



**Open Fibre Networks**

Wholesale

# Fibre Integrated Reception System (FIRS)

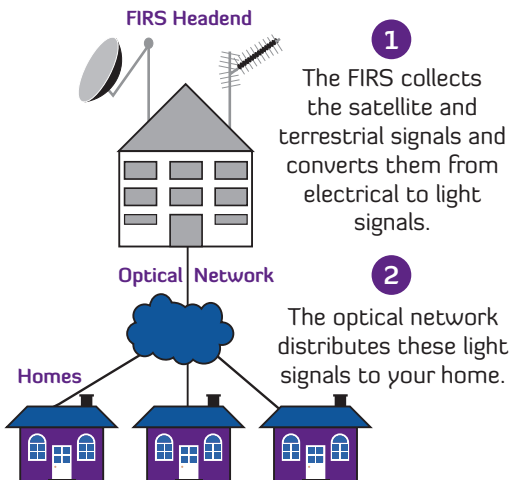
## What is FIRS?

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

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

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

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



## Benefits of FIRS

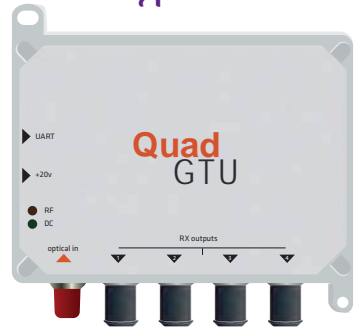
- ✓ No need for the installation of traditional terrestrial aerials for Freeview or DAB digital radio
- ✓ No unsightly aerials/dishes on the home
- ✓ No need for the installation of a satellite dish when using Freesat or subscribing to Sky services
- ✓ Lower cost than professional installation of conventional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

## GTU and how FIRS works

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

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

## A typical GTU



GTU model and colour may vary

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

## Frequently asked questions

### What is FIRS?

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

### What type of equipment can connect to the FIRS?

**Freeview**

Connect to the TV or Digibox aerial socket

**Freesat**

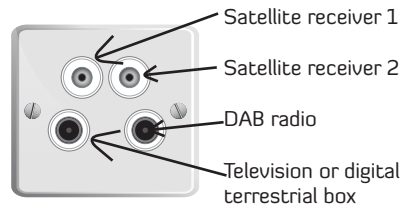
Connect to satellite receiver dish inputs 1 and 2

**Sky (+, HD, 3D)**

Connect to satellite receiver dish inputs 1 and 2

**DAB Radio**

Connect to DAB radio aerial Socket



### What should I do if I have a fault?

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

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

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

Voice, Ultrafast broadband and TV networks

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

### Introduction

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

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

### Choice of Service Providers:

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

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

OFNL enables service providers to meet government targets of offering all residents on the Open Fibre Network Super-Fast broadband. Superfast is defined as greater than 24Mbps. OFNL delivers ultrafast speeds of up to 1Gbps.

**There are currently 16 service providers who can deliver residential services.**

### Service Providers on the OFNL Network:

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

## Available residential service providers



# How to Get Sky Q with OFNL

## The Next Generation Box

### The Sky Q experience

- ✓ Pause, rewind or restart live TV
- ✓ Use Series Link to record a whole series
- ✓ Watch your favourite shows around the home
- ✓ Over 500 hours of recording space to save your favourite shows

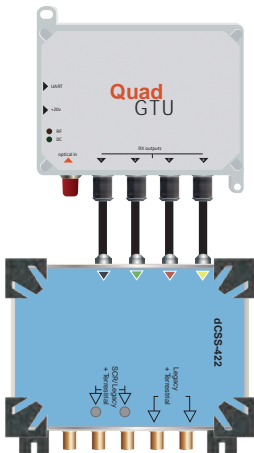


### Getting Sky Q

If you live on a site where a communal satellite dish has been fitted, a Gateway Terminal Unit (GTU) will have been installed in your home. This enables you to get Sky or terrestrial Freeview services via a set top box.

### What you need to do if you want to get Sky Q

#### If you have a Quad GTU



If you have a Quad GTU, the engineer will need to connect a DCSS switch to it, to allow you to receive Sky Q services.

#### If you have a dSCR GTU



You will not need a DCSS switch to receive Sky Q services - the engineer will connect your GTU to your Sky Q set top box.

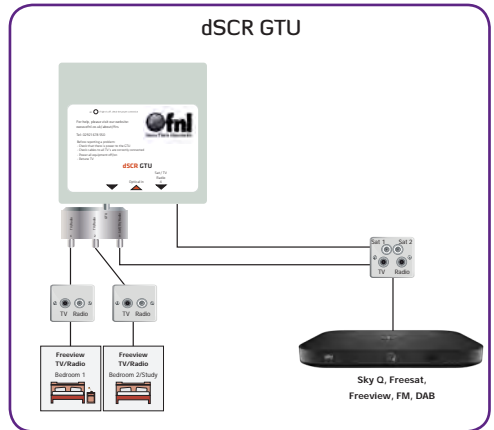
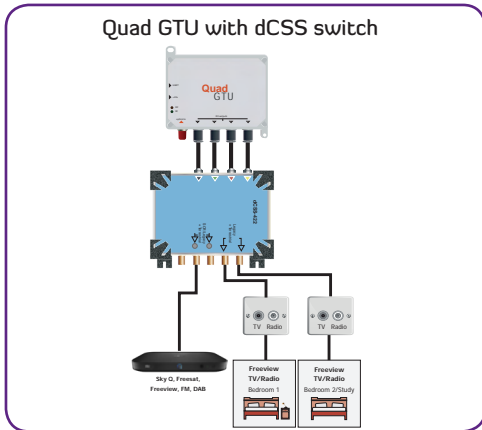
When you sign up for services with Sky, please remind Sky that you are on a communal site.

## Sky Q Multi room setup

Sky Q provides the ability to watch TV in different rooms via multiple set top boxes. Only the main box needs to be connected to either the dCSS switch or the dSCR GTU.

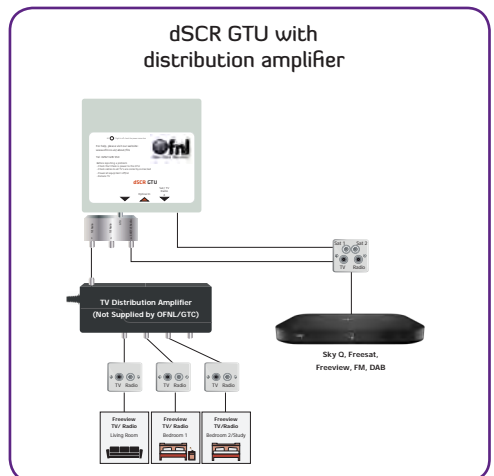
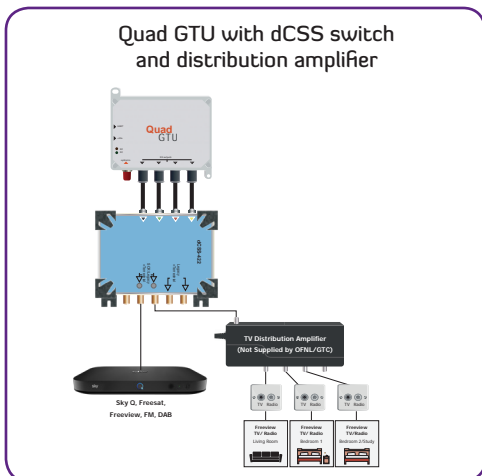
### Watching Freeview

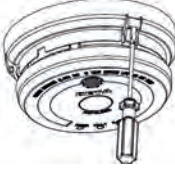
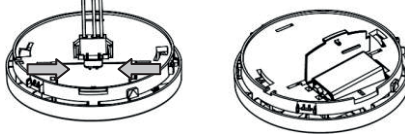
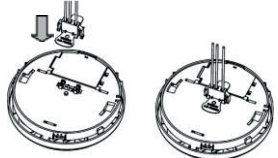
Connect a standard Digital TV to your GTU and watch free to air content.



To watch Digital TV on more than two TV's, you may require a distribution amplifier. **OFNL don't supply these. Contact your local aerial/TV supplier to purchase one.**

Plug the 'Distribution Amplifier' into the spare port of the 'dCSS switch' or dSCR. Use additional cables and plug these into the faceplate in each room.



User Information	
<b>Alarm Operation</b>	<b>What to do if the CO alarm sounds</b>
<p><b>LED indicators</b></p> <p>Green LED: When connected to the mains supply, the alarm goes through a 40 second initialization routine. After initialization, the GREEN LED remain permanently on indicating normal operation. If GREEN LED flashes every 33 seconds, it indicates the alarm is being powered by the back-up battery.</p> <p>Red LED Flashing: When the alarm senses CO gas, it goes into alarm mode and the RED LED flashes 4 times at 5 second intervals.</p> <p>Yellow LED Flashing: Flashing once every 33 seconds approx. accompanied with two chirps indicates low battery warning. If flashing approximately once every 38 seconds with chirping sound, indicates a fault condition.</p> <p><b>Alarm Mode</b></p> <p>In alarm mode, the CO alarm will sound four beeps in quick succession, followed by a 5 second pause. This pattern is then repeated.</p> <p><b>Test/Silence Button</b></p> <ul style="list-style-type: none"> <li>Use the Test/Silence button to test the alarm weekly. Please refer to “Testing the Alarm”.</li> <li>The Test/Silence button will silence the alarm only if it is in low battery condition. The yellow LED will flash during this condition. The alarm will be silenced for up to 9 hours. To change the battery, please refer to “Replacing the Battery”.</li> </ul> <p><b>End of life indication</b></p> <ul style="list-style-type: none"> <li>The device will give visual and audible warning when it reaches end of life (10 years). The device chirps 3 times every 33 second approx. with yellow LED flashing once. The end of life signal cannot be silenced and the device must be replaced as soon as possible.</li> </ul>	<p><b>If the CO gas is detected</b>, the alarm will emit a series of four beeps followed by a short pause.</p> <ol style="list-style-type: none"> <li>Alert small children in the home and quickly follow the family escape plan.</li> <li>Keep calm and open all doors and windows to increase the rate of ventilation.</li> <li>Turn off any fuel burning appliances where possible and stop using them.</li> <li>Evacuate the property leaving doors and windows open.</li> <li>Leave immediately and don't waste time getting dressed or picking up valuables.</li> <li>Once outside, go to your selected meeting place and make sure everyone is there.</li> <li>Get medical help for anyone suffering the effects of CO poisoning.</li> <li>Call the appropriate appliance servicing and/or maintenance agency or, where necessary, the relevant fuel supplier on their emergency number.</li> </ol> <p><b>Note:</b> When an alarm sounds, it may be difficult to determine what triggered the alarm, particularly if CO alarms are interlinked with smoke/heat alarms. Therefore, evacuate the property first, then determine the cause and take appropriate action.</p> <p><b>Note:</b> The CO alarm will return to normal operating mode once the CO gas condition is cleared.</p> <p><b>Warning:</b> This device alarms only on the detection of carbon Monoxide gas. If ignored, the presence of Carbon Monoxide can be fatal.</p> <p><b>DANGER:</b> If the alarm sounds, and it is not being tested, it means the unit is sensing Carbon Monoxide gas, <b>THE SOUND OF THE ALARM REQUIRES YOUR IMMEDIATE ATTENTION AND ACTION.</b></p> <p><b>Plan of Escape</b></p> <ul style="list-style-type: none"> <li>It is recommended that a plan of escape is developed and practiced. A floor plan indicating doors and windows should be made and, if possible, that two routes of escape are established.</li> </ul>
<b>User Maintenance</b>	
<b>Replacing the Battery</b>	
<p><b>Warning:</b> Only use the specified batteries (see Product Specification). Use of different batteries may have detrimental effect on the alarm. It is recommended that the battery is replaced when its voltage is low.</p> <ol style="list-style-type: none"> <li>Turn off the electrical supply to the alarms at the consumer unit/fuse box. The green power LED light will go off.</li> <li>To remove the alarm from the base, using a small flat blade screwdriver gently flex the locking clips on the side of the base away from the alarm. The alarm will then come away from the base. See Diagram 8.</li> </ol>  <p style="text-align: center;">Diagram 8</p> <ol style="list-style-type: none"> <li>To remove the electrical connector, squeeze the locking arms on the sides while pulling it away from the bottom of the alarm. See Diagram 9.</li> <li>After alarm has been removed, you can open the battery cover and replace with new battery. See Diagram 9.</li> </ol>  <p style="text-align: center;">Diagram 9</p> <ol style="list-style-type: none"> <li>After the battery is replaced, close the battery cover and test the alarm by pressing the TEST button.</li> <li>Reconnect the electrical connector, ensuring the orientation is correct and the locking arms snap back into place. See Diagram 10.</li> <li>Fit the alarm body on to the base, ensuring it clips securely into place.</li> </ol>	 <p style="text-align: center;">Diagram 10</p> <ol style="list-style-type: none"> <li>Turn on the electrical supply and the green LED light will come on after the 40 second initialization routine, during which the green light flashes every 3 seconds. Test alarm by pressing the test button. The alarm will sound 4 short beeps – 5 seconds pause, and then repeat until the button is released.</li> </ol> <p>It will then go to normal status and the Green LED will always be ON. If there is no sound output when the test button is pushed, the alarm may be defective. See the section: “Trouble Shooting”.</p> <p><b>Caution:</b> Test the alarm for correct operation using the test facility whenever the battery is replaced.</p> <p><b>Warning:</b> Electricity is dangerous. When replacing the battery, you must make sure the electrical AC power is turned off.</p> <p><b>Battery</b></p> <ul style="list-style-type: none"> <li>It is recommended that the battery is replaced annually.</li> <li>This alarm uses a 9 Volt battery. A new battery should last for at least one year under normal operating conditions.</li> <li>This alarm has a low battery monitor which will cause the alarm to “chirp” twice and at the same time the Yellow LED flashes approx. every 33 seconds for a minimum of 7 days when the battery gets low. Replace the battery when this condition occurs. Please refer to “Replacing the Battery”.</li> </ul> <p><b>Important:</b> Do not attempt to remove the cover to clean inside. This will affect the warranty.</p>

Testing the Alarm	Important Safety Information
<p>Test the alarm to ensure proper operation.</p> <ol style="list-style-type: none"> <li>Test alarm by pressing and holding the test button until it sounds. The alarm will sound 4 short beeps – 5 seconds pause, and then repeat until the button is released.</li> <li>If multiple alarms are installed within the dwelling, test each alarm. Each alarm should trigger other alarms connected within 10seconds.</li> </ol> <p>The alarm must only be tested by pressing the Test/Silence button. Do <u>not</u> ignite combustible materials and start a fire. If no alarm sounds, the unit has a defective battery or other failure. Refer to “Trouble Shooting” section for a solution.</p> <p><b>Caution:</b> Due to the loudness (85 decibels) of the alarm, always stand an arms-length always from the unit when testing. Erratic or low sound coming from your alarm may indicate a defective alarm.</p> <p><b>NOTE: WEEKLY TESTING IS REQUIRED</b></p>	<ul style="list-style-type: none"> <li>The alarm may not alert every household member every time. The alarm horn is loud in order to alert individuals to a potential danger. However, there may be some circumstances where a household member may not hear the alarm (e.g. excessive outdoor or indoor noise, sound sleepers, drug or alcohol usage, the hard of hearing). If you suspect that this alarm may not alert a household member, install and maintain specialty alarms.</li> <li>The alarms have limitations. This alarm is not fool proof and is not warranted to protect lives from exposure to Carbon Monoxide. The alarms are not a substitute for insurance. Occupants should insure their lives and property. In addition, it is possible for the alarm to fail at any time. For this reason, you must test the alarm weekly and replace the unit after 10 years.</li> <li>Test alarm weekly to ensure proper operation by pressing the test button. Do not use any other test method.</li> <li>Do not paint the alarms.</li> <li>Check the alarms on reoccupation of the premises after a vacation.</li> </ul>

Maintenance	Carbon Monoxide (CO) Overview
<p><b>Cleaning</b></p> <p>The alarm should be cleaned on a monthly basis as a minimum. To do this:</p> <ul style="list-style-type: none"> <li>Turn off the electrical supply to the alarm.</li> <li>Use a vacuum cleaner with the soft brush to vacuum all sides and covers of alarm to remove dust, dirt, and debris. Be sure all the vents are free of debris.</li> <li>Use a damp cloth to clean the alarms cover.</li> <li>Turn the electrical supply to the alarm on.</li> </ul> <p><b>Battery</b></p> <p>The battery should be replaced annually. See ‘Replacing the Battery’</p>	<p>Carbon monoxide (CO) is an extremely poisonous, colorless, odourless and tasteless gas released by the incomplete combustion of fossil fuels such as natural gas, bottle gas, petrol, diesel, oil, paraffin, wood, coal coke and biofuels. When inhaled, it causes chemical asphyxiation, when CO mixes with the blood and reduces the oxygen carried around the body, particularly to the brain. The following symptoms are typical to CO poisoning and should be discussed with all members of the household.</p> <p><b>Mild Exposure</b> - Slight headache, nausea, fatigue (flu like symptoms).  <b>Medium Exposure</b> - Severe throbbing headache, drowsiness and vomiting.  <b>Extreme Exposure</b> - Unconsciousness, cardiorespiratory failure, death.</p>

Important Safety Information
<ul style="list-style-type: none"> <li>This alarm must not be connected to any other manufacturer’s alarms.</li> <li>The alarm must not be exposed to dripping or splashing water.</li> <li>The alarms are designed to give audible warning of a dangerous levels of Carbon Monoxide. The alarms do not detect any other gas.</li> <li>Commonly occurring materials, vapours or gases, e.g. in cleaning fluids, polishes, paints, cooking operations may cause nuisance alarms. Major interferents are acetylene, ethyl alcohol, hydrogen cyanide, hydrogen sulfide, mercaptan, nitrogen dioxide and sulfur dioxide.</li> </ul> <p>Although feeling unwell, victims of CO poisoning can become so disorientated that they can no longer decide what to do next, including being unable to exit the building or call for assistance. Very young children often show symptoms earlier than adults.</p> <p><b>Note:</b> The CO alarm may not prevent the chronic effects of carbon monoxide exposure, and it will not fully safeguard individuals with specific medical conditions. If in doubt, consult a medical practitioner.</p>

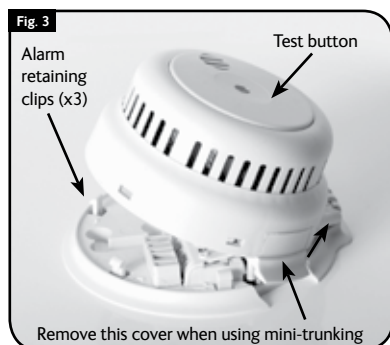
Troubleshooting		Problem		Remedy	
Problem	Remedy	Problem	Remedy	Problem	Remedy
The green LED does not light up	<ol style="list-style-type: none"> <li>Check electrical power supply is switched on</li> <li>Check electrical connector is properly connected to alarm</li> <li>If the problem still exists, replace the alarm</li> </ol>	The alarm chirp occurs every 38 seconds approx. at the same time as yellow LED flashes once and goes into fault mode	<ol style="list-style-type: none"> <li>Clean alarm. Refer to “Maintenance”</li> <li>If the problem still exists, replace the alarm</li> </ol>		
Alarm does not sound when tested. Note: push test button for at least five seconds while testing!	<ol style="list-style-type: none"> <li>Ensure that the battery and electrical connector is properly connected</li> <li>Clean alarm</li> <li>If the problem still exists, replace the alarm</li> </ol>	The alarm sounds intermittently or when residents are cooking, taking showers, etc. (false alarming)	<ol style="list-style-type: none"> <li>Press test button to pause alarm</li> <li>Open window or fan alarm</li> <li>Clean alarm</li> </ol>		
The alarm chirps twice every 33 second approx. at the same time as the yellow LED flashes once	The battery needs replacing, refer to “Replacing the Battery”	The alarm sounds different from it is used to. It starts and stops.	<ol style="list-style-type: none"> <li>Clean alarm</li> <li>If the problem still exists, replace the alarm</li> </ol>		

**Warning:** Do not disconnect battery to quiet an unwanted alarm. This will remove your protection. Fan the air or open a window to remove smoke/dust.

Product Specification			
Voltage	220 – 240V @ 50Hz with 9V battery backup	CO Alarm Button – dual function	<ul style="list-style-type: none"> <li>Push to Test</li> <li>Temporarily silence low battery warning</li> </ul>
Battery Specification	9V battery DC. Brands: Gold Peak: GP1604S, GP1604A, Raymax: 6LR61 or Duracell: MN1604	Sound Pattern	ISO8201 (BI 0.1s -pause 0.1s -BI 0.1s-pause 0.1s-BI 0.1s-pause 0.1s-BI 0.1s-pause 0.1s with RED LED flash, then repeat)
Battery Life	Over one year	Inter-linkable	up to 12 detectors
Alarm Volume	> 85dB(A) at 1 meter	Operating Conditions	- 10 to +40°C, 30 to 93%RH
Alarm Sensitivity (alarm conditions)	30PPM - Alarms after 120 minutes 50PPM - Between 60 to 90 minutes 100PPM - Between 10 to 40 minutes 300PPM - Less than 3 minutes	Storage Conditions	-20 to +50°C, 10 to 95% RH
		Compliance	BS EN 50291-1:2010+A1:2012
Product Disposal	This alarm come under the Waste Electrical & Electronic Equipment Regulations and must be disposed of in accordance to these Regulations.		



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



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

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

## 6. USER INFORMATION

### Protect your Home Against Fire

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

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

### What to Do if the Alarms Sound

Alarms sounds are as follows:

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

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

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

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

## 7. CHANGING THE BATTERIES

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

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

### Changing the 3 AAA batteries (BB versions only)

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



### Changing the Lithium battery (Model LB versions only)

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

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

### Alarm Maintenance

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

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

## 8. TROUBLE SHOOTING

Problems are indicated in several ways:

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

## 9. PRODUCT WARRANTY

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

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

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

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

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

This guarantee does not affect your statutory rights.

**Fireblitz Extinguisher Ltd.**

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

**Telephone: 01322 342238**

**Email: Info@fireblitz.co.uk**



**Fireblitz Extinguisher Ltd**

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**FH250BB 0832-CPD-1716**

**FH250LB 0832-CPD-1718**

**FH250RB 0832-CPD-1717**

**EN14604:2005 Smoke Alarm Devices**

**For Technical Data see product handbook**



FEATURING **Fast-Fix**

**MAINS POWERED**

# Smoke & Heat Alarms

**MANUAL**



**Smoke Alarm Models:**  
FH250BB/FH250LB/  
FH250RB



EN14604:2005  
971a



**Heat Alarm Models:**  
FH450BB/FH450LB/  
FH450RB



BS 5446-2: 2003  
KM 579552

**READ AND RETAIN THIS USER MANUAL**



## 1. FH250 & FH450 PRODUCT DESCRIPTION

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

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

### Product Features

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

## 2. CHOICE AND LOCATION OF ALARMS

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

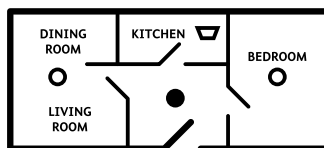
**Heat Alarms** are most suitable for kitchens, boiler rooms, workshops and garages where dust, dirt and moisture contribute to nuisance alarms in smoke alarms.

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

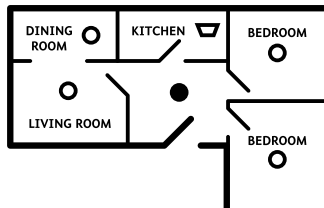
For minimum protection, install at least one smoke alarm on each level of your home. They should be installed in hallways, corridors and all escape routes from the building and within 3 meters of all bedroom doors. All alarms should be interconnected.

Recommended siting of smoke and heat alarms in:

### SINGLE STOREY HOME WITH ONE SLEEPING AREA

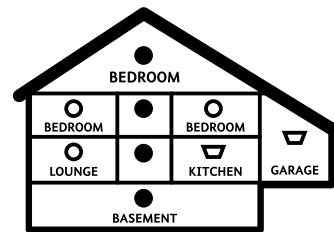


### SINGLE STOREY HOME WITH TWO SLEEPING AREAS

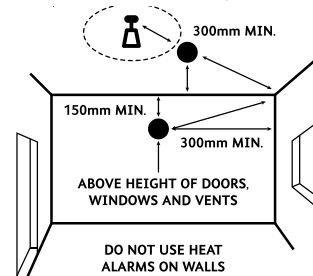


### MULTIPLE STOREY HOME WITH MULTIPLE SLEEPING AREAS

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



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



Recommended position of alarms on apex ceilings:



## 3. AVOID THE FOLLOWING LOCATIONS

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

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

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

## 4. FURTHER DETAIL ON ALARM

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

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

## 5. INSTALLATION PROCEDURE

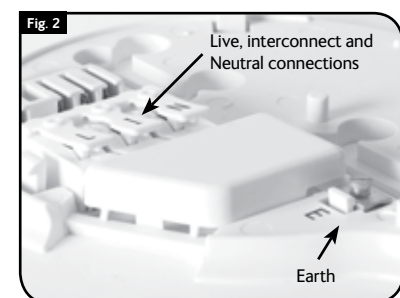
**Important Note:** Mains powered smoke and heat alarms should be installed by a qualified electrician and in accordance with Part P of the Building Regulations, BS7671 and BS5839 pt 6: 2004 section 15.5, Grade D systems.

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

**The power supply should be from one of two sources:**

- An independent circuit at the dwellings main distribution board with no other electrical equipment connected (other than a dedicated supply failure monitoring device) or:
- A separately electrically protected and regularly used local lighting circuit. Only suitably approved cabling should be used. The alarms should be wired using a minimum of 1mm<sup>2</sup> "3 core and earth" cable (6243Y); with the Brown to Live (L), Grey to neutral (N) and the Black to Interlink (I). All alarm circuits should be protected by a 6amp over-current device. The maximum total length of wiring should not exceed 250m. Mini-trunking systems can be used via the removable cover shown in Fig.4 below

Installation:



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

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

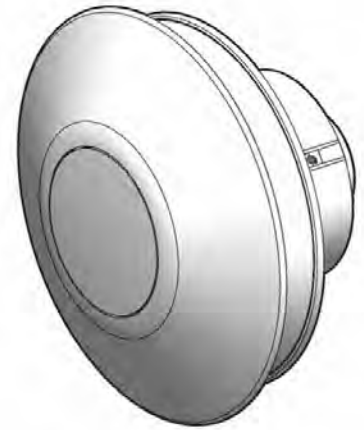
# Unity CV2GIP / CV2SVGIP

Decentralised Mechanical Extract Ventilation (dMEV)  
**User / Homeowner Guide**



# Contents

	<b>User / Homeowner Information</b>	<b>Page</b>
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4.	Servicing / Maintenance	10



## WEEE Statement

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

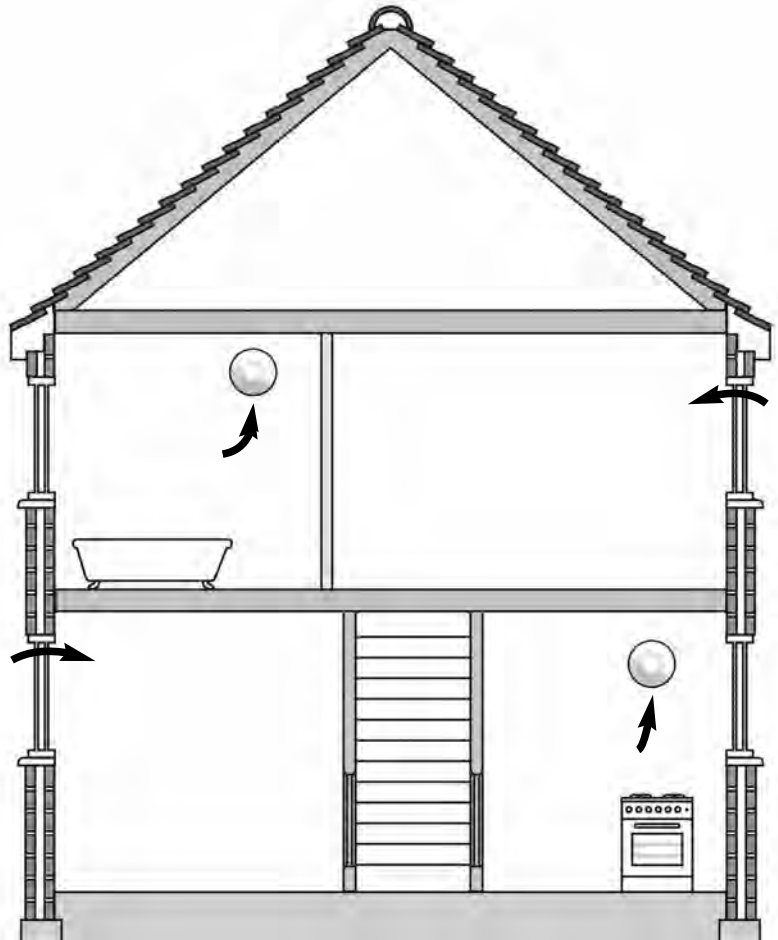
For more detailed information about the recycling of this product, please contact your local council office or your household waste disposal service.



## 1.0 Ventilation In Your Home

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

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



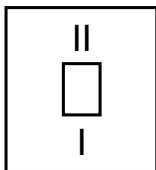
## 2.0 General Overview

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

The options are –

Trickle Speed: Operating on a continual basis.

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



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

**Note:** Other manufacturers switches may show different markings.

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

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

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

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

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

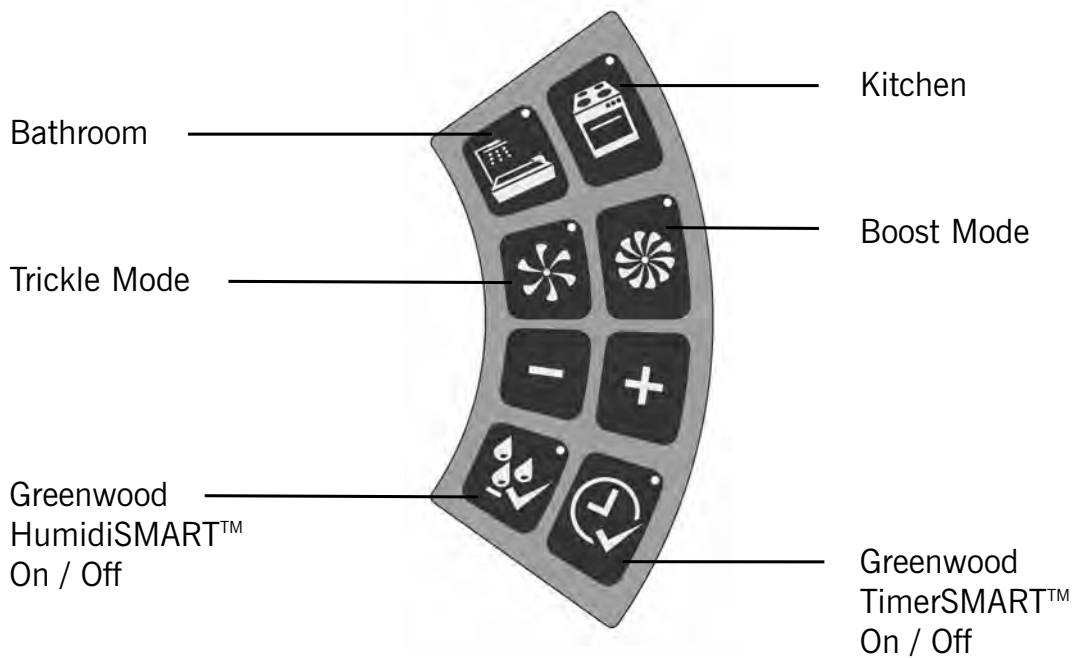
- 2.1.4 **Greenwood HumidiSMART™** monitors the ambient humidity within the wet room environment and looks for short peaks of humidity made by either showering or bathing. This smart technology ensures that your Unity CV2GIP / CV2SVGIP is not on boost for prolonged periods of time, removing nuisance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

## 3.0 Homeowner Controls

### 3.1.1 Controls

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

### 3.1.2 Control Panel



### 3.1.3 To View Fan Set Up / Status

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

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

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






### 3.1.4 To Change the Greenwood HumidiSMART™ Setting

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

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

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

Factory set to OFF

Option's ON / OFF

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

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




### 3.1.5 To Change the Greenwood TimerSMART™ Setting

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

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

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

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

Factory set to OFF

Option's ON / OFF

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

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



## 4.0 Servicing / Maintenance

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