LBKSystem

The Worlds first SIL2/Pld radar based safety system

IMMUNE to DEBRIS, LIQUID, SMOKE & DUST!

- The LBKSystem detects the presence of humans & can give pre-alarms in order to avoid the sudden stopping of machinery

- Maximum depth of monitored area is 4m but with six sensors can cover an area 15m wide

- Beam width 110 degrees in the horizontal & 30 degrees in the vertical

- The LBKSystem consists of a single LBK-C22 control unit & from one to six LBK-S01

- Configuration, e.g. depth of warning & danger areas, sensitivity & restart functions can be quickly & easily set using the free application software

- A lower cost alternative to traditional laser based floor scanners with the benefit of no moving parts

- Immune to visible objects like smoke, dust, wood or vegetable shavings, machine waste & water splashes

- Three levels of sensitivity for both detection & automatic reset

- Perfect alignment between sensors is not required

- LBK-S01 can be mounted behind mesh guarding or hidden behind an acrylic facia

To download the full catalogue or manual please click here

Interested? Email us to arrange a demonstration by clicking here

LBK-S01
The smart radar sensor

The **LBK-S01** sensor is a smart FMCW (Frequency Modulated Continuous Wave) radar device based on proprietary Inxpect detection algorithms. The sensor sends 24GHz radio waves and recovers motion information, analyzing the returned signals reflected by both static and moving objects in the operative range.

The sensors perform the following primary functions:

- **Motion and scenario analysis.**
- **Communication via CAN bus to the controller of the motion detection signal.**
- **Fault reporting and communication of diagnostic information via CAN bus to the controller.**

in   *out*

LBK-C22
The control unit

The **Inxpect LBK-C22** is the system control unit. It can connect up to six LBK-S01 smart sensors. Intervention of any single sensor results in the deactivation of the controller's safety output. The LBK-C22 control unit is configured with the Inxpect Safety PC application, which allows the configuration of sensitivity levels, safety functions, size of warning and dangerous areas, and the functionality of the controller's I/O ports.

Digital inputs

The controller has three dual-channel digital inputs and common reference potential for:
· muting
  (high logic level (1) = muting enabled)
· machinery emergency button
  (low logic level (0) = stopping enabled)
· machinery restart button enabled
  (high logic level (1) = restart enabled)

The digital inputs can be configured through the Inxpect Safety application software.
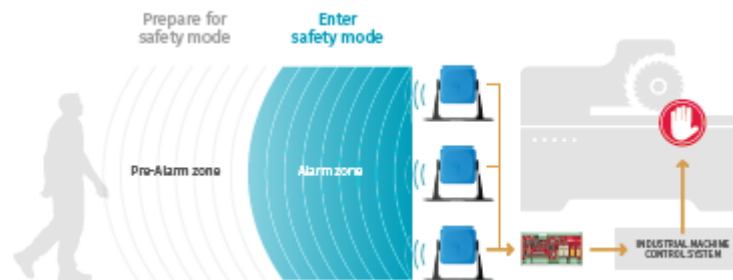
Auxiliary outputs

The controller has two auxiliary relay outputs, which can be configured to signal pre-alarm, fault and muting status.
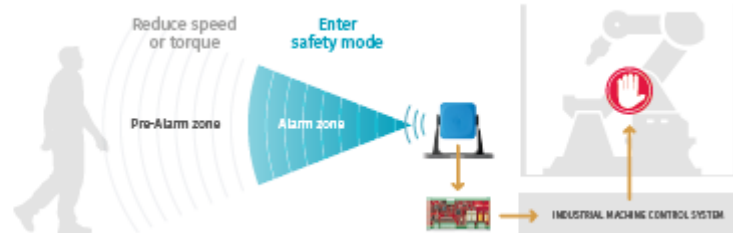
Safety outputs

The controller has one dual-channel, force-guided safety relay output for alarms and direct or indirect safety of the machinery.

EXAMPLE 1
Safety on automated machine tools

EXAMPLE 2
Safety on automated robot arm

Interested? Please email us to arrange a demonstration

Read our privacy policy

Andy Yorke
Director
Sensor Centre Limited
info@sensorcentre.com
0844 3351232
www.sensorcentre.com