MOBILE AND FIXED RADAR DETECTOR KAZA DM 480 DEFENDER II

EUROPEAN MODEL - Pre configured for SPAIN



1. Introduction

Thank you for purchasing the KAZA DM 480 DEFENDER II Mobile and Fixed Radar Detector.

The new KAZA DM480 Defender II is a state-of-the-art radar detector that has been equipped with a new DSP antenna specially designed to detect, at a great distance, the new MTR radars (MULTARADAR), without producing false alerts. With extended range and fewer false alerts thanks to advanced digital signal processing (DSP) and in-vehicle technology filtering (IVT).

The Kaza DM 480 DEFENDER II DSP Radar Detector and Warning offers an improved detection range, with longer detection distances and the practical cancellation of false alerts caused mainly by the adaptive cruise control systems and blind spot sensors that equip some modern vehicles.

Radar detectors equipped with DSP technology recognize radar wave data by their unique signature. These detectors detect and block data other than individual signal, offering a great improvement in the cancellation of false alerts and identifying real radars with digital signatures. In addition, DSP technology allows a permanent evolution of the firmware adapting it to any change such as: new radars, sensors in vehicles that could interfere with radars, etc.

This powerful antenna increases its sensitivity by more than 30% compared to the previous version. It relies on a new DSP chip to identify radar signals quickly and more efficiently. It multiplies by 100 the capacity of filtration and detection of radiofrequency emissions and optimizes detections in MTR and KA band.

The new radars called MTR, with intelligent multi-rail control, are being strongly implemented throughout Europe. They cover more than 30% of radars in Spain and more than 80% in Portugal. They have become the model most chosen by the authorities.

This type of radar, which is replacing the veteran Multanova (34.3 Ghz and 35.5 Ghz), are able to act both static and moving, controlling several roads / vehicles at the same time.

The Kaza DM480 DEFENDER II radar detector and warning device offers a double protection shield:

- GPS radar warning.
- Exclusive DSP detector antenna with digital signature technology.

Do not use the KAZA DM 480 DEFENDER II Mobile and Fixed Speed Camera Detector to bypass speed controls, but to make your driving safer. The device will remind you of the limits that must be met at all times helping you not to incur distractions that may cause an infringement or accident.

Do not tamper with the unit inside the vehicle while driving, as this may divert your attention to the road.

Don't forget to check your country's legislation regarding the detector!

The user of this device will be solely and personally responsible for its use, taking into account the provisions of each country. The manufacturer or distributor will not assume any responsibility when its use contravenes the provisions of the legislation that is in force in the country in which it is used.

Recommendations for use for the KAZA DM 480 DEFENDER II Mobile and Fixed Speed Camera Detector

- Put it close to the glass, totally parallel to the road, and facing forward.
- Place it at such a height that neither the windshield wipers nor any other object hinders the vision of the detector.
- Do not place it on top, or on sunshades, if the glass has a tinted sun protection zone as the detector will not work properly.
- Make sure your vehicle does not have leaded athermic glass. With this type of crystals the detector does not work properly. Athermal windows have a layer of leaded metal inside the windshield. This layer of metal can nullify or weaken the signal emitted by radars, thus reducing or canceling the strength of the signal that reaches the detector. This can cause the detector to take longer to warn or even not at all. In these athermal moons there is an area of black dots, just behind the rearview mirror, where it does not have the metallic layer. To improve the reception somewhat, it is recommended to put the portable detector tohi.

Detection distances depend on many factors: installation and orientation of the detector, configuration, type of radar, amount of traffic, interference, etc. But, above all, it depends on the type of radar.

Considerations for the use of the KAZA DM 480 DEFENDER II

Differences between a radar detector and a GPS radar warning?

The radar **detector antenna**, located inside the device, captures the existence of a radar by receiving radio waves (Ghz) emitted by the radar.

The GPS **radar warning**, located inside the device, knows the position of the vehicle at all times and also that of the fixed radars through the complete, careful and constantly updated database that is incorporated. Therefore, it does not have to pick up the signal from a radar, nor detect it. When the car approaches one of those points, the radar warning will warn you well in advance to slow down thanks to its database. The effectiveness of a GPS radar warning device depends on the quality of the database.

In the KAZA DM 480 DEFENDER II the two technologies are combined, so its effectiveness is very high.

How does a radar used by the police work?

The operation of a radar is as follows: This device emits high-frequency electromagnetic radiation that is reflected off objects. The frequency of this reflected radiation on a static **Object** is different from that reflected on a moving object and radars rely on this principle to calculate the speed of the vehicle. This is known as **the 'Doppler Effect'**.

The only way to 'detect' these radar emissions is through so-called 'radar detectors', such as the KAZA DM 480 DEFENDER II Mobile and Fixed Radar Detector.

RADAR WARNING VIA THE GPS OF THE KAZA DM 480 DEFENDER II

In general, all fixed, section, traffic light and fixed variable radars will be announced by GPS (photo 1, photo 2, photo 3).

In some cases, exceptionally, the antenna will also be detected, but the GPS will warn you much more in advance.

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(Photo 1) (Photo 2)

The <u>fixed Autovelox</u> (photo 3), are of transverse laser type (**undetectable by any system**) and, therefore, will only be announced well in advance by means of the GPS warning.

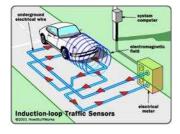




(Photo 3)

Other radars that do not emit waves and that can only be prevented with the GPS warning are induction and section radars:

Induction radars are located under the asphalt that calculate the speed of the vehicle when passing over them, they are also used in traffic light radars (photo 4).



(Photo 4)

The <u>section radars</u> are two video cameras, with an optical license plate reading system, separated by a fixed distance of X Km (photo 5). The system measures the time it takes for the vehicle to travel the distance and calculates the average speed. This type of radars will be announced by your GPS.





(Photo 5)

RADARS DETECTED WITH THE DETECTOR ANTENNA

The detector antenna of the KAZA DM 480 DEFENDER II detects radars that emit waves and use KA bands in 34.3 and 35.5 Ghz and the band of the new Multaradar CD and CT, in addition to the K band and the X band (It is recommended not to connect it since they do not exist in Spain and will produce false alerts).

In Spain the KA band is used and they are of the Multanova 6F type, both fixed and mobile. In the KAZA DM 480 DEFENDER II model, this factory band is activated as well as that of the new Multaradar. See examples (photo 6).



(Photo 6)

RADARS NO DETECTED BY NINGUN ANTI-RADAR

<u>Autovelox mobile and velolaser</u> that work with a transverse road lab. There are approximately 2% of these radars. They can be identified if a car is observed on the shoulder with the glass behind the driver half-lowered (photo 7).

Sometimes the velolaser (central photo) if pointed from the front, the detector could detect them later.







(Photo 7)

OTHER INFORMATION YOU SHOULD KNOW

Sometimes, the antenna of your detector will not emit any alarm when passing in front of a radar. This could be due to the following reasons:

- 1. The radar is off.
- 2. The radar is in a calibration state.
- 3. The radar may have been sabotaged.
- 4. The mobile radar is temporarily turned off because officers have stopped many vehicles and are fining.

On these occasions the detector antenna will not emit alarms, but it may receive warnings from the GPS system of your device.

3. Interpretation of alarm warnings

The detector antenna suddenly emits an almost continuous tone and the visual alarm is visible. It is approaching a nearby radar source. This situation requires immediate attention.

The detector antenna begins to sound slowly, gradually increasing the tone, the visual alarm is visible.

It is approaching a radar source aimed at its vehicle.

The detector antenna emits a weak signal and suddenly sounds at peak intensity.

It is approaching a radar source behind a mound or curve. Being hidden, the signal was detected weakly. It will detect it with maximum intensity when it enters the field of vision of the radar.

The detector antenna emits short alarms for a few seconds.

It is approaching a radar source, or transmitting station, located far and out of its sight. They are simple echoes of radio waves.

The detector antenna receives a brief laser-like alarm.

There is a laser emitter, probably very close.

The detector antenna emits intermittent alerts for no apparent reason.

It is probably an official vehicle with a radar emitting device circulating in front of your vehicle. Radar signals are reflected off other vehicles and the radar detector picks up the echo. It may also be that another vehicle carries a detector antenna and these detect each other.

The detector antenna warns KA band weakly and intermittently.

You are probably driving in an area with radar sensors (remote controls for garage doors, burglar alarms, mobile phone repeaters, etc.)

The detector antenna warns MultaRadar weakly and intermittently.

You are probably driving in an area with radar sensors (remote controls for garage doors, burglar alarms, mobile phone repeaters, etc.)

The detector antenna sounds intermittently, passing through the same place, but there is apparently no radar.

There is probably an emission that produces a false alarm. With the use of the apparatus, you will distinguish real alarms from false alarms.

The detector antenna does not appear to react to mobile radars.

Make sure that nothing interferes with the field of vision of the appliance and that the antenna power supply is correct. Also verify that there is no mistakenly recorded radar jamming memory. Try clearing the radar interference memory.

Radars are not always in operation. Note that they are periodically connected and disconnected.

The detector antenna does not warn me in advance of fixed radars.

Fixed radars installed on gantries and on the margins of roads (in booths) are the most difficult to detect. This is because they emit at very low intensity. To detect this type of fixed radars, the GPS that incorporates your device is the best solution. The detector antenna is not designed for the capture of fixed radars, although, exceptionally, it can detect them. For that there is the GPS that incorporates the device that will warn you, in any case, in advance.

The detector antenna did not raise any alarm when it passed a police car.

They do not always have the radar active, especially if they already have a car stopped ahead.

Laser radar warnings.

Only portable front-focus laser radars, not used in Spain, can be detected. Other transverse fixed laser radars are undetectable and will only be alerted by GPS.



4. Equipment characteristics





<u>Screen</u>

- OLED screen with descriptive icons, both for operation and configuration.
- Easy to read, both day and night. With manually or automatically adjustable brightness.

Detector antenna function

- It incorporates a new state-of-the-art DSP digital antenna with digital signature detection.
- Sensitivity increased by 30% compared to previous models.
- Equipped with a powerful 100 times faster processor that allows you to accurately scan all radar signals and distinguish real threats, minimizing false alarms to 0.
- Detects radars with radio frequency emission: police vehicles, mobile tripod radars, with KA band, detection of CD/CT radar fine, Laser detector 800 1100 nm, and radars in K band and X band (not used in Spain but abroad).
- On/Off function of the antenna. This function allows you to manually activate/deactivate the
 antenna according to the legislation of each country and automatically, when the vehicle
 speed is less than 30km/h (Configurable).
- It can work as a warning + detector, warning only or detector only as desired by the user.

GPS function

- Most current database on the market.
- Trajectory of more than 15 years of development.
- Regular release of updates
- With contributions from thousands of users.
- Possibility of incorporating a database for the whole of Europe.
- Warns of: fixed radars, variable speed, possible areas frequented by mobile radars, possible LASER, Autovelox or LIDAR undetectable radars, section controls, cameras for the use of belts or mobile devices, radars at traffic lights or traffic signs, radars inside tunnels, dangerous points, etc.
- With the possibility of putting filters on the warnings and adjusting the distance at which the warning is notified.
- **Smart** System (intelligent mode): Allows you to adjust the distance to the speed of the vehicle to reduce false GPS warnings on nearby streets, especially in the city.
- Several operating modes: Smart, Highway and City. You can adjust both the sensitivity of the detector and the distance at which you want to receive GPS warnings.
- Quiet zones: Allows the user to add zones where they do not want the warning detector antenna.
- User points: Allows the user to insert points where they want the advertiser to remind them of something.
- Auto Cruise Speed Limiter: You can program your cruising speed to self-limit the maximum speed at which you travel, very useful on highways or highways.

- Configurable voices in Spanish, English, French, Portuguese and German.
- System of updating the database through PC.
- It shows the actual speed at which the vehicle is traveling and the time.
- No installation required.
- Flat and compact design to enhance the reception of the antenna signal and improve its invisibility.
- Voice and visual ads.
- Automatic system of readjustment of the alert message before the persistence of the detection of the radar at long distances.

Box contents:

- Avisador KAZA DM 480 DEFENDER II.
- Car adapter12V -24 DC with modem GSM/GPRS.
- User manual.
- Non-slip tray for the dashboard.
- Metal supports with suction cups.
- USB cable for updating the database.

5. Getting started with your computer

The factory values that the equipment brings, are ideal for the standard operation of the equipment in Spain and Portugal. If you want to change something, read this manual carefully before doing so.

In the car:

- 1. Connect the adapter cable to the car cigarette lighter and equipment.
- 2. Hold the detector by one of the methods provided, making sure it is facing forward and as horizontal as possible. Poor placement significantly reduces detections.
- 3. To connect the detector you must press the red button on the car cigarette lighter adapter. To disconnect it, perform the same operation.

6. Installation with supplied brackets

The suction cups will be inserted into the device.



Stick the suction cups on the glass. To glue the suction cups, it is convenient to put the heating with the defogging of the front glass for a while, if the glass is cold, they will not stick.

You can also use the non-slip mat on the dashboard.

Important notice:

For good detections, make sure the view of the detector is clear. Do not place the detector near metal objects, it has to be facing forward and completely horizontal to the road. Be careful not to interfere with your car's windshield wipers.

7. Screen information



Example from the previous screen: Fine CD/CT level 5, fixed camera 680 m, speed limit 80 km, its driving speed is 74 km

On-screen GPS warnings:

- When you are driving, it will inform you of the actual GPS speed of your vehicle.
- When you are going to pass through a fixed radar, it will inform you of the distance that remains until you reach it with a countdown.
- When you pass through an area where mobile speed cameras are usually placed, it will indicate a countdown to zero.

8. GPS warning types

Database Reminders: Fixed speed cameras Tunnel radars Speed cameras Induction radars Fixed variable speed cameras Stretch control radars (optical) Belt and mobile device control cameras Mobile speed camera statistics

Statistics of dangerous points, curves, junctions...

Undetectable mobile speed camera statistics (Autovelox database only) Other...

Interpretation of the screen, voice and soundor detection of a radar (con factory options bydefault)

EVENT	MONITOR	DETAIL	
STANDBY MODE		There is no GPS connection yet.	
	∰ 1 14:33	GPS connected (sensitivity mode, GPS connection ICON, time)	
LOCK MODE	14:53 29 ^{Km}	If the driving speed is less than 30 km (Disable the signal alarm setting according to the set speed "Menu function"), all RD signal detections are blocked in any mode.	
STANDBY MODE (DRIVING MODE)	14:33 29 ^{Km}	Road, GPS connection, time, driving speed.	
BAND YOU ARE		Display: highway, Ka signal + signal strength and speed.	
(DRIVING MODE)	[™] Ka 11 8 89 Km	Sound: Double beep and then voice announcement of radar type only once and beep.	
"Fine" (radar signature detected)	MULTA CD/CT	Display: displays the name "Fine" and then moves the next screen (sensitivity level, ICON, signal strength and driving speed	
(Sensitivity level in city mode)	8 89 ^{Km}	Sound: Double beep once => Voice alert "Fine" => continuous beep.	

10. <u>Interpretation of the screen, voice and sound in warning of a GPS point (con orfactory ptions by default)</u>



EVENT	MONITOR	DETAIL
DB (Danger Point) Speed limit information "0"	⅓ 124 ^{Km} / _n	Monitor: City3 (sensitivity mode), DB icon dangerous point, distance and driving speed. Sound: When entering the database area, Voice Announcement Dangerous point type, only once and no beep. When it passes, it is alert to sound Passing Beep only once.
DB (Fixed Radar) its speed is less than the Speed Limit	1 370 8 64 6 6 6 6 6 6 1 6 1 1 1 1 1 1 1 1 1 1	Monitor: City1 (sensitivity mode), camera type, distance, speed limit information, driving speed. Sound: When entering the database area, Fixed radar voice announcement only once and no
DB (Fixed Radar) its speed is greater than the Speed Limit	11 ■ 370 (3) 94 ^{Km} h	beep until it passes. Monitor: City1 (sensitivity mode), camera type, distance, speed limit information (flashing), driving speed. Sound: Upon entering the database area, Voice Announcement Fixed radar type only once and continues to beep until the speeding is less than the speed limit of the radar.
DB (Stretch Control) its speed is less than the Speed Limit	370 (00) 84 Km/h	Monitor: City2 (sensitivity mode), camera type section control, distance, speed limit information, average driving speed. Sound: When entering the database area, Voice Announcement Type of stretch control Only once and no beep until it passes.
DB (Stretch Control) its speed is higher than the Speed Limit	370 (00 104 Km/h	Monitor: City2 (sensitivity mode),

11. <u>Display interpretation, voice and sound in warning of a user point (con orfactory settings by default)</u>

EVENT	MONITOR		DETAIL
THEN NORMAL			Monitor: After pressing Save button "Normal POI" => Sensitivity Mode, PDI icon No



SAVE POI		Sound: When you press the "Normal POI" button, you can hear "Save PDI".
THEN NORMAL	™1 NO1 Borrado	Monitor: After pressing the delete button of "Normal POI", => Sensitivity Mode, POI icon, PDI No.
DELETING PDI		Sound: When you press the "Normal POI" button, you can hear "Delete PDI".
THEN ENTERING NORMAL	124m 74 ^{Km} / _h	Monitor: Sensitivity mode, PDI icon, distance and driving speed. Sonar: When you enter the "normal POI" area, double beep and voice alert once and then No beep regardless of the current driving speeding until you pass the point of interest.
While driving in a normal POI area	≛ 25 124 m 74 ^{Km}	Monitor: "Fine" signal ICON, signal strength, PDI icon, PDI distance, driving speed.
(Detects a Multaradar only in Highway mode)		Sound: While driving in the PDI, if you encounter the signal "Fine", Voice alert and double beep and beep according to the signal strength according to the sensitivity mode setting value.
POI THAT HAPPENS	14:33 29 ^{Km}	Monitor: After passing poi, the screen will return to normal driving mode.
		Sound: When listening to a POI, you may hear a Passing Beep beep.

12. Interpretation of the screen, voice and sound in warning of a point of silence (con orfactory ptions by default)

EVENT	MONITOR	DETAIL
POI OF SILENCE RECORD PDI	™ NO1 Grabado	Monitor: After pressing Save button "Mute POI" => Sensitivity Mode, POI icon, PDI No. Sound: When you press the "Mute POI" button, you can hear "Save PDI".
POI OF SILENCE DELETING PDI	™ 1 NO1 Borrado	Monitor: After pressing the delete button "Mute POI" => Sensitivity Mode, PDI icon, PDI No. Sound: When you press the "Mute POI" button, you can hear "Delete PDI".



THEN ENTERING (No DB and RD signal detection at all)	124m 74 ^{Km}	Monitor: sensitivity mode, mute POI icon, distance and driving speed. Sound: When you enter the "Mute POI" area, double beep and voice alert once and then No beep regardless of the current driving speeding until you pass the point of interest.
While driving in a quiet POI area (Recognizes a Multa Radar sign)	24m 74 ^{Km} / _h 124m 74 ^{Km} / _h	Monitor: "Fine" ICON, signal strength, PDI icon of silence, distance, and driving speed. Sound: While driving PDI, if you encounter the signal "Fine", Voice alert and double beep and No beep according to the sensitivity mode setting value.
POI THAT HAPPENS	∰ 1 14:33 29 ^{Km} / _h	Monitor: After passing poi, the screen will return to normal driving mode Sound: When passing a POI, you can hear a Passing Beep beep.



13. Display interpretation when it detects a GPS point and then a radar (factoryoptions by default)

EVENT	MONITOR	DETAIL
While driving in a BD area, if you encounter the signal of a Multaradar	11	Monitor: (1) "Fine" text display (2) "Fine" signal, Signal strength, Camera type, Distance, Speed limit information, Speeding driving. Sound: Double beep => Voice Multaradar, and Beep according to the signal strength.

14. <u>Display interpretation when it detects a Multaradar and then a GPS point (con factory options by default)</u>

EVENT	MONITOR	DETAIL
While detecting the Multaradar signal, if it approaches a point on	**************************************	Monitor: short icon fine, signal strength, camera type, distance, speed limit information, driving speed.
the GPS	355 80 64 ^{Km} 64 64 64 64 64 64 64 64 64 64 64 64 64	Sound: Fine beep => Type of camera with voice => Beep still Fine (RD signal is prior to DB).

15. Smart Mode Concept, Highway and City

Smart mode is a mode that, depending on the speed of the vehicle, adjusts the warning distance of the GPS points and the sensitivity of the antenna to this speed. In this mode, GPS warnings of nearby areas where Ud. circulates that should not be firedbecause it will not pass through itare minimized. False alarms of the detector antenna are also minimized in cities with high intensity of electrical noise.

In the table below you can see the warning distances of the GPS points, as well as the sensitivity mode that are automatically selected while driving.



Car speed (Km/h)	GPS warning distance (m)	Radar sensitivity
0-20	100	City2
21-40	200	City1
41-60	300	Motorway
61-80	500	Motorway
81-100	700	Motorway
101-120	900	Motorway
Above 120	1000	Motorway

<mark>Modes</mark>	<mark>Motorway</mark>	City 1	City 2
K-band	OFF	OFF	OFF
Band You	ON	ON	OFF
Banda MTR	ON	ON	OFF
X-band	Off	OFF	OFF
Laser	ON	ON	ON
GPS Warnings	ON	ON	ON
Smart Mode	>41 Km/h	21-40 kph	0-20 kph

16. Advanced: Programming, management and menu options



Volume Adjustment

To turn on and adjust the volume, spin the side wheel.

Key functions

MUTE (▲)

- Short press in detection mode, mutes the sound.
- Short press in sleep mode, turns silent mode on or off.



- Short press in "MENU" mode, go to the previous option.
- Long press in motion, adds or deletes a user point. Ifwe are going through an already recorded point it deletes it, if there is no point it adds it.





CITY(▼)

 Short press, switch between HIGHWAY/CITY1/CITY2/CITY3/SMART modes. Bydefault, SMART mode recommended.



- Short press in "MENU" mode, go to the next option.
- Long press in motion, adds or deletes a point of silence. If we are going through an already
 recorded point it deletes it, if there is no point it adds it. A quiet point is an area where we
 don't want the warning detector. For example, an area where we know there is a false
 alarm.





MUTE (\triangle) + CITY(∇) (At the same time)

• Long press of the two keys, displays the status of the vehicle's battery.



** If the battery charge is less than 10.5 V, it automatically displays the "low battery" alert and beeps 2 times at 30-second intervals continuously.



MENU

- In "MENU" mode, a long press enters or exits the "MENU" mode.
- Within a MENU, the MENU key short press, enters the submenu options.
 Example: If we are in GPS SETTINGS in the Fixed Radars option, if we make a short press of the MENU key, we will be able to activate or deactivate, another short press and we will be able to adjust the distance.
- Short press on switch between brightness modes (100 => 50 => Auto => Dark => Instant Dark)

BRILLIANT (100%)

BRILLO MEDIO

AUTOMATIC

DARK

OSCURO

INSTANT DARK

OSCURO INSTANTÁNEO

INSTANT DARK 0% (works as if it were dark (only 1 point shines on the BLACK SCREEN), but when any GPS or radar warning occurs, the screen starts to work as in Brightness (100%), and after losing the signal, the screen returns to DARK mode.

Long press, enter or exit "MENU" mode



MUTE (\blacktriangle) + CITY(\blacktriangledown) + MENÚ (At the same time)

Factory reset.



*Note: It does not delete the loaded GPS database, it only resets the options to their original recommended values. It is important to do this after a GPS Firmware update!

Functions of "MENU" (summary)

In MENU mode, a short press of the MENU key enters the option or group of options, a long press returns from the option.

- ** Radar configuration
- (1) Band selection on/off
- (2) Sound notification settings according to signal level
- (3) Deactivation of the radar according to the set speed
- ** GPS database configuration
- (1) GPS BD on/off
- (2) Distance control of GPS BD points
- (2) Point of interest activated/disabled
- ** Configuration of POI
- (1) Eliminate all normal points of interest
- (2) Remove all PO I's of silence
- (3) Delete the last saved PO I
- **Other settings
- (1) Enabling/disabling the audible alert type
- (2) Automatic control
- (3) Intelligent radar control
- (4) Intelligent Control for DB
- (5) Maximum driving speed control
- (6) GMT settings
- (7) GPS calibration settings
- (8) Current latitude and longitude data
- (9) Welcome message enabled/disabled
- (10) Work style
- (11) Display settings

Functions of the "MENU" (detail)

We recommend that you do not change the setup options without knowing what you are doing. Read what you want to change first, if you are not sure ask the technical support service. If you change options and then it doesn't work as you wanted, go back to the manufacturer's recommended factory settings.



RADAR SETTINGS



Within the MENU, the MENU key short press, enters the submenu options. Example: If we are in RADAR SETTINGS in OPTION KA, if we make a short press of the MENU key, we will be able to activate or deactivate. This is applicable to all MENUS and submenus.

(1) RADAR BAND SELECTION FUNCTION (It is recommended not to modify it, it is already programmed for Spain and Portugal)

K-band on/off (Default)

Ka-band **On** (**Default**)/Off



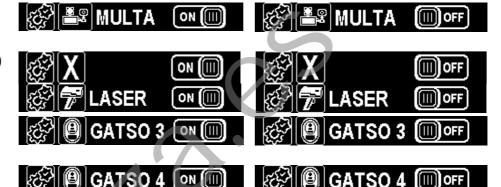


Multaradar CD/CT Enabled (Default)/Disabled X-band on/off (default)

Laser On (Default)/Off

Gatso 3 On/**Off** (**Default**)

Gatso 4 On/**Off** (**Default**)



(2) Sound notification settings based on signal level

Predetermined: Shutdown/ values: from 0 (SHUTDOWN) to Nivel 6





This option raises or lowers the volume of a radar detection signal according to its strength.

(3) Disabling the radar according to the set speed.

Predetermined: 30 KM / Value: from 0 (SHUTDOWN) To 60 (EVERY 10 KM)





With this option, if the selected speed is not exceeded, the radar detector will be disabled. If it is put into Off mode, it will always be active.





Within a MENU, the MENU key short press, enters the submenu options.

Example: If we are in GPS SETTINGS in the Fixed Radars OPTION, if we make a short press of the menu key, we will be able to activate or deactivate, another short press and we will be able to adjust the distance.

(1) FIXED RADAR On/off Default: Enabled

Distance control to FIXED RADAR. Default warning distance: 800M (100 TO 1000 M)



(2) STRETCH CONTROL CAMERA On/off Default: Enabled

Distance control to SECTION CONTROL CAMERA. Default warning distance: 800M (100 TO 1000 M)



(3) TRAFFIC LIGHT CAMERA OR TRAFFIC SIGNALOn/off Default: Enabled

Distance control to CAMERA AT TRAFFIC LIGHT OR TRAFFIC SIGNAL. Default warning distance: 300M (100 TO 1000 M)



(4) CAMERA CONTROL USE BELT ORMOBILE DEVICES On/off Default: Enabled

Distance control to CAMERA CONTROL USE BELT OR MOBILE DEVICES. Default warning distance: 800M (100 TO 1000 M)



(5) WARNING OF POSSIBLE HIDDEN RADAR Activated/Turned off By default: Activated

Distance control to WARNING OF POSSIBLE HIDDEN RADAR. Default warning distance: 800M (100 TO 1000 M)



(6) ACCIDENT BLACK SPOT WARNING On/off Default: Off

Distance control to ACCIDENT BLACKHEAD WARNING. Default warning distance: 500M (100 TO 1000 M)



(7) POI (Mute Points) On/Off Default: Off





POI SETTINGS



(1) - Delete all normal POIS (User points)



(2) - Delete all of the silent ones



(3) Delete the last saved POI (It doesn't matter if it's a user point or a silent point)



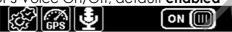




(1) Sound alert type



a) GPS Voice On/Off, default enabled



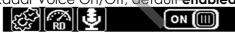


b) Continuous GPS beep when exceeding the speed limit On/Off, default enabled



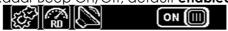


c) Radar Voice On/Off, default enabled





d) Radar Beep On/Off, default enabled





(2) Automatic Sound Control



a) Default: 5 Seconds (RANGE: OFF/ 3/5/7/10/15/20/30/45/60 seg.) If it is on and a signal persists longer than the selected time, the sound will be cut off or the volume will be reduced as selected in the next option.





b) By default: 50% (RANGE: TURNED OFF/30/40/50/60/70%.)

If it is on and a signal persists longer than the selected time, the volume will be reduced by the selected percentage. If you select Off and the time of the previous option passes, the sound will turn off.





(3) Intelligent Radar Control



a) Intelligent sound in Highway mode

The display works and shows the detected radar and signal level, but there is no voice or sound at less than 40 km driving speed. **Default:** 0 km (from 0 to 100 km)



b) Smart sound in City mode
 The display works, butthere is no voice or sound at less than 40 km driving speed. Default: 0 km (from 0 to 100 km)



(4) Intelligent GPS Control



a) Smart sound in all modes

The display works and displays the warning data, but thereis no voice or sound unless you exceed the driving speed limit at the value selected for GPS warnings. **Default:** 0 km (0 to 20 km)



*Note: The set value will be added to the GPS DB speed limit for alarm. Example: If the limit is 60 km / h and you have selected 20 in this option will not jump the alarm spends to circulate at 80 km / h.

(5) Cruise control



a) **Default: Shutdown** (RANGE: 0 to 160 km/h)

If it is turned on, a warning voice will sound and the sound of a beep will sound if the driving speed ishigher than the set speed.







(6) GMT (Local Time Zone) setting



a) **By default: +1** (RANGE: from -11 to +11 h)
Put 1 or 2 depending on whether it is winter or summer time, in the Canary Islands always one less.

(7) GPS calibration)



a) **Default: 0** (RANGE: from -5 to +5 km/h)
Add or subtract the selected amount in Km/h to the speed shown on the screen, useful to adjust it to the size of the car's speedometer.

(8) Current position



Displays the latitude and longitude of the vehicle's position. Useful if you have to call a tow truck.

(9) Initial greeting when turning on the device



Give the initial greeting of fastening the belts, by default On.

(10) Mode of operation

MODO DE OPERACIÓN

a) **Default: GPS + Radar**Select from three modes, GPS only, radar detector only, or both if you're at the same time.



(11) Adjusting the language on the screen



a) Default: Spanish
 Select between the two screen languages





17. FalseGPS warnings

Warnings with lower than the track speed

If the GPS gives a warning with a speed lower than that of the road on which we circulate, it is because, in certain circumstances, the GPS may be giving a warning of the service road, a nearby intersection or a parallel road. By not carrying cartography like a navigator, the GPS warns when we approach a point that has in the database with a certain course, but does not know if we are exactly on that road or in the adjacent one.

Other times it may happen that we give a warning of a point that is 500 meters ahead, but if we deviate before arriving and the warning disappears.

Warnings of possible mobile radar

The GPS keeps a database with a statistic of positions where mobile radars usually sanction. Remember that this is a statistic and that they do not have to be when we go through that point. To detect these radars the device carries the detector antenna.

Warnings of dangerous locations, curves

These warnings occur when we are within a radius of approximately 250 meters. We may not see them but they are on the service road, adjacent road, etc.

The GPS has not given me a warning of a fixed radar, tunnel, traffic light, etc.

Upgrade the database version. In the unlikely event that you still do not give notice, please contact us through the web www. Kazaradares.com to report that this point is missing from the database.

The GPS has not given me a warning of a fixed radar inside a tunnel

Inside a tunnel there is no GPS coverage, so the device will warn you before entering but not inside it.

18. False alarms of the detector antenna

The KAZA detector antenna is a microwave receiver. In order to detect radars this antenna has to be very sensitive, since they emit with very little power. Due to the great sensitivity of the antenna, it can detect strong transmissions and give some false alarm.

There are devices that can confuse the detector antenna:

- Pre-collision systems (PCS)/adaptive cruise control (ACC) systems and radar-based blind spot detection (BSD) systems (not optical ones) of some cars and trucks may produce some false alarm in the MTR band.
- Another radar detector installed in a car. If another vehicle carries a radar detector and
 circulates near us, the detector antenna will detect the KA band that the other device lets
 escape and give a false alarm. If we are driving in heavy traffic and we approach and
 move away from the vehicle, it will disappear and the signal will reappear. Perhaps this is the
 most difficult false alarm to detect since the detector can be in any of the vehicles that
 surround us.

DESIGN 284 PRODUCTS WW

• Mobile phone repeaters, data radio links. These repeaters emit at frequencies that their harmonics can match the KA band. The KAZA detector has a software filter to limit the KA band to 34.3 Ghz and 35.5 Ghz as well as the frequency of the fine radar, but, sometimes, it can happen that the harmonic coincides and produces a false alarm. These types of false alarms are usually repeated in the same places.

Because of this, all radar detectors can give false alarms, and it does not mean that they are damaged. If your device gives a false alarm, make sure if any of the above may be happening before sending it to technical service. Sometimes, on an isolated road, a false alarm can occur, leading us to think that it is damaged but, although it seems incredible, in isolated areas there are radio links of automatic irrigation of farms, air navigation radio links and other devices.

Important notice:

If you activate the band "K" or "X" in Spain, there will be many interferences and false warnings. All radars that emit in the "K" band are fixed and will be notified by the GPS 500 m in advance. It is advisable to have it disconnected.

19. Updating the database

To update the device database, you must register the detector on the web http://www.kazaradares.com



Click on the link **to go to** the registration form and follow the registration process. Once registered you can download the program and the database for updating your advertiser. If you have doubts in the process click the link: "If you have any questions with the registration process see the video by clicking here" you will be shown a video of how to do it.

When you are registered and your account activated through the mail that will arrive, enter http://www.kazaradares.com again and put your username and password, a screen like this will appear.

Download "the program the first time" and the database every time you want to upgrade. Copy them to your PC.

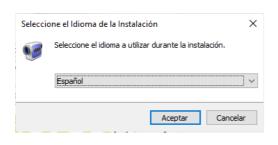


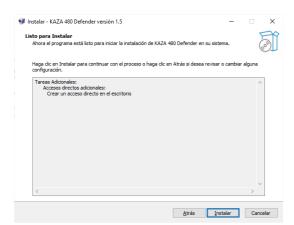
OPTION 1: With the automatic installation program

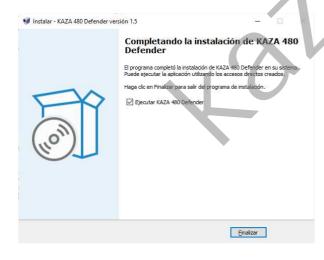
Run Setup and follow the instructions in the wizard:

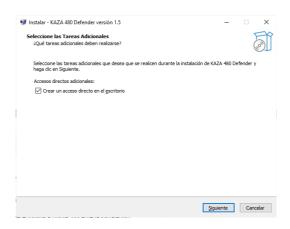


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Let it install the drivers

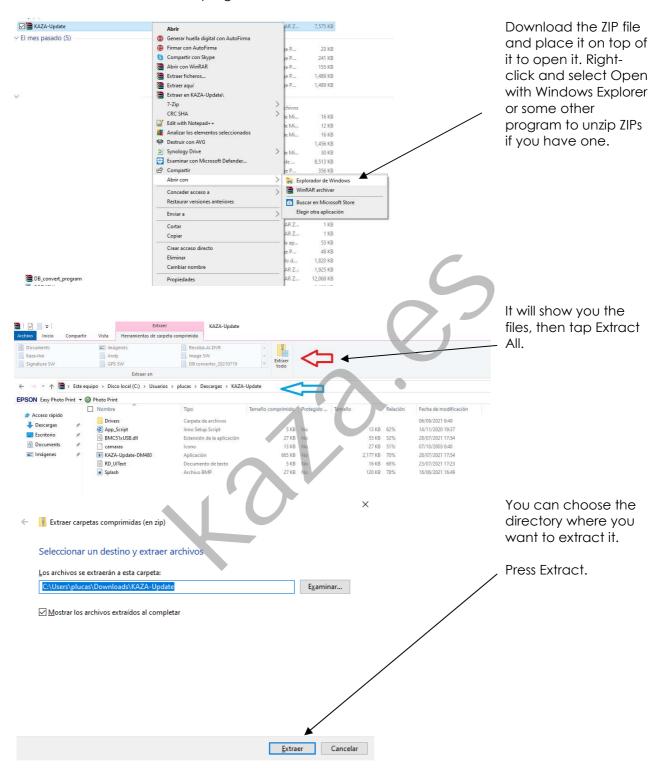


Run the program you will have on your desktop or in the program bar.



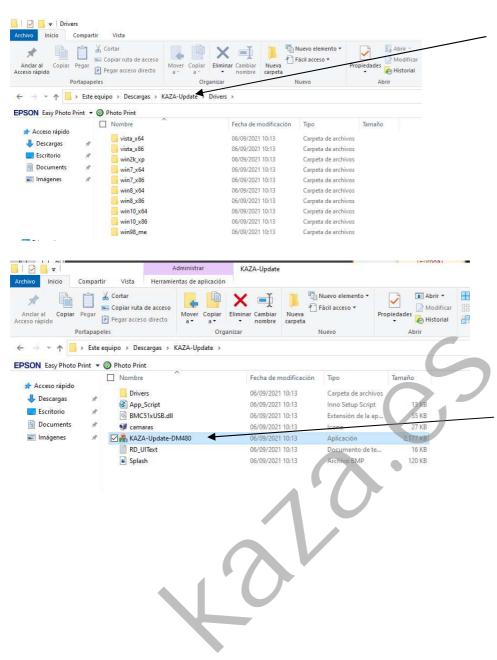
OPTION 2: Without the installer (onlyrecommended if option 1 fails that makes everything automatic).

Download the ZIP file with the program and drivers





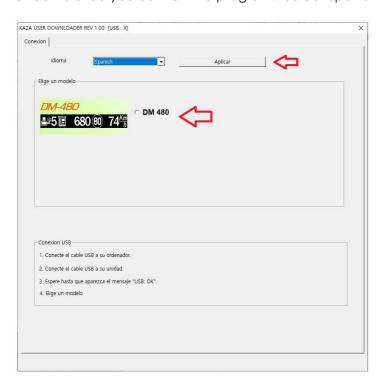
C.D.PRODUCTS S.A. C/ Kanna 2, Local 3 (Pol. Ind P-29) 28400 Collado Villalba, Madrid (España) www.cdpsa.es



In the directory that I select it will extract the program and a folder that says "drivers". Select the driver of your operating system and run it by following the wizard.

Once the driver is installed, you can run the update program by double-clicking on it, which is in the main folder you chose.

"Kaza-Update-DM480" Once installed you can run the program. "Select Spanish" and click "Apply"

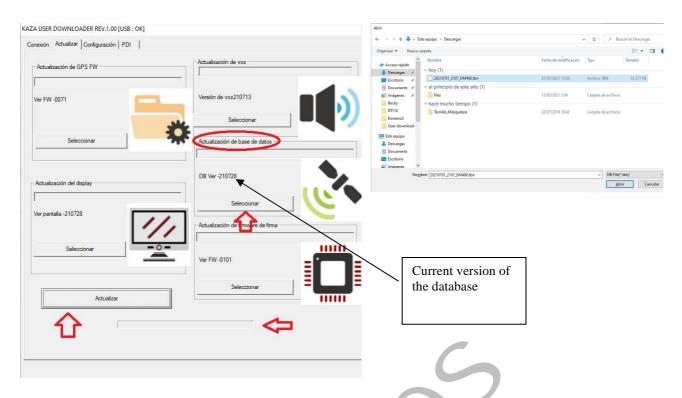


Connect the supplied USB cable to the order, connect the USB to the unit and wait until OK appears in the bar above and choose the model.

The following tabs light up:



Choose the "Update" tab

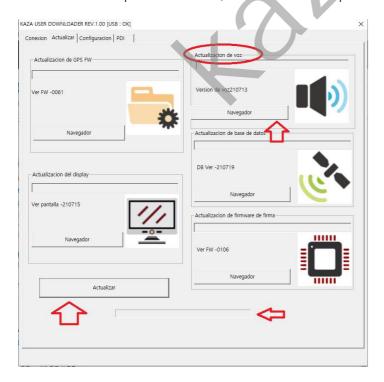


In the option that says database, press the button "Select and select the database that has been downloaded, which will normally be in the downloads folder and whose extension is . TBN.

Finally click Update and wait for the process to finish.

20. Updating the voices

Follow the same process above, but choose the option to update voices.





21. Updating the display, GPS firmware and digital signature firmware

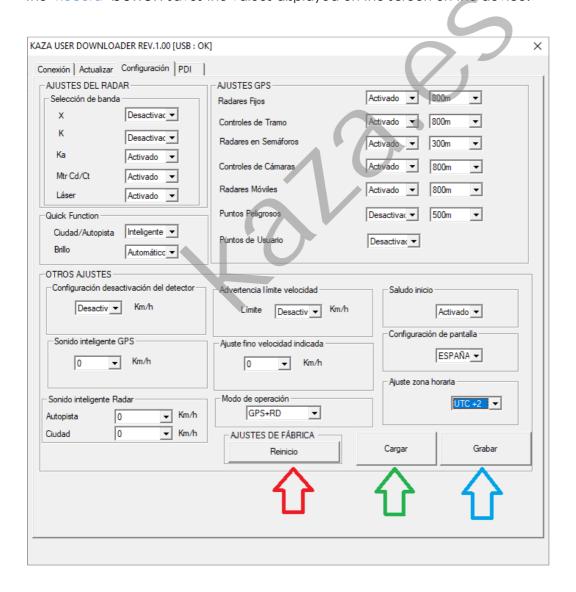
It is done the same as in the previous steps. Watch out for these updates! Make NO mistake because you can render the device unusable and you will not be covered by the warranty.

22. Settings tab

The factory values that the equipment brings, are ideal for standard operation in Spain and Portugal. If you want to change something, read this manual carefully before making changes.

In this tab you can modify all the settings as well as from the device menu in a more comfortable way.

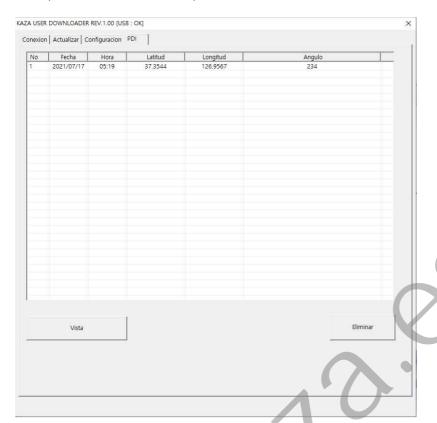
The "Reset" button, loads factory settings all options (recommended) The "Charge" button reads the current settings of the device and displays it on the screen. The "Record" button saves the values displayed on the screen on the device.





23. <u>Tab PDI</u>

Here you can view the user points as well as erase them that are in the device's memory.



24. Technical specifications of the KAZA DM 480 DEFENDER II

Detection system

DSP (Digital Signal Processor)

Operating frequencies:

Gang Ka 34,300, 34,700, 35,500 GHz \pm 200 MHz

K Band 24,050 at 24,250 Ghz

Band X 10,475 at 10,575 Ghz

Radar CD/CT fine band

Gatso 3/4

Laser detection:

800 a 1100 nm

Feeding:

DC12V-15V (from car battery) 230mA

Operating temperature:

-10°~ 50°

Storage:

-20°~80°

25. Contact details

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www.kazaradares.com E-mail: clientes@cdpsa.es

IMPORTANT NOTE:

C.D. PRODUCTS S.A. 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.

This device was created to aid responsible drivers to comply with all traffic codes and regulations. The user of this device shall be exclusively and personally responsible for its use, keeping in mind the set of laws in each country. The manufacturer or distributor shall not be liable if its use contravenes the regulations applicable in the country where it is used

