LF-4000 Series

Conventional Fire Alarm Control Unit

Features:

- 1 to 36 Zone Control Panels
- Control Key Switch
- Easy Push Button Control Switches
- Zone Circuit Monitoring for Open and Short
- Sounder Circuit Monitoring for Open and Short
- Multiple Indicator LED's for Quick Identification
- Up to 30 Detectors per Zone
- 2 Wire System
- Individual Zone Relays
- No Polarity for Zone Inputs
- Polarized for Sounder Circuits
- Auxiliary 24VDC Power
- Fuse Protection for AC Main, Battery and Aux Power
- Circuit Protection for Zone and Sounder Circuits
- Top and Bottom Knockouts for Easy Installation
- Rigid Enclosure

Description:

The LF-4000 Series Conventional Fire Alarm Control Panels are manufactured based on advanced technology while maintaining high quality during assembly. It is of solid state circuitry and is designed and tested to meet the requirements of industrial or commercial applications. With its multi-zone architecture (see ordering information), the system can be installed ranging from small buildings to large constructions.

Up to 30 devices, combination of smoke, heat and manual call points, can be connected to a single zone. Zone wiring are non-polarized which makes installation easier and fault free. Any alarm coming from a zone would activate the sounder circuits, common alarm relay, zone relay and the panel audible circuit. Once the panel has been silenced and a subsequent alarm occurs in another zone, the internal speaker and sounder circuits would then re-activate with its associated zone relay. The system incorporates 2 built-in sounder circuits, a common alarm relay, configurable zone relays, and a 24VDC auxiliary output. All of which ensures the system can be easily configured to meet the requirements of the end-user.

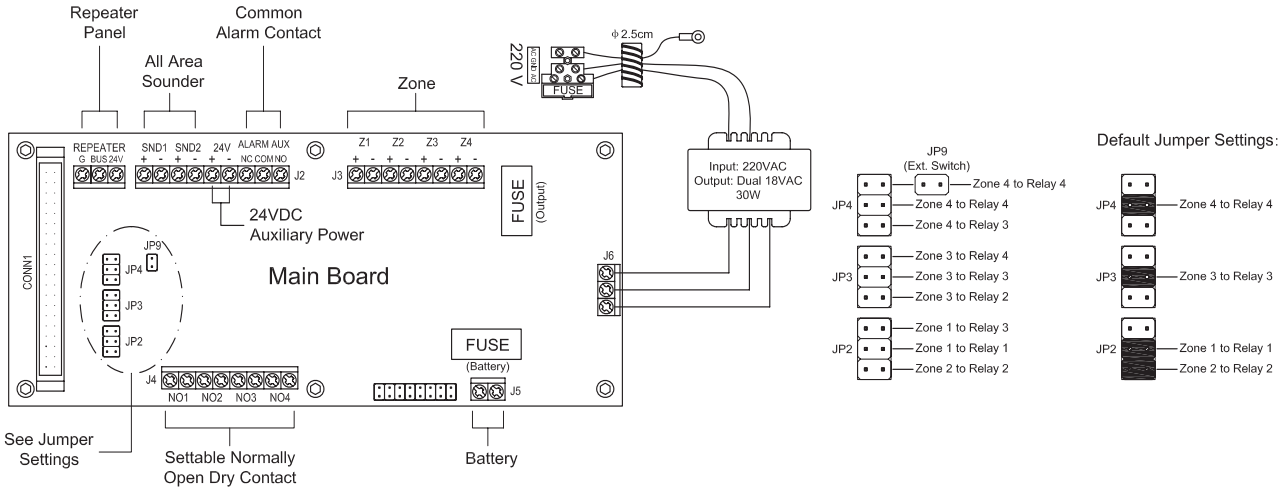
It also has the provision to connect repeater panels. The repeaters are integrated into the system utilizing a serial data line and a 24VDC power source. Up to 8 repeaters can be connected to a single system.

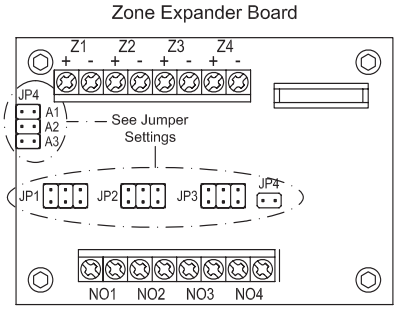
For security purposes, the Control Panel is fitted with a control key switch which locks all the push-button functions so only authorized personnel would be allowed to operate the system. The provided push-button keys allows the operator to Silence the local panel and alarm indicators during a fire or trouble condition, to Evacuate by operating all sounders and to perform a local lamp test and Reset the control unit.

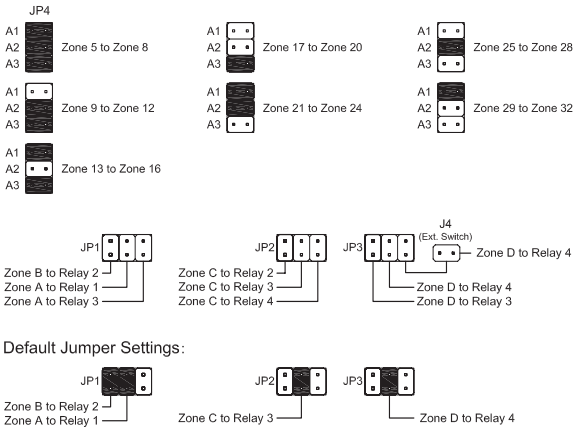
Lichfield Fire & Safety Equipment Co. Ltd
Saturn Centre, 2nd floor, Suite 4, Spring Road,
Ettingshall, Wolverhampton WV4 6JX, United Kingdom.

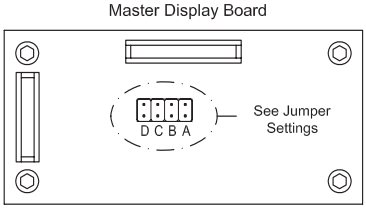
Tel: +44 (0) 870 066 44 01
Fax: +44 (0) 870 066 44 02
email: info@lifeco-uk.com

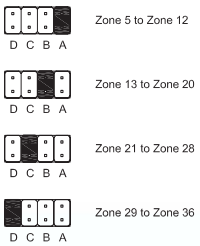
Wiring and Terminal Details:











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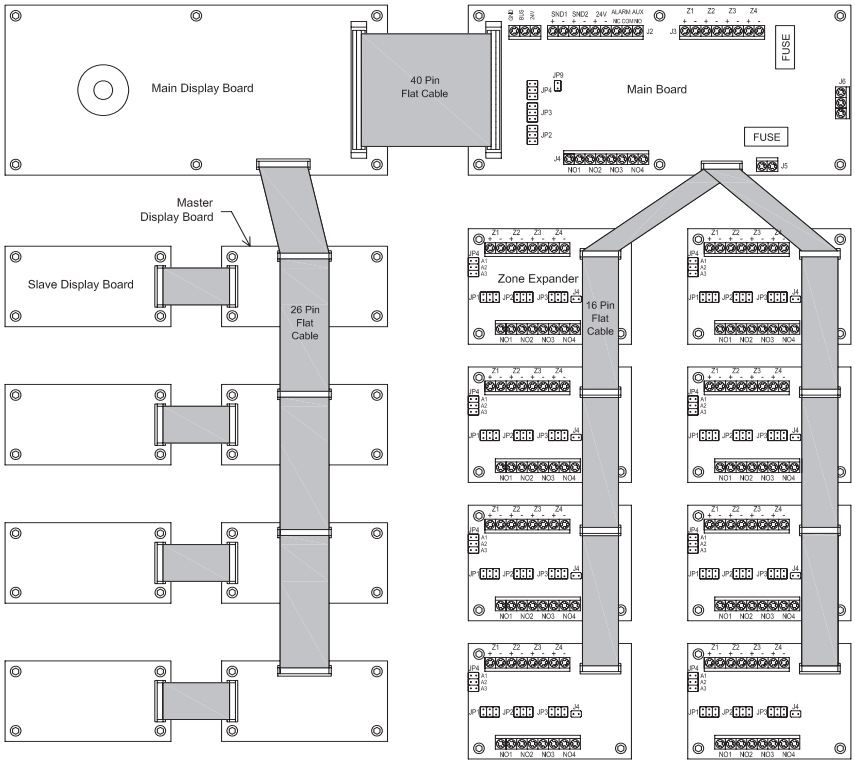
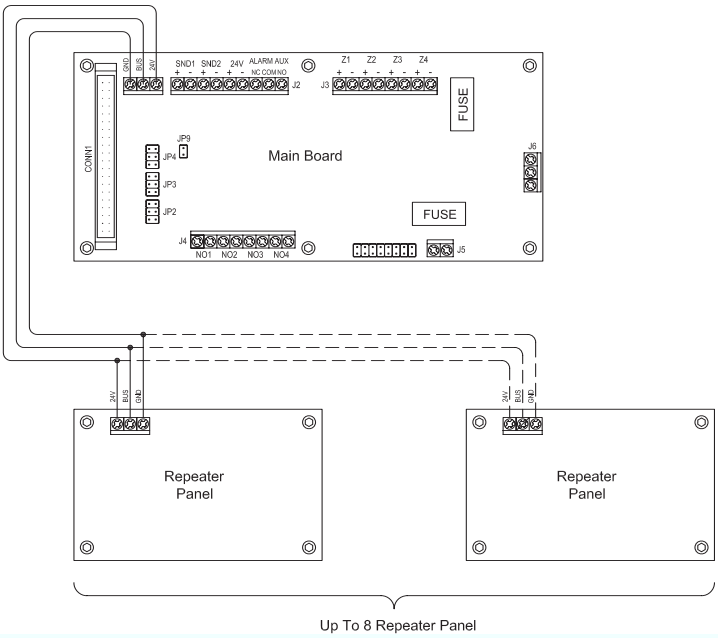
Flat Ribbon Cable Connection:



Repeater Panel Termination:



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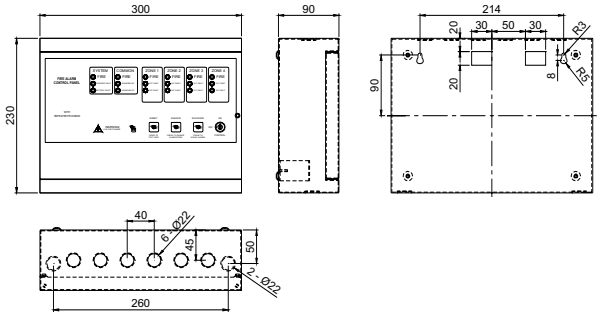
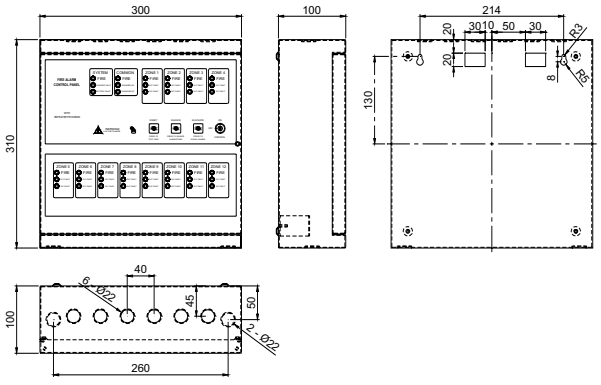
Installation and Dimentional Details:

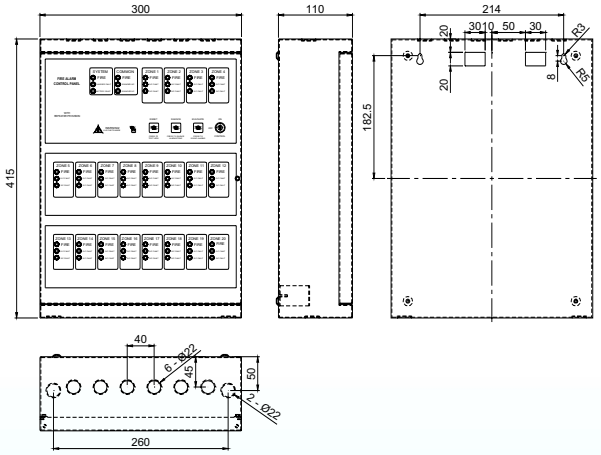
1, 2, & 4 ZONE



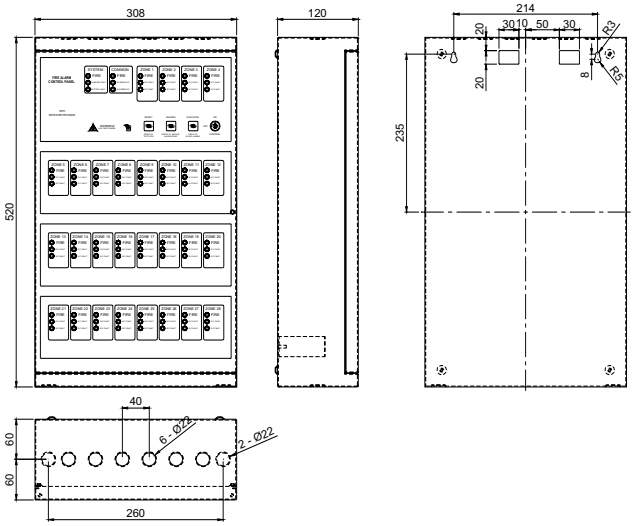
8 & 12 ZONE



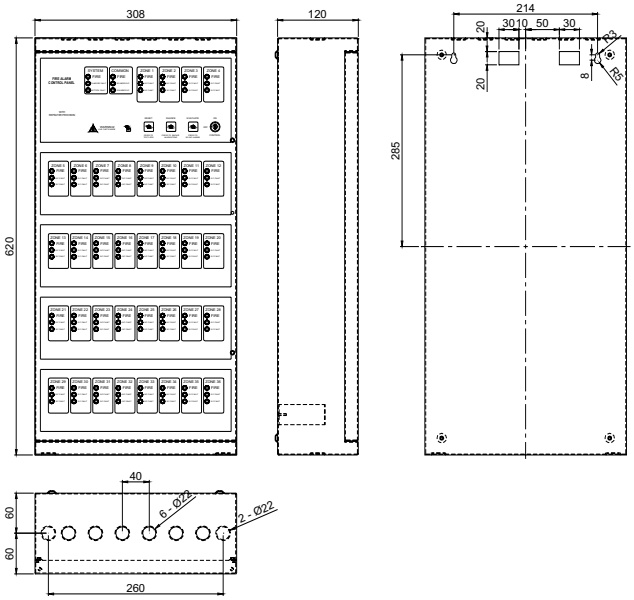
16 & 20 ZONE



24 & 28 ZONE



32 & 36 ZONE



Note: All dimensions are in millimeters

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LF-4000 Series Conventional Fire Alarm Control Unit

Fusing Rating:

Zone 1 to Zone 4 Control Panel	Mains Fuse	0.5A (5X20mm)
	Battery Fuse	3.0A (5X20mm)
	Output Fuse	3.0A (5X20mm)
Zone 5 to Zone 8 Control Panel	Mains Fuse	0.75A (5X20mm)
	Battery Fuse	4.0A (5X20mm)
	Output Fuse	4.0A (5X20mm)
Zone 9 to Zone 12 Control Panel	Mains Fuse	0.75A (5X20mm)
	Battery Fuse	4.0A (5X20mm)
	Output Fuse	4.0A (5X20mm)
Zone 13 to Zone 16 Control Panel	Mains Fuse	0.75A (5X20mm)
	Battery Fuse	7.0A (5X20mm)
	Output Fuse	7.0A (5X20mm)
Zone 17 to Zone 20 Control Panel	Mains Fuse	0.75A (5X20mm)
	Battery Fuse	7.0A (5X20mm)
	Output Fuse	7.0A (5X20mm)
Zone 21 to Zone 36 Control Panel	Mains Fuse	1.0A (5X20mm)
	Battery Fuse	10.0A (5X20mm)
	Output Fuse	10.0A (5X20mm)

ORDERING INFORMATION

Model No.	Description	Dimensions (mm)
LF-4000/1	1 Zone Fire Alarm Control Panel	230 x 300 x 90
LF-4000/2	2 Zone Fire Alarm Control Panel	230 x 300 x 90
LF-4000/4	4 Zone Fire Alarm Control Panel	230 x 300 x 90
LF-4000/8	8 Zone Fire Alarm Control Panel	310 x 300 x 100
LF-4000/12	12 Zone Fire Alarm Control Panel	310 x 300 x 100
LF-4000/16	16 Zone Fire Alarm Control Panel	415 x 300 x 110
LF-4000/20	20 Zone Fire Alarm Control Panel	415 x 300 x 110
LF-4000/24	24 Zone Fire Alarm Control Panel	520 x 308 x 120
LF-4000/28	28 Zone Fire Alarm Control Panel	520 x 308 x 120
LF-4000/32	32 Zone Fire Alarm Control Panel	620 x 308 x 120
LF-4000/36	36 Zone Fire Alarm Control Panel	620 x 308 x 120
LF-4050/16	1 to 16 Zone Repeater Panel	120 x 160 x 32.5
LF-4050/36	20 to 36 Zone Repeater Panel	180 x 160 x 32.5

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TECHNICAL SPECIFICATION:

Power Requirement	220 VAC 50/60 Hz ± 10%	
Sounder Circuit		
Output Voltage	24 VDC	
Alarm Current	1, 2, 4, 8 Zone	700 mA,
	12, 16 Zone	1A
	20, 24 Zone	1.5A
	28, 32, 36 Zone	2A
EOL	5.6K	
Zone Circuit		
Voltage	24 VDC	
Supervisory Current	4 mA	
EOL	5.6K	
Loop & Sounder Circuit Protection	Thermal Circuit Cut-off	
Auxiliary Relays		
Contact Rating	125 VDC, 12A	
	250 VAC, 7A	
	28 VDC, 7A	
Auxiliary Power	24 VDC, 1A	
Repeater	Up to 8 panel	

Distributor:

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LF PE HD/2000

Combined Smoke and Heat Detector

Features:

- Low Profile Design
- Low Power Consumption
- High Precision and Stability
- Quick Fire Alarm Transfer Speed
- High Accuracy of Fire Detection
- Special Chamber Design
- Polarized Wiring
- Ease of Maintenance
- Base options for Supplementary Relay and/or Remote Indicator
- 2-Wire, 3-Wire and 4-Wire Applications
- LED indicator

Description:

The LF PE HD 2000 Combined Smoke and Heat Detector was designed on theory in which the light emits diffusively to various directions when reflecting onto the smoke chamber.

It uses specialized smoked chamber design, which could sense the presence of smoke particles produced by fast combustion or slow smoldering fire. Combining fire algorithms stored in its memory with the special three part design of the smoke chamber and given the photo-sensor's viewing angle, the detector can effectively sense both white smoke and black smoke with virtually no false alarms.

Before the fire break out, internal temperature would become higher than the usual standard. When it reaches the programmed temperature level, the sensor will transfer signal to the control panel to convert the L-C into short signal. At this moment, the highly reliable LED indicator will light up for notification.

The detector's design widely applies to all kinds of industrial and commercial constructions with its high resistance to humidity, wide operating temperature range, high reliability and ease of installation and configuration.

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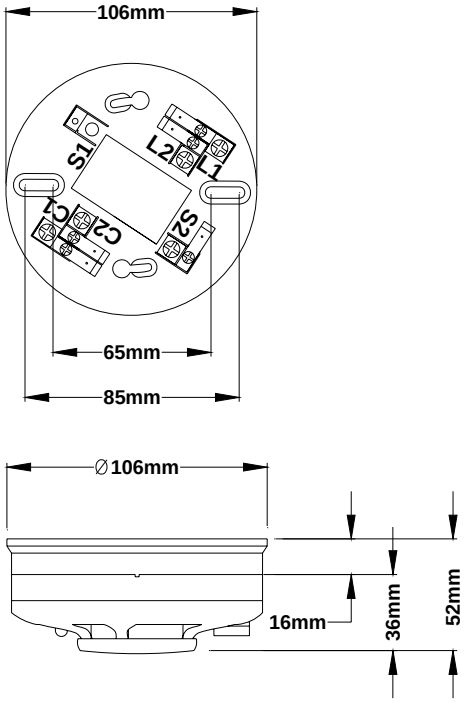
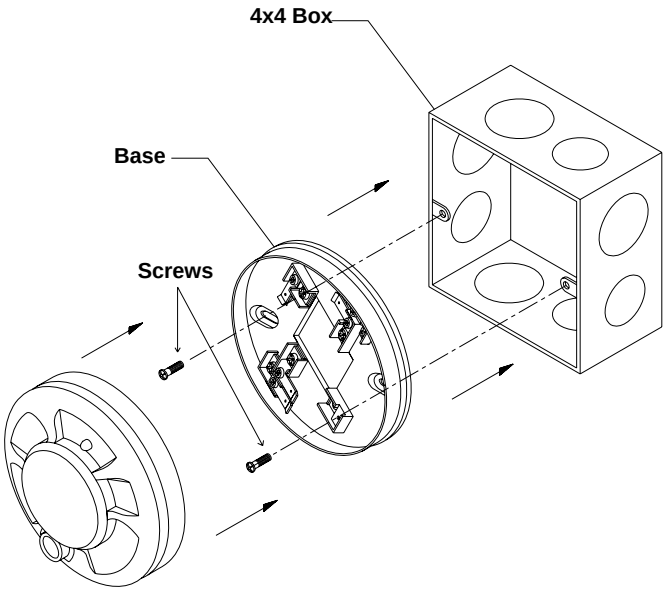
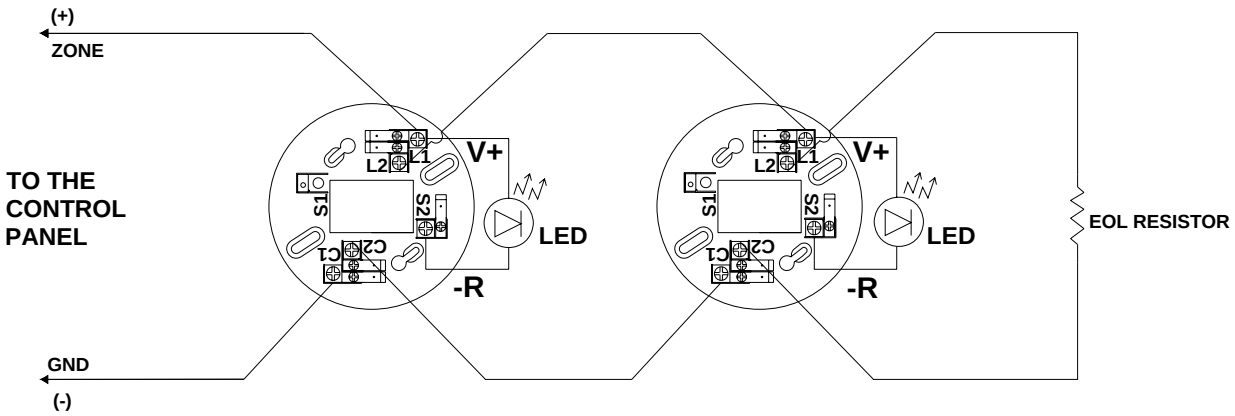
Dimension and Installation Details:





Wiring:



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TECHNICAL SPECIFICATION:				
Effective Warning Area (Smoke)	Height above the ground	Below 4m	4 ~ 8m	8 ~ 15m
	Building	100 m^2	50 m^2	30 m^2
Effective Warning Area (Heat)	Height above the ground	Below 4m	4 ~ 8m	
	Building	20 m^2	15 m^2	
Input Voltage Range	16V ~ 32VDC (DC 24V)			
Alarm Current	10 ~ 100mA (MAX)			
Standby Current	60μA/24VDC			
Set Temperature	57˚C			
Relative Humidity	0 ~ 95%RH			
Weight	187g			
Diameter	106mm			
Height	52mm			
Material	ABS Plastic			
Color	White			

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LF-AV-4125

Conventional Audible and Visual Alarm Indicator

Features:

- Quick Response Time
- Piezoelectric Horn
- High Intensity Strobe
- Integrated Electronics
- High Performance at Low Cost
- 3 User Selectable Tones via jumpers
- Wall Mount Type
- Two Wire Operation

Description:

The LF-AV-4125 Conventional Audible and Visual Alarm Indicator adopts a built-in integrated circuit, a piezoelectric sounder and a high intensity strobe which when combined, produces a high energy conversion efficiency for effective output of light and sound while utilizing a minimum amount of power.

The LF-AV-4125 can be mounted by opening the front cover and installing the body of the device to a standard 3 inch square box. The mounting holes are hidden when the cover is replaced. Together with the modern style of the strobe unit and the contour of the device, makes it appealing with any building wall design.

Selector jumpers are also provided at the back of the unit for a variety of tone outputs. Depending on the requirement of the authority having jurisdiction, the device can be set to have an audible output of Hi-Lo, Wailor Siren.

The indicator's design widely applies to all kinds of industrial and commercial constructions with its high resistance to humidity, wide operating temperature range, high reliability and ease of installation and configuration.

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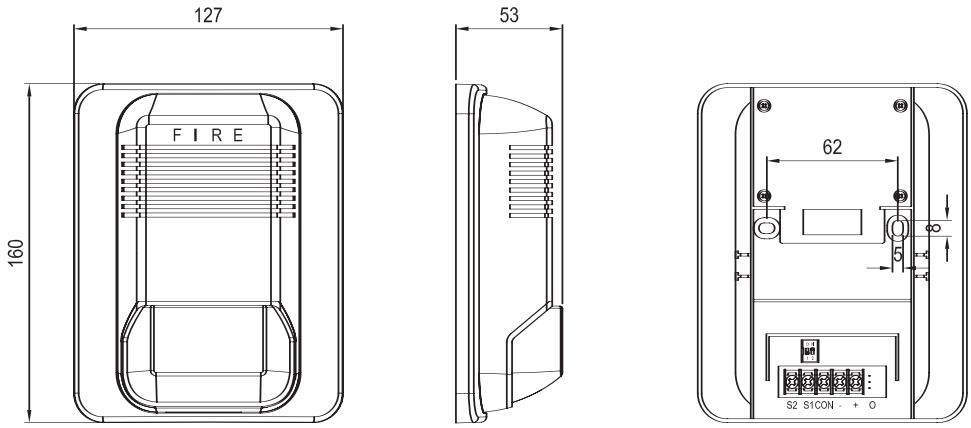
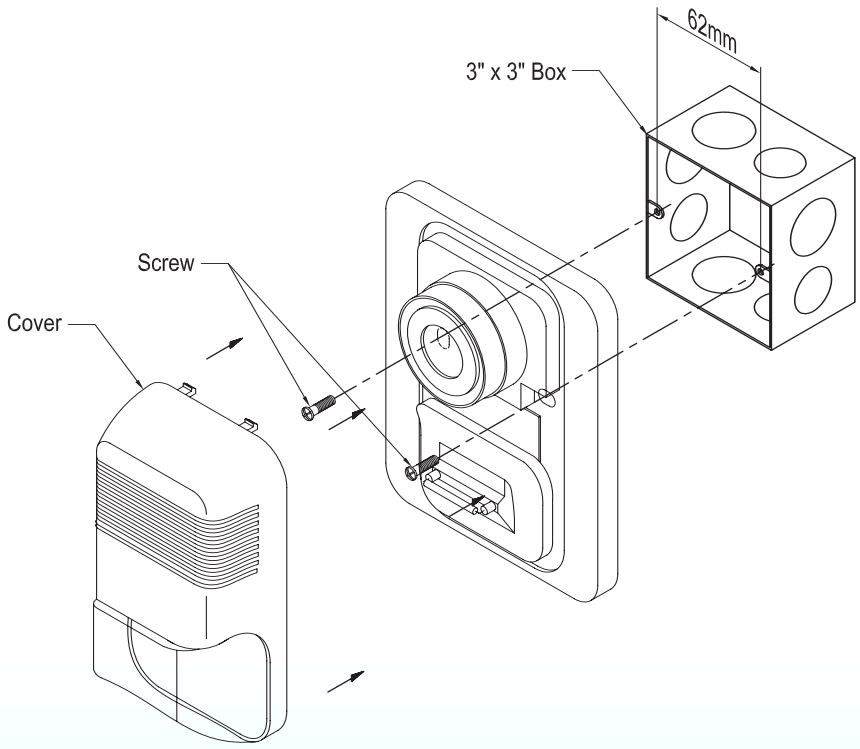
Physical Dimensions:



Installation:



Note: All dimensions are in millimeters

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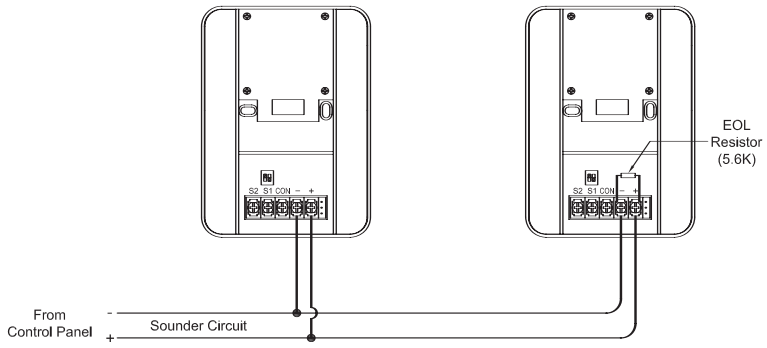
LF-AV-4125 Conventional Audible and Visual Alarm Indicator

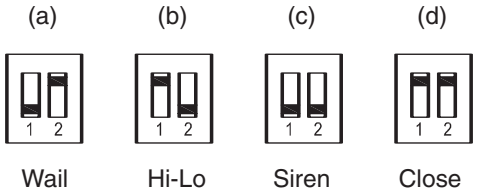
TECHNICAL SPECIFICATION:

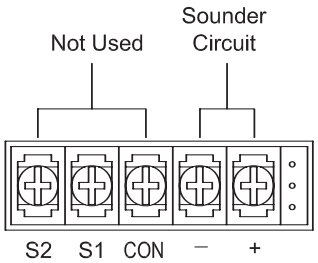
Operating Temperature	-10°C ~ 55°C
Relative Humidity	95% non-condensing
Wiring System	Polarized
Flash Intensity	1.2 Watts
Flash Cycle	Every 1.5 seconds
Sound Output	105 dB
Device Operating Voltage	22 ~ 26 VDC
Auxiliary Power Consumption	120 mA
Weight	260g
Dimensions (mm)	160 x 127 x 53mm

Wiring and Terminal Details:



- Observe proper polarity when connecting tosounder circuit
- User Selectable Tones:





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LFB6/8 & LFBW6/8

Fire Alarm Bell

Features:

- UL Approved
- Quick and Easy Installation
- Vibrating Type
- High Sound Level
- High Reliability
- Low Power Consumption
- Available in 6", 8" Housing
- Mounts to Standard 4" Square Electrical Box
- Cast Alloy Housing
- Indoor or Outdoor* Use

Description:

LIFECO LFB series bells are intended for fire alarm application only. The gong is of cast alloy metal suitable to produce loud and standard alarm bell sound. Two gong sizes are available to suit high or low noise level applications.

It produces a characteristic sound with a 96dBA @ 10Ft. for 6" bell and 98dBA @ 10Ft. for 8" bell sound level. The external casing is painted red. It can be connected to all fire detection control panels and requires a voltage of 24VDC in order to operate.

This design of exceptional structure is sturdy and durable. It is also weather proof that can be used as an indoor or outdoor fire alarm bell. When used outdoors, weather proof back box is also required. Each bell is supplied with a mounting plate to fix it on a standard utility box or to install directly on the wall.

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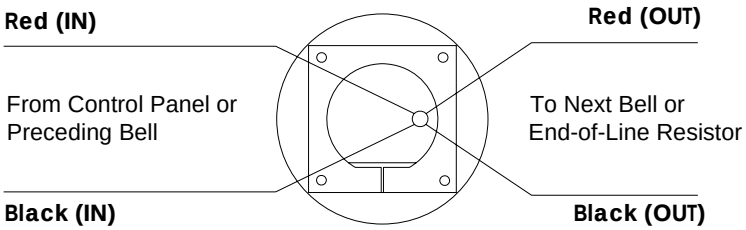
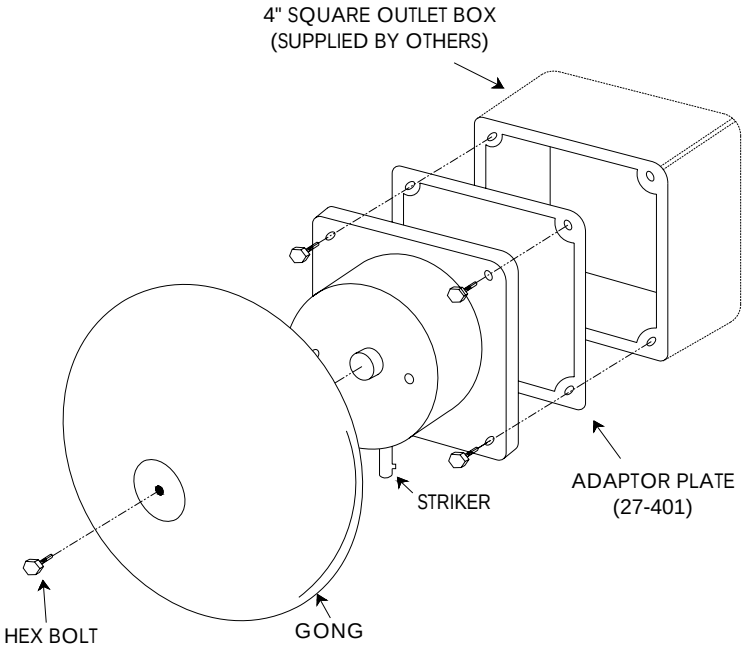
Wiring Diagram:



Installation Details:



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ORDERING INFORMATION:

MODEL	SIZE	VOLTAGE DC	CURRENT	dBA @ 10 Ft.	APPLICATION
LFB 6	6"	24 V DC	100mA	96	Indoor
LFB 8	8"	24 V DC	100mA	98	Indoor
LFB 6W	6"	24 V DC	100mA	96	Outdoor*
LFB 8W	8"	24 V DC	100mA	98	Outdoor*

** Weather proof back box available on request.*

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LF/B 10

Call Point Series

Features:

- Arabic and English Label
- Quick Fire Alarm Transfer
- Easy Operation – Push to Activate
- No Polarity
- Ergonometric Construction
- Durable Design
- High Performance at Low Cost
- Easy to install
- Semi flush or Surface Mounting
- With protective cover
- Suitable for indoor use

cover

Description:

The LF-B 10 Call Point Series satisfies the requirements for a manual fire alarm initiating device. With its sleek and durable design, it is easily observed yet does not hinder with building design and can be fitted along corridors, hallways and exits for easy access to operate in cases where there is a requirement for activating an alarm signal.

The switch inside is kept pressed by the edge of the glass. When the glass is broken, the switch is released and causes an alarm signal to be sent to the fire alarm control panel through the initiating device circuit.

The detector's design widely applies to all kinds of industrial and commercial constructions with its high resistance to humidity, wide operating temperature range, high reliability and ease of installation.

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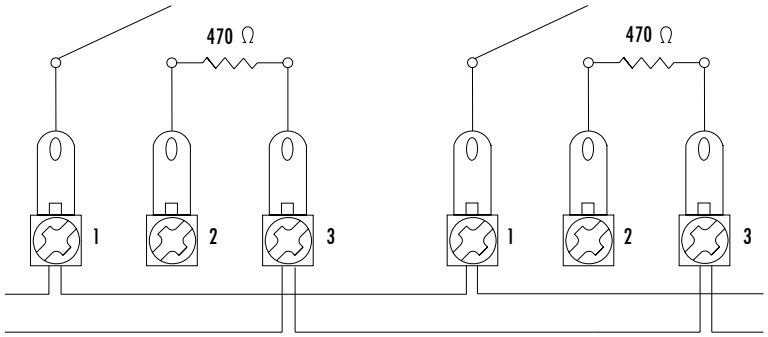
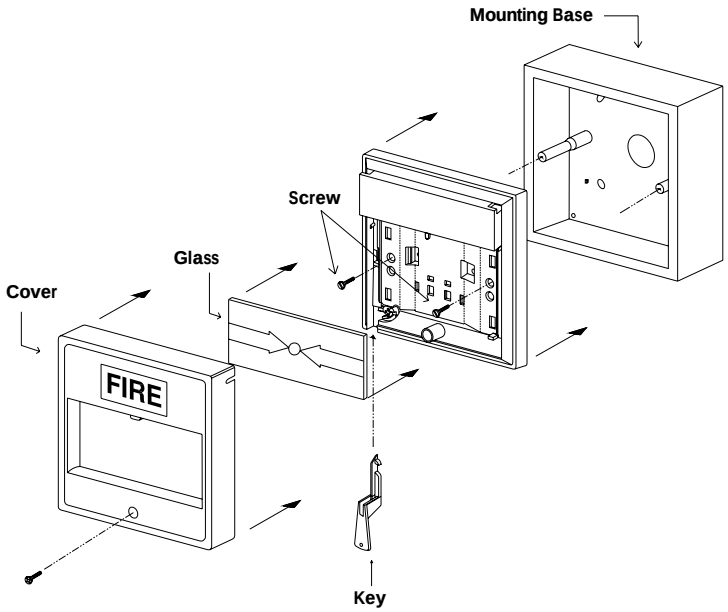


Installation Details:



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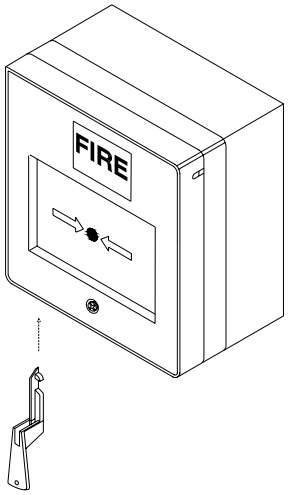
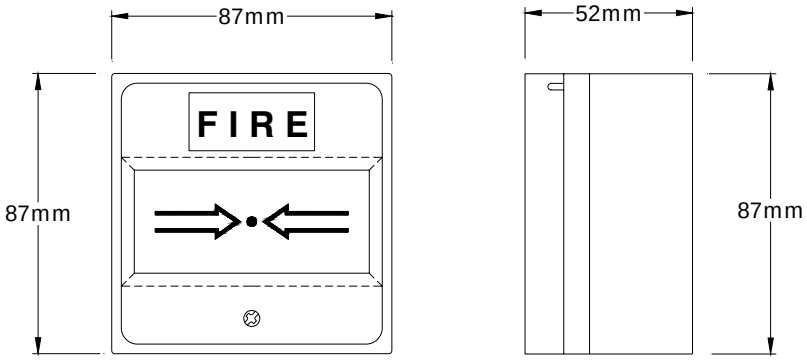
Testing:

When the key is inserted, the glass drops and tests the switch. Do not leave the key with the Call Point after commissioning.



Dimensional Details:



TECHNICAL SPECIFICATION:	
Terminals	Screw type to suit 0.28mm² to 2.5mm² Cables
Contact Rating	Resistive 1A @ 50 VAC/VDC
Maximum Contact Resistance	150 mΩ
Minimum Contact Voltage	12V AC/DC
Operating Temperature	-40˚C ~+85˚C
Material	ABS Plastic
Dimensions	87 x 87 x 52 mm
Color	Red

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LF/EX

Fire Alarm & Gas Extinguishing Control Panel

Features:

- Rigid Steel Powder Coated Cabinet
- Built-in Battery and Internal Charger
- System Status Indication
- Indicators for Charge Fault & Battery Fault
- Monitored Alarm Circuits for Both Open and Short Circuit
- Manual Operating Switch on Front Fascia
- 2 Monitored Detection on Zones
- Monitored Gas Release
- Knockouts on top and bottom sides for Easy Installation
- Relay Contacts
- Control Key Switch
- Release Timer
- Silence/tone and/or First Tone Alarm
- Automatic or Manual Operation
- Reset/LED Test Button

Description:

The LF/EX Fire Alarm and Gas extinguishing Control Panel is manufactured based on advanced technology while maintaining high quality during assembly. It is of solid state circuitry and is designed and tested to meet the requirements of industrial or commercial applications.

It provides operator interactive control of the fire alarm and gas extinguishing system.

Push buttons are provided on the front fascia for manual/automatic modes of extinguisher operation, first stage alarm, silence and reset.

The LF/EX is interfaced with two detection zones of a conventional fire alarm panel which are utilized to provide double knock (coincidence) detection throughout the gas protected area.

A callpoint situated on the front of the unit can be operated to manually release the extinguishant. It has multi-colored LED indicators for easy reference of fault isolation.

For security purposes, the Control Panel is fitted with a control key switch which locks all the push-button functions so only authorized personnel would be allowed to operate the system.

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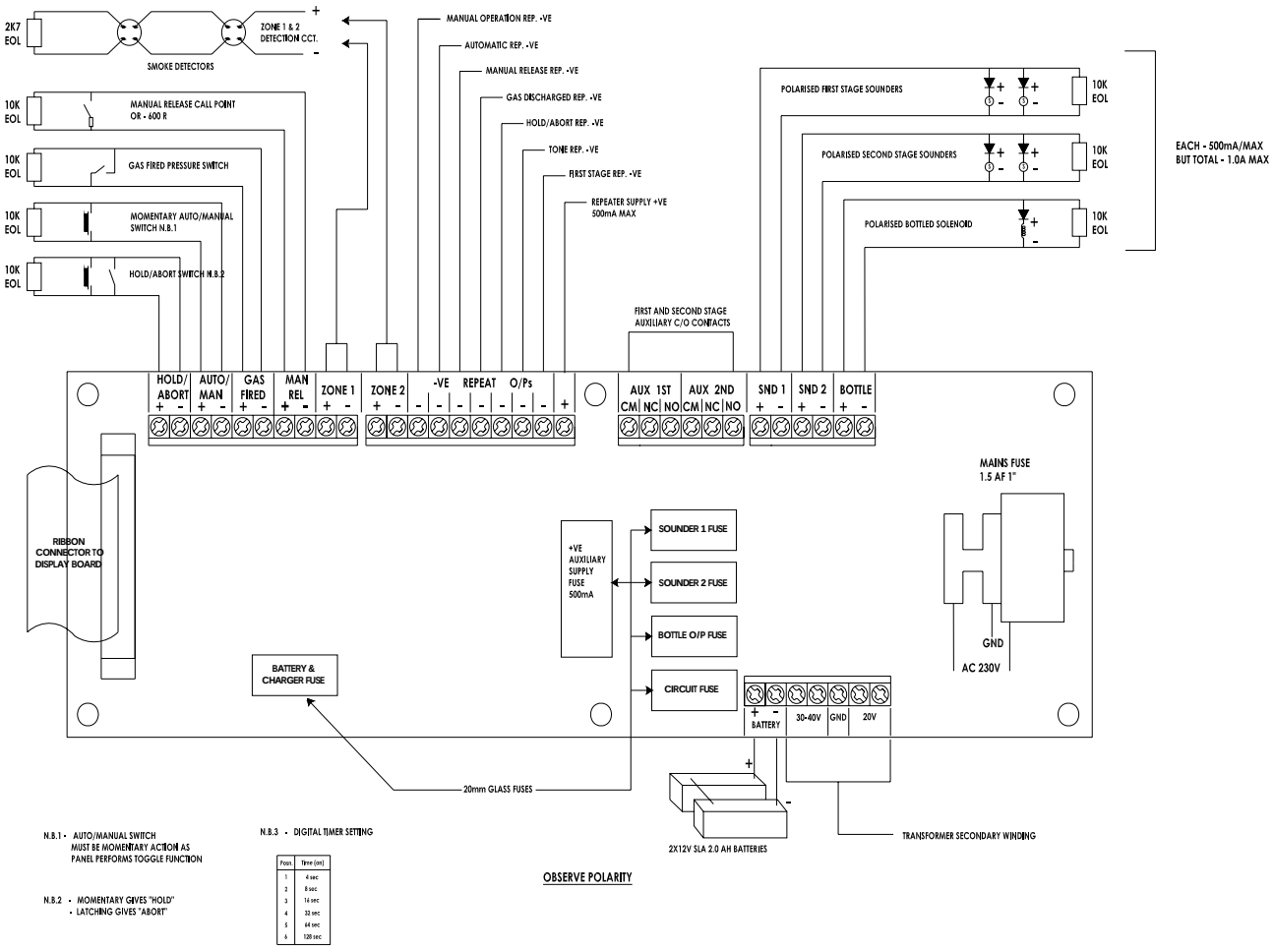
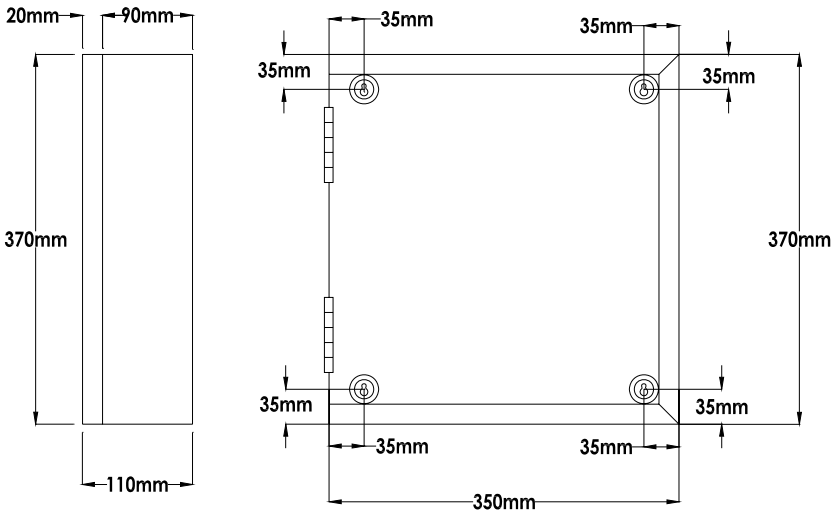
Control Panel Connection Diagram:



Dimensions of Box and Installation Holes:



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TECHNICAL SPECIFICATION:	
Mains Voltage	230VAC @ 50/60 Hz +15%, -10%
Charger Voltage	25~30VDC (Set Internally to 27.6V)
Battery Voltage	24 V SLA (2x12V)
Battery Space	7.0 AH Maximum
Mains Supply Protection	1.5 AF 20x5mm Glass Fuse
Battery and Charger Voltage Protection	1.5 AF 20x5mm Glass Fuse
Reverse Battery Protection	Battery Fuse
Sounder Output (1st and 2nd Stage)	24 VDC Nominal
Sounder Output Protection	500mAF 20x5mm Glass Fuse
Auxiliary Supply Output	24 VDC Nominal
Auxiliary Supply Protection	500mAF 20x5mm Glass Fuse
Auxiliary Relay Contacts (1st and 2nd Stage)	30V AC/DC 1.0 A Each
Bottle Output	24 VDC Nominal
Bottle Output Protection	500mAF 20x5mm Glass Fuse
Zone Voltage	24 VDC
Quiescent Zone Current	8mA per Circuit
Max Zone Circuit Resistance	50 Ω
Max Sounder Circuit Resistance	25 Ω
Max Resistance - Other Circuits	50 Ω
Quiescent Battery Current (Tone Muted)	100mA Nominal
Quiescent Battery Current (Tone Not Muted)	125mA Nominal
Max Total Load Current (Snd, Bottle and Aux+VE)	1.5A (Although each maybe to fuse rating)
Circuits Monitored for O/C and S/C	Bottle Output, 1st and 2nd Stage Snd Outputs, Zones 1 and 2
Circuits Monitored for O/C only	Hold/Abort, Auto/Manual, Gas Fired, and Manual Release. (S/C gives active condition although a resistance of up to 500 Ω will still give an active condition.
Maximum Loading	2mA per Zone
No. of Gas Area	One
Release Time for Digital Extinguishant	4 sec. to 5 min.

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LF / GD

High Performance Gas Detector

Features:

- Gas Level Indicators
- Power On, Gas Alarm and Warm-up LED Indicators
- Reset Button
- Built-in Buzzer
- Gas Sensitive Sensor
- Auto Analysis
- Detects Combustible Gases
- Quick Response Time
- Relay Output
- Rigid steel Powder Coated Cabinet
- 220V AC Operation
- Wall Mount

Description:

The LF/GD High Performance Gas Detector is used to detect various types of combustible gas. It is used mainly where there are possibilities of gas leakage like in chemical plants, gasoline stations, pharmaceutical factories, etc.

When the detector is activated, the red LED (Alarm LED) lights and the internal buzzer will give an alarm sound. The green LED shows the presence of the mains power supply. When first installed, the yellow LED (Warm-up LED) will light for 10 seconds until the sensor compensates to its surrounding.

Depending on the monitored gas, the unit must be placed higher (for methane) or lower (for propane, butane) then at the probable gas leak point. The horizontal distance should not be more than 3 meters and the detectors must not be placed in humid or drafty areas. It is suggested that the detector is tested for good operation every 6 months or if it changed position.

It contains a gas leakage density rate indicator equipped with 9 different levels.

The detector's design widely applies to all kinds of industrial and commercial constructions with its high resistance to humidity, high reliability and ease of installation.

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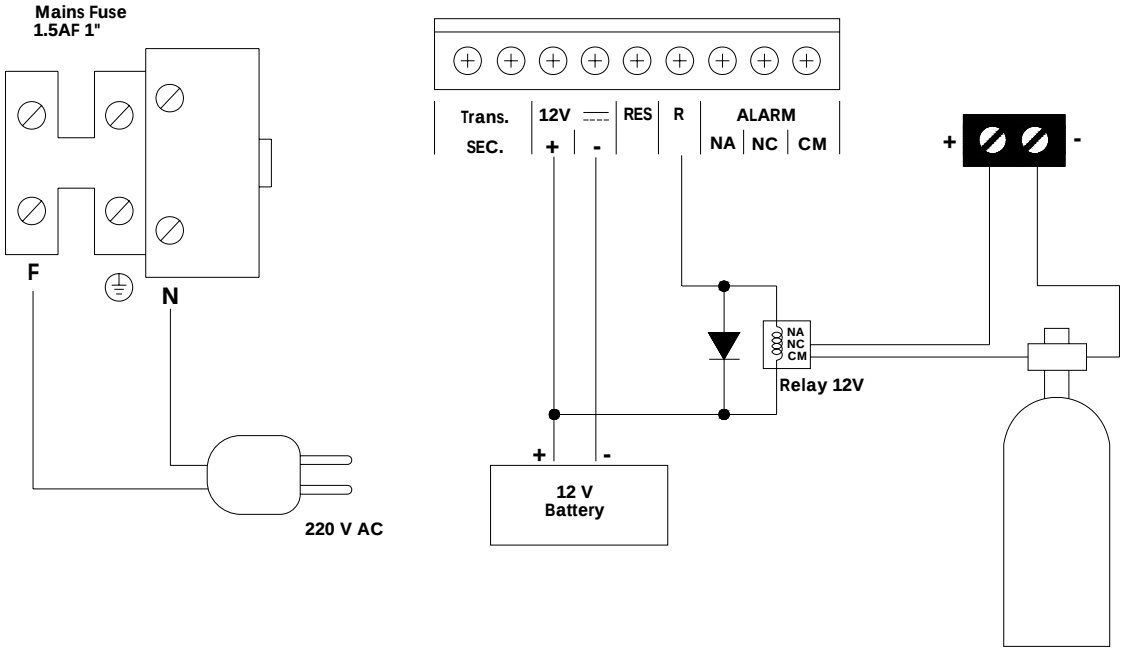
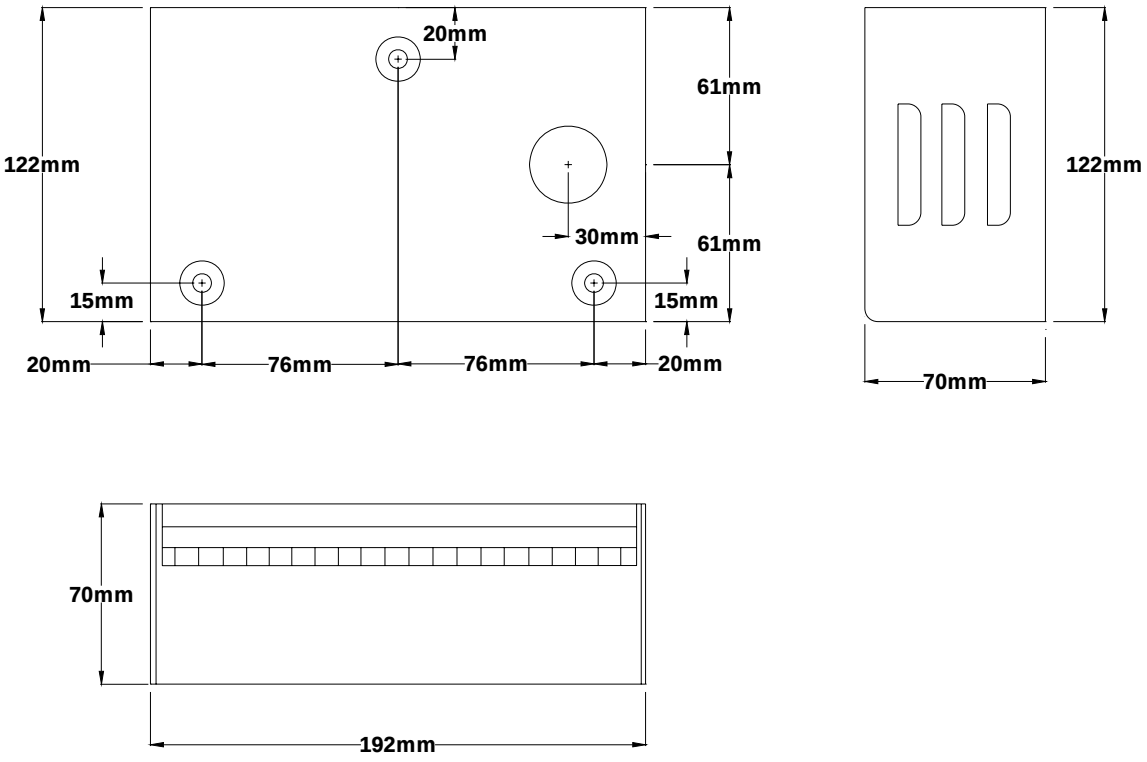
Wiring Diagram:



Dimensional Details:



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TECHNICAL SPECIFICATION:	
Mains Voltage	220 VAC 50/60 Hz
Battery Voltage	12 VDC
Standby Current	80 mA
Alarm Current	130~250 mA
Heater Voltage	2.225 VDC
Auxiliary Nominal Voltage	12 VDC @ 1.5 A
Auxiliary Relay Contacts	24 VDC/5A
Sensitivity Range	1000 to 40000 ppm
Sensitivity Gas/Air	75
Response Time	2 sec.
Gas Concentration	2000 ppm CS 1110
Mains Supply Protection	1.5AF 1" Glass Fuse
Circuits Protection	2.0 AF 20 x 5 mm Glass Fuse
Dimension	192 x122 x 70 mm

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LF-HD-4112

Heat Detector

Features:

- Microprocessor Based Design
- High Accuracy of Fire Detection
- Rate of Rise and Fixed Temperature
- Quick Fire Alarm Transfer Speed
- Polarized Wiring
- Provision for Remote LED Indicator
- Ease of Maintenance
- Multiple Sensitivity Settings
- Up to 30 devices per zone
- 2 LED's for 360deg. Viewing Angle

Description:

The LF-HD-4112 Conventional Type Heat Detector identifies fire with both rapidly rising and gradually increasing temperature. It has three levels of fixed temperature settings to adapt itself to the local temperature of the area being protected.

The detector utilizes a modern, accurate, state of the art Negative Temperature Coefficient (NTC) thermistor that senses thermal changes in the protected area. And combined with the data stored in its non-volatile memory, the detector sends out alarm information to the Fire Alarm Control Unit during a rapid rise of heat or upon reaching its pre-set temperature rating.

The LF-HD-4112 Conventional Heat Detector also has the provision of connecting a remote LED indicator.

The detector's design widely applies to all kinds of industrial and commercial constructions with its high resistance to humidity, wide operating temperature range, high reliability and ease of installation.

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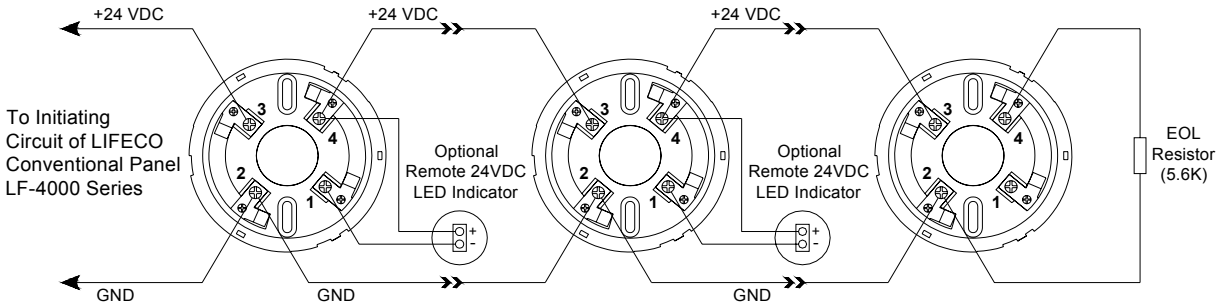
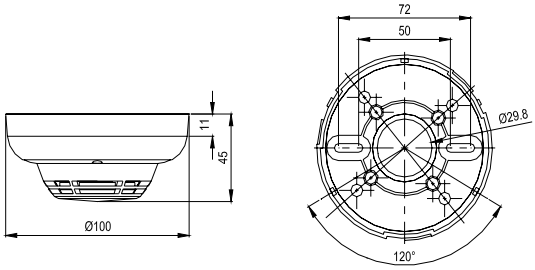
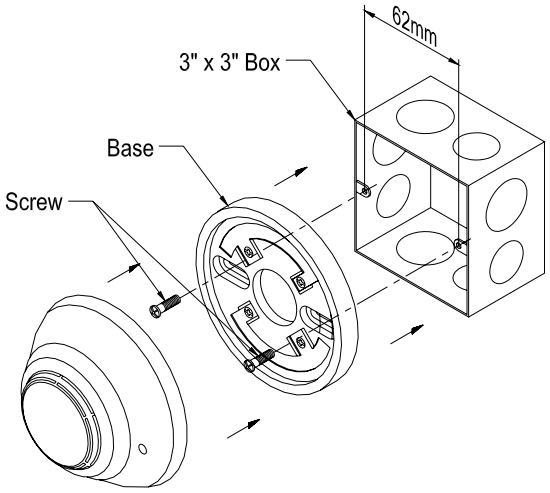
Wiring Diagram:



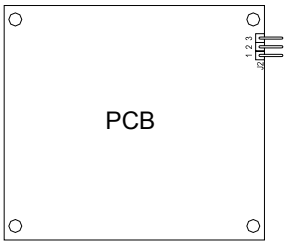
Dimensions and Installation Details:

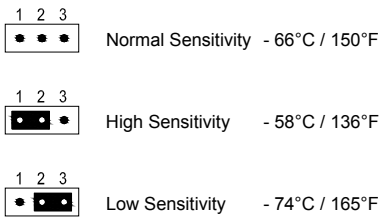


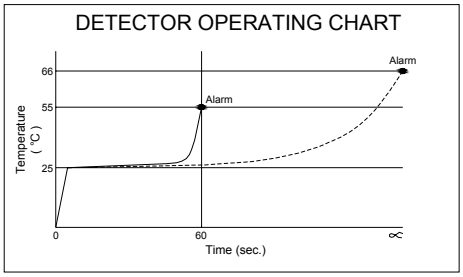


Note: All dimensions are in millimeters

Sensitivity Adjustment:







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TECHNICAL SPECIFICATION:

Sensitivity Settings	I (high)	58℃
	II (normal)	66℃
	III (low)	74℃
Maximum Allowable Spacing	15m	
Approx Weight	112g (with base)	
Temperature Rating	-10℃ ~ 55℃	
Input Voltage	16 ~ 32 VDC	
Standby Current	30 μ A	
Alarm Current	40mA	
Peak Current	4mA	
Relative Humidity	0-95% non condensing	
Led Indication (Red)	Pulsing	Standby
	Steady	Alarm
Material	ABS Plastic	
Color	Off-White	

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LF-MCP-4103

Conventional Manual Fire Alarm Call Point

Features:

- Quick Fire Alarm Transfer Speed
- 2 LED's Alarm Indicator
- Easy Operation – Push to Activate
- Resettable Type using Glass Return Unit
- Firefighter's Telephone Extension Jack Input
- No Polarity
- Ergonometric Construction
- Durable Design
- High Performance at Low Cost

Description:

The LF-MCP-4103 Conventional Manual Call Point satisfies the requirements for a manual fire alarm initiating device. With it's sleek and durable design, it is easily observed yet does not hinder with building design and can be fitted along corridors, hallways and exits for easy access to operate in cases where there is a requirement for activating an alarm signal.

It contains a normally open switch which activates upon pressing on the glass window. Since there is no requirement of breaking to initiate the alarm, the device is safe for use by any personnel who requires to manually initiate a fire alarm. The Glass Return Unit is used to reset the device.

An optional telephone jack is also fitted on the unit. In cases where a Fire Host Telephone is installed, plug-in a firefighters telephone extension on the bottom of the call point and it would immediately connect to the Host Telephone Controller.

The detector's design widely applies to all kinds of industrial and commercial constructions with its high resistance to humidity, wide operating temperature range, high reliability and ease of installation.

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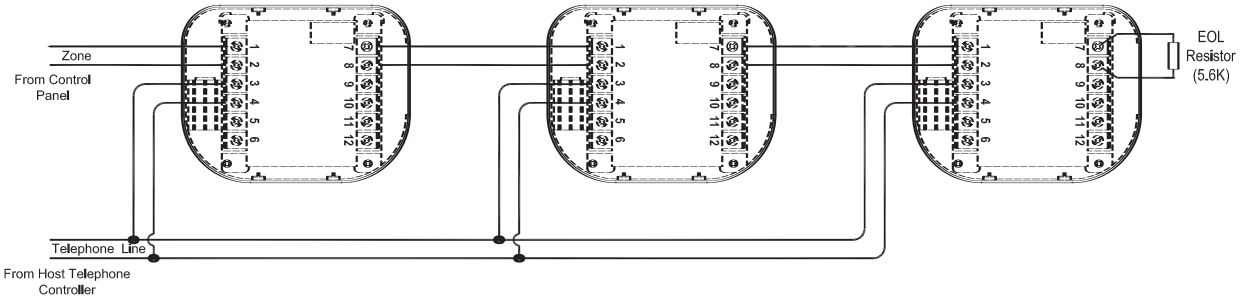
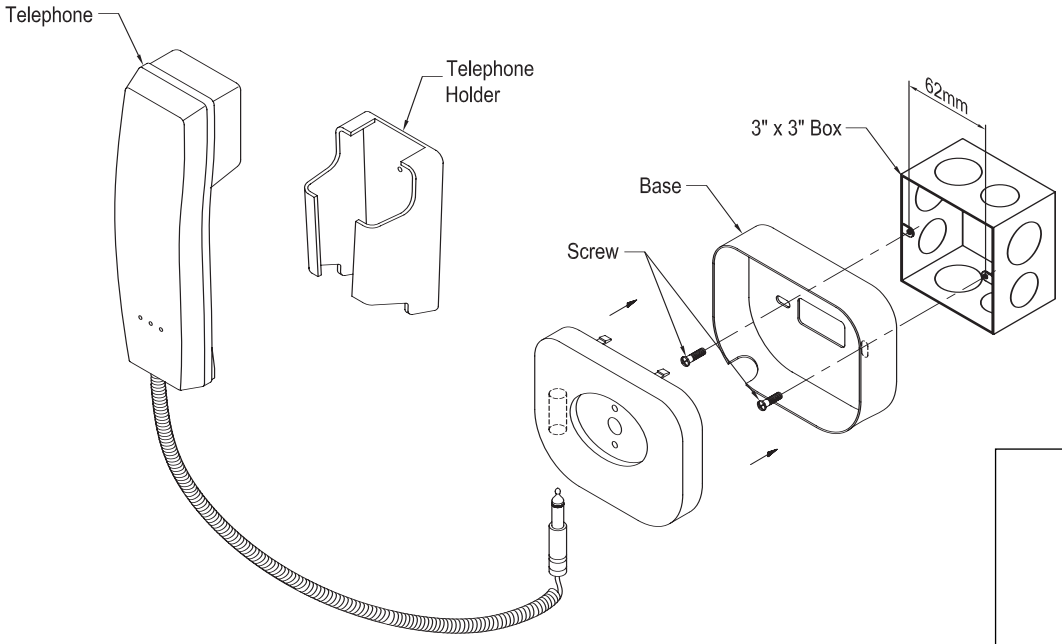
Wiring:



Installation:



Note: The optional telephone extension would only operate together with a Host Fire Telephone Controller


Glass Return Unit

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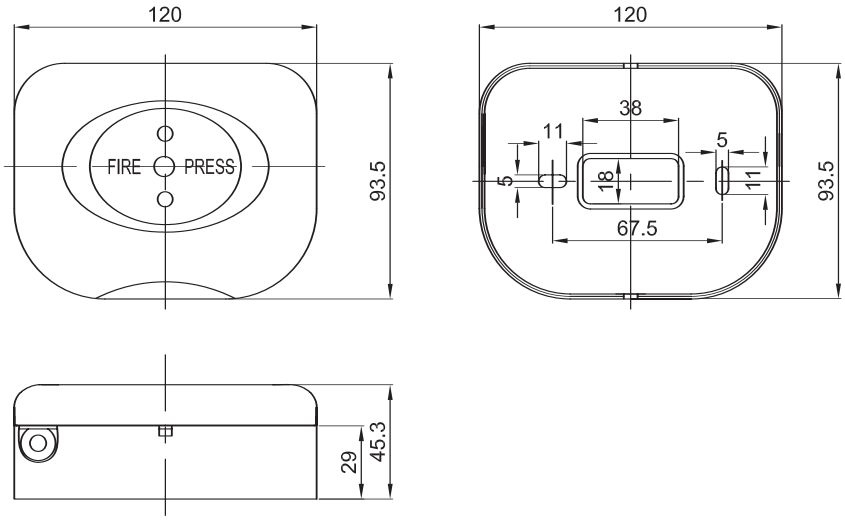
LF-MCP-4103 Conventional Manual Call Point

TECHNICAL SPECIFICATION:

Operating Voltage	16~32VDC
Alarm Current	40mA
Standby Current	0
Operating Temp	-10 ~ 55ºC
Relative Humidity	0 ~ 95% RH
Color	Red
Weight	116g
Dimensions	120 x 93.5 x 45.3mm

Dimensional Details:



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Distributor:

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email: info@lifeco-uk.com, Website: www.lifeco-uk.com

LF-PE-4111

Optical Smoke Detector

Features:

- Microprocessor Based Design
- High Accuracy of Fire Detection
- Quick Fire Alarm Transfer Speed
- Special Chamber Design
- Polarized Wiring
- Provision for Remote LED Indicator
- Ease of Maintenance
- Multiple Sensitivity Settings
- Up to 30 devices per zone
- 2 LED's for 360deg. Viewing Angle

Description:

The LF-PE-4111 Conventional Type Photoelectric Smoke Detector uses a specialized smoke chamber design, which could sense the presence of smoke particles produced by fast combustion or slow smoldering fire. Combining fire algorithms stored on its memory with the special three part design of the smoke chamber and given the photo-sensor's viewing angle, the detector can effectively sense both white smoke and black smoke with virtually no false alarms. A maximum of thirty smoke detectors can be installed on a single zone.

Accurate analysis of fire is achieved using it's built in microprocessor and fire data stored in its non-volatile memory. With the detectors automatic environmental compensation settings, it would adjust itself according to its environment or application thus improving the veracity of fire judgment.

Three levels of sensitivity is also provided with the detector using jumper selections. Depending on the application, the sensitivity is set by removing the PCB mounting plate and shorting the terminals to achieve the desired setting.

The LF-PE-4111 Conventional Type Photoelectric Smoke Detector also has the provision of connecting a remote LED indicator.

The detector's design widely applies to all kinds of industrial and commercial constructions with its high resistance to humidity, wide operating temperature range, high reliability and ease of installation and configuration.

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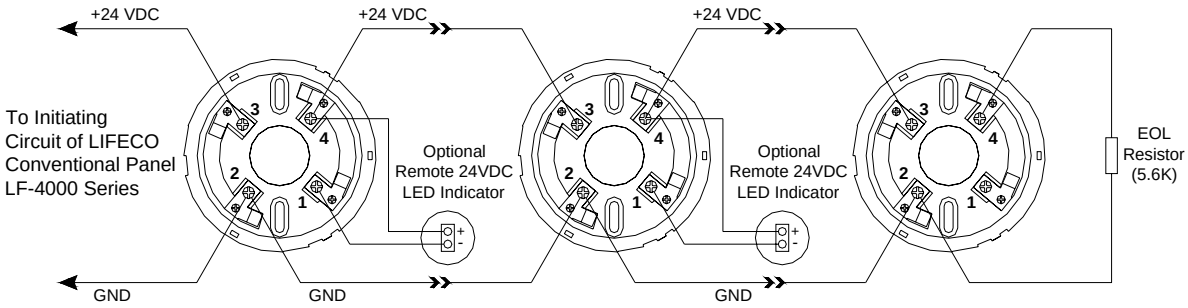
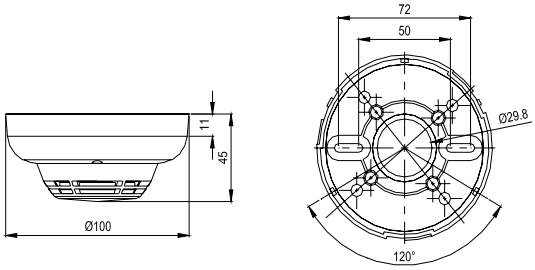
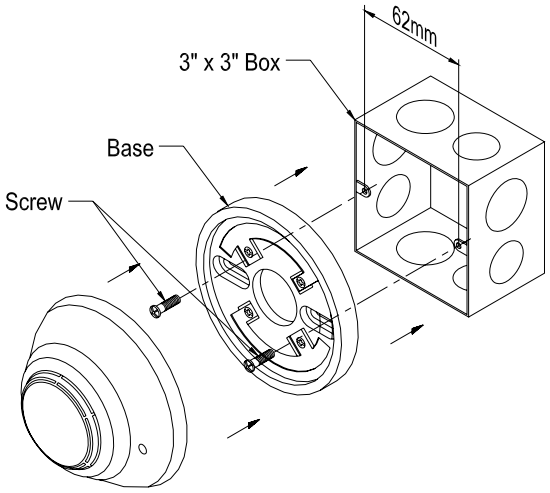
Wiring Diagram:



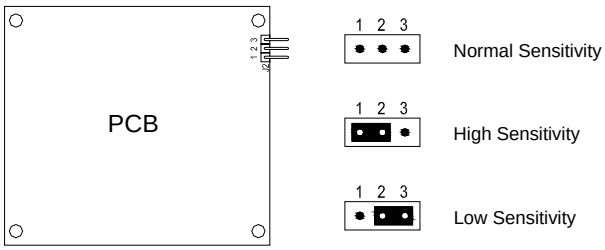
Dimensions and Installation Details:

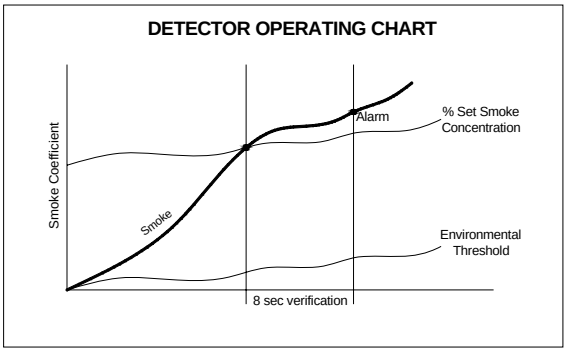




Note: All dimensions are in millimeters

Sensitivity Adjustment:





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TECHNICAL SPECIFICATION:

Maximum Detector Area of Coverage	Area ⩽ 80㎡	Height ⩽ 12m
	Area > 80㎡	6m < Height ⩽ 12m
		Height ⩽ 6m
Air Velocity Range	0—4000 ft/min	
Maximum Allowable Spacing	9m	
Approx Weight	116g (with base)	
Temperature Rating	-10 ° C ~ 55 ° C	
Operating voltage	16~32 VDC	
Standby Current	30 μ A	
Alarm Current	40mA	
Peak Current	4mA	
Relative Humidity	0-95% non-condensing	
Led Indication (Red)	Pulsing	Standby
	Steady	Alarm
Material	ABS Plastic	
Color	Off-White	

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LFR-100

LED Remote Indicator

Features:

- Easy Installation
- Wide Viewing Angle
- Low Profile Design
- Low Power Consumption
- High Precision and Stability
- Quick Fire Alarm Transfer Speed
- High Accuracy of Fire Detection
- 2 LED Indicators

Description:

The LFR-100 LED Remote Indicator is an attractive device used in installations where a detector going to alarm is likely to occur behind a locked door, inaccessible rooms, or in a ceiling void to provide indication of the activation of a fire detector.

The indicator's design widely applies to all kinds of industrial and commercial constructions requiring a local visual indicator such as process control, security and shut down operations, with its high reliability and ease of installation.

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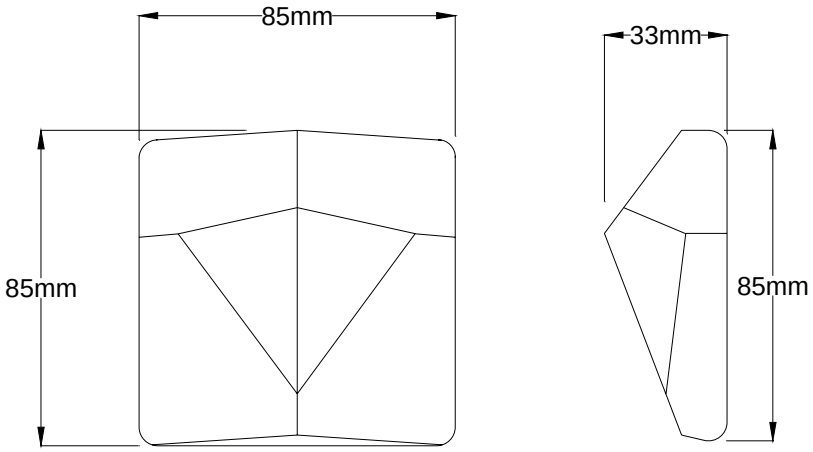
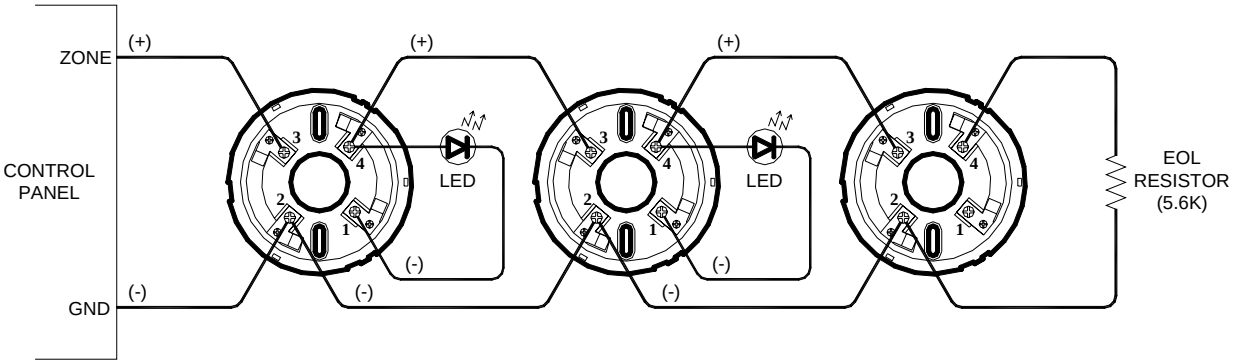
Dimensional Details:



Wiring:



TECHNICAL SPECIFICATION:	
Operating Voltage	24 VDC (5~28V)
	3.3 VDC (2~5V)
Operating Current	0.6~20mA
Alarm	Red LED Flash
Dimension	85 x 85 x 33mm
Weight	50 g
Color	White
Material	PC Polycarbonate

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LF - RP

Fire Alarm Repeater Panel

Features:

- 1 to 36 Zone Control Panels
- Built-in Buzzer
- Rigid Steel Powder Coated Cabinet
- 24 VDC Operation
- Used with LF-CP Series Fire Control Units
- Wall Mounting
- LED Status Indicators

Description:

The LF-RP Fire Alarm Repeater Panel is manufactured based on advanced technology while maintaining high quality during assembly. It is of solid state circuitry and is designed and tested to meet the requirements of industrial or commercial applications.

The LF-RP Repeater Panel is designed to act as a low cost repeater connected to a LF-CP Series Fire System.

The Repeater Panel would be used wherever there is a need to relay status information to multiple points to inform key personnel.

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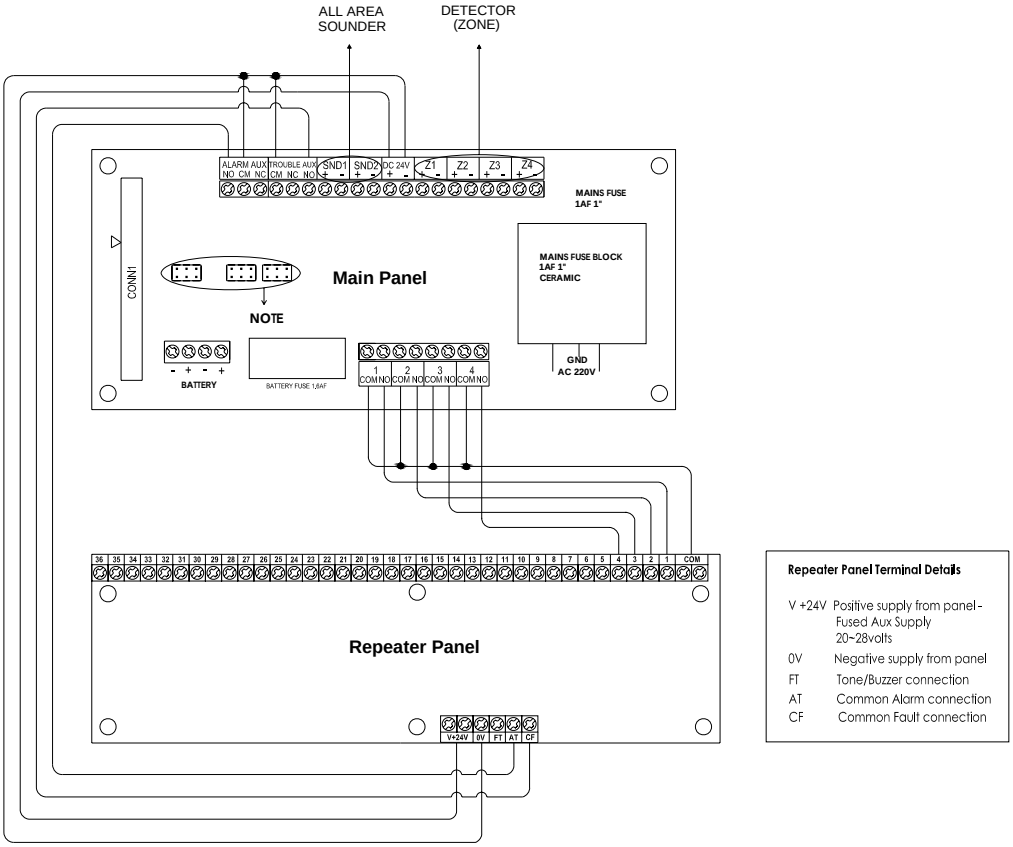
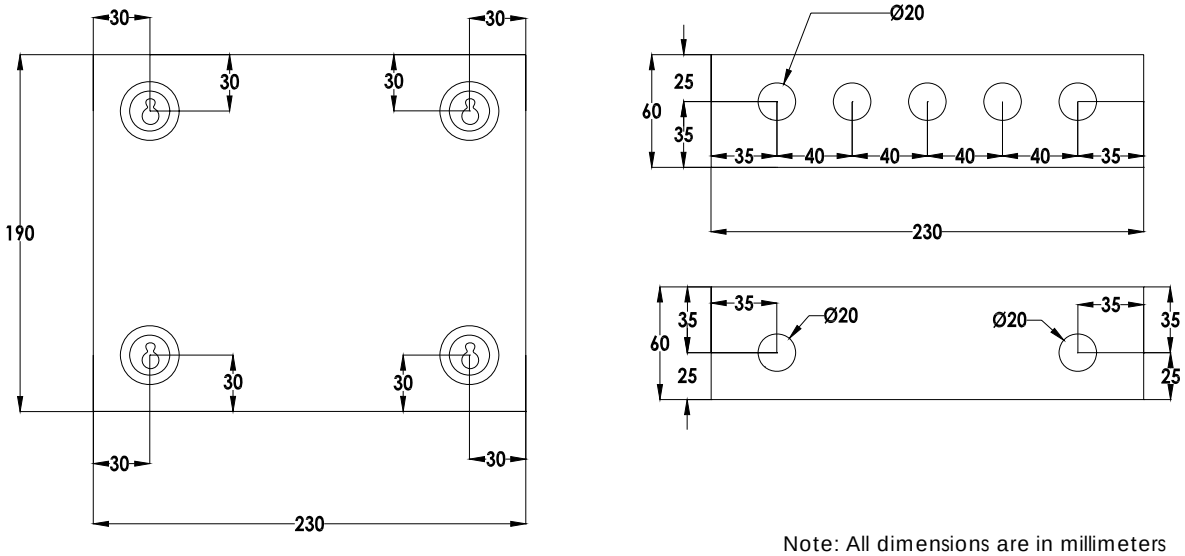
Repeater Panel Termination:



Dimensional Details:



Note: All dimensions are in millimeters

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LF-SD-40

Battery Operated Smoke Detector

Features:

- Photo-electric Type
- Battery Operated (9V battery included)
- High Accuracy of Fire Detection
- Special Chamber Design
- Ease of Maintenance
- Easy to Install with Mounting Hardware Included
- Ideal for Business and Homes
- Test Button for Easy Recommended Monthly Testing
- Loud 85dB Alarm Signal
- Low Battery Warning
- 220V AC Optional*

Description:

The LF-SD-40 Battery Operated Smoke Detector uses a specialized smoke chamber design, which could sense the presence of smoke particles produced by fast combustion or slow smoldering fire. The detector can effectively sense both white smoke and black smoke with virtually no false alarms.

The smoke detector is designed to give early warning of developing fires at a reasonable cost. This detector monitors the air. When it senses smoke, it sounds its built-in alarm horn. It can provide precious time for you and your family to escape before a fire spreads.

Its battery life can last over a year and it also has a low battery warning wherein the unit beeps every 50 seconds for a minimum of 7 days indicating that the battery needs to be replaced.

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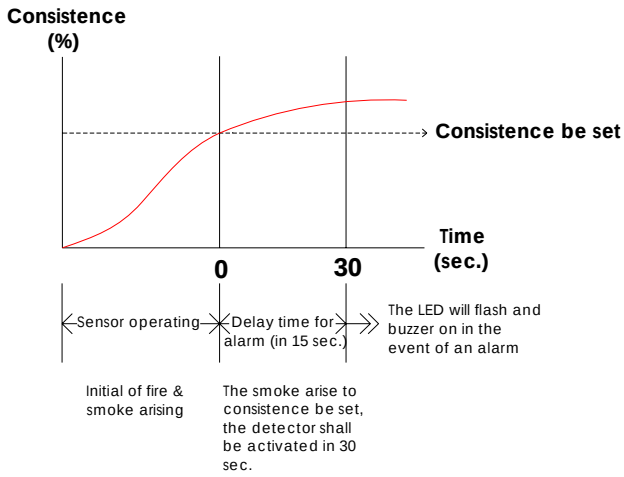
Detector Operating Chart:



TECHNICAL SPECIFICATION:

Effective Warning Area	Height above the ground:	Below 4M	4 ~ 8M	8 ~ 15M
	Building:	100 M^2	50 M^2	30 M^2
Operating Light	Monitoring:	Every 50 sec.		
	Alarm Active:	Flash		
Operating Voltage	9V DC			
Operating Temperature	0˚C to 60˚C			
Nominal Sens	2.3±1.2% FT Obscuration			
Sound	Loud 85dB Alarm Signal			
Test Function	Press testing button			
Relative Humidity	0 ~ 95%RH			
Weight	145g			
Diameter	126mm			
Height	35mm			
Color	Ivory			
Material	ABS Polycarbonate			
Aux. Relay rating	1A @ 30V DC / 0.5A @ 125V AC			

ORDERING INFORMATION

Model Number	Operating Voltage
LF-SD-40	9V DC
LF-SD-40AC	9V DC and 220 V AC (50/60 Hz)

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LF-SI and LF-SS

Siren, Siren with Strobe

Fire Alarm Siren (LF-SI) and Siren with Strobe (LF-SS)

Features:

- Quick Response Time
- 100±5dB (@24v DC)
- Piezoelectric Horn
- High Performance at Low Cost
- Integrated Electronics
- High Intensity Strobe*
- With Reverse Polarity Protection
- Ease of Maintenance
- Easy to Install
- 2-wire Operation
- Ceiling or Sidewall Mount

*Applicable to LF-SS

Description:

The LF-SI/SS Audible Strobes and Sirens are designed for maximum performance, reliability and cost-effectiveness. It adopts a built-in integrated circuit, a piezoelectric sounder and high intensity strobe which when combined, produces high energy conversion efficiency for effective output of light and sound while utilizing a minimum amount of power.

The LF-SI/SS can be mounted by opening the front cover and installing the body of the device to a standard 3" square box.

The mounting holes are hidden when the cover is placed. Together with the modern style of the strobe unit and the contour of the device, makes it appealing with any building wall design.

The indicator's design widely applies to all kinds of industrial and commercial constructions with its high resistance to humidity, wide operating temperature range, high reliability and ease of installation and configuration.

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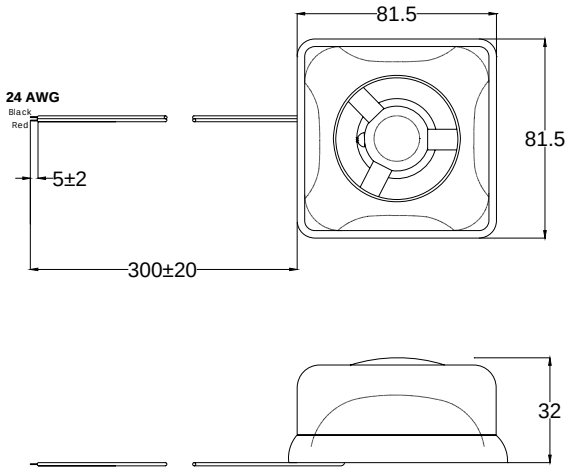
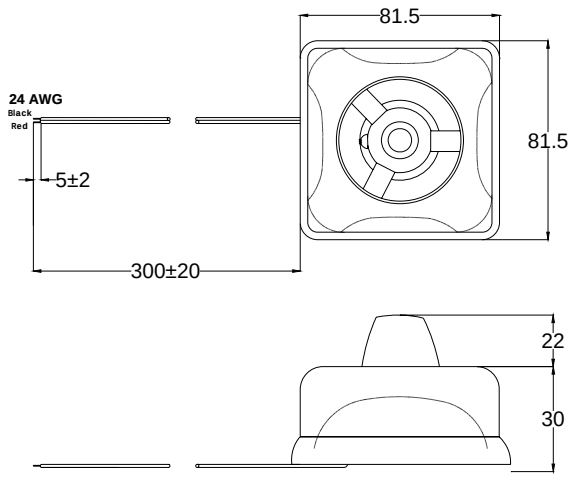
Dimensional Details:



LF-SI (SWEEP SIREN)



LF-SS (ALARM SIREN)

TECHNICAL SPECIFICATION:		
Input Voltage Range	24VDC 12~30VDC	
Sound Output	100 ±5dB	
Operating Temperature	-10˚C ~ + 60˚C	
Continue Operation Test	OVER 72 Hours	
Life Test	"ON" 1 minute, "OFF" 30 seconds	
Strobe*	Over 8000mcd. (6pcs. Super bright LED)	
Duty Cycle at 24 VDC	Continuously over 500 Hours period	
Material	ABS/polycarbonate	
Color	Red	
	LF-SI Siren	***LF-SS Siren w/ Strobe**
Operating Current	22 ~ 28mA	50 ~ 65mA
Tone Type	Sweep Siren	Alarm Siren
Dimensions (mm)	81.5 x 81.5 x 32	81.5 x 81.5 x 52

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