

Basic hints for better system design for Redscan – Horizontal detection

Location of installation

- * Install the detector so the majority of traffic is moving in the detection pattern.
- * If there are obstacles in the laser path, it can not detect beyond or behind the obstacles.
- * The mounting height should be around 28 inch (70cm) so the beam can hit the waist of a human target.
- * Mount the unit on a wall or a solid surface. An unstable installation could be a cause of false alarms.
- * Direct or strong reflected sunlight on the face of the detector can affect the performance of detection. Do not face the sun, grasses or water surfaces to avoid reflection.
- * Do not install the Redscan unit sideways.

Confirm the detection area can be covered by camera

- * Miss-matching detection area and camera views means that operators can not see the crucial image on the monitor screen. The detection area should be within camera view.

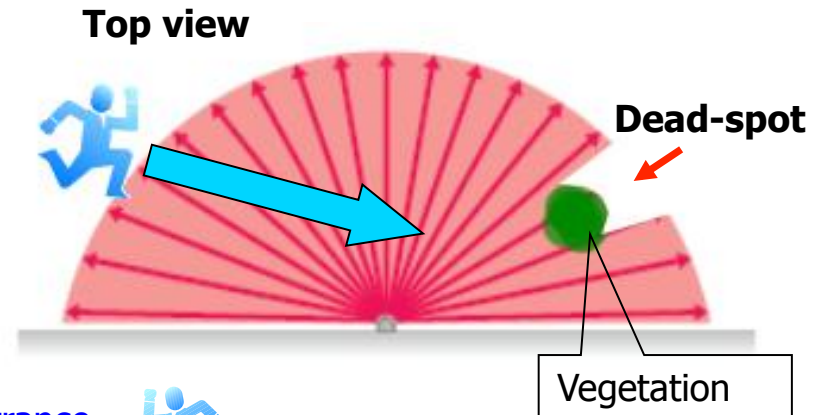
If there is a possibility that people can crawl under the area, set the unit at an angle or use multiple units or consider a back-up detector.

Basic hints for better system design for Redscan – Horizontal detection 1

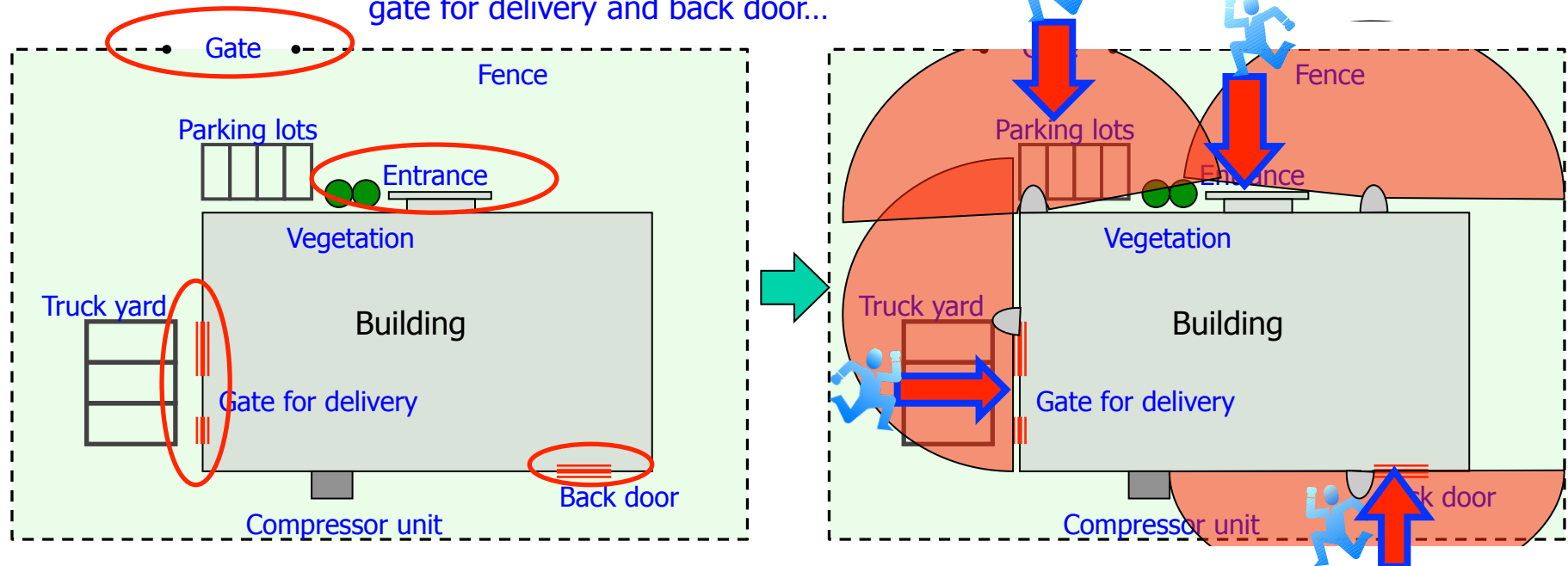
To reduce missed alarms

- Install the detector so the majority of traffic is moving in the detection pattern.

If there are obstacles in the laser path, it can not detect beyond or behind the obstacles. Select the place where the detector can cover the required area.



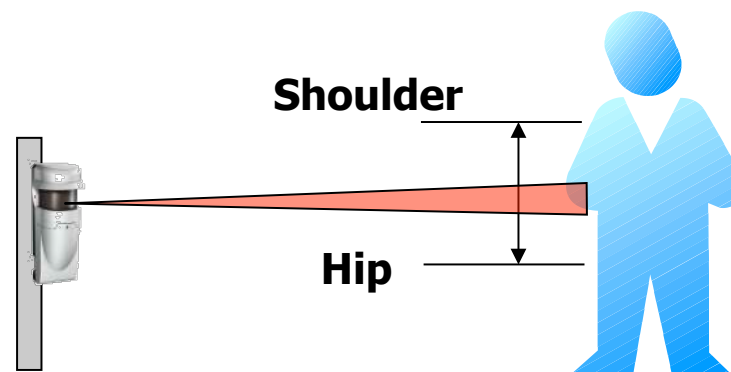
When you need to protect a gate, entrance, gate for delivery and back door...



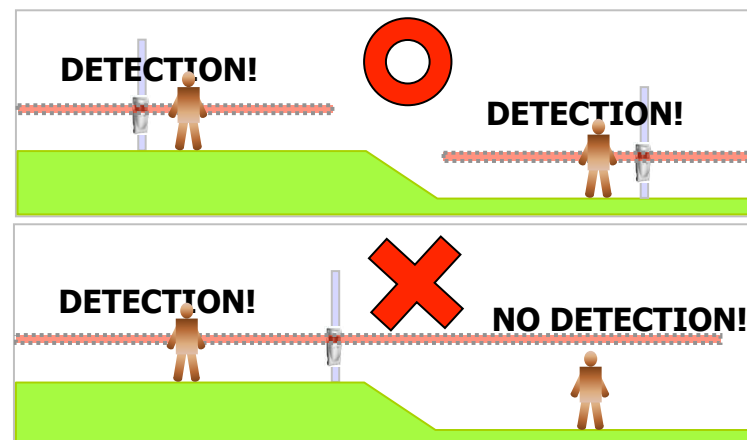
Basic hints for better system design for Redscan – Horizontal detection 2

To reduce false and miss alarm

- * The mounting height should be around 28 inch (70cm) so the beam can hit the waist of a human target.



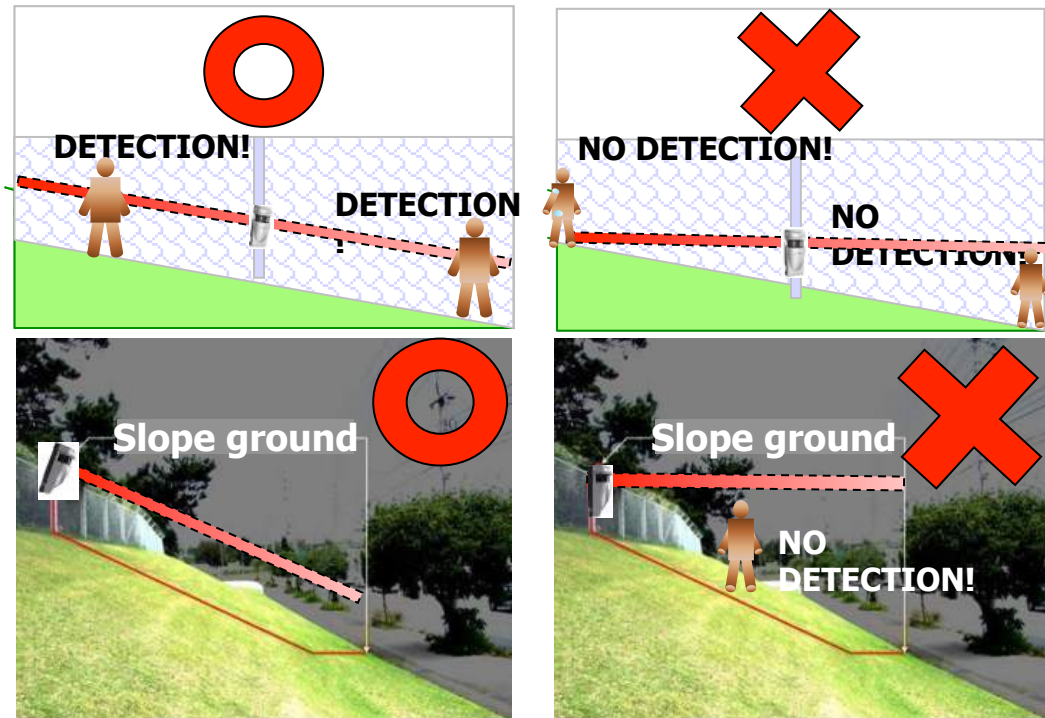
If there is big difference of altitude on the required area, it may be unable to cover in the area of one unit of REDSCAN. In this case, two or more sets of REDSCAN(s) need to be installed.



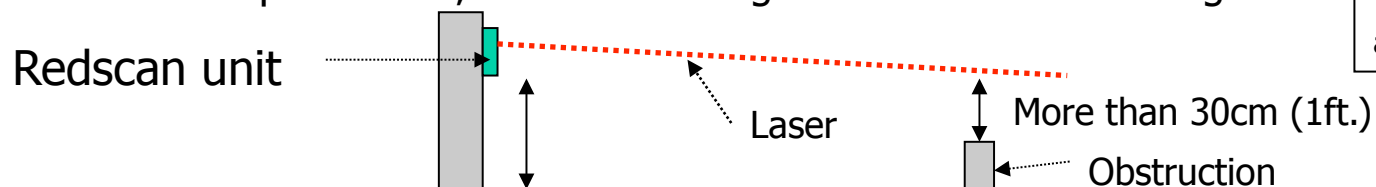
Laser beams should hit human body (from shoulder to hip) in the required area for proper detection.

Basic hints for better system design for Redscan – Horizontal detection 3

Need to keep laser scan beam parallel to the ground.



Furthermore, when the laser beam would hit the ground at obtuse angle, the unit may not scan the area properly. If the edge of the detection area isn't above 30cm (1ft.) from the ground surface, the angle or the portion of the portion of the detection area should be adjusted so that the area close to the ground surface should be disregarded by using Redscan setup software, Redscan Manager or the "offset" setting.

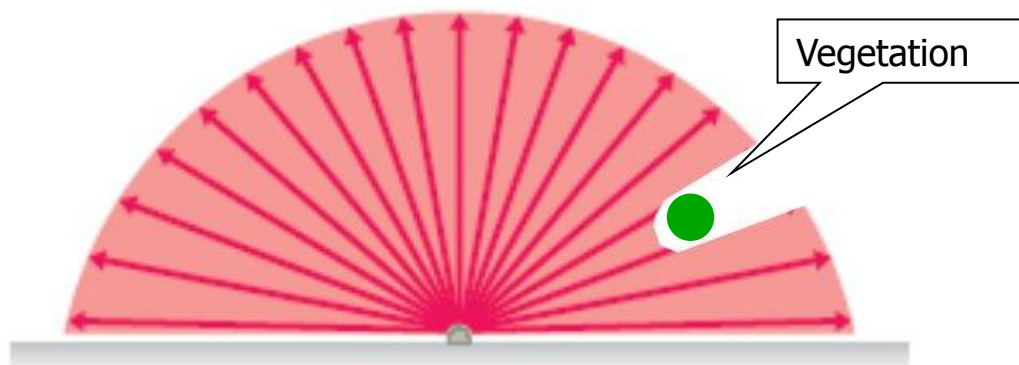


To avoid effects from rain and the spray of rainfall.

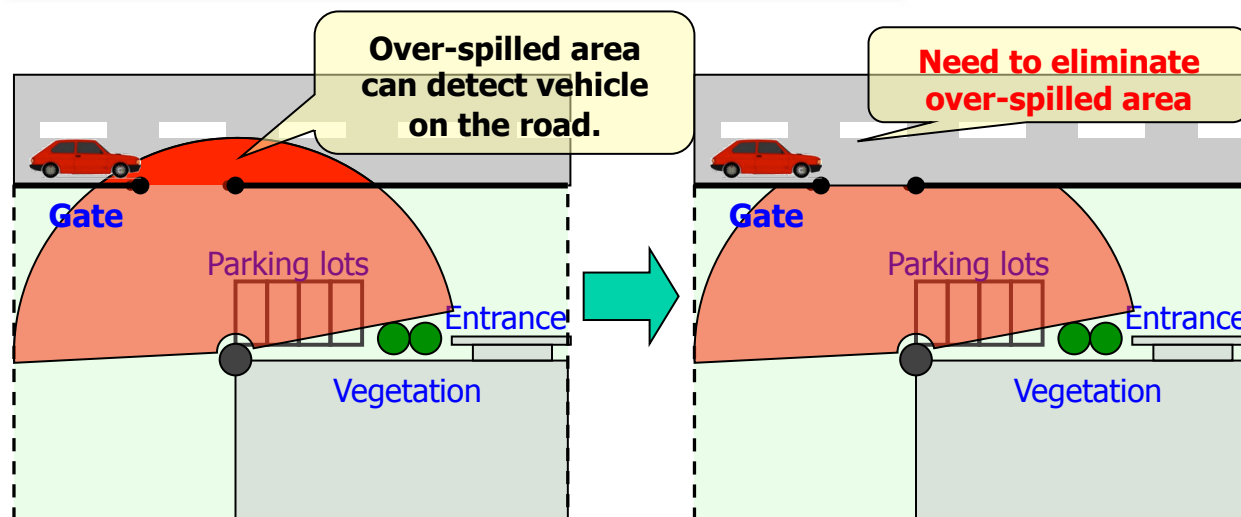
Basic hints for better system design for Redscan – Horizontal detection 4

To reduce false and miss alarm

- * Adjust the detection area avoiding vegetation and public area.



If there is vegetation or tree branches near the detection area that will move with wind, it will cause false alarms. Therefore, the detection area should be offset 1m (3.3ft) or more as the vegetation will surely grow.



Detection area should be adjusted properly within the property in order to avoid public transportation.

Basic hints for better system design for Redscan – Vertical detection

Location of installation

- * Install the detector so the majority of traffic is across the detection pattern.
- * The mounting height: Strongly recommended 4-15m (Approx. 13-50ft.).
 - In case that laser length is more than 7m (Approx. 23ft.);
Redscan performs better with separation between target and unwanted noise, such as fog.
- * Mount the unit on a wall or other solid surface. An unstable installation could cause false alarms.
- * Direct or strong reflected sunlight toward the face of the unit can affect the performance of detection.
- * The unit should be mounted to avoid any cables and projections like camera housings. Block from roof-water drainage and downspouts.

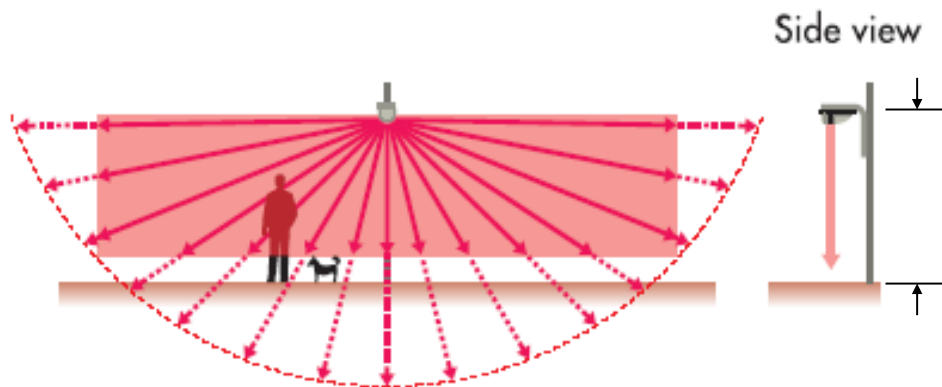
Confirm the detection area can be covered by camera

- * Miss-matching detection area and camera views means that operators can not see the crucial image on the monitor screen. The detection area should be within camera view.

Basic hints for better system design for Redscan – Vertical detection 1

To reduce miss alarm

- Install the detector so the majority of traffic is across the detection pattern.



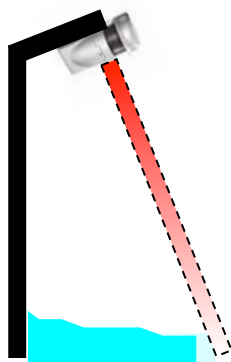
The mounting height: Strongly recommended 4-15m (Approx. 13-50ft.).

- In case that laser length is more than 7m (Approx. 23ft.);

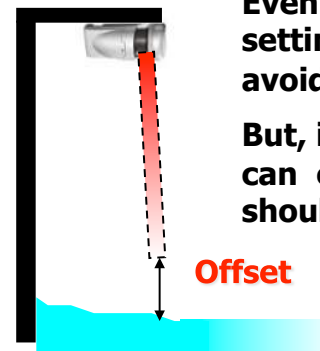
Redscan performs better with separation between target and unwanted noise, such as fog.

Basic hints for better system design for Redscan – Vertical detection 2

[Water's edge]



Water reflection may cause false alarm



Even with enough offset setting, reflection can be avoided.

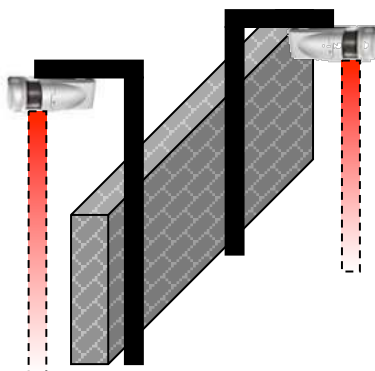
But, if the water level can change, Redscan should not be used.

Offset

[Human running]



No risk to run through at high speed



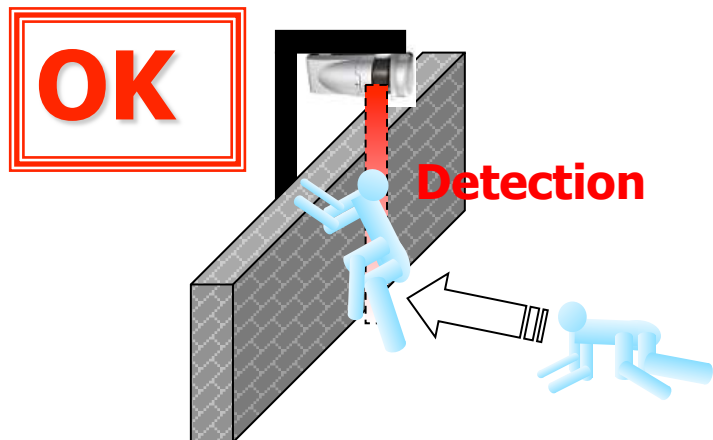
Risk to run through at very high speed

0° Angle

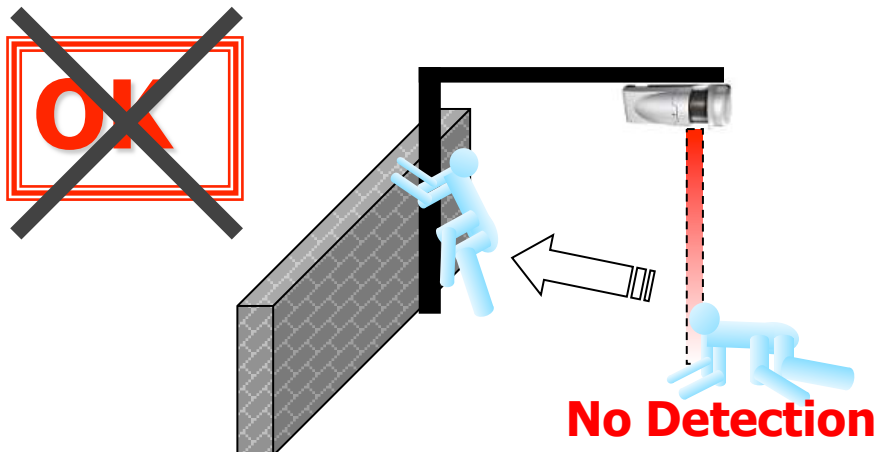
Running person at Max. 11km/h (6.9mile/h) can be detected. There is a risk of running through.

Basic hints for better system design for Redscan – Vertical detection 3

[Crawling near wall]

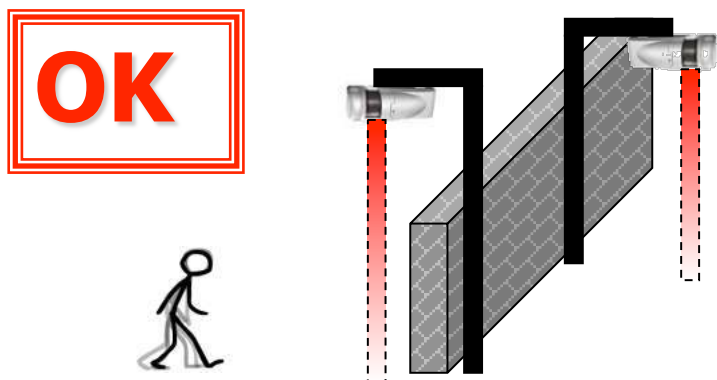


0° Angle Vertical Mount with no chance to crawl. Detected at surface on the wall or fence

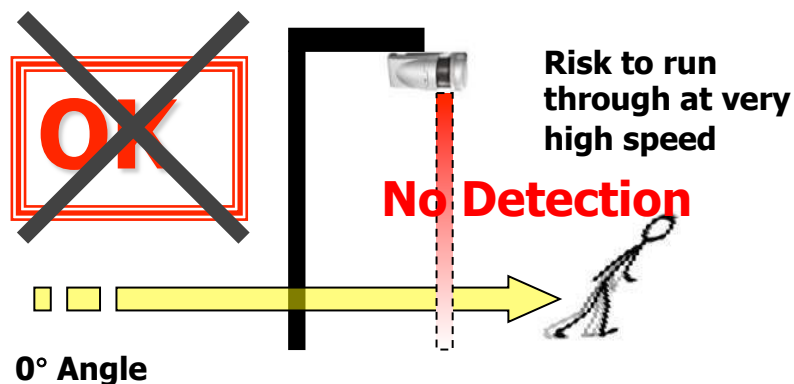


0° angle vertical mount where crawling may happen

[Human running]



No risk to run through at high speed



0° Angle

Running person at Max. 11km/h (6.9mile/h) can be detected. There is a risk of running through.

Basic hints for better system design for Redscan – Vertical detection 4

Redscan **CAN DETECT** a target height of **35cm (14in)** in the following case

