

## 9V Interconnectable Alarms For models: 19HI, 19HILL, 29I, 29ILL, 29HI, 29HILL,

Thank you for choosing a Kidde Fyrnetics alarm.  
Please read through our guide in full. It should be retained for future reference.  
Cut out page 6 and pin up near your Consumer Unit/Fuse Box.

Kidde Fyrnetics recommends for maximum protection that both ionisation and optical (photo-electric) smoke alarms be installed. Ionisation technology is faster at detecting fast flaming fires that give off little smoke. Optical (photo-electric) technology is faster at responding to slow, smouldering smoky fires. Heat alarms (hard wired only) are installed in environments where excessive steam, dust etc. make smoke alarms impractical e.g. kitchens/boiler rooms/lofts.

Electrical rating 9V DC,  
80mA max per alarm  
with 12 alarms interconnected).



Lic No: 7861  
BS 5446: Pt. 1: 1990 (19 series)  
BS 5446: Pt. 1: 2000 (29 series)

**Kidde Safety Europe, Mathisen Way, Colnbrook, SL3 0HB, UK.**  
**www.kiddefyrnetics.co.uk**

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**SAVE THIS MANUAL FOR FUTURE REFERENCE**

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Read this manual thoroughly and follow its instructions regards regular maintenance. – **it could save your life.**

## 1. Alarm Range *Interconnectable 9V Battery Smoke Alarms*

19HI	Ionisation Smoke Alarm with Hush
19HILL	Ionisation Smoke Alarm with Sealed in/Long Life Battery and Hush
29I	Optical Smoke Alarm
29ILL	Optical Smoke Alarm with Sealed in/Long Life Battery
29HI	Optical Smoke Alarm with Hush
29HILL	Optical Smoke Alarm with Sealed in/Long Life Battery and Hush

## 2. Important Information

- Test the alarm weekly by pressing (and holding) the test button. The alarm and all those interconnected to it will sound.
- Vacuum your alarms regularly to reduce the likelihood of nuisance alarms, caused by dust contamination.
- Never paint or expose alarm to water.
- If the alarm chirps every 30-40 seconds, it indicates the battery needs replacing. *(If you are in rented property, you may need to tell your Landlord.)*

Smoke and heat alarms will only function if properly selected, located, installed and maintained as per KIDDE Fyrnetics instruction manuals.

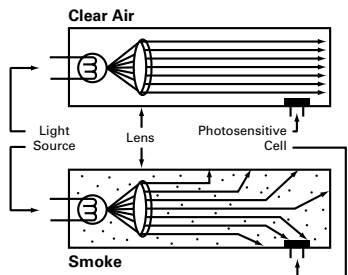
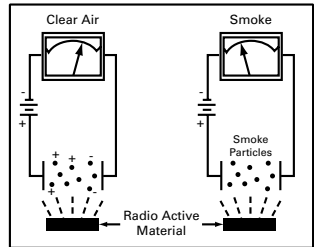
## 3. Types of Alarm

### a. Power Supply

- *DC alarms*  
9V battery powered units, but will only function if battery is in good condition – check regularly. (BS5839 Pt6: Grade F).

### b. Alarm Types

- *Ionisation (Ion) alarms* are the most common type and provide early detection, especially against fast flaming fires. Most suitable for dining and living room areas. Ion alarms contain 0.9 microcurie of Americium 241, a radioactive material. UK Home Office and BS5839 Pt6 recommend however, that optical alarms are also used especially in locations where steam or cooking fumes, from a nearby room could cause nuisance alarms. **No one type of alarm is considered suitable for all locations.**
- *Optical (Photo-Electric) alarms* are increasingly used and are less prone to nuisance alarms from cooking fumes. They are therefore the recommended type in BS5839 Pt6, for fitting near kitchen areas and on escape routes/circulation spaces.

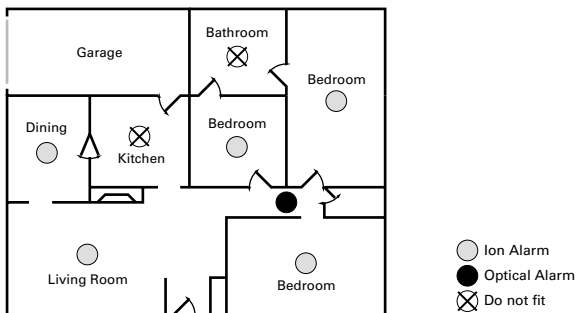


## 4. Installation Instructions

- ⚠ Read these instructions **thoroughly** before proceeding. Peoples **lives depend on it**.
- ⚠ Only interconnect to the identical brand and type of smoke or heat alarm. Do not connect to any other brand of alarm/auxiliary device.
- ⚠ When testing the alarm, stand back so your hearing is not damaged by the 85dB sounder.

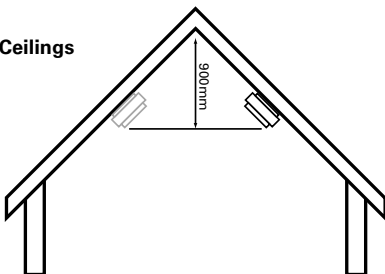
## 5. Recommended Locations for Smoke Alarms

- Ideally locate near centre of room on ceiling but at least 300mm (12") from any light fixture and 300mm away from any wall.

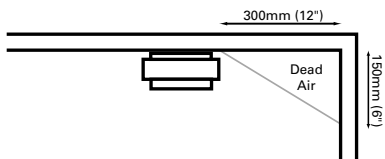


- On peaked ceilings install within 900mm (36") of highest point.

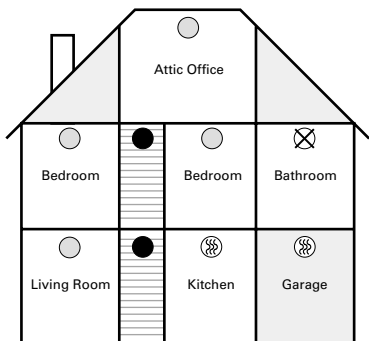
### Sloped/Peaked Ceilings







### Flat Ceilings










- Install one in every room, including occupied attics, but not in kitchens/ bath rooms/shower rooms/boiler rooms/garages.



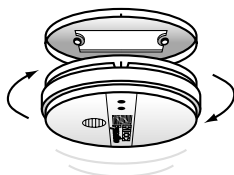
-  Heat Alarm (Hard wired - mains only)
-  Ion Alarm
-  Optical Alarm
-  Do not fit

## 6. Locations to be Avoided (Smoke Alarms)

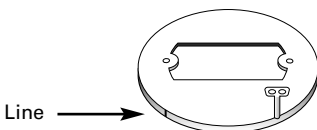
-  Within 3m of a steam source e.g. kitchen/bath room or garage.
-  In locations where temperature may fall below 5°C (41°F), or above 40°C (104°F).
-  In very dusty/dirty/insect laden areas.
-  Within 1m of dimmer controlled lights and cabling.
-  Within 1.5m of fluorescent lighting fittings.
-  Any location where the free flow of smoke to the alarm could be interrupted (e.g. next/above a door/air vent/heater/air-con unit).
-  Areas where routine maintenance or operating hush/test button is difficult (e.g. top of stairwells).

## 7. Installing Alarm

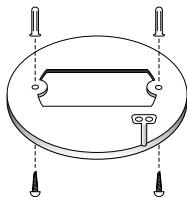
- Remove the mounting plate from the back of the alarm by holding the mounting plate and twisting the alarm in the direction indicated by the "OFF" arrow on the alarm cover.



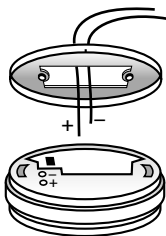
- To ensure alignment of the alarm with the hallway or wall, the line on the mounting plate must be parallel with the hallway when ceiling mounting or horizontal when wall mounting.



- After selecting the proper smoke alarm location as described in Section 5, attach the mounting plate to the ceiling as shown. Use the screws and wall plugs provided to secure the mounting plate.



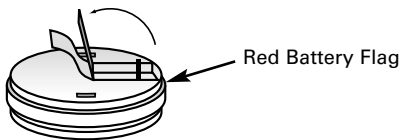
- If interconnecting bring interconnect wiring into terminal connectors on rear of alarm. Use 12V type bell wire.



- If alarm is not being interconnected, the two terminals are not used.

#### Non-Sealed in Alarms

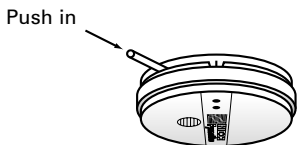
- Open battery door on rear of alarm. Remove freshness tab prior to powering up ensuring red spring-loaded battery flag is under battery.



The alarm battery door will not shut without a battery in the compartment.\*

\* On Sealed in/Long Life models there is no access to battery drawer – type of alarm is indicated on label on underside of alarm or carton.

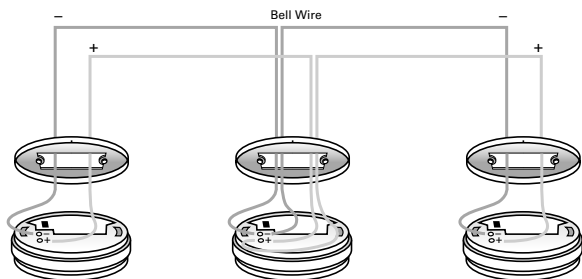
- Reinstall on alarm base plate affixed to ceiling and push (and hold) test button to verify battery operation.
- Slot in locking pin as in illustration if required.



- Red L.E.D. will flash intermittently.

## 8. Initial Testing and Checking of Alarm

- Having energised by activating the battery circuit, press and hold the test button again – the alarm should sound and other interconnected ones also, within a few seconds.
- Do this for all alarms.
- If any do not sound, isolate mains and recheck cabling.
- On optical alarms if the red L.E.D. blinks every 30-40 seconds and the alarm chirps inbetween, it indicates failure of the sensing chamber. Consult your installer/supplier as appropriate having read the manuals troubleshooting tips.



Connect (+) to (+) on each alarm and (-) to (-).

## 9. Interconnecting

- You may interconnect up to 11 Kidde Fyrnetics DC smoke or CO alarms to this unit. i.e. 12 in total.



Total cable length between alarms must not exceed 250m (273yds) and be of 12V bell wire type, with a maximum resistance of 50Ω between alarms.

## 10. How to Operate/Test the Alarm

### a. Operation and L.E.D. Status

- When your alarm is correctly functioning, the red L.E.D. will blink about once a minute. If the alarm senses products of combustion, it's 85dB horn will be activated. *The red L.E.D. will flash rapidly on the alarm sensing smoke/heat.* (Other interconnected alarms will also sound to warn those in other parts of the property.) This will continue until the sensor chamber is clear. On optical alarms if the red L.E.D. blinks every 30-40 seconds and the alarm chirps inbetween, it indicates failure of the sensing chamber. (See side or rear of alarm that indicates type.)

**Regularly check and ensure that the L.E.D. is blinking – if not, check the battery – on Sealed in/Long Life units consult your supplier/Landlord.**

### b. Testing

- Utilise the test button to test the alarm. Do not use naked flames as this does not replicate smoke and may cause physical damage to the alarm.

**Test all your alarms weekly** – remember they are life saving devices, protecting the family and home.

# Good Safety Habits



## Develop and practice a plan of escape:

- Make a floor plan indicating all doors and windows and at least two escape routes from each room. Second storey windows may need a rope or chain ladder.
- Have a family meeting and discuss your escape plan, showing everyone what to do in case of a fire.
- Determine a place outside your home where you can meet if a fire occurs.
- Familiarise everyone with the sound of the alarm and train them to leave your home when they hear it.
- Practice a fire drill at least every six months. Practice allows you to test your plan before an emergency. You may not be able to reach your children. It is important they know what to do.

## What to do when the Alarm Sounds

- Leave immediately by your escape plan. Every second counts, so don't waste time getting dressed or picking up valuables.
- In leaving, don't open any inside door without first feeling its surface. If hot, or you see smoke seeping through cracks, *don't open that door!* Instead use your alternative exit.
- If the inside of the door is cool, place your shoulder against it, open it slightly and be ready to slam it shut if heat and smoke rush in.
- Stay close to the floor if the air is smoky. Breathe shallowly through a cloth, wet if possible.
- Once outside, go to your selected meeting place and make sure everyone is there.
- Call the fire brigade on 999 from your neighbour's home or a call box – not from yours.
- **If there is any question as to the cause of an alarm, it should be assumed that the alarm is due to an actual fire and the dwellings should be evacuated immediately**

Installation Date: \_\_\_\_\_


Alarm Model(s): \_\_\_\_\_

Installer/Landlord: \_\_\_\_\_

Tel: \_\_\_\_\_

Press and hold the **test** button until the alarm sounds. Any interconnected alarms will also sound. (Do not stand too close to the alarm during testing – hearing may be damaged.)

### c. Hush Button

 If your alarm has this feature it has the capability of temporarily desensitising the alarm circuit for approximately 7 minutes. This feature is to be used only when a known alarm condition, such as fumes from cooking, activates the alarm. The alarm is desensitised by pushing the “HUSH” button on the alarm cover. If the smoke is not too dense, the alarm will silence immediately and “chirp” every 30-40 seconds for approximately 7 minutes. This indicates that the alarm is in a temporarily desensitised condition. The alarm will automatically reset after approximately 7 minutes and sound the alarm if particles of combustion are still present. The “HUSH” feature can be used repeatedly until the air has been cleared of the condition causing the alarm.

**Note:** Dense smoke will override the hush control feature and sound a continuous alarm.

**Caution:** Before using the alarm hush feature, identify the source of the smoke and be certain a safe condition exists.

### d. Nuisance Alarms

**Warning:** Persistent nuisance alarms indicates incorrect type and/or siting of alarm. Review with your installer or Landlord after cleaning as described in Section 7 (Maintenance).

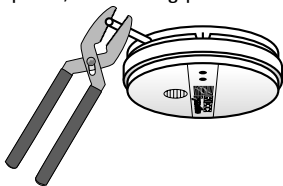
## 11. Battery Checking/Changing\*

### a. Low Battery Indicator

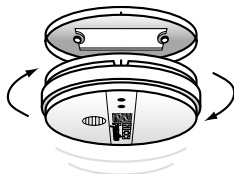
If you hear the alarm chirp continuously every 30-40 seconds (and have not just pressed the hush button) it indicates the battery voltage is at an unacceptably low level. Replace the battery at the next possible opportunity. On Sealed in/Long Life models there are no user replaceable parts. Consult your supplier or Landlord, having read through the manuals troubleshooting tips.

### b. Battery Change

- i. Pull out with pliers, the locking pin and retain for reinserting later.

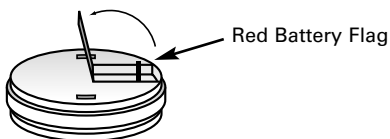


- ii. Twist alarm as indicated on housing to remove from mounting base plate.




\*On Sealed in/Long Life models there are no user serviceable batteries to be changed. (See Section ?.)

- iii. Flip up lid and note position of red plastic bar, under battery. When you remove battery, the red door stop bar prevents the door closing unless a battery is installed.



This safety feature also prevents the alarm from being mounted back on its mounting base plate.




We recommend the use of alkaline or lithium batteries for a longer service life.

-  **Battery type/code nos.**  
*Alkaline type:* Eveready 522; Duracell MN1604; Duracell Ultra MX1604; Gold Peak 1604A;  
*Lithium type:* Ultralife U9VL



On Sealed in/Long Life models there are no user serviceable batteries to be changed. (See Section ?.)

- vi. When you have fitted a fresh battery, check test button; if horn sounds then reverse the process above.

## 12. Timing of Installing/Decorating

-  Do not install if property remains damp/unheated.
-  During building work dust and other contaminants e.g. paint fumes, will enter the alarm causing possible nuisance alarms and damage the sensitive components within. (It will also invalidate the guarantee provisions.) Cover with a dust cover or plastic bag.
-  After work is complete, allowing 3 days for paint fumes to clear, uncover the alarm – **this must be removed for the alarm to function.**

## 13. Decorating

-  Never paint the alarm itself.
- During redecoration, all alarms should be covered with a dust cover or a plastic bag to prevent contamination by fumes. (These can permanently damage the alarm).  
**Do not uncover until the surrounding paintwork is thoroughly dried and fumes have cleared – allow 3 days.**
-  Whilst covered, the alarm **cannot** operate. Remove covering as detailed above.

## 14. L.E.D. Status

- The red L.E.D. blinks to indicate normal operation of alarm function. (If model with battery back-up, also indicates healthy battery.) In alarm state (i.e. triggered), L.E.D. will flash rapidly. If interconnected to other alarms only the triggering alarm will have a rapidly flashing L.E.D.. On optical alarms if the red L.E.D. blinks every 30-40 seconds and the alarm chirps inbetween, it indicates failure of the sensing chamber. Householders should consult Owner's Manual or installer/landlord.
- The alarm sounder and flashing L.E.D. will remain whilst the alarm continues to detect smoke.

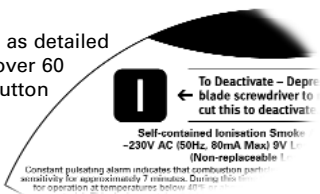
## 15. Ongoing Maintenance

- Alarms are sensitive electrical devices. The test button should be pushed (and held) once a week to verify operation.
- Once a month the alarm should be wiped with a mildly damp cloth, having previously vacuumed the outside of the unit, especially through the grill area.

## 16. Checking Battery on Sealed in/Long Life Models

- There is no user replaceable battery on Sealed in/Long Life models. These models will be indicated on the product's label on the underside; additionally there is no battery drawer. To check charge on these models, push and hold the test button to check battery works. If the battery is depleted, the low battery beep will be heard once every 40 seconds.

**Deactivation:** The alarms battery will chirp as detailed above, when its power is low. If this lasts over 60 minutes, and is not a result of the HUSH button being pressed, the alarm needs replacing. However, to enable you to silence the alarm, there is on the underside of the alarm, a deactivation tab: *see illustration*.



To safely access the rear of the alarm, refer to Section 5.

## 17. Maintenance

- Your alarm is a life saving device. Spending a few minutes each month in vacuuming off any excess dust will enhance it's performance and reduce the likelihood of nuisance alarms.
- Vacuum up to the grill and through the slots where dust/talc etc. can enter. Wipe off with a very mildly damp cloth. Never use cleaning agents/polishes etc..



 **Never attempt to open the inside of the alarm – this will invalidate it's guarantee.**

## 18. What to do in an Emergency

- If an alarm sounds without anyone pressing the test button you have a potential emergency.
- Don't panic – you will need to think clearly to ensure all family members escape as soon as possible. Never stop to collect belongings etc. – they are replaceable.
- Check the temperature of door handles or doors to check if hot – **if hot do not open them** – a fire will be raging the other side of the door. Find an alternative escape route.
- Keep doors/windows closed to contain the fire after you have passed through them.
- **Call 999 from a neighbour's phone or call box.**  
*This is preferable to using a mobile.*
- Do not re-enter the property until advised it is safe to do so by a Fire Brigade Officer.

Always be aware of the dangers of fire and ensure your alarms are functioning, together with equipment such as fire extinguishers/fire blankets etc..

## 19. Troubleshooting

Symptom	Possible cause/solutions
1. Red L.E.D. not blinking	<i>Low or flat battery. Replace battery – on Sealed in/Long Life models, contact supplier/Landlord having read these troubleshooting tips.</i>
2. Frequent nuisance alarms	<i>See sections 4d and 7.</i>
3. Alarm chirps every 40 seconds	<i>See section 5 (if the hush button has been pressed the unit will chirp for 7 minutes to indicate it is in hush mode).</i>
4. Alarm does not sound when test button pressed and held.	<i>See parts 1a and 1b above.</i>
5. Interconnected alarms do not sound when test button is pressed and held.	<i>See part 1b above – check cabling or contact your Landlord to remedy as soon as possible.</i>

## 20. Useful Hints

- Smoke alarms can **only operate correctly if smoke particles reach the unit.** Correct selection/siting and installation are covered earlier in this manual.
- **UK Building Regulations** require new homes to have 1 hard wired smoke alarm per floor and to be interlinked. During 2000 they will additionally require an interlinked heat alarm to be fitted in most kitchens too. i.e. 3 alarms per property. These models are not suitable for this requirement.
- With the exception of garages/kitchens/bathrooms **it is recommended that smoke alarms are fitted in every room** and outside all sleeping areas too. *A professional electrician should be employed for all mains powered (hard wired) alarms.*

- If you are **redecorating** your home, paint fumes can contaminate the alarm – *temporarily* cover the unit with a plastic bag (during this time the alarm will not function). **Never paint the alarm itself.**  
Only remove the bag when the paint is thoroughly dry.
- If you **extend your property**, review your alarm requirements.
- Smoke alarms **should be replaced every 10 years** or sooner.
- These products are designed for **domestically scaled premises**.

## 21. Limitations of Smoke Alarms

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**Warning!** Alarms are devices that can provide early warning of possible fires at a reasonable cost; however, alarms have sensing limitations. *Ionisation* type alarms offer a broad range of fire sensing capability but are better at detecting fast flaming fires than slow smouldering fires. *Optical (Photo-electric)* alarms sense slow smouldering fires better than flaming fires. Home fires develop in different ways and are often unpredictable. Neither type of alarm (Photo-electric or Ionisation) is always best, and a given alarm may not always provide warning of a fire.

Loose batteries, where fitted must be of the specified type, in good condition and installed properly.

All alarms must be tested regularly to make sure the batteries and the alarm circuits are in good operating condition.

Smoke alarms cannot provide an alarm if smoke does not reach the unit. Therefore, smoke alarms may not sense fires starting in chimneys, walls, on roofs, on the other side of a closed door or on a different floor. If the alarm is located outside the bedroom or on a different floor, it may not wake up a sound sleeper. Equally heat alarms will only be triggered if they are correctly sited to detect heat. The use of alcohol or drugs may also impair ones ability to hear the alarm. For maximum protection a smoke alarm should be installed in each sleeping area on every level of a home. Hearing impaired occupiers should consider fitting additional strobe accessories to give a visual alarm.

Although smoke alarms can help save lives by providing an early warning of a fire, they are not a substitute for an insurance policy. Home owners and renters should have adequate insurance to protect their property.

## 22. Service and Guarantee

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If after reviewing this manual you feel that your smoke alarm is defective in any way, do not tamper with the unit. Return it prepaid for servicing to: Kidde Safety Europe, Mathisen Way, Colnbrook, SL3 0HB, UK – Email: [info@kiddesafety.co.uk](mailto:info@kiddesafety.co.uk), or refer to your supplier or Landlord.

### Guarantee

Kidde Fyrnetics warrants to the purchaser that the enclosed smoke alarm (but not any loose batteries) will be free of defects in material, workmanship or design under normal use and service for a period of 5 years, (5 years including battery on Sealed in/Long Life [LL] products from the date of purchase). The obligation of Kidde Fyrnetics, 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 prepaid, to Kidde Safety Europe, Mathisen Way, Colnbrook, SL3 0HB, UK.

This guarantee shall not apply to the alarm if it has been damaged, modified, abused or altered after the date of purchase, or if it fails to operate due to incorrect selection, siting, installation or maintenance.

The liability of Kidde Fyrnetics, 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 be liable for consequential loss or damaged resulting from the failure of the alarm or for the breach of this or any other guarantee, express or implied, or for damaged caused by failure to abide by the instructions supplied.

This guarantee does not affect your statutory rights.

Kidde Fyrnetics makes no guarantee, express or implied, written or oral, including that of merchantability or fitness for any particular purpose, with respect to the battery, except Sealed in/Long Life cells.