

SEEN SAFETY

IRIS 860 Detection Zone Guide

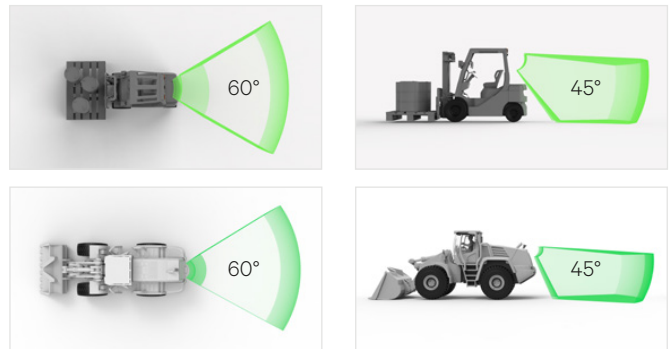
Setting an appropriate detection zone is critical to the success of using IRIS 860 sensors. The detection area should be a careful balance between too little detection –resulting in reduced safety effect– and too much detection, resulting in irrelevant alerts.

Here are five aspects to consider when setting the IRIS 860 detection zone.

1. Where should detection be targeted around the machine?

To avoid over-alerting, IRIS 860 sensors are designed to specifically target critical risk zones only. Each sensor has a 60° x 45° field of view, and can be attached anywhere on the machine. Remember that the sensor requires line-of-sight to the reflective tape, so make sure it has an unobstructed view.

The most common setup is either one or two sensors mounted on the back of the machine to monitor the critical risk zone behind the machine as it reverses.



Each sensor has a 60° x 45° field of view

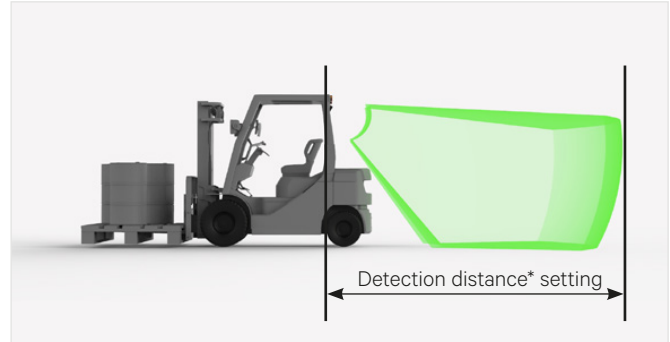
2. What distance should the detection zone be set to?

There is no right or wrong answer, the optimal size will depend on your unique conditions. Consider:

- The amount of separation you would like to maintain between pedestrians and your machines
- The speed of the machines and their stopping times

Making the detection zone too big could result in unnecessary alerts, but too small and the driver might not have time to react. The sensor's maximum detection range is 8 metres / 26 feet.

Remember to factor in the distance between the sensor and the extremity of the machine.



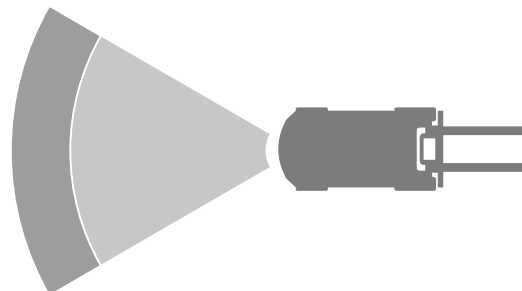
The detection distance can be pre-set up to 8m / 26 feet.
*Remember to take into consideration the length of a counter-weight.

3. Early warning zone

The detection area can be configured with two alert zones:

- The critical risk zone (continuous audible alert)
- The early warning zone (beeping audible alert)

Adding an early warning zone gives the driver and pedestrian time to modify their behaviour before they enter the critical risk zone.



- Critical alert zone = continuous audible alert
- Early warning zone = beeping audible alert

4. What shape should the detection zone be?

- The default 60° detection fan shape is suitable for most applications.
- Multiple sensors can be used together to achieve a wider field of view.
- It is possible to customise the shape of the detection zone. More information about this can be found in the IRIS 860 Installation Guide.

5. When should the sensor alert?

IRIS 860 sensors can be pre-set to only alert when the machine is reversing. This direction dependant setting is used to minimise non-critical, annoying detections. For example it prevents a detection if someone walks behind a machine when it is going forwards.

Typical setup examples

Forklift

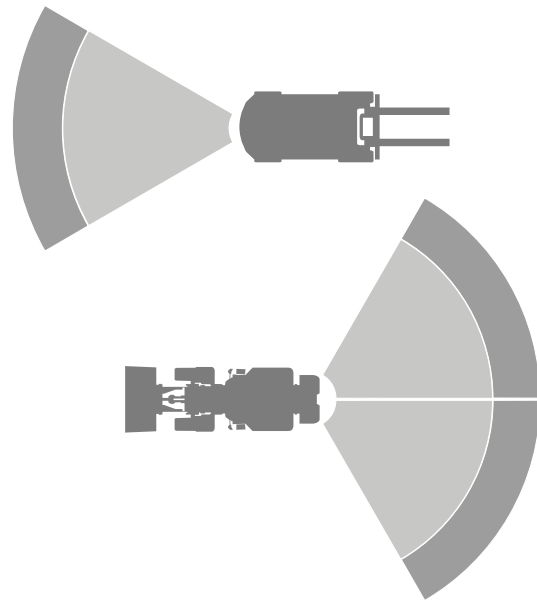
- 1 or 2 sensors on the top rear of the machine
- 3m / 10ft critical alert zone
- 1m / 3.3ft early warning zone
- Sensor set so to only alert in reverse.

Wheel-loader

- 1 or 2 sensors on the back of the machine mounted above the radiator
- A Cab Box inside the cab with cables connected back to each sensor
- 5m / 16ft critical alert zone
- 1.5m / 5ft early warning zone
- Sensor set to reverse-only alert.

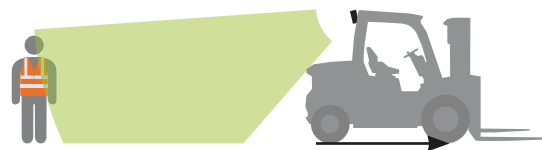
Custom detection area

The shape of the detection area can be customized to minimize non-critical detections. In this example, 2 sensors have been used to achieve a 120° field of view. To minimize overall width the edges of the detection zone have been trimmed.

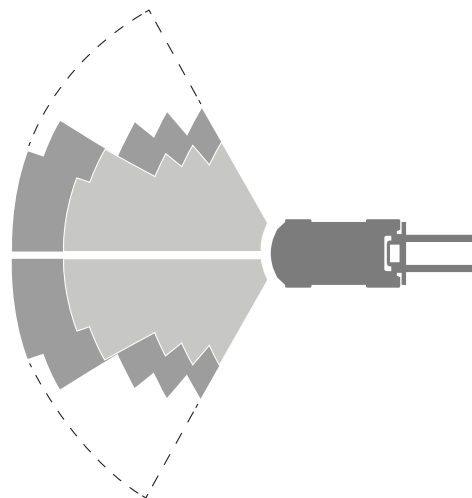


- Critical alert zone = continuous audible alert
- Early warning zone = beeping audible alert

Machine going forwards, no alert



Machine reversing, alert!



IMPORTANT. SEEN IRIS 860 sensors can provide collision warning assistance to the operator but do not replace the need for proper operator training and best practice safe operating procedure. While IRIS 860 sensors can alert the machine operator to a potential collision, the operator is always fully responsible for the safe operation of the equipment. IRIS 860 sensors do not comply with the regulatory standards required for devices which are intended to directly control vehicle or machine safety functions. Using the sensor accessory port to control a vehicle or machine function is entirely at your own risk.