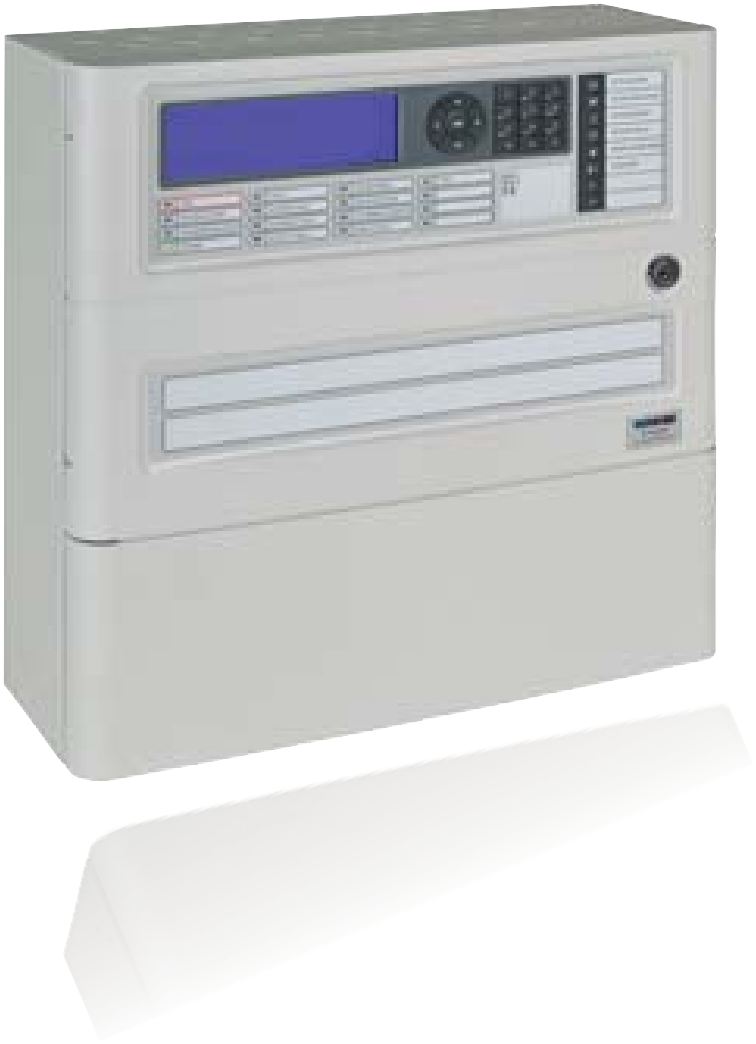
CHANNEL

SAFETY SYSTEMS

Firewatch



Analogue addressable systems
from Channel Safety Systems

BAFE

FIA
Fire Industry Association

Firewatch

Analogue addressable systems

Amongst the many advantages of an analogue addressable system over a conventional open circuit monitored scheme is that the 126 detection and output devices can be wired in a loop configuration.

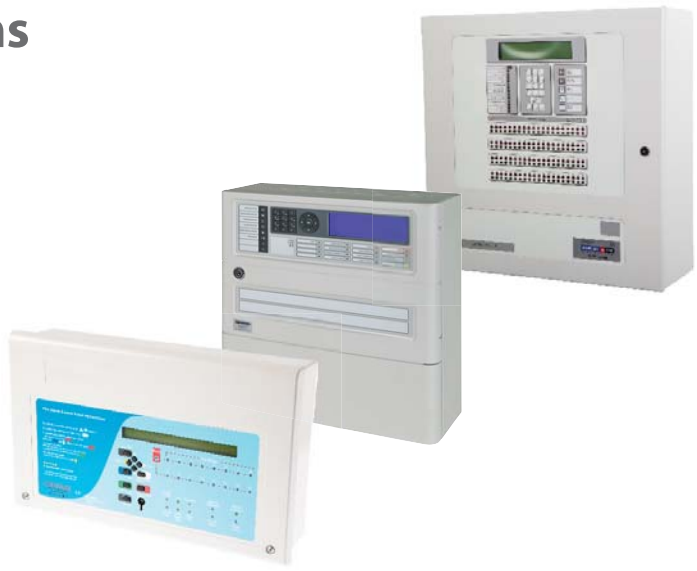
This reduces the installation cost for the medium to large size schemes. Further to this, pinpoint accuracy is given by the panel to identify the source of an activation.

The Firewatch addressable fire alarm panels are able to identify the exact detector or device which has activated the system or if a fault in the system has been found.

Each panel will display the exact device (detector or call point) that signalled the alarm, allowing the fire to be located more quickly.

Network Systems

When a large or multi-building system is required it is often more cost effective to install several control panels which are then networked together. This means that detection loop lengths are kept to a minimum thus reducing installation costs and giving increased system integrity.

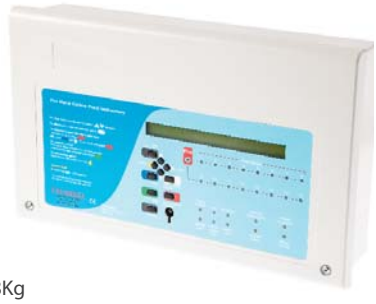


Images show from left to right F/FW1001, F/FW9004 & F/FW9003

FW1001 Panels

The Firewatch 1001 is an economical, flexible yet highly sophisticated analogue addressable fire alarm control panel. Third-party certified to the latest versions of EN54 parts 2 & 4 by the Loss Prevention Certification Board, the FW1001 is available in two different formats – 1 loop 16 zone and 2 loop 32 zone.

Up to eight FW1001 master panels (any variant) can be interconnected, making the range ideal for use in larger applications such as office blocks, shopping complexes and big industrial sites as well as in smaller, stand-alone applications due to its competitive price.



Product Dimensions

Height 235mm
Width 380mm
Depth 90mm

Weight without batteries

Single loop 16 zone panel - 1.8Kg
Two loop 32 zone panel - 4.5Kg

Features

- Compatible with XP95/Discovery and Hochiki's ESP protocols
- The ability to interconnect up to eight Firewatch main panels (any variant) onto a two wire RS485 network. Alternatively, up to eight Firewatch repeaters can be connected to a non-networked Firewatch main panel.
- Combined keypad/keyswitch entry to access levels 2 & 3
- Two independently programmable conventional sounder circuits
- Two programmable inputs
- A fault output relay and three programmable relay outputs with voltage free changeover contacts
- Three zone dependency functions (A, B & C to EN54-2 clause 7.12)
- A day/night (building occupied/unoccupied) function
- An investigation delay period function
- A phased evacuation and delays to outputs facility to EN54-2
- An alarm counter that records the number of times the panel has been in an alarm state to EN54-2
- Powerful short circuit protected loop drivers, capable of supporting up to 40 loop powered 10mA sounders per loop
- An integral EN54-4/A2 switch mode PSU rated @ 185-260V a.c 50-60Hz (1.4A on a 16 zone panel, 3A on a 32 zone panel)
- Earth fault monitoring
- An easy to read, 80 character back-lit display
- 40 characters of custom text per device
- 999 event monitoring
- Comprehensive test facilities to EN54-2 and a wide range of functions including auto-learn loops, monitor a point, test outputs, one man walk test and loop continuity test
- An intuitive Windows based upload-download PC program that allows the system to be programmed quickly and easily

PRODUCT CODE	DESCRIPTION
F/FW1001/1/16	Networkable single loop 16 zone panel (requires a 24/3 battery)
F/FW1001/2/32	Networkable two loop 32 zone panel (requires a 24/7 battery)
F/FW1001/R/16	Networkable repeater panel – 16 zones (requires a 24/3 battery)
F/FW1001/R/32	Networkable repeater panel – 32 zones (requires a 24/3 battery)
F/FW1001/NCC/16	Network communications card for 16 zone
F/FW1001/NCC/32	Network communications card for 32 zone
F/FW1001/1/16/H	Networkable single loop 16 zone panel complete with Hochiki protocol
F/FW1001/1/32/H	Networkable single loop 32 zone panel complete with Hochiki protocol
F/CH24/7	7Ah 24V battery
F/CH24/3	3.2Ah 24V battery

POWER SUPPLY SPECIFICATIONS	1 Loop 16 Zone	1 Loop or 2 Loop Zone 32
Mains Supply	230V AC ± 10% 50/60Hz. Max current 350mA	230V AC ± 10% 50/60Hz. Max current 680mA
Internal Power Supply	27V DC Nominal	
Total Output Current Limited to	1.4A @ 230V AC	3A @ 230V AC
Power Rating	Imax. a = 210mA; Imin = 40mA	Imax a. = 250mA (1 loop) 270mA (2 loop); Imin = 70mA
Maximum Internal Resistance	Ri max - 1.1Ω	
Supply and Battery Charger Monitored for Failure	Yes	
Batteries Monitored for disconnection and Failure	Yes	
Batteries Protected against Deep Discharge	Yes	
Max. Battery Size and Type	3.2 Ahr VRLA	7.0 Ahr VRLA
Specified batteries for LPCB approved systems	2 x Yuasa NP3.2-12	2 x Yuasa NP7-12
Quiescent Current Drain	<50mA (1 loop unloaded)	<80mA (1 loop unloaded) <100mA (2 loops unloaded)
Earth Fault Monitoring	Yes (any conductor)	
Temperature Compensated Charging	Yes	

LOOP DRIVER SPECIFICATIONS	1 Loop 16 Zone	1 Loop or 2 Loop Zone 32
Max. Loop Output Current	500mA (voltage: 25V min, 34V max)	
Max. Number of Addressable Devices per Loop	126	
Max. Number of Loop Powered Sounders per loop @ 10mA	40	
Number of Programmable Sounder Groups	16	
Number of Programmable Output Sets	16	

CONVENTIONAL SOUNDER CIRCUIT SPECIFICATIONS	1 Loop 16 Zone	1 Loop or 2 Loop Zone 32
Number of Programmable Circuits	2	
End of Line Resistor Value	6800 Ω 5% tol. 0.25 W	
Outputs Fused at	400mA protected by resettable overload circuit	
Output Voltage	19.5V (min); 28V (max)	
Max. Number of Sounders : 20mA	40	

AUXILIARY OUTPUTS	
Type	Relay voltage free single pole changeover
Max. Switching Current	1A
Max. Switching Voltage	30V DC
Relay 1 / Relay 2 / Relay 3	Programmed from cause and effect
Fault	Active when no faults are present
'24V' Aux Power Output	19.5V (min), 28V (max), Max. Current 100mA protected by resettable overload circuit

FUSES (TO IEC - EN60127 Part 2)	1 Loop 16 Zone	1 Loop or 2 Loop Zone 32
Mains Fuse	1A HRC Ceramic 20mm	1A HRC Ceramic 20mm
Battery Fuse	1.6A F 20mm	3.15A F 20mm

PANEL INDICATORS AND CONTROLS	1 Loop 16 Zone	1 Loop or 2 Loop Zone 32
Key-switch	Plastic key operated	Metal key operated
Control Buttons	Silence, Reset, Resound, Investigate; More information; Menu	
Event Scrolling and Menu Access Buttons	Up (1); Down (2); Accept (3); Abort (4)	
Liquid Crystal Display	Two lines x 40 characters, backlit	
Number of Zonal LED Indicators	16	32
Other LED Indicators	General Fire, System Energised; Pre-Alarm; Remote Output Activated; Menus Accessed; Disablement; Test; Remote Output Disabled; Silence; General Fault; System Fault;	

CABLING REQUIREMENTS	1 Loop 16 Zone	1 Loop or 2 Loop Zone 32
Type of Cable	Fire resistant screened cable, minimum size 1mm²	
Max. Cable Length per Loop	1km	
Connector Blocks	Plug - on type, largest acceptable conductor size 1.5mm²	
Max. Allowable Loop Impedance (each conductor)	20 Ω	
Max. Cable Capacitance	.27µF	

FW9003 Panels

The Firewatch 9003 range of analogue addressable fire alarm control panels have 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.

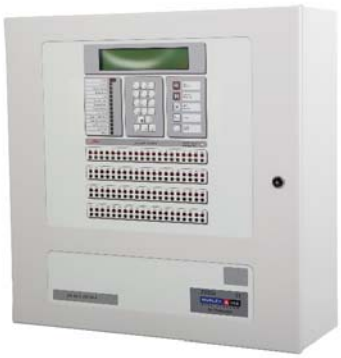
The Firewatch 9003 range has been designed to assist with the normal operation of a fire detection system. Standard weekly testing is available through a simple menu structure allowing selection of the zones to be tested either with or without activation of the output relays or sounders.

Additionally, the status of individual devices can be analysed to determine whether cleaning or replacement is required. As the installation grows the panels can expand with the building or site by adding additional devices, loop cards, printers or repeater panels. Additionally, further panels can be networked together allowing an even bigger system to be created. 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.

- All major device manufacturers devices supported
- Optional, local or remote printers
- Walk test facility
- Provide up to 72hr stand-by (subject to verification)

Supporting the industries leading protocols;

- Apollo XP95
- Discovery
- Hochiki ESP
- Nittan



Product Dimensions 5SE

Height 500mm
Width 500mm
Depth 195mm

Product Dimensions 1/2SE

Height 400mm
Width 400mm
Depth 135mm

This feature allows fire detection devices to be independently selected based on performance or aesthetic appeal.

Features

- Simple, robust design to EN54 Parts 2 & 4
- 4x40 – Character LCD alphanumeric display with back-light
- Up to 200 zone LEDs (by special request)
- Up to 10 individual level 2 user access codes
- Optional lockable glass door – provides added security/protection
- Provide up to 72hr stand-by (subject to verification)
- Walk test facility
- Event logic – facilitates complex cross-panel programming
- Auto-learn facility allows rapid and accurate commissioning of devices
- Windows™ configuration tool allows off-site programming
- Facility to print history and event logs
- Shared Zone System - Each networked control panel shares information
- Report & Control System - For multiple building sites where information is presented at the local and master panels only
- A compliant fault tolerant network can be created using the additional, optional Hi-485 network card
- 99 panel network allows systems in excess of 60,000 devices to be managed

PRODUCT CODE	DESCRIPTION
F/FW9003/1SE	1 loop fire panel less loop cards (requires a 24/7 battery)
F/FW9003/2SE	2 loop fire panel less loop cards (requires a 24/7 battery)
F/FW9003/5SE	5 loop fire panel less loop cards 20 zones – expandable to 80 (requires a 24/12 battery)
F/FW9003/485	RS485 communication module
F/FW9003/HI485	Hi485 network card – required to comply with BS5839
F/LC9003	Loop card for use with FW9003/5SE and 2SE panel
F/LC9003/HOC	Hochiki Loop Card
F/LC9003/NIT	Nittan Loop Card
F/FW9000/R	Repeater panel – no controls
F/FW9000/RC	Repeater panel – with controls
F/CH24/7	7Ah 24V battery
F/CH24/12	12Ah 24V battery

SPECIFICATIONS	
Operating Voltage	230V AC 50Hz (+10%, -15%)
Maximum PSU Rating	8.6A total, comprised of 2.25A min @ 25V (panel supply) 2.5A min @ 35V (loop supply) 1.66A min @ 12V (printer supply) 2.2A min charger current
Loop Load	460mA per loop maximum
Zone	200 (max)
LED Type Zonal Indicators	20 (up to 200 available)
Operating Temperature	0°C to + 40°C
Humidity	85% non-condensing (max)
IP Rating	IP30
User Controls	Sound Alarms, Silence/Resound, Mute Buzzer, Accept, System Reset
Programming Controls	Alphanumeric multi-level keypad
Indicators	FIRE, FAULT, Acknowledged, Disablement, Test, Sounder Fault, Delayed Mode, Relays Disabled, Earth Fault, System/CPU Fault, Sounders Disabled, Alarms Silenced, Supply Fault, Power
Serial Interface	3 serial ports with connections for optional RS485 or RS232 plug-in communication cards
Auxiliary Relays	EN54 format at 1 fault relay and 1 programmable relay voltage free, changeover outputs contacts rated at 24V AC/DC, 1A, 0.6 pF maximum
Sounder Outputs	4 programmable outputs. Open and short circuit monitoring 1A max per output (Max total load 1.3A)
Loop Capacity	1 to 5 loops 460mA per loop max
Operating Temperature	0ºC to + 40ºC
Humidity	85% non-condensing (max)
	IP30
Operating Voltage	230V AC 50Hz (+10%,-15%)
Loop Load	460mA per loop maximum
Weight	20Kg

FW9004 Panels

The Firewatch 9004 panel is ideally suited for use in the protection of small to medium sized buildings. All in all, a compact, high performance, feature rich, economical fire alarm control panel designed to help both the installer and the end user.

The multi-protocol Firewatch 9004 range of fire alarm control panels has been developed to be the most time efficient fire panel on the market to install.

The panel's large graphical display provides a clear menu structure making the whole initial set-up process quick, clear and intuitive. Additionally, programming the control panel couldn't be easier. Complex configuration can be achieved by using either the panel's mobile phone style key pad or by using the Windows PC programming tool supplied with the panel. The flexible PC programming tool also allows text messages for devices or zones to be imported from an Excel spread sheet, saving further time.

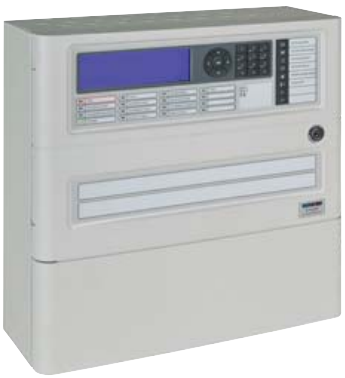
Supporting the industries leading protocols;

- Apollo XP95
- Discovery

This feature allows fire detection devices to be independently selected based on performance or aesthetic appeal.

Product Dimensions 9004/1
Height 260mm
Width 390mm
Depth 147mm

Product Dimensions 9004/2& 9004/4
Height 391.5mm
Width 390mm
Depth 147mm



Features

- 1,2 and 4 loop panels available
- Network 16 loops max on each system
- Optional 40 or 80 zone alarm LEDs
- Easy 5 key-press set-up
- Large blue LCD display
- Supports USB upload/download
- Mobile phone style keypad and navigation keys
- True peer-to-peer network reduces installation costs
- BS5839 part 1 compliant network
- 80 fire zones
- 7 day timers
- Event logging
- On board diagnostics
- Protocol change function on panel to choose XP95, Discovery and Hochiki's ESP
- Coincidence and verification detection for false alarm management
- Sensitivity adjustment e.g. between day and night
- 2 independent sounder circuits
- 500mA Universal Loop Driver
- 2x on board monitored inputs
- Plug-in connectors

PRODUCT CODE	DESCRIPTION
F/FW9004/1	1 loop DXc control panel (requires a 24/7 battery)
F/FW9004/2	2 loop DXc control panel (requires a 24/7 battery)
F/FW9004/4	4 Loop DXc control panel ((requires a 24/12 battery)
F/FW9004/40Z	DXc 40 zone LED Card
F/FW9004/80Z	DXc 80 zone LED card
F/FW9004/NCC	DXc Network Card
F/FW9004/232	DXc RS232 Card
F/FW9004/485	DXc RS485 Card
F/FW9004/EBC	DXc blank cover for extension box
F/FW9004/EB	DXc extension backbox – to allow up 17Ah batteries for 1 loop panel
F/FW9004/KSP	DXc plate to allow up to 4 keyswitches
F/FW9004/KS	Keyswitch kit max 4 per panel
F/FW9004/BEZ/1	Bezel kit for FW9004 1 loop
F/FW9004/BEZ/4	Bezel kit for FW9004 2/4 loop
F/FW9004/BEZ/1/EXT	Bezel kit extension for FW9004 1 loop + ext
F/FW9004/BEZ/EXT/4	Bezel kit extension for FW9004 2/4 loop + ext
F/FW9004/UL/DL	DXc USB upload/download lead
F/CH24/7	7Ah 24V battery
F/CH24/12	12Ah 24V battery

SPECIFICATIONS	
Display	6x40 character (240x64 pixels) blue liquid crystal display with backlight illumination
Control Keys	Evacuate, Silence/Resound, Mute Buzzer, Extend Delay, System Reset, Show Alarm Zone
Programmable Keys	2 independent programmable function keys and LED indicators
Programming Keys	12 button alpha numeric key pad inc cancel and return keys plus 4 navigation keys and an OK key
Indicators	Fire, Fault, Disablement, Test, Buzzer Muted, Delayed Mode, Sounders Silenced, Sounders Disabled and Power.
Operating Temperature	0°C to +40°C
Relative Humidity	5% - 95% non-condensing
IP Rating	IP30 (EN6059)
Operating Voltage	230V AC (+10%,-15%) 50-60 Hz
PSU Rating	1 loop - 24V DC 2A 2-4 loop - 24V DC 4A
Stand-by Batteries	1 loop - 2 x 7Ah 2-4 loop - 2 x 17Ah
Auxiliary Output	+24V DC 250mA fused
Fire relay	Single pole changeover 24V DC 1A
Fault relay	Single pole changeover 24V DC 1A
Aux relay	Programmable single pole changeover 24V DC 1A
Onboard Data Ports	1 x RS485 (Repeater connection) 1 x RS232 (PC Programming)
Weight	4.5kg

Compatible Devices

The Firewatch range are compatible with a selection of devices which Channel offers, which are listed below.

Firewatch 1001

- Compatible with Apollo XP95, Discovery and Hochiki's ESP protocols

Firewatch 9003

- Compatible with Apollo XP95, Discovery, Hochiki's ESP and Nittan protocols

Firewatch 9004

- Compatible with Apollo XP95 and Discovery protocols.

Apollo XP95 devices:


Optical smoke detector


Heat detectors


Ionisation detector


Multi-sensor detector


Visual indicators


Open area sounders


Call points

These are just a selection of the devices from the XP95 range. For more information on what Channel can offer, please visit our website.

Discovery devices:


Optical smoke detector


Heat detector


Ionisation detector


Multi-sensor detector


Open area sounder visual indicators


Sounder visual indicator base


Call points

Hochiki devices:


Photoelectric smoke sensor


Multi-sensor photoelectric & heat


Multi-heat sensor


Wall sounder


Addressable visual indicator lens


Call points


Device programmer

These are just a selection of the devices from the Hochiki range. For more information on what Channel can offer, please visit our website.

Nittan devices:


Photoelectric Detector


Heat Detector


Photoelectric Detector Sounder


Sounder Visual Indicator


Sounder


Call points


Mounting bases

GET INTERACTIVE

Scan the code for more information on the Firewatch range and the related devices

www.channelsafety.co.uk/firewatch/