ideal
BOILERS

USER GUIDE

2.   BOILER OPERATION

@Y[YbX
A.   Domestic Hot Water Temperature Knob
B.   Central Heating Temperature Knob
C.   Mode Knob
D.   Boiler Status Display
E.   Bri[T1 ia

EFFICIENT HEATING SYSTEM OPERATION

automatically adjust its output to match the demand for heat. Therefore gas consumption is reduced as the heat demand is reduced.

(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 'MA ' position to meet heating requirements. This will depend on the house and radiators used.

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

WEATHER COMPENSATION

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

modes, provided the power supply to the boiler is always turned on. If the water in the boiler falls below 5ºC, the frost

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3.   SYSTEM WATER PRESSURE

The system pressure gauge (G - see page 3) 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.

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1. Ensure both **Ⓐ** & **Ⓑ** handles (blue) are in closed position (as shown below)
2. Remove the plug and cap and retain.
3.

4. Turn the Domestic Hot Water (DHW) Inlet **Ⓐ** blue handle to

   handle (blue) **Ⓑ**
6. Wait for the pressure gauge to reach 1 to 1.5 bar.
7. Once pressure is reached turn valves **Ⓐ** & **Ⓑ** back to the closed position.

   can be some water spillage at this point.

4.   CONDENSATE DRAIN
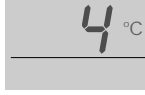
please follow these instructions:

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

6.   POINTS FOR THE BOILER USER

Note.

7. NORMAL OPERATION DISPLAY CODES

DISPLAY CODE ON BOILER	DESCRIPTION
00	The boiler is in standby operation awaiting either a central heating call or hot water demand.
4°	The boiler has a call for central heating but the appliance has reached the desired temperature set on the boiler.
4	The boiler has a call for hot water but the appliance has reached the desired temperature set on the boiler.
4 °C	The boiler is operating in central heating mode.
4 °C	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.

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	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).
	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	1. Check condensate pipe for blockages (refer to Section 4). 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	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).
	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

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,

Features

- &SHPOPNJDJOUFSGBDFBSOP,HCVUUPO
- -BSHF%-JRVJEZTBMQMBZXMFENCBDLMJHIU
- EBZBUJOOHSBNBUZPVSJGFXUZMNBYNJFOGSBWJOH
- JOEFQFOUFNQSBUWFSWFSBZGPSPNUP°$
-)PMJCBZTBOFOFSHLFUJPOGHEVUIFUFNQFSBUPSBP

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

d. After a short pause the thermostat will display information on the screen and is now ready for use.

e. Replace the battery cover by sliding it firmly back into the front of the thermostat.

STEP 4 Setting the Date and Time

To set the Date and Time:

a. 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 ⏱ ⊕ or ⊖ buttons to set the current day of the month (e.g. d 01 = 1st day of the month) then press the green ⓞⓚ button to confirm.

b. Press the ⏱ ⊕ or ⊖ buttons to set the current month of the year (e.g. m 01 = January) then press the green ⓞⓚ button to confirm.

c. Press the ⏱ ⊕ or ⊖ buttons to set the current year (e.g. yr 13 = 2013) then press the green ⓞⓚ 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.)

d. Use the ⏱ ⊕ or ⊖ buttons to set the correct time then press the green ⓞⓚ 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

Modifying the Heating Program

To change the heating program:

a. Press either of the PROGRAM ◁ or ▷
buttons to enter the programming mode. The
UJNFUFNQFSBBUVSGPSGTPFO
.POEB%BZ XJMMMBTIJBH

Operating Modes

Holiday function

The Holiday function allows you to set a constant temperature (lower for fuel economy) for a specified number of days (e.g. whilst you are away on holiday) so that your home will be at a more comfortable temperature ready for your return.

To set the Holiday function:

a. Ensure the ther

t Automatic Summer/Winter Time Change

Symptom	Remedy
#MB%LTQMBXFBTT	$IEBUUBSSJFOTUBMSVFFNEPWUJHI CBUZDFSSWFS
	$IFDCBUUFSWFFFJOOTUBUBJNNFE DPFSDSUSJFOUBUJPO
	3FQMBJDFECBUUFSJFT
%JTQMBXBTIJOH	

Honeywell

3
What is
Carbon Monoxide?

Many people are killed each year, and many more suffer ill health from Carbon Monoxide (CO) poisoning. CO is an invisible, odourless, tasteless and extremely toxic gas. It is produced by appliances and vehicles burning fuels, such as coal, oil, natural/bottled gas, paraf n, wood, petrol, diesel, charcoal etc. CO is absorbed by red blood cells in the lungs in preference to oxygen - this results in rapid damage to the heart and brain from oxygen starvation.

High levels of CO in a house can be caused by:
• Inco[(93a6([( )-7.4 (l93a2da)py o)-5.7af) po4 (o)-5.7afl93a2dansal95.1 (l)-5.8d fu0 4.al-TD 4.8u

3.1 Symptoms of CO poisoning

Table A	
Concentration of CO in Air ppm	Inhalation Time (approx) and Symptoms Developed
35	The maximum allowable concentration for continuous exposure in any 8 hour period according to OSHA *.
150	Slight headache after 1.5 hours.
200	Slight headache, fatigue, dizziness, nausea after 2-3 hours.
400	Frontal headaches within 1-2 hours, life threatening after 3 hours, also maximum parts per million in ue gas (on an a4J2U1 0 Tc t7rT5erdg6.278 0

3.2 How to protect your family against CO

Follow these guidelines to reduce the risk of Carbon Monoxide poisoning.

(1) Know and look out for tell-tale signs that Carbon Monoxide may be present.

These include:
- The CO Alarm warning of abnormal levels.
- Staining, sooting or discolouration on or around appliances.
- A pilot light frequently going out.
- A strange smell when an appliance is operating.
- A naked gas flame which is yellow or orange, instead of the normal blue.
- Family members (including pets) exhibiting the "flu-like" symptoms of CO poisoning describ
  above. If any of these signs are present get the appliance checked out by an expert before fur
  use. If family members are ill get medical help.
(2) Choose all appliances and vehicles which burn fossil fuels such as coal, oil, natural/bottled
  paraffin, wood, petrol, diesel, charcoal etc. with care and have them professionally installed
  regularly maintained.
(3) These appliances must "breathe in" air to burn the fuel properly. Know where the air cosmf(c

(6) Never adjust your own gas pilot lights.

Note: In an interconnected system, the Alarm may also be triggered to sound by another Alarm. In this case, the Alarm will sound but will not flash its red LED alarm indicator. This means that while the Alarm is sounding, it is not the unit actually sensing the alarm event. If you have an Ei1529RC or Ei450 Remote Control installed, press the locate switch to leave just the Alarm that has triggered the system sounding and identify the source and type of the alarm.

Event typeevery 5 sec

The Alarm memory is an important feature of the Alarm where even if the house is unoccupied du
an alarm condition it warns the homeowner that the Alarm has previously detected Fire or CO gas
been in alarm. Table C outlines the indicators that are displayed in the memory mode.

Hush feature

The Alarm has a combined Test/Hush Button. When the alarm sounds, pressing the Test / Hush
will immediately silence the alarm for a period of 10 minutes, if due to heat, or 4 minutes, if due

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4.1 Testing and maintaining your Alarm

Frequent testing of all your Alarms is a requirement to ensure they are functioning correct
Guidelines and best practices for testing are as follows:

1. After the system is installed.
2. Once monthly thereafter.
3. After prolonged absence from the dwelling (e.g. after holiday period).
4. After repair or servicing of any of the systems elements or household electrical works.

(i) Check that the green LED power indicator is on continuously.

(ii) Check also that there are no faults i.e. NO green, yellow or red LED ashing (if this is the case p
see indicator summary table)

(iii) Press the test button for up to 10 seconds and ensure that the Alarm sounds (Note: On initial press the Ei3028 will alarm the fire sound pattern. On second press the Ei3028 will alarm the sound pattern). This tests the sensor, electronics and sounder are working. The Alarm will stop the button is released. Pressing the test button simulates the effect of smoke and/or heat a therefore is the best way to ensure the Alarm is operating correctly. (Refer to indicator summ table if you see Red or Yellow LED flashes).

(iv) Interconnected Alarms only- Test the first unit by pressing the test button for 10 seconds. All the Alarms should sound within 10 seconds of the first horn sounding. After releasing the t button, the local horn will stop sounding immediately and the interconnected Alarms will be hea sounding in the distance for a further 3-4 seconds. This feature gives an audible verification that interconnection is OK. Check all the other Alarms in the same way.

(v) Check the functioning of the mains battery back-up directly after installation and then at lea yearly as follows:

- Turn off the mains power at the distribution board and check that the green indicator light is no

prevent the batteries becoming fully depleted. (This is sometimes done with holiday homes wh are only occupied in the summer).

The Ei3000MRF modules (if required) must be re-fitted to the Alarms and the Alarms must re-attached to the mounting plates when the premises are re-occupied. Ensure to match the origi RF module back to the same Alarm head.

5
What to do in case of FIRE?

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6
What to do in case your Alarm detects Carbon Monoxide?

(i) Open the doors and windows to ventilate the area (if it is safe to do so).

(ii) Turn off all fuel appliances where possible.

(iii) Evacuate the property leaving the doors and windows open.

(iv) Get medical help immediately for anyone suffering the effects of Carbon Monoxide poison (headache, nausea), and advise that Carbon Monoxide poisoning is suspected.

(v) Ring your gas or other fuel supplier on their emergency number. Keep the number in a promin place.

(vi) Do not re-enter the property until the alarm has stopped. (If the Alarm has been silenced pressing the Test/Hush button, wait at least 5 minutes. The Alarm will then check that the has cleared).

(vii) Do not use the fuel appliances again until they have been checked by an expert. In the cas gas appliances this must be a Registered Gas Installer.

The alarm will stop once the CO has cleared.

Pressing the Test/Hush button will silence the alarm immediately for 4min if <150ppm CO. If C still present after 4min, the red LED indicator and horn will turn on again.

Note: When ventilation is provided by leaving the window and doors open, the CO build up n -4.8 (e)0nS TJ EMC /Spa204 e4.3 (a)3.8 (r)-5rtila1( )]T8.7 7td).

7
Troubleshooting
and
Indicator summary
tables

Your Alarm does not sound when you press the Test button	• Check the Alarm is secured correctly on the mounting plate. • Wait 15 seconds after connecting the power before button testing. • Hold button down firmly for at least 10 seconds. • If the horn does not sound, then your Alarm must be returned for repair or replacement - see "GETTING YOUR ALARM SERVICED" sect
Your Alarm sounds for no apparent reason	• Follow the detailed instructions in section 5 and/or section 6 regarding the alarm condition. • Locate the Alarm that sounds and has a flashing red LED. • Identify the alarm type – Fire or CO (Ei3028) •

	• For CO- Ensure there are no fuel burning appliances in the vicinity w

Interconnected Alarms do not all sound	• Hold test button for 10 seconds after the first alarm has sounded to ensure signal is transmitted to all units. • If this is not the case and you have a hardwired interconnection, we recommend you consult a qualified electrician. • If the Alarm is fitted with an RF module for wireless interconnection, check that all Alarms in the RadioLINK system are powered and are house-coded correctly. (see the Ei3000MRF RadioLINK+ module manual)
Pressing the Test/Hush button does not silence the Alarm	Always make sure that you are pressing the Test/Hush button on the Alarm that sounds with the red LED flashing.
Your Alarm chirps/beeps/flashes	In standby mode, the Alarm does not sound, beep, chirp or flash. The only light on is the green power LED. The Alarm automatically monitors the battery, sensor and electronics periodically to ensure that all are satisfactory. If a fault has been found, the alarm alerts the occupier to this via short chirps from its sounder and yellow LED fault indicator flashes every 48 seconds. The alarm will also indicate any faults when the test button is pressed. See indicator summary table on the next pages

| Normal Operation | | | | | | |
Mode / Action	Green LED (Power)	Yellow LED (Fault)	Red LED (Alarm)	Alarm	Icon Display FIRE/CO (Ei3028 only)	Notes
Power up						
Standby						
Testing (pressing and holding Test button)						
Detecting Fire						
Activated via Interconnect						
Pressing Silence Button on Alarm detecting fire				x 10mins		

The Alarm memory is an important feature of the Alarm where even if the house is unoccupied du an alarm condition it warns the homeowner that the Alarm has previously detected Fire or CO gas been in alarm. It is particularly useful in the case of CO leakages which may have occurred whe owner is away from the property - for example, CO leaking from a faulty boiler operating on a tim The memory feature also helps identify the unit and event type which has previously triggered entire alarm system, which can also very helpful after the entire alarm system has gone into al and then stopped, for no obvious reason.

Once the source Alarm has been identified, appropriate action can be taken e.g. In the case of alarm event in memory, investigate any potential sources of CO leaks, or in the case of a fire a event in memory, investigate the cause of nuisance / false alarms by ensuring kitchen or bathr doors are kept closed to prevent very hot air or steam from cookers / showers reaching the heat se on the Alarm, locate the Alarm further away from the source of steam or condensation, replace Alarm if it is thought to be defective or remove the unit in the short term.

The memory feature has two operation modes:
- memory indication for 24 hour period after alarm.
- memory recall on demand

24-hour memory indicators: For 24 hours after alarming, the red LED alarm indicator will flash different rates every 48 seconds (approx) depending on the alarm event type (Fire or CO) and i case of CO, on the levefhe alarm r- see Table C.

Memory recall on demand: To review the memory status at any time, press and hold the test but the red LED alarm indicator will flash in accordance to Table C to convey the alarm event in men if any.

Red LED	Icon Display FIRE/CO (Ei3028 only)

Reset Memory: Hold down the test button for at least 20 seconds. Cover the horn with a cloth to muffle the alarm during this time. Clearing of the memory is indicated by a 1-second-long flash of the red LED alarm indicator. Please note that the alarm memory will also be reset if the Alarm is removed from its mounting plate (switched off).

The Alarm can communicate its status and history through various Led flashes and chirps/beeps. However, a more comprehensive report of all such events is available through the AudioLink download via the App.

Low Battery Backup Fault

If the battery backup supply is depleted, the sounder will give one short chirp with one yellow LED fault indicator flash every 48 seconds. In this case check that the green LED power indicator is on continuously. If it is off, or flashing every 48 seconds, the Alarm is not receiving 230V AC mains power and is being powered by the battery backup. The chirp every 48 seconds indicates that the battery is depleted. The battery is not replaceable. Check fuses, circuit breakers and wiring to determine the cause of the interruption to the mains power. If in doubt, contact a qualified electrician. Once mains power is reinstated, the chirps should cease within 2 hours as the battery charges up. If the chirps

8
Important Safeguards

Limitations of Heat and CO Alarms

- Mains powered Alarms will not work if the mains power supply is off or disconnected and t

How do I operate the unit?

At installation your unit will have been set to run continuously to a level that will adequately ventilate your home for the majority of the day.

However, there will be occasions when the humidity/ moisture levels in your home will rise; this is usually due to activities such as cooking and bathing or showering. During these times your unit has the functionality to increase its extract rates via a boost mode, and remove the excess moisture.

There are a few ways in which the ECO2 system can be set to boost. A housing provider/ housebuilder will determine system settings as part of the installation, but you may override these functions with manual operation. The most common method is via remote switches which may also be provided at the time of install, usually situated in the kitchen and bathroom areas. To increase the extract rates manually simply set the switch to boost, and when you are ready to resume normal operation turn it back off.

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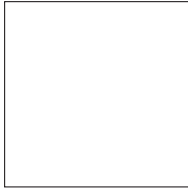
Compact/NIDT user instruction

CALLER ENTRY

1.   When the buzzer sounds, lift the receiver and
      identify who the caller is.

2.   If you wish to allow the caller access then press

Compact VM user instruction

TENANTS USER INSTRUCTIONS

CALLER ENTRY

1. When the buzzer sounds, lift the receiver and identify who the caller is by viewing them on the video monitor.

2. If you wish to allow the caller access then press and release the [button. This will unlock the main entrance door.

3. The red Z K KZW lamp will illuminate when the door is opened.

4. Replace the receiver.
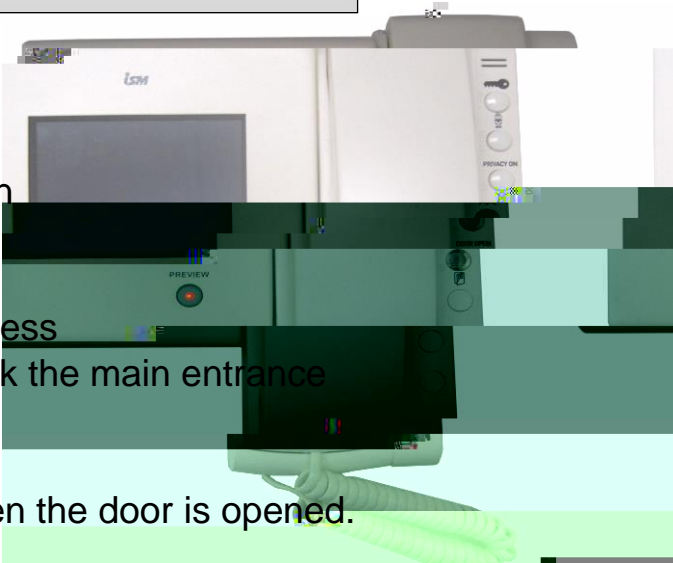
Preview
1. To preview the perspective caller on the video monitor, press the preview button.

Concierge call (If fitted)
1. To call the Concierge office, press and release the button and await a call back

HANDSET ON/OFF (Privacy)

4. / (Ç } µ Á] • Z š } š µ Œ v š Z ‰ Z } v Z K & & [‰ Œ • • š Z Z

   The green lamp will light.

   The phone will now not ring.

5. To turn the phone back Z K, press the Z W , K E K E button & [
   The green lamp will turn off.

6. If the phone is left switched Z K & it will automatically reset to Z K after
   4 to 12 hours depending on settings created

PLEASE NOTE THAT WHEN THE GREEN LIGHT IS ON THEN THE PHONE WILL NOT RING