

THORN

Voyager Sigma

Versatile exit sign with
low-maintenance LED option



For emergency exit signage that is reliable, effective and easy to install, choose Voyager Sigma

Voyager Sigma enables designers to meet the latest UK and European safety standards and help ensure safe evacuation in the event of an emergency. Sigma is offered with an advanced LED light source, for economical operation and low maintenance, and is also available with standard 8W T16 (T5) fluorescent lamps.



- Voyager Sigma single sided exit signs are made from polycarbonate and come in a white (RAL9010) or silver finish (RAL 9006).
- Both EU and ISO-style legends are screen printed and can be specified with the arrow pointing upwards, downwards, to the right and to the left. They are available separately and can easily be updated if the direction of an exit route changes.
- The legends are easily clipped into the luminaire body, behind the diffuser.
- Suitable for surface mounting, Voyager Sigma has pre-drilled holes for use with different wall recessed boxes, together with a knock-out cable entry on the top for surface mounted wiring.
- A hinged steel gear tray ensures quick and easy installation and maintenance.
- LED versions provide long life self-contained emergency lighting with a 3 hour duration, using Nickel Metal Hydride (NiMH) batteries.
- Standard 8W T16 (T5) fluorescent versions use Nickel Cadmium (NiCad) batteries to deliver 3 hours of emergency lighting output.

Maintaining Emergency Lighting

Once an emergency lighting scheme is designed and installed, the person responsible for the building has a legal obligation to make sure that all the emergency luminaires will operate when required. Emergency light fittings, including exit signs, must be regularly tested to confirm that they will operate if required.

E3TX – SelfTest Addressable Test

E3TX emergency gear combines the functionality of SelfTest and Addressable Test in a single fitting, enabling the specifier to choose how to test and maintain an emergency lighting scheme.

Explorer SelfTest technology provides simple and reliable automatic testing for standalone fittings. Coming standard in all Voyager Sigma luminaires, E3TX emergency gear contains an intelligent diagnostic processor that automatically performs the required testing and uses a bi-colour LED to show the test results.

Compliance with regulations requires a simple visual check of the luminaires at monthly intervals, with results recorded in a central log book.

Explorer SelfTest technology delivers:

- Easy installation, with automatic self-commissioning and no additional cabling.
- Simple monthly visual monitoring by a building operative.
- Fast recharge cycles for batteries of 10 to 15 hours (as opposed to 24 hours for basic manual test fittings).
- Bi-colour LED (red and green) status indication.
- Intelligent scheduler learns to test while the building is unoccupied.

Explorer SelfTest is an ideal testing solution for small applications or building refurbishments. Key applications include small shops, offices and public buildings.

Complete peace of mind with E3TX Addressable Test and Explorer Project

E3TX luminaires can be quickly and easily linked to Thorn's Explorer Project technology. This is a centrally-addressable testing system that provides fully automatic monitoring, testing and fault logging for up to 256 emergency fittings. For larger projects with more than 256 emergency fittings Explorer Vision can be used.

Explorer Project delivers:

- Ultimate convenience for emergency lighting testing.
- Automatic, paper-free storage of results for two years.
- A reporting function that identifies each luminaire, giving precise details on the location of the fitting and the details of any fault.
- Coverage up to 900 metres from the local Explorer controller.
- Flexible scheduling of tests to suit local requirements.
- Staggered testing to minimise the risk of depleted batteries.
- Simple installation and commissioning.
- Easy connection of E3TX Voyager Sigma luminaires linked to the local controller using standard 1.5mm 2 core mains cable.

Explorer Project is particularly suitable for small-to-medium projects requiring an easy and convenient way of maintaining an emergency lighting installation. Schools, colleges, small offices, surgeries, libraries and public buildings are among typical user groups. For larger applications please use Explorer Vision.

Find out more...

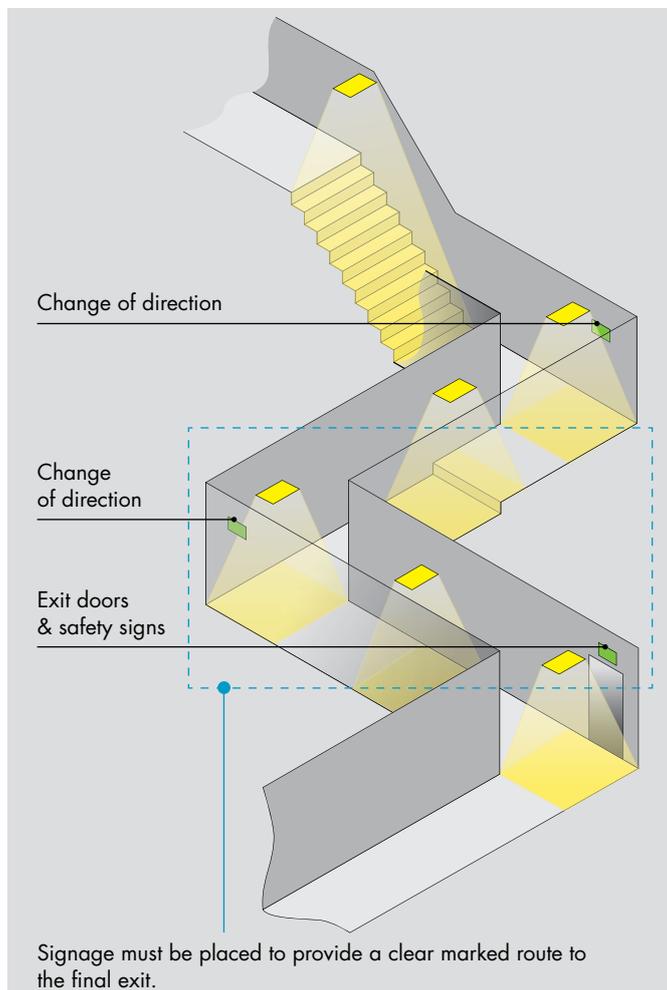
For further information on Explorer please refer to the 'Explorer' brochure.



Exit Signage in Escape Routes and Open Areas

Planning emergency signage

According to EN 1838, exit signage along escape routes should let people see the way out and ensure that they can evacuate the building safely in the event of the mains power supply failing. Escape routes can also be 'notional' in open spaces, such as a large office. Changes in levels, direction and at intersections along a corridor have to be taken into consideration when designing the emergency lighting scheme. European law specifies that emergency signage should be visible at all times along an escape route, outlining the minimum size requirements, luminance levels and contrast ratios that have to be observed. In public spaces, exit signs must be lit whenever there are people in the building.



Delivering the right message

Specific requirements have to be followed if the design and performance of exit signage is to comply with UK and European standards.

Technical design:

- Mounting height: exit signs should be mounted at a minimum height of 2 metres above the floor.
- Luminance: the minimum safety colour luminance of the exit legend must be no less than 2cd/m^2 .

Legend:

Only two designs of exit sign comply with the latest legislation:

- The pictogram from the European Safety Signs Directive (EU legend).
- The pictogram conforming to ISO 6309 (EN 5499, part 1).

Although both forms of legend are in use, only one type of design should be used in a building.



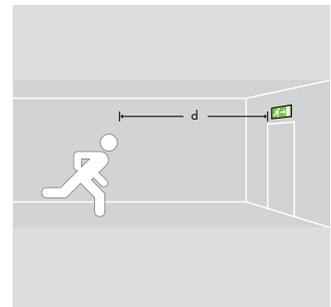
EU legend



ISO legend

Viewing distance:

- The viewing distance of an internally lit exit sign (ie. the distance from which the sign can be seen and understood) is calculated by multiplying the height of the legend by 200.
- Exit signs must be placed at any change in direction to indicate the route to the final exit door.



Viewing distance (d) = height of legend x 200

Solution

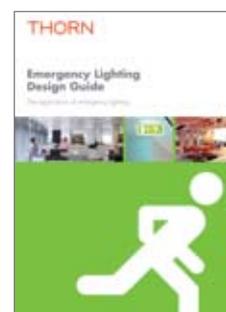
Voyager Sigma complies with these requirements.

Sigma offers:

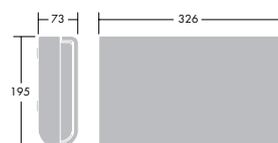
- A safety colour luminance of the exit legend change is at least 8cd/m^2 .
- A viewing distance of up to 30 metres.
- A choice of either EU or ISO style legends.

Find out more...

For detailed information on the planning of emergency schemes, please refer to the Emergency Lighting Design Guide.



Product Features



Lamps

8W T16 (T5) (FDH)
compact fluorescent or multiple
LED strip version.

Materials/Finish

Body: polycarbonate with
alternative finishes in either
RAL9010 white or RAL9006
metallic silver.

Diffuser and legend panel:
polycarbonate.

Installation/Mounting

Wall mounting with 20mm
conduit or rear back box entry.

Standards

Designed and manufactured to
comply with EN 60 598.2-22,
EN 55015, EN 501838.

Class I electrical.

IP40.

Specification

To specify state: Sign for
viewing up to 30m distance,
maintained operation, E3TX
SelfTest or Addressable Test.
3 hour emergency duration
with either an LED strip or 8W
T16 (T5) lamp. Choice of EU or
international ISO legends.
As Thorn Voyager Sigma.

Ordering Guide Supplied with lamp. For complete luminaire, order body and legend.

SAP Description	ILCOS code	Socket	Weight (kg)	SAP code
VOYAGER SIGMA 1X8W T16 E3TX WHI	FDH	G5	2.0	96233811
VOYAGER SIGMA 1X8W T16 E3TX SIL	FDH	G5	2.0	96233812
VOYAGER SIGMA LED E3TX WHI	-	-	1.4	96233815
VOYAGER SIGMA LED E3TX SIL	-	-	1.4	96233816

E3TX - 3 hour SelfTest or Addressable Test, WHI - white finish, SIL - silver finish

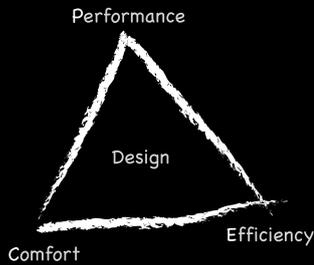
Both versions can be wired to operate as non-maintained or maintained.

Legends	SAP code
VOYAGER SIGMA LEG EU UP	EURO LEGEND SCREEN PRINTED ARROW UP 96233875
VOYAGER SIGMA LEG EU DOWN	EURO LEGEND SCREEN PRINTED ARROW DOWN 96233876
VOYAGER SIGMA LEG EU LEFT	EURO LEGEND SCREEN PRINTED ARROW LEFT 96233877
VOYAGER SIGMA LEG EU RIGHT	EURO LEGEND SCREEN PRINTED ARROW RIGHT 96233878
VOYAGER SIGMA LEG ISO UP	ISO LEGEND SCREEN PRINTED ARROW UP 96236785
VOYAGER SIGMA LEG ISO DOWN	ISO LEGEND SCREEN PRINTED ARROW DOWN 96236786
VOYAGER SIGMA LEG ISO LEFT	ISO LEGEND SCREEN PRINTED ARROW LEFT 96236787
VOYAGER SIGMA LEG ISO RIGHT	ISO LEGEND SCREEN PRINTED ARROW RIGHT 96236788

Only one style of legend (Euro or ISO) should be deployed in any one building.

Performance, Efficiency and Comfort (PEC) – for a better lit environment

Voyager Sigma evokes the spirit of Thorn Lighting's dynamic, results-orientated PEC programme



The programme is based on the principle that Performance, Efficiency and Comfort determine the effectiveness of lighting, its impact on the people using it, and its impact on the natural environment. Voyager Sigma delivers the right performance in the right place at the right time.

Performance: providing the best visual effectiveness

- Flexible design and interchangeable legends allow the product to be altered to suit changing emergency requirements.
- Fast battery recharge minimises system downtime during testing.
- Crisp and clear legend illumination enhances detection of escape routes in an emergency situation.

Efficiency: conserving energy and effort, reducing CO₂ emissions and waste. Providing lighting that is practical and efficient to install, operate and maintain

- The availability to specify Voyager Sigma with LED technology offers excellent energy efficiency opportunities.
- Voyager Sigma can be used with Explorer Project – Thorn's centrally-addressable testing and monitoring system. This helps a building meet all statutory test requirements and provides added peace of mind.
- A hinged gear tray makes the luminaire easy to install and service, reducing the cost of ownership.

- Clever optical design and the option of both ISO and EU-style legends ensures that the luminaire meets all relevant regulations.

Comfort: giving people satisfaction and stimulation

- The styling of the luminaire gives a smart, modern appearance that will suit a wide range of applications. Distinctive styling combines aesthetic style with leading performance.
- A well-designed emergency installation, using good quality luminaires, gives reassurance to users of the space.



THORN

Lighting people and places

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Publication No: 453 (GB) Publication Date: 04/09



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Industry Federation



ISO 9001:2000
Reg: 2916/0
Manufacturing & Distribution