons. The thermostat will continue to maintain this temperature until another operating mode or temperature is selected.
- OFF** mode sets the thermostat to control to a minimum temperature setting of 5°C (default) that acts as a frost protection measure for your home.

During Normal Operation

• Temperature Enquiry





In **AUTO**, **MAN** and **OFF** operating modes the thermostat will display the current room temperature. To review the programmed '**target**' temperature (the temperature which the thermostat is trying to maintain) press the  button. This 'target' temperature value will be displayed flashing for 5 seconds before returning to the current room temperature value.

• Temperature Override

During normal operation (**AUTO** mode) the programmed temperature can be adjusted manually by pressing the   or the  button. The 'target' temperature will be displayed and flash for 5 seconds - during this time the  or  buttons can be used to modify the set value.

Note: This temperature override is cancelled at the next programmed temperature change.

Adjusting the Time










To adjust only the time during normal operation use the   or  buttons to adjust the time and press the green  button again to confirm any changes.


Using the Special Functions

• HOLIDAY Function

The holiday function allows you to set a constant temperature (default = 10°C) for a specified number of days (from 1 - 99 days). This lets you save energy and related costs when you are away from home, but resumes normal operation on the day of your return.

To set the Holiday function:

- Ensure the thermostat is running in **AUTO** or **MAN** operating modes.
- Press the holiday  button to display the holiday days counter and temperature setting, along with the holiday indicator .
- Press the   or  time buttons to set the holiday time (1 - 99 days) and press the green  button to confirm.
- Press the  or  buttons to set the holiday temperature (5°C - 35°C) and press the green  button to confirm.

The thermostat will now control to the new temperature for the set number of days that your home is vacant. At midnight the holiday counter will be reduced by one until the selected number of days have passed. The thermostat will then return to normal operation as set by the **MAN** or **AUTO** mode. To cancel the HOLIDAY function or to exit the function at any time press the  button a second time.

Using the Special Features

- **Display Backlight**

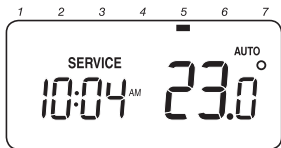
The CM707 has a backlit display that will illuminate when a button is pressed for easier viewing of the display in low light conditions.

- **SERVICE indicator (optional)**

Note: This option only works if activated by your installer.

The 'SERVICE' indicator is displayed at set intervals as a reminder that your heating system requires a routine check. Please call your installer to arrange a maintenance visit.

The 'SERVICE' indicator will remain on the display of the CM707 until it is either reset or disabled by your installer. The CM707 and heating system will continue to operate as normal.






- **Automatic Summer/Winter Time Change**


The CM707 has a built-in Automatic Summer/Winter Time Change feature that will automatically adjust the clock forward or backward by one hour for 'Daylight Saving Time'. This is carried out on the last Sunday of March and October each year.

- **Optimum Start**



Optimum Start is a program which ensures that the optimum temperature conditions are achieved at the required times. This is an Energy Efficiency feature that adjusts the start time of your heating system depending upon how cold it is. For example, on cold days your heating system will be started earlier to ensure that your home is warm when you get up (at the target temperature) and on warmer days the heating system will be started later to save energy. So, if the Optimum Start Feature is used, then the time / temperature settings which are entered into the thermostat should be set to when you want to be warm by and not when you want the heating system to start.

Symptom	Remedy
Blank Display (Power Loss).	<p>Check batteries are installed by removing the battery cover.</p> <p>Check batteries have been installed in the correct orientation.</p> <p>Replace the batteries.</p>
Display shows flashing  symbol.	<p>The batteries in the thermostat are low on power - Replace the batteries.</p>
Display shows  symbol.	<p>A fault has occurred in your heating system. Remove and re-insert the batteries.</p> <p>If the  symbol does not clear after a few minutes contact your installer.</p>
Display shows the word ' SERVICE '	<p>Your installer has set a scheduled maintenance alert period on your CM707 as a recommendation that your heating system should receive a routine inspection.</p> <p>Call your installer to arrange a maintenance visit.</p> <p>Note: <i>The CM707 and heating system will continue to operate as normal.</i></p>

How do I change the batteries on the thermostat when they run out?

The thermostat constantly monitors the battery power level, which typically lasts for about 2 years before needing replaced. When the power is running low a flashing  symbol will be displayed on the screen. To change the batteries follow the steps in the above section ('**STEP 1: Installing the Batteries**' on page 3), replacing the used batteries with new ones in Step c. Note: While changing the batteries your program settings will be stored but you may need to adjust the time settings to be correct.

How do I set one temperature for the whole day?

To operate as a simple thermostat with one temperature throughout the day, select the manual operating mode by pressing the **MAN** button. Adjust the temperature by pressing the  or  buttons - this can be set anywhere from 5°C to 35°C in 0.5°C steps. The thermostat will continue to maintain this temperature until another operating mode is selected or the temperature is adjusted.

...an explanation for householders

A programmable room thermostat is both a programmer and a room thermostat. A programmer allows you to set 'On' and 'Off' time periods to suit your own lifestyle. A room thermostat works by sensing the air temperature, switching on the heating when the air temperature falls below the thermostat setting, and switching it off once this set temperature has been reached.

So, a programmable room thermostat lets you choose what times you want the heating to be on, and what temperature it should reach while it is on. It will allow you to select different temperatures in your home at different times of the day (and days of the week) to meet your particular needs.

Turning a programmable room thermostat to a higher setting will not make the room heat up any faster. How quickly the room heats up depends on the design of the heating system, for example, the size of boiler and radiators.

Neither does the setting affect how quickly the room cools down. Turning a programmable room thermostat to a lower setting will result in the room being controlled at a lower temperature, and saves energy.

The way to set and use your programmable room thermostat is to find the lowest temperature settings that you are comfortable with at the different times you have chosen, and then leave it alone to do its job. The best way to do this is to set low temperatures first, say 18°C, and then turn them up by one degree each day until you are comfortable with the temperatures. You won't have to adjust the thermostat further. Any adjustments above these settings will waste energy and cost you more money.

If your heating system is a boiler with radiators, there will usually be only one programmable room thermostat to control the whole house. But you can have different temperatures in individual rooms by installing thermostatic radiator valves (TRVs) on individual radiators. If you don't have TRVs, you should choose a temperature that is reasonable for the whole house. If you do have TRVs, you can choose a slightly higher setting to make sure that even the coldest room is comfortable, then prevent any overheating in other rooms by adjusting the TRVs.

The time on the programmer must be correct. Some types have to be adjusted in spring and autumn at the changes between Greenwich Mean Time and British Summer Time.

You may be able to temporarily adjust the heating programme, for example, 'Override', 'Advance' or 'Boost'. These are explained in the manufacturer's instructions.

Programmable room thermostats need a free flow of air to sense the temperature, so they must not be covered by curtains or blocked by furniture. Nearby electric fires, televisions, wall or table lamps may prevent the thermostat from working properly.



Honeywell Control Systems Ltd.

Arlington Business Park,

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RG12 1EB

Technical Help Desk: 08457 678999

www.honeywelluk.com

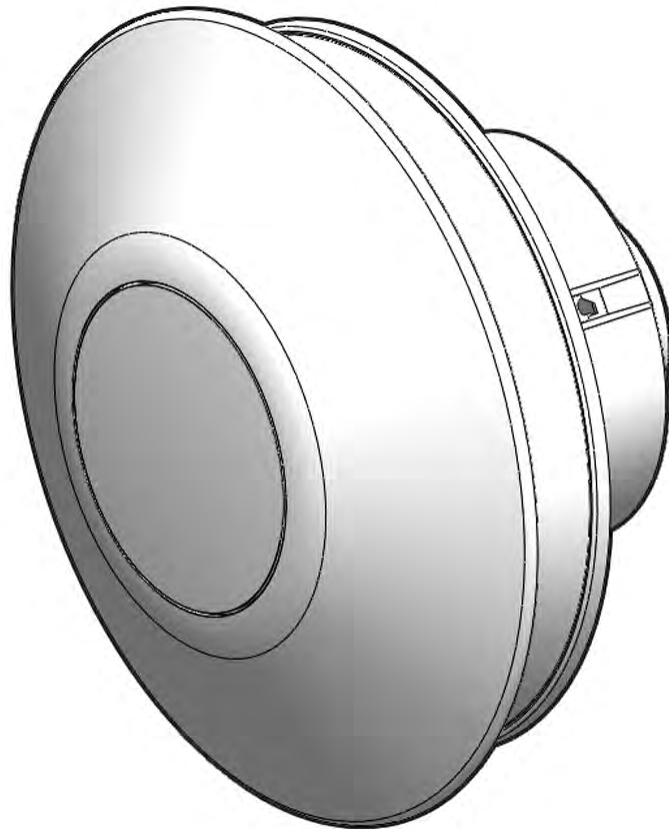
Honeywell

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Unity CV2GIP / CV2SVGIP

Decentralised Mechanical Extract Ventilation (dMEV) User / Homeowner Guide

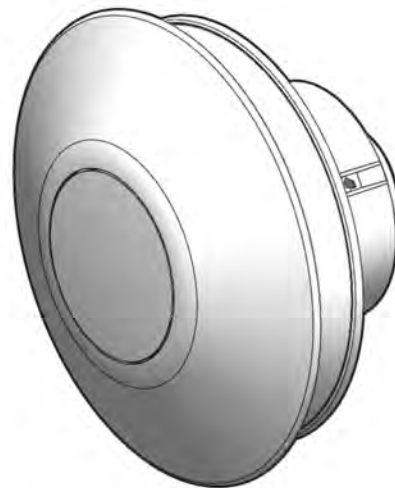


Commissioning and Inspection Record:

Located on page 10 of this guide, should have been completed
by the Commissioning Engineer.

Contents

User / Homeowner Information	Page
1. Ventilation in Your Home	3
2. General Overview	4
3. Homeowner Controls	6
4. Servicing / Maintenance	10
5. Commissioning & Inspection Record	10



To disassemble the unit, disconnect from mains supply and use a screwdriver to segregate the electronic components and motor from the plastic housing. Dispose items in accordance with WEEE.

WEEE Statement

This product may not be treated as household waste. Instead it should be handed to an appropriate collection point for the recycling of electrical and electronic equipment.

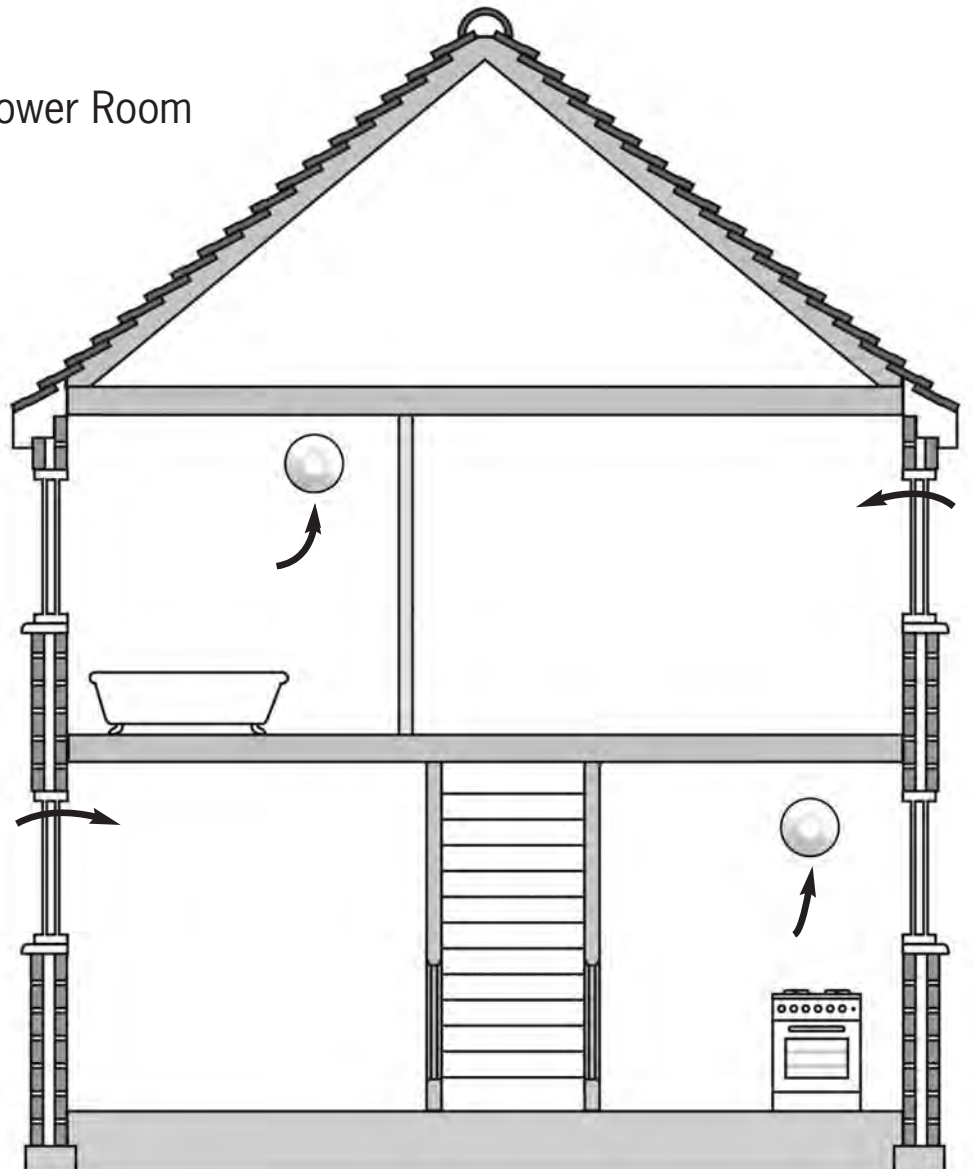
For more detailed information about the recycling of this product, please contact your local council office or your household waste disposal service.



1.0 Ventilation In Your Home

Your home has continuously running ventilation Unity CV2GIP / CV2SVGIP (dMEV) fans installed. This consists of locally sited extract fans that form part of a whole house ventilation approach. These fans extract air on a continual basis from the following areas (defined as wet rooms within Building Regulations) in residential dwellings –

- Kitchen
- Bathroom
- Utility Room
- WC/Cloakroom
- Ensuite Bath/Shower Room



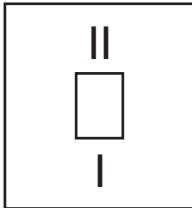
2.0 General Overview

2.1.1 The specific operation of your fan may vary depending on the way it has been installed.

The options are –

Trickle Speed: Operating on a continual basis.

Boost Speed: Activated manually using our GS2 switch or via the room light switch.



GS2 switch markings - Trickle (I) & Boost (II) Operation

Note: Other manufacturers switches may show different markings.

2.1.2 To maintain a healthy indoor environment the Unity CV2GIP / CV2SVGIP includes SMART technology for Over-run Timer (Greenwood TimerSMART™) and Humidity (Greenwood HumidiSMART™).

2.1.3 **Greenwood TimerSMART™** monitors the length of time that there is an occupancy presence within a wet room (via the 'switch-live') and provides a fixed over-run time period to best match the length of time that the 'switch live' is active (as shown below):

Note: The first 5 minutes will not activate an over-run.

Time 'Switch Live' is Active	Over-run Boost Period
0 – 5 minutes	No over-run
5 – 10 minutes	5 minutes
10 – 15 minutes	10 minutes
15+ minutes	15 minutes

This removes nuisance running noise and unnecessary energy wastage typically associated with traditional timers.

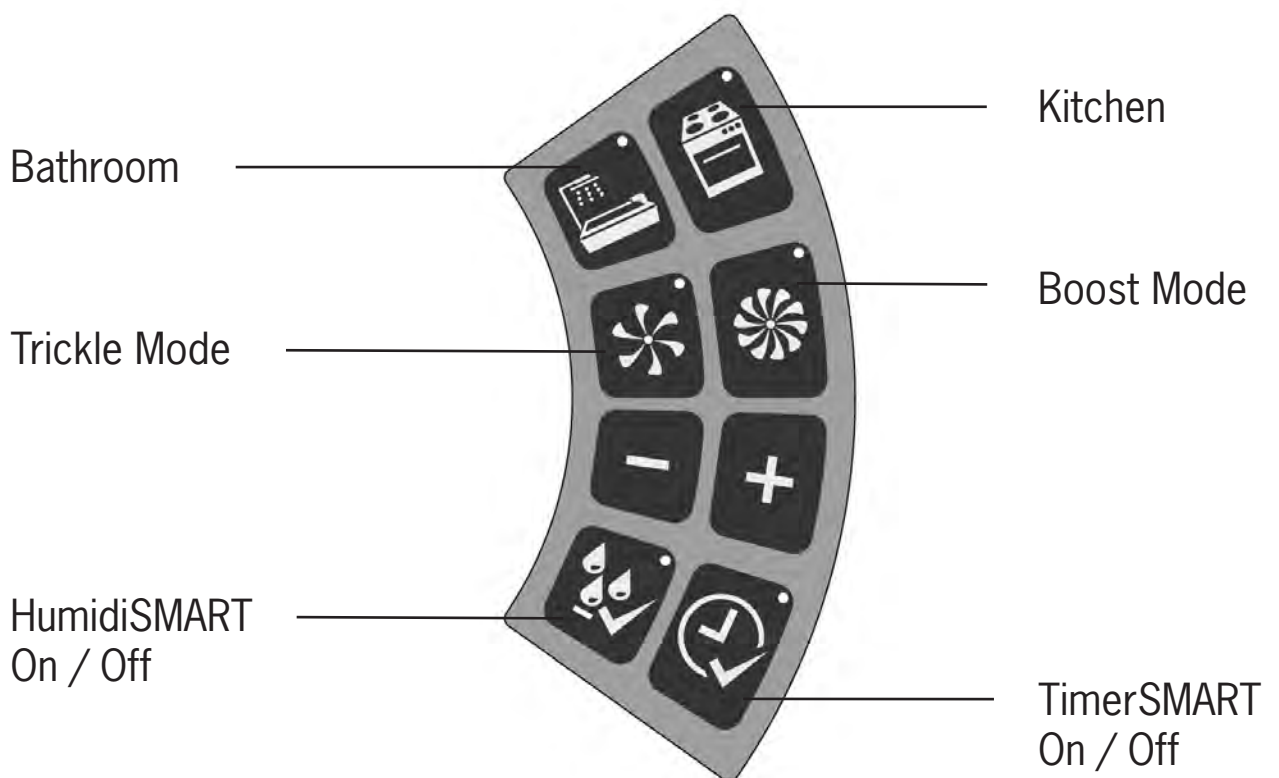
- 2.1.4 **Greenwood HumidiSMART™** monitors the ambient humidity within the wet room environment and looks for short peaks of humidity made by either showering or bathing. This smart technology ensures that your Unity CV2GIP / CV2SVGIP is not on boost for prolonged periods of time, removing nuisance running noise and unnecessary energy wastage typically associated with increases to background humidity which naturally occurs with the changing seasons.
- 2.1.5 To maintain good indoor air quality within the dwelling it is important that the fan remains in operation at all times unless switched off for maintenance. (See section 4.0 Servicing / Maintenance).
- 2.1.6 Depending on when your home was built, background window trickle ventilators may be provided in dry habitable rooms. **Trickle vents should not be installed in the same rooms as the fan, as overall ventilation effectiveness can be reduced.**
- 2.1.7 **Warning:** This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance.
- 2.1.8 Where an open-flued oil or gas-fuelled appliance is installed precaution must be taken to avoid a back-flow of gases into the room.
- 2.1.9 The CV2SVGIP fan must only be installed by using the supplied Safety Extra Low Voltage (SELV) controller corresponding to the markings on the appliance.
- 2.1.10 Cleaning and user maintenance shall not be made by children without supervision.
- 2.1.11 Always isolate fan from mains supply before cleaning. Do not use solvents to clean this fan.

3.0 Homeowner Controls

3.1.1 Controls

This section shows how to operate the Unity CV2GIP / CV2SVGIP control panel.

3.1.2 Control Panel



3.1.3 To View Fan Set Up / Status

Press any button to activate the panel. The current fan set up / status will be shown via the green lights.

Example shows: Bathroom setting selected
Boost mode activated
HumidiSMART feature selected


Note: The Unity CV2GIP / CV2SVGIP is commissioned during installation to provide the correct airflow requirements for your dwelling. Post adjustment of the room setting or airflow speeds is not available.



3.1.4 To Change the HumidiSMART Setting

The HumidiSMART monitors the humidity of the extracted air at all times. A rapid rise in humidity from a bath / shower, should be picked up by the sensor and should cause the fan to automatically switch to Boost mode.

When humidity falls below a calculated threshold close to background levels, the fan should return to trickle mode.

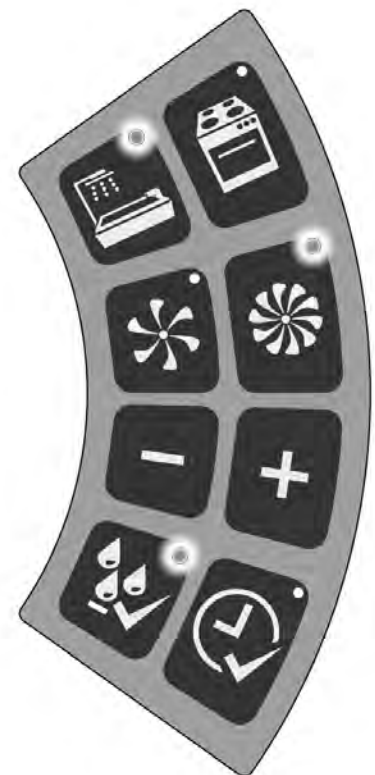
To identify current fan status, press any button to activate the panel. Upon identification of control status, either press [] to activate or deactivate the HumidiSMART. Please note the light should come on to indicate that the function is active.

Factory set to OFF

Option's ON / OFF

Note: After approximately 10 seconds of inactivity, the control panel lights should turn off and save selection settings.

Note: This feature can be activated at the same time as the TimerSMART.



3.1.5 To Change the TimerSMART Setting

The TimerSMART monitors the length of time the unit has been in boost mode via the Switch Live. Once the Switch Live is deactivated the TimerSMART over-run period should continue to run the unit for a calculated time if required.

Note: The first 5 minutes should not activate an over-run.

Time 'Switch Live' is Active	Over-run Boost Period
0 – 5 minutes	No over-run
5 – 10 minutes	5 minutes
10 – 15 minutes	10 minutes
15+ minutes	15 minutes

To identify current fan status, press any button to activate the panel. Upon identification of control status, either press [🕒] to activate or deactivate the TimerSMART. Please note the light should come on to indicate that the function is active.

Factory set to OFF

Option's ON / OFF

Note: After approximately 10 seconds of inactivity, the control panel lights should turn off and save selection settings.

Note: This feature can be activated at the same time as the HumidiSMART.



4.0 Servicing / Maintenance

- 4.1.1 The Unity CV2GIP / CV2SVGIP contains a unique backward curved mixed flow impellor that has been designed to reduce against any build up of dirt. **The fan motor has sealed for life bearings, which do not require lubrication.**
- 4.1.2 Periodic cleaning of the fans front cover and casing can be carried out using a soft damp cloth. Care must be taken when wiping around the control panel.
- 4.1.3 **Warning:** The Unity CV2GIP / CV2SVGIP must be isolated from the mains supply before removing the electronics cover. Do not use solvents to clean this fan.
- 4.1.4 Cleaning and user maintenance shall not be made by children without supervision.
- 4.1.5 Please note that your stored fan settings will not be lost during any interruptions to your fan's power supply.

5.0 Commissioning & Inspection Record

- 5.1.1 This section should be used to record all installation details. The Commissioning Engineer should use the following Parts 1 to 3, to record important information relating to the installation, of which, should be incorporated into the Home Information Pack for the homeowner to keep.
- **Part 1** – **System details and declarations**
 - **Part 2a** – **Installation details**
 - **Part 2b** – **Inspection of installation**
 - **Part 3** – **Air flow measurement test and commissioning details**

Part 1 – System details and declarations

1.1 Installation Address Details	
Dwelling Name/Number	
Street	
Locality	
Town	
County	
Post Code	
1.2 Installation Details	
System Classification	System 3 – Decentralised Mechanical Extract Ventilation
Manufacturer	Zehnder Group UK Limited
Model Number	
Serial Number (where available)	
Location of dMEV fans	

Part 2a – Installation details

2.1 Installation Checklist – General (all Systems)		Tick as appropriate	
Has the system been installed in accordance with manufacturer's requirements?		Yes	No
Have relevant system installation clauses been followed as detailed in Tables 1, 3, 5 and 7 as applicable?		Yes	No
Type of ductwork installed (e.g. rigid, semi-rigid)			
If any deviation from Tables 1, 3, 5 and 7, these should be detailed here.			
Description of installed controls (e.g. timer, central control, humidistat, PIR, etc)			
Location of manual / override controls			

2.2 Installation Engineer's Details	
Name	
Company	
Address Line 1	
Address Line 2	
Telephone Number	
Post Code	
Signature	
Competent Person Scheme / Registration Number (if applicable)	
Date of Installation (completion)	

Part 2b – Inspection of Installation

This section should be completed before completing part 3.

2.3 Visual Inspections – General (all Systems)	Tick as appropriate	
Total installed equivalent area of background ventilators in dwelling?		mm
Total floor area of dwelling?		m ²
Does the total installed equivalent ventilator area meet the requirements given in Tables 5.2a, 5.2b, or 5.2c in ADF?	Yes	No
Have all background ventilators been left in the open position?	Yes	No
Have the correct number and location of extract fans/ terminals been installed that satisfy Table 5.2a in ADF?	Yes	No
Is the installation complete with no obvious defects present?	Yes	No
Do all internal doors have sufficient undercut to allow air transfer between rooms (i.e. 10 mm over and above final floor finish)?	Yes	No
Has all protection/packaging been removed (including from background ventilators) such that system is fully functional?	Yes	No
For ducted systems, has the ductwork installation been installed in such manner that air resistance and leakages kept to a minimum?	Yes	No
Are the correct number and size of background ventilators provided that satisfy ADF?	Yes	No
Has the entire system been installed such that there is sufficient access for routine maintenance and repair/replacement of components?	Yes	No
Upon initial start up, was any abnormal sound or vibration experienced, or unusual smells detected?	Yes	No

2.4 Inspector's Details

Name		
Company		
Address Line 1		
Address Line 2		
Telephone Number		
Post Code		Signature
Competent Person Scheme / Registration Number (if applicable)		
Date of Inspection (completion)		

Part 3 – Air flow measurement test and commissioning details

3.1 Test Equipment

Schedule of air flow measurement equipment used, (model and serial)	Date of last UKAS calibration
1.	

3.2 Air Flow Measurements

Room reference (location of terminals)	Measured Air Flow High Rate (l/s)	Design Air Flow High Rate (l/s) Refer to Table 5.1a ADF	Measured Air Flow Low Rate (l/s)	Design Air Flow Low Rate (l/s) Refer to Table 5.1a in ADF
Kitchen				
Bathroom				
En Suite				
Utility				
Other...				

3.3 Commissioning

Tick as appropriate

Have controls been set-up in accordance with the manufacturer's recommendations?

Yes**No****3.4 Test Engineer's Details**

Name

Company

Address Line 1

Address Line 2

Telephone Number

Post Code

Signature

Competent Person Scheme /
Registration Number (if applicable)

Date of Test

All information is believed correct at time of going to press. All dimensions referred to are in millimetres unless otherwise shown. E&OE.

All goods are sold according to Zehnder Group UK Ltd's Standard Conditions of Sale which are available on request. See website for warranty period details.

Zehnder Group UK Ltd reserves the right to change specifications and prices without prior notice. © Copyright Zehnder Group UK Ltd 2017.

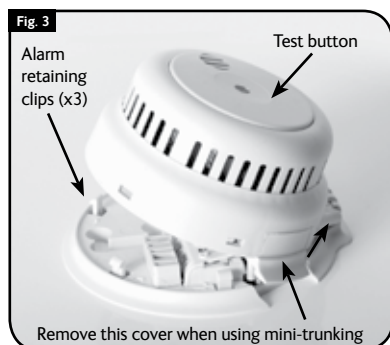
Zehnder Group UK Limited

Watchmoor Point, Camberley,
Surrey, GU15 3AD

Customer Services: +44 (0) 1276 408404
Technical Services: +44 (0) 1276 408402
Email: info@greenwood.co.uk
Web: www.greenwood.co.uk



- Close the alarm making sure the 3 retaining clips are fitting securely. When removing the alarms from its base-plate, use a small flat bladed screwdriver in the slots to push away the clips and lever the alarm away.



- Test the alarm using the large test button (shown above) without mains power and check it sounds at least 3 times and that the red LED flashes.
- Turn on the mains power supply. (RB versions only - the alarm may beep once every minute for around an hour while the battery charge is topped up).
- Check that the Green LED is on and that the red LED flashes once every minute.
- Test the alarm to check that all other interlinked alarms in the system sound. The LEDs on the other alarms will not flash repeatedly during this operation.

IMPORTANT NOTE: Use only the test button to test the alarm weekly. Do not test the alarm with either a naked flame or smoke, this will damage and contaminate the alarm causing nuisance alarms in the future.

6. USER INFORMATION

Protect your Home Against Fire

Contact your local Fire Brigade for a home safety check, this information is free and will identify potential fire hazards in and around your home.

Make sure all occupants of the home know what a fire alarm sounds like. Prove and practise a fire escape plan and arrange a suitable and safe assembly point.

What to Do if the Alarms Sound

Alarms sounds are as follows:

Full alarm indicating smoke and fire	Repeating series of 3 beeps every 4 seconds with flashing light	••• ••• ••• •••
Low Battery	Single beep every minute	• • • •
Test button jammed	One beep every 11 seconds	• • • •
Fault	Double beep every minute	•• •• •• ••

If the full alarm sounds, ensure everyone leaves the building as soon as possible.

- Do not run.
- Do not stop to collect belongings.
- If it is safe to do so, close all windows and doors as you escape to prevent the spread of fire.
- Smoke is the main cause of death from fire. If trapped inside the building, cover your mouth, conserve breath and crawl to safety.

Do not silence a fire alarm until you know the cause of the alarm and when all occupants are safely outside the building. The red LED on the test button of the alarm that has set the system off will be flashing Red once every second. The lights on the other alarms will be flashing once every minute. The system can only be silenced from this alarm.

7. CHANGING THE BATTERIES

CAUTION: Danger of explosion if the battery is incorrectly replaced. Replace only with correct batteries.

The alarm will beep once a minute to indicate the batteries need replacing. If this happens at night press the test button to silence the warning for 10 hours and replace the following day. In the event of a low battery warning on the FH250RB and FH450RB, replace the alarm. The battery is not replaceable. To replace the batteries on the BB and LB versions, isolate mains power to the alarm, release the retaining clips, lower the alarm on its hinge and refer to Fig. 4.

Changing the 3 AAA batteries (BB versions only)

Pull out the battery drawer shown here and replace the 3 AAA batteries taking care to insert the new ones in the correct orientation. Re-fit the drawer and re-close the alarm taking care to ensure the alarm is fitted securely and test the alarm.



Changing the Lithium battery (Model LB versions only)

Pull out the battery drawer shown above and replace with a new battery-pack, complete with new battery and drawer.

Re-fit the drawer and re-close the alarm taking care to ensure the alarm is fitted securely. Test the alarm.

Alarm Maintenance

A regular program of fire alarm maintenance will help to keep your alarm in good working order.

- Test the alarms weekly making sure that all interconnected alarms in the system sound within 10 seconds.
- Vacuum the alarms every six months and wipe the external surfaces with a damp cloth.

8. TROUBLE SHOOTING

Problems are indicated in several ways:

- The alarm beeps twice every minute indicating a malfunction.
- The alarm beeps once every minute indicating a low battery. Replace the battery as above.
- The alarm beeps once every 11 seconds indicating the test button is jammed on. Press the test button to reset.
- The full alarm sounds for no reason. (A repeating series of three beeps with flashing light). Clean the alarm as above.
- The alarm does not sound when pressing the test button.
- The red LED remains steadily on or off. (i.e. does not flash approximately once every minute, when the unit is not in alarm).
- The green LED is off. Inspect for obvious damage. Check that the alarm has been installed in accordance with the instructions, that the alarm is connected and the supply turned on. In the case of repeated nuisance alarms, check that it is free from dust, cobwebs and external contamination from such things as cigarette smoke, drying paint, spray from household aerosols and steam that may invalidate the warranty. If this does not correct the problem, do NOT attempt to repair. Other than the replaceable batteries there are no user serviceable parts. If the alarm is within the warranty period and terms, indicate the nature of the problem and return the unit with proof of purchase to the address at the end of this manual. Units beyond warranty cannot be economically repaired.

9. PRODUCT WARRANTY

Smoke and heat alarms are sensitive life-saving devices. The life of this alarm can be significantly reduced by adverse environments, incorrect location and a failure to regularly clean and maintain it according to the instructions. Incorrect location and a lack of reasonable care may also cause it to malfunction and will invalidate the warranty.

FireHawk guarantees to you, as a purchaser, that the enclosed fire alarm will be free from defects in material, workmanship or design under normal use and service for a period of 6 years.

This Guarantee is not assignable. Our liability to you, under this guarantee is limited to repairing or replacing any part which we find to be defective in material, workmanship or design, free of charge to the customer, upon sending the alarm with proof of date of purchase, postage paid to FireHawk, Units 15/17 Manford Industrial Estate, Manor Road, Erith, Kent DA8 2AJ UK.

The terms of this guarantee will not apply in the following circumstances: If the alarm has been modified, dismantled, contaminated, damaged, neglected or otherwise abused or altered following the date of purchase, or if it fails to operate due to incorrect siting, installation, maintenance or inadequate or over voltage AC electrical power, or damage caused by failure to abide by the instructions supplied no claim under the guarantee will be entertained.

The liability of FireHawk arising from the sale of this alarm or under the terms of this guarantee shall not in any case exceed the cost of replacement of the alarm. In no case, shall FireHawk be liable for consequential loss or damage resulting from the failure of the alarm or the breach of this or any other guarantee, express or implied or for damage caused by failure to abide by the instructions supplied.

This guarantee does not affect your statutory rights.

Fireblitz Extinguisher Ltd.

Units 15-17 Manford Industrial Estate, Manor Road, Erith, Kent DA8 2AJ

Telephone: 01322 342238

Email: Info@fireblitz.co.uk



Fireblitz Extinguisher Ltd

11

FH250BB 0832-CPD-1716

FH250LB 0832-CPD-1718

FH250RB 0832-CPD-1717

EN14604:2005 Smoke Alarm Devices

For Technical Data see product handbook



FEATURING **Fast-Fix**

MAINS POWERED

Smoke & Heat Alarms

MANUAL



Smoke Alarm Models:
FH250BB/FH250LB/
FH250RB



EN14604:2005
971a



Heat Alarm Models:
FH450BB/FH450LB/
FH450RB



BS 5446-2: 2003
KM 579552

READ AND RETAIN THIS USER MANUAL

1. FH250 & FH450 PRODUCT DESCRIPTION

All FireHawk smoke and heat alarms are approved to the most recent and rigorous standards. The photoelectric smoke alarms with their unique X-Profile sensing chamber are approved to EN14604: 2005 and are particularly sensitive to slow smouldering fires typically originating in living rooms, bedrooms and hallways whilst being highly resistant to nuisance alarms. The Heat alarms are approved to BS5446-2: 2003

The alarms are guaranteed for 6 years. However, their lives can be significantly reduced by adverse environments, incorrect location and a failure to regularly clean and maintain them according to the following instructions. Incorrect location and a lack of reasonable care may also cause them to malfunction and will invalidate the warranty.

Product Features

- All models are supplied with a back-up power source. The FH250RB and FH450RB have a rechargeable lithium battery; the FH250LB and FH450LB have a replaceable long life lithium battery and the FH250BB and FH450BB have 3 x AAA replaceable alkaline batteries.
- Alarm Silence - Silence your smoke alarm by momentarily pressing the test button. Ideal in non-emergency situations when nuisance alarms may have been created, for example, by steam. The red light flashes every 12 seconds to remind you that the smoke alarm has been silenced and will automatically reset to quiescent mode in 10 minutes.
- Bespoke software maximizes detection ability and false alarm rejection.
- Power automatically switched on as detector is installed onto its mounting plate and automatically switched off when detector is removed.
- A permanent green LED indicates mains power is connected and switched on.
- Red LED flashes approximately every minute confirming unit is receiving power and ready to detect fire conditions. (Quiescent Mode)
- Low Battery Warning alarm gives one beep every minute.
- Low Battery Warning Silence - Low battery warnings often start at night. Silence the audible warning for ten hours by pressing the test button, thus avoiding removing the alarm from its mounting plate and turning it off. The batteries on non-rechargeable battery alarms can then be replaced when convenient the following day.
- Extra Large Test Button for ease of use, tests sensitivity, circuitry, power supply and alarm sounder.
- Loud 85 Decibel Piezo Electric alarm automatically resets when hazardous condition has passed and chamber is clear.
- Easy Installation - Fixing screws and plugs supplied.
- The built in interconnect facility allows the connection of a combination of up to 15 smoke and heat alarms together so that when one alarm sounds all connected alarms will sound.
- Approved for use in Leisure Accommodation Vehicles

2. CHOICE AND LOCATION OF ALARMS

Optical Smoke Alarms are best at detecting smouldering fires such as those started in electrical equipment, clothing and soft furnishings such as seating, bedding, curtains and carpets.. They are, therefore, ideally suited for living rooms, bedrooms and escape routes in domestic accommodation.

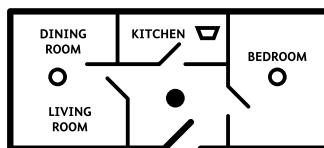
Heat Alarms are most suitable for kitchens, boiler rooms, workshops and garages where dust, dirt and moisture contribute to nuisance alarms in smoke alarms.

NOTE: Heat alarms should NOT be used on walls and in escape routes and should always be interlinked to smoke alarms.

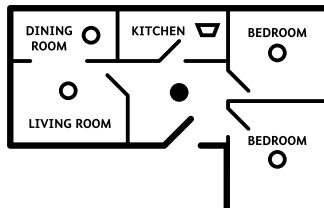
For minimum protection, install at least one smoke alarm on each level of your home. They should be installed in hallways, corridors and all escape routes from the building and within 3 meters of all bedroom doors. All alarms should be interconnected.

Recommended siting of smoke and heat alarms in:

SINGLE STOREY HOME WITH ONE SLEEPING AREA

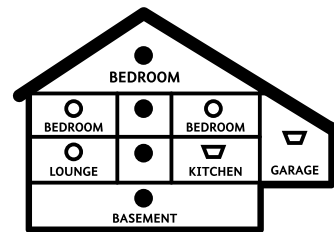


SINGLE STOREY HOME WITH TWO SLEEPING AREAS

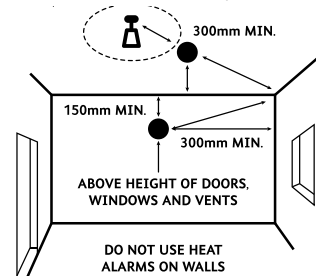


MULTIPLE STOREY HOME WITH MULTIPLE SLEEPING AREAS

- SMOKE ALARMS FOR MINIMUM PROTECTION
- SMOKE ALARMS FOR INCREASED PROTECTION
- ▽ HEAT ALARMS



Recommended position of alarms in a room, corridor or escape route:



Recommended position of alarms on apex ceilings:



3. AVOID THE FOLLOWING LOCATIONS

The life of this alarm can be significantly reduced by adverse environments, incorrect location and a failure to regularly clean and maintain it in accordance with the instructions below. Incorrect location and a lack of reasonable care may also cause it to malfunction and will invalidate the warranty.

- Do not locate near fans or extractors. These can pull smoke and heat away from the alarms.
- Do not install smoke alarms in or near high humidity areas such as showers, bathrooms or kitchens where humidity levels exceed 85% or the room temperature exceeds 40°C or falls below 0°C. These conditions may cause nuisance alarms and damage.
- Do not install in the peak of an "A" frame or sloping ceiling. This may delay smoke and heat reaching them due to the presence of dead air.
- Do not install less than 300mm from walls and light fittings when mounted on the ceiling where heat and dead air may prevent smoke reaching the alarm.
- Do not install smoke alarms in insect infested areas.
- Do not install smoke alarms in areas subjected to heavy concentrations of cigarette smoke that will cause nuisance alarms and the alarm to become contaminated.
- Do not install smoke alarms in boiler rooms and garages where fumes and dust may cause nuisance alarms.
- Do not install smoke or heat alarms on poorly insulated walls and ceilings where cold air boundary layers could delay smoke and heat reaching the alarm.
- Do not install near objects that could prevent smoke and heat reaching the alarm.
- Do not install close to fluorescent light fittings that could trigger nuisance alarms.
- Do not paint the alarm.

The location of the alarms must be in accordance with applicable building regulations, in particular Part B. Further help and guidance can also be found in BS5839 part 6.

4. FURTHER DETAIL ON ALARM

- At least one smoke alarm should be installed in the escape route from all floors of the building.
- The detection element of smoke alarms should be between 25mm and 600mm below the ceiling, or in the case of heat alarms between 25mm and 150mm
- Smoke and heat alarms should be at least 300mm from any wall or light fitting.
- If ceiling mounting is impractical smoke alarms may be installed on walls provided that the area is no longer or wider than 10 metres and the total area does not exceed 50 square metres and that:
 - The detection element is between 150mm and 300mm below the ceiling.

- The bottom of the detection element is above openings such as vents, doors and opening windows
 - They are not mounted close to or above heaters or air-conditioning vents.
- Where smoke alarms are located in a hallway, corridor or landing, the alarm should be no further than three metres from any bedroom door to assist audibility behind closed doors.
 - For maximum protection no point on the ceiling in any room, hallway or corridor should be further than 7.5 metres from any smoke alarm.
 - To give the earliest warning of a developing fire, smoke alarms should be installed in all the rooms of your home and interlinked. (other than those in section 3, AVOID THE FOLLOWING LOCATIONS, point 2 above).
 - Do not install heat alarms in escape routes from the building. Where used in other areas, heat alarms should be no more than 5.3 metres from other heat or smoke alarms.
 - Do not install heat alarms in sleeping areas; for example, bedrooms, nurseries, playrooms or areas where the elderly and disabled may spend long periods of time.
 - Do not install heat alarms on walls.
 - Do not install heat alarms on ceilings with a slope greater than 60° from the horizontal.

5. INSTALLATION PROCEDURE

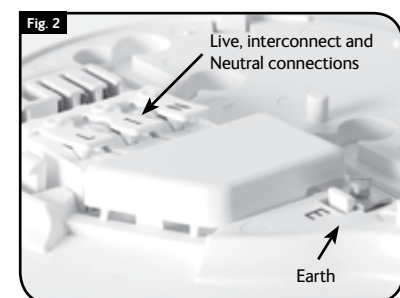
Important Note: Mains powered smoke and heat alarms should be installed by a qualified electrician and in accordance with Part P of the Building Regulations, BS7671 and BS5839 pt 6: 2004 section 15.5, Grade D systems.

WARNING: Storing or installing alarms in temperatures below 5°C and above 30°C, and in low humidity may cause beeping and nuisance alarms when first installed. These will clear after a short time when the alarm has become acclimatised. Extended periods under these conditions will reduce the life of the alarms and invalidate the warranty. Do not expose to dripping or splashing. Disconnect the alarm before dismantling. Interconnect terminals and circuits are not to be accessible and must only ever run to other Interconnect terminals. Do not interconnect to alarms with other brand-namers or made by other manufacturers.

The power supply should be from one of two sources:

- An independent circuit at the dwellings main distribution board with no other electrical equipment connected (other than a dedicated supply failure monitoring device) or:
- A separately electrically protected and regularly used local lighting circuit. Only suitably approved cabling should be used. The alarms should be wired using a minimum of 1mm² "3 core and earth" cable (6243Y); with the Brown to Live (L), Grey to neutral (N) and the Black to Interlink (I). All alarm circuits should be protected by a 6amp over-current device. The maximum total length of wiring should not exceed 250m. Mini-trunking systems can be used via the removable cover shown in Fig.4 below

Installation:



WARNING: Ensure the power supplies are turned off before installing smoke and heat alarms.

- Using the fixings supplied attach the base plate of the alarm to the desired position.
- Connect the supply wires to the connectors - Brown to Live (L), Grey to neutral (N) and the Black to Interlink (I). Be sure to sleeve the bare earth wire and terminate it in the connector shown above.
- BB and LB versions only – Fit batteries in accordance with section "Changing the Batteries" below.



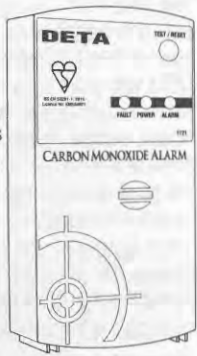
BS EN 50291-1: 2010
Licence No: KM554921

GN2943/R1

CARBON MONOXIDE ALARM

COVERS

- Simple Fitting Instructions
- Location Guide
- Operating Guide
- Basic Safety Tips
- Simple Maintenance Instructions



PLEASE KEEP THIS MANUAL IN A SAFE PLACE

MAINS POWERED,
230-240 VAC (⌚), 50-60 Hz, 7W.
Model: 1121

**IMPORTANT: PLEASE READ
AND RETAIN THIS OWNERS MANUAL**

When installing this alarm for use by others, please leave this manual or a copy with the end user.

WARNING: APPARATUS CONFORMING TO THIS STANDARD (BS EN 50291:2010) MAY NOT PROTECT PEOPLE WHO ARE AT SPECIAL RISK FROM CARBON MONOXIDE EXPOSURE BY REASON OF AGE, PREGNANCY OR MEDICAL CONDITION. IF IN ANY DOUBT, CONSULT YOUR MEDICAL PRACTITIONER.

Important: Not suitable as a smoke, fire, or combustible gas alarm. This device is not suitable for installation in a hazardous location, as classified in BSEN 60079-10:1996.

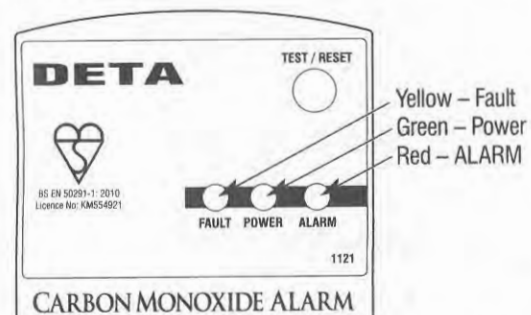
This Carbon Monoxide alarm shall not be seen as a substitute for proper servicing of fuel-burning appliances, or sweeping of chimneys, or as a substitute for either a smoke alarm or a combustible gas alarm.

A. Audible and visual warnings

-Alarm sounder

- •••• •••• A repeating series of 4 beeps with red light – **FULL ALARM**
- •••• •••• A repeating series of 4 beeps WITHOUT LIGHTS – An interconnected alarm is in **FULL ALARM**
- ••• Three short beeps every 60 seconds – **END OF LIFE SIGNAL REPLACE ALARM**
- •• Two short beeps every 60 seconds with yellow light – **FAULT**
- • A single beep every minute with a yellow light flash – **LOW BATTERY**
- •••• Two sets of four beeps with red Light – **WHEN TESTED WITH TEST BUTTON**

Indicator lights



The Green (power) Light – When the alarm is powered by the mains supply the green light will remain on all the time.

End of life indication

Your carbon monoxide alarm will give you an audible and visual warning when it reaches end of life (6 years). The end-of-life signal can be silenced for up to 2 days. Do not disconnect the alarm until a replacement has been purchased.

For your records, please record the following details:

Date purchased:.....

Where purchased:.....

Date installed (Month/Year):

Replace alarm 6 years after installation.
Please write the date in the space provided (Month/Year):

The alarm will also provide an audible end-of-life signal approximately 6 years after installation to remind you to replace the unit.

The end-of-life signal can be silenced for up to 2 days. Do not disconnect the alarm until a replacement has been purchased.

The Red (Alarm) Light – This light will be on if the alarm is detecting carbon monoxide. It will be accompanied by a repeating series of four beeps followed by a 5 second pause.

The Yellow (fault) Light – If a circuitry or sensor fault occurs, the yellow light will stay permanently on and be accompanied by 2 short beeps every 60 seconds. Call Customer Services if this should happen on: +44 (0) 800 1412561.

NOTE 1: On interconnected alarm system with more than one alarm, only the originating alarm will show the red light. All the others will just sound the alarm.

Warning: Do not attempt to open the unit or tamper with the internal circuitry as this may result in the risk of electric shock and/or unit malfunction.

B. What to do if the alarm sounds

If harmful levels of carbon monoxide are detected, your alarm will emit a series of four beeps followed by a short pause; this will be accompanied by a flashing red light. This pattern will be repeated until the alarm is successfully reset. If the alarm is emitting a different pattern of beeps see section A above.

If the alarm sounds, respond as follows:

1. If anyone is experiencing the effects of carbon monoxide poisoning—headache, dizziness, nausea or other 'flu-like' symptoms:—
2. Open the doors and windows to ventilate.
3. Turn off any fuel-burning appliances where possible and stop using them.
4. Evacuate the property leaving the doors and windows open.
5. Ring your gas or other fuel supplier on their emergency number. Record those numbers here:—

Gas Supplier _____

Gas Safe Engineer _____

Hospital/Doctor _____

6. Do not re-enter the property until the alarm has stopped.
7. Get medical help immediately for anyone suffering the effects of carbon monoxide poisoning (headache, nausea), and advise that carbon monoxide poisoning is suspected.
8. Do not use the fuel-burning appliances again until they have been checked by an expert. In the case of gas appliances this must be a Gas Safe registered installer.
9. If no symptoms exist, operate the Test/Reset button and immediately ventilate the home by opening the windows and doors.
10. The alarm can be silenced by pressing the Test/Reset button.
11. If you have interconnected CO alarms in the system, you have to reset the initiating alarm which can be identified by the red alarm light being 'on'.

What to do after resetting the alarm

A full continuous alarm within six minutes after reset confirms ongoing presence of harmful levels of carbon monoxide. If this occurs follow instructions 2 to 8 as per above.

What to do after a carbon monoxide problem has been corrected?

After a carbon monoxide problem has been corrected reset your alarm by pushing the Test/Reset button as per the following instructions.

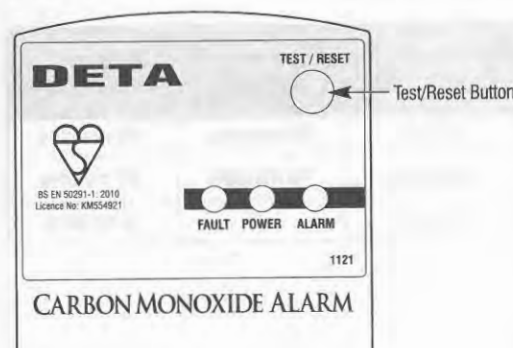
Because CO may dissipate by the time an investigator arrives, it may be difficult to locate the source of CO. DETA shall not be obligated to pay for any carbon monoxide investigation or service call.

Warning: This device will only alarm if carbon monoxide is detected. If not responded to, the presence of carbon monoxide can be fatal.

Caution: This alarm will only indicate the presence of carbon monoxide at the sensor. Carbon monoxide may be present in other areas.

How to reset the alarm

The alarm will reset once the carbon monoxide has dispersed. Should you wish to attempt to do a manual reset press the test/reset button. The unit will re-alarm if the levels of carbon monoxide are still hazardous. To reset after an alarm, press the Test/Reset.



C. What are the possible symptoms of carbon monoxide poisoning?

Carbon monoxide (CO) is odourless, colourless, tasteless and very toxic. When inhaled, it produces an effect known as chemical asphyxiation.

Injury is due to the combining of CO with the available haemoglobin in the blood, which lowers the oxygen-carrying capacity of the blood. In the presence of carbon monoxide, the body is quickly affected by oxygen starvation. The following symptoms are related to carbon monoxide poisoning and should be discussed with all members of the household so that they know what to look for:

Extreme Exposure (A-C) below. Unconsciousness, convulsions, cardio respiratory failure, death.

Medium Exposure (D-G below) Severe throbbing headache, drowsiness, confusion, vomiting, fast heart rate

Mild Exposure (H-J below) Slight headache, nausea, fatigue (often described as 'flu-like' symptoms)

- A - 50% COHb (Permanent Brain Damage – Death)
- B - 45% COHb (Coma and Permanent Brain Damage)
- C - 40% COHb (Collapse)
- D - 35% COHb (Vomiting)
- E - 30% COHb (Drowsy)
- F - 25% COHb (Headache and Nausea)
- G - 20% COHb (Headache)
- H - 15% COHb (Slight Headache)
- I - 10% COHb (None)
- J - 5% COHb (None)

Many cases of reported CARBON MONOXIDE POISONING indicate that while the victims are aware they are not well, they become so disorientated they are unable to exit the building or call for assistance. Young children and household pets may be the first affected. Exposure during sleep is particularly dangerous because the victim usually does not awaken. For most people, mild symptoms generally will be felt after several hours of exposure to 100 ppm of carbon monoxide. Higher levels will lead to more severe symptoms or death.

D. What is carbon monoxide and why should you be concerned?

Carbon monoxide is a dangerous, poisonous gas. It is often referred to as the Silent Killer because it has no odour or taste and it can't be seen. The presence of carbon monoxide inhibits the blood's capacity to transport oxygen throughout the body, which can eventually lead to brain damage. In any enclosed space (home, office, recreational vehicle or boat) even a small accumulation of carbon monoxide can be dangerous.

E. What are the potential sources of carbon monoxide?

Although many products of combustion can cause discomfort and adverse health effects, it is carbon monoxide (CO) that presents the greatest threat to life. CO is produced by the incomplete combustion of fossil fuels such as natural gas, propane, heating oil, paraffin, coal, charcoal, petrol or wood. The incomplete combustion of fossil fuel can occur in any device that depends on burning for energy or heat such as gas fires, central heating boilers, room heaters, water heaters, cookers or grills and in any petrol-powered vehicle or engine (e.g. generator set or lawnmower). Tobacco smoke also adds CO to the air you breathe.

When properly installed and maintained, your natural gas boiler and hot water heater do not pollute your air space with carbon monoxide. Natural gas is known as a 'clean burning' fuel because under correct operating conditions the combustion products are water vapour and carbon dioxide, which are not toxic. Carbon dioxide (CO₂) is also present in the air we exhale and is necessary for plant life). The products of combustion are vented from boilers and water heaters to the outside by means of a flue, duct or chimney.

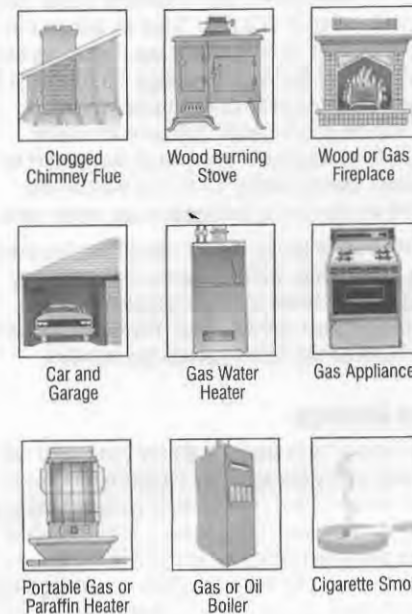
Correct operation of fuel-burning equipment requires two key conditions. There must be:

- An adequate supply of air for complete combustion.
- Proper venting of the products of combustion from the boiler through the chimney, vent or duct to the outside.

Typical Carbon Monoxide Problems

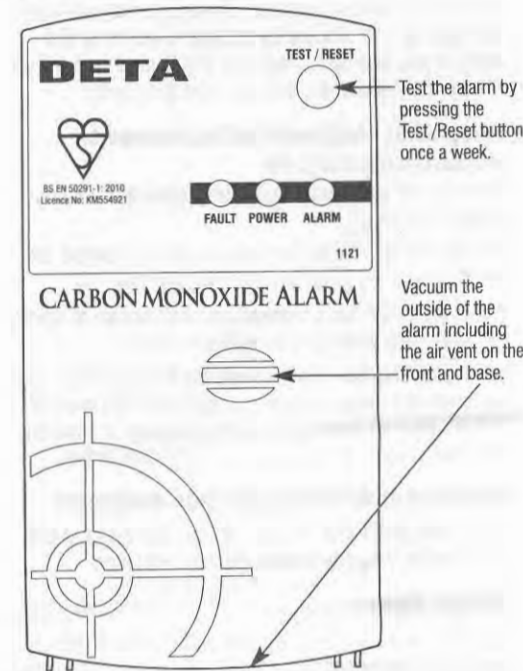
1. Equipment problems, due to defects, poor maintenance, damaged or cracked heat exchangers
2. Collapsed or blocked chimneys or flues, dislodged, disconnected or damaged vents
3. Downdraught in chimneys or flues; this can also be caused by very long or circuitous flue runs, improper location of flue outlets or wind conditions
4. Improper installation or operation of equipment, chimneys or vents
5. Short stays in rented accommodation (e.g. flats, holiday cottages etc)
6. Air tightness of house envelope resulting in a lack of air for the combustion process
7. Inadequate exhaust of space heaters or fuel-burning appliances
8. Vent fans/chimneys competing for air supply

Potential sources of carbon monoxide in your home/office:



F. How can you maintain your alarm?

An alarm is useful only if it works. The following illustration explains proper maintenance.



G. How can you test the alarm?

A green power light indicates that power is supplied. (See previous section). To test the alarm (wait at least ten minutes after installing it or after power failure/switch-off), press, hold and then release the Test/Reset button. A flashing red light will be accompanied by a repeating series of four beeps followed by a 5 second pause. Test weekly.

Test button will only function when alarm is fully installed on the pattern.

H. A Malfunctioning unit

If a circuitry or sensor fault occurs, the yellow light will stay permanently on and be accompanied by 2 short beeps every 60 seconds. Call Customer Services if this should happen.

WARNING: If the green light is off the alarm may be without power and therefore will not indicate a fault condition.

J. Tips for the Homeowner

Energy Conservation and Indoor Air Quality

Two steps that homeowners take to conserve energy may adversely affect indoor air quality. Since air leakage can account for as much as 40% of heat loss, houses are being made more airtight. Reduced air leakage will contribute to higher concentrations of air contaminants from indoor sources and can cause draught reversal in the central heating boiler or fireplace chimney when the demand for air by fireplaces, central heating boilers and exhaust fans exceed the air supplied by leakage area and supply ducts.

Converting from oil to gas, without taking steps to prevent chimney deterioration, will increase the risk of chimney blockage, draught failure and the associated release of combustion products into the house. You should always use properly qualified Gas Safe registered gas installers.

Dirt and Blockage

Never insulate or try to seal up a draught hood, wind cap or exhaust vent on any gas appliance (central heating boiler, hot water heater, cooker, dryer or space heater). Keep area around appliances clean. Don't store anything that could restrict air circulation close to equipment. If you have a gas water heater, make sure that combustion air openings at the bottom of the tank and the opening below the draft diverter (on top of the tank next to the flue duct) remain unblocked. If you have a gas dryer, the exhaust duct must be vented to the outside and have a hood at the end. Check that the exhaust system is not blocked by lint or debris and that the flapper in the hood moves freely.

For all fuel-burning equipment, make sure that vent hoods and pipes are not blocked by insulation, leaves or bird nests. If you have pets, make sure that there is no build up of fur or hair around gas burners or aeration holes.

Using other equipment that consumes or exhausts household air

If you use exhaust fans, a fireplace or other fuel burning heaters or stoves:

Run exhaust fans for just a minute or two. Prolonged use could remove too much air, and it wastes heat.

If your appliance has a conventional flue, beware of running extraction fans when the gas appliance is on.

When your fireplace, coal or wood stove is operating, open a window and close off warm air registers in the room or install a fresh air duct directly to the fireplace or stove so that it won't steal air from your central heating boiler.

Confining or enclosing gas-fired equipment

If you have partitioned off your central heating boiler and water heater, you may need additional ventilation.

Danger Signs

Stuffy, stale or smelly air, back draughts and soot from a fireplace or boiler chimney usually means your home needs more air for proper combustion and healthy living.

For gas-fired equipment, mostly yellow (rather than clear blue) burner flames, a pilot light that keeps going out, or a smell of gas indicate trouble. Turn off the equipment and contact the gas emergency service, number in the telephone directory, under 'Gas'.

K. Additional Safety Tips

DETA CO alarms are manufactured to the highest standards to ensure faultless operation and long life.

The manufacturers do, however, recommend that no CO alarm should be used for more than twelve years, in order to minimise the chance of a fault occurring. This device requires no special disposal procedures and may be disposed of in household refuse. Have your fuel-burning equipment checked periodically for safety and efficiency by a qualified service engineer. If you are adding a wood or coal burning stove to a home, make sure that the stove is properly installed and vented.

Check with the Building Inspectors Department of your local council and always use a qualified (Gas Safe registered) gas installer.

If you have already installed a wood or coal stove without building regulation approval, consult your local Building Control Officer. Some 'do-it-yourselfers' have unknowingly created dangerous conditions.

Do not expose yourself to carbon monoxide through carelessness. Never operate a petrol engine in a confined or enclosed space such as a garage or tool shed. Never use a paraffin stove or charcoal grill in a confined space such as a closed garage or caravan. On brick chimneys inspect and clean-out regularly to ensure that the chimney is free and clear of debris.

Regardless of the fuel your boiler, fireplace or stove uses, your chimney should be inspected from time to time by a competent person. Any 'Efficiency' devices must always be installed by a Gas Safe registered installer. When using paints, household cleaning supplies or similar materials, be sure that you're using them in a well-ventilated area. Following sensible maintenance and safety procedures in the home will give you fuel savings without endangering your health.

Installation



L. Where should you install the alarm?

Which room to put the alarm?

Ideally, you should have an alarm in or near every room that has a fuel-burning appliance. However, if you have more than one appliance, but only one alarm, you should take the following into consideration when deciding where best to put the alarm.

- If there is a fuel-burning appliance in the room where you sleep, you should put the alarm in that room.
- If there is a fuel-burning appliance in the room that you use a lot, e.g. a sitting room, you should put it in that room.
- If you live in a bed-sit put the alarm as far away from the cooking appliances as possible, but near to the place where you sleep.
- If the fuel-burning appliance is in a room not normally used (e.g. a boiler room) put the alarm just outside the room so that you will be able to hear the alarm more easily.

If the alarm is in the same room as the appliance:-

It should be mounted on or close to the ceiling at a height greater than that of any door or window. It should be at least 300mm from any wall, light fitting or any other obstruction. If mounted on a wall it should be at least 150mm from the ceiling. If mounted in a room with a sloped or gabled ceiling it should be at least 1 metre lower than the highest point of the room as long as that is above doors and windows.

If the alarm is in a room that is remote from the appliance, then the alarm should be in the breathing zone of the occupants.

- An alarm should be between 1m and 3m from the fuel-burning appliance.

Do not put a CO alarm:

- Outside the building.
- In close proximity to a vehicle exhaust pipe; this will damage the alarm.
- In or below a cupboard.
- In a damp or humid area.
- Near paint thinners, adhesives, polishes, aerosols, or household cleaning products. Other substances may also affect the reliability of the unit.
- Directly above a sink or cooker.
- Next to a door window or extractor fan or anywhere that it would be affected by draughts.
- In exhaust streams from gas engines, vents, flues or chimneys.
- Where it would be obstructed by curtains or furniture.
- In an area where the temperature could drop below -10°C or rise to above 40°C .
- Where humidity is less than 30% R.H. or more than 90% R.H.
- Where dirt or dust could block the sensor and stop it working.
- Where it could be easily knocked or damaged, or where it could be accidentally turned off or removed.

M. How should you install the alarm?

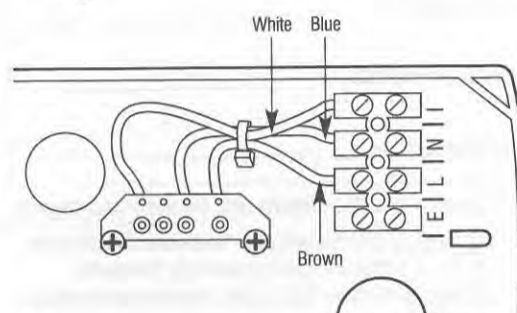
For mains powered models: DETA 1121

This unit is designed for permanent connection to a 230-240 VAC 50-60Hz supply. The maximum current draw is 45mA – select fuse accordingly.

Warning: Wiring should be installed only by a qualified electrician in accordance with the current IEE Wiring Regulations for Electrical Installations (BS7671).

Important: The circuit used to power the alarm must be a 24 hour voltage circuit that cannot be turned off by a wall switch. It is recommended that CO alarms be wired on a separate circuit (ie one with no other lights or appliances) to ensure maximum reliability of mains power supply.

1. ELECTRICITY MUST BE TURNED OFF AT THE DISTRIBUTION BOARD BEFORE COMMENCING ANY WORK IN ORDER TO PREVENT ELECTRICAL SHOCK OR EQUIPMENT DAMAGE.
 2. Select a suitable location in accordance with the guidance in section L of this manual and complying with the requirements set out above.
 3. Remove CO alarm from packaging.
 4. Place pattress at chosen location with the connector block uppermost. Mark and then drill holes for suitable fixings, corresponding to the slots in the base of the pattress.
 5. Bring supply wires from mains into the pattress.
- N.B. The DETA 1121 mains powered alarm is supplied complete with a pattress within which wiring connections are made and does not therefore require a junction box. The pattress is provided with knockouts in the base for entry from the back or an end port knockout for mini-trunking.
6. Secure pattress to mounting surface using suitable fixings.



7. Connect the incoming live wire to the terminal marked L, the incoming neutral wire to the terminal marked N and the incoming green and yellow earth wire into the unused terminal marked E.

This alarm can be interlinked to 11 other CO alarms (12 in all). To interlink to another alarm connect the incoming wire used for the interlink connection to the terminal marked I. The incoming wire must be rated the same as the incoming live and neutral.

NOTE: NO connection should be made to the mains supply earth terminal. Simply secure the incoming earth wire at terminal marked E to prevent contact with live neutral or interlink wires.

8. Carefully offer the alarm up to the pattress ensuring the connection pins locate into the sockets in the pattress.
9. Secure alarm to pattress using securing screws supplied in separate polythene bag.
10. Turn electricity supply back on.
11. Ensure the green power light is on and press the test button. The alarm will sound 2 series of 4 beeps with red light followed by a single flash of the yellow and green lights.
12. If the alarm is interconnected to other CO alarms, pressing the test button on one alarm will cause the others to sound within a few seconds. The red light will only show on the originating alarm.

Warning: This device should remain permanently installed. It should not be used on an intermittent basis, nor as a portable detector for the spillage of combustion products from fuel-burning appliances or chimneys.

N. Technical information

Your alarm utilizes a proprietary Electronic Sensing Technology that permits the unit to vary the exposure time before the alarm sounds based on carbon monoxide concentrations.

The carbon monoxide concentrations and time standards for the alarms are as follows:

Carbon Monoxide Concentration	No alarm before	Will alarm before
50 ppm	60 minutes	90 minutes
100 ppm	10 minutes	40 minutes
300 ppm	—	3 minutes

O. Guarantee Information

Limited Guarantee

Your Deta 1121 Carbon Monoxide alarm, excluding the battery is warranted for five years from the date of purchase against defect in material and workmanship. Units returned to DETA with proof of purchase date during this period as a result of such defects will be repaired, or replaced at DETA's option, without charge. This warranty only covers defects in material or workmanship in normal residential use and does not cover damage resulting from negligent handling, misuse or lack of reasonable care.

YOUR ALARM IS NOT A SUBSTITUTE FOR PROPERTY, DISABILITY OR OTHER INSURANCE OF ANY KIND. APPROPRIATE COVERAGE IS YOUR RESPONSIBILITY, CONSULT YOUR INSURANCE AGENT.

This warranty does not affect a customer's statutory rights in any way.

In the event of a problem with your alarm or you have any questions concerning use and care of the product or concerning service, please consult your owners manual.

If you require any further help or clarification please write to:

DETA ELECTRICAL COMPANY LIMITED
Kingsway House, Laporte Way, Luton, Bedfordshire. LU4 8RJ. UK

www.detaelectrical.co.uk

PLEASE KEEP THIS MANUAL IN A SAFE PLACE

Please note that specifications may be subject to change.

Important:

Please read and retain this owner's manual. When installing this alarm for use by others, please leave this manual or a copy with the end user and ensure they are fully conversant with its siting, operation and maintenance.



HML ANDERTONS

Property & Estate Management

A guide to grounds maintenance and the management of open spaces at **Forge Wood** for council tenants



Who are HML Andertons?

HML Andertons are an experienced estate management business appointed by the developers to manage the open space and communal land at Forge Wood.

What do they do?

They manage the common parts of the development and some of the communal areas relating to the blocks.

The management company

A management company manages the grounds maintenance at Forge Wood and they have appointed HML Andertons to act as managing agent. At present, the directors of the management company are representatives of Persimmon Homes and Taylor Wimpey.

Once building has finished and the site is complete the control of the management company will be handed to the residents of Forge Wood. The directors will be volunteers from the community.

It is not clear yet whether tenants or representatives from Crawley Homes can be directors, but the completion of the neighbourhood is several years away.

Maintenance queries

Q: What are the 'Amenity Areas'?

A: The publicly accessible open space together with all other landscaped areas including any fencing, except for the fencing that falls within the boundaries of your property and any of the other plots. The Play Area, park land and paths all fall under the amenity areas as well as any other areas intended to be used and shared by residents.

Q: How often will the grounds maintenance be carried out and what is included?

A: Fortnightly visits are planned (26 visits per year).

- All communal grassed areas will be cut, strimmed and collected.
- Front gardens to properties are included in the contract. These will be attended to on a monthly cycle along with other management land in the same area.
- Shrubs are to be pruned as and when necessary.
- All paved areas are to be kept clear of rubbish and loose debris.
- Weed killer is to be applied to paved areas regularly and a weed and feed applied to lawns annually.
- All bin areas are to be kept clean and clear of debris.

Reports, including photos, can be sent to HML Andertons for anything that needs urgent attention.

Q: Are the estate roads and street lighting private or adopted by the council?

A: The main spine road into the estate including the footpaths, street lighting and verges are to be considered for adoption by West Sussex County Council once the development is complete.

All other small access roads and parking forecourts/drives are private and fall under the management company lands.

The management company are responsible for the maintenance of the drainage and soakaways on the private estate roads and landscaped areas; keeping these maintained and clear will reduce the risk of flooding. The soakaways will be inspected annually and maintenance carried out as and when necessary to clear any blockages.

Permeable paving will be swept and inspected following a maintenance regime.

Charges

Within your rent you pay a service charge (amenity charge) to cover the cost of providing the grounds maintenance and land management service. This charge will vary each year subject to the budget set by the Managing Group.

HML Andertons then bill Crawley Homes for an amount that covers all the council housing in Forge Wood. This amenity charge is paid by every home in Forge Wood.

If you live in a flat, you will also pay a service charge for the cleaning of the internal communal areas.

Contact Information

For general management issues or queries, please contact the appointed property manager for the site:

Name: Property Management Team

Phone Number: 0330 300 0004

Email: ForgeWood@hmlandertons.com

Hours: 9am to 5.30pm, Monday to Friday

In the event of an emergency - Out of hours - 0345 6012422
