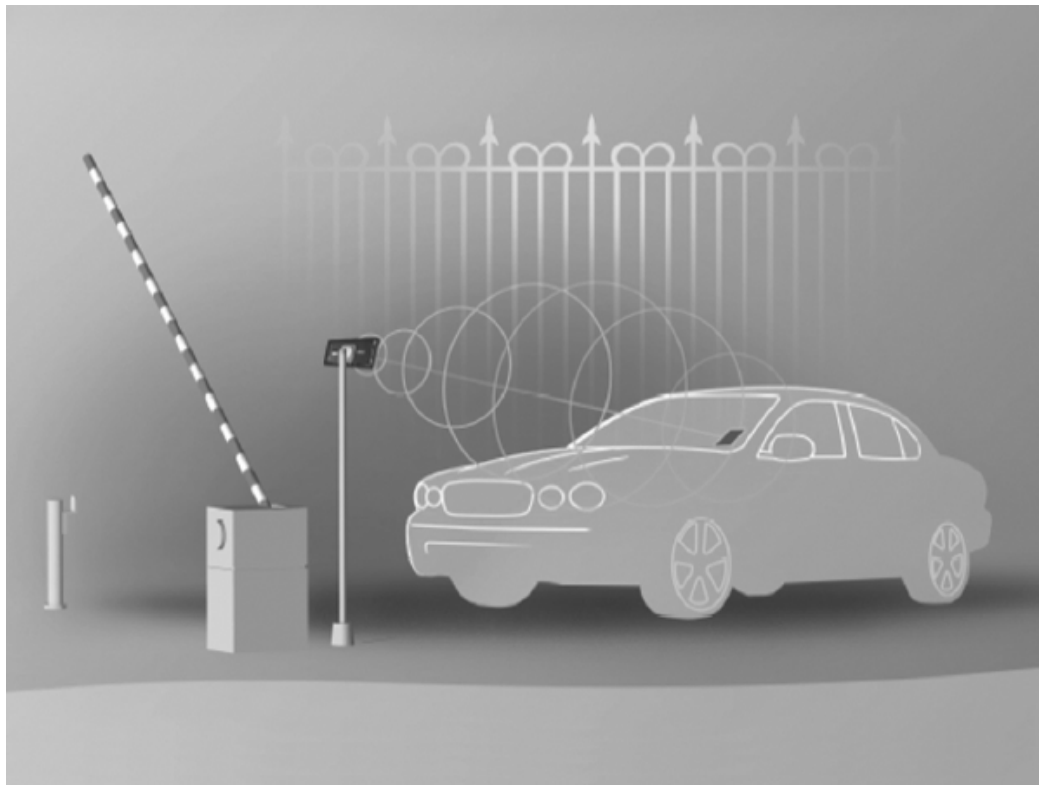


Installation Guide **Vehicle Access Control**

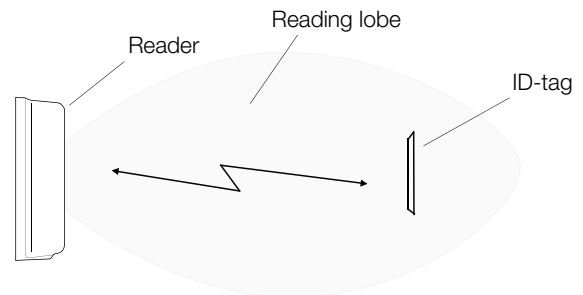
Guidelines for installing the TagMaster RFID system in vehicle access control applications.



Installation considerations

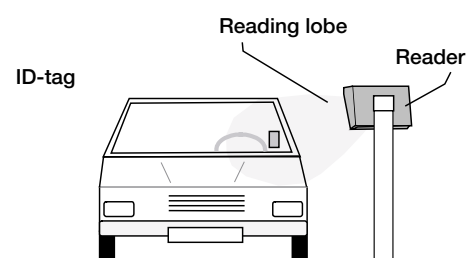
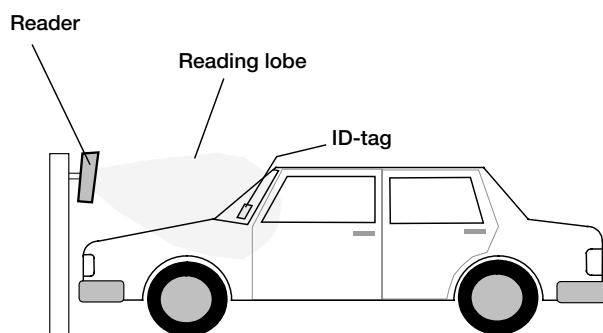
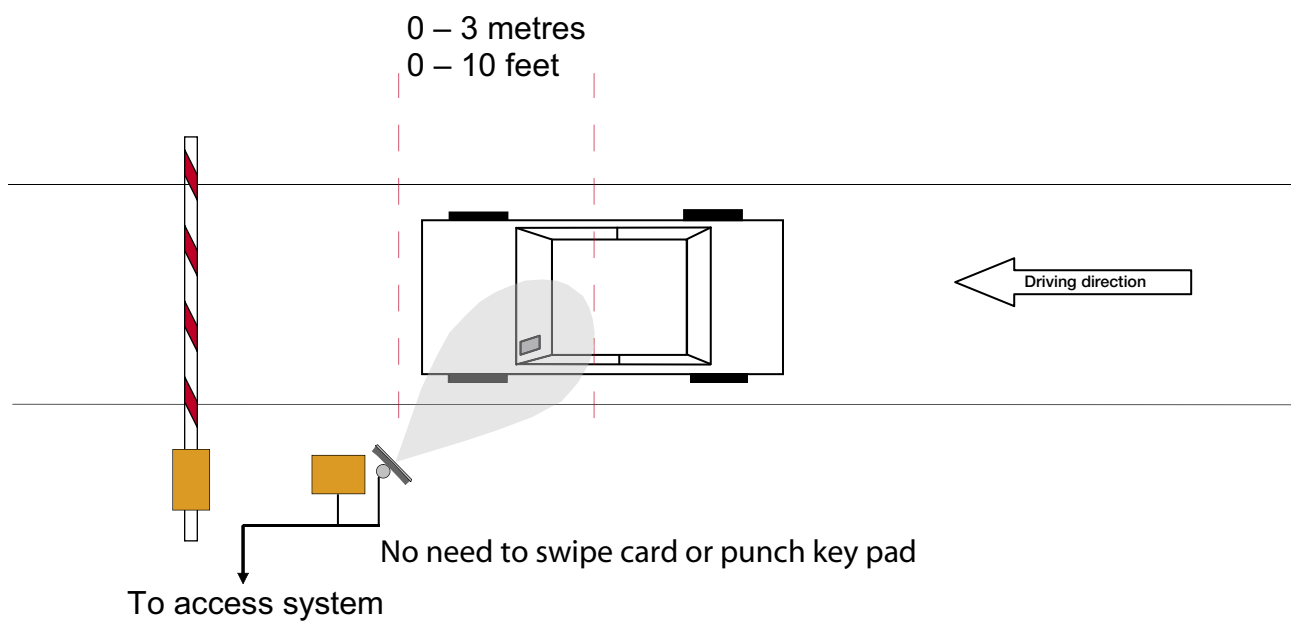
Before installing the TagMaster RFID system it is important to consider how the reader and ID-tags are best mounted considering the local surroundings. In this brochure we will introduce a couple of basic installation options.

- Always mount the reader as parallel as possible towards the ID-tag.

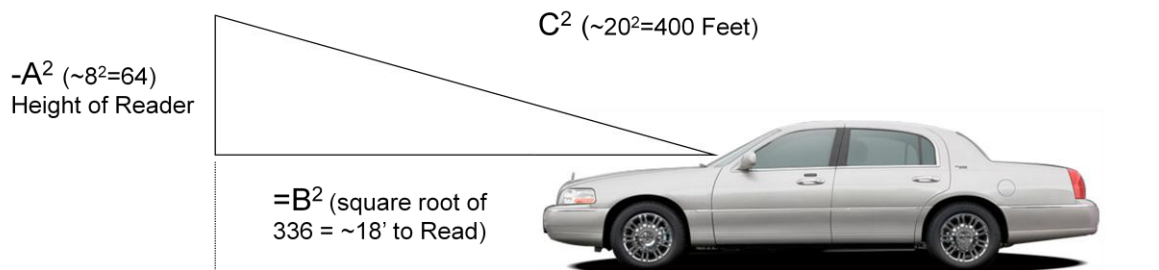


Reader installation

- Vehicle single-lane identification at barrier



Calculating Distance using $C^2 - A^2 = B^2$

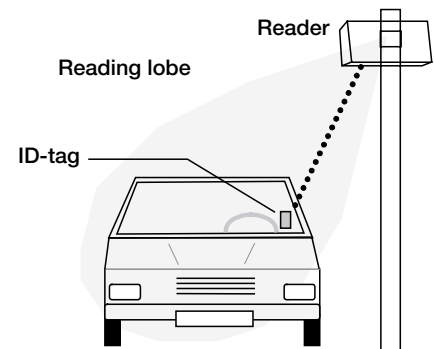
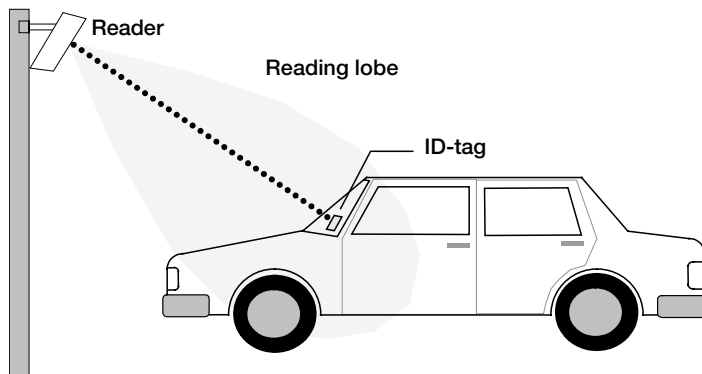
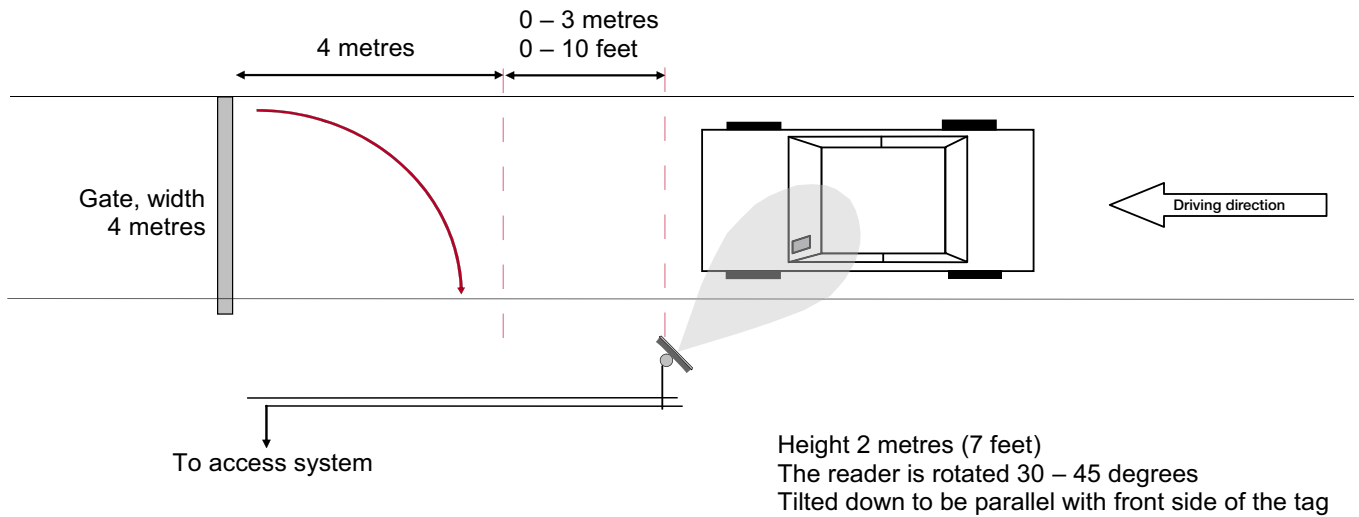


In the scenario above, the Reader is up in the air 12 Feet, but the average Tag placement is around 4 feet up on the windshield. We take the equation $C^2 - A^2 = B^2$ to find the actual distance needed to get our Reader to read a Tag. (For this example we are using a LR-6 Reader, which can read up to 20 feet)

$C=(20 \times 20=400)$ $-A=(8 \times 8=64)$ comes to 336, $B=(\text{square root of } 336)$ comes to 18.33 feet before the car is read by the Reader.

- Vehicle single-lane identification at a gate

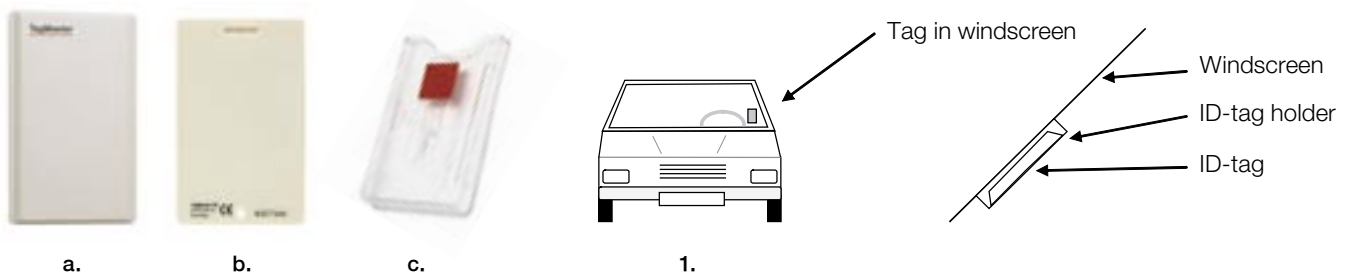
In applications where the distance between vehicle and gate is remote, the reader is preferably mounted higher.



ID-tag installation

- **Mounting the ID-tag**

Depending on specific installation requirements, ID-tags can be mounted in different areas inside the windscreen. Always position the ID-tag on the side closest to the reader. The image below shows the front (a) and back (b) of the ID-tag. Please note that the ID-tag can ONLY be identified from the front side, which means that the front side must face the reader. The ID-tag should be mounted in a WinFix holder (c), placed preferably like described in illustration 1.



- **Several ID-tags in the windscreen**

In cases where several RF-tags are used, always position the TagMaster ID-tag on the same side as the reader. In some cases the orientation of the ID-tags may influence the performance of the system (see illustration below). Contact your system supplier for more information.



- **Windscreen with metallic coating**

In case of windscreens with metallic coating, mounting of the ID-tag has to be done in the metallic-free space. This area is normally placed behind the rear mirror (see illustration 2). (In some cases the metallic-free space is located in the lower corners of the windscreen.)

