

FIRElux

Emergency
Lighting



Safety In All Enviroments

FIRElux is a completely new emergency lighting system.

The rapid development of LED technology has made it possible to implement emergency lighting systems utilising analogue system technology. Hochiki, using the world-proven ESP protocol, have combined the best of centralised and decentralised emergency lighting systems with their state-of-the-art fire detection technology simplifying cable-planning, loop technology and connections.

FIRElux is based on an addressable emergency lighting control panel with battery back-up, addressable, self-contained luminaires and signage with traditional low-voltage cabling. **FIRElux** also offers the installer new solutions to the installation of luminaires, connections and service.

The conventional methods of grouping luminaires in exit signs and route light groups have been surpassed. The addressability of the components makes it possible to locally control the fire areas and group control panels. For example the route lights and exit signs of a specific area can be programmed to remain on in alarm/fault situations.

Advantages of the FIRElux System

- ▶ Simplified system planning
- ▶ Battery back-up contained in each luminaire/sign
- ▶ Will operate on loop length of between 500m to 1000m
- ▶ 127 addressable luminaires/signs per individual (dedicated) loop
- ▶ Inexpensive cabling costs - a dedicated lighting loop does not have to be fire-rated
- ▶ Easy installation, luminaires/signs fit onto standard Hochiki sensor mounting base - YBN-R/3
- ▶ Easy service and maintenance
- ▶ Automatic testing
- ▶ System alarm data can be transmitted direct to a service company by transfer units
- ▶ Cost-effective system in implementation and maintenance

Products



FIRElux-1
Emergency Lighting
Control Panel

In normal situations the FIRElux-1 control panel supplies an operating voltage to the addressable luminaires/signs. In case of power failure the luminaires switch to internal batteries. Any failure in the luminaire is shown at the control panel.

- ▶ Luminaires: 60 pcs addressable route lights and exit signs
- ▶ Supply voltage: 29 VAC (150 VA)
- ▶ Nominal voltage: 12 VDC
- ▶ I/O outputs: 1 relay output
- ▶ Size (w x h x d): 270 x 350 x 84 mm



FIRElux-2
Addressable Emergency
Lighting Control Panel

The control panel FIRElux-2 has two addressable loops. Each loop can run 127 luminaires/signs. In normal conditions the FIRElux-2 supplies an operating voltage to the luminaires/signs whilst also monitoring the lighting system. All monitoring data is stored locally in the control panel memory and can be read using the LCD screen on the FIRElux-KP keypad.

- ▶ Luminaires: 254 addressable exit signs and route lights
- ▶ Supply voltage: 29 VAC (150 VA)
- ▶ Nominal voltage: 12 VDC
- ▶ Internal batteries: 7.2 Ah
- ▶ I/O outputs: 1 relay output and 7 digital outputs
- ▶ Modem connection: RS-232
- ▶ Keypad connection: RS-485/9600 baud
- ▶ Transaction memory: 500 transactions
- ▶ Size (w x h x d): 295 x 475 x 100 mm



FIRElux-KP
Keypad

Designed for use with the FIRElux-2 control panel (max 8 pcs in the system) provides a small graphic display for system information.

- ▶ Nominal voltage: 12 VDC
- ▶ Display: graphic display 128 x 64 pixels
- ▶ Display viewing area: 60.0 x 32.5 mm
- ▶ Size: (w x h x d): 147 x 144 x 29 mm
- ▶ Intended for use with FIRElux-2 control panel



FIRElux-PSU
230V Control Panel

Loop-controlled 230 V/500 W control panel, which provides power for the Addressable **FIRElux** system.

- ▶ Switchmode power supply
- ▶ Terminal block connections for outputs, max. 2.5 mm²
- ▶ Outputs: 6 pcs, 2A glass tube fuses
- ▶ Batteries: 2 pcs 42 Ah / 1h safety time
- ▶ Control of emergency lights for each group as option

System Structure

FIRElux brings new technology with new opportunities and solutions for emergency exit lighting.

The core of the **FIRElux** emergency lighting system is the addressable **FIRElux-2** control panel. Altogether 254 exit signs and route lights can be connected to the two addressable loops. Both exit signs and route lights utilise LED (Light Emitting Diode) technology, which guarantees around 10 years lifetime (for exit sign usage). The unique 'Flex-it' hinge system in the exit signs allows both wall and ceiling mounting utilising the standard Hochiki sensor mounting base, YBN-R/3.

The equipment is controlled by the **FIRElux-KP** keypad which features an LCD graphic display. The keypad display can show the address and location text of the device in alarm or fault.

Maintenance

In the EN50172 standard regarding emergency lighting systems special attention has been paid to the operational condition of the system. The system has to be tested regularly - at least once a month. The control panel of the **FIRElux** system continuously controls and tests the condition of the system automatically. Fault/alarm data remains in the control panel memory and can be shown on the keypad display.

Cabling

Cabling of the **FIRElux** system is easily and quickly achieved using traditional cable. The system can be wired either as a loop or as a spur. Exit lights can be connected in parallel without grouping. **FIRElux** allows the connection of the cabling to luminaire bases before installing the light units.



GSM

Remote control of the **FIRElux-2** emergency lighting system is possible utilising the GSM alarm transfer unit. Fault data is easily transmitted to end user or service company GSM numbers. Each GSM number can be stored in an 'alarm ring' so that each responsible person can be contacted in turn if any others are unavailable.

Control Station

FIRElux emergency lighting system alarm and fault data, can be linked to a graphics software package located in a control centre. The software depicts the plan view of the building indicating both alarms and faults states. By using the **FIRElux** INSTALL program it is possible to monitor the emergency lighting system from a central point.





FIRElux-20
Addressable Exit Sign

LED-based addressable exit sign with flexible 'Flex-it' hinge solution. Address unit and battery are located in the hinge cup.

- ▶ Colour: white
- ▶ Material: fire resistant ABS plastic
- ▶ Fire class: UL94 V-O
- ▶ Viewing distance: 20m
- ▶ Models: 20L (left), 20R (right), 20L/R (double-sided), 20D (down), 20D/D (double-sided)
- ▶ Operating time: 1 h/3 h
- ▶ Enclosure class: IP44
- ▶ Size (w x d x d): 204 x 133 x 32mm
- ▶ Total depth (wallmounting) 71.3mm
- ▶ Total height (ceiling mounting) 191.5mm (+ 10mm base YBN R/3)



FIRElux-40
Addressable Exit Sign

LED-based addressable exit sign with flexible 'Flex-it' hinge solution. Address unit and battery are located in the hinge cup.

- ▶ Colour: white
- ▶ Material: fire resistant ABS plastic
- ▶ Fire class: UL94 V-O
- ▶ Viewing distance: 40 m
- ▶ Models: 40L (left), 40R (right), 40L/R (double-sided), 40D (down), 40D/D (double-sided)
- ▶ Operating time: 1 h / 3 h
- ▶ Enclosure class: IP44
- ▶ Size (w x h x d): 350 x 253 x 32 mm
- ▶ Total depth (wallmounting) 70.1 mm
- ▶ Total height (ceiling mounting) 336.4mm (+ 10mm base YBN R/3)



FIRElux-ER
Addressable Luminaire

LED-based addressable luminaire. Address unit and battery are located in the luminaire cup.

- ▶ Colour: white
- ▶ Material: fire resistant ABS plastic
- ▶ Fire class: UL94 V-O
- ▶ Operating time: 1 h/3 h
- ▶ Enclosure class: IP 44
- ▶ Size (Ø x h): 99.7 x 38mm (+ 10mm base YBN R/3)



FIRElux-SL
Addressable Step Luminaire

LED-based addressable step luminaire.

- ▶ Material: fire resistant ABS plastic
- ▶ Colour: white
- ▶ Fire class: UL94 V-O
- ▶ Operating time: 1 h/3 h
- ▶ Enclosure class: IP44
- ▶ Size (w x h x d): 80 x 80 x 12mm



FIRElux-SB
Start Button

Surface-mounted emergency lighting start button.

- ▶ Size (w x h x d): 88 x 88 x 52mm



YBN-R/3
Luminaire Base

A universal base for exit signs and route lights with connection points for loop cabling. The base does not include electronics or battery.

- ▶ Colour: white
- ▶ Material: fire resistant ABS plastic
- ▶ Fire class: UL94 V-0
- ▶ Contacts: stainless steel
- ▶ Enclosure class: IP44
- ▶ Size (Ø x h): 100 x 10mm



FIRElux-10
I/O Unit

The FIRElux-10 I/O unit is powered directly from the emergency lighting loop and allows start buttons and phase monitors to be connected to the system.

- ▶ 4 inputs
- ▶ Size (w x h x d): 100 x 110 x 35mm



FIRElux-GSM
Alarm Transfer Unit

GSM-based duplex alarm transfer/control unit with number identification to block outsider use. The unit includes power source and GSM antenna.

- ▶ Alarm messages and call numbers programmable as sms
- ▶ 3 inputs (digital and analog alarm)
- ▶ 3 outputs (relay output NO, 24 V/10 A)
- ▶ Size (w x h x d): 100 x 75 x 25 mm



FIRElux-DMC-8
Modem Communicator

A modem communicator which transfers fault/alarm data to security and service companies via chosen telephone network.

- ▶ SIA format
- ▶ Communicator with serial traffic connection to NEPTO-254 control panel
- ▶ 8 inputs
- ▶ Size (w x h x d): 170 x 95 x 20 mm



FIRElux
Graphics Software

FIRElux alarm and fault data can be linked to the graphics software which displays the building system in plan view showing alarm and fault locations.

- ▶ Compatible with Win2000, XP, NT
- ▶ Shows alarm/fault data in plan view directly on building layout
- ▶ Includes program protective module



FIRElux-PM
Local Fuse Failure Monitor

A voltage monitoring and protection unit.

- ▶ Auxiliary supply voltage 190 to 260 Vd.c.
- ▶ Various rated voltages, user adjustable
- ▶ Delay time 0.1 to 10sec, user adjustable
- ▶ Size (w x h x d): 35 x 90 x 58

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Quality System
Certificate No. 164
Assessed to ISO9001



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