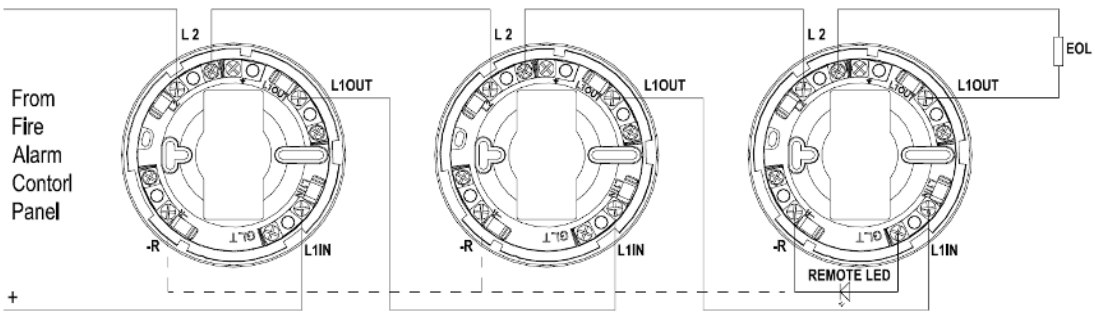
Wiring Diagram



Conventional schematic wiring diagram of detector circuit

Note: Polarity must be observed on detector as indicated on schematic wiring diagram.
Earth terminal is provided to maintain earth screen continuity. It does not connect to this detector head.

Base Installation

Connect the zone wires to the appropriate terminal. Tighten with a correct sized screwdriver: a wrong screwdriver may damage the screw heads.
Make sure that the base contacts are clean and unobstructed.
Note, the base model No. for MKII Series is MKII-CB or MKII-CB/D

Detector Head Installation

If there is still minor construction work in progress, the head may be fitted, provided that the dust cover is still in place.
To fit the detector, mate the detector onto the base and rotate the detector in a clockwise direction until the detector loads into the base. Continue to twist clockwise to secure it.

Model

There are 5 models of Fyreye II Conventional Detector.

Part No	Model No.	Description	CPR No.	LPCB No
80-200	MKII-OP	Conventional optical detector	0832-CPR-F0067	330n/01
80-202	MKII-HR	Conventional A2R heat detector	0832-CPR-F0071	330q/02
80-204	MKII-HF	Conventional A2S heat detector	0832-CPR-F0073	330q/01
80-206	MKII-OH	Conventional optical and heat detector	0832-CPR-F0069	330p/01
80-208	MKII-HF/CS90	Conventional CS heat detector	0832-CPR-F1922	330q/06

Monitor state

In monitor state, the two red LEDs on the top cover will blink every 5 seconds.
See Fig-1.

Fig-1

Pre-alarm state

In pre-alarm state, LED pairs will blink a clockwise circle in every 5 seconds.

Fire alarm state

In fire alarm state, the two LEDs shown in Fig-1 will light. The other 3-pairs of LED will light for 0.5 seconds rotating clockwise.

False alarms

In case of false alarm, the LED pairs will blink alternately. Check if the air around the detector is clear. Fan the air around the smoke alarm if necessary, until the alarm turns off. If the false alarm occurs frequently or continuously, arrange to have the unit serviced.

Fig-2

Sensitivity Read

Take the Sensitivity Test Wand making the receive diode against the light-emitting diode (see Fig-2).
And push the button of the Sensitivity Test Wand, the sensitivity will be displayed on LCD of Wand for a few moments later.

Drift Compensation Limit

In the case of the smoke chamber reaching the end of it`s compensation limit, the detector will flash it`s LEDs continuously to signal that the detector should be replaced. This can be confirmed with the Sensitivity Test Wand.

SPECIFICATION

EN54-5/7 approval
Supply Voltage: 10.5~33V
Alarm Current: 35-45mA at 24 volts
Quiescent Current: 70uA Maximum
Smoke Sensitivity: 0.08 dB/m - 0.12 dB/m
Temperature class: A2R (for MKII-HR); A2S (for MKII-HF) , CS (for MKII-HF/CS90)
Humidity Range: 0% to 95% Relative Humidity, non condensing

Maintenance Information

Fyreye Mk II detectors are generally installed as part of a fire alarm system.
Servicing of the system should be carried out in accordance with the requirements of the local code of practice for fire alarm installations, eg. BS 5839 Part 1, Fire Detection and Alarm Systems for Buildings: Code of Practice for System Design, Installation and Servicing.
The frequency of inspection testing will be based on a risk assessment of the installation, but should be no more than 6 months between visits.
Over a 12 month period every detector should be functionally tested, using suitable equipment to generate smoke or heat (EG the Solo range from No Climb Products)
All Fyreye Mk II conventional smoke detectors have an IR transmitter that periodically transmits chamber data. This allows the detectors sensor status to be checked with a Sensitivity Test Wand.

Cleaning

Cleaning a smoke detector can prolong its working life. The detector can be cleaned with:-

A hand held vacuum cleaner
A clean air line or a “duster” aerosol
A lint free cloth.

The effectiveness of cleaning will depend on the operating environment of the detector. Depending on timescales & financial considerations, detector cleaning may not be a practical option.

When to replace a detector

A detector should be considered as needing to be replaced if:-

The detector does not respond to a functional test
If the detector has had an unexplained activation*
If the detector has been in service for more than 10 years**

* In some cases it may be sensible to leave a detector until a second unexplained activation, but consider the extra service costs and perceived system integrity if this is done.

** Many detectors will continue to function adequately way beyond 10 years service. Balance the frequency of unwanted alarms, with the cost of replacing detectors when making this decision.

CE 0832
Zeta Alarms Limited, 72-78 Morfa Road, Swansea SA1 2EN 17 0832-CPR-F0067/F0069/F0071/F0073/F1922
EN54-5:2000+A1:2002 Heat detectors — Point detectors EN54-7:2000+A1:2002 + A2: 2006 Smoke detectors — Point detectors using scattered light, transmitted light or ionization MKII Conventional detectors MKII-OP, MKII-OH, MKII-HR, MKII-HF, MKII-HF/CS90 Other Technical Data: See Doc: “MKII-xx LPCB, MKII-xx/CS LPCB” held by the manufacturer