

# FL-400

Series  
Intelligent Addressable Fire  
Alarm Control Panel



EN54-2/4  
1330h-(c1-8)



## Features and Benefits

- EN54-2:1997 + A1:2006, EN54-4:1997 + A1:2002 + A2:2006 Certified
- LPCB Approved
- Using advance microprocessor technology with Large memory capacity
- Enhance user interface combining LCD Touch screen and keypad access
- Support real time visual algorithm
- Enhance false alarm prevention
- Keypad and PC programming
- Built-in Multiple interface protocol such as USB/Ethernet/CanBus/ Serial/RS485 (Available only in FL-4004/4 Panel)
- Support Loop Powered devices for extra saving on cable cost
- Built-In Printer and 160 LED Zones Indicators

## Commissioning Advantages and Capacity

- Auto Enrolling of Devices
- Loop Mapping with color coding status
- Monitor device mismatch and dual address conflict
- Command Builder to create requirements for fire event scenario
- With Loop protection against power surge
- One-man test with On/Off sounder
- Programming Protection
- Maximum 4 loop in network application builtin 4-in-1 Communication card
- Support 254 Devices per loop
- Maximum 6 loop in standalone basis (1,524 ideal)
- Network up to 512 Node
- Programmable Capacity
- Zones up to 3000
- Sounders Groups 1-1000
- Modules Groups 1001- 2000
- Built-in 160 LED Zones Indicator

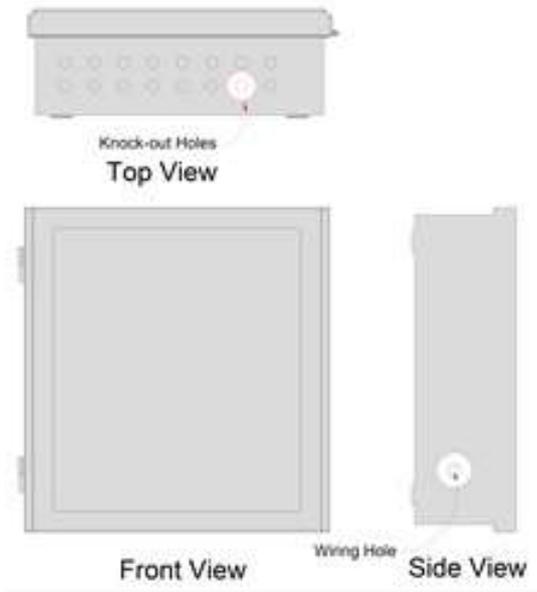
## Overview

The FL-400 series comprise of a range of analogue addressable, microprocessor based fire alarm control equipment to offer flexibility in both design and operation. The System is modular concept for easy tailoring of system design, to meet the full requirements of the project. The FL-400 series of Intelligent Fire Alarm Control Panels. is designed and manufactured to meet the requirement of BS EN54 Part 2 & 4.

The FL-400 series of panel is designed to provide early warning fire detection, to quickly identify the location of fire and provide user definable text informing the occupants of the building of potential smoke spread. Simultaneously, it will alert and evacuate the occupants, and control all necessary auxiliary command functions such as elevator control, air handling shut down, gas shut off & damper control, as per the cause and effects requirements configured though Command Builder Set-up.

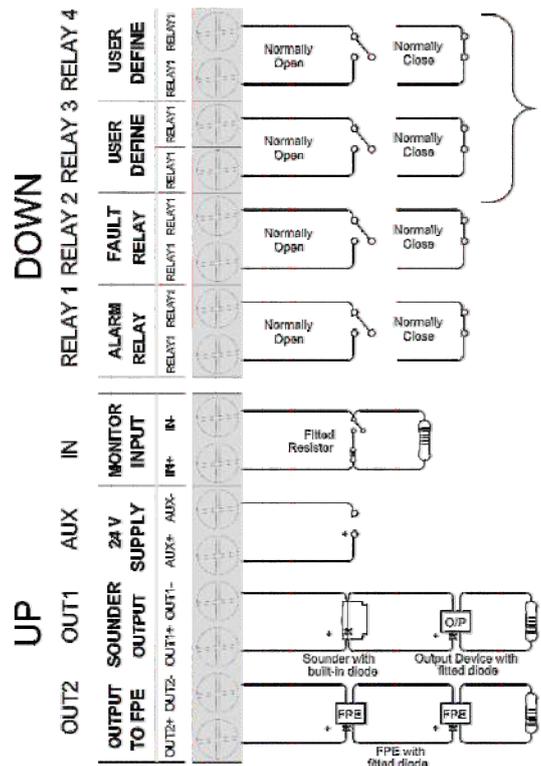
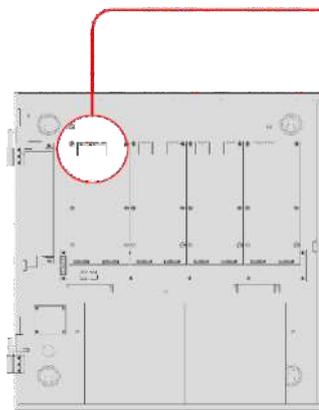
## Technical Specification

Listed	LPCB
Certified	EN54-2:1997 + A1:2006, EN54-4:1997 + A1:2002 + A2:2006

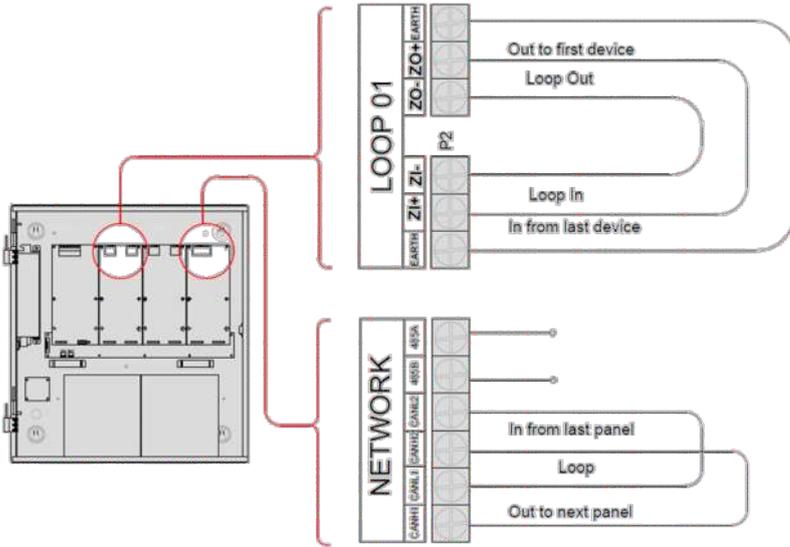


Physical	
Material / Color	Flat sheet Metal / with outer glass door, orange stripe
Dimension Lx W x H	530 mm x 490 mm x 135 mm
Weight	16.70 Kg (4 Loop Panel)
Humidity	0 to 95% Relative Humidity, Noncondensing

Control Panel	
Input Voltage	240VAC +10%-15%, 50/60Hz
Input Current Consumption	1 A
PSU Output to CIE	24.5 to 28.5 VDC
Batteries	2 x 12V / 24AH
Memory [Non-Volatile]	1000 Fire Events, 10,000 General Event
Zones	3,000 programmable
Groups	3,000 programmable
Programmable Relays	4 circuits: Normally Open/Close
Programmable Input	1 Circuit: Power limited 24Vdc (for future use)
Programmable Auxiliary Power	19 to 28 VDC (Note: Current Limited)
Fixed Outputs (FPE/Sounder)	2 Circuits: 18 to 28 VDC (Note: Current Limited)
Indicator	24 LED Status/ 160 Zone Indicators
Display	7" TFT Touch Screen
Keypad	5 Brigade buttons and Programming Keypad



**Technical Specification**



Loop Specifications	
<b>Protocol/Addressing</b>	Agni / Value ranges from 1 to 254
<b>No. of Loop</b>	4 Loop/ 254 per loop
<b>Protection</b>	Built-in 4kV Surge protection
<b>Power rating</b>	16 to 24Vdc / 500mA
<b>16 to 24Vdc</b>	1.2Km Max Length/2 x 1.5mm <sup>2</sup> solid core Fire resistance

Networking and Interfaces	
<b>Panel to panel communication</b>	Can Bus [loop]
<b>Number of Panels</b>	512 units
<b>Interface Port</b>	USB, RS485 Serial, RS232 Serial, Ethernet

**Ordering Information:**

<b>FL-4001</b>	1 Loop LPCB Approved .7" LCD display touch screen, fitted with 1x Single Loop Card, basic configuration up to 254 Addressable Devices, expandable to 6-loop by adding loop card. NO Glass door and Optional Printer. Optional 4-in-1 Communication Card
<b>FL-4002</b>	2 Loop LPCB Approved .7" LCD display touch screen, fitted with 1x Dual Loop Card, basic configuration up to 508 Addressable Devices, expandable to 6-loop by adding loop card. Built-in Glass Door and Printer. Optional 4-in-1 Communication Card
<b>FL-4004</b>	4 Loop LPCB Approved .7" LCD display touch screen, fitted with 2x Dual Loop Card, basic configuration up to 1016 Addressable Devices, expandable to 6-loop by adding loop card. Built-in Glass Door and Printer. Built-in 4-in-1 Communication Card