

Radenso

User's manual



Radar antenna RADENSO HD+

Main functions of Radenso HD+

Radenso HD+ equipment is the first radar detector from the Radenso family, intended for fixed installation in vehicles. It is designed to protect the driver from fines for speeding; its main functions are detections of micro-wave radars (X / K / **Ka narrow** bands) and laser guns. In combination with GPS detector Radenso GPS+ (wireless connection), it communicates with drivers in English language and also detects GPS points like red light cameras and sectional speed cameras.

Installation:

Installation of Radenso HD+ is not complicated; however, it is recommended that the installation is committed to a professional service or your retailer if it is capable of ensuring an appropriate quality technical support.

Installation of the radar antenna:

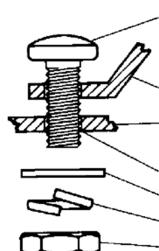
The antenna captures signals emitted by radars; the choice of the installation place is therefore crucial to its proper functioning and good sensitivity of the detector.

The antenna is mounted to the front of the car, usually into its plastic bumper or behind the front grille in front of the vehicle radiator. It must be installed in the place from where the front part has a good view of the road ahead. It is ideal to locate the antenna into the bumper vent, 30-50 cm above the ground. If you choose to mount the antenna so that the bumper covers its front part, check the material from which the bumper is made and whether it contains a metal reinforcement. Some types of plastic can weaken radar waves and reduce the efficiency of the detector. Never mount the antenna behind metal parts of the vehicle!

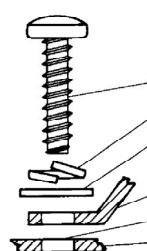
In North America, install the antenna in a horizontal position for maximum performance. Only in countries that use horizontally polarized radar gun a vertical installation is recommended. The connecting cable must point backwards and mounting holes up and down.

Selection of mounting screws:

When installing the antenna, you can use self-tapping screws in places where the nut can be attached from the other side, as well as classic nut bolts:



Screw
Antenna
Mounting area
Hole 5mm
Support plate
Spring part
Nut



Self-tapping screw
Spring part
Support plate
Antenna
Hole 3.7 mm
Mounting area

Mounting the antenna:

After selecting a suitable location for the antenna and the type of screws, drill two to four screw holes. It is recommended that the antenna is attached with 4 screws. The antenna cable can be slightly bent. Firstly, attach the antenna with two screws crosswise against each other and tighten them partly; then mount the remaining two screws.

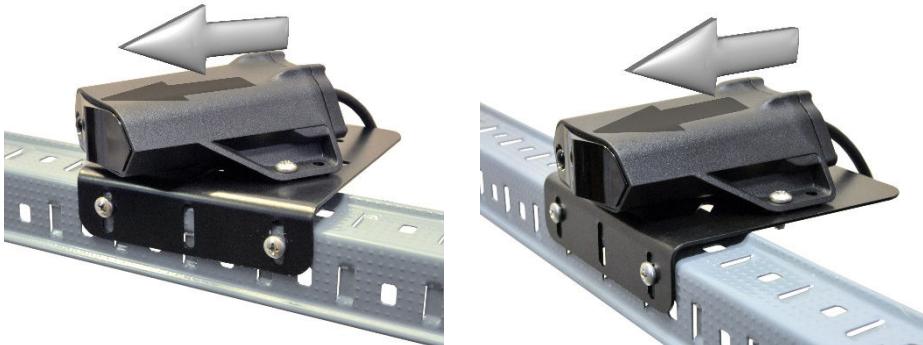
In some vehicles, it is advisable to carry out the installation using a special support plate that is included in the sales package. It has the shape of the letter "L" and is made of thick steel plate with pre-drilled holes. Firstly, screw the support plate to the appropriate place, and then attach the antenna to the plate.

An example of the antenna vertical installation (the arrow points in the driving direction > front of the car):



Remember: *A vertical installation is only recommended in countries where horizontally polarized radar guns are in use (e.g. Australia)*

An example of the antenna **horizontal installation** (the arrow points in the driving direction > front of the car):



The antenna cable:

After fixing the antenna, pull the cable through to the driver's cab. It is recommended that you add it to the existing cabling and attach by fastening straps. The length of the cable from the antenna to the coupling connector is 1.7 meters. The length of the second part of the cable is 2.5 meters. Antenna connector is waterproof and allows easy connection and disconnection when changing the point of antenna mounting or replacing the antenna.



When pulling the cable through, keep in mind that the cable must not touch any hot parts of the car or be installed in places with higher temperature, and must not be attached to any moving parts of the car!

To pull the cable through to the driver's cab, use the hole with diameter of about 8 mm. If there is no free hole available, drill a hole in a suitable place. The drilled hole should be adjusted so that the cable is protected against accidental abrasion, for example by using a rubber grommet. When drilling the hole, keep the utmost care not to damage surrounding cabling.

12V power supply:

After the mechanical installation of the radar antenna and cabling, connect the cabling to power. Connect the black wire to -12V, and the red wire with a fuse to +12V.

Before connecting the +12V power supply, remove the fuse from the case because of the possibility of a short circuit during installation

It is recommended to connect cables to a switched power source (No. 15). When connecting cables to a constant power supply (No. 30), it is recommended to use a delayer so that the antenna is not powered continuously; this avoids discharging of the vehicle battery.

Operating frequency:

Ka narrow: 34,0GHz, 34,3GHz,
34.7GHz, 35,5GHz (\pm 120MHz)
Ka Wide: 33.4 GHz \sim 36.0 GHz
K narrow: 24.125GHz (\pm 70MHz)
K wide: 24.125GHz (\pm 150MHz)
X band: 10.525GHz (\pm 50MHz)
Laser: 904nm

Technical parameters:

Operating temperature:
-20 - +85 ° C
Operating voltage: 11-16 V
Energy consumption: 190 mA
normal, 220 mA max. (12V)
Dimensions: 96 * 109 * 40 mm

FCC Compliance

This device complies with part 15 of FCC rules: Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received including interference that may cause undesired operation.

FCC NOTE: CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE MANUFACTURER COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT

Your Dealer:

