

# 990-052, Issue 4 28 March 2002

# **ID50 Series**

# Single Loop Intelligent Fire Alarm Panels

Section: Intelligent Fire Alarm Panels

#### **GENERAL**

The NOTIFIER ID50 series single loop intelligent fire alarm panels, has been developed for both installers and end users with efficiency in mind, offering a technically advanced range of facilities and functions while remaining easy to install, program and operate. 3 modules are available in the ID50 series, the basic ID50, the ID51 with printer option and the ID52 with printer option and space for 72 hours battery back up.

The ID50 series has a capacity of 99 sensors and 99 input / output modules on the single loop. The panel has been designed to EN54 parts 2 and 4 requirements and will be produced to various European languages and local requirements as options.

The ID51 & ID52 can be upgraded to 2 loops without the need to change back box.



# **Intelligent Features**

- ✓ EN54 parts 2 and 4 compliant
- One loop capacity (99 sensors and 99 modules)
- √ 16 fire zones, 16 non fire zones
- ✓ Supports avanced detection such as
  - OptiPlex
  - HARSH™
  - HAZARD<sup>TM</sup>
- √ 64 CBE rules
- ✓ Filter by device type
- ✓ Printer option
- √ 72 hourse backup option
- ✓ Adjustable sensor sensitivity
- ✓ Automatic High Test
- ✓ Day/Night mode facility
- ✓ Class Change
- ✓ Active and passive repeaters
- ✓ Programmable from the panel keypad or PC
- ✓ Two on board sounder circuits
- ✓ Two on board configurable outputs
- ✓ "Autolearn" facility
- ✓ Unconfigured device detection
- ✓ One man "Walk Test" by zone
- ✓ 512 event Historic Log
- ✓ Duplicate address fault monitoring
- ✓ Coincidence function
- ✓ Loop powered sounder support
- ✓ Non-latching "Plant Alarm" function
- Pulsing sounders support
- ✓ Output delay functions
- ✓ Remote "Reset" function
- ✓ 3 second response to manual call point activation
- ✓ Alarm verification algorithm
- ✓ Internal diagnostics program
- ✓ Fully on-site configurable
- ✓ Windows<sup>™</sup> off-line configuration tool
- ✓ Loop and Battery calculator
- ✓ 20 characters of configurable zone text.

- ✓ 20 characters of configurable device location text
- ✓ Built-in language variants

# **FEATURES**

# Analogue Loop Devices Support

- ✓ Type A1, A1R BS Heat Sensors
- ✓ Low-Profile Optical Sensors
- ✓ Low-Profile Ionisation Sensors
- Loop Powered Beam Detector
- ✓ Manual Call Points
- ✓ Analogue Input Modules
- ✓ Analogue Output Modules
- ✓ Loop Powered Sounders
- Conventional Detector Interface Module

# Advanced Optiplex Support

- Self optimising Optical, Thermal sensing technology combined in one sensor
- ✓ 5 Smoke sensitivity levels, two self optimising with heat only output

## **HARSH™** Sensor Support

- Operates as standard optical sensor in "dirty" environments, with no loss of smoke detection performance
- Dual filters for immunity to nuisance alarms
- Resistant to problems associated with water droplets, visible dust and fibres
- ✓ Intake fan motor,power availability and filter state fully monitored

# **HAZARD™** IS Sensor Support

- ✓ BASEEFA approved to EEX ia IIC T5
- ✓ Zone 0 hazardous enviroment installers

This document is not intended to be used for installation purposes. Every care has been taken in the preparation of this document but no liability can be accepted for the use of the information therein. Design features may be changed or amended without prior notice. For more information, contact **NOTIFIER**. Charles Avenue, Burgess Hill, West Sussex, RH15 9UF. United Kingdom Phone: +44 (0) 1444 230 300 Fax: +44 (0) 1444 230 888

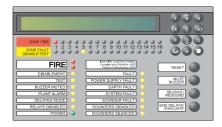
#### ISO9001

Design, Manufacture and Supply to Quality Management Systems Certified to ISO9001:1994



#### **User Interface**

- 16 zone indications of fire and fault, disablement/test
- ✓ 2 Lines of 40 characters each on a backlit LCD
- ✓ Real time clock for time-stamping of events
- ✓ 11 configurable passcodes for access restriction
- ✓ Numeric and Navigation keys
- ✓ Plant Alarm (Non-Fire) LED indication



# Housing

- ✓ Two part, mild steel cabinet
- ✓ Plastic moulded insert
- ✓ Customer ID label indent

#### **Passive Repeater**

- ✓ A compact mild steel housing incorporates all electronics for the fully monitored and addressable repeater unit
- ✓ A 2 x 40 character LCD indicates all information
- ✓ Incorporated status LED's for FIRE, FAULT, DISABLEMENT, POWER, PRE-ALARM, TEST, DELAY ACTIVE, SYSTEM FAULT and COMMUNICATIONS LOSS
- ✓ An maximum combination of 16 Passive/Active repeaters may be connected to a single ID50 Series Panel which will require an RS485 Interface Module PCB to be fitted in order to communicate
- ✓ Requires a 24V DC source at 90mA max. for power
- ✓ Optional semi-flush mounting

#### **Active Repeater**

- A compact mild steel housing incorporates all electronics for fully the monitored and addressable repeater unit
- ✓ A 2 x 40 character LCD indicates all information

- ✓ Incorporated status LED's for FIRE, FAULT, DISABLEMENT, POWER, PRE-ALARM, TEST, DELAY ACTIVE, SYSTEM FAULT and COMMUNICATIONS LOSS are included, and control push-buttons for MUTE BUZZER, END DELAY/ EVACUTATE, SILENCE/RESOUND and RESET
- ✓ A keyswitch provides restricted access to control pushbuttons
- ✓ A maximum combination of 16 Passive/Active repeaters may be connected to a single ID50 Series Panel which will require an RS485 Interface Module PCB to be fitted in order to communicate
- ✓ Requires a 24V DC source at 90mA max. for power
- ✓ Optional semi-flush mounting Bezel

## Windows™ Configuration Tool

- ✓ Simple to use Offline Configuration
- ✓ Simple to use Output Configuration
- ✓ Simple to use Text entry

Note...

Example of the Windows™ Offline Configuration Tool below.



# SYSTEM MODULES

The ID50 Series Panel is available with the following modules. Choose from the required modules below. Each kit is supplied with all required fixings and installation instructions.

#### 002-455-xxx ID50 Series Panel

002-455 - English, Spanish, Portuguese, Icelandic, Italian. xxx-xxx-002 - English, German, Dutch, French. xxx-xxx-003 - English, Swedish



#### 002-462-xxx ID51 Series Panel

020-462 - English, Spanish, Portuguese, Icelandic, Italian. xxx-xxx-002 - English, German, Dutch, French.



#### 002-460-xxx ID52 Series Panel

002-460 - English, Spanish, Portuguese, Icelandic, Italian. xxx-xxx-002 - English, German, Dutch, French.



# 020-644-009 PRN-ID Printer Module Kit for ID51/ID52

Includes thermal printer with power supply unit and roll of thermal paper.



# 020-553 RS485 Interface Module PCB Kit

Includes the RS485 Interface Module PCB required for repeater interfacing to the ID50 Series Panel. Plugs into dedicated socket on ID50 Series Panel PCB Assembly. Includes instruction sheet and fixings.



# 002-451 IDR-2P Passive Repeater

Includes the complete passive repeater unit with all assembled electronics, Liquid Crystal Display (LCD), Fascia membrane and manual.



# 002-450 IDR-2A Active Repeater

Includes the complete active repeater unit with all assembled electronics, Liquid Crystal Display (LCD), Control pushbuttons, Access control keyswitch, Fascia membrane and manual.



# • 020-573 Mimic Control PCA Kit

Supports up to 8 Mimic Drivers. Requires external 24Vdc power.



## 020-574 Mimic Driver & Terminal Board PCA Kit

Provides 64 LED's or Relay outputs and 8 inputs. Up to 8 Mimic Drivers can be daisychained. Requires Mimic Control PCA kit and external 24Vdc power.



# • 020-599-009 ID50 Semi-flush Bezel Kit

Includes semi-flush mounting bezel for ID50 Black/Grey and instruction sheet.



• 020-038-009 ID51 Flush Bezel

Includes flush mounting bezel for ID51, Black/Grey and instruction sheet



020-039-009 ID52 Semi-flush Bezel Kit

Includes flush mounting bezel for ID52, Black/Grey and instruction sheet.



020-600-009 Flush Bezel for IDR Repeaters

Flush mounting bezel for IDR repeaters, Black/Grey



 020-552 ID50 Replacement PCB Assembly Kit

ID50 replacement PCB kit, including LCD and membrane (For Issue 1 to 5 PCB board).



• 020-635-001 ID50
Replacement PCB Assembly
Kit

ID50 replacement PCB kit, Including LCD and membrane (For issue 6 pcb and above)



 020-649-001 ID51 & ID52 Replacement PCB Assembly Kit,

ID51 & ID52 Replacement PCB Assembly Kit, Including LCD and membrane.



 020-648 Replacement Power Supply

Replacement power supply (3A) for ID51/ID52.



020-562 ID50 Support Tool Kit

Including Offline Configuration software, on-line manual and interconnection cable assembly.



## PANEL SPECIFICATIONS

# **Primary Input Power**

- ✓ ID50 230V, 50Hz, 1.0A
- ✓ **ID51** 230V, 50Hz, 1.6A
- ✓ **ID52** 230V, 50Hz, 1.6A

## **Sounder Outputs**

✓ 2 Sounder outputs rated @ 30V 1A each

# Sounder / Volt-free Outputs

✓ 2 Sounder / Volt-free outputs rated @ 30V 1A

Note...

Default as general fire and fault relay contacts.

# **Open - Collector Outputs**

✓ 2 configurable outputs rated together @ 60mA total output

# **Auxiliary Output**

✓ 24V Auxiliary Output rated @ 250mA

# Power Supply / Battery Charger

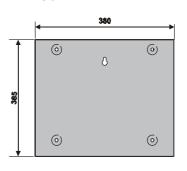
- ✓ ID50 Maximum 1.5A total output, 0.5A for battery charger, supporting 12Ah batteries to EN54.
- ✓ ID51/52 Maximum 3A total output, 2.2A for battery charger, supporting 42ah batteries to EN54
- Maximum of 1A available in alarm for sounders etc.

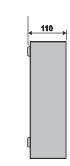
#### **Digital Input**

✓ 1 configurable input defaulting to Level 2 access control

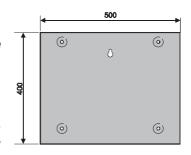
#### **Dimensions**

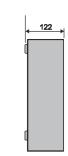
**ID50** 



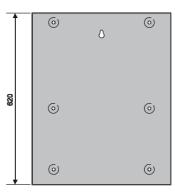


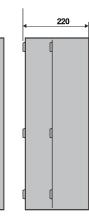
**ID51** 





**ID52** 





Note...

All dimensions are in Millimetres

#### Weight

- ✓ **ID50** 6kg without batteries.
- ✓ **ID51** 9.5kg without batteries.
- ✓ **ID52** 15.5kg without batteries.

# **Battery Space**

- ✓ **ID50** Maximum 2 x 12V, 12Ah batteries.
- ✓ **ID51** Maximum 2 x 12V, 12Ah batteries
- ✓ ID52 Maximum 2 x 12V, 42Ah batteries

#### **Cable Access**

- ✓ **ID50** 16 x 20mm knockouts in top of cabinet
- ✓ **ID51** 25 x 20mm knockouts in top of cabinet
- ✓ **ID52** 25 x 20mm knockouts in top of cabinet

#### **Environmental Limits**

- $\checkmark$  Climatic Classification :
  - 3K5, (IEC 721-2-3)
- ✓ Operating Temperature :
  - -5° C to +45° C
- ✓ Humidity:

5% to 95% R.H.

✓ Panel Sealing:

IP 30, (EN 60529)

# REPEATER SPECIFICATIONS

# **Primary Input Power**

✓ 18 - 32V DC (+10%, -15%)

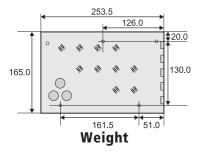
# **Current Consumption**

√ 90mA rated @ 24V DC

#### **Communications**

✓ RS485

#### **Dimensions**



✓ 750g

#### **Cabling**

 Maximum 1200 metres communications cable with 150R terminating resistors at both ends

# **Cable Access**

- √ 5 x 20mm knockouts in top of cabinet
- 3 x 20mm knockouts in back of cabinet

#### **Environmental Limits**

- ✓ Climatic Classification : 3K5, (IEC 721-2-3)
- ✓ Operating Temperature : -5° C to +45° C

- ✓ Humidity:
  - 5% to 95% R.H.
- $\checkmark$  Panel Sealing :
  - IP 30, (EN 60529)

# CONTROLS AND INDICATORS

#### **Led Status Indicators**

- ✓ FIRE
- ✓ DISABLEMENT
- ✓ TEST
- ✓ BUZZER MUTED
- ✓ PLANT ALARM
- ✓ DELAYED MODE
- ✓ RELAY DISABLED
- ✓ POWER
- ✓ FAULT
- ✓ POWER SUPPLY FAULT
- ✓ EARTH FAULT
- ✓ SYSTEM FAULT
- ✓ SOUNDER FAULT
- ✓ SOUNDERS DISABLED
- ✓ SOUNDERS SILENCED
- ✓ Individual FIRE and FAULT / DISABLED / TEST LED's per zone

## Membrane Push-button Controls

- ✓ RESET
- ✓ MUTE BUZZER
- ✓ SILENCE / RESOUND
- ✓ END DELAYS / EVACUATE

# Configuration and Selection Keys

- ✓ 12-Key Numeric / Navigation Keypad when used in conjunction with the Shift key
- ✓ 🚯 , 🚱 , 🛂 and 🍪 Navigation Arrows
- ✓ ⑤ (Select) Push-button
- ✓ 0.9 (Shift) Push-button for numeric functions
- ✓ (Access Code Prompt) Pushbutton

#### **LCD Display**

✓ Alphanumeric 80 Character (2 x 40) Backlit Display

# SYSTEM CAPACITY

# Intelligent Signalling Line Circuits (SLC)

√ 1 Loop per panel

#### **Number of Zones**

- √ 16 Zones of Fire Detection per panel
- ✓ 16 Zones of Non-Fire (Plant Alarm) per panel

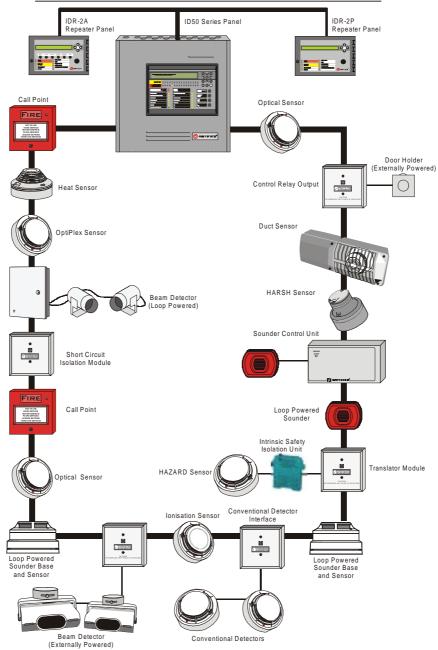
# **Intelligent Sensors**

√ 99 Intelligent Sensors per loop

#### Addressable Modules

✓ 99 Addressable Monitored / Control Modules per loop

# **ID50 PANEL FIRE CONTROL SYSTEM**



# **COMPATIBLE SLC DEVICES**

Model	Description		
CPX-551E	Standard Ionisation Sensor	ZMX-1E	Conventional Zone Monitor Module
CPX-751E	Low Profile Ionisation Sensor	CMX-2E	Control Module (Monitored or Relay)
SDX-551E	Standard Optical Sensor	PS2-CMX	Control Module With PSU and 2 Bell Circuits
SDX-751E	Low Profile Optical Sensor	CMX-10R	10 Way Relay Module
HPX-751E	HARSH Optical Sensor	ISO-X	Standard Isolator Module
FDX-551E	Type A1 Thermal Sensor	MRM-1(/DIN)	Mains Relay Module
FDX-551HTE	Type BS Thermal Sensor	B501	Standard Sensor Base
FDX-551RE	Type A1R Thermal Sensor	B524IE	Sensor Base With Standard Isolator
SDX-751TEM	OPTIPLEX Multi-criteria smoke & heat sensor	B524IEFT	Sensor Base With FET Isolator
IDX-751	HAZARD intrinsically safe optical sensor	B254RE	Sensor Base With Relay Output
LPB-500	Loop Powered Beam Detector (TX/RX pair)	B524FTXE	HARSH Sensor Base
LBP-620	Loop Powered Beam Detector	ANS4	Addressable Loop Powered Sounder
M500KAC/GB	Manual Call Point	ANSE4	Addressable Externally Powered Sounder
M500KACW	Weatherproof Manual Call Point	ABS4	Addressable Loop Powered Sounder Base
MMX-1E	Monitor Module	ABSE4	Addressable Externally Powered Sounder base
MMX-101E	Mini Monitor Module Micro Monitor Module	IBS3	Addressable Loop Powered Base Sounder with Built-in Sensor Base
MMX-102E MMX-10		AWS3/R	Addressable Loop Powered Wall Sounder Red
IVIIVIA-10	10 Way Monitor Module	AWS3/W	Addressable Loop Powered Wall Sounder White

Some devices may be under development. Contact NOTIFIER for device availability.