# Features

- **Multi-protocol**
- **Modular concept**
- **Simple, robust design to EN54**
- **Intuitive to use**
- **Easy to maintain**
- **Easy to expand**
- **Easy to network**
- **Easy to install**
- **Easy to configure**

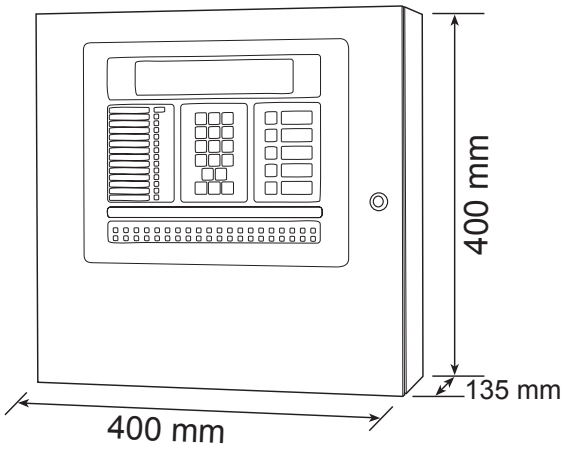
# Overview

The ZX2Se is an intelligent analogue addressable fire alarm control panel. It has been designed and constructed around proven and reliable microprocessor technology. This simple approach has produced a modular, scalable fire alarm platform suitable for protecting all types of premises.

The ZX2Se control panel supports a total of five industry leading protocols, allowing fire detection devices to be independently selected based on performance or aesthetic appeal. The ZX series control panels seamlessly integrate with Apollo (Xplorer, XP95 & Discovery), Hochiki ESP, Nittan, Morley-IAS and System Sensor detection device protocols.

Designed for maximum flexibility, the ZX2Se control panel is supported by a complete suite of peripherals and software tools. Information on the location of fires, faults and system status can be easily displayed or printed in multiple locations. Integration with Voice Evacuation Systems, paging systems and third party control systems is supported through a range of peripheral interface units.

This adaptability, support and intelligence means that the ZX2Se is suitable for new projects, system expansions, retrofits and system upgrades in all application areas. Offices, industrial units, multi-storey buildings, entertainment venues, industrial plants and hospitals are a few of the many applications that can benefit from the features of the ZX2Se intelligent multi-protocol fire alarm control panel.




MORLEY IAS
FIRE SYSTEMS
by Honeywell

# ZX2Se Multi-protocol Fire Alarm Control Panel Data Sheet



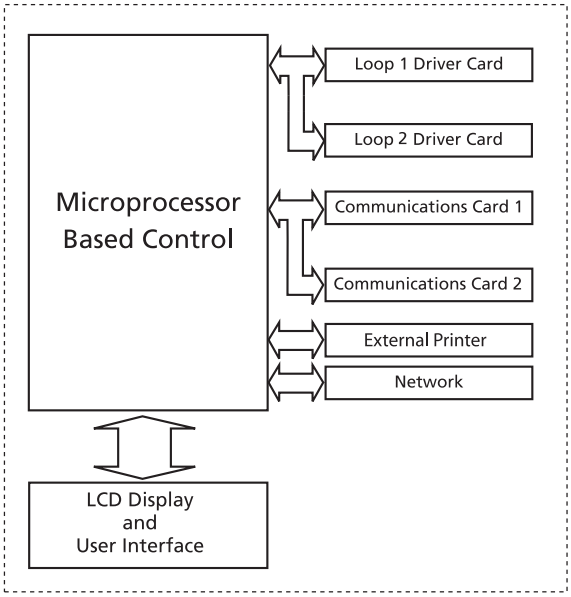
Every care has been taken in the preparation of this datasheet but no liability can be accepted for the use of the information therein.
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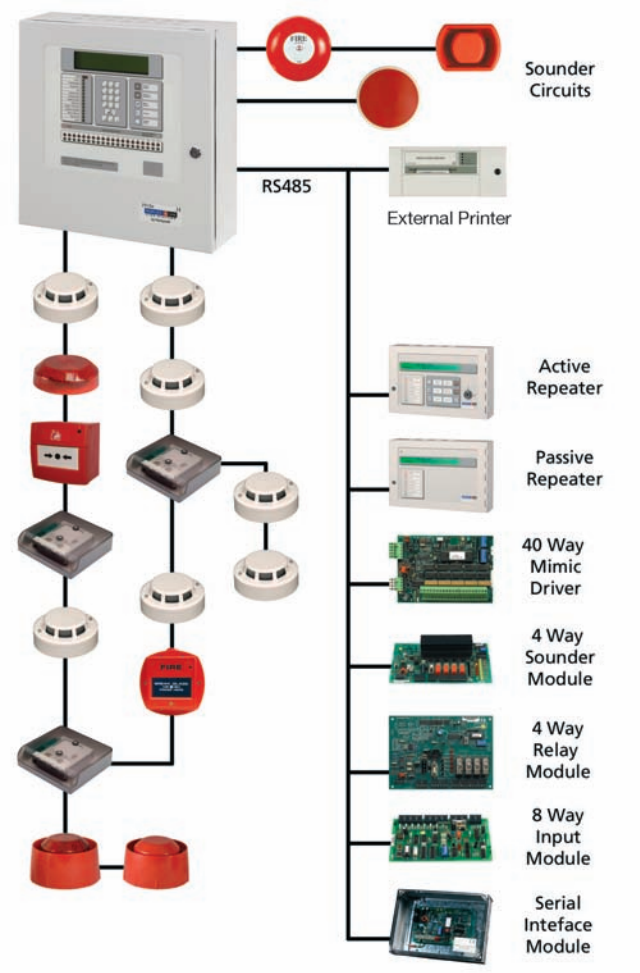
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# System Design & Planning

The ZX2Se control panel forms the heart of the fire detection system. A steel enclosure contains all the required components – microprocessor, power supply plus a clear LCD (Liquid Crystal Display), system status indicators and the control buttons that form the user interface.

The flexibility of the ZX2Se design allows the control panel to be connected to a wide variety of peripheral devices. From display repeaters to custom mimic displays, printers, serial data interfaces and switching relay interfaces.




A quick glance enables users to assess the condition of the fire alarm system. Alarm and Fault conditions are highlighted by LEDs and supported by enhanced text descriptions on the LCD display. Clearly labelled buttons allow users to quickly manipulate the system providing both audible and tactile feedback of successful operations.

Accidental operation is prevented by user pass codes that are required to gain access to functions. Basic functions (Evacuate, Reset, Mute, Accept, Silence) are available at one access level whilst more advanced operations are protected by a secondary level pass code. Individual device isolations, test modes and configuration data are all protected by these secondary access levels.

Inside each control panel the microprocessor maintains a log of the events or actions occurring on the system. Fires, Faults, tested devices and diagnostics are all electronically logged for future reference. Remote (or local) printers can easily be connected to provide a paper copy of events as and when they occur or provide a historical record.

The control panel can be configured to support any one of the five detection protocols by installing the correct loop driver cards in the control panel. For each loop the control panel will support a total up to 126 devices using Apollo, Hochiki or Nittan protocols and up to a maximum of 99 sensors and 99 modules (call points, monitor, control, conventional zone modules and addressable sounders) using the Morley-IAS or System Sensor protocols.

# Installation

The initial installation of the system is aided by sophisticated features like AUTOLEARN. An internal routine that will automatically detect all the devices on the detection and peripheral loops saving the time of entering all the devices individually.

Basic programming is also configured during the Autolearn process resulting in only fine tuning of the system being required to complete the system configuration.

An off-line Windows™ configuration tool is available to further enhance the process, making text entry and specific device programming easier. Complex cause and effect programming is simplified through clearly designed user interfaces. Once completed the

configuration of the panel can be saved for future reference. Enhanced features allow the complete archiving of the control panel history log and a Virtual Panel Interface enables all control commands to be entered using the computer.



# Maintenance

The ZX2Se intelligent fire alarm control panel has been designed to help with the normal operation of a fire detection system. Standard weekly testing is available through a simple menu structure allowing selection of the zones to be tested and the optional activation of the outputs or ringing of the sounders.

The status of individual devices can be analysed to determine whether cleaning or replacement is required. This information can either be viewed directly on the LCD or printed for reference.

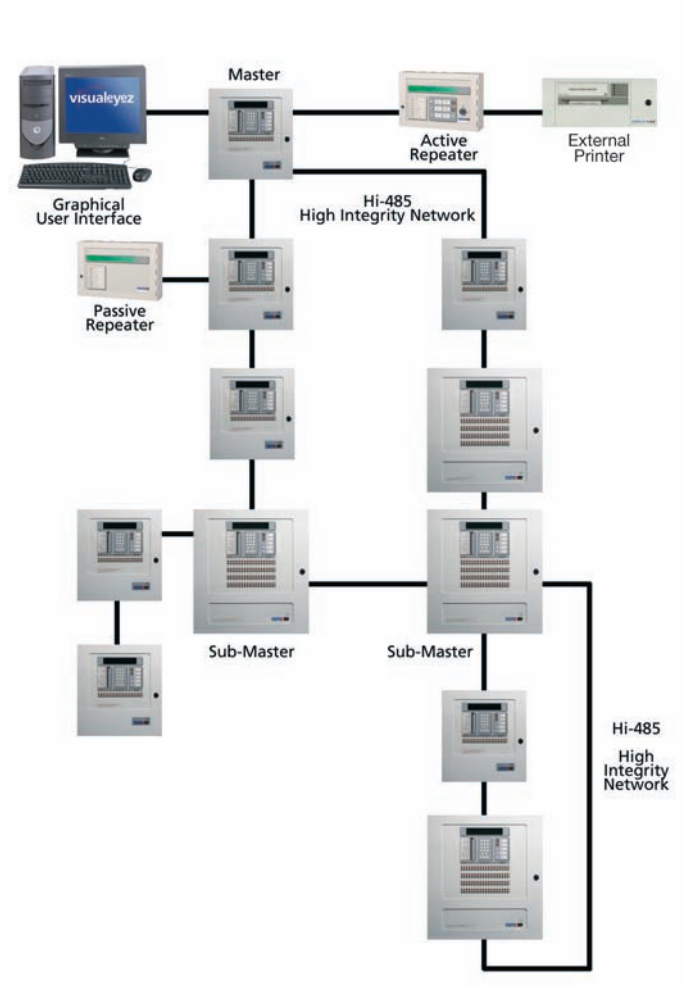
As the installation grows the ZX2Se can expand with the installation, adding additional devices, loop cards, printers, display repeaters or interface devices. If the installation becomes too big for a ZX2Se, additional ZX1Se or ZX5Se control panels can simply be added by networking using two or more control panels.

# Networking

The Morley-IAS network is unique. A clever protocol allows for the propagation and distribution of all messages and control signalling. A robust protocol that can be used over long distances, even on MICC mineral based fire resistant cabling. The ZX2Se can be networked with other ZX series control panels using Master/Slave architecture. Up to a maximum of 99 control panels can be networked together using the standard control panel operating system. The network can be configured in two ways:

For single sites or large buildings the network is normally configured as one large system. Each networked control panel shares information. Alarms and communications are reported to each individual display.

If the fire alarm system is to provide cover for multiple buildings or multiple sites it is normally configured to operate in a report and control mode. The fire alarm panels act individually or as sub-systems only reporting information to the master on the level above.



# Specification

**Operating Voltage** 230V 50Hz AC
(+10%, -15% voltage tolerance)

**Max. PSU Rating**
**2.5A total, comprising:** Battery Charger: 0.5 Amp

**Internal & External Loads**
**General System Load:** 1.8A @ 24V nominal
**Max Loop Load:** 460mA

**Standby Batteries** 24V sealed lead acid batteries
**Minimum Capacity**: 2x 12V 7Ah
**Maximum Capacity**: 2x 12V 12Ah

**Dimensions (mm)** 400 x 400 x 135 (H x W x D)

**Weight** 10 kg without batteries

**Environmental Operating Limits**
**Temperature:** 0°C to +40°C
**Humidity:** 85% non-condensing (maximum)

**Construction** Sheet steel painted, sealed to IP30

**Cable Entry** 14 x 20mm knock-outs in top of cabinet
2 x 20mm knock-outs in bottom of cabinet

**Loop Capacity** 1 or 2 Loops 460mA per loop maximum

**Apollo, Nittan and Hochiki Protocols:**
Max. 126 devices (detectors and modules) per loop
**Morley-IAS and System Sensor Protocols:**
Max. 99 sensor and 99 module addresses per loop
**Note:** Mulitiple sensor protocols cannot be used in the panel simultaneously.

**Zones** Up to 20 zone with individual LED indicators.

**Internal Sounder** Intermittent buzzer (fault condition) High-pitched continuous buzzer (fire condition)

**External Outputs**
**Sounder Outputs** 2 programmable outputs. Open and short circuit monitoring. 1A maximum per output.
**Auxiliary Relays** 1 fault and 1 fire relay voltage free, changeover outputs Contacts rated at 24V AC/DC, 1A, 0.6 PF maximum.

**User Controls**
SOUND ALARMS, SILENCE/ RESOUND, MUTE BUZZER, ACCEPT, SYSTEM RESET

**Programming Controls**
Alphanumeric multi-level keypad with 15 keys and 5 control keys: YES, NO, CHANGE, ENTER and SHIFT

**LED type general panel status indicators**
FIRE, FAULT, ACKNOWLEDGED, DISABLEMENT, TEST, SOUNDER FAULT, DELAYED MODE, RELAYS DISABLED, EARTH FAULT, SYSTEM /CPU FAULT, SOUNDERS DISABLED, ALARMS SILENCED, SUPPLY FAULT, POWER.

**LED type zone Indicators (for 20 zones)**
FIRE, FAULT/TEST/DISABLED

**Display**
4x40-character LCD alphanumeric display with back-light.

**Serial Interface**
2 serial ports with connections for optional RS485 or RS232 plug-in communication cards.

**Networking**
Maximum 99 panels can be networked using a Master Network and connected Sub-Networks.

# Part Numbers

| | |
|---|---|
| 722-001-301 | ZX2Se Fire Alarm Control Panel |
| 795-066-100 | Apollo XP95 & Discovery Loop Driver Card (460mA) |
| 795-058-105 | Hochiki ESP Loop Driver Card (460mA) |
| 795-044-001 | Nittan Loop Driver Card |
| 795-068-100 | System Sensor Loop Driver Card (460mA) |
| 795-072-100 | Morley-IAS Loop Driver Card (460mA) |
| 795-005 | RS232 Communication Card |
| 795-004-001 | RS485 Communication Card |
| 797-061 | ZX2Se Bezel Kit |
| 797-063 | ZX2Se Glass Door Kit |
| 795-082 | Engineer's Software Programming Kit including Fire 6 |
| 795-080 | Programming interface lead |
| 795-081-001 | Fire 6 Enhanced Feature Set Software Key |
| 795-014 | 4 way programmable relay module, pcb only |
| 795-015 | 4 way programmable sounder module, pcb only |
| 795-029 | 8 way programmable input module, pcb only |
| 795-038-001 | Hi-485 communication module, pcb only |
| 795-065 | 40 way programmable mimic interface module, pcb only |
| 709-601-001 | ZXr-A Active Repeater. LCD, System Status indicators and user controls for Silence, Reset, Mute and Evacuate all activated by a key switch. |
| 709-701-001 | ZXr-P Passive Repeater. LCD and system status indicators |
| 020-600-002 | Bezel Kit for ZXr series repeaters |
| 795-060-002 | External remote printer module |
| 797-056 | External Printer Bezel Kit |
| 795-057 | MODBUS interface unit |
| 795-067-001 | Paging system interface module. Suitable for SCOPE, ASCOM/TELENOVA |

## Fire System Compatibility

Morley-IAS is fully committed to offering practical solutions and supporting products that enhance your buildings control systems.

## Other Supporting Products Include

- Morley-IAS Intelligent Public Address and Voice Alarm Equipment
- Morley-IAS Visualeyez range of Alarm Management Graphical Interface Systems
- Morley-IAS Dimension Analogue Addressable Panels
- Morley-IAS Horizon Conventional Panels
- Morley-IAS Extinguishing Panels

For further details on these or any other Morley-IAS product please contact your local distribution point, Morley-IAS Regional Sales Manager or via our contact details.

Morley-IAS by Honeywell a real choice for fire detection solutions, committed to supporting our device partners.

apollo WORLD CLASS FIRE SOLUTIONS
HOCHIKI
NK NITTAN
SYSTEM SENSOR

MORLEY IAS
FIRE SYSTEMS
by Honeywell

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