CONSUMER DESIGN PRODUCTS
C.D.PRODUCTS S.A.
C/ Kanna 2, Local 3 (Pol. Ind P-29)
28400 Collado Villalba, Madrid (España)
www.cdpsa.es

MOBILE AND FIXED RADAR DETECTOR KAZA CDP DT 450 MTR

EUROPEAN MODEL – Factory settings for SPAIN

1. Introduction.

Thank you for purchasing the **Mobile and Fixed Radar Detector KAZA CDP DT 450 MTR**.

The KAZA CDP DT 110+450 Radar Detector uses the most advanced GPS technology and detector antenna. It has been specifically designed and developed for the Spanish market, optimizing its sensitivity to detect mobile radars; it works with a verified and efficient database to detect fixed radar warnings, for the exclusive use of KAZA CDP DT 110 owners.

Do not use the KAZA CDP DT 110+450 unit to avoid speed limit controls, but rather to promote safer driving conditions. The device will remind you of the limits that should be complied with at all times, aiding you to avoid mistakes or blunders that may lead to accidents or speeding fines.

Don't handle the unit while driving, since this may lead to distractions, deviating your attention from the road.

2. Considerations for the use of the Mobile and Fixed Radar Detector KAZA CDP DT 450 MTR

¿What are the differences between a radar detector and radar warning by GPS?

The **radar detector antenna**, located in front of the vehicle, captures and detects the existence of a radar by receiving the radio wavelengths (Ghz) emitted by the radar.

The **radar warning by GPS**, located inside the vehicle, identifies the position of the vehicle and the radars by means of an incorporated complete and updated database. Therefore, it doesn't necessarily need to capture or detect a radar signal. When the vehicle approaches one of these points, the radar warning will warn you sufficiently in advance (thanks to its database) so you have time to reduce your speed. The efficiency of a GPS radar warning unit depends on the *quality of the database*.

The Mobile and Fixed Radar Detector KAZA CDP DT 110+400 combines both technologies so its effectiveness is quite high.

How does radar used by the police work?

A radar works as follows: The device emits high frequency electromagnetic radiations that are reflected in objects. The frequency of this radiation reflected in a static object is different from that reflected in a moving object, and radars are based on this principle to calculate the speed of the vehicle. This is known as ***Doppler Effect***.

The only form of detecting these radar emissions is through a radar detector like KAZA CDP DT 450 MTR.

The detector antenna of the KAZA CDP DT 450 MTR model has been specially designed and configured to receive the emissions of radars used in Spain. Most people are unaware of the existence of these devices or they believe they are not effective due to the poor results of prior detectors that were unprepared to receive the signals of the Spanish speed traps. This is due to an erroneous belief that all detectors offer the same sensitivity and warning distance, but this is not correct since the system used in speed controls differs a lot in Spain regarding other countries and the antennas have to be optimized for the Spanish market.

This problem has been augmented lately with new radars used by the police that are very difficult to detect. This is because they emit in a very high frequency and with a very low nominal power of emission (between 0.25 and 0.5 mW). For this reason, the detector antennas have to be very sensitive to the frequencies used in Spain and are not free of false warnings.

3. Recommendations for use of the Mobile and Fixed Radar Detector KAZA CDP DT 450 MTR:

- Install the antenna in the vehicle (optional), parallel to the highway and facing forward. Place it as shown in the photo, so the detector antenna faces the road through the vehicle's grills without any obstacle blocking its view.

- Place the GPS module inside the vehicle with the power cable. **Never use other power cables since this could damage the unit irreversibly,** and this circumstance would not be covered by the warranty.
- Check that the GPS module has coverage inside the vehicle. If your vehicle has athermal glass windows, find a place on the dashboard where the GPS gets proper coverage, usually below the shaded area with black points in the rear-view mirror or on one side near the window.

Athermal windows have a metal layer with lead inside the windshield. This metal layer could cancel or weaken the GPS signal that reaches the detector. In these athermal glasses, there is an area of black points located at the top, behind the rear-view mirror where there is no metallic layer. We recommend placing the portable GPS module here or right below this area.

The detection distances depend on many factors: installation and orientation of the detector, configuration, radar type, amount of traffic, interferences, etc., but mainly it depends on the radar type and on a correct installation.

RADARS DETECTED WITH THE ANTENNA OF THE CDP DT 450 MTR

The detector antenna of the KAZA CDP DT 390 MTR detects the radars that emit wavelengths and use KA bands in 34.3 and 35.5 Ghz and Multa Radar CD/CT.

In Spain, KA band and Multa radar CD/CT are used for both fixed and mobile radars.

In the KAZA CDP DT 450 MTR model, these bands are the factory setting in DT110 Options by default. See examples (photo 6).

(Photo 6)

RADARS NOT DETECTED BY ANY ANTI-RADAR UNIT.

Autovelox mobiles that work with a laser in cross-section to the road. Approximately 2% of radars are of this type. They may be identified if you observe a car on the roadside with the glass window behind the driver lowered halfway.

(Photo 7)

Important warning:

At times, the antenna of your detector won't produce any alarm when you pass by a radar.

This could be due to the following reasons:

1. The radar is off.
2. The radar is damaged (see photo 6).
3. The radar is in gauge state.
4. The mobile radar is temporarily turned off because police officers have stopped many vehicles and are fining drivers.

At these times, the detector antenna won't emit alarms for obvious reasons, but you might receive warnings from the GPS system of your device.

4. Beginning to use the equipment.

1. **OPTIONAL:** Install the detector antenna (See antenna installation section).

2. Connect the adapter cable to the car lighter and to the unit.

3. Once you have turned on the car ignition, move the button of the power adapter supplied to the ON position and the warning module will turn on.

Now the detector is ready for use!

Important warning:

It is advisable to turn on the equipment using the power switch when the motor is running to avoid current peaks in the unit when you start the car.
To turn off the unit, move the adapter switch to the OFF position.

Important warning:
The detector bands carry factory settings for Spain.
The configuration for Spain is the following:

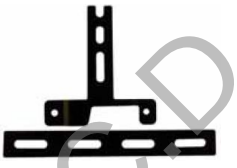
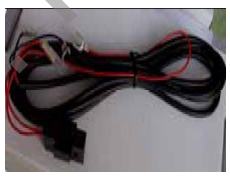
Multa Radar (MTR) On
Band K Off
KA1 On
KA2 Off
KA3 On
Laser On

5. <u>Installation of the detector antenna with the supports supplied (optional).</u>

Contents of the detector antenna box (optional):

- KAZA CDP DT 450 MTR antenna.
- Cable 12V DC with fuse for antenna power.
- Bag with supports and screws.

Identify the components for the installation.

	
Screw the metallic support to the antenna. **1**	Attach the red terminal to the battery's positive end. **2**

Attach the black terminal to the battery's negative end.

3

Insert the cable terminals in the antenna terminals respecting the colors and moving the plastic case so they **don't** touch each other or make contact with any metallic part of the vehicle.

4

Fasten the cable with the flanges so it is not loose around the engine area.

5

Install the antenna in one of these points marked A or B.

6

Important warning:

To achieve good detections, make sure the detector's view is not blocked. The antenna must be facing forward completely horizontal to the road. If you wish to better detect the radars in overhead signaling, you may apply a maximum slope of 5 degrees upward. Make sure no objects interfere with its view. Install it as far as possible from metallic surfaces.

If you are uncertain about the installation, please go to a professional installer. The detection distances may vary greatly depending on the antenna's installation.

6. Interpretation of alarm warnings

The detector antenna suddenly emits an almost continuous tone and the visual alarm is visible.
You are close to a radar source. This situation requires immediate attention.

The detector antenna begins to make sounds slowly, increasing the speed of the tones and the visual alarm.
You are approaching a radar source directed toward your vehicle.

The detector antenna emits a weak signal and –suddenly– jumps to the maximum intensity.

You are approaching a radar source located behind a rise or curve. Since it is hidden, the signal will be detected weakly at first. Then it will appear with maximum intensity when you enter the field of vision of the radar.

The detector antenna emits short alarms during brief seconds.
You are approaching a radar source or emitting station located far and outside its vision. They are simple radio wavelength echoes.

The detector antenna receives a brief laser-type alarm.
There is a laser, probably very close.

The detector antenna emits brief and weak signals. These may be more intense when you drive near highway facilities (gas stations, mobile telephony antennas, urban centers, etc.)
They are simple interferences from other communication systems, automatic door detectors, alarms, garage-door remote controls, microwave emitting stations, etc. It usually occurs with the K band.

The detector antenna emits intermittent alerts without apparent reason.
It is probably a police vehicle with a radar-emitting device circulating in front of your vehicle. The radar signals are reflected in other vehicles and the radar detector captures the echo. It could also be another vehicle carrying a detector antenna and these detect each other.

The detector antenna warns you of a KA band in a weak and intermittent way.
You could be driving in an area with radar sensors (garage-door remote controls, alarms, mobile telephony repeaters, etc.)

The detector antenna makes a continuous noise when driving through the same place, but there is no apparent radar.
An emission that produces a false alarm probably exists. By using the unit, you will learn to differentiate between real alarms and false alarms.

The detector antenna doesn't seem to react to the radars.
Make sure that nothing blocks the field of vision of the antenna and that it is correctly connected. Also check there are no radar interferences memories recorded by mistake. Try deleting the radar interferences memory.

The radars might not always be in operation. Keep in mind that they are connected and disconnected periodically.

The detector antenna doesn't warn me in advance of fixed radars.
The fixed radars installed in overhead signaling and next to the highway (in huts) are the most difficult to detect. This is because they emit at a very low intensity. To detect this type of fixed radars, the GPS is the best solution. The detector antenna is not designed to capture fixed radars, although it may detect them. The GPS incorporated in the unit for this purpose will warn you much sooner.

The detector antenna did not issue an alarm when the vehicle circulated near a police car.
Their radar is not always in active mode, especially if they have already stopped a car.

Laser radar warnings.
Only portable laser radars with front focus may be detected, and these are not used in Spain. Fixed cross-laser radars are undetectable and only the GPS may warn you about them.

7. False alarms of the detector antenna.

The detector antenna of the KAZA is a microwaves receiver. To be able to detect the radars, this antenna must be very sensitive, since they emit at very low power. Due to the high sensitivity of the antenna, it might detect strong transmissions and give off false alarms.

Some devices may confuse the detector antenna:

- **The pre-collision systems (PCS)/adaptive cruise control systems (ACC) and blind spot detection systems (BSD) based in radar** of some automobiles or trucks can be detected and get false alarms in MTR band.

- **Another radar detector installed in a car.** If another vehicle has a radar detector and it circulates near you, the detector antenna will detect the KA band issued by the other device and it will give off a false alarm. If you are circulating in dense traffic and you approach and move away from this vehicle, the signal will disappear and reappear. This may be the most difficult false alarm to detect, since the detector might be in any vehicle around you.

- **Mobile telephony repeaters, data radio-links.** These repeaters emit in frequencies whose harmonics may coincide with the KA band. The KAZA detector includes a filter by software to delimit the KA band to 34.3 Ghz, 35.5 Ghz or Multa Radar, but sometimes the harmonic coincides and produces a false alarm. These types of false alarms are usually repeated in the same places.

As explained above, all radar detectors may give off false alarms, and this does not mean they are not working properly. If your device issues a false alarm, make sure the previous conditions are not applicable prior to sending it to the technical service department. Sometimes a false alarm may be produced in a deserted road, leading us to think the unit is faulty. However, although it may seem implausible, in isolated areas we may find radio-links of automatic land watering units, aircraft and air navigation radio links and other devices.

Note about the "K" band: If you activate the "K" band in Spain, many interferences and false warnings will be produced. All the radars that emit in band "K" are fixed and the GPS will warn you 500 m in advance. It is advisable to have it disconnected.

8. Contact data.

C.D.Products S.A.

Polígono Industrial P-29.
28400 Collado Villalba – Madrid.
www.cdpsa.es
www.gpsalerta.com
email: clientes@cdpsa.es

Technical specifications of the GPS and the Antenna (optional)

Operating frequencies: Band Ka 34.300, 34,700, 35.500 GHz ± 200 MHz
Band K 23.880 to 24.150 Ghz
Banda Multa Radar CD/CT

Detector laser: 800 to 1100 nm

Detector antenna power (optional): DC12V ~15V (from the vehicle's battery)

Transmission frequency: 390MHz±100KHz

Size (mm): Detector antenna (optional): 108 *101*49

Operation temperature: -20º ~ 85º C

Storage temperature: -30º ~105º C

IMPORTANT NOTE: CDP reserves the right to modify the user guide and product characteristics without previous warning. Also, some of the functions described in this guide may vary depending on the software version installed or the optional components acquired.