

Watch out!

VIRTUAL SIGN PROJECTION SYSTEM

A sign made of light — it appears exactly where and when it is needed. It does not wear off, does not fade, and its content changes in seconds.

DESIGN

MANUFACTURE

INSTALLATION

SERVICE

PROBLEM AND SOLUTION

Floor markings wear out faster than the layout changes

Painted lines and floor decals wear away under forklift wheels, get dirty and need renewing. A fixed board hangs in one place and says the same thing whether or not a hazard is present. Watch out! replaces both with an image cast by an LED projector — bright, legible and controllable.

01

Visible whatever the floor looks like

LED projectors cast a bright, sharp sign even where the floor is dusty, wet or obstructed. There is no worn-through or scraped-off marking — the image is always complete.

02

A warning only when it is needed

The projection can be triggered by motion sensors, radars, LiDARs and door reed switches. The sign appears the moment a hazard is detected and can pulse — so it never becomes background.

03

New content without construction work

Changing the traffic layout means swapping the gobo in the projector, not chiselling and repainting the floor. Any sign, logo or text, in any number of colours.

04

A message that cannot be missed

Light also works where an audible signal fails: in a noisy plant, under hearing protection and for people who are hard of hearing. The warning reaches the field of view, not the ear.



COMPARISON OF SOLUTIONS

CRITERION	PAINT / DECALS	WATCH OUT!
Durability of the marking	Wears away under forklift traffic, needs renewing	An image of light — it does not wear out
Change of content or layout	Stripping, repainting, zone closed to traffic	Gobo swap, no downtime
Response to a hazard	Static — always looks the same	Switches on from a sensor signal, can pulse
Visibility when soiled	Drops as the floor gets dirty	Independent of the floor's condition
Maintenance cost	Markings renewed on a cycle	Limited to servicing the equipment

CONFIGURATIONS

Four configurations — from a single sign to a controlled zone

Each configuration is matched to the mounting point and the operating scenario.

Configurations can be combined and extended in stages — the controller and the wiring stay the same.

CONFIGURATION I

Fixed sign

A single projector running continuously. The equivalent of a painted marking, only wear-free.

- One projector, one sign
- Any graphic: safety sign, text, logo, pictogram
- Projection onto floor, wall or door
- Local power supply, no control system

TYPICAL USE

Storage areas, no-pallet zones, marking of entrances and pedestrian routes.

CONFIGURATION II

Sign rotation

One projector cycles through up to seven different graphics, one after another, in a set order.

- Up to 7 signs from one unit
- Graphic and order changed by remote
- Warning, information and message in one spot
- Fewer units per workstation

TYPICAL USE

Building entrances, PPE zones, places that need several messages at once.

CONFIGURATION III · OUR BESTSELLER

Virtual zebra crossing

A set of two projectors with a controller and sensors. It automatically switches the pedestrian-crossing sign to a no-crossing sign when a forklift approaches or a door opens.

- 2 projectors + Felixcom controller + sensors
- Automatic switching: crossing ↔ no crossing
- Traffic priority set at commissioning
- Works with high-speed door automation

TYPICAL USE

High-speed doors, forklift crossings, intersections of pedestrian and vehicle routes.

CONFIGURATION IV

Controlled zone

The system extended with any number of projectors, sensors and signal devices, integrated with the plant's infrastructure.

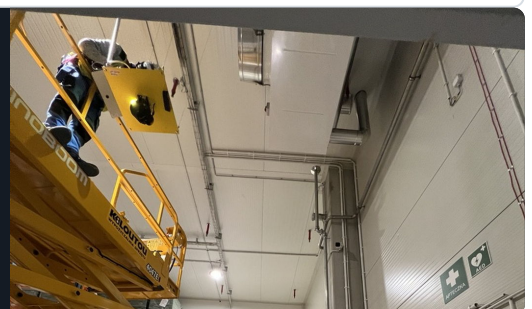
- Radars, LiDARs, reed switches, presence sensors
- Outputs for light and sound signalling
- Signals from doors, ramps, platforms, lifts and cages
- Multi-zone scenarios on one controller

TYPICAL USE

Loading docks and ramps, manoeuvring areas, routes with heavy mixed traffic.

GROWTH IN STAGES

The installation can start with a single fixed sign and grow with sensors, a controller and further zones — with no projectors, brackets or wiring replaced. The configuration is matched to the workstation, not to the whole site.



SPECIFICATION

Projector, controller, installation

PROJECTOR

Light source	High-power LED
Image carrier	Gobo insert — interchangeable graphic
Number of graphics	1 (fixed sign) or up to 7 (cyclic rotation)
Colours	Any sign or logo, any number of colours
Adjustment	Image focus, frame rotation, angle set on the bracket
Projection direction	Any — floor, wall, door, vertical surface
Local control	Remote control (graphic selection and order in the rotation configuration)
Ingress protection	IP65 — indoor and outdoor versions
Housing	Aluminium, passive heat sink, mounting bracket included



Projector in an IP65 housing with an adjustable bracket and a remote for switching graphics.

FELIXCOM CONTROLLER

Origin	Felixcom in-house module	Outputs	Projector control, light and sound signalling
Signal inputs	Radar sensors, LiDAR, reed switches, presence sensors	Operating modes	Continuous operation, sensor triggering, pulsing, sign switching
Signals from infrastructure	Door automation, ramps, platforms, lifts, cages	Logic	Scenarios and traffic priorities set at commissioning

INSTALLATION AND COMMISSIONING

1 • Site survey

Mounting points, hanging height and sign size chosen for the specific building, along with the traffic directions in the zone.

2 • Graphic design

Preparation and production of the gobos — safety signs, the customer's own markings, texts, logos, language versions.

3 • Installation and set-up

Installation, power supply, sensor and controller wiring, focus and framing, handover and training.

Matched to the building. Projector power, mounting height and the resulting sign size are selected individually — they depend on the ceiling height, the ambient light level and the floor colour. We confirm the parameters during the site survey and record them in the technical offer.

SELECTION

Four sizes, one controller

Power and lens are selected from a light-level measurement taken at the mounting point.

Below are the projector sizes and the ratio that sets the sign diameter.

PROJECTOR SIZES

PARAMETER	WATCH OUT! S	WATCH OUT! M	WATCH OUT! L	WATCH OUT! XL
LED power	50–60 W	80–100 W	150 W	200–300 W
Projection distance	up to approx. 6 m	6–9 m	9–11 m	over 11 m, outdoor yard
Ingress protection	IP67	IP67	IP67	IP65
Power supply	230 V AC	230 V AC	230 V AC	230 V AC

SIGN SIZE

The sign diameter follows directly from the lens and the mounting height: **diameter = height × lens ratio**. Values in metres, for a projector mounted perpendicular above the marked surface.

LENS	3 M	4 M	5 M	6 M	8 M	10 M	12 M
1:0.3	0.9	1.2	1.5	1.8	2.4	3	3.6
1:0.36	1.1	1.4	1.8	2.2	2.9	3.6	4.3
1:0.5	1.5	2	2.5	3	4	5	6
1:1	3	4	5	6	8	10	12

CONSTRUCTION

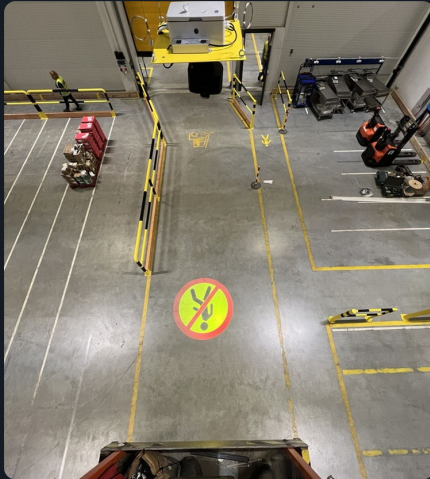
Housing	Aluminium, passive heatsink, mounting bracket included
Mounting	Ceiling, wall, column or racking structure — out of reach of forklifts
Multi-message configuration	One projector rotating up to 7 messages, switched automatically
Networked configuration	The plant's Wi-Fi or LAN, or a dedicated Felixcom radio link

Matched to the building. The sign diameter can be read from the table, but the projector size also depends on the ambient light level and the floor colour. We confirm the parameters during the site survey and record them in the technical offer. The projection supplements the markings required by regulations; it does not replace them.

INSTALLATIONS

Where Watch out! is at work

Photographs from installations carried out by Felixcom in warehouses and production facilities.



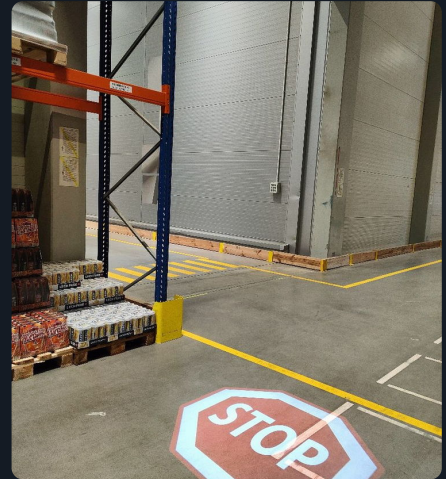
High-speed doors

The no-crossing sign lights up when the door operates or a forklift approaches.



Pedestrian crossings

A virtual zebra crossing on the route — with no floor painting.



Docks and ramps

A STOP sign at the stopping point before the loading area.



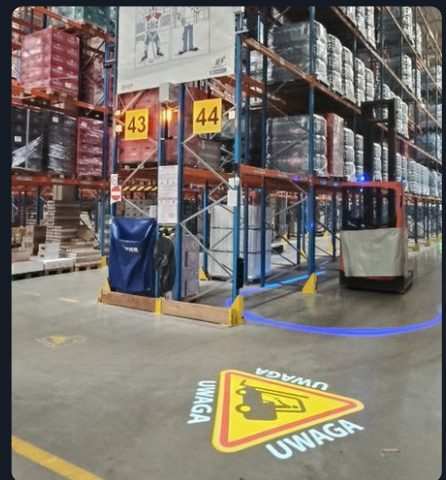
Storage areas

No pallets on the traffic route or by fire-fighting equipment.



Escape routes

Emergency exit and monitored passage projected at the door.



Shared pedestrian and vehicle routes

A warning where pedestrians meet forklifts.



Two-way sign with PPE pictograms

One projection readable from both directions, with pictograms of required protective equipment.



Multilingual message

The same sign in two languages — with no extra boards or decals.

A SYSTEM, NOT A SINGLE DEVICE

Watch out! plugs into the rest of your safety systems

The Watch out! controller is our own design, so the projection can be tied to a signal from any device in the building — including the other Felixcom systems. Instead of several independent installations you get one coherent safety scenario.

FX-STOP-TRUCK**Wheel chock interlock at the loading dock**

A STOP or no-entry projection at the bay until the vehicle is secured with a chock — one message for the driver and for the warehouse.

FX-SAY**Voice announcements**

The same signal triggers the light sign and a spoken announcement, in foreign languages too — the warning reaches the pedestrian and the forklift operator.

FX-EVACUATION**Evacuation and people flow**

On alarm the projectors switch to escape-route markings and exit directions, following the building's evacuation scenario.

FX-GUARD**The danger zone is visible from the doorway**

When the thermal camera detects overheating in the forklift charging area, a no-entry zone appears around the affected bay. People do not walk up to the source of the hazard.

WHY FELIXCOM

Our own controller

We design and build the control module, so integration is not limited to a list of compatible devices.

One contractor

Design, graphic production, electrical installation, commissioning and service from one supplier.

Experience in industrial facilities

Security, CCTV, access control and automation in warehouse and production facilities.

Growth in stages

The installation starts with a single sign and grows with sensors and further zones, with no hardware replaced.

LET'S TALK ABOUT YOUR FACILITY

Book a site survey and a quote for your zone

FELIXCOM SP. Z O.O.

ul. Stolarzowicka 19, 41-923 Bytom, Poland · NIP 6263059028
biuro@felixcom.pl · phone +48 575 101 210, +48 609 960 760

www.felixcom.pl