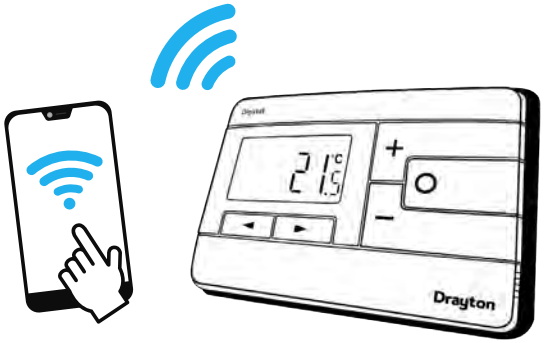
Drayton

by Schneider Electric

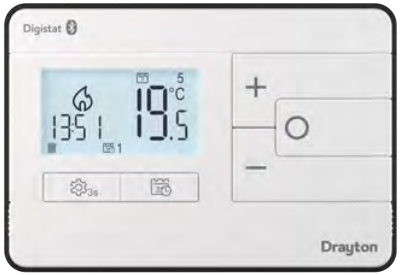
Smart, simple, sustainable

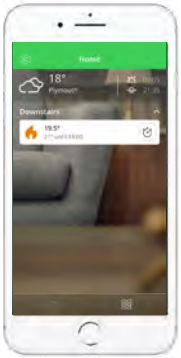
The New Digistat



User guide

Set-up and control





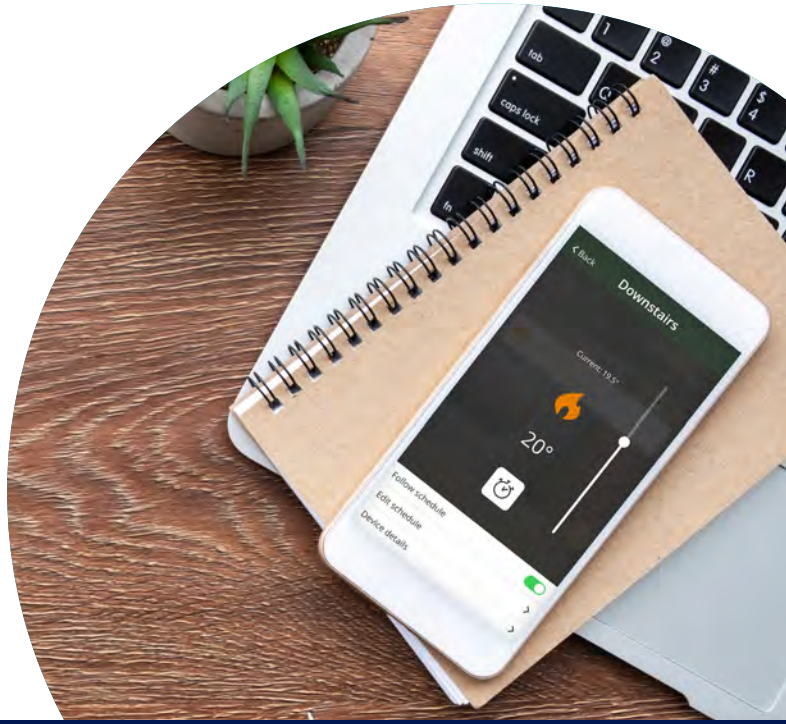
Using the new Drayton Digistat

Drayton's latest generation of wired and wireless Digistat Thermostats bridges the gap between traditional thermostats and smart systems

Providing unparalleled flexibility and the ultimate in control for the homeowner via the app

You can control your heating directly from the Digistat itself using the 5 buttons and the backlit display

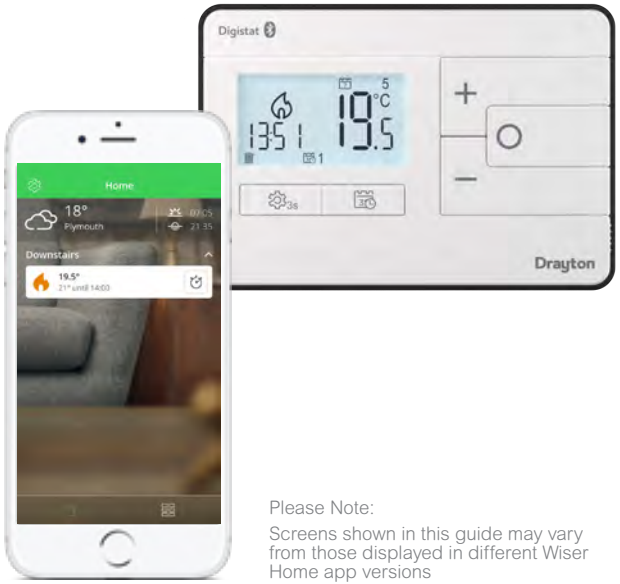
Or if you prefer you can connect your smart phone to the Digistat using Bluetooth and control everything for the palm of your hand



Of course using your Digistat is so much easier if you use your smartphone

With the free smartphone app you can adjust schedules, boost your heating, set a holiday period and set away mode, all from your smartphone in the palm of your hand

With the app downloaded your smartphone connects directly to your Digistat using the phone's Bluetooth technology with no need for home Wi-Fi, internet broadband or cloud connectivity. It's just a simple way to use your Digistat from anywhere in the home (typical Bluetooth range)
The use of the Wiser Home app will need mobile data to be enabled on your smartphone



Please Note:

Screens shown in this guide may vary from those displayed in different Wiser Home app versions

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Schneider Electric is under license. Other trademarks and trade names are those of their respective owners.

Step 1: Download the Wiser Home app

Download the Wiser Home app for your mobile device from the App Store® or Google Play™

- Search for Wiser Home
- Download the Wiser Home app

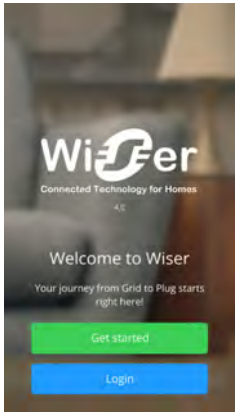
The Wiser Home app guides you through the whole set-up process

System requirements

The Wiser Home app is available for Apple® iOS and Android™ mobile devices. Due to the large number of mobile devices available on the market, compatibility cannot be guaranteed with every model. The mobile device must fulfil the following minimum technical requirements:

Android™ Version 9 or higher
Apple® iOS 12 or higher
Bluetooth version 4.2 or higher

Step 2: Open Wiser Home app



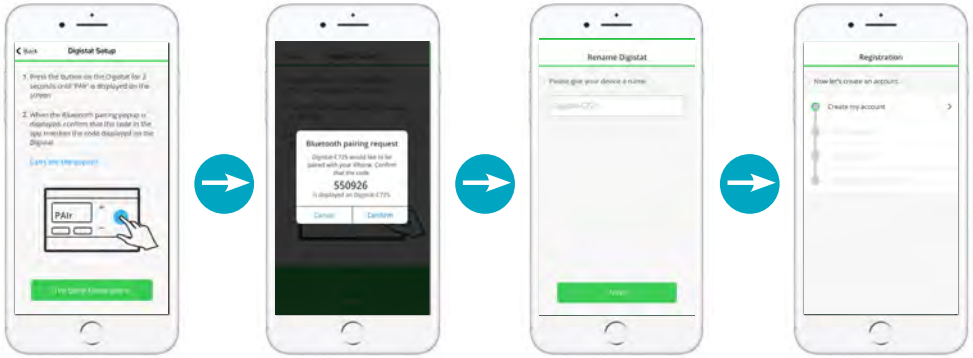
- On the welcome screen select “Get Started”
- Then select Digistat

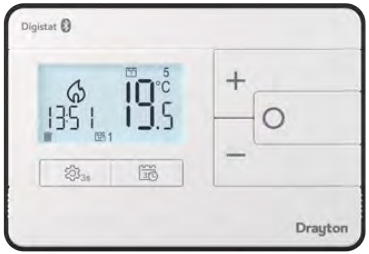
Pairing

Confirming

Renaming

Account creation



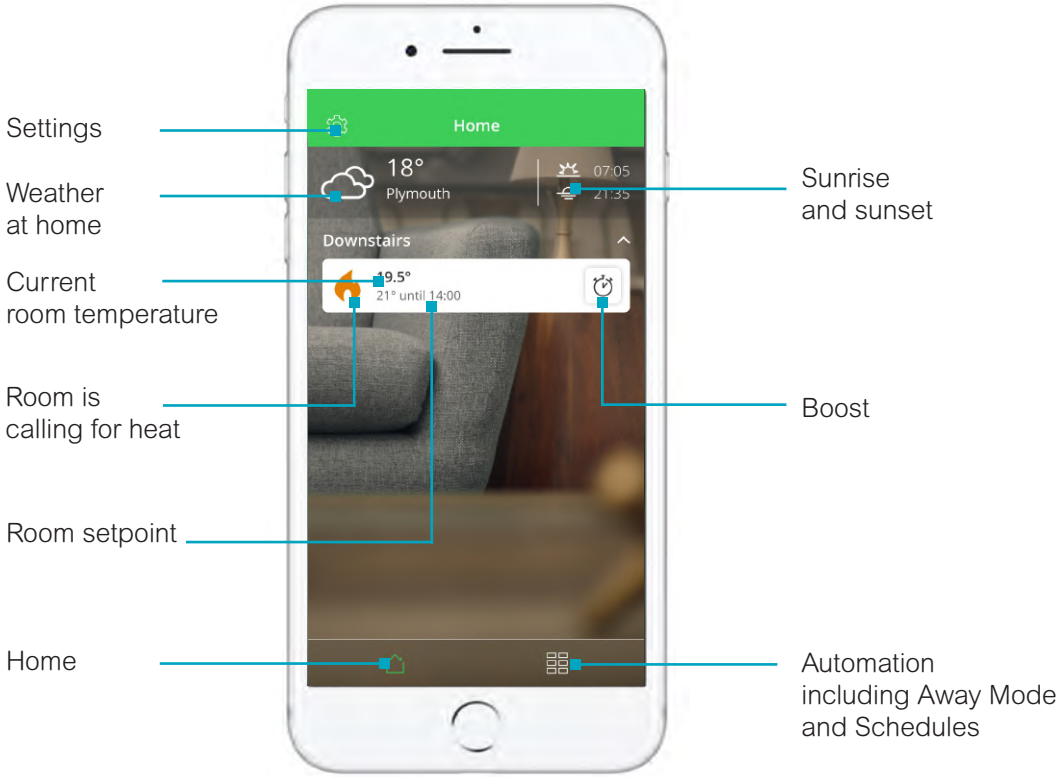


Just follow the instructions in the app…

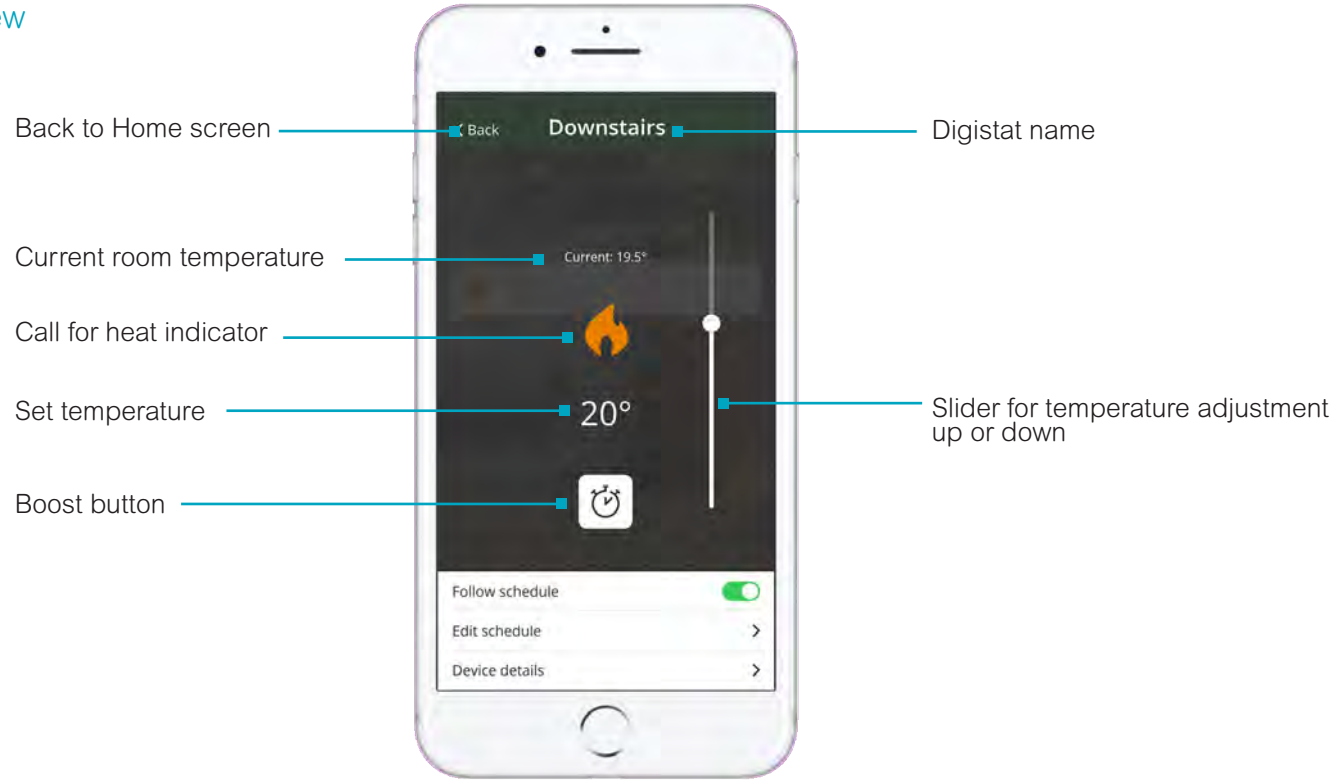
Note that using the Wiser Home app will lock the buttons on the Digistat while the app is open. A lock symbol will appear in the display top left. To go back to using the controls on the Digistat, please close all open apps.

You're done!
Now start playing
with your Digistat…..

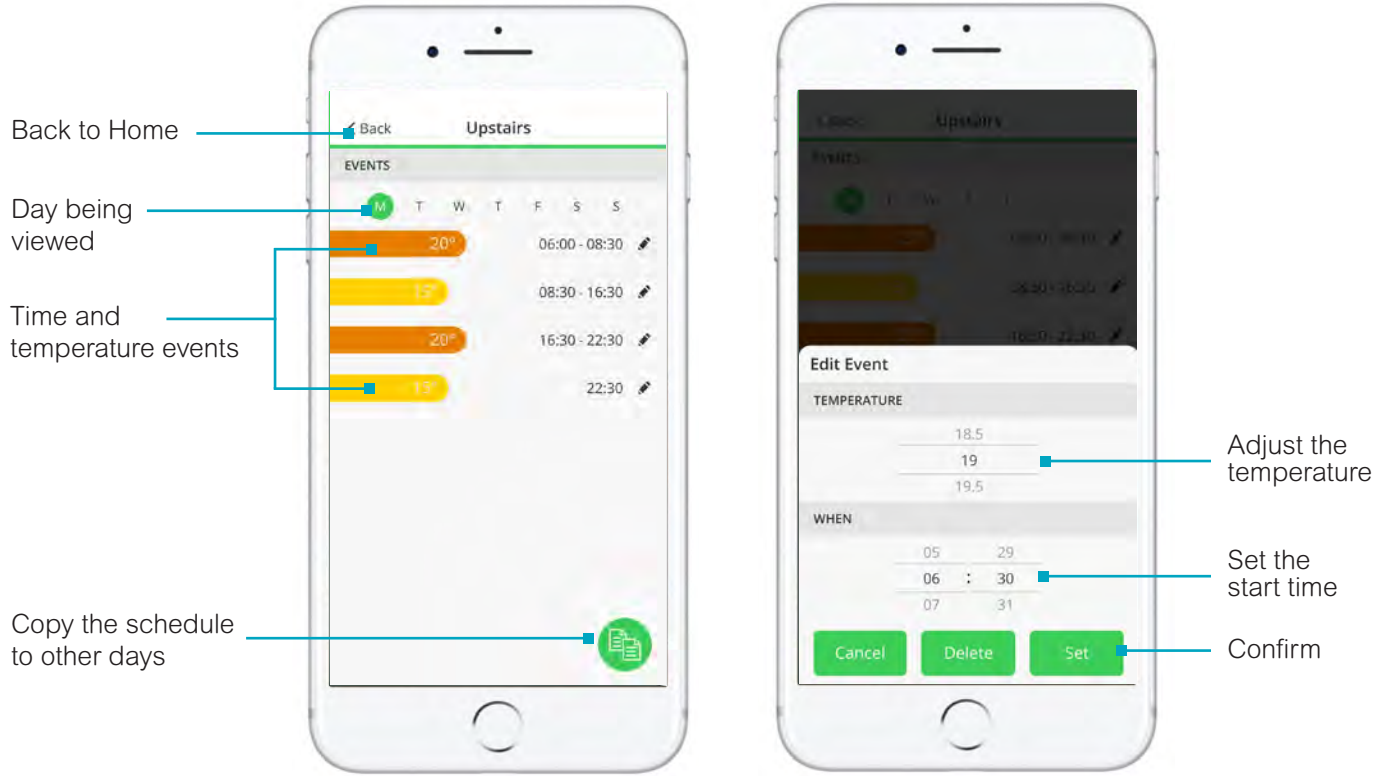
Home screen

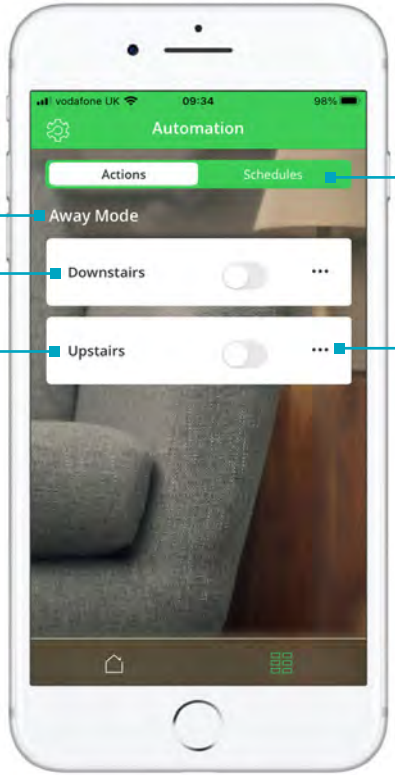

Settings
Weather at home
Current room temperature
Room is calling for heat
Room setpoint
Home
Sunrise and sunset
Boost
Automation including Away Mode and Schedules
Home
18°
Plymouth
07:05
21:35
Downstairs
19.5°
21° until 14:00

Room View


Back to Home screen
Back
Downstairs
Digistat name
Current room temperature
Current: 19.5°
Call for heat indicator
Set temperature
20°
Slider for temperature adjustment up or down
Boost button
Follow schedule
Edit schedule
Device details

The Schedule Screen





Away Mode

Apply the Away Mode on individual or all Digistats

Tap here for schedules

Timed Away Mode
You can set a start time/date and end time/date for your Away Mode here, perfect for when you go on holiday

Away Mode appears in the Automation menu

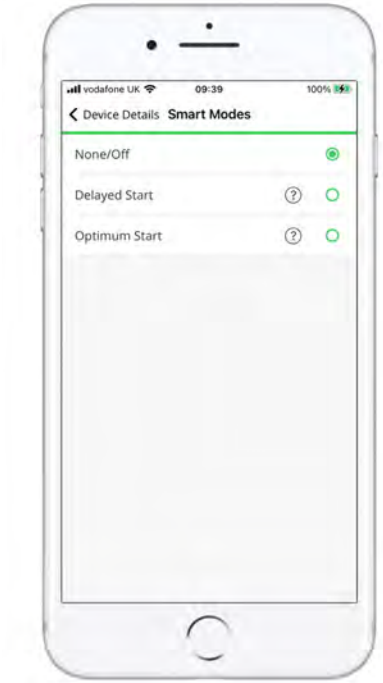
Smart modes help to save you money or to improve comfort levels

Delayed Start

When activated Delayed Start will save you money by delaying start times, effectively adapting your schedule to optimise energy usage based on a learning mode that takes into account the thermal characteristics of your home and the weather forecast

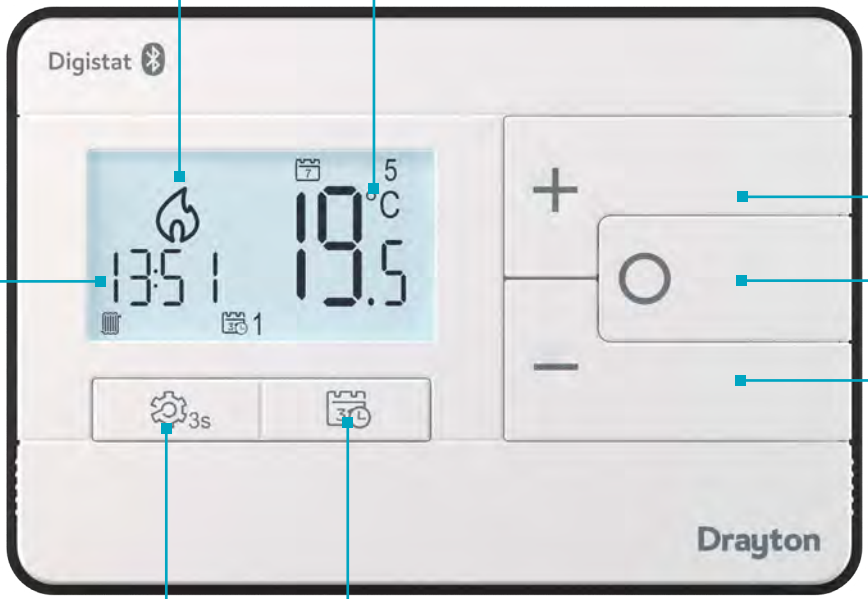
Optimum Start

When activated Optimum Start will improve comfort on colder days when the home takes longer to heat up. This is a learning mode which takes into account the thermal characteristics of your home and the weather forecast, and it will turn on your heating earlier to ensure that the set temperature is achieved by the required time in the schedule



The new Digistat can also be used without the app

The next pages explain how you set up the Digistat according to your lifestyle and how you make day-to-day changes such as applying a BOOST or setting Holiday Mode



Call for heat indicator

Current room temperature

Increase the set temperature

Time of day (this is set automatically by the Digistat)

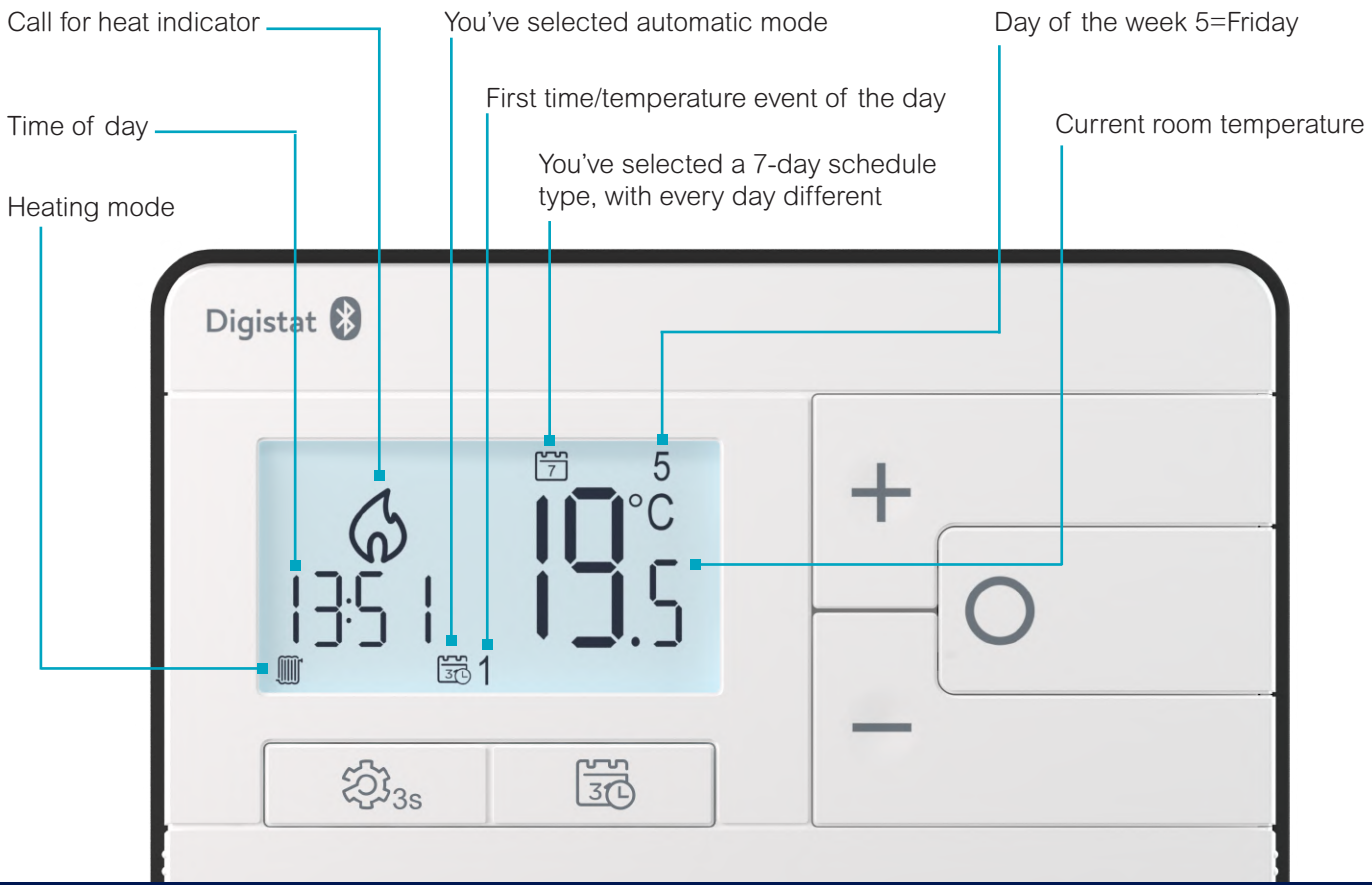
Boost your heating for 30mins, 1 hour, 2 hours or 3 hours

Settings button
1.Press and hold for 3 seconds to access menus
Or
2.On dual-channel versions press once to change from heating to hot water, selecting with the + or - button and confirming with O. The radiator icon indicates heating mode; the tap icon indicates hot water

Adjust your daily schedule

Decrease the set temperature

Note: pressing any button turns on the display backlight


Call for heat indicator
You've selected automatic mode
Day of the week 5=Friday
First time/temperature event of the day
Time of day
Current room temperature
You've selected a 7-day schedule type, with every day different
Heating mode
Digistat
5
19°C
13:51
19.5
1
3s

Before you start it's worth checking that the Digistat has been correctly set for your specific needs

Use these setting to adjust:

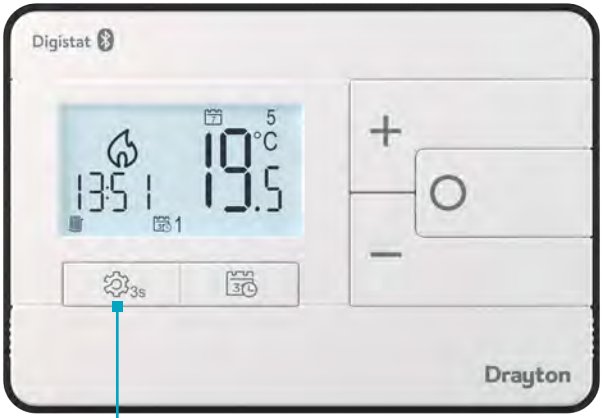
User settings (USEr 01 menu):

- Change from automatic to manual mode, or turn the thermostat OFF
- Set a holiday period (turn OFF the thermostat for a set period)

Advanced user settings (AdvU 02 menu):

- Set the time of day
- Set the date
- Choose a 12-hour or 24-hour clock
- Switch OFF daylight saving time
- Apply a temperature offset
- Lock the display
- Set the backlight ON time
- Choose between a 7-day, 5/2-day, 24hour or manual schedule
- Choose between 3 preset schedules
- Return to factory settings

In this menu you will also find the Installer Menu (InSt 03) and the Service Interval menu (Ser 04) but these should only be adjusted by the installer



Settings button

- Press and hold for 3 seconds to access
- Then use the + and – buttons to navigate
  And the O button to confirm any new settings
- In the mode the Settings button can be used as a back button to exit

USEr 01 Menu	Options	Default	Note
Mode	Automatic (AUTO), Manual (MAn)	Automatic (AUTO)	Automatic mode applies the set schedule
			Manual mode provides temperature control only
Holiday Mode (HOL)	Set the start date and time	Today's date and time	
	Set the end date and time	In 7 days time	
	Set the temperature while you are away	10°C	

AdvU 02 Menu	Menu item name	Options	Default	Note
Time of day	tIME 01	Set or adjust the time of day	Automatically factory-set by the Digistat	
Date	dAtE 02	Set or adjust the date	Automatically factory-set by the Digistat	
Clock format	12:24 03	12-hour or 24-hour clock display	12-hour clock	
Daylight saving time	dSt 04	ON or OFF	ON	
Temperature Offset	OSEt 05	-5° to +5°C in 0.1°C increments	0.0°C	
Display Lock	LOC 06	ON or OFF	ON	Set a 3-digit code to lock
Backlight ON time	bALt 07	OFF, 10secs, 20 secs	10 secs	
Schedule Type	ProG 08	7 day, 5/2 day, 24 hour, none	7 day	
Preset schedule	PSEt 09	1 (heating morning and evening), 2 (heating morning, noon, and evening) or 3 (heating all day)	1	
Reset to factory settings	rPSt 12	Yes or No	No	

Schedule Types	Select in Advanced User settings, item Prog 08
7 day	Every day can be programmed differently - This is great if you have a very flexible lifestyle
5/2 day	Weekdays all the same but weekend programmed differently - This schedule is ideal if your work days are the same every day
24 hour	Every day the same - If you work from home or are retired then this schedule will be more suitable
None	The thermostat controls temperature only all the time - Use this setting if you want to keep your home at the same temperature at all times

Preset 1	All day		5/2 day			
Event	Time	Temp	Weekdays		Weekend	
1	06:30	20.0°C	06:30	20.0°C	07:00	20.0°C
2	08:30	16.0°C	08:30	16.0°C	09:00	18.0°C
3	16:30	21.0°C	16:30	21.0°C	16:00	21.0°C
4	22:30	OFF	22:30	OFF	23:00	OFF

Preset 2	All day		5/2 day			
Event	Time	Temp	Weekdays		Weekend	
1	06:30	20.0°C	06:30	20.0°C	07:00	20.0°C
2	08:30	16.0°C	08:30	16.0°C	09:00	18.0°C
3	12:00	21.0°C	12:00	21.0°C	12:00	21.0°C
4	14:00	16.0°C	14:00	16.0°C	14:00	18.0°C
5	16:30	21.0°C	16:30	21.0°C	16:00	21.0°C
6	22:30	OFF	22:30	OFF	23:00	OFF

Preset 3	All day		5/2 day			
Event	Time	Temp	Weekdays		Weekend	
1	06:30	20.0°C	06:30	20.0°C	07:00	20.0°C
2	22:30	OFF	22:30	OFF	09:00	18.0°C
3					16:00	21.0°C
4					23:00	OFF

Setting up Times/Temperatures on the Digistat

1. With the product operating as normal in Auto Mode, press once. Use + and – to select the day or set of days you want to adjust the times and temperatures for. Press O to confirm.

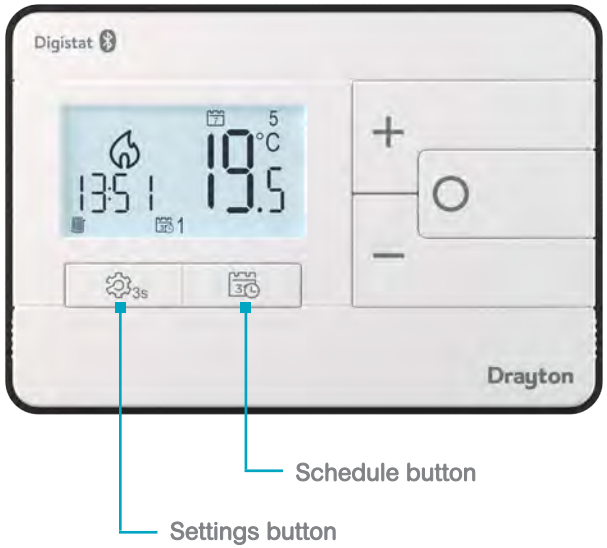
2. The time on the display will now be flashing as shown, use + and – to adjust the first period start time. Press O to confirm.

3. Once the time has been set the temperature on the display will now be flashing, use + and – to adjust the temperature for the first time period. Press O to confirm.

4. Move to the next time and temperature periods and adjust as needed, confirming the changes by pressing O. The new schedule will be saved pressing O when the word SAVE is flashing.

5. In Pre-set Program 1 you will have 4 time periods available, to add more (max. 8 per day) press + when you see the SAVE option on-screen and time period 5 at the bottom of the screen, to scroll to the Add option. Press O to add time period then adjust time and temperature as required.

6.To exit press to go back until you return to the home screen.



If you are using the dual-channel RF902 you can toggle between heating and hot water by pressing briefly the settings button and using the up and down buttons to select heating or hot water mode. In hot water mode ON/OFF times can be adjusted (Settings Button - Page 14)

Setting a BOOST means applying a new set temperature for a short period of time

You can boost for 30 minutes, one hour, two hours or three hours

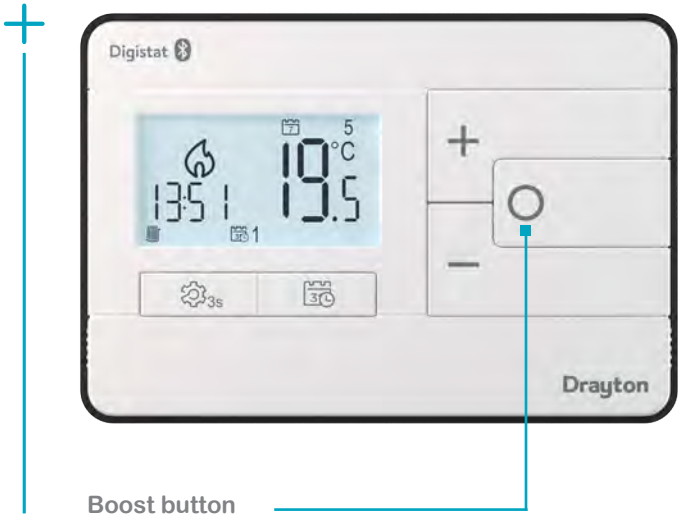
A timer symbol will appear bottom right in the LCD to indicate that a boost has been set

When the BOOST has expired the normal schedule takes over

After pressing the Boost Button (O) you set the length of time for the boost and then the temperature, adjusting with the + and - buttons confirming each one with O button

The Digistat remembers your last BOOST so if you want to repeat the previous boost you just press O once

The BOOST can also be used to setback your heating so you can avoid heating your home while you are out. Select 15°C and up to 3 hours and confirm with the O button. If this is the previous boost you then just need to press O once to setback the heating for the time you have selected



Trademarks

- The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Schneider Electric is under license. Other trademarks and trade names are those of their respective owners.

Other brands and registered trademarks are the property of the relevant owner.

Please Note: Information in this guide is subject to change as these products evolve. Screen graphics and descriptions in this guide may not reflect exactly the latest product configuration.

Customer Service Tel: +44 333 6000 622*

Technical Helpline: +44 333 6000 622*

*Please note that international call charges may apply to those calling from outside of the UK.

Website: wiser.draytoncontrols.co.uk

E-mail: customer.care@draytoncontrols.co.uk

@DraytonHome

/DraytonControls

/DraytonHome

/DraytonHome

BRITISH BUILT TO LAST

06490331001 Iss B

Cleaning Karredecco Wall Boarding – this product is in your bathrooms & en suites.

- do not allow liquid stains to dry
- from time to time, clean the boards with a damp cloth and a mild detergent
- intensive scrubbing and use of strong detergents may damage the board's surface or cause its discoloration
- **DO NOT** clean with sharp & abrasive clothes, sponges or brushes
- **DO NOT** use acetone and acid based fluids solvents, acids or any other liquids based on these substances for cleaning
- no cleaning liquids should be left on the surface, they must be rinsed off with water; cleaning substances left out on the surface may cause its discoloration

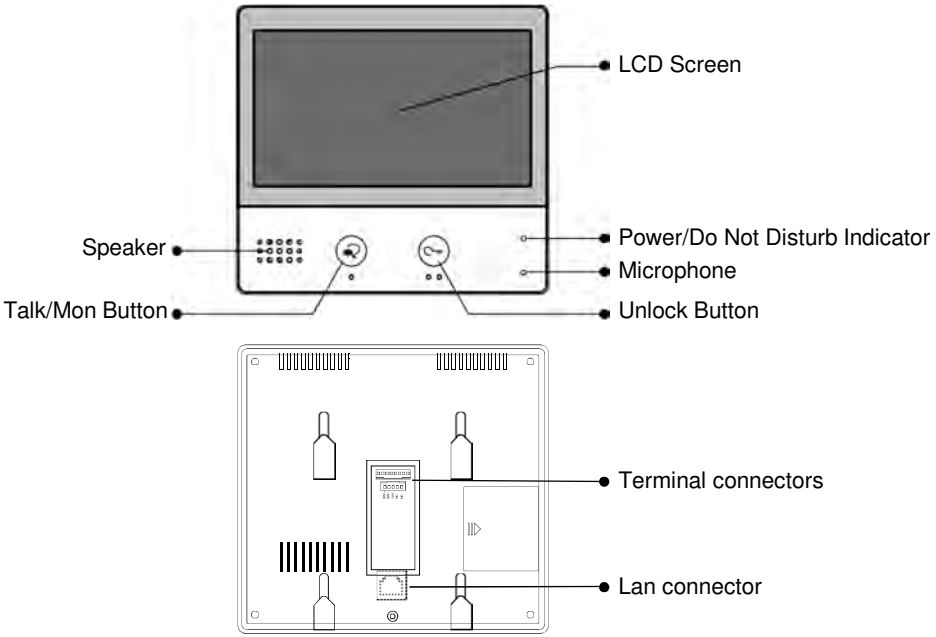
RSS IP Lite M7
IP 7” Colour TFT Monitor

Installer Manual

- Please read this manual carefully before using the product, and keep it for future reference.
- We reserve the right to modify the specification of the product in this manual at any time without notice.

Contents

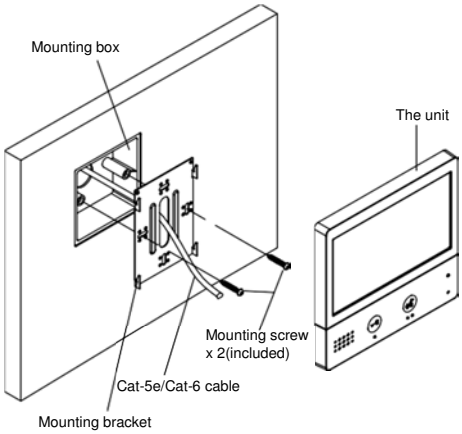
1. Parts and Functions

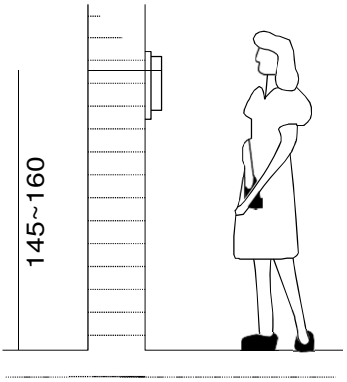


Key functions

Speaker	Audio from the Entrance Panel.
Talk/Mon button	Tap to communicate hands free with callers. Tap to view the Entrance Panel video in standby mode (shortcut to monitor function)
LCD screen	Used to display video images.
Power/DND indicator	Shows the status of the system. Green – Standby Red – Do Not Disturb Red Flashing – Missed Call Blue – Incoming call
Microphone	Audio to the Entrance Panel
Unlock button	Tap to release the door currently in view.

2. Mounting





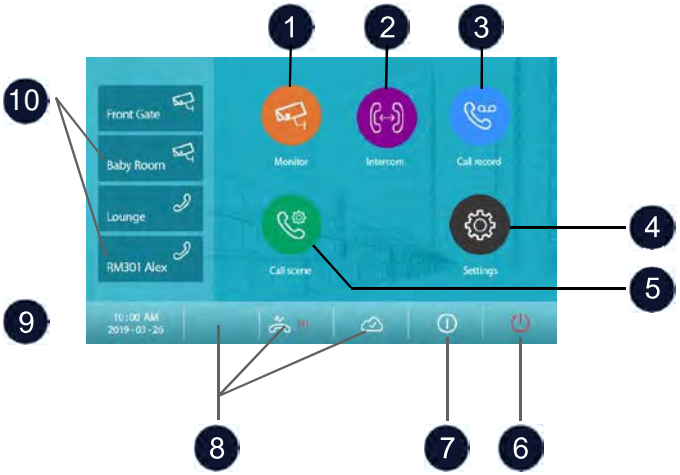
The installation height is recommended as 145~160cm.

1. Use screws to fasten the mounting bracket to the wall with mounting box.
2. The fixing centres suit a standard single socket outlet back box.
3. Connect the cat-5e or cat-6 cables to the unit.
4. Mount the unit to the mounting bracket, make sure the unit is correctly attached to the mounting bracket.

3. Home Screen

The Home Screen is your starting point for using all the applications on your monitor.

Tap the **Unlock** button, or tap anywhere on the screen in standby mode, the Home Screen will appear as shown below



1 **Monitor icon**
Allows you to monitor the Entrance Panel and cameras.

2 **Intercom icon**
Allows you to call other Monitors/Handsets

3 **Call Record icon**
Allows you to view the call record.

4 **Setting icon**
Use to change the Monitors settings.

5 **Call Scene icon**
Allows you to activate the functions of Do Not Disturb/Divert

6 **Close icon**
Touch to turn off the screen.

7 **About icon**
Allows you to view the information about device.

8 **Status bar**
Displays icons that indicate the Monitors Status (see status bar icons on page4)

9 **Date and time**
Allows you to set date and time for device.

10 **Shortcut Buttons**
Tap to enter the corresponding items directly.

4. Status Bar Icons

Icon	Description	
	Missed call	Indicates 1 or more missed calls. Tap to review the missed call.
	Do Not Disturb	Indicates the device is in “Do Not Disturb” mode.
	Divert call	Indicates the device is in “Divert call” mode.
	Device online	Indicates the device is online, but not connected to the internet.
	Cloud server connected	Indicates the device is connected to the cloud server.
	Cloud server not connected	Indicates the device is not connected to the cloud server.
	Cloud server anomaly	Indicates the device cloud server connection is abnormal.
	mute	Indicates the device is in “Mute” mode.

Other status icons

Icon	Description	
	Recording	Indicates the device is recording
	Talking	Indicates the device is in “talk” status.
	Unlock	The currently viewed door is open.

5. Answering a Call

When you receive a call, the Monitor will ring (unless it is in “Do not disturb” mode) The callers’ image will be displayed on the screen.

1. Tap the icon or **TALK/MON** button to speak to the caller.

   - Speak within about 50 cm of the microphone.
   - Begin communicating hands free with the visitor for up to 90 seconds.

2. When finished, tap the icon or **TALK/MON** button again to finish the call.

   During a call the following functions are available:

   • Door release

   • Manual recording of Audio and Video

Notes:

1.Receiving a call while talking with an Entrance Panel

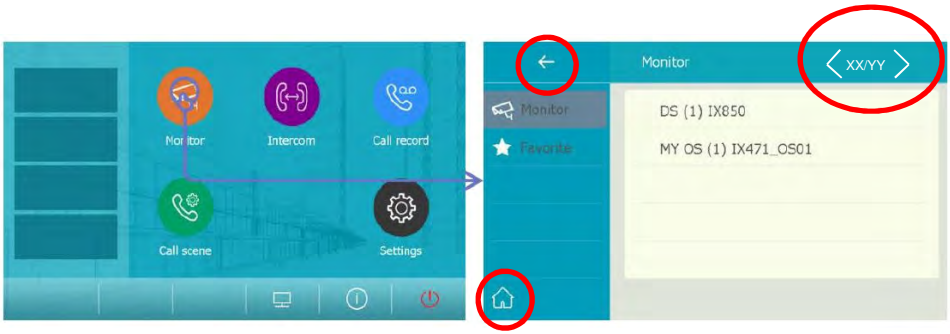
- Only one call can take place at a time.
- Conclude the current communication and then answer any other calls.

2.Receiving a call while talking with other monitors

- Calls from Entrance Panels will interrupt internal calls.
- The video image from the Entrance Panel will be displayed on the screen, all standard features will be available.

6. Monitoring

This section can be used to monitor video from Entrance Panels and any configured additional cameras.



1. From the Home Screen, tap the **"Monitor"** icon.
2. The Monitor screen shown above will be presented
   - This allows you to select Entrance Panel camera(s) or IP camera(s) (if the system has been configured for multi Entrance Panels and/or IP cameras)
3. Tap the desired video source.
4. When finished, tap ← button (back button) on panel.

* During monitoring, images can be viewed, but audio cannot be heard.

Available functions during monitoring:

- Door release
- Manual recording

Note: If monitors or cameras have been setup as 'Shortcuts' tap the appropriate shortcut icon to view the video images from the monitor or camera identified in the 'Shortcut'

Please note that whilst accessing menus the following symbols may appear on the display as identified on the screen shot above:

⌂ Returns to the Home screen

← Returns to the previous menu

〈XX/YY〉 Indicates Screen xx of yy Tap left or right arrow to access previous or next.

7. Making Calls

You can call other residences, common area phones, concierge (if installed) and other monitors within your dwelling.

Namelist Call

1. From the main menu, tap the **"Intercom"** icon.
   - A list of available items is displayed.
2. Tap **"Namelist".**
   - A list of names is displayed (if the system has been configured with names)
3. Tap the desired name.
   - This will initiate a call to the device selected.

Internal Calls

If you have monitors installed in different rooms in your residence, you can call other monitors and use the system as an intercom.

1. From the main menu, tap the **"Intercom"** icon.
   - A list of available items is displayed.
2. Tap **"Inner call".**
   - A list of Master and Slave monitors is displayed.
3. Tap the desired device to call.
   - This will initiate an internal call.

Calling Concierge station (if it is configured)

1. From the main menu, tap the **"Intercom"** icon.
   - A list of available items is displayed.
2. Tap **"Guard station".**
   - This will call the Concierge directly if this facility is available.

8. View Call Record

The monitor records information about calls you have answered, missed, and made, and saves it in the call record. See the following steps to view the call record.

1. From the main menu, tap **"Call record"** icon.
2. Tap the desired button.
   - **Missed**: Displays calls you received but did not answer.
   - **Incoming**: Displays calls you answered.
   - **Outgoing**: Displays calls you made.
   - **Playback**: Displays pictures/videos you received / made.
3. Browse the call record as needed.
4. When finished, tap ← to return to the previous menu.(or tap ⌂ to return to the home screen)

Play pictures/videos

You can record camera images/videos manually while talking to a visitor or monitoring camera images/videos. See the following steps to play the pictures/ videos.

1. From the main menu, tap **"Call record"** icon.
2. Tap the desired button.
3. Tap the desired call record.
   - Displays the images/videos
4. When finished, tap ← to return.

Controlling pictures/videos playback

The following controls are available by tapping the screen while viewing an image or video.

Plays the image/video.

Plays the next image/video.

Plays the previous image/video.

Delete image/video.

Delete confirm.

Limitations

Up to 120 records can be saved, up to 120 images can be saved. Subsequent records/images/videos will overwrite the oldest items.

9. Do Not Disturb Mode

During a certain period, if you do not want to be disturbed, you can set the Do Not Disturb mode.

1. From the Home Screen, tap **"Call scene"**
2. Tap the desired mode.
   - **No Disturb 8H**: This sets the monitor to Do No Disturb mode for 8 hours, after the 8 hours have expired the monitor will exit “Do Not Disturb” mode
   - **No Disturb Always**: This sets the Monitor to Do Not Disturb mode until it is manually turned off.

Note:
The Power/Do Not Disturb indicator turns from green to red, to indicate that the do not disturb function has been activated. The status bar on the Home Screen will show the Icon.

10. Divert Calls

The call from the Entrance Panel can be diverted to your smart phone, please note that this function should be supported by a SIP network (See notes below)

1. From the home screen, tap the **"Call scene"** icon.
2. Tap the desired function.
   - **Divert call if no answer**: If nobody answers the call within 30s the call from the entrance panel will be diverted to the smart phone. In this mode the monitor will always turn on and show the image from the entrance panel, if the monitor answers the call during this time the diverted call to the smart phone will be terminated.
   *__Divert call always__: When the monitor is called with this option selected, the call is diverted directly to the smart phone. In this mode, the monitor will shut off the screen after diverting successfully.

*This function will perform immediately if selected and the status bar on the main menu interface will show "" icon.

Note:

To divert calls to a smart phone via a Sip server there are specific requirements.

For a single dwelling with one or more monitors the Door Entry IP network needs to have a wired connection to the dwellings private internet connection.

(Door Entry IP network connected to private Internet Router via an Ethernet cable)

For multiple dwellings connected to the same Door Entry IP network there will need to be a wired connection from the Door Entry IP network to a public internet connection which is shared amongst ALL of the dwellings connected to the Door Entry IP network.

(Door Entry IP network connected to the public Internet Router via an Ethernet cable)

11. Changing the Monitor's Settings

1. From the main menu, tap the **"Setting"** icon.
   - A list of available setting categories is displayed.
2. Only **Call Tune** can be accessed by the User, Tap **Call Tune**
3. Tap the desired setting category.
4. Change the settings as desired.
5. Tap ← / ⌂ to save the new setting.

List of settings

Call Tune ›	Ring volume - Ring timing - DS ring - CDS ring - OS ring - Message ring - Doorbell ring - Intercom ring - Innercall ring - Alarm ring
General ›	Date and time - Language - Monitor timing - Shortcut setting - SD card
Installer ›	IP address - Call_Nbr - Parameter - Upgrade - Onsite tools
Manager ›	Sipconfig - Private unlock code - Common unlock code - Card manager - Back and restore
Ext.Unit	Auto setup wizard - IM extensions - Outdoor Stations - IPC camera - Enter OS binding

Settings in Red above will require the Installer or Manager password for access.

The **Call Tune** Sub menu is as follows:

Ring volume: adjusts the ringtone volume.

Ring timing: adjusts the ringtone time.

DS ring: enables selection of the call tone from door entrance panel(s) (Block Panels)

CDS ring: enables selection of the call tone from common door entrance panel(s) (Perimeter Panel)

OS ring: Enables selection of the call tone from outer entrance panel unique to the dwelling.

Message ring: Enables selection of the call tone when a message is received.

DoorBell ring: Enables the selection of the call tone from the doorbell (if configured)

Intercom ring: Enables the selection of the call tone from the monitor of another dwelling.

Innercall ring: Enables the selection of the call tone from another monitor within the dwelling.

Alarm ring: Enables the selection of the call tone when an alarm is initiated (if configured).

Example: "DS ring" (Entrance Panel Call) setting

1. From the Home Screen, tap the **"Setting"** icon.
   - A list of available setting categories is displayed.
2. Tap "Call Tune", and then tap "DS ring".
   - A list of available tunes is displayed.
3. Tap the desired tune. (The tune will play after a few seconds)
4. Tap ← / ⌂ to save the new setting.

USER GUIDE

ESPRIT ECO
24 30

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.

July 2018
UIN 212133 A05

CONTENTS

1. INTRODUCTION

The **Esprit eco** 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 (RGII) 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 (RGII).
- 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 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.

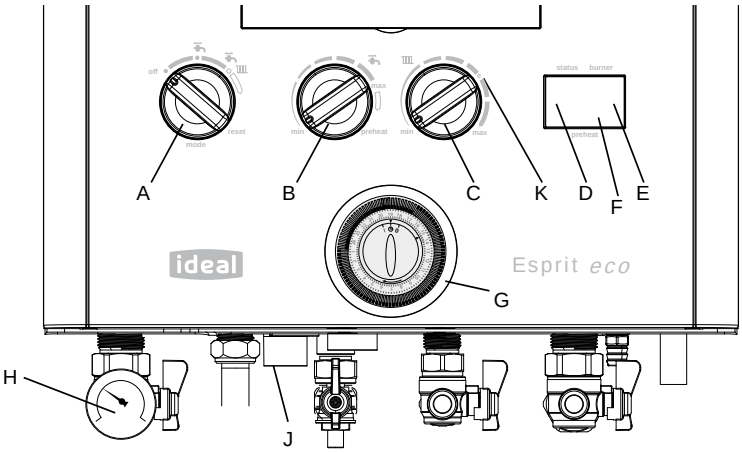
THE BENCHMARK SERVICE INTERVAL RECORD MUST BE COMPLETED AFTER EACH SERVICE

benchmark COLLECTIVE MARK
THE MARK OF QUALITY FOR THE INSTALLATION, COMMISSIONING AND SERVICING OF DOMESTIC HEATING AND HOT WATER SYSTEMS

2. BOILER OPERATION

Legend

A. Mode Knob
B. Domestic Hot Water / Preheat Knob
C. Central Heating Temperature Knob
D. Boiler Status
E. Burner 'on' Indicator
F. Domestic Hot Water Preheat on / off indicator
G. Timer
H. Pressure Gauge
J. Condensate Drain
K. Central Heating Economy Setting



TO START THE BOILER

Start the boiler as follows:

1. Check that the electricity supply to boiler is off.

2. Set the mode knob (A) to '**off**'.

3. Set the Domestic Hot Water temperature knob (B) and Central Heating temperature knob (C) 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. timer and room thermostat, are on.

7. Set the mode knob (A) 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:*

0 Standby - no demand for heat.

c Central Heating being supplied

d Domestic hot water being supplied

P Domestic hot water preheat

F Boiler frost protection - boiler will fire if temperature is below 5ºC.

During normal operation the burner on indicator (E) will remain illuminated when the burner is lit.

Note: If the boiler fails to light after five attempts the fault code *L-2* will be displayed (refer to Fault Code page).

OPERATION MODES

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

Set the mode knob (A) ' ' (winter).

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

The domestic hot water preheat will operate if preheat is enabled (shown by indicator light (F)).

Summer Conditions - (Domestic Hot Water only required)

Set the mode knob (A) to ' ' (summer).

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

The domestic hot water preheat will operate if preheat is enabled (shown by indicator light (F)).

Boiler Off

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

PREHEAT - DOMESTIC HOT WATER

The domestic hot water heat exchanger within the boiler can be kept preheated to provide faster delivery of hot water at the tap.

Preheat is enabled when the preheat indicator (F) is lit. To switch preheat on or off, move the domestic hot water preheat knob (B) full clockwise and then return it to the required domestic hot water temperature setting.

The boiler will operate periodically for a few seconds to maintain the domestic hot water heat exchanger in a preheated condition. The average time period between operation is 90 minutes. This may vary considerably due to the surrounding ambient temperature of the boiler. The boiler will operate whenever there is a demand for domestic hot water.

If standard hot water delivery is satisfactory turn the knob (A) to '**preheat off**'.

CONTROL OF WATER TEMPERATURE

Domestic Hot Water

The domestic hot water temperature is limited by the boiler controls to a maximum temperature of 64°C, adjustable via the domestic hot water temperature knob (B).

Approximate temperatures for domestic hot water:

Knob Setting	Hot Water Temperature (approx.)
Minimum	40ºC (104ºF)
Maximum	64ºC (147ºF)

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 (C).

Approximate temperatures for central heating:

Knob Setting	Central Heating Radiator Temperature (approx.)
Minimum	45ºC (113ºF)
Maximum	80ºC (176ºF)

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 (C) 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 1ºC 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 (C) 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 5ºC, 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 RESET

To reset the boiler, when directed in the listed fault codes (see section 9), turn the mode knob (A) to '**reset**' position and IMMEDIATELY turn knob back to required setting. The boiler will repeat its ignition sequence. If the boiler still fails to start consult a Gas Safe Registered Engineer or in IE a 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 (H - 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. 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.

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, reset 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 (C) to maximum, (Must return to original setting once cold spell is over).

Place the heating on continuous and turn the room thermostat down to 15ºC 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 (6 $^{1}/_{2}$") above, 100mm (4") below, 2.5mm (9$^{1}/_{8}$") at the sides and 450mm (17 $^{3}/_{4}$") 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.

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**

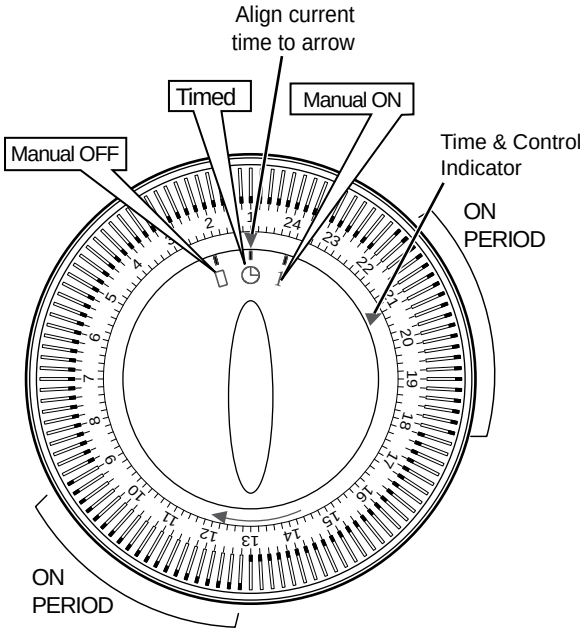
CLEANING

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. MECHANICAL 24 HOUR TIMER



SETTING UP

The outer dial should be set to the current time. Rotate the dial slowly in a clockwise direction, until the correct hour is aligned with the arrow printed on the dial.

Note that the outer dial is printed with the 24hr clock e.g. 8.00am = 8 on the dial, 8.00pm = 20 on the dial.

Do not attempt to rotate the dial in an anti-clockwise direction.

PROGRAMMING SWITCHING TIMES

Set tappets to outer edge for ON periods and set tappets to inner edge for OFF periods.

The example shown has been set with 2 on periods.

ON at 9.00am. OFF at 1.00pm. (13 hours)

ON at 6.00pm. (18 hours) OFF at 10.00pm (22 hours)

Manual Switch Operation

To set the timer for timed operation move the switch to the "TIMED" position.

To set the timer to be continuously on, move the switch to the "MANUAL ON" position.

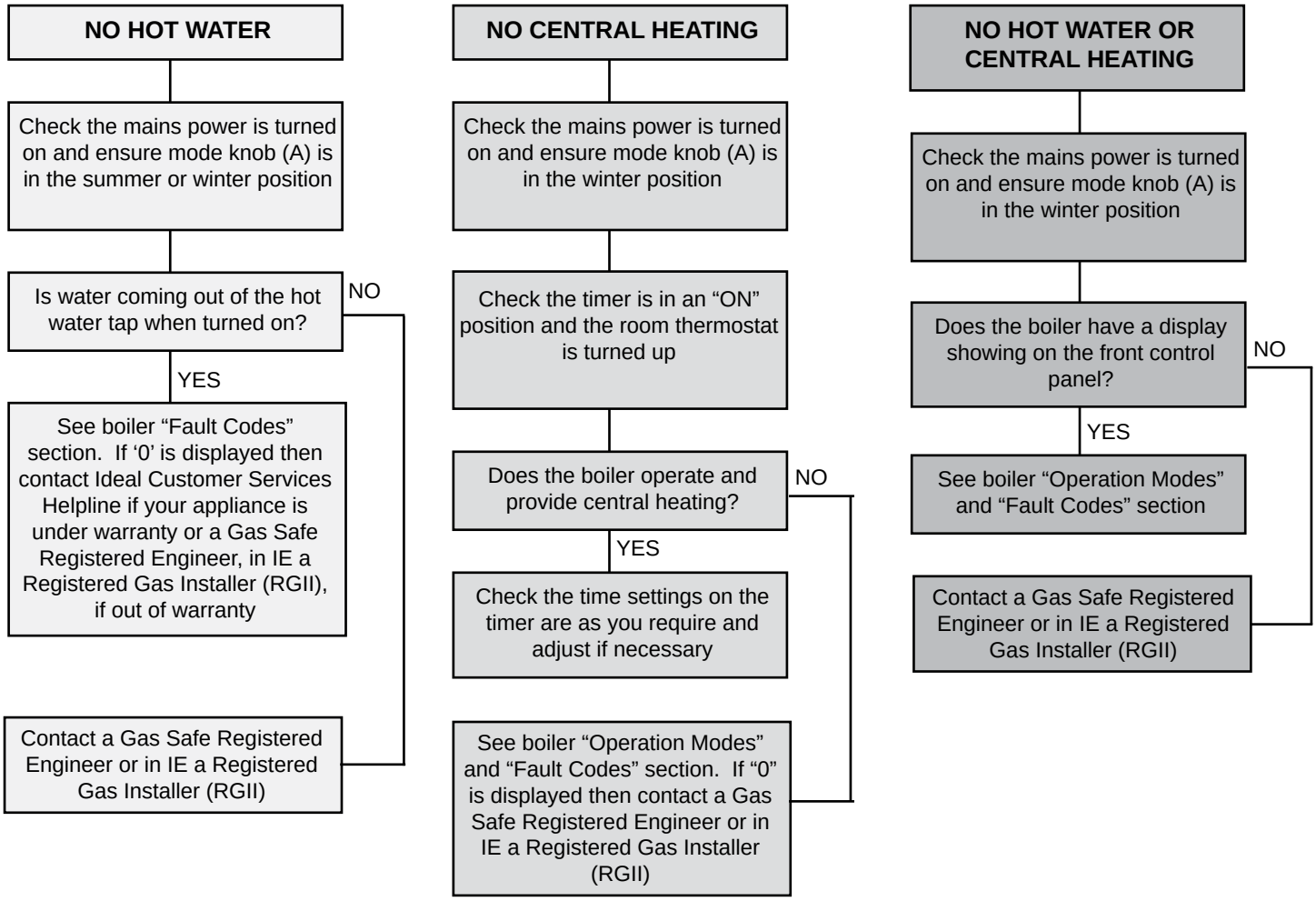
To set the timer to be continuously off, move the switch to the "MANUAL OFF" position.

Note. *If boiler does not light when in "timed on" or "manual on" position, increase temperature on room stat.*

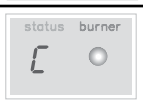
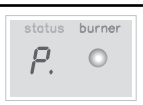
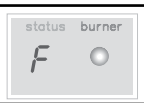
7. POINTS FOR THE BOILER USER

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 engineers 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



8. NORMAL OPERATION DISPLAY CODES

DISPLAY CODE ON BOILER	DESCRIPTION
	The boiler is in standby mode 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 hot water mode.
	The boiler is operating in pre heat mode.
	The boiler is operating in frost mode. *continued . . . . . .*

FOR ANY QUERIES PLEASE RING THE
ESPRIT ECO CONSUMER HELPLINE : 01482 498660

NOTE. BOILER RESET PROCEDURE -
To reset boiler, turn mode control knob to “reset” position and immediately turn knob back to required setting.

continued . . . . . .

9. FAULT CODES

DISPLAY CODE ON BOILER	DESCRIPTION	ACTION
	BCC Activation Fault	Reset the appliance - if the boiler fails to operate then please contact Ideal Boilers (if under warranty) or alternatively a Gas Safe Registered Engineer if outside of the warranty period. In IE contact a Registered Gas Installer (RGII).
	BCC Fault	
	Low Water Pressure	Check system water pressure is between 1 & 1.5bar on the system pressure gauge (G). To re-pressurise the system see Section 3. If the boiler still fails to operate then please contact Ideal Boilers (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	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 Boilers (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	Reset the appliance - if the boiler fails to operate then please contact Ideal Boilers (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	Reset the appliance - if the boiler fails to operate then please contact Ideal Boilers (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	Reset the appliance - if the boiler fails to operate then please contact Ideal Boilers (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	Reset the appliance - if the boiler fails to operate then please contact Ideal Boilers (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 Boilers (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 (G). To re-pressurise the system see Section 3. If the boiler fails to operate then please contact Ideal Boilers (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	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 Boilers (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 Boilers (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	Reset the appliance - if the boiler fails to operate then please contact Ideal Boilers (if under warranty) or alternatively a Gas Safe Registered Engineer if outside of the warranty period. In IE contact a Registered Gas Installer (RGII).

PLUMBRIGHT
HEATING | PLUMBING

TECHNICAL DATA SHEET

Product Code: 709151

Product Description: TRV 15MMX1/2 SNGLED WHITE TRV

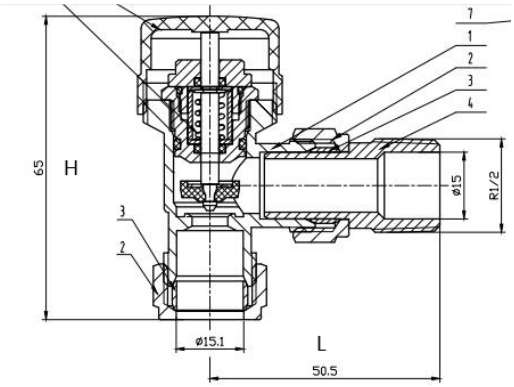
Product Specification

Material: Brass chrome plated

Size: 15mm

Technical Information:
Compliant to BS EN 215
Keymark approved

Manufacture date: MM/YY



Size	DN	L	H	Kgs
15mm	15	50.5	65	0.183

NO.	Part Name	Material	Qty
1	TRV Head	ABS	1
2	Angled Valve body	Brass	1
3	Connection Pie	Brass	1
4	Olive	Copper	2
5	Nut	Brass	2
6	Protective head	PP	1

Technical Data	
Normal flow rate	176kgs/h
Max pressure difference	0.8Bar
Max flow temperature	120℃
Temperature Range	6℃ to 28℃
Field of applications cold and hot Water	
Chrome finish	
Directional flow - vertical or horizontal mounting	

Guarantee Period:
5 Years against Manufacturing Defects

Using your extractor

For best performance, you should switch on the extractor 15 minutes before starting to cook and leave it to run for approximately 15 minutes after the end of cooking.

Control Panel

A = Power off button B = Speed level buttons C = Light button

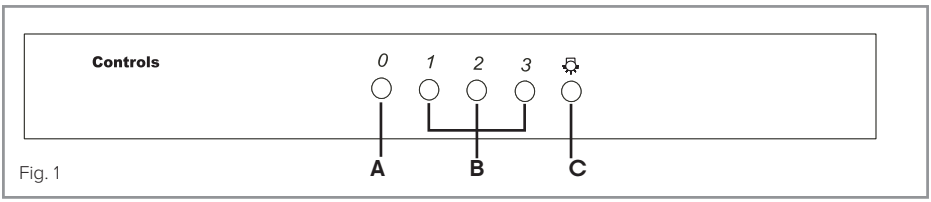


Fig. 1

To switch the extractor light on or off

- Press button C.

To switch on the extractor or change the motor speed at any time when the extractor is running

- Press the relevant speed button (B) for the first, second or third speed as required.

To switch the extractor off

- Press button A.

Care and Maintenance

IMPORTANT : DO NOT PERFORM MAINTENANCE OR CLEANING OF THE EXTRACTOR WITHOUT FIRST SWITCHING OFF THE ELECTRICITY SUPPLY.

Cleaning

You should use a nonabrasive cleaner. Any abrasive cleaner (including Cif) will scratch the surface and could erase the control panel markings.

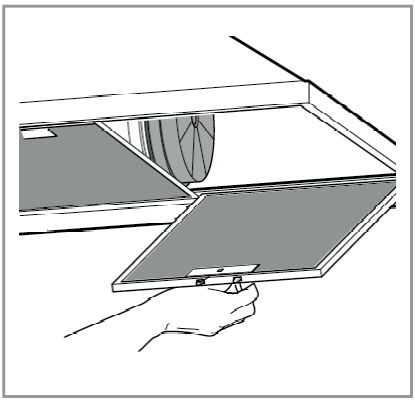
You can clean your extractor effectively by simply using a dilute solution of water and mild detergent and drying to a shine with a clean cloth.

Cleaning the grease filter

The grease filter should be kept clean to minimise the risk of fire.

At least once a month you should remove and clean the grease filter with hot soapy water. You can also wash the grease filter in a dishwasher, ensuring that you place it in an upright position to prevent damage from other items in the dishwasher. After rinsing and drying, replace the filter.

To remove the grease filter, push in the button on the handle and then pull down on the filter at the front. When you have released it at the front, then you can pull out the filter. To replace the grease filter, repeat the steps in reverse.



Please note:

Cleaning the grease filter in the dishwasher may lead to discolouration. This is normal and does not constitute a fault with the appliance.

Changing the charcoal filter (re-circulating only)

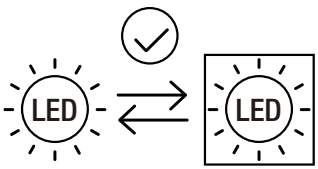
To ensure best performance of your extractor, you should replace the charcoal filter every four to six months, depending on use.

To attach a new charcoal filter, first remove the grease filters as described above.

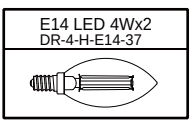
Insert the charcoal filter into the guide on the side of the motor, then slide the filter in until it locks into place. Repeat with the second filter on the opposite side. Finally replace the grease filters.

Changing the light bulbs

DO NOT CHANGE THE LIGHT BULB IMMEDIATELY AFTER USE AS THE BULB WILL BE HOT. ALLOW IT TO COOL BEFORE REMOVING IT.



Replaceable (LED only) light source by an end-user



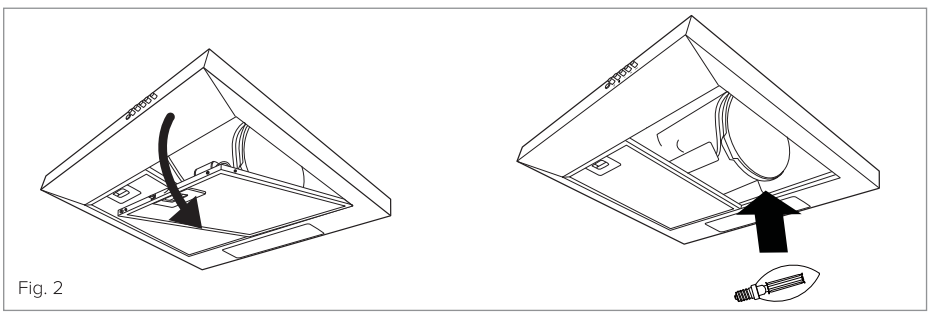


Fig. 2

Remove the cover panel as described above, unscrew the light bulb and replace the light with the correct type of light bulb (4W max LED SES). Finally, replace the cover panel.

Do not touch bulbs or adjacent areas during or straight after prolonged use of the lights.

The light is designed for use during cooking and not for general room illumination. Extended use of the light can reduce the life span of the bulb.

Bulb replacement is not covered by the guarantee.

Only use bulbs recommended for your extractor. Do not fit bulbs of a higher power rating.

Bulbs of a lower power rating may be adequate for use, generally last longer and use less energy.

Electrical Information

Mains electrical voltage: 230 – 240Vac, 50Hz

Total rated power consumption:

128W

Troubleshooting

If your extractor is not working:

1. Check that the mains supply has not been switched off.
2. Check that the fuse in the spur has not blown.

Ei Electronics®
fire + gas detection

230V~ SMOKE & HEAT ALARMS

ALKALINE BATTERY BACK-UP

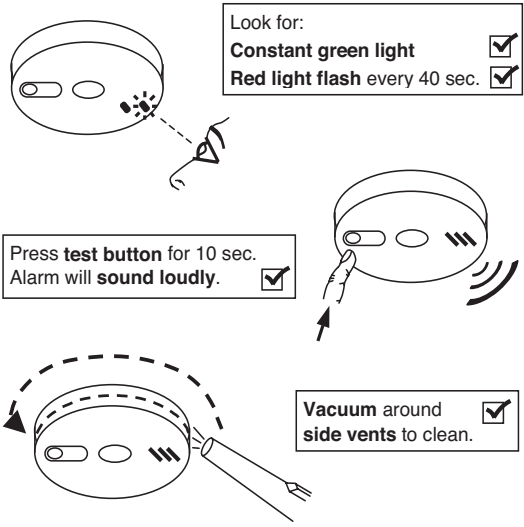
Ei141RC - Ionisation | Ei144RC - Heat | Ei146RC - Optical

RECHARGEABLE LITHIUM CELL BACK-UP

Ei161RC - Ionisation | Ei164RC - Heat | Ei166RC - Optical

USER INSTRUCTIONS

1. REGULAR CHECKS



P/N B17682 *Rev2*

© Ei Electronics 2013

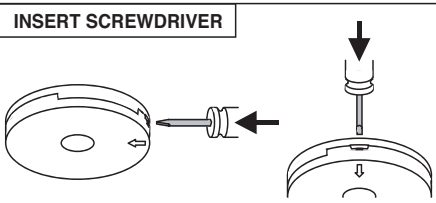
2. ALARM REMOVAL

⚠ ***DISCONNECT MAINS BEFORE REMOVAL***

1 **LOCATE REMOVAL SLOT**

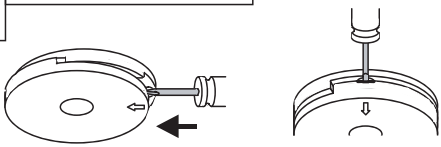
LOCATE THE ARROW ON THE FRONT FACE OF THE ALARM. THE SLOT IS LOCATED DIRECTLY ABOVE THE ARROW.

2 **INSERT SCREWDRIVER**



INSERT A FLAT-BLADED SCREWDRIVER HORIZONTALLY APPROX. 1cm INTO THE CENTRE OF THE REMOVAL SLOT

3 **SLIDE ALARM OFF BASE**



WITH THE SCREWDRIVER STILL INSERTED, PUSH THE LOWER HALF OF THE ALARM AWAY FROM THE SCREWDRIVER, IN THE DIRECTION OF THE ARROW ON THE COVER

4 **REMOVE ALARM**

HOLD THE LOWER HALF OF THE ALARM AND REMOVE FROM THE BASE PLATE BY MOVING IT VERTICALLY DOWNWARDS, TOWARDS THE FLOOR.

3. IMPORTANT INFORMATION

Do not paint your alarm. Do not allow paint, water or dust to contaminate your alarm.

Your alarm is a mains 230V AC electrical appliance. Do not open or insert anything into the alarm.

Regularly check that the green mains indicator light on the cover is lit.

Test weekly - press and hold the test button on the alarm for 10 seconds. The alarm will sound loudly and the red light on the cover should flash rapidly. All the other interconnected alarms should sound.

If alarm beeps once every 40 seconds for over 20 minutes, the battery is probably depleted (models Ei141RC/144RC/146RC only) and must be replaced.
(see "**CHANGING THE BATTERY**" section).

If a nuisance alarm occurs, press the test/hush button to silence the alarm for 10 minutes.

Clean your alarm regularly. This will reduce the risk of false alarms.

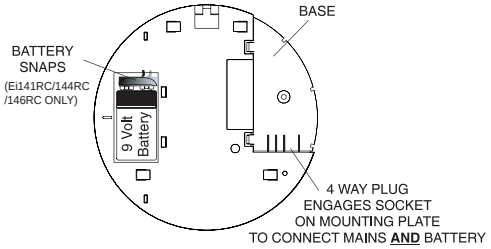
Remove or completely cover your alarm when decorating to prevent dust or other contamination damaging the unit.

If your alarm sounds for no reason and will not reset, it can be removed by releasing the clip on the base.
(see "**ALARM REMOVAL**" section).

4. CHANGING THE BATTERY
(Models Ei141RC / 144RC / 146RC only)

1. Switch off mains power to alarm (green light on cover should go out).
2. Remove unit as shown in "**ALARM REMOVAL**" section on page 2.
3. Locate battery slot in base of alarm as shown below.
4. Unclip battery from battery snap connectors.
5. Connect new battery by clipping back on to battery snap connectors. Use only 9V Alkaline batteries Duracell MN1604, Energizer 522. Other batteries can cause problems.

   We recommend that the "use by date" on the battery should still have at least 2 years to go. Older batteries will give beeps prematurely.
6. Slide unit back on to the base. A click should be heard as the alarm engages. (The unit cannot be replaced on the base unless a battery is installed).
7. Press and hold the test button - horn should sound loudly.
8. Reinstate mains power to alarm (green light on cover should come on).



We recommend that the battery is replaced at least every three years for optimum performance.

5. TESTING & MAINTAINING YOUR ALARM

INSPECTION &TESTING PROCEDURE

Check **all** your alarms weekly, especially after initial installation or after re-occupation (e.g. following a holiday):

(i) Check that the **green mains indicator light** is on. (If it is off check circuit breakers, fuses and wiring etc.) Check that the red led on the cover flashes once every 40 seconds to indicate normal operation.

If the memory has been set indicating that the Alarm has been activated in the last 24 hours, the red light will flash twice every 40 seconds. After 24 hours the memory will be cleared.

(ii) Press the **test button** for up to 10 seconds to ensure the sensor chamber, electronics and sounder are working. A red light on the cover, will flash while horn is sounding. The alarm will stop when the button is released. Pressing the test button simulates the effect of smoke or heat during a real fire and is the best way to ensure the Alarm is operating correctly. This action will also clear the memory.

WARNING: DO NOT TEST WITH FLAME

This can set fire to the Alarm and damage the house

We do not recommend testing with smoke or heat as the results can be misleading unless special apparatus is used.

(iii) Check for any sign of **contamination** such as cobwebs or dust and clean the alarm as described in the "**CLEANING YOUR ALARM**" section, if necessary.

(iv) **Interconnected Alarms only -** Test the first unit by pressing the button for 10 seconds. All the units should alarm within 10 seconds of the first horn sounding. The red light on the first unit only will flash about once a second. On releasing the button the local Alarm will stop sounding immediately and the remote Alarms will stop sounding approximately 3 seconds later. This will verify that the interconnect is working. Check all the other units similarly.

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

- Turn off the mains power at the distribution board and check that the green indicator light is extinguished.
- Press the test button and ensure the horn sounds loudly for 10 seconds.

Turn on the mains supply at the distribution board only if the unit passes the above test.

Note: If the mains is disconnected and the battery is almost depleted the unit will beep every 40 seconds for at least 30 days.

(vi) Monitor the alarm over a short period of time for any beeps.

Switching off Mains for long periods

If the premises are regularly being left without mains power for long periods the smoke/heat alarms should be removed from their mounting plates to prevent the batteries becoming fully depleted. (This is sometimes done with holiday homes which are only occupied in the Summer).

The alarms must be re-attached to the mounting plates when the premises are re-occupied.

(Long term storage (over 1 year) can damage the batteries such that they will not recharge when the units are re-connected to the mains supply).

5.1 If the unit is beeping

The Alarm automatically monitors the battery every 40 seconds. If it is depleted it will give a short beep every 40 seconds.

Models Ei141RC, Ei144RC & Ei146RC only

Before replacing the battery, check that the beeps are not due to one of the following:

(i) battery snaps not connected properly.

(ii) On the **Optical Smoke Alarm** only (Ei146RC) if the unit beeps and the red light does not flash at the same time it indicates a problem with the smoke chamber - see "**CLEANING YOUR ALARM**" section.

(iii) If the beeps have continued for over 20 minutes (and the other causes of beeps have been ruled out - see "**TROUBLESHOOTING**" section) the battery must be replaced.

See "**CHANGING THE BATTERY**" section.

Models Ei161RC, Ei164RC & Ei166RC only

(i) Check that the green mains power light is on. If it is off the Alarm is not receiving mains power and is being powered from its internal back-up cells. The beeps indicate that they are depleted. The cells are not replaceable. Re-connect the mains, check fuse, circuit breakers and wiring. If in doubt contact a qualified electrician. The beeps should cease within 2 hours as the cells charge up. Fully charged, the cells will provide up to 6 months back-up without mains power.

(ii) On the **Optical Smoke Alarm only** (Ei166RC) if the unit beeps and the red light does **not** flash at the same time it indicates a problem with the smoke chamber - see "**CLEANING YOUR ALARM**" section.

If all of the above possible causes of beeps have been ruled out, but the beeping has still persisted for over 2 hours with the green light on - the rechargeable cells may be defective. The Smoke / Heat Alarm must be returned to the manufacturer for repair or replacement - see "**GETTING YOUR ALARM SERVICED**" section.

A unit will operate from the mains alone, even with a fully depleted or a defective battery (and give beeps every minute), though it may not give sufficient warning of fire if the mains supply is disconnected for any reason. If there are any problems get a qualified electrician to inspect the house wiring and connections to the alarms.

If there are still problems the unit must be returned for examination - see "**GETTING YOUR ALARM SERVICED**" section.

6. CLEANING YOUR ALARM

WARNING: *Electrical shock hazard. Disconnect the AC mains at the fuse box or circuit breaker powering the Alarm before following the cleaning instructions.*

Clean your Alarm regularly, particularly in dusty areas. Use the narrow nozzle attachment of your vacuum cleaner to remove dust, insects and cobwebs from the sides and cover slots where the smoke or heat enters. To clean the cover, wipe with a damp cloth. Dry cover thoroughly with a lint free cloth.

WARNING: Do not paint your Alarm.

Other than the cleaning described above, no other customer servicing of this product is required. Repairs, when needed, must be performed by the manufacturer.

All Alarms are prone to dust and insect ingress which can cause nuisance/false alarms or failure to alarm.

The latest design, materials and manufacturing techniques have been used in the construction of our Alarms to minimize the effects of contamination. However it is impossible to completely eliminate the effect of dust and insect contamination, and therefore, to prolong the life of the Alarm you must ensure that it is kept clean so that excess dust does not build up. Any insects or cobwebs in the vicinity of the Alarm should be promptly removed.

In certain circumstances even with regular cleaning, contamination can build up in the smoke sensing chamber causing the alarm to sound or fail. If this happens the alarm must be returned to us for servicing or replacement. Contamination is beyond our control, it is totally unpredictable and is considered normal wear and tear.

For this reason, contamination is not covered by the guarantee and a charge is made for servicing such units.

If you experience persistent nuisance/false alarms it may mean that the environment may not be suitable for your particular alarm type. If, for example it is due to dust contamination or exposure to steam you should be using an ionisation Alarm. If the false alarm is due to cooking fumes an optical Alarm should be fitted.

7. NUISANCE/FALSE ALARMS

When **sure** that it is just a nuisance/false alarm, simply press the test/silence button briefly on the Alarm to silence the unit for 10 minutes.

If, when the alarm goes off, there is no sign of smoke, heat or noise to indicate that there is a fire, you should get your family into a safe place, before you start investigating.

Check the house carefully in case there is a small fire smouldering somewhere.

Check whether there is some source of smoke or fumes, for example cooking fumes being drawn past the Smoke Alarm by an extractor.

If there are frequent nuisance/false alarms it may be necessary to re-locate the device away from the source of the fumes or replace an Ionisation Alarm with an Optical Alarm. If for some reason the alarm continues to sound without smoke or heat being present (due to insect infestation or contamination build-up for example) the units can be silenced by disconnecting the mains power and removing the unit - see "**ALARM REMOVAL**" section.

If cleaning the Alarm does not correct the problem it can be returned to the manufacturer for repair or replacement - see "**GETTING YOUR ALARM SERVICED**" section.

Silence Feature

All the Smoke/Heat Alarms have a combined Test/ Silence Button to help you control nuisance/false alarms.

1. To silence a nuisance/false alarm, press the Test/ Silence Button located on the cover. The Alarm will automatically switch to a reduced sensitivity condition for a 10 minute period (very large levels of smoke from a nearby fire will override the Silence period).

The unit will flash the red light every 10 seconds (instead of the normal 40 seconds) to indicate the sensitivity is reduced.

On interconnected Alarms, pressing the Test/Silence Button on the one sensing smoke (i.e. the one with the red light flashing every second) will silence all alarms. Pressing the Silence Button on any other Alarm will not silence the alarm.

2. The unit will reset to normal sensitivity at the end of the silenced period.

8. IMPORTANT SAFEGUARDS

When using household protective devices, basic safety precautions should always be followed, including those listed below:

- Please read all instructions.
- Rehearse emergency escape plans so everyone at home knows what to do in case the alarm sounds. Further information can be obtained from the Home Office Publication or from your local fire prevention officer.
- To maintain sensitivity to smoke, do not paint or cover the Smoke Alarm in any manner; do not permit any accumulation of cobwebs, dust or grease.
- If unit has been damaged in any way or does not function properly, do not attempt a repair. Return the Alarm - see "**GETTING YOUR ALARM SERVICED**" section.
- This appliance is only intended for premises having a residential type environment.
- Smoke / Heat Alarms are not a substitute for insurance. The supplier or manufacturer is not your insurer.
- The chamber inside the Ionisation (Ei141RC/161RC) Smoke Alarms contains a small amount of radioactive material (33kBq of Amercium 241). Do not tamper with the chamber. You may safely install and clean the Smoke Alarm following this leaflet's instructions.
- Do not dispose of your Alarm in a fire.

9. PLANNING YOUR ESCAPE ROUTE

Use the Smoke / Heat Alarm Test Buttons to familiarise your family with the Alarm sound and to practice fire drills regularly with all family members. Draw up a floor plan that will show each member at least 2 escape routes from each room in the house.

Children tend to hide when they don't know what to do. Teach children how to escape, open windows, and use roll up fire ladders and stools without adult help. Make sure they know what to do if the alarm goes off.

1. Check room doors for heat or smoke. Do not open a hot door. Use an alternate escape route. Close doors behind you as you leave.

2. If smoke is heavy, crawl out, staying close to floor. Take short breaths, if possible, through a wet cloth or hold your breath. More people die from smoke inhalation than from flames.

3. Get out as fast as you can. Do not stop for packing. Have a prearranged meeting place outside for all family members. Check everybody is there.

4. Call the Fire Brigade immediately on a mobile phone or from a neighbour's house. Make sure to call the Brigade for all fires no matter how small - fires can suddenly spread. Also call the Brigade even if the alarm is automatically transmitted to a remote manned centre - the link may have failed.

5. NEVER re-enter a burning house.

Limitations of Smoke / Heat Alarms

Smoke / Heat Alarms have significantly helped to reduce the number of fire fatalities in countries where they are widely installed.

However independent authorities have stated that they may be ineffective in some circumstances. There are a number of reasons for this:

- The Alarms will not work if the mains power is off and the battery is depleted. On the Ei141RC/144RC/146RC alarms the batteries should be replaced every three years as a precaution or if the unit gives a low battery beep.
- **NOTE:** Constant exposure to high or low temperatures or high humidity may reduce the life of the Alkaline battery.
- Smoke / Heat Alarms will not detect fire if sufficient smoke / heat does not reach the alarm. Smoke / heat may be prevented from reaching the Alarm if the fire is too far away, for example, if the fire is on another floor, behind a closed door, in a chimney, in a wall cavity, or if the prevailing air draughts carry the smoke / heat away. Installing Smoke / Heat Alarms on both sides of closed doors and installing more than one Smoke / Heat Alarm as recommended in the '**INSTALLER INSTRUCTIONS**' booklet significantly improves the probability of early detection.
- The Alarm may not be heard.
- A Smoke / Heat Alarm may not wake a person who has taken drugs or alcohol.
- Smoke / Heat Alarms may not detect every type of fire to give sufficient early warning.
- Optical and Ionisation Smoke Alarms should be fitted for the fastest response to all types of fires.

• Smoke / Heat Alarms don't last indefinitely. For example if there is a build up of contamination, performance will be impaired.

It is recommended that the Smoke / Heat Alarms are replaced after 10 years as a precaution.

10. ALARM CONTROL (OPTIONAL)

A System Control Switch (Ei1529RC) is available as an optional accessory. It allows the user to perform the following functions from a remote location:

LOCATE - If alarms sound press **Locate** to allow the source of alarm to be identified.

SILENCE - Press to silence nuisance/false alarms.

TEST - Operate weekly to **Test** the alarms.

MAINS CHECK - **Test** will not work with mains absent.

Note: for RadioLINK interconnect and Alarm control an Ei168RC Alarm Base and an Ei450 Alarm Controller are required.

11. GETTING YOUR ALARM SERVICED

If your Alarm fails to work after you have carefully read all the instructions, checked the unit has been installed correctly, and is receiving AC power (green light on) contact Customer Assistance at the address given at the end of this leaflet. If it needs to be returned for repair or replacement put it in a padded box and send it to "Customer Assistance and Information" at the nearest address given on the Alarm or in this leaflet. Do not snap on to the mounting plate as this connects the battery and the unit may beep or alarm in the post. **State the nature of the fault**, where the Alarm was purchased and the date of purchase.

12. FIVE YEAR GUARANTEE

Ei Electronics guarantees this Alarm (excluding battery in the Ei141RC/144RC/146RC models) for five years from date of purchase against any defects that are due to faulty materials or workmanship. This guarantee only applies to normal conditions of use and service, and does not include damage resulting from accident, neglect, misuse, unauthorised dismantling, or contamination howsoever caused. This guarantee excludes incidental and consequential damage. If this Alarm should become defective within the guarantee period, it must be returned to Ei Electronics, with proof of purchase, carefully packaged, with the problem clearly stated. (see "Getting Your Alarm Serviced") We shall at our discretion repair or replace the faulty unit.

Do not interfere with the Alarm or attempt to tamper with it. This will invalidate the guarantee, but more importantly may expose the user to shock or fire hazards.

This guarantee is in addition to your statutory rights as a consumer.

13. TROUBLESHOOTING

1. FREQUENT NUISANCE/FALSE ALARMS OCCUR:

(1) Close kitchen / bathroom door when in use.

(2) Ensure that the alarm is sited at least 6m away from sources of fumes.

(3) Contamination from insects, paint or paint fumes may have occurred. Clean the alarm - see "**CLEANING YOUR ALARM**" section.

(4) If the problem persists, resiting of the unit should be considered.

2. ALARM SOUNDS FOR NO APPARENT REASON:

(1) Identify the alarm source. On interconnected units, the red light on the cover will flash rapidly only on the unit which is the source of the alarm. If an optional Ei1529RC Control Switch is installed, press Locate when system is sounding to identify source of alarm.

(2) Check for fumes, steam etc. from the kitchen or bathroom. Paint and other fumes can cause nuisance/ false alarms.

(3) Press the test/silence button to silence the Smoke/ Heat Alarm for 10 minutes.

(4) If alarm does not stop, switch off mains and remove unit - see "**ALARM REMOVAL**" section. (Only remove the alarm with the red light flashing, the others are probably satisfactory).

3. LOW BATTERY & OTHER BEEPS:

(On Ei141RC/144RC/146RC only)

If the battery is correctly connected and the unit has beeped for over 20 minutes the battery is probably depleted. Obtain a new battery, disconnect the mains, then remove the alarm and replace the depleted battery.

(On Ei161RC/164RC/166RC only)

Check the green mains power light is on. If not, check fuse, circuit breakers and wiring connections. If the green light is off, the Lithium cells will deplete after some months without mains and will need to be recharged. If turning on the mains fails to stop the beeps, a fault may exist. Switch off mains and remove the unit - see "**ALARM REMOVAL**" section.

(All Alarms)

(1) If the green mains light is on and replacing battery, recharging Lithium cells or cleaning unit has not stopped the beeps, a fault may exist. Disconnect the mains first and replace the unit - see "**ALARM REMOVAL**" section.

(2) If an Optical unit (Ei146RC/166RC) beeps without the red light flashing at the same time, the chamber is defective. Clean the chamber.

4. INTERCONNECTED ALARMS DO NOT ALL SOUND:

(1) Hold test button for 10 seconds after first alarm has sounded to ensure signal is transmitted to all units.

(2) One or more of the connections may not be correctly connected. We recommend you consult a qualified electrician.

CE
0086

Ei Electronics, Shannon, Co. Clare, Ireland
08
DoP No.13-0001

EN14604:2005 + AC:2008

Smoke Alarm Devices:
Ei141RC, Ei146RC, Ei161RC, Ei166RC

Fire Safety

Nominal activation conditions/ sensitivity, response delay (response time) and performance under fire condition	**Pass**
Operational reliability	**Pass**
Tolerance to voltage supply	**Pass**
Response delay and temperature resistance	**Pass**
Vibration resistance	**Pass**
Humidity resistance	**Pass**
Corrosion resistance	**Pass**
Electrical stability	**Pass**

CE

Heat Alarm Devices:
Ei144RC, Ei164RC

The Declaration of Performance No. 13-0001 may be consulted at www.eielectronics.com/compliance

INDEX

The crossed out wheelie bin symbol that is on your product indicates that this product should not be disposed of via the normal household waste stream. Proper disposal will prevent possible harm to the environment or to human health. When disposing of this product please separate it from other waste streams to ensure that it can be recycled in an environmentally sound manner. For more details on collection and proper disposal, please contact your local government office or the retailer where you purchased this product.

Aico Ltd. Mile End Business Park, Maesbury Rd, Oswestry, Shropshire SY10 8NN, U.K.
Tel: 0870 758 4000

www.aico.co.uk

Ei Electronics. Shannon, Co Clare, Ireland.
Tel: 061 471277

www.eielectronics.com

Ei Electronics®
fire + gas detection

230V~ SMOKE & HEAT ALARMS

ALKALINE BATTERY BACK-UP

Ei141RC - Ionisation | Ei144RC - Heat | Ei146RC - Optical

RECHARGEABLE LITHIUM CELL BACK-UP

Ei161RC - Ionisation | Ei164RC - Heat | Ei166RC - Optical

INSTALLER INSTRUCTIONS

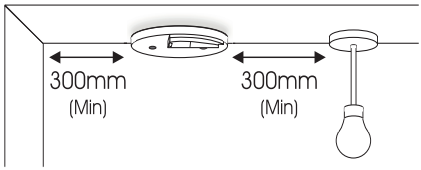
1. QUICK GUIDE

✓	IDEALLY INSTALL IN THE CENTRE OF CEILING AT LEAST 300mm FROM LIGHT FITTINGS
✓	LOCATE IONISATION ALARMS AWAY FROM KITCHENS TO PREVENT NUISANCE ALARMS
✓	INTERCONNECT ALL ALARMS
✓	ENSURE LIVE MAINS IS CORRECTLY CONNECTED TO L TERMINALS ON ALL INTERCONNECTED ALARMS - OTHERWISE UNITS WILL BE DAMAGED
X	DO NOT FIT ACTUAL ALARM UNTIL ALL BUILDING WORK IS COMPLETED TO AVOID CONTAMINATION. AFTER CHECKING OPERATION, COVER SMOKE ALARM WITH DUST COVER UNTIL REQUIRED FOR USE
X	DISCONNECT THE ALARM BEFORE APPLYING HIGH VOLTAGE INSULATION TESTS TO WIRING
X	DO NOT ATTEMPT TO OPEN THE ALARM AS IT IS PERMANENTLY SEALED FOR SAFETY
X	DO NOT CONNECT ALTERNATIVE ENERGY SOURCES e.g. WIND, SOLAR, UPS WITH NON-SINUSOIDAL OUTPUTS (see INSTALLATION section)

P/N B17683 *Rev0*
© Ei Electronics 2013

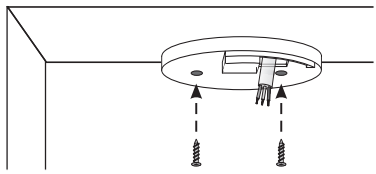
1.1 Installation Guide

1 **LOCATE CORRECT SITING POINT**



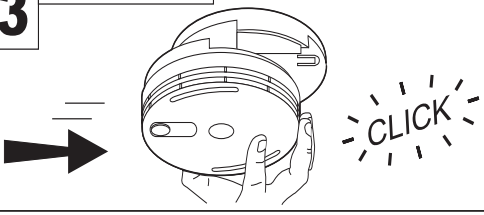
ALARM SHOULD BE CEILING MOUNTED *AT LEAST 300mm* FROM WALLS & OBSTRUCTIONS, IDEALLY CENTRALLY IN ROOM/AREA

2 **FIX & WIRE BASEPLATE**



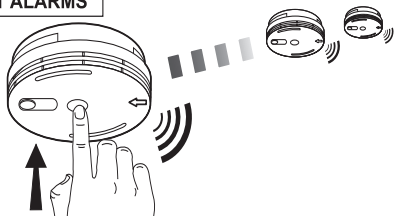
WIRE TO TERMINALS ON BASEPLATE AND FIX BASEPLATE TO CEILING USING THE FIXINGS PROVIDED

3 **SLIDE ON ALARM**



SLIDE ALARM ONTO BASEPLATE. A CLICK SHOULD BE HEARD AS THE TAMPER-PROOF CATCH ENGAGES

4 **TEST ALARMS**



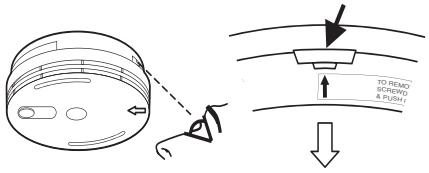
PRESS AND HOLD THE TEST BUTTON ON THE ALARM. THE ALARM AND ANY INTERCONNECTED UNITS SHOULD SOUND

ATTENTION: THIS SECTION IS ONLY A GUIDE.
PLEASE READ FULL INSTRUCTIONS BEFORE INSTALLATION

2. Alarm Removal

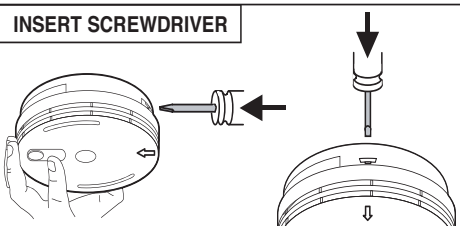
⚠ ***DISCONNECT MAINS BEFORE REMOVAL***

1 **LOCATE REMOVAL SLOT**



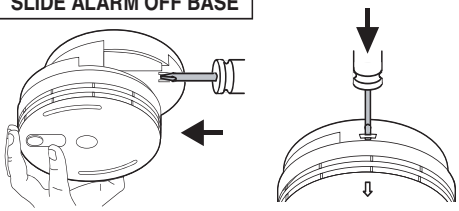
LOCATE THE ARROW ON THE FRONT FACE OF THE ALARM THE SLOT IS LOCATED DIRECTLY ABOVE THE ARROW

2 **INSERT SCREWDRIVER**



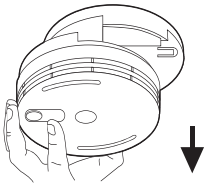
INSERT A FLAT-BLADED SCREWDRIVER HORIZONTALLY APPROX. 1cm INTO THE CENTRE OF THE REMOVAL SLOT

3 **SLIDE ALARM OFF BASE**



WITH THE SCREWDRIVER STILL INSERTED, PUSH THE LOWER HALF OF THE ALARM AWAY FROM THE SCREWDRIVER, IN THE DIRECTION OF THE ARROW ON THE COVER

4 **REMOVE ALARM**



HOLD THE LOWER HALF OF THE ALARM AND REMOVE FROM THE BASE PLATE BY MOVING IT VERTICALLY DOWNWARDS, TOWARDS THE FLOOR

2. HOW MANY ALARMS TO INSTALL
- CATEGORIES & GRADES -

The advice here follows the guidance in British Standard BS 5839-Part 6: 2004 in general (for further information see the BS standard itself).

The main reason for fitting Smoke & Heat Alarms in dwellings is to ensure that when there is a fire, sufficient early warning is given so that everybody can escape safely.

This means that the fire alarms should ideally be located near all potential sources of fires and that the alarm should be heard throughout the house – particularly in the bedrooms.

It is also important that nuisance/false alarms are minimised to ensure the units are not disabled or ignored.

The BS standard gives guidance on:

- how many alarms to install
- what type of alarm to use
- where to position alarms

The above points will depend on the type of dwelling to be protected and the level of fire risk.

Fire Risk Assessment

The 'Grade' and 'Category' of system that should be installed depends on the fire risk. The risk assessment is based on a combination of probabilities:

- fire occurring
- injury or death to occupant
- system operating correctly with a fire
- early detection and warning to occupants in the event of a fire.

The greater the risks, the more comprehensive and reliable systems need to be.

2.1 Categories of System

There are three Categories of **LD** systems for **L**ife protection in **D**wellings that can be installed, depending on the fire risk and regulations.

Please see following pages for detailed information.

LD3 MINIMUM PROTECTION

for existing dwellings

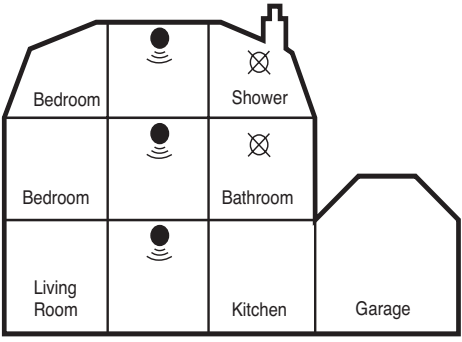
Minimum Protection LD3: Smoke Alarms in all hallways, stairways and circulation areas that form part of the escape routes from the dwelling.

Interconnect all alarms

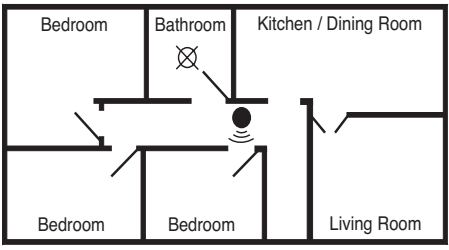
Smoke Alarms located:

- on each storey
- every 7.5 m of hallways and escape routes
- within 3m of all bedroom doors

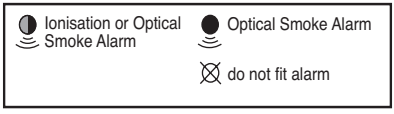
(apart from toilets & bathrooms ⊠)



Multi Storey Dwelling LD3



Single Storey Dwelling LD3



LD2 ADDITIONAL PROTECTION

for new or materially altered dwellings or existing dwellings with poor structural fire precautions

Additional Protection LD2: As LD3, but in addition Smoke or Heat Alarms in all rooms or areas that present a high fire risk to occupants.

Interconnect all alarms

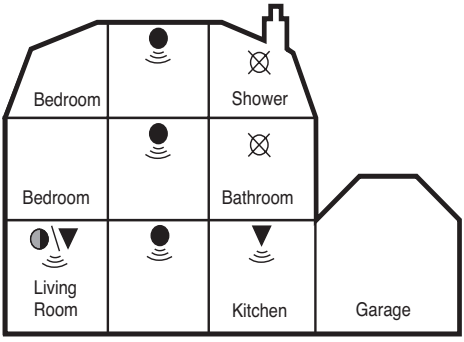
Smoke Alarms located:
- on each storey
- every 7.5 m of hallways and escape routes
- within 3m of all bedroom doors

(apart from toilets & bathrooms ⊠)

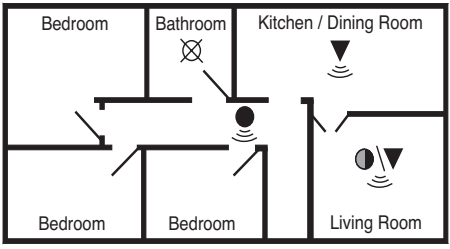
Heat Alarms located in:
- each Kitchen

(Heat Alarms must be within 5.3m of potential fire sources)

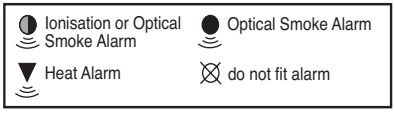
Smoke or Heat Alarms located in:
- each Living room (i.e. most frequently used daytime room)



Multi Storey Dwelling LD2



Single Storey Dwelling LD2



LD1 OPTIMUM PROTECTION

for dwellings where occupants may be at high risk (e.g. elderly)

Optimum Protection LD1: As LD2, but in addition Smoke or Heat Alarms should be located in all rooms and other areas of the dwelling.
(apart from toilets or bathroom)
Interconnect all alarms

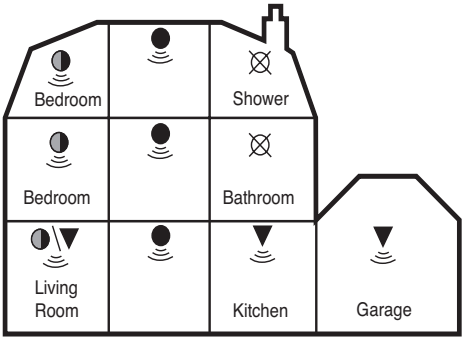
Smoke Alarms located:
- on each storey
- every 7.5 m of hallways and escape routes
- within 3m of all bedroom doors
- in all other rooms & areas other than listed below

(apart from toilets & bathrooms ⊠)

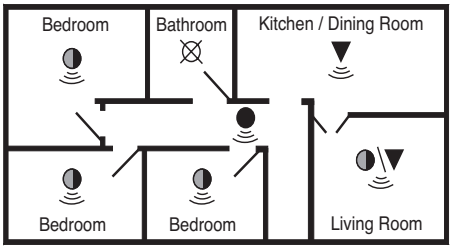
Heat Alarms located in:
- each Kitchen
- garages

(Heat Alarms must be within 5.3m of potential fire sources)

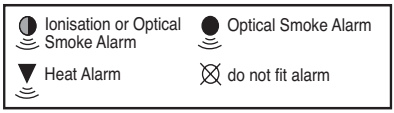
Smoke or Heat Alarms located in:
- each Living room (i.e. most frequently used daytime room)



Multi Storey Dwelling LD1



Single Storey Dwelling LD1



2.2 Selecting Alarm Type

Optical/Ionisation/Heat Alarm Selection
Locations & Performance

	Alarm Type		
	Optical [1]	Ionisation [2]	Heat
Locations			
Hall, Corridors, Escape Routes	✓✓✓	✓✓	X
Kitchens	X	X	✓✓✓
Living Rooms	✓✓✓	✓✓	✓ [3]
Bedrooms	✓✓✓	✓✓	X
Shower / Bathroom	X	X	X
Fire Response			
Slow Smouldering Fires (polyurethane foam, ignited bedding etc.)	✓✓✓	✓✓	X
Fast Flaming Fires (chip pans, flaming wood/plastic, oil, solvents etc.)	✓✓	✓✓✓	X
Temperature >58^{0}C (only in areas with cooking fumes, steam, very dirty/dusty)	X	X	✓✓✓ [4]
Nuisance Alarm Immunity			
Cooking Fumes	✓✓	✓ [5]	✓✓✓
Steam, Condensation & Dust Build-up	✓	✓✓	✓✓✓

✓✓✓ - Best ✓✓ - Good ✓ - Acceptable X - Not Suitable

1 Optical Smoke Alarms are recommended due to their excellent response to smouldering fires. If there is likely to be problems with steam, contamination or dust build-up, or if there is significant risk of a fast burning clean fire an Ionisation Smoke Alarm should be fitted.

2 Ionisation and Optical Smoke Alarms should be fitted for the fastest response to all types of fires.

3 Some Fire authorities (concerned with the slow response of Heat Alarms) advise that Smoke Alarms should be fitted. This is acceptable according to BS 5839-6 provided there are clearly not going to be problems with nuisance/false alarms. Fit Heat Alarms only if nuisance/false alarms are very likely and it is acceptable that a warning will only be given by the Heat Alarm when there is a very significant flaming fire in the room. If the door(s) and windows are not closed to contain the fire and heat, it is extremely unlikely that the Heat Alarm would respond before a Smoke Alarm sited outside in the corridor.

4 In enclosed kitchens with doors closed.

5 Greatly depends on ventilation and distance from source of fumes.

Improved Audibility

The effectiveness of Category LD2 and LD3 systems can be significantly enhanced if an additional Smoke Alarm (interconnected) is installed in the master bedroom. This will help ensure that a responsible person will quickly be alerted to a fire and can arrange for an orderly evacuation of children and other vulnerable occupants.

2.3 Grade D, E & F Systems

The mains powered Smoke and Heat Alarms with battery back-up covered by these instructions are suitable for Grade D, E & F Systems.

A Grade D system is needed for:

- new or materially altered dwellings, up to three-storeys, with no floor over 200m^2
- existing dwellings with poor structural fire precautions, up to three storeys, with no floor over 200m^2
- Houses in Multiple Occupation (HMOs) of one or two-storeys, with no floor over 200m^2
- Individual dwellings units of two or more rooms in HMOs

Check that a Grade D system is adequate for the dwelling into which the system is being installed.

3. POSITIONING ALARMS

The locations must comply with applicable building regulations.

Hot smoke rises and spreads out, so a central ceiling position is the preferred location. The air is “dead” and does not move in corners, therefore Smoke & Heat Alarms must be mounted away from corners. Place the unit:

- At least 0.3m away from walls. See **Figure 1**.
- At least 0.3m from any light fitting or decorative object which might obstruct smoke / heat entering the Alarm.

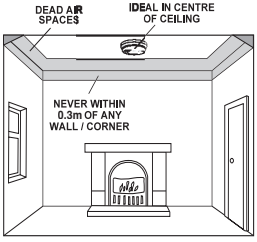


Figure 1

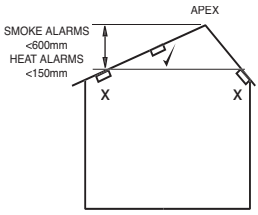


Figure 2

Sloping Ceiling

With a sloping or peaked ceiling install a Smoke Alarm within 600mm of the peak or a Heat Alarm within 150mm of the peak (measured vertically). If this height is less than 600mm for Smoke Alarms or 150mm for Heat Alarms it is regarded as being flat (see **Figure 2**).

Wall mounting of smoke alarms (only):

If ceiling mounting is impractical, smoke alarms may be mounted on a wall, provided that:

a) the top of the detection element is between 150mm and 300mm below the ceiling;

b) the bottom of the detection element is above the level of any door openings;

Wall mounting should only be considered where close spaced beams or similar obstructions may preclude ceiling mounting. It is considered to be the responsibility of the installer/client to determine if the presence of asbestos in the ceiling material would make ceiling mounting 'impractical'.

3.1 Locations To Avoid

DON'T place Smoke Alarms in any of the following areas:

- *Bathrooms, kitchens, shower rooms, garages* or other rooms where the smoke alarm may be triggered by steam, condensation, normal smoke or fumes. Keep at least 6 metres away from sources of normal smoke/fumes.

DON'T place Heat Alarms in any of the following areas:

- *Bathrooms, shower rooms* or other rooms where the unit may be triggered by steam or condensation.

DON'T place Smoke or Heat Alarms in any of the following areas:

- Places where the normal temperature can exceed 40°C or be below 4°C (e.g. *attics, furnace rooms*, directly above *ovens* or *kettles* etc.) as the heat/steam could cause nuisance/false alarms.
- Near a *decorative object, door, light fitting, window moulding* etc., that may prevent smoke or heat from entering the Alarm.
- Surfaces that are normally warmer or colder than the rest of the room (e.g. *attic hatches*). Temperature differences might stop smoke or heat from reaching the unit.
- Next to or directly above *heaters* or *air conditioning vents, windows, wall vents* etc. that can change the direction of airflow.
- In very *high* or *awkward areas* (e.g. over stairwells) where it may be difficult to reach the alarm (for testing, hushing or battery replacement).
- Locate away from very *dusty* or *dirty areas* as dust build-up in the chamber can impair performance. It can also block the insect screen mesh and prevent smoke from entering the smoke detector chamber.
- Locate the unit at least 1m from *dimmer controlled lights and wiring* as some dimmers can cause interference.
- Locate unit at least 1.5m and route wiring at least 1m away from *fluorescent light fittings* as electrical "noise" and/or flickering may affect the unit. Do not wire into the same circuit as fluorescent lights or dimmers.

- Do not locate in *insect infested areas*. Small insects getting into the smoke detector chamber can cause intermittent alarms. Insects and contamination on the Heat Alarm sensor can increase its response time.

4. INSTALLATION

The Alarm is designed to be permanently mounted, using it's own built-in terminal block to connect it to the mains. The mounting plate can be screwed directly to the ceiling. Alternatively it can be screwed to a standard junction box. It requires a current of 40mA. The Alarm must not be exposed to dripping or splashing. There are important markings on the underside of the alarm.

Caution

Alternative Energy Sources - (Wind, Solar, UPS etc.)

This product is designed to be connected to a Pure or True Sine Wave 230 Vac supply.

If connecting to a power source that utilises an inverter, e.g. PV solar panel, the Total Harmonic Distortion (THD) must be less than 5%. If in doubt please check with the manufacturer of the inverter.

This also applies to battery powered UPS (Uninterruptible Power Supply) inverters.

Light Dimmer Circuits – The Alarms **must not** be powered from a light dimmer circuit.

IMPORTANT PRECAUTION: Do not install the Alarms in new or renovated buildings until all work is completed (including floor coverings) and the building has been fully cleaned. The wiring can be installed when appropriate. *(Excessive dust and debris from building work can contaminate the smoke chamber or heat sensor and cause problems, it will also invalidate the guarantee).* If it must be installed, first cover it completely, particularly around the edges, with a dust cover (eg. with the elasticated cover supplied or a plastic bag), until all cleaning is finished.

The Alarm must not be connected when the house wiring insulation is being checked with high voltages.
i.e. Do not use a high voltage insulation tester on the alarm.

WARNING: Mains operated Alarms should be installed and interconnected by a qualified electrician in accordance with the Regulations for Electrical Installations published by the Institution of Electrical Engineers (BS7671). Failure to install this Alarm correctly may expose the user to shock or fire hazards.

WARNING: The Alarm must be continuously powered 24 hours a day so it is important that it is not on a circuit that can be turned off by a switch.

Note: BS 5839-6 2004 gives the folowing recommendations regarding the mains supply to be used in a Grade D system (The Ei141RC/146RC/161RC/166RC Smoke Alarms and Ei144RC/164RC Heat Alarms can be used in a Grade D system). The power supply for the Alarms should be derived from the public electricity supply to the dwelling. The mains supply to the Alarms should take the form of either:

(a) an independent circuit at the dwelling's main distribution board, in which case no other electrical equipment should be connected to this circuit (other than a dedicated monitoring device installed to indicate failure of the mains supply to the Alarms); or

(b) a separately electrically protected, regularly used local lighting circuit.

Alarms should be connected on a single final circuit, unless the means of interconnection is by radio signals (e.g. RadioLINK).

(See BS 5839-6: 2004 for further information)

Note: The Ei Electronics RadioLINK Base Ei168RC can be used to eliminate interconnect wiring, make system extensions and provide simple and cost effective compliance with BS 5839-6: 2004.

4.1 Mounting & Wiring Alarms

1. Select a location complying with the advice in the (Positioning Alarms section).

2. Disconnect the AC mains supply from the circuit that is going to be used.

3. Lift off the wiring cover as shown in **Figure 3**.

The house wiring must be connected to the terminal block on the mounting plate as follows:

L: Live - connect to the house wires coloured brown or marked L.

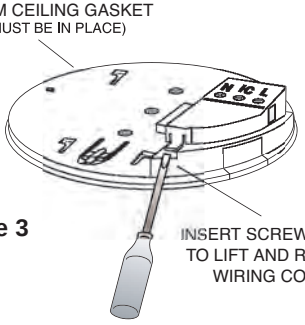


Figure 3

N: Neutral - connect to the house wires coloured blue or marked N.

See page 14 for information on interconnection.

Note: *Wiring must be installed in compliance with local regulations.*

Warning: Mixing the Live and Neutral connections when interconnecting alarms will damage all the alarms - ensure that the same colours are used throughout the premises for Live, Neutral and Interconnect wires.

We strongly recommend that you check for the following **before connecting the alarm**:

- check for Live and Neutral using a two probe tester.
- check for Live using a neon tester.
- check that the Interconnect wire is NOT connected to Live, Neutral or Earth. **Do not use an Earth wire for the Interconnect line.**

N.B. The alarm does not need to be earthed. However the terminal marked ⏚ is provided for the convenience of the installer so that any copper Earth wire or cable coloured green & yellow, can be safely terminated.

To interconnect the Alarms connect all the IC terminals together as shown in **Figure 4** (see "**Interconnecting Alarms**" section on page 14).

4. If the mains wires are recessed, bring the wires through the rear hole in the mounting plate as shown in **Figure 4**.

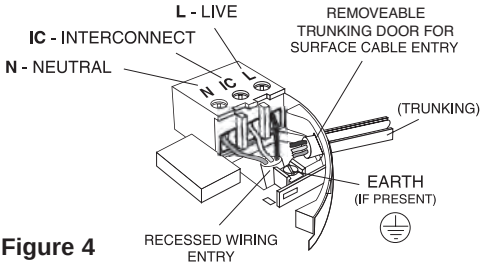


Figure 4

If the mains wires are being brought along the surface:

(a) position the mounting plate so the cable trunking is as shown in **Figure 4**.

(b) the mounting plate has a removable section, take it out to interface directly with 25mm conduit as shown in **Figure 5**. If interfacing to 16mm conduit carefully cut around the marked section, leaving the top intact and replace the section. (If you are not using surface wiring, the removable section must be left in place for electrical safety reasons).

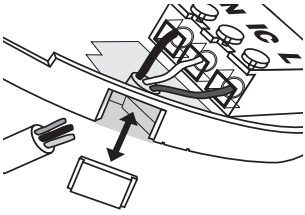


Figure 5

There are two other positions which are also suitable for the surface wiring to enter (and exit) the alarm, one next to the removable section and another directly opposite.

5. Carefully align the mounting plate and screw into place. Connect the wires to the terminal block. With recessed wiring, ensure the rear gasket seals around the edge of the hole in the ceiling or wall. This is to

prevent air draughts affecting the smoke/heat entering the alarm. If the hole is too large or the alarm does not seal it, it should be sealed with silicone rubber or equivalent.

6. Replace the wiring cover. Check the alarm battery is connected (Ei141RC/144RC/146RC only).

7. Carefully line up the unit on the base and slide on.

8. Press and hold the test/hush button for 10 seconds. The horn will sound. On release of the test button the local alarm will stop sounding immediately and the interconnected Alarms will stop sounding a few seconds later.

9. Connect the mains power to the alarm circuit. Check the green light is on.

10. Attach the *'Smoke Alarm'* identification label provided to the distribution board to identify the alarm circuit.

11. Attach the *'Mains Smoke / Heat Alarms'* label provided on or near the distribution board and write in date installed and the number of alarms on the circuit.

Ensure the alarm operates correctly - see "**TESTING & MAINTAINING YOUR ALARM**" section on page 4 of the *USER INSTRUCTIONS*.

4.2 Interconnecting Alarms

Note: A maximum of twelve Ei141RC/144RC/146RC /161RC /164RC/166RC Smoke or Heat Alarms may be interconnected. Up to 8 additional accessories may also be connected (see "**ACCESSORIES**" section).

If you wish to connect more than twelve alarms contact your local distributor (see page 16 for details).

Systems using more than 3 or 4 alarms must be very carefully planned to ensure nuisance/false alarms are not excessive. e.g. from cooking fumes or steam. The following is suggested:

- Smoke Alarm Control Switch (model Ei1529RC) should be incorporated into the system and be readily accessible to all occupants so that the source of an alarm can be quickly identified.
- All alarms must be cleaned and maintained regularly.
- A qualified person must be on call to quickly remove any nuisance units (i.e. units with red light flashing rapidly) which are causing all the other alarms to sound.

WARNING: Do not connect these Alarms to any other type of Ei Alarm (apart from those listed above) or to any other model produced by another manufacturer. Doing so may damage the Alarms and could result in a shock or fire hazard.

Wiring must be installed in compliance with local regulations.

In the UK it is recommended that the following coloured cores are used (for example with triple flat 6243Y cable).

230V supply	*Brown*
Neutral	*Grey - sleeved blue at terminations*
Interconnect	*Black*

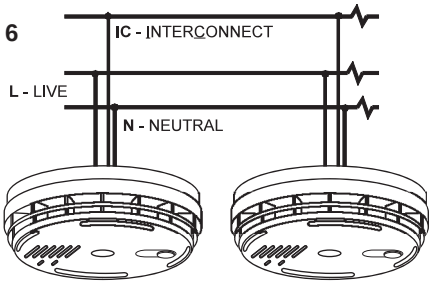
The interconnect wire (minimum 0.75mm^2 cable) must be treated as if it was Live. It should be insulated and sheathed.

A maximum of 250 metres of wire can be used (maximum resistance between detectors 50 Ohms).

These Smoke/Heat Alarms should be interconnected only within the confines of a single family living unit. If they are connected between different units there may be excessive nuisance/false alarms. Everybody may not be aware that they are being tested or that it is a nuisance/false alarm caused by cooking etc.

Ensure the alarms operate correctly - see "**TESTING & MAINTAINING YOUR ALARM**" section of the *USER INSTRUCTIONS*.

Figure 6



Note: For RadioLINK (wireless) interconnect and remote control each alarm must be fitted with an Ei168RC Alarm Base.

Smoke Alarm - Optical or Ionisation?

Both types respond in all standard fires but each type may respond faster to particular fires as shown.

Optical Sensor
Best for slow smouldering fires - large smoke particles

Ion Sensor
Best for fast flaming fires - small smoke particles

Fire Authorities states:
"If your home has more than one floor, at least one alarm should be fitted on each level".

5. ACCESSORIES

Alarm System Control Switch Ei1529RC:

The System Control Switch is recommended for systems with three or more Smoke / Heat Alarms. It allows the user to perform the following functions from a remote location:

LOCATE - If alarms sound press *Locate* to allow source of alarm to be identified.

SILENCE - Press *Hush* to silence nuisance/false alarms.

TEST - Operate weekly to *Test* the alarms.

MAINS CHECK - *Test* will not work with mains absent.

RadioLINK Ei168RC

The Ei168RC RadioLINK Base provides wireless interconnection when used with either the Ei140RC or Ei160RC Series alarms. The base is used to eliminate interconnect wiring making system extensions simple, cost effective and compliant with BS 5839-6: 2004.

RadioLINK Alarm Controller Ei450

This wall mounted device allow you to Locate (identify the unit in alarm audibly), Hush and Test Smoke/Heat/Fire Alarms mounted on an Ei168RC Base. It also has a Locate Alarm Memory function that allows the alarm that had previously triggered the system to be identified – a useful troubleshooting feature.

Relay Modules Ei128R, Ei128RBU & Ei428:

The hard-wired interconnected Ei128R and Ei128RBU relay modules have voltage free contacts rated at 250V AC / 5 Amps. This is useful for remote signalling and turning on lights etc. The Ei128RBU Relay Module has battery back-up.

The Ei428 is a RadioLINK interconnect Relay Module with rechargeable battery back-up. The Ei428 is also a voltage free contact as is rated at 250V AC / 5 Amps.

Aico Ltd. Mile End Business Park, Maesbury Rd,
Oswestry, Shropshire SY10 8NN, U.K.
Tel: 0870 758 4000

www.aico.co.uk

Ei Electronics. Shannon, Co Clare, Ireland.
Tel: 061 471277

www.eielectronics.com

Xpelair Simply Silent™ Contour

Installation and Maintenance Instructions
Installatie - en Onderhoudsinstructies
Paigaldus- ja hooldusjuhised
Instructions d'installation et d'entretien
Istruzioni per installazione e manutenzione
Instrucciones de instalación y mantenimiento
تعليمات التركيب والصيانة
स्थापना एवं रखरखाव के निर्देश

C4S (92960AW)	C4TS (92962AW)	C4PS (92964AW)	C4HTS (92966AW)
C4R (92961AW)	C4TR (92963AW)	C4PR (92965AW)	C4HTR (92967AW)

English
Nederlands
Estonian
Français
Italiano
Español
العَرَبِيةُ
हिन्दी

English

Installation and Maintenance Instructions

Standard	Timer	Pull Cord	Humidistat, Timer
C4S (92960AW)	**C4TS (92962AW)**	**C4PS (92964AW)**	**C4HTS (92966AW)**
C4R (92961AW)	**C4TR (92963AW)**	**C4PR (92965AW)**	**C4HTR (92967AW)**

- Do read the entire instruction leaflet before commencing installation.
- Do install each fan with a means for disconnection in all poles in the fixed wiring.
- Do make sure the mains supply is switched off before attempting to make electrical connections or carry out any maintenance or cleaning.
- Please leave this leaflet with the fan for the benefit of the user.

English

This appliance is intended for connection to fixed wiring. Check that the electrical rating shown on each fan matches the mains supply.

THE APPLIANCE IS DOUBLE INSULATED AND DOES NOT REQUIRE AN EARTH CONNECTION.

All installations must be supervised by a qualified electrician. Installations and wiring must conform to current IEE Regulations (UK), local or appropriate regulations (other countries).

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and maintenance of the appliance shall not be made by children.

All Xpelair Simply Silent™ Contour AC fans have the following features:

- Two speed extraction (Selectable at installation)
- Built-in back draught shutter

C4S/C4R - Operate the fan using an on/off switch (not supplied).

C4PS/C4PR - Operate the fan using an integral pull-cord.

C4TS/C4TR* - Built-in timer operates fan for a preset delay from 30 seconds to 30 minutes.

C4HTS/C4HTR* - Operates when triggered automatically by the integral humidity sensor, or by using an external on/off switch (not supplied).

In automatic mode: the built-in timer automatically operates the fan for a pre-set delay time from 30 seconds to 30 minutes once humidity drops below the pre-set Relative Humidity (RH) value.

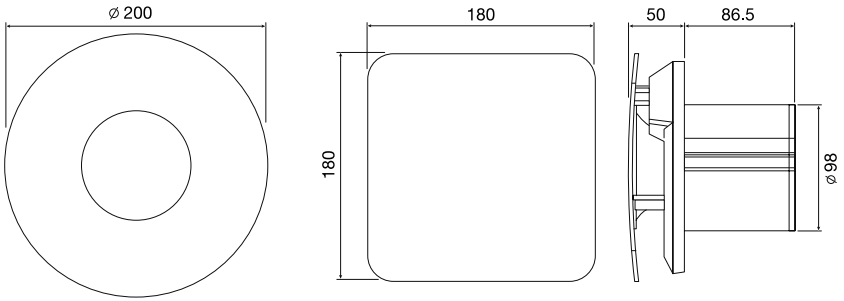
External operation: When switched off using the external on/off switch the fan continues to run for the preset delay from 30 seconds to 30 minutes.

*** Factory settings:** Timer 15 minutes, RH 75%

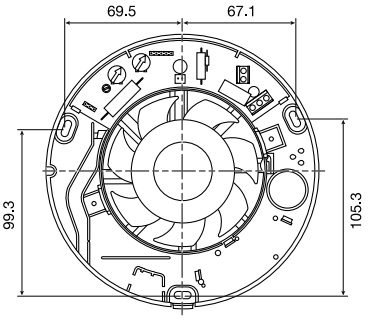
Where to locate the fan.

- Locate it as high as possible.
- At least 110mm from the edges of the mounting surface to the centre of the hole.
- As far away as possible from and opposite to the main source of air replacement to ensure airflow across the room (e.g. opposite the internal doorway).
- Near the source of steam or odours.

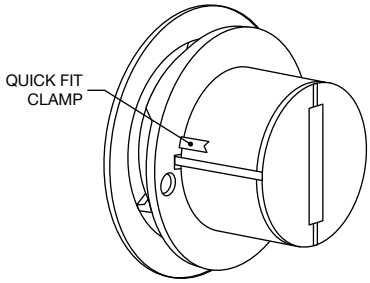
Overall Dimensions (mm)



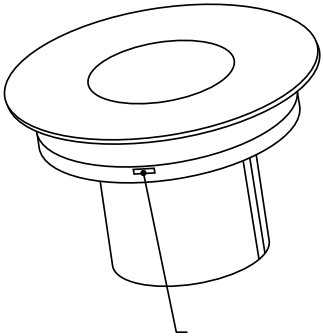
A Back plate fixing positions



B Wall tube quick fit clamps



C Front cover removal



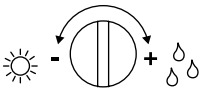
DEPRESS COVER LATCH
WITH TOOL & REMOVE
COVER & BAFFLE COMPLETE

D IMPORTANT – PLEASE READ

Adjusting the humidity setting

Fan switches on at lower level of condensation (anti-clockwise)

MORE SENTITIVE (RH = 50%)



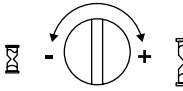
Fan does not switch on until higher level of condensation (clockwise)

LESS SENTITIVE (RH = 95%)

Factory settings:
Timer 15 minutes, RH 75%

Adjusting the run on timer setting

Fan runs on for a shorter time when the external switch is turned off

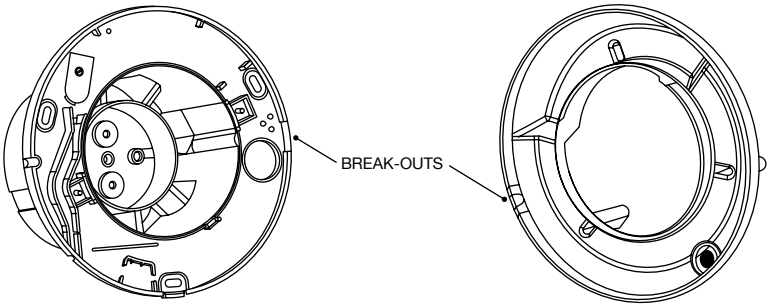


Fan runs on for a longer time when the external switch is turned off

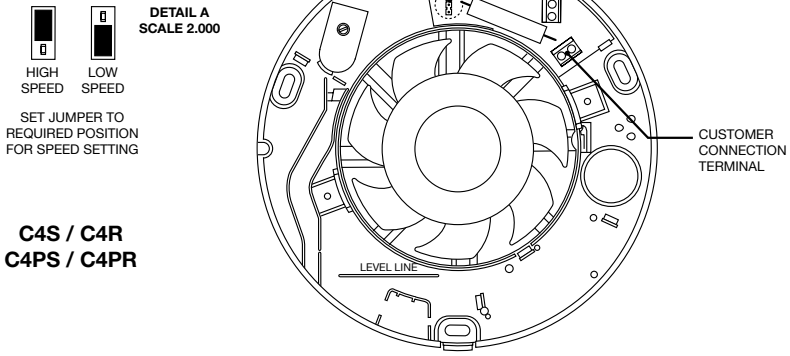
Minimum 30 seconds

Maximum 30 minutes

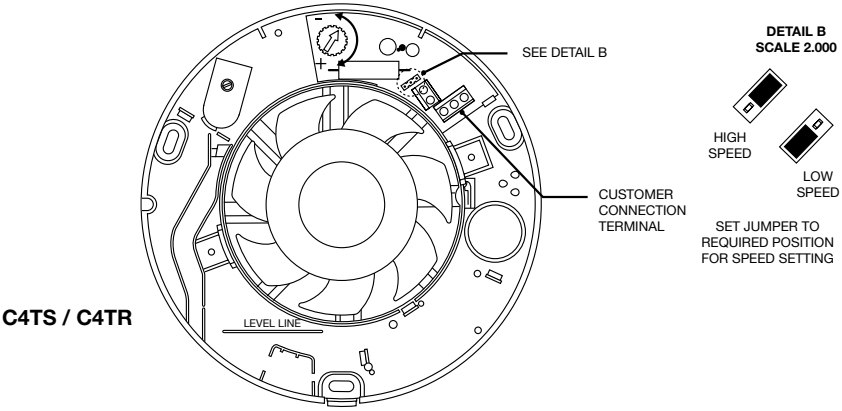
E Front cover and duct breakouts



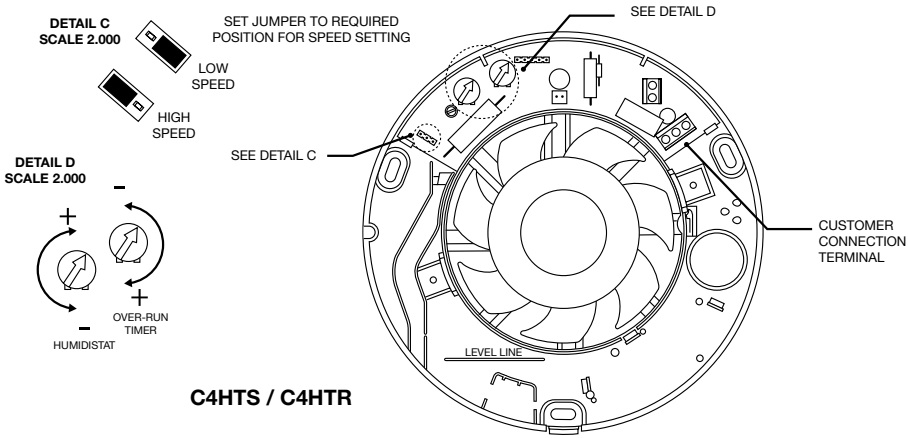
F Wiring and Setting Up



C4S / C4R
C4PS / C4PR



C4TS / C4TR



C4HTS / C4HTR

- **Not where ambient temperatures are likely to exceed 50°C.**
- **If installed in a kitchen fans must not be mounted immediately above a cooker hob, or eye level grill.**

- **If installing in a room containing a fuel burning device which has a non-balanced flue, it is the installer's responsibility to ensure that there is enough replacement air to prevent fumes being drawn down the flue when the fan is operating up to maximum extract. Refer to Building Regulations for specific requirements.**
- **Exhaust air must not be discharged into a flue used for exhausting of fumes from appliances supplied with energy other than electric. Requirements.**
- **Not suitable for use in possible chemical corrosive atmospheres.**

Installation

What the installer will need.
- 3mm electrician's screwdriver and No.1 or 2 Pozidrive screwdrivers.

If wall mounting the fan, you will also need:
- A 100mm diameter prepared hole.
- An appropriate external Wall Grille and Ø100mm wall sleeve duct. Kit Ref 91232AW.

If ceiling mounting the fan, you will also need:
- A 100mm diameter prepared hole.
- Appropriate ancillaries for termination. These items are available from Xpelair:
  1. 3m flexible ducting Ref: 89663AA. If the duct passes through a cold space use insulated duct ref: 89847AA.
  2. Soffit Grille Ref: 89742AW.
  3. XCT100 – Condensation Trap. Ref: 89749AA. Fitted immediately above the fan, this prevents water ingress due to condensation forming in the duct above the fan and running down.

If surface mount wiring the fan, you will also need:
- Miniature PVC trunking 16mm wide x 8mm deep to house the cable to the fan.

Installing the isolating switch and cables.
A means for disconnection in all poles must be incorporated in the fixed wiring in accordance with wiring regulations

- **If metal switch boxes are used, earthing regulations must be followed.**
- The cross-sectional area of the supply cord used should be ranged from 1-1.5mm².
- C4S / C44R / C4PS / C4PR – 2 core, C4TS / C4TR / C4HTS / C4HTR – 3 core.
- C4TS / C4TR / C4HTS / C4HTR. A wall or ceiling On/Off switch (with indicator light) is recommended

1. **Check that the electrical rating shown inside the back-plate matches your mains supply.**
2. **Check there are no buried pipes or cables e.g. electricity, gas, water behind the switch location (in the wall or above the ceiling). If in doubt, seek professional advice.**
3. **Isolate the mains supply.**
4. Lay in the cable from the isolating switch to the fan location via the on/off switch (if required). This must be housed in miniature PVC trunking.
5. Lay in the cable from the isolating switch to the point of connection to the mains supply.

Warning: Do not make any connections to the electrical supply at this stage.

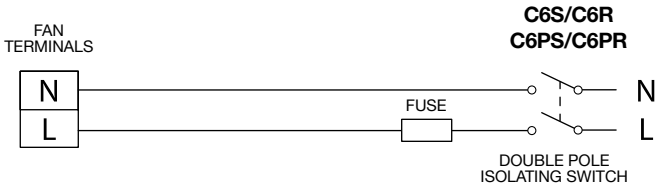
6. Install the isolating switch and on/off switch (if required).
7. Make all connections within the isolating switch and the on/off switch (if required).

Wet Rooms: On/Off switch must be situated so that it cannot be touched by persons making use of the bath or shower.

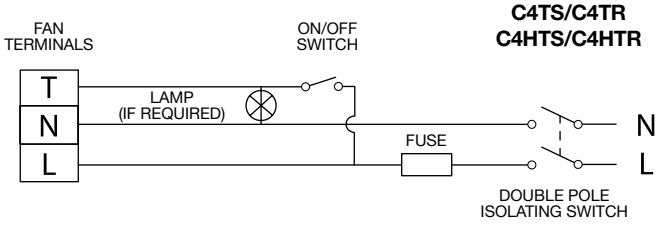
For Australia Only – C4S /C4R / C4PS / C4PR
Connection to the supply can be made by a flexible 2-core cable complete with 3 pin plug for insertion into an approved 10A GPO or directly wired through an approved 10A wall mounted surface switch with at least 3mm clearance between contacts.

For Australia Only – C4TS / C4TR / C4HTS / C4HTR
These models are permanently connected to the supply and operation is controlled by a remote switch. They should be directly wired to the supply through an approved 10A wall mounted surface switch with at least 3mm clearance between contacts.

G



For fixed wiring circuits the protective fuse for the appliance must not exceed 5A.



Preparing the Fan for installation.

1. Remove the front cover/baffle assembly by depressing the latch on the underside of the cover and pulling off the front cover / baffle from the bottom (See Figure C).

If working above ground floor level, safety precautions must be observed.

Mark the position of the back-plate

2. Hold the back-plate so that the level line marked on it is orientated horizontally.
3. Carefully insert the fan tube into the wall duct.
4. Mark on the wall the positions of the fixing holes in the back-plate.
5. Remove the back plate from the ducting.
6. Drill screw holes in these positions if necessary, and fit wall plugs and screws as required. The fan may also be fixed to a wall tube using the clamping brackets. See 9 below.

If installing in a ceiling, appropriate termination ancillaries are required. Follow instructions provided.

Mount the back-plate.

7. Feed the mains cable through the cable entry hole in the back plate to the terminals. If surface mount wiring 'break out' the side wall in the duct flange for cable entry (See Figure F)
8. Insert the fan tube of the back-plate into the wall duct/ceiling as before.
9. Fasten the back-plate to the wall/ceiling using appropriate fasteners. See figure A.
10. If using screws, do not over tighten. The fan may also be fixed to a wall tube using the clamping brackets. Tighten the screws until the fan is firmly secured to the tube – see figure B.

Wire the electrical connections.

11. Make sure the mains supply is isolated. Switch off the mains electrical supply and remove fuses.
12. Feed the cable to the terminal block. Wire the fan as shown in Figure G using the diagram appropriate to the fan model.
13. Connect the cable from the isolating switch to the electrical supply wiring.

Fan Settings

SPEED SETTING

The fans are factory set to low speed, but have two speed settings for different applications. Select either high or low speed by connecting the jumper between the centre and high or low speed pin on the jumper (see Figure F)

C4TS / C4TR Only.

- To adjust the over-run period turn the control (T) clockwise to increase and anti-clockwise to decrease – see Figure D.

C6HTS /C6HTR Only – see figures D and F.

- The pre-set humidity operation is factory set at approximately 75% Relative Humidity (RH), but can be adjusted between 65% and 85% RH by control H.
- The over-run timer is factory set at 15 minutes but can be adjusted from 30 seconds to 30 minutes by control T.
- Turn the controls clockwise to increase RH or time and anti-clockwise to decrease.

Using the fan

C4S / C4R Only

- Operate the fan using the on/off switch (not supplied). Repeat to switch off.

C4PS / C4PR Only

- Operate the fan by pulling and releasing the cord. Repeat to switch off.

C4TS /C4TR Only

- Operate the fan using an on/off switch (not supplied). When the switch is turned off, the fan continues to operate for the set time delay. To adjust the over-run period, turn the control “T” clockwise to increase and anti-clockwise to decrease – see Figure D.

C4HTS /C4HTR Only.

- **Automatic mode** - The fan automatically adjusts to slow changes in natural humidity levels without operating the fan. If the humidity levels increase at a rate slower than 5% RH in 5 minutes, up to the pre-set humidity level, the fan will not be triggered by humidity. This is to prevent nuisance triggering of the fan. If humidity levels increase quicker than 5% RH in 5 minutes the fan will operate. When relative humidity drops the fan continues to operate for the adjustable time delay.
- **External operation** - Use the external on/off switch. When the fan is switched off, the fan continues to operate for the adjustable time delay then goes into automatic mode.

All Fans

Re-fit the front cover/baffle assembly by hooking in the top first, and then swing the cover down to clip into place. If surface mount wiring, ‘break out’ the thin wall section in the front cover prior to re-fitting (see figure E). The miniature PVC trunking **must** then be sealed against the front cover to prevent any water ingress.

Cleaning

(recommended once a month)

1. Before cleaning, isolate the fan completely from the mains supply.
2. Remove the front cover/baffle assembly by depressing the latch on the underside of the cover and pulling off the front cover / baffle from the bottom.
3. To clean the front cover/baffle assembly, either wipe it with a damp, lint free cloth or wash it with warm soapy water. Thoroughly dry the front cover and refit.
4. Do not immerse the fan in water or other liquids to clean any other parts of the fan.
5. Do not use strong detergents, solvents or chemical cleaners
6. Allow fan to dry thoroughly before use.
7. Apart from cleaning, no other maintenance is required.

Disposal

This product should not be disposed of with household waste.

Please recycle where facilities exist.

Check with your local authority for recycling advice.

Guarantee

UK only

We, Redring Xpelair Group Limited, provide a guarantee against faulty parts and manufacture for a period of 2 years from the date of purchase. In the unlikely event of a product breakdown during the guarantee period the product should be returned to the place of purchase or to Redring Xpelair Group Limited.

Exclusions

- This guarantee does not cover compensation for the loss of the product or consequential loss of any kind.
- Damage or defects to the product arising from incorrect installation or lack of maintenance.
- Transportation costs.

This guarantee does not affect your statutory rights

English

Technical advice and service

Customers outside UK - see international below.

United Kingdom

Xpelair have a comprehensive range of services including:

- Free technical advice help-desk from Engineers on all aspects of ventilation.
- Free design service, quotations and site surveys.
- Service and maintenance contracts to suit all requirements.

Please ask for details:

- By telephone on Techline: +44 (0) 844 372 7766
- By fax on Techfax: +44 (0) 844 372 7767
- At the address below

Head Office, UK Sales Office and Spares
Redring Xpelair Group Ltd,
Newcombe House, Newcombe Way,
Orton Southgate, Peterborough,
PE2 6SE England

Telephone: +44 (0) 844 372 7761
Fax: +44 (0) 844 372 7762
Sales/Spares Hotline: +44 (0) 844 372 7750
Sales/Spares Faxline: +44 (0) 844 372 7760

www.xpelair.co.uk

International.

- Guarantee: Contact your local distributor or Xpelair direct for details.
- Technical Advice and Service: Contact your local Xpelair distributor.

CDA

Built for your life

HN6412FR

Induction hob

Installation, use and maintenance

Contents:

Important

The CDA Group Ltd cannot be held responsible for injuries or losses caused by incorrect use or installation of this product. Please note that CDA reserve the right to invalidate the guarantee supplied with this product following incorrect installation or misuse of the appliance or use in a commercial environment.

This appliance is not designed to be used by people (including children) with reduced physical, sensorial or mental capacity, or who lack experience or knowledge about it, unless they have had supervision or instructions on how to use the appliance by someone who is responsible for their safety.

Under no circumstances should any external covers be removed for servicing or maintenance except by suitably qualified personnel.

Appliance information:

Please enter the details on the appliance rating plate below for reference, to assist CDA Customer Care in the event of a fault with your appliance and to register your appliance for guarantee purposes.

Appliance Model	
Serial Number	

EU Declarations of Conformity

This appliance has been manufactured to the strictest standards and complies with all applicable legislation, including Electrical safety (LVD) 2014/35/EU and Electromagnetic interference compatibility

(EMC) 2014/30/EU. Parts intended to come into contact with food conform to 1935/2004/EC.

IMPORTANT INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT IN ACCORDANCE WITH EC DIRECTIVE 2012/19/EU.
At the end of its working life, the product must be taken to a special local authority waste collection centre or to a dealer providing appliance recycling services.

Disposing of a household appliance separately avoids possible negative consequences for the environment and health. It also enables the constituent materials to be recovered, saving both energy and resources. As a reminder of the need to dispose of household appliances separately, the product is marked with a crossed-out wheeled dustbin. 

Please note:

- Induction hobs become hot and remain hot during and immediately after use. Do not touch the hob until it has been allowed to cool.
- Keep children away from the appliance when in use.
- Never use the hob top for storage.
- Pan handles should never stand out beyond the edge of the worktop. This will help to avoid children reaching them.
- Do not lean over the hob when it is in use.
- Follow the cleaning instructions carefully.
- Ensure the base of the saucepan is clean and dry before placing it on the hob.
- Avoid hard shocks from cookware, dropping pepper mills etc. – the vitroceramic glass surface is highly resistant but not unbreakable.

- Do not place hot lids flat on the hob top. A “suction” effect could cause damage to the hob.
- Do not drag cookware across the hob top: in the long term, this could cause damage to the hob.
- Do not store cleaning or flammable products in the unit below the hob.
- Always use appropriate cookware.
- Do not cook unopened tins of food directly on the hob.
- Never put cooking foil or plastic materials on the ceramic surface when the hob is hot. These materials could melt and cause damage to the hob.
- This hob (Class 3) has been designed for use only as a cooking appliance in a domestic environment. Any other use should be considered incorrect and therefore dangerous.

FOR THOSE WITH HEART PACEMAKERS OR ACTIVE IMPLANTS:
The function of this hob conforms to current electromagnetic interference standards and thus is in total compliance with legal requirements (2004/108/CE directives).

To avoid interference between your hob and a pacemaker, your pacemaker must be designed and programmed in compliance with the regulations that apply to it. As such, CDA guarantee only that our product is compliant.

With regard to the compliance of the pacemaker or any potential incompatibility, you should obtain information from the manufacturer or your attending physician.

Important

- Do not use the hob if the glass surface is cracked or damaged to prevent the risk of electric shock. Disconnect it from the power supply.
- Ensure that the power cable of a connected electrical appliance near the hob is not in contact with the cooking zones.

Saving energy

Using energy in a responsible way not only saves money but also helps the environment. The following will help you to save energy:

- Use proper pans for cooking. A saucepan should never be smaller than a zone. Always remember to cover any pans.
- Ensure pans and the hob are kept clean. Soils can prevent heat transfer and repeatedly burnt-on spillages can often only be removed by products which cause damage to the environment.
- Do not uncover the pan too often (a watched pot never boils!).

Be sure to recycle all of the packaging. All packaging materials used are 100% recyclable.

Cooking on Induction

The principle of induction cooking is based on magnetic effect.

When you put your cookware on an induction zone and switch it on, the electronic boards in the hob produce induced currents in the base of the cookware and instantly raise its temperature. This heat is then transferred to the food inside the cookware.

The best cookware to use with induction cooking has thick flat bases, as the heat will be better distributed meaning cooking is more even.

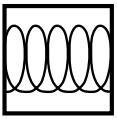
Most cookware is compatible with induction cooking.

There are three ways to check the suitability of your cookware:

1. Using a magnet to see if the base of the pan is magnetic: If the magnet sticks, then the cookware is compatible.

2. Place the pan on one of the cooking zones and switch the zone on. If the display continues to show the selected power level then the cookware is compatible. If the display shows “U”, the cookware cannot be used on an induction hob.

3. Check the instructions or packaging of the pans for the symbols indicating suitability for use with induction.



Using your hob

Zones:

1. Front left 2 - 3kW 220 mm
2. Back left 1.2 - 1.4kW 180 mm
3. Back right 2 - 3kW 220 mm
4. Front right 1.2 - 1.4kW 180 mm

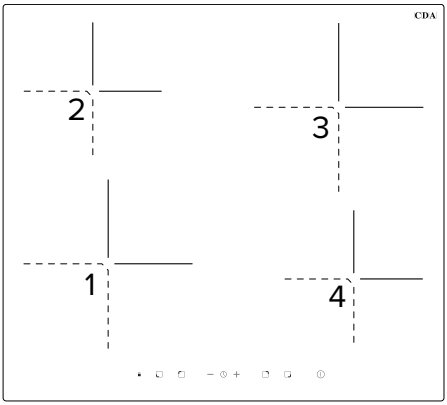


Fig. 1

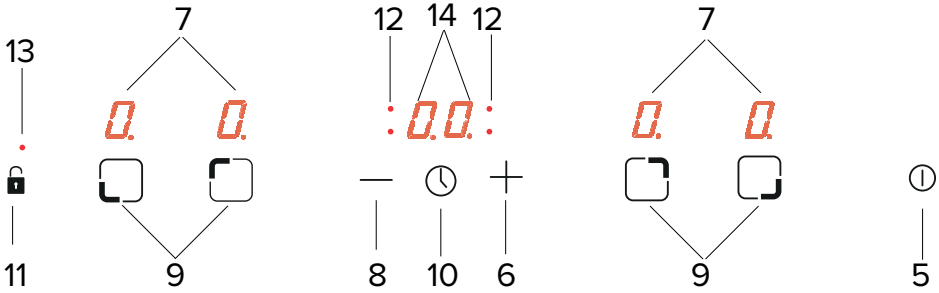


Fig. 2

Control panel:

5. On/off sensor
6. Higher heat setting selector
7. Cooking zone indicator
8. Lower heat setting selector
9. Cooking zone selector(s)
10. Timer sensor
11. Safety key lock sensor
12. Timer indicator light
13. Safety key lock indicator light
14. Timer display

Using your hob

To switch the hob on

- To switch the power on, touch and hold the "On/off sensor" (5) ⏻ for approximately two seconds. The hob will beep and all four cooking zone indicators will show “0”.

Please note: If a zone is not selected nor a power level set within ten seconds, the hob will switch off automatically.

To set the power level

- Touch the cooking zone selector (9) for the required zone. The hob will beep and the zone display will show a pulsating "0" on the selected zone's indicator.
- Select the desired heat setting using the "+" or "-" selectors. The power level ranges from 1 (minimum) to 9 (maximum). The hob will begin heating and the cooking zone indicator will pulsate for approximately ten seconds before remaining solidly lit. Inactive cooking zones' indicators will dim at this point.
- This hob also has a "Keep warm" function as well as a "Booster" function. The "Keep warm" function is available between "0" and "1" heat settings and is shown on a cooking zone indicator as "⊔". The Booster function is available after heat setting "9" and is shown on a cooking zone indicator as "P".

Please note: After zone selection, the zone will remain active for approximately ten seconds. If no key is touched during this time, the zone will become inactive and the hob will switch off automatically.

To turn the power off to a zone

- To switch off a zone, touch the cooking zone selector (9) so that the cooking zone indicator (7) pulsates. Then press and hold the cooking zone selector (9) for approximately three seconds. The cooking zone indicator will display a "0" to confirm that the zone is now inactive but will display an "h" or "H" if the zone is still hot to the touch.
- If switching off multiple zones, the above step needs to be taken for each zone. When all the zones are at "0", the hob will switch off automatically after approximately ten seconds.
- Alternatively, to switch off the hob immediately, touch and hold the "On/off sensor" (5) ⏻ for approximately two seconds. Any zones that are still hot to the touch will display an "h" or "H".

Booster function

- The hob is equipped with a booster function on all zones, allowing a higher power level than the maximum for approximately ten minutes. To turn on the booster function, touch the cooking zone selector (9) for the desired zone, set the heat setting to "9" using the "+" sensor (6) and then touch the "+" sensor (6) once more. "P" will show in the cooking zone indicator to show that the booster is on.
- The booster function automatically deactivates after 10 minutes of usage. The cooking zone will continue to operate at its nominal power at this point. The booster can be reactivated after this time provided the hob's internal components have not overheated.
- To cancel the booster at any time, select the cooking zone using the cooking zone selector (9) and lower the heat setting using the "-" sensor (8).

Please note: The booster function cannot be used on two vertically arranged cooking zones at the same time. This is to prevent damage to the internal modules caused by overheating.

If the appliance's electronic circuits or induction coils overheat whilst the booster function is in operation then the function will be automatically deactivated and the zone will continue to operate at its nominal power. The booster function will be available again once the internal components have been cooled sufficiently.

It is normal for a high pitched whirring noise to begin whilst the booster function is in use. This is the cooling fan inside the hob keeping the internal components as cool as possible.

If a pot is removed from the cooking zone whilst the booster function is in use, the function remains active and the ten minute countdown continues.

Operating time limiter

In addition to the booster deactivation timer, each zone has an operating time limiter to increase overall efficiency and to prevent the hob from being left on indefinitely. If a zone's heat setting is not changed for a specific duration then the associated zone is automatically switched off and residual heat indicator activated. Zones can still be used as normal in accordance with the operating instructions. The operating time limiter is set according to the last selected heat setting. The maximum operating times for each setting can be found on page 12.

Operating time limiter durations

Zone heat setting	Maximum operating time (minutes)
⊔	480
1	480
2	480
3	300
4	300
5	300
6	90
7	90
8	90
9	90
P	10

Auto-heat function

- Every zone is equipped with an auto-heat function, which reduces the warming up time for the zone. To turn on the auto-heat function, touch the cooking zone selector (9) for the required zone, then set the desired heat setting using the "+" sensor (6).
- With the cooking zone indicator (7) still pulsating, touch the cooking zone selector (9) for that zone for approximately one second. The display will alternate between the set power level and “A” for a preset period of time, before reducing the power to the originally selected heat setting.
- To disengage the auto-heat function simply select the zone using the cooking zone selector (9) and then press the cooking zone selector (9) again for approximately one second.

Timer/Minute minder

The hob is equipped with a timer that allows a finish time to be set for the end of cooking on any zone, between a minimum of 1 minute and a maximum of 99 minutes. This timer can be used separately for each zone, and an LED will indicate the zone positions for each of the active timers. Once the timers are set, the timer display will show the time remaining on the first zone to finish cooking. The timer can also be used as a minute minder to count down time, when the zones are not in use.

To set the timer

- First switch on the hob and set the desired zone to the power level required.
- Whilst the relevant cooking zone indicator (7) is pulsating touch the timer sensor (10). Using the higher heat setting selector (6) or the lower heat setting selector (8), set the desired cooking time (in minutes) to between 0 and 99. The selection will confirm in approximately 2 seconds, the timer display will show the time set and the countdown will start.
- If no time is set within ten seconds, the timer indicator light (12) will become inactive and the zone will continue cooking.

At the end of the timer, the selected zone will switch off and the timer display, and relevant time indicator light, will flash. The hob will beep for approximately two minutes. To switch off the beep and the flashing displays, touch any key. This beeping also occurs after the minute minder time has elapsed and the same process to switch off the beep applies.

Please note: The timer duration can be adjusted at any time during the countdown. Simply touch the relevant cooking zone selector (9) so that the zone indicator (7) pulsates, then press the timer sensor (10) within 10 seconds and adjust the minutes using the higher (6) and lower (8) heat setting selectors.

Please note: The power level can be adjusted at any time during the countdown.

To cancel the timer

- Touch the cooking zone selector (9) for the required zone so that the cooking zone indicator (7) pulsates. Touch the timer sensor (10) and hold it for approximately 3 seconds.

Please note: Cancelling the timer will not switch off the zone. You should switch the zone off manually if required.

To set the minute minder

The timer can also be used as a minute minder when the hob is not in use.

- Switch the hob on using the on/off sensor (5).
- Touch the timer sensor (10) to activate the minute minder.
- Use the higher (6) and lower (8) heat setting selectors to set the desired time in minutes.

To cancel the minute minder

- Touch and hold the timer sensor (10) for approximately 3 seconds.

Keep warm function

Each zone is equipped with a keep warm function that is designed to keep food at a stable temperature. This allows the serving of food to be delayed. The "Keep warm" function is available between "0" and "1" heat settings and is shown on a cooking zone indicator as "".

To activate the keep warm function

- Switch the hob on if necessary. Then simply touch the desired zone's selector (9) and set the power level using the "+" or "-" selectors to "" (use the "+" selector to set the power level to 1 and then use the "-" selector once).
- The keep warm function's duration is limited to keep food as safe as possible. This duration is detailed on page 12.

To deactivate the keep warm function

- Touch the desired zone's selector (9) and either set the power level using the "+" or "-" selectors to "0" or, alternatively, touch and hold the cooking zone selector for 3 seconds. The cooking zone indicator will display a "0" to confirm that the zone is now inactive but will display an "" or "" if the zone is still hot to the touch.

Safety key lock

To prevent accidental use, the hob has a safety key lock which switches controls off temporarily or completely. The safety key lock can be deactivated when the hob is turned on or off but not when power has been switched off at, or the appliance disconnected from, the mains.

Please note: Disconnecting the appliance from the mains will deactivate the safety key lock.

To activate the safety key lock

To switch on the lock, turn on the hob and touch the safety key lock sensor (11) for approximately 5 seconds. The safety key lock indicator light (13) should illuminate.

To deactivate the safety key lock

To switch off the lock, touch the safety key lock sensor (11) for approximately 5 seconds. The safety key lock indicator light (13) should extinguish.

Residual heat indicator

The hob is equipped with residual heat indicators to warn when any of the zones are still hot to the touch after use. An "h" will show in a zone's indicator if the relevant zone is between 45°c and 60°c. An "H" will show if the relevant zone is 60°c or above. You should avoid touching any zone whilst the hob is in use or whilst either residual heat indicator is displayed.

In the event of a power cut or failure, the residual heat indicators will illuminate after the power supply is restored. When there is no power supply to the hob however the residual heat indicators will not work, yet the hob zone(s) may still be hot, so extra care must be taken.

Efficient use of your hob

The hob is equipped with zones designed to accommodate most shapes and sizes of pan. For best results, only use pans with flat bottoms and choose an appropriate zone depending on the size of the pan. The most efficient use of the hob is shown below, where the pan and zone are correctly chosen.

Use pan lids where possible to minimize the energy usage of your appliance.

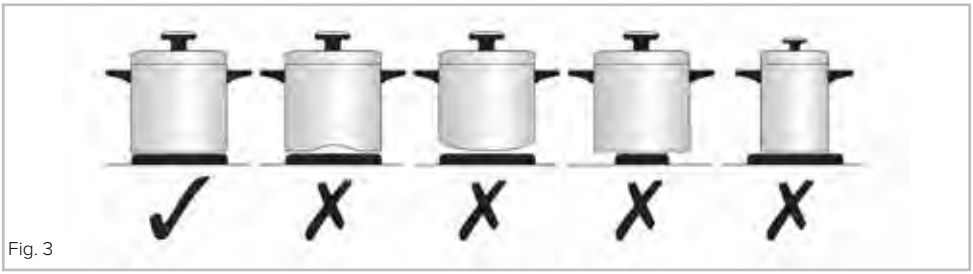


Fig. 3

Zone Size	Minimum Pan Size (mm)	Maximum Pan Size (mm)
160-180mm	90	160-180
210-220mm	140	210-220

It is very important that the pans used on the hob are made of a suitable material and have the correct type of base. The base of the pan and the hob top must be clean before use to prevent any scratches on the hob top.

Please note: Extra care should be taken if cast iron pans are used as these have coarse bases which may damage the hob top.

Care and maintenance

Always disconnect the appliance from the power supply before undertaking any cleaning or maintenance.

Important:

- Steam cleaners must not be used when cleaning this appliance.
- You should use a non-abrasive cleaner to clean the hob top. Any abrasive cleaner (including Cif) will scratch the surface and could erase the control panel markings.
- Sugar and starch can cause permanent damage to the surface of the hob. Wipe away any spillages immediately but be careful given that the hob top will be hot during and after usage.
- Avoid letting pans boil over where possible to ensure that the need for cleaning is minimal.
- Always use a soft sponge or cloth where possible. Utensils such as scouring sponges and some brushes could cause scratches to the hob top.

A cleaning guide is available on page 19.

Contacting CDA Customer Care

A: Customer Care Department, The CDA Group Ltd, Harby Road, Langar, Nottinghamshire, NG13 9HY

T: 01949 862 012 F: 01949 862 003

E: customer.care@cda.eu W: www.cda.eu

Type of residue	Clean with	Cleaning advice
Light	Cleaning sponge and soft cloth	Wipe over the zone to be cleaned with a sponge and hot water, and then wipe off with a soft dry cloth.
Accumulated baked-on stains/dirt, sugar spills or melted plastics	Cleaning sponge or glass scraper and soft cloth	Wipe over the zone to be cleaned with a sponge and hot water, using a ceramic scraper to remove any large marks or stains and then wipe off with a soft dry cloth.
Rings and hard water residues	White vinegar and soft cloth	Pour a small amount of warm white vinegar onto the stain, leave it to stand, and then wipe off with a soft dry cloth.
Shiny metallic streaks	Cleaning agent for vitroceramic glass etc.) Slow boiling, e.g. spaghetti, soups, stews, potatoes	Use specialist vitroceramic glass cleaner (preferably one with silicone for its protective properties)

Troubleshooting

If your hob does not appear to be working well:

Check with your installer, if you are at all unsure, as to what power level the hob is configured to (page 26). Any power setting lower than 7.4kW will implement the power management feature whereby the hob powers zones in bursts to try and ensure even peformance between all active zones. This means that 4 zones on full power on a 3.7kW power setting will not perform the same as said zones on full power at 7.4kW.

IMPORTANT: Never reconfigure your hob's power setting without your installer or electrician present to confirm the fuse and cable protecting the appliance and subsequently if it is safe to do so. Consult page 27 for information.

Problem	Possible Causes	Possible Remedy
The appliance does not work and no indicators are lit.	The appliance has no power	Check the fuse and replace if blown.
Sensor fields do not respond when touched.	Appliance is not turned on	Turn on the appliance
	A sensor field has been touched too briefly (less than a second)	Touch the sensor field again and for longer
	Multiple sensors have been touched/covered at the same time	Only touch one sensor field at a time unless instructed otherwise
	The safety key lock is engaged	Disengage the safety key lock as per page 16
The appliance does not respond and emits an extended beep	Improper use (wrong sensor fields touched or touched too briefly)	Switch the appliance off via the on/off sensor and at the mains and then switch the power and appliance on again
The appliance switches itself off	No heat level has been set within 10 seconds of activating the appliance	Switch on the appliance and set zone and heat setting without delay
	Sensor fields covered or dirty	Uncover or clean the sensor fields
A cooking zone switches itself off and a residual heat indicator is shown.	Operating time limiter has activated.	Nothing (see pages 11-12)
	Sensor fields covered or dirty	Uncover or clean the sensor fields
	Electronic components have overheated	Nothing. Allow appliance to cool.

Problem	Possible Causes	Possible Remedy
Residual heat indicator has extinguished despite zone(s) still being hot.	The appliance has no power	Check the fuse and replace if blown.
Hob top is broken, cracked and/or chipped.	Stop using the appliance immediately and switch the appliance off at the mains. Contact CDA Customer Care to arrange a repair.	
The appliance makes a buzzing noise.	Buzzing noises are normal whilst the hob is in use (inductor modules functioning) and after the hob has been used (cooling fan in operation).	
The appliance makes noises similar to whistles, hisses and pops.	These noises are normal. If several cooking zones are used at once then the hob can make hissing or whilstling noises due to the frequencies used to power the inductor modules. Popping noises can often be heard when pans are being heated.	
cooking zone or multiple zones do not work.	The internal electronics may be faulty and in need of a reset.	Reset the appliance by disconnecting it from the mains for a few minutes before reconnecting it.
One or more zones display a “U̲” symbol	The selected pan is not suitable for use with this hob.	See page 7 for more information on selecting a correct pan.

Should any error code show on the zone displays, or the above steps not resolve an issue, please contact CDA Customer Care for assistance. Contact details are on page 18.

IMPORTANT - PLEASE NOTE: In the event of any breakage, crack or cracking – even minimal – of the vitroceramic glass, immediately disconnect your appliance to prevent a risk of electric shock and contact CDA Customer Care.

Fitting the hob

Unpacking the hob:

Take care not to lose, drop or mishandle any parts.

Fitting position of the hob:

This appliance must be, **when installed**, a minimum of 50mm from any back wall and a minimum of 180mm away from any adjacent vertical surfaces, e.g. a tall cupboard end panel. This may be reduced to 100mm if the adjacent surface is resistant to fire (tiles or steel for example). These dimensions are shown in Fig.8 on page 25.

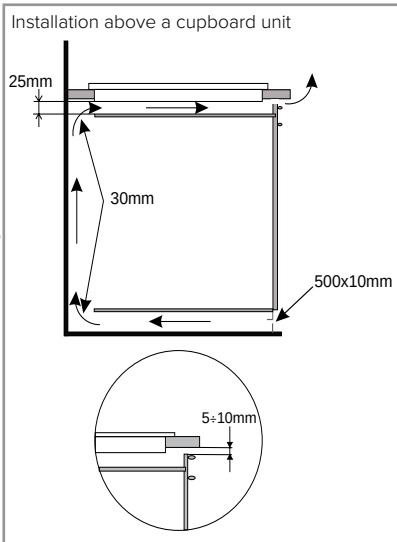


Fig. 4 Installing hob in kitchen cabinet worktop.

Ventilation requirements:

This appliance must be installed to allow air to flow freely to the air intake and from the air outlet. An air gap of 25mm+ is recommended immediately below the hob.

Failure to allow sufficient ventilation could cause problems with operation or damage to the hob and constitutes incorrect installation, which is not covered by the product's warranty (Figs. 4 and 5).

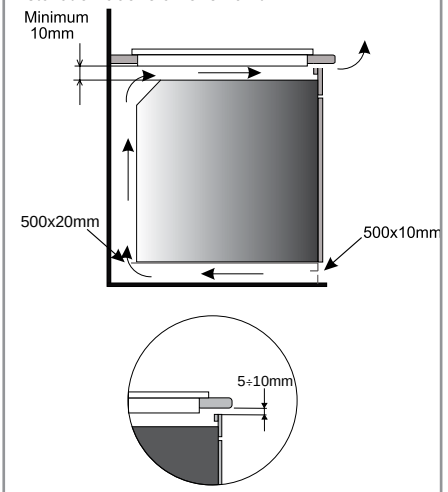


Fig. 5 Installing hob in kitchen worktop above oven with ventilation.

If fitting a cooker hood above the hob:

If a cooker hood is to be installed above the hob, the height of the hood above the hob must be at least 600mm (650mm is recommended) (Fig.6). If the instructions supplied with the hood dictate that the hood must be installed at a height greater than 600mm, then that height is the minimum required.

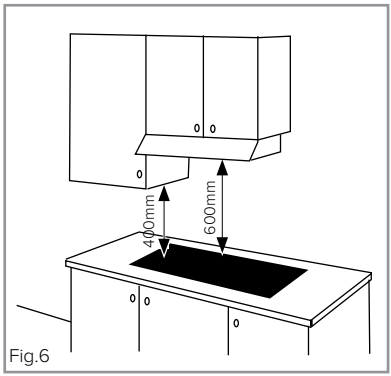


Fig.6

Wall furniture requirements:

The minimum height of any cabinet immediately above the hob is 900mm. The minimum height of any adjacent units (including light pelmets) is 400mm, unless they are manufactured from a material resistant to fire (steel, for example).

Important notes:

- Do not position this appliance above a refrigeration unit. The heat generated may cause the refrigeration unit to fail.
- Do not position this appliance above a dishwasher or similar unit. The moisture generated may cause serious issues.
- This appliance is designed to be installed into and around cabinet units and in worktop capable of withstanding temperatures of 100°C+.

Important notes:

- Never place perishable foods, cleaning products or flammable items in the cupboard below the appliance.

- If an oven is to be installed below the hob, the thermal safety system on the hob may not allow the hob to be used at the same time as a pyrolytic programme on the oven.

- **Ensure that the top rail is removed prior to installation, and that no unit cross member is blocking the air outlets.**

- If the hob is to be located above a working drawer, we recommend that the drawer is not used for storing soft items, for example dusters or towels; this is to minimize the risk of the cooling system air intakes being obstructed.

How to install the hob

Overall dimensions of the hob:

Width: 576 mm Depth: 518 mm Thickness: 50 mm

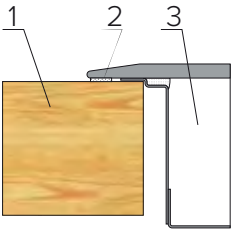
Worktop cut-out dimensions:

Width: 560 mm Depth: 490 mm

1. Make the required hole in the worktop. Before doing this, you must check the instructions supplied with any cooker hood to ensure that you will have the required clearance. The cut-out (Fig.8) shows a 60mm gap from the worktop edge to the cut-out edge. The distance from the hob, when fitted, to the back wall is to be 50mm (the edges of the hob add approx. 5mm).

If a splashback/worktop upstand is to be fitted, take this into account when cutting the hole. The minimum distance that the hob should be positioned away from the rear wall or splashback, when installed, is 50mm.

2. Make sure that the worktop is clean and dust free and insert the hob into the cut-out opening. Press the hob firmly into place so that the seal connects with the worktop (Fig. 7).



1 - Worktop
2 - Hob seal
3 - Induction hob

Fig.7

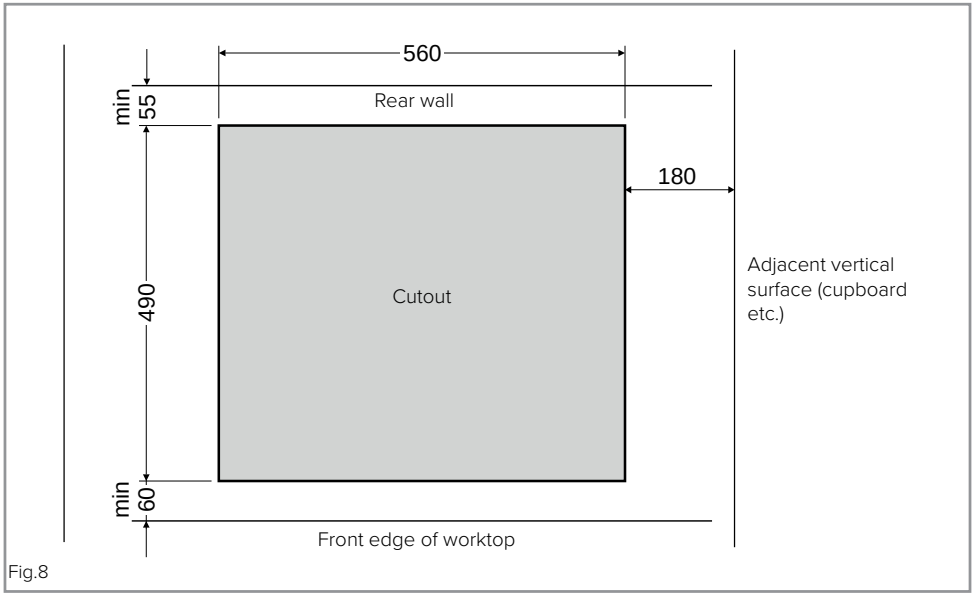


Fig.8

Power configuration

This hob can be connected to a 13, 16, 25 or 32Amp supply and configured to work on any of these power settings.

If the hob is connected to a 32 Amp supply all four zones can be used on the maximum setting with boost at the same time. If, however, the hob is connected and configured to a 13 Amp supply and all four zones are selected at the same time the hob will limit the maximum power consumed so that the 2.8kW power supply cannot be exceeded (see page 19 for more information).

To configure the hob at first switch on (within 5 minutes)

1. Switch on the power supply.
2. Touch and hold the " ⌴ " and " 🕓 " keys simultaneously for approximately 3 seconds.
3. Touch the timer "-" and "+" keys to cycle through the options, shown as 2.8, 3.7, 6.0 and 7.4. Within 10 seconds of selecting the desired setting, touch and hold 🕓 for approximately 3 seconds to confirm. You should hear a beep and the selected power setting will flash 3 times on the display and the appliance will turn off. Your hob should now operate at the set power setting.

IMPORTANT: If you do not confirm the selected maximum power setting, your hob will turn off and operate with the previously selected power setting or at the default power of 7.4kW. Ensure the power setting you requires flashes 3 times when properly set as per step 3.

Mains electrical connection

Warning! this appliance must be earthed

The appliance must be connected by a qualified electrician, who is a member of the N.I.C.E.I.C. and who will comply with the I.E.T. and local regulations.

This hob is intended to be connected to permanent, fixing wiring and dependent on the power configuration is possible to be connected to a 13A supply or connected via a 13A plug. The table below shows the recommended size of cable and the fuse that will be required for each power configuration mode.

Power configuration mode	Mains cable size (CSA, mm2)	Min. Fuse protection required
2.8kW	1.5	13
3.7kW	1.5	16
6.0kW	2.5 - 4.0	25
7.4kW	2.5 - 4.0	32

The following diagram shows the mains connection terminal block:

Terminal connections:

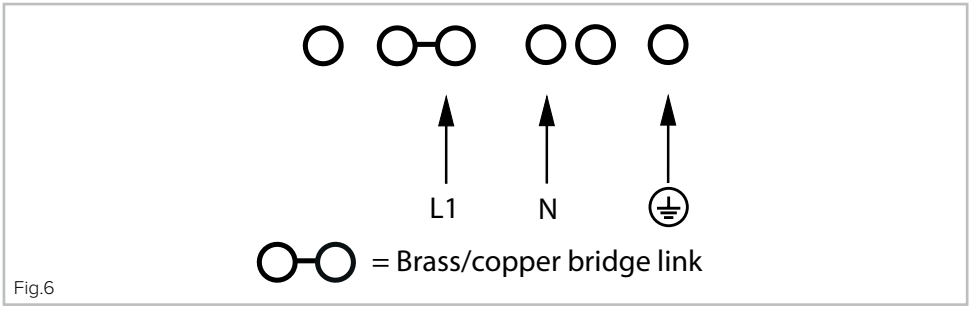


Fig.6

2.8kW mode

When the hob is configured in 2.8kW mode it can be connected via a standard 13A switched fused spur.

3.7kW-7.4kW modes

When configured in any mode other the 2.8kW, the hob should be installed into a dedicated cooker outlet and protected by the size of fuse shown in the table above.

This appliance is intended to be connected to fixed wiring by a double pole switch, having a contact separation of at least 3mm in all poles. The switch must be positioned no further than 2m from the appliance.

Please note:

The mains cable must only be replaced by a qualified electrician or service engineer and be of a cross sectional area appropriate for the power configuration mode of the hob, as shown in the table above.

The marking of the current rating of the fuse or circuit breaker protecting this appliance should be marked on the socket outlet. Assembly and electrical connection should be carried out by specialised personnel.

When installing this product we recommend you seek the help of another individual.

Ensure that the brass links are securely fitted. Failure to do so will prevent the hob from operating correctly.

Any service call arising from incorrect installation may result in a charge.

E & O E. All instructions, dimensions and illustrations are provided for guidance only. CDA reserve the right to change specifications without prior notice.

Energy Efficiency Information			
Attribute	**Symbol**	**Value**	**Units**
CDA model		HN6412FR	
Type of hob		Built in	
Number of cooking zones and/or areas		4	
Heating technology (induction cooking zones and cooking areas, radiant cooking zones, solid plates)		Induction cooking zones	
For circular cooking zones or area: diameter of useful surface area per electric heated cooking zone, rounded to the nearest 5mm	Ø	FL:21.0/ FR:16.0/ RL:16.0/ RR:21.0	cm
For non-circular cooking zones or areas: length and width of useful surface area per electric heated cooking zone or area, rounded to the nearest 5mm	L W	NA	cm
Energy consumption per cooking zone or area calculated per kg	$EC_{\text{Electric cooking}}$	FL:188.9/ FR:188.9/ RL:188.9/ RR:188.9	Wh/kg
Energy consumption for the hob calculated per kg	$EC_{\text{Electric hob}}$	188.9	Wh/kg

CDA

Built for your life

For service or queries relating to your product please contact:
The Customer Care Department on **01949 862 012** or email **customer.care@cda.eu**

For more information please contact:
The Sales Department on **01949 862 010** or email **sales@cda.eu**

Customer Care Department. The CDA Group Ltd, Harby Road, Langar, Nottinghamshire, NG13 9HY
T: 01949 862 012 **F:** 01949 862 003 **E:** customer.care@cda.eu

CDA

Built for your life

SC223SS

Single oven

Installation, use and maintenance

Contents:

IMPORTANT: Please read the user instructions carefully before using the appliance for the first time and before installing it. Failure to install the oven, or to have it installed, as per the user manual could invalidate the warranty. Any service calls relating to misuse or incorrect installation could incur a service charge.

Important

This appliance must only be used for the purpose for which it is intended, i.e. domestic cooking. Any other use could be dangerous and may lead to premature failure of the appliance.

The CDA Group Ltd cannot be held responsible for injuries or losses caused by incorrect use or installation of this product. Please note that CDA reserve the right to invalidate the guarantee supplied with this product following incorrect installation or misuse of the appliance.

Under no circumstances should any external covers be removed for servicing or maintenance except by suitably qualified personnel.

User information:

- Ovens become hot during and immediately after use.
- The oven door can become very hot during operation.
- After use, please ensure that the oven switches are in the 'Off' position.
- Keep children away from the appliance when in use, and immediately after use.
- Do not allow children to play with or on the appliance.
- Keep the oven door closed whilst grilling.

Appliance information:

Please enter the details from the appliance rating plate on to the following page for reference, to assist CDA Customer Care in the event of a fault with your appliance and to register your appliance for guarantee purposes.

Appliance Model	

Serial Number	

EU Declarations of Conformity:
This oven has been designed, constructed and marketed in compliance with safety requirements of EU Directive 2014/35/EU (Low voltage) and requirements of EU Directive 2014/30/EU.

This appliance has been manufactured to the strictest standards and complies with all applicable legislation, including Electrical safety (LVD) and Electromagnetic interference compatibility (EMC). Parts intended to come into contact with food conform to 1935/2004/EC.

IMPORTANT INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT IN ACCORDANCE WITH EC DIRECTIVE 2012/19/EU.
At the end of its working life, the product must not be disposed of as urban waste. It must be taken to a special local authority differentiated waste collection centre or to a dealer providing this service.

Disposing of a household appliance separately avoids possible negative consequences for the environment and health deriving from inappropriate disposal and enables the constituent materials to be recovered to obtain significant savings in energy and resources. As a reminder of the need to dispose of household appliances separately, the product is marked with a crossed-out wheeled dustbin.

Important

- Read the user instructions carefully before using the oven for the first time.
- Follow the instructions for first use of the oven.
- Clean the oven regularly.
- Remove spills as soon as they occur.
- Always use oven gloves when removing shelves and trays from the ovens.
- Do not allow children near the oven when in use.
- Do not allow fat or oils to build up on the oven shelves, grill pan or oven base.
- Do not place any cooking utensils or plates directly on the oven base.
- Always grill with the oven door closed.
- Do not grill food containing fat without using the grill pan grid.
- Do not cover the grill pan grid or the oven walls with aluminium foil.
- Do not use the oven tray for roasting.
- Do not perform maintenance or cleaning of the oven without first switching off the electricity supply. If the oven has recently been used, allow to cool.
- Do not place hot enamel parts in water. Leave them to cool first.
- Do not allow vinegar, coffee, milk, saltwater, lemon or tomato juice to remain in contact with enamel parts.
- Do not use abrasive cleaners or powders that will scratch the surface of the enamel.
- Do not attempt to repair the internal workings of your oven.

First use of the oven

First use

- The metal casing of this appliance has been coated with a preservative to protect it during transport and storage. This should be removed during installation by using a non-abrasive stainless steel cleaner. Always follow the instructions given with the cleaner being used.
- Before using the oven for the first time we recommend that you clean the oven with soapy water, rinse carefully. **Set the current time on the programmer as per page 10.** Heat on each of the below programmes at maximum temperature for the specified time. A slightly unpleasant smell may be produced, caused by grease remaining on the oven elements from the production process.


15 minutes full grill


30 minutes fan oven

Please note:

- This oven has been fitted with a cooling fan to achieve maximum efficiency and to maintain low surface temperatures. The cooling fan will switch on automatically when the oven switches on. It is normal for the cooling fan to run for an hour or more after use, depending on the duration, temperature and type of cooking programme used.

IMPORTANT: The fanned grill must only be used to a maximum temperature of 190°C

Oven controls and use

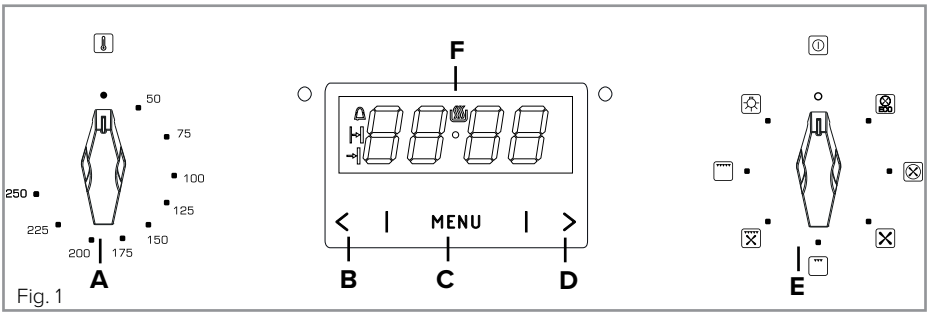


Fig. 1

IMPORTANT: You must set the current time on the oven programmer, as per page 10, for the oven to operate properly.

Cooking function knob (E)

To set the function, turn the cooking function knob (E in Fig. 1) to the required function. **You will need to set a temperature on all functions except the light and defrost functions.** The neon indicator next to the temperature knob will extinguish when the temperature has been reached.

Each of the oven functions uses different elements within the oven to offer you the best choice of cooking every time. These are explained below and on the following two pages:

Fan oven

This function uses the circular heating element with a temperature between 50°C and 250°C. The fan then circulates the hot air which helps to achieve uniform heat distribution.

Eco fan oven

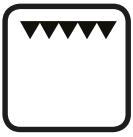
This function provides the most ecomonical method for cooking food. It is similar in operation to the fan oven function mentioned previously. However, cooking times may be longer.

Defrost

This function uses the fan to circulate air, at ambient temperature, within the oven which helps to accelerate the defrosting process.

Half Grill

This function radiates the heat from the grill element. This fully temperature variable grill can be set between 50°C and 250°C maximum.



Full Grill

This function radiates the heat from the grill element and the top element.
This fully temperature variable grill is ideal for grilling a full family meal. It can be set between 50°C and 250°C maximum.

When grilling, please note:

- Always grill with the oven door closed.
- Put the grill pan as close to the grill as possible.
- Do not grill for more than 30 minutes at a time.
- Preheat the grill for up to five minutes with the oven door closed.

Fanned Grill

This function radiates the heat from the grill element and the top element but also uses the fan to circulate the hot air. The hot air is distributed over and under the food that you are grilling.

This fully temperature variable grill is ideal for grilling fish or other items whose appearance can be spoiled by a normal grill function.

It can be set between 50°C and **190°C maximum.**

When fan grilling, please note:

- Always grill with the oven door closed.
- The grill pan does not need to be as close to the grill as possible.
- Do not grill for more than 30 minutes at a time.
- Preheat the grill for up to five minutes with the oven door closed.

Light

This turns on the light within the oven.

Temperature knob (A)

- To set the temperature, turn the temperature knob clockwise to the required temperature.
- Once the oven has reached the required temperature, the temperature indicator lamp on the control panel will switch off.
- The temperature indicator lamp will light up when the oven elements are in operation.

Electronic programmer/timer

This oven's electronic timer is equipped with touch control sensors. Each registered touch of a sensor field is confirmed by a single beep. It is advisable to keep the sensor fields clean at all times.

Setting the current time

After connection to the mains supply, or reconnection after a power outage, the display will show '0.00' and the display will flash.

- Press the < and > sensors simultaneously until the  symbol shows on the display and the dot below flashes. You have approximately 7 seconds to set the time using the < and > sensors. Wait approximately 7 seconds and the time should be set.
- The time can be amended at any time by following these steps.

Please note: The time must be set for the oven to work.

Setting the minute minder function

The minute minder function can be set at any time, regardless of the state of activity of the oven. The minute minder can be set anywhere from 1 minute to 23 hours and 59 minutes.

- Press the menu sensor until the display shows the flashing () symbol.
- Set the desired duration of the minute minder using the timer left and right sensors. After an approximately 7 second wait, the minute minder will be set and the () symbol will be solidly lit. The minute minder duration will be shown on the timer display.
- Press and hold any of the three sensors in order to deactivate

the acoustic signal that sounds once the minute minder time has elapsed. The timer will then show the current time.

Please note: The acoustic signal, if not switched off manually, will deactivate automatically after approximately 7 minutes.

Cancelling the minute minder function

The minute minder function can be cancelled at any time.

- Press the menu sensor to select the minute minder settings. This is indicated by the ( ) symbol .
- Press and hold the timer left and right sensors simultaneously.

Semi-automatic cooking

This function allows for a cooking time to be set. When the set time elapses, the oven will switch the set function off and an acoustic signal will sound to alert the user.

To switch on semi-automatic cooking

- Set the desired oven function and temperature.
- Press the menu sensor until the display illuminates the symbol and the timer display shows ‘dur’.
- Set the required cooking time using the timer left and right sensors. The cooking time that can be set ranges from between 1 minute and 10 hours. After an approximately 7 second wait, the time will be set.
- Once the set cooking time has elapsed the set function will be switched off automatically. An acoustic signal will sound and the symbol will flash. Press and hold any of the three sensors

- in order to deactivate the acoustic signal that sounds once the minute minder time has elapsed. The timer will then revert to showing the current time.
- Switch both control knobs to the off position.

To cancel semi-automatic cooking

The semi-automatic function can be cancelled at any time. To do this, simply press and hold the timer left and right sensors simultaneously.

Automatic cooking

This function allows for a duration and an end time to be set for cooking. With this, the oven will start cooking automatically due to the set duration determining how long before the end time that the function will activate and begin cooking. For example, if you set the cooking duration to 1 hour, and the end time to 15:30, then the oven will activate the function at 14:30. When the set time elapses, the oven will switch the set function off and an acoustic signal will sound.

To switch on automatic cooking

- Press the menu sensor until the display illuminates the |⇨| symbol and the timer display shows ‘dur’.
- Set the required cooking time using the timer left and right sensors.

  The cooking time that can be set ranges from between 1 minute and 10 hours.
- Press the menu sensor until the display illuminates the ⇨| symbol and the display shows ‘End’.
- Set the end of cooking time using the timer left and right sensors.

The end of cooking time can be set no more than 23 hours and 59 minutes ahead of the current time.

- Set the desired function and temperature using the relevant control knobs. The automatic function will now be set. Once the end of cooking time has been reached an acoustic signal will sound and the  and  symbols will flash. To deactivate the acoustic signal, press and hold any of the three timer sensors. Alternatively, the signal will deactivate automatically after approximately 7 minutes.
- Switch both control knobs to the off position.

To cancel automatic cooking

The automatic function can be cancelled at any time. To do this, simply press the timer left and right sensors simultaneously.

Please note: It is not possible to adjust the time (of day) setting whilst the semi-automatic and automatic cooking functions are operational.

Cleaning and maintenance

Keeping your oven clean and well maintained helps to prolong the fault-free lifespan of it. It is important that, before any cleaning or maintenance is performed, you switch off the oven at the mains supply. Do not start any cleaning or maintenance until the oven has been allowed to cool completely.

We recommend always wearing PPE (Personal Protective Equipment) when carrying out any cleaning or maintenance.

Cleaning the oven exterior

As the oven has a stainless steel or enamel surface, you should use a nonabrasive cleaner. Any abrasive cleaner (including Cif) will scratch the surface and could erase the control panel markings. Stainless steel can be effectively cleaned by simply using a dilute solution of water and mild detergent and drying to a shine with a clean cloth.

Proprietary stainless steel cleaners are available. We recommend a microfibre cloth for stainless steel surfaces. If necessary, wipe any area that has been cleaned using a damp soft cloth or tissue to remove any residual cleaning fluid and then wipe dry with a clean, dry cloth or tissue (such as kitchen towel).

Cleaning the oven interior

The oven should always be cleaned after use when it has been allowed to cool down.

The cavity should be cleaned using a mild detergent solution and warm water and then wiped dry with a suitable, clean cloth.

Suitable proprietary chemical cleaners may be used after first consulting with the manufacturers' recommendations and testing a sample on a small area of the oven cavity. Abrasive cleaning agents or scouring pads/cloths should not be used on the cavity surface.

IMPORTANT:

- **Steam cleaners must not be used when cleaning this appliance.**
- **Once care and maintenance is complete, ensure that all parts are correctly replaced before using the oven.**

Removing the appliance door

In order to allow for easier access into the oven cavity for cleaning, it is possible to remove the door. Before removing the door, ensure that you have an area prepared in which you can place the removed door. This area should ideally be protected by something like a folded, dirt-free, towel to help prevent damage to surfaces and the door.

- Open the door fully
- Lift and tilt the safety catch part of the hinge (fig. 2) so that it is fully extended and points towards the door.
- Close the door most of the way, lift it slightly and then pull it, safely but firmly, towards you.

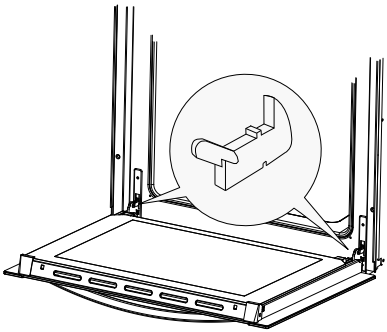


Fig. 2

Replacing the appliance door

- Hold the door to the appliance in the closed position and manoeuvre the hinges so that the part of the hinge, highlighted by the star in fig. 3, inserts into the hinge slot in the cavity frame.
- Next, ensure the notch on the underside of the hinge sits on the lip of the hinge slot. Open the door fully. Each hinge should be seated in the same way as the hinge in fig. 4. If it is not, follow the steps for removing the door and try replacing it again.
- Finally, lift the safety catch part of the hinges back into place so that they are lying flat against the hinges.

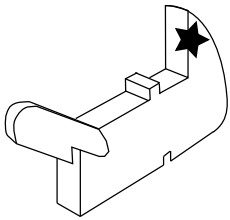


Fig. 3

Fig. 4

Please note: If the hinge safety catches are not in the correct place then the door and/or appliance may receive damage when attempting to close the door.

Removing the inner door glass

With the door removed, the inner glass can also be taken out for cleaning purposes.

- Use a flathead screwdriver or to unhook the door slat, as shown in fig. 5
- Remove the door slat, as per fig. 6, and place it somewhere safe where it will neither receive nor cause damage.
- Remove the inner glass from the blocks it is seated within (near to the hinges) and place this somewhere safe also. Pay attention to the way that the glass is facing as it will need to be replaced in the same direction. The smooth surface of the glass should be facing upwards (inwards if the door was back in place) with the patterned side facing the oven door handle.
- Clean the door glass with warm, soapy water and wipe dry with a clean microfibre cloth.
- The middle pane of glass can also be removed but it is important that this pane is reinserted facing the same way that it was when removed.

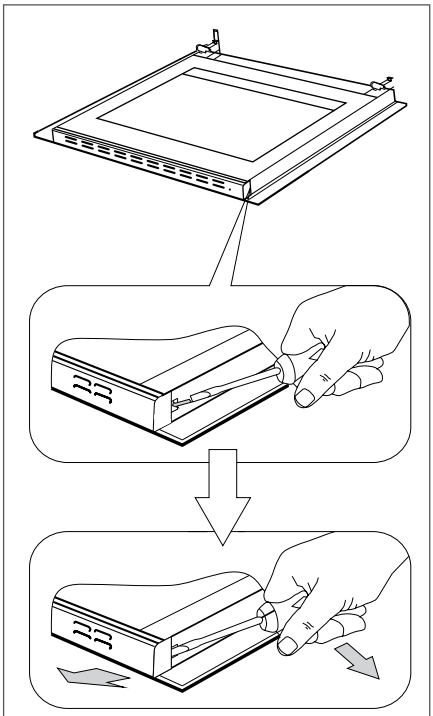


Fig. 5

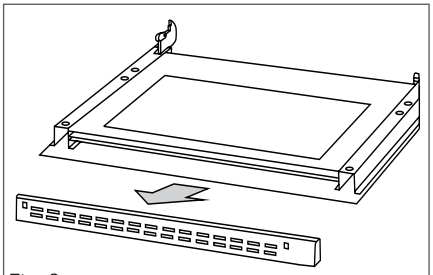


Fig. 6

- There are a number of rubber guides attached to the inner pane and these must be returned to their original positions when reassembling the door. Fig. 7 shows these guides and their position on and around the inner glass.
- Simply reverse these steps in order to reassemble the door. Take care when reattaching the upper door slat. Place the left side on first until you hear a ‘click’ as it connects and then attach the right side. This will help to avoid damaging the door and/or glass.

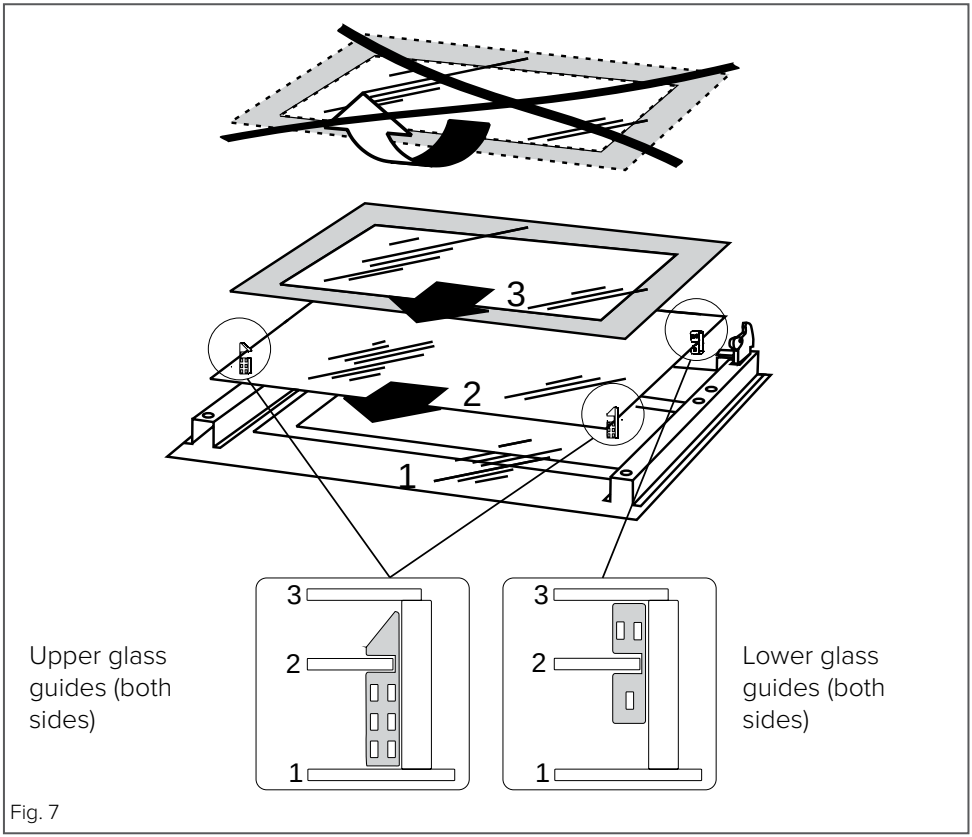


Fig. 7

Important: Do not disassemble the door without it having been removed from the oven. Weight differences could cause the door to snap shut, causing damage to the oven and/or the user.

Removing the shelf supports

Important:
Always remember to allow the oven to cool sufficiently, if it has been in use, before carrying out any maintenance.

To remove the shelf supports

- Take a firm hold of the shelf support in the middle. Place your thumb against the oven wall and lever the support out of the support holes (Fig. 8)


Fig. 8

- Tilt the shelf support outwards (Fig. 9) and you should then be able to remove the shelf support arms that secure it into the cavity walls at the back.


Fig. 9

To replace the shelf supports

- Simply carry out the above steps, but in reverse order.

Please note:
Take care not to damage the enamel walls of the oven, particularly around the shelf support arm holes.

Changing the oven light bulb

Important:
Before any maintenance is started involving electrical parts, the appliance must be disconnected from the power supply.
If the oven has been in use, let the oven cavity and the heating elements cool down before attempting any maintenance.

Never use screwdrivers or other utensils to remove the light cover. This could damage the enamel of the oven or the lamp holder. Remove only by hand.

Never replace the bulb with bare hands as contamination from your fingers can cause premature failure. Always use a clean cloth or gloves. Old bulbs may also be hot!

Changing the bulb (fig. 10)

- Unscrew the protective cover.
- Carefully extract and replace the bulb with the new one suitable for high temperatures (300°C) having the following specifications: 230-240V, 50Hz, 25W G9 fitting.
- Refit the protective cover.

Please note:
The bulb replacement is not covered by your guarantee.

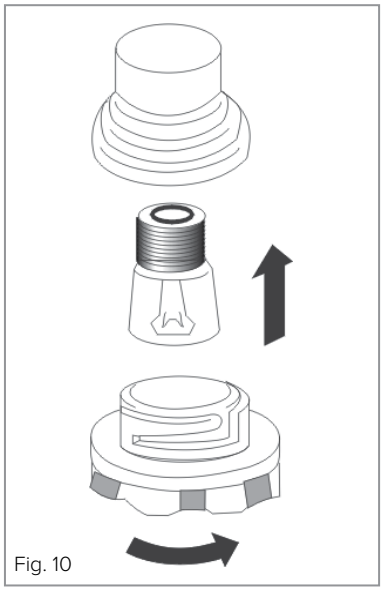


Fig. 10

Installation

Important! If installing this oven below a hob, ensure that the air gap between the two appliances is observed. This gap is usually detailed in the hob's manual.

The installation of this appliance must be carried out by a suitably qualified person. We recommend seeking the help of another person for the installation process.

If the oven is being installed into a built under oven housing unit ensure that the front rail at the top of the unit is not installed as it could restrict ventilation.

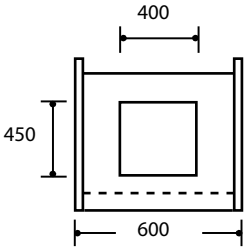


Fig. 11

Ensure that air can flow freely around the housing area. If the oven is being installed into a fully enclosed built-under oven housing unit it may be necessary to cut a small slot in the top of the plinth fitted under the unit. Cut a section 400 mm wide and a minimum of 15 mm high to allow air to pass under the unit. Alternatively cut a section 400 x 450 mm in the base of the carcass as indicated in Fig. 11.
Failure to allow adequate ventilation to the appliance may result in overheating or damage to adjacent units and could invalidate the warranty.

This appliance is type X installation.

The walls of the kitchen units must be able to withstand temperatures

of 75˚C above ambient (typically this is between 90˚C and 100˚C). When correctly installed ensure that there is a gap of 4 mm minimum between the sides of the oven and adjacent furniture doors.

How to install your oven

You will need the housing area in fig. 12 to fit your oven correctly.

The oven is designed to fit into a cabinet of 600 mm width. The oven can be built in or built under the kitchen units, but you must ensure that it is properly ventilated. In the diagram below the built-in oven is ventilated by means of a space at the top of the kitchen cabinet. There are many other methods of ventilating your oven - consult a qualified engineer for advice.

Lift the oven carefully into position on the shelf, taking care NOT to lift it by the door handle. If you lower the oven door, you will see 4 screw holes, 2 on each side of the oven (image B fig. 12). The oven should then be secured to the housing by securing screws into these holes. Remember the housing should not be free standing but be secured to the wall and/or adjacent fittings.

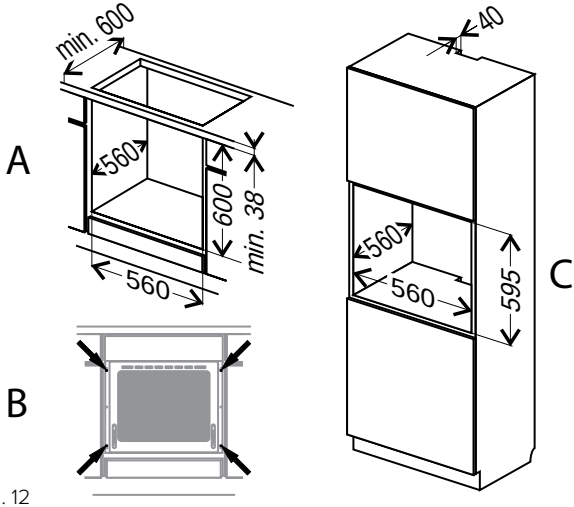
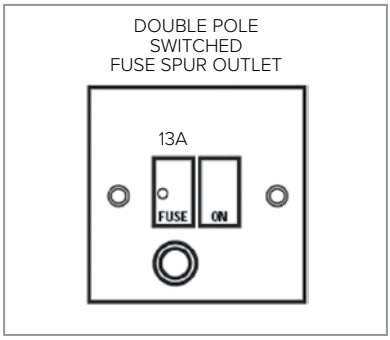


Fig. 12

Mains electrical connection



Warning! This appliance must be earthed.

This appliance is intended to be connected to fixed wiring by a double pole switch, having a contact separation of at least 3mm in all poles and protected by a 13A fuse. The switch must be positioned no further than 2m from the appliance.

We recommend that the appliance is connected by a qualified electrician, who is a member of the N.I.C.E.I.C. and who will comply with the I.E.T and local regulations. The wires in the mains lead are coloured in accordance with the following code:

GREEN AND YELLOW = EARTH BLUE = NEUTRAL BROWN = LIVE.

As the colours of the wires in the mains lead for the appliance may not correspond with the coloured markings identifying the terminals in your spur box, proceed as follows:

1. The wire which is coloured green and yellow must be connected to the terminal marked E (Earth) or coloured Green.
2. The wire which is coloured blue must be connected to the terminal marked N (Neutral) or coloured Black.
3. The wire which is coloured brown must be connected to the terminal marked L (Live) or coloured Red.

Please note:

- The mains cable must only be replaced by a qualified electrician or service engineer and must be of equivalent or better rating (i.e. 3 x 1.5 mm^2, HO5VV-F).
- This appliance is intended to be connected to the mains supply with a cable of cross sectional area 1.5 mm^2.
- The current rating of the fuse or circuit breaker protecting this appliance should be marked on the socket outlet.
- Assembly and electrical connection should be carried out by specialised personnel.
- When installing this product we recommend you seek the help of another individual.
- Should the mains cable be damaged or need to be replaced, it should only be done so by a qualified electrician or engineer. The terminal block on the appliance is clearly marked with regards to the positions of live, neutral and earth.

Appliance electrical rating: 2800W

Troubleshooting

Problem	Potential cause	Potential remedy
The appliance does not work	No power	Check the fuse, replace if blown. Check the mains supply is on.
Oven lighting does not work.	Loose or damaged bulb	Replace the blown bulb (see page 20).
Oven is not heating	Temperature has not been set	Set the desired temperature using the temperature knob.
	If the programmer shows 0:00 (or 0:01 etc.) then the current time has not been set.	Set the current time as per page 10.
The cooling fan does not work on a heated function	Risk of overheating! Unplug the appliance or switch off the at the mains isolator. Contact CDA Customer Care.	

If any of the above steps do not resolve your issue, please contact CDA Customer Care to arrange a repair. Contact details are below. Please have to hand all the details from your appliance's rating plate which can be found on the back of the oven and/or on the back of the instruction manual/warranty card.

Important: All repairs must be carried out by qualified service technicians.

Contact CDA Customer Care

A: Customer Care Department, The CDA Group Ltd, Harby Road, Langar, Nottinghamshire, NG13 9HY

T: 01949 862 012 **F:** 01949 862 003

E: customer.care@cda.eu **W:** www.cda.eu

Important notes on the oven timer/programmer

- **You will need to set the time on the electronic programmer before the functions will begin to work (see page 10).**
- **You can change the tone of your programmer. To do so, touch and hold the < and > sensors simulatenously. Then press menu until 'ton' and a number appears on the display. Use the < and > sensors to select a new tone. Touch nothing for approximately 7 seconds and the tone should set.**
- **IMPORTANT: The programmer goes on standby (dims) after 7 secs of inactivity. It also does this between 22:00 and 06:00.**
- **You can change the brightness of your programmer's standby mode. To do so, touch and hold the < and > sensors simulatenously. Then press menu until 'bri' and a number appears on the display. Use the < and > sensors to select a new level between 1 (dullest) and 9 (brightest). Touch nothing for approximately 7 seconds and the level should set.**

Energy Efficiency Information			
Attribute	**Symbol**	**Value**	**Units**
Model identification		SC223SS/1	
Mass of the appliance	M	33.085	kg
Energy efficiency class		A	
Number of cavities		1	
Heat source per cavity (electricity or gas)		Electricity	
Volume per cavity	V	65	L
Energy consumption (electricity) required to heat a standardised load in a cavity of an electric heated oven during a cycle in conventional mode per cavity (electric final energy)	$EC_{Electric\ cavity}$	N/A	kWh/cycle
Energy consumption (electricity) required to heat a standardised load in a cavity of an electric heated oven during a cycle in fan-forced mode per cavity (electric final energy)	$EC_{Electric\ cavity}$	0.78	kWh/cycle
Energy consumption required to heat a standardised load in a gas-fired cavity of an oven during a cycle in conventional mode per cavity (gas final energy)	$EC_{Gas\ cavity}$	N/A	MJ/cycle : kWh/cycle
Energy consumption required to heat a standardised load in a gas-fired cavity of an oven during a cycle in fan-forced mode per cavity (gas final energy)	$EC_{Gas\ cavity}$	N/A	MJ/cycle : kWh/cycle

E & O E. All instructions, dimensions and illustrations are provided for guidance only. CDA reserve the right to change specifications without prior notice.

CDA

Built for your life

For service or queries relating to your product please contact:
The Customer Care Department on **01949 862 012** or email **customer.care@cda.eu**

For more information please contact:
The Sales Department on **01949 862 010** or email **sales@cda.eu**

Customer Care Department. The CDA Group Ltd, Harby Road, Langar, Nottinghamshire, NG13 9HY
T: 01949 862 012 **F:** 01949 862 003 **E:** customer.care@cda.eu