



**PFS**  
SINCE 2003

# Paramount

## Fire & Safety Co L.L.C

Stands as a preeminent force within the fire and safety industry, distinguished for our expertise.

# TECHNICAL MATERIAL SUBMITTAL

## CONVENTIONAL FIRE ALARM SYSTEM

**BRAND : RAVEL**  
**UL-LISTED**



# RE-2554

## FIRE ALARM CONTROL PANEL

### General

RE-2554 is an UL Listed Microprocessor based conventional Fire Alarm Control Panel which has 4 Zones . These control panels are designed to be used in small and medium sized commercial complexes, buildings, hotels, schools, and industrial establishments. They are compatible with conventional detectors, manual call points and normally open dry contact devices.



### Special Features

- Switched Mode Power Supply.
- Modular Construction.
- Auto Resettable Fuse.
- Surge Protection for all Input and outputs.
- Programmable AC loss delay/Trouble Remainder/Alarm Verification.
- Battery polarity reversible protection.
- Surface Mount Technology.
- Over All current consumption is low.

### Features

- Fully complies with UL -864 and NFPA-72.
- Rugged CRCA sheet with powder coated finish.
- Operates on 110 - 220VAC 50 /60 Hz, AC mains power supply.
- 16x2 Dot Matrix LCD display.
- 4/8 Class B Style 'B ' or Style 'C' initiating device circuit (IDC).
- All zones accept smoke detectors and normal open contact devices.
- Any zone can be configured as alarm or supervisory zone.
- 2 Class B notification appliance circuits (NAC).
- NAC shall be programmed as silenceable or non-silenceable.
- Supervisory zone shall be latching or resettable.
- Standby (battery) backup 24VDC power supply with built in charger.
- Error free Fire / Fault status in unambiguous colored LED indication.
- System ON indication.
- Main & Standby status with audible and visual indication.
- Battery low visual warning with audible tone.
- Form C relays for fire, fault and supervisory.
- Resettable / Steady 24VDC Output.
- RS 485 Communication facility (Optional).
- Lamp test facility.
- All field wiring circuits are power limited except 110-220VAC and battery.
- All field wiring circuits are supervised.
- Walk test facility.
- Zone isolation facility with loop voltage cut off.
- Earth fault annunciation facility at 0 ohms.
- AC low voltage cutoff.
- Programmable AC loss delay.
- Programmable alarm verification.
- Programmable trouble reminder.

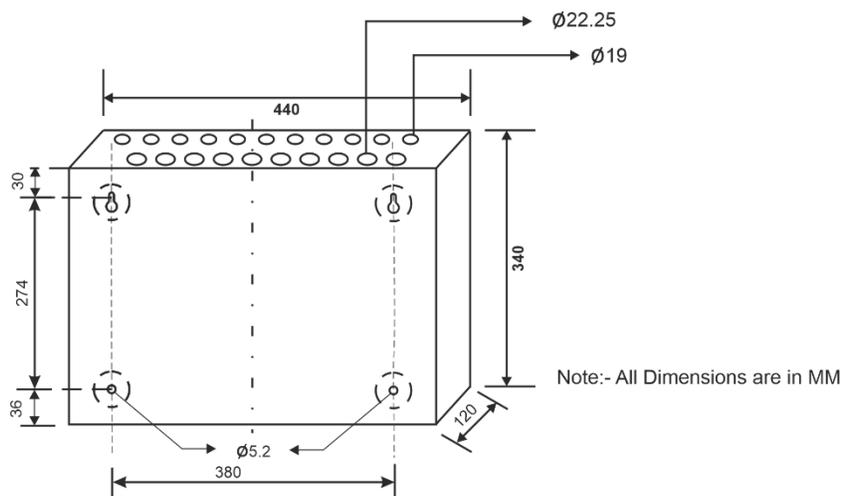
## Specification

Electrical Specification		
<b>Primary Power</b>	110 - 220VAC $\pm$ 10%, 50 Hz, 100W.	
<b>Standby Power</b>	24VDC (2 Nos of 12V, 12Ah Sealed Lead acid battery). Quiescent current: 120mA	
<b>Operating Condition</b>	Operating temperature: 0 – 49° C / 32 – 120° F Storage Temperature: 0° C to 60° C Relative humidity: 93 $\pm$ 2% RH (non-condensing) at 32 $\pm$ 2° C / 90 $\pm$ 3° F	
<b>Charging Circuit</b>	Charging voltage: 28 V, $\pm$ 2% nominal Charging current: 800mA (max)	
<b>Notification Appliance Circuits</b>	Wiring style	Class B, Style Y
	Operating Nominal Voltage	24 VDC Nominal
	Current for all NACs	1.2Amps (0.6A per circuit)
	Line drop	1.8V
	EOL resistor	3K9, ½ watt
<b>DC Output</b>	Supervised 24VDC regulated, 300mA Max.	
<b>Relays</b>	Type	Form C
	No of Relays	3
	Relay contact rating	2A @ 30 VDC, 0.5A @ 125 VAC
	Power factor	1.0
<b>Initiating Device Circuits</b>	Wiring style	Class B, Style B/C
	Normal operating voltage	14 – 21 VDC
	Alarm current	15 – 30 mA
	Short circuit current	45 mA (max)
	Loop resistance	100 $\Omega$ (max)
	EOL Resistor	3K9, ½ watt
	Standby current	7 mA (2 mA for detectors)

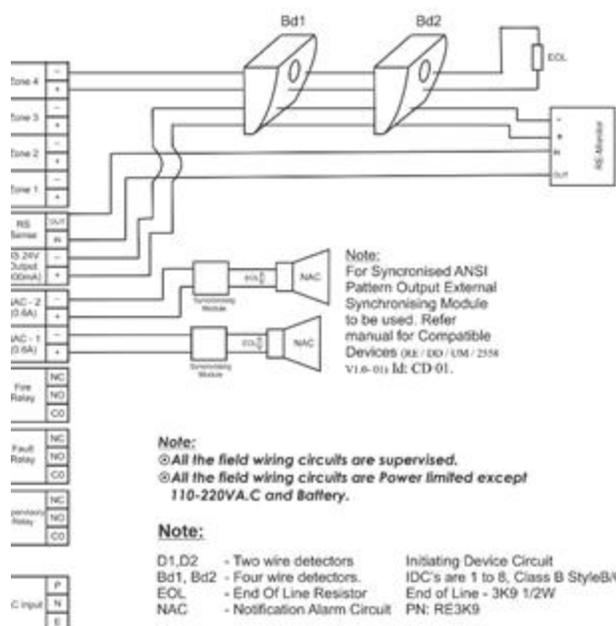
  

Mechanical Specification	
<b>Dimensions</b>	440 W x 340 H x 120 D (mm)
<b>Color</b>	White / Red
<b>Construction</b>	18 Gauge (1.22mm) CRCA sheet with powder-coated finish.
<b>IP Rating</b>	IP50
<b>Cable Entry</b>	11x $\phi$ 19mm Knockout on top of the cabinet.
	10x $\phi$ 22.25mm Knockout on top of the cabinet.

## Dimensions



## Wiring Configuration



## Compatible Devices

Models	Description
RE-316S-2L	Photoelectric Smoke detector with base.
RE-316H-2L	Heat detector with base.
RE-316SH-2L	Photoelectric & Heat detector with base
RE-314	Common base for above
RE-716MR	MCP Red
RE-24CS	Mini Horn
RE-24SS	Sounder cum Strobe
RE-Monitor	24VDC Output for Monitor Module
RE-3K9	End of Line Resistor

## Ordering Information

Model	Zones
RE-2554 (White)	4 Zones
RE-2554 (Red)	4 Zones

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### USA

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# RE-2558

## FIRE ALARM CONTROL PANEL

### General

RE-2558 is an UL Listed Microprocessor based conventional Fire Alarm Control Panel which has 8 Zones . These control panels are designed to be used in small and medium sized commercial complexes, buildings, hotels, schools, and industrial establishments. They are compatible with conventional detectors, manual call points and normally open dry contact devices.



### Special Features

- Switched Mode Power Supply.
- Modular Construction.
- Auto Resettable Fuse.
- Surge Protection for all Input and outputs.
- Programmable AC loss delay/Trouble Remainder/Alarm Verification.

- Battery polarity reversible protection.
- Surface Mount Technology.
- Over All current consumption is low.

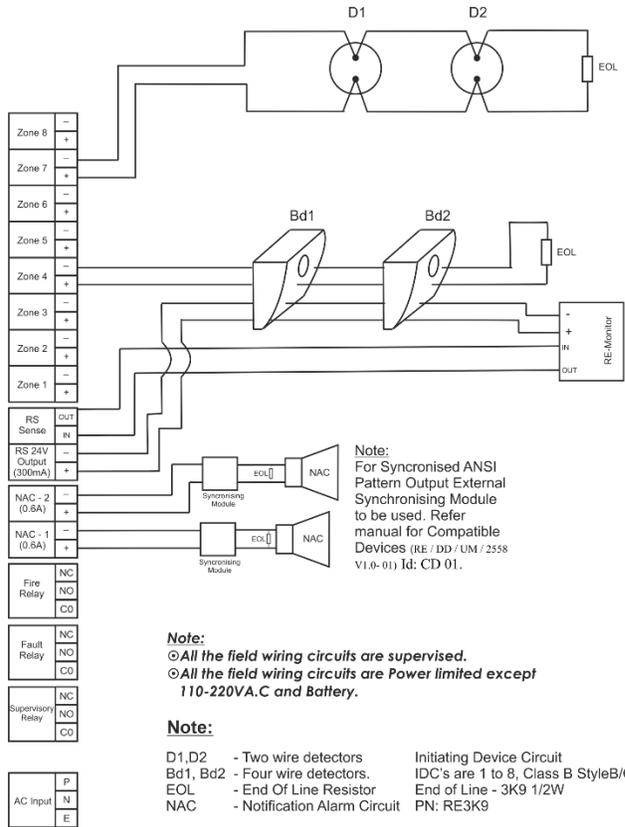
### Features

- Fully complies with UL -864 and NFPA-72.
- Rugged CRCA sheet with powder coated finish.
- Operates on 110 - 220VAC 50 /60 Hz, AC mains power supply.
- 16x2 Dot Matrix LCD display.
- 4/8 Class B Style 'B ' or Style 'C' initiating device circuit (IDC).
- All zones accept smoke detectors and normal open contact devices.
- Any zone can be configured as alarm or supervisory zone.
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- Supervisory zone shall be latching or resettable.
- Standby (battery) backup 24VDC power supply with built in charger.
- Error free Fire / Fault status in unambiguous colored LED indication.
- System ON indication.
- Main & Standby status with audible and visual indication.

- Battery low visual warning with audible tone.
- Form C relays for fire, fault and supervisory.
- Resettable / Steady 24VDC Output.
- RS 485 Communication facility (Optional).
- Lamp test facility.
- All field wiring circuits are power limited except 110-220VAC and battery.
- All field wiring circuits are supervised.
- Walk test facility.
- Zone isolation facility with loop voltage cut off.
- Earth fault annunciation facility at 0 ohms.
- AC low voltage cutoff.
- Programmable AC loss delay.
- Programmable alarm verification.
- Programmable trouble reminder.



# Wiring Configuration



# Compatible Devices

Models	Description
RE-316S-2L	Photoelectric Smoke detector with base.
RE-316H-2L	Heat detector with base.
RE-316SH-2L	Photoelectric & Heat detector with base
RE-314	Common base for above
RE-716MR	MCP Red
RE-24CS	Mini Horn
RE-24SS	Sounder cum Strobe
RE-Monitor	24VDC Output for Monitor Module
RE-3K9	End of Line Resistor

# Ordering Information

Model	Zones
RE-2558 (White)	8 Zones
RE-2558 (Red)	8 Zones

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## USA

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# RE-316S-2L

## CONVENTIONAL PHOTOELECTRIC SMOKE DETECTOR

### General

The RE 316S-2L conventional detectors are designed to work with all conventional Panels. These detectors are low profile and have dual LED's for 360° visual indication. The blinking LED's indicate normal operating conditions whereas the steady state indicate fire status. It has a unique protocol chamber designed to sense smoke produced by wide range of sources of combustion. It has a unique drift compensation feature wherein the detector adjusts its normal reference based on environment conditions.

### Features

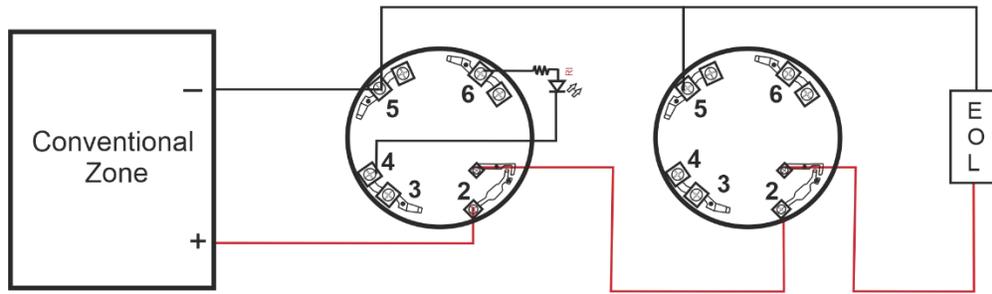
- UL listed.
- Dual LED's for 360° visibility.
- Advanced detection and communication protocol.
- Easy installation and maintenance.
- Sleek low-profile housing design.
- Regular 100mm base.



### Specification

Electrical Specification	
<i>Operating Voltage</i>	9 ~ 33V DC.
<i>Reset Voltage</i>	Less than 1V.
<i>Standby Current</i>	50 $\mu$ A.
<i>Start up Time</i>	60s.
<i>Start up Current</i>	170 $\mu$ A.
<i>Alarm Current</i>	90 mA (max).
<i>Remote Output</i>	15mA maximum open collector.
<i>Smoke Sensitivity</i>	(1.96 $\pm$ 0.76) % / ft
<i>Air Velocity</i>	0 - 4000 fpm.
<i>Operating Temperature</i>	-10° C to 37.8° C
<i>Storage Temperature</i>	-10° C to 60° C.
<i>Humidity</i>	0 - 95% RH, non-condensing.
<i>Cycle time</i>	5 Sec.
<i>Installation Space</i>	5 meters.
Mechanical Specification	
<i>Dimension</i>	46 H x 100 D ( mm)
<i>Weight</i>	130 g with base
<i>IP Rating</i>	IP42

## Wiring Diagram



Note:  
RI-Response Indicator

## Compatible Device

Model	Description
<i>RE-314B</i>	Normal Base

## Ordering Information

Model	Description
RE-316S-2L	Conventional Photoelectric Smoke Detector with Base

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# RE-316H-2L

## CONVENTIONAL HEAT DETECTOR

### General

The RE-316H-2L Conventional detectors are designed to work with all conventional Panels. These detectors are low profile and have dual LED's for 360° visual indication. The blinking LED's indicate normal operating conditions whereas the steady state indicate fire status.

RE-316H-2L is a fixed cum rate of rise heat detector using a thermistor. These detectors will raise an alarm when the detector reaches 59° C(Fixed) or when the change in temperature exceeds the rate of rise of 11°C/min.

### Features

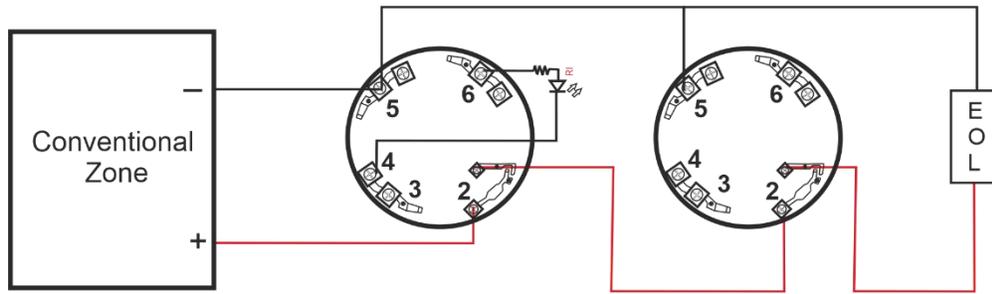
- UL listed.
- Dual LED's for 360° visibility.
- Polarity free wiring
- Advanced detection.
- Easy installation and maintenance.
- Sleek low-profile housing design.
- Regular 100mm base.



### Specification

Electrical Specification	
<i>Operating Voltage</i>	9 ~ 33V DC.
<i>Reset Voltage</i>	Less than 1V.
<i>Standby Current</i>	50 μA.
<i>Start up Time</i>	60s.
<i>Start up Current</i>	170 μA.
<i>Alarm Current</i>	90 mA (max).
<i>Remote Output</i>	15mA maximum open collector.
<i>Thermal Rating</i>	59° C (138° F).
<i>Rate of Raise of Temperature</i>	11.1° C / min (20° F/min).
<i>Operating Temperature</i>	-10° C to 37.8° C
<i>Storage Temperature</i>	-10° C to 60° C.
<i>Humidity</i>	0 - 95% RH, non-condensing.
<i>Cycle time</i>	5 Sec.
<i>Installation Space</i>	5 meters.
Mechanical Specification	
<i>Dimension</i>	46 H x 100 D ( mm)
<i>Weight</i>	130 g with base
<i>IP Rating</i>	IP42

## Wiring Diagram



**Note:**  
RI-Response Indicator

## Compatible Device

Model	Description
RE-314B	Normal Base

## Ordering Information

Model	Description
RE-316H-2L	Conventional Heat Detector

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# RE-716SS

## SOUNDER CUM STROBE

### General

RE-716SS sounder cum strobe provides an efficient and cost-effective way to meet various international standards such as NFPA72 (2016 edition). Strobe light consists of Hybrid LED. It can be flush / ceiling mounted with / without back box.



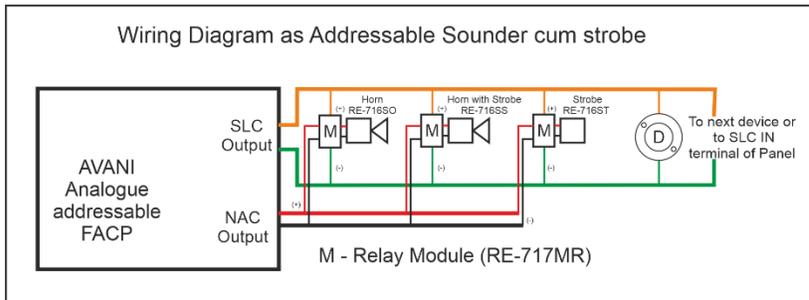
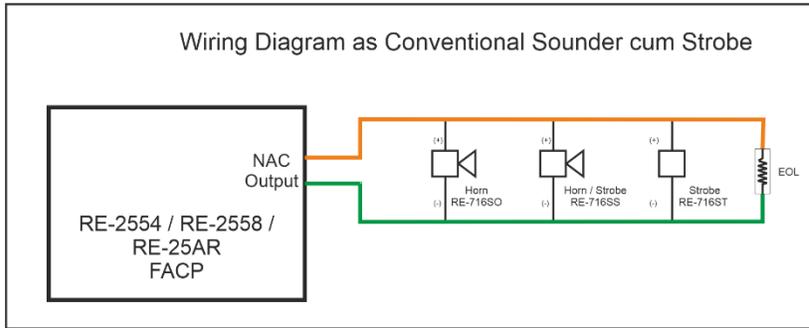
### Features

- UL 1971,ULC-S525,UL 464,ULC-S526.
- Low Current Draw.
- Flexible optic design to meet the light dispersion.
- 4 candela settings:15/30/75/110cd output.
- 2 audible tone settings: Continuous/Temporal 3.
- Slim and Sleek.
- They are used in Fire, Burglar & Emergency Alarm System.

### Specification

	Electrical Specification
<i>Light Source &amp; Color</i>	High power cool white LED
<i>Pulse Duration</i>	20ms
<i>Max Current Draw(mA)</i>	67 – 93mA
<i>Flash Rate</i>	1 flash per second
<i>Operating Voltage</i>	24VDC(16-33VDC) / FWR
<i>Sounder Output</i>	75dB to 85 dB
<i>Mounting Options</i>	Standard 4" * 4" back box
<i>Dimension</i>	5.5"L *4.7"W *2.0"D(140mmL*120mmW*51mmD)
<i>Wiring</i>	2-Wire Type
<i>Screw Terminals</i>	#12 to #18 AWG wires

## Wiring Details



## Compatible Panel

Model	Description
AVANI	Analogue Addressable Fire Alarm Control Panel
RE-25AR	Agent Release Panel
RE-2558/2554	4 & 8 Zone Fire Alarm Control Panel

## Ordering Information

Model	Description
RE-716SS	Sounder Cum Strobe

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# RE-25SS

## CONVENTIONAL SOUNDER CUM STROBE

### General

RE-25SS sounder cum strobe is designed for fire and security applications. It gives both audio and visual indication in case of fire and emergency. The horns can be flush / ceiling mounted with /without back box. Strobe shall be wired for signaling notification appliance flashing at 1Hz over entire voltage operating range. Strobe light consists of Xenon flash tube. It Complies NFPA-72 standard and CE & RoHS certified.

### Features

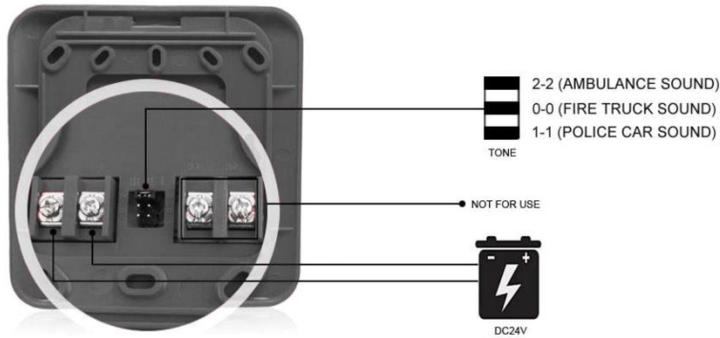
- CE Certified
- RoHS Compliant.
- Easy to Install.
- Operates on 24VDC.
- 100dB @ 1m.
- Low Current.
- 3 types of field programmable tone.
- Ceiling / Flush mount.



### Specification

	Electrical Specification
<i>Operating Voltage</i>	18 to 30V (24 V nominal) DC
<i>Current</i>	≤ 100 mA
<i>Sound Level</i>	80 - 100 db @ 1m
<i>Flashes/min</i>	60 times.
<i>Operating Temperature</i>	-10 to 50° C
<i>Relative Humidity</i>	≤ 95%
<i>Tone Type</i>	Ambulance Fire truck Police Car Sound
<i>Material</i>	FR ABS Plastic
<i>Color</i>	Red
<i>Mount Type</i>	Surface Mount/Flush mount
<i>Dimensions</i>	125H X 125W X 47D in mm

## Wiring Diagram



## Compatible Panels

Model	Description
<i>RE-102</i>	2 Zone Fire Alarm Control Panel
<i>RE-104</i>	4 Zone Fire Alarm Control Panel
<i>RE-2554</i>	2 Zone Fire Alarm Control Panel
<i>RE-2558</i>	4 Zone Fire Alarm Control Panel
<i>RE-900 Series</i>	Fire Alarm Control Panel
<i>RE-25AR</i>	4 Zone Agent Release Panel

## Compatible Devices

Model	Description
<i>RE-717MC</i>	Analogue Addressable Control Module

## Ordering Information

Model	Description
<i>RE-25SS</i>	Conventional Sounder cum strobe

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# RE-364BS

## CONVENTIONAL SOUNDER BASE

### General

The RE 364BS range of conventional sounder base are designed to be connected to conventional Fire Alarm Panels. And these conventional sounder base should be connected to the compatible control panel. The RE-364BS conventional sounder base receives their power from NAC terminal of Fire alarm control panel and once fire detected in the zone circuit then NAC output turns on this sounder base. A conventional detector is mounted on the sounder base and it receives power from Zone terminal of Fire alarm control panel.

### Features

- Low Standby Current.
- Slim and Sleek.
- 8 Different tone selection by using 4 way DIP Switch.



### Specification

	Electrical Specification
<i>Operating Voltage</i>	18 ~ 32 VDC
<i>Operating Current</i>	8 mA
<i>Standby Current</i>	0.5 mA
<i>Sound Level</i>	80 db @ 1m
<i>Sounder Type</i>	Piezo Electric Type
<i>Operating Temperature</i>	0 - 49° C / 32 - 120° F
<i>Storage Temperature</i>	0 - 60° C
<i>Tone Type</i>	8 Different Types
<i>Material</i>	FR ABS
<i>Color</i>	White
<i>Mount Type</i>	Ceiling Mount
<i>Dimensions</i>	120mm Dia (100mm Base mountable)

# RE-716M Series

## Manual Call Point

### Product Overview

RE-716M series are conventional call points to bypass gas release by pressing the front glass. RE-716MR are conventional call points to indicate alarm manually by pressing the front glass with break glass or resettable type options.



### Features:

- \* Alarm status is indicated By Red colour LED.
- \* Operates on 24 VDC.
- \* Green Colored for Emergency Release.
- \* Yellow Colored for Abort.
- \* 1 No's of CO & NC Output (Optional).

### Electrical Specification

- Operating Voltage : 24VDC
- Operating Current : 30mA
- Colour : Green / Yellow / Red
- Material : Plastic
- IP Rating : IP-50
- Size : 86 X 86 X 50 mm

### Ordering Information:

MODELS	COLOR	DESCRIPTION
RE-716MR	MCP Red	MCP -Resettable
RE-716MG	MCP Green	MCP - Emergency Release
RE-716MY	MCP Yellow	MCP - Abort

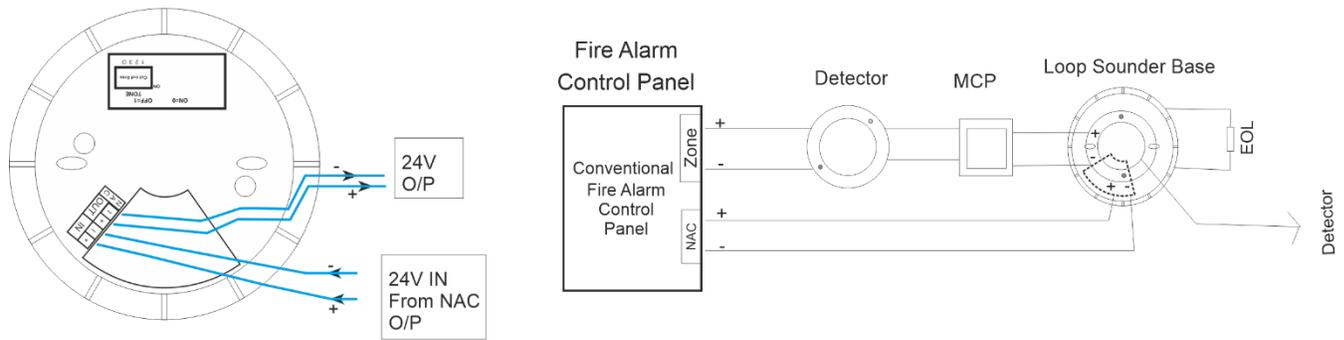
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## Wiring Diagram



Connect the sounder base to the NAC terminal of a Fire Alarm Control Panel, according to the polarity. The wiring Terminal accepts solid or stranded cables up to mm<sup>2</sup>.

## Tone Selection Chart

Tone	Description
1	Dutch sweep tone @ 970 Hz continuous
2	Din Tone 1200Hz falling to 500Hz over 1 sec
3	French Fire Sound 554Hz for 100ms and 440Hz for 400ms
4	Alternative warble BS standard 800/960 Hz @ 2 Hz
5	US temporal pattern HF 2900 Hz for 0.5s on 0.5s off x 3 then 1.5s off
6	Sweep 800-1000 hz @ 0.5 sec
7	Siren high freq sweep 500-1000 in 0.5 sec
8	Siren low freq sweep 500-1000 in 1.5 sec

## Ordering Information

Model	Description
RE-364BS	Conventional Sounder Base

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