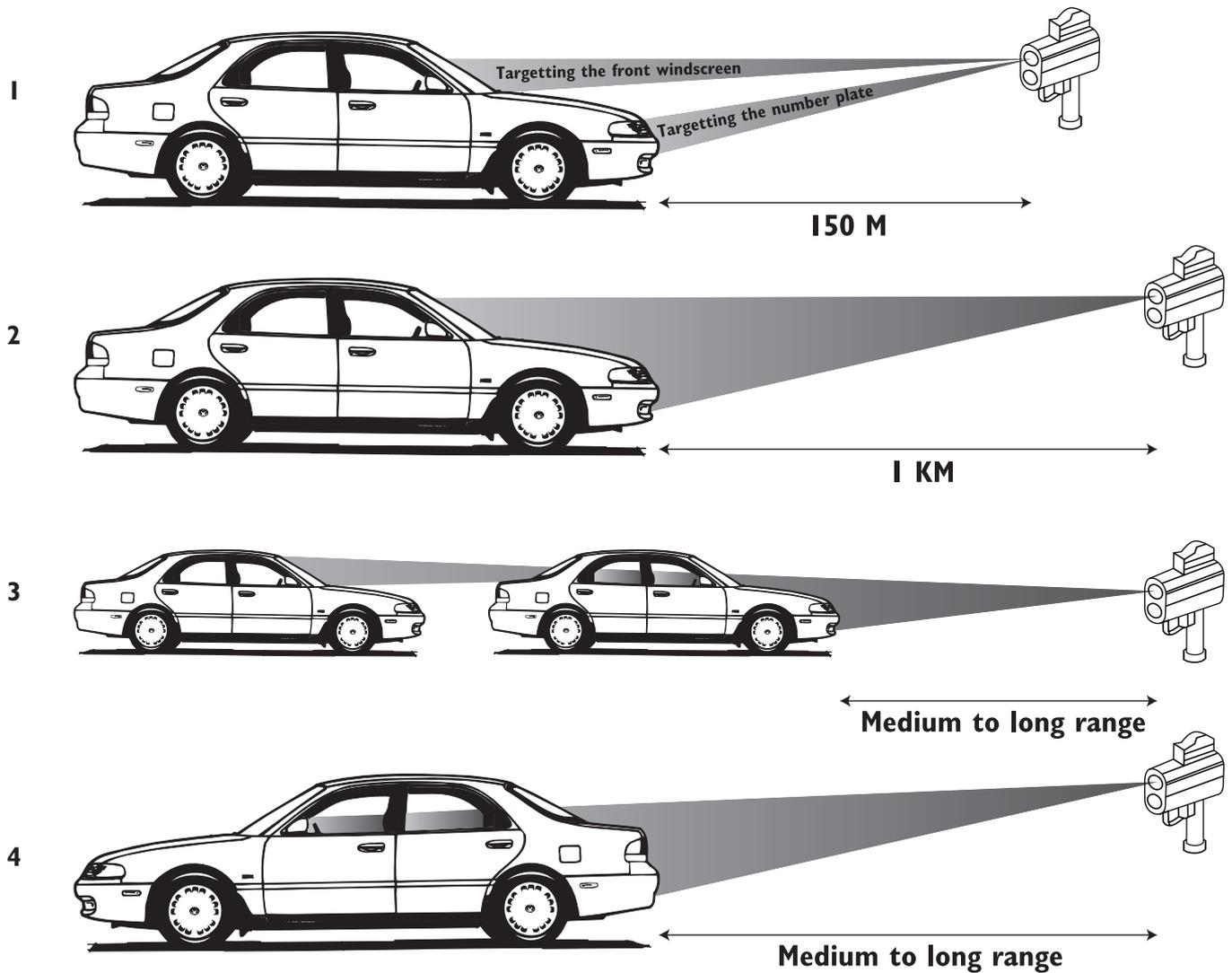


# How does Laser detection work?



## 1 Short Range

This highlights the difficulties of short range detection. The beam is very narrow and with a single sensor it is not possible to cover both scenarios.

## 2 Long Range

At long range it is not possible to choose which part of the vehicle to target. On some Laser Guns the sight is bigger than the vehicle. Wherever the LASER ALERT SYSTEM is fitted it is possible to trigger it.

## 3 Following a vehicle being targeted

At short range it is difficult to detect, but if the vehicle in front is targeted from medium to long range it is possible to detect as long as the sensor is fitted to the front windscreen.

## 4 Rear Detection

When the vehicle is targeted from the rear, the laser signal will pass through the rear windscreen and trigger the LASER ALERT SYSTEM as long as no obstructions are in the way.

## How mobile Laser Traps operate

Police Laser Guns work by firing a pulsed beam of light at a vehicle which then measures the time taken for it to return, this can take as little as a third of a second. The beam is very narrow, this allows the enforcement officer to be very precise in which vehicle they want to target. From a motorway bridge any vehicle in a line of traffic could be targeted. The beam fired from the gun is of a conical shape, the further away from the gun, the wider the beam.

This causes great problems when fitting a Laser detector to a vehicle, as complete coverage is very difficult to achieve at short range.

## How the enforcement officer chooses which vehicles to target

Even though the police have all the high tech equipment for measuring and recording the speeds of motorists, it is down to the officer using the equipment to choose which vehicle to target. A lot of people believe that the police are checking every vehicle as they go by, this is not the case. Guidelines state that an officer can only measure the speed of a vehicle that they believe to be exceeding the posted limit. **This is often why a driver with a Laser detector fitted may see a gun or van nearby, but will not get a warning alarm as they drive by.** The majority of the time they are targeting the number plate of the vehicle as this is normally vertical to the road, but any part of the vehicle could be used.

## Where is the best place to mount LASER ALERT SYSTEM?

Tests with Speed Enforcement teams have shown that the most effective place for mounting a single detector is low down in the centre of the front windscreen. Above 200 metres this has proved to warn every time the vehicle was targeted. (tested with a standard saloon car). If the Laser gun is targeting your number plate at less than 200 metres it is likely that a dashboard mounted LASER ALERT SYSTEM **WILL NOT** detect the signal. At 200 metres the beam of the Laser can be as little as 200 mm.