

KAZA DM 480 MOBILE AND FIXED RADAR DETECTOR

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-type antenna specially designed to detect the new MTR (MULTARADAR) radars at great distances, without producing false alerts.

With extended range and fewer false alerts thanks to advanced digital signal processing (DSP) and invehicle technology (IVT) filtering.

The Kaza DM 480 DEFENDER II DSP Radar Detector and Warning System offers an improved detection range, with greater detection distances and the virtual elimination of false alerts caused mainly by adaptive cruise control systems and blind spot sensors that are fitted in some modern vehicles.



Radar detectors equipped with DSP technology recognize radar wave data by their unique signature. These detectors detect and block data that is not a single signal, offering significant improvements in the elimination of false alerts and identifying real radars with digital signatures. Furthermore, DSP technology allows for continuous firmware development, adapting to any changes such as new radars, vehicle sensors 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 more quickly and efficiently. It increases RF emissions filtration and detection capacity by 100 times and optimizes detection in the MTR and KA bands.

The new MTR radars, with intelligent multi-rail control, are being widely deployed throughout Europe. They cover more than 30% of radars in Spain and more than 80% in Portugal. They have become the most popular model for authorities.

These types of radars, which are replacing the veteran Multanova (34.3 Ghz and 35.5 Ghz), are capable of operating both statically and in motion, monitoring several roads/vehicles at the same time.

The Kaza DM480 DEFENDER II radar detector and detector offers a DOUBLE SHIELD OF PROTECTION:

• GPS radar detector. • Exclusive DSP detector antenna with digital signature technology.

Don't use the KAZA DM 480 DEFENDER II to evade speed controls, but rather to make your driving safer. The device will remind you of the speed limits you must comply with at all times, helping you avoid distractions that could lead to a violation or accident.

Do not operate the unit inside the vehicle while driving, as this may divert your attention from the road.

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

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



2. Recommendations for use of the KAZA DM 480 DEFENDER II Radar Detector

- Place it close to the glass, completely parallel to the road, and facing forward.
 Position it at such a height that neither the windshield wipers nor any other object obstructs the driver's vision.
- Do not place it on top of the sun visors if the glass has a tinted protective area. against the sun as the detector will not work properly.
- Make sure your vehicle does not have leaded thermal glass. With this type of
 The detector is not working properly. Thermal glass has a lead-based metal layer inside the windshield. This metal
 layer can cancel or weaken the signal emitted by radars, thereby reducing or nullifying the signal strength reaching
 the detector. This can cause the detector to take longer to warn, or even fail to warn at all. On these thermal glass, there
 is an area of black dots just behind the rearview mirror where the metal layer is missing. To improve reception
 somewhat, it is recommended to place the portable detector there.

Detection distances depend on many factors: detector installation and orientation, configuration, radar type, 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 Mobile and Fixed Radar Detector

Differences between a radar detector and a GPS radar detector?

The radar **detector antenna**, located inside the device, detects the presence of a radar by receiving radio waves (GHz) emitted by the radar.

The GPS **radar detector**, located inside the device, knows the vehicle's position at all times and also the position of fixed radars using its comprehensive, carefully maintained, and constantly updated built-in database. Therefore, it doesn't necessarily need to pick up a radar signal or detect it. When the car approaches one of these points, the radar detector will warn you well in advance, allowing you to reduce your speed, using its database.

The effectiveness of a GPS radar detector depends on the quality of the database.

The KAZA DM 480 DEFENDER II Mobile and Fixed Radar Detector combines both technologies, making it very effective.

How does a radar used by the police work?

The way a radar works is as follows: This device emits high-frequency electromagnetic radiation that is reflected off objects. The frequency of this radiation reflected off a stationary object is different from that reflected off a moving object, and radars rely on this principle to calculate vehicle speed. 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.

Radar warning via GPS on the Kaza DM 480 Defender II

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

In some exceptional cases, the antenna will also detect them, but the GPS will warn you much earlier.





(Photo 1) (Photo 2)

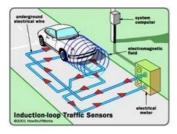
The <u>fixed speed cameras</u> (photo 3) are of the transverse laser type **(undetectable by any system)** and, therefore, will only be announced well in advance by the GPS warning device.



(Photo 3)

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

Induction radars are cables located beneath the asphalt that calculate the speed of the vehicle as it passes over them; they are also used in traffic light radars (photo 4).



(Photo 4)

Section radars consist of two video cameras, each with an optical license plate reading system, separated by a fixed distance of X km (photo 5). The system measures the time it takes the vehicle to travel the distance and calculates the average speed. These types of radars will be indicated 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 at 34.3 and 35.5 Ghz and the band of the new Multaradar CD and CT, in addition to the K band and 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 the Multanova 6F type is used for both landlines and mobile phones. The KAZA DM 480 DEFENDER II model, as well as the new Multaradar, comes with this band activated from the factory. See examples (photo 6).



(Photo 6)



RADARS NOT DETECTED BY ANY ANTI-RADAR

<u>Mobile speed cameras and speed</u> cameras that operate with a laser beam across the road. Approximately 2% of these radars exist. They can be identified by observing a car on the hard shoulder with the rear window halfway down (photo 7).

Sometimes the velolasers (center photo) if pointed straight ahead, could be detected by the laser detector.







(Photo 7)

OTHER INFORMATION YOU SHOULD KNOW

Sometimes, your detector's antenna won't sound an alarm when passing a radar. This could be due to the following reasons:

- 1. The radar is off.
- 2. The radar is in calibration status.
- 3. The radar may have been sabotaged.
- 4. The mobile radar is temporarily off because the officers have stopped many vehicles and are issuing fines.

In these cases, the detector antenna will not emit alarms, but it may receive alerts from your device's GPS system.

3. Interpretation of alarm warnings

The detector antenna suddenly emits an almost continuous tone and the visual alarm is visible.

You are 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.

You are approaching a radar source directed toward your vehicle.

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

You are approaching a radar source located behind a hill or curve. Because it is obscured, the signal was weakly detected. You will detect it at its strongest when you enter the radar line of sight.

The detector antenna emits short alarms for a few seconds.

You are approaching a radar source, or transmitting station, located far away and out of your vision. They are simple echoes of radio waves.

The detector antenna receives a brief laser-type alarm.

There is a laser emitter, probably very close.



The detector antenna emits intermittent alerts for no apparent reason.

It's likely an official vehicle with a radar-emitting device driving in front of your vehicle. Radar signals are reflected off other vehicles, and the radar detector picks up the echo. Another vehicle may also be equipped with a radar antenna, and they detect each other.

The detector antenna signals the KA band weakly and intermittently.

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

The detector antenna warns MultaRadar weakly and intermittently.

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

The detector antenna sounds intermittently as it passes over the same location, but there is apparently no radar.

There is likely an emission that is producing a false alarm. Using the device, you will be able to distinguish real alarms from false alarms.

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

Make sure nothing is interfering with the device's field of view and that the antenna power is correct. Also, check that there is no radar interference memory that was saved in error. Try erasing the radar interference memory.

Radars are not always operational. Please note that they are switched on and off periodically.

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

Fixed radars installed on portals and roadsides (in booths) are the most difficult to detect. This is because they emit at very low intensity. To detect this type of fixed radar, the GPS built into your device is the best solution. The detector antenna is not designed to detect fixed radars, although it can detect them in exceptional cases.

That's what the device's built-in GPS is for, which will warn you, in any case, with more advance notice.

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

They don't always have their radar on, especially if they already have a car stopped ahead.

Laser radar warnings.

Only forward-focusing portable laser radars, which are not used in Spain, can be detected. Other fixed cross-track laser radars are undetectable and will only be alerted by GPS.



4. Equipment characteristics





Display •

OLED display with descriptive icons, both for operation and for its configuration.

Easy to read, both day and night. With manually or manually adjustable brightness.
 Automatic.

Detector Antenna Function • Incorporates

- a new state-of-the-art DSP digital antenna with signature detection
- 30% increased sensitivity compared to previous models. Equipped with a powerful processor that's 100 times faster, allowing it to accurately scan all radar signals and distinguish real threats, minimizing false alarms to zero.
- Detects radars with radio frequency emissions: police vehicles, mobile tripod radars, with KA band, CD/CT radar fine detection, 800

 1100 nm Laser detector, and K band and X band radars (not used in Spain but used abroad).
 Antenna On/Off function. This function allows the antenna to be manually activated/deactivated according to the legislation of each country

 and automatically activated when the vehicle speed is less than 30 km/h (configurable).
 It can operate as a warning device + detector, only a warning device or only a detector, as desired.

user.

GPS Function •

The most up-to-date database on the market. • Over 15 years

of development experience. • Regular updates released • With contributions from thousands of users. • Option to incorporate

a database for all of Europe. • Warns of: fixed radars,

variable speed cameras, possible areas frequented by mobile radars, possible undetectable

LASER, Speed Cameras, or LIDAR radars, section controls, seatbelt or mobile device use cameras, radars at traffic lights or signs, radars inside tunnels, dangerous points, etc. • With the option to set filters on the warnings and adjust the distance at which the notification is sent.

warning.

• Smart System (intelligent mode): Allows you to adjust the distance to the vehicle speed to reduce false GPS alerts on nearby streets, especially in the city. • Various operating modes: Smart,

Highway, and City. Both the detector's sensitivity and the distance at which you want to receive GPS alerts can be adjusted. • Silent Zones: Allows the user to add zones where they do not want the detector antenna to detect alerts.



- User Points: Allows the user to insert points where they want the prompter to remember something.
- Automatic cruise speed limiter: You can program your cruise speed to automatically limit the maximum speed at which you are traveling, very useful on highways or motorways.
- Configurable voices in Spanish, English, French, Portuguese, and German. Database update system via PC. Displays the actual speed at which the vehicle is traveling and the time.
- No installation required. Flat and compact design to enhance antenna signal reception and improve

Its invisibility. •

Voice and visual announcements. •

Automatic system for readjusting the alert message in the event of persistent radar detection at long distances.

Box contents:

• KAZA DM 480 DEFENDER II warning system. •

12V-24V DC car adapter with GSM/GPRS modem. • User manual. • Non-slip dashboard tray. • Metal brackets with

suction cups. • USB cable for database updates.

5. Starting to use the equipment

The factory settings supplied with the unit are ideal for standard operation in Spain and Portugal. If you wish to change anything, please read this manual carefully before making any changes.

In the car:

- 1. Connect the adapter cable to the car cigarette lighter and the computer.
- 2. Hold the detector using one of the supplied methods, ensuring that it faces forward and is as horizontal as possible. Improper placement significantly reduces detection rates.
- 3. To connect the detector you must press the red button on the cigarette lighter adapter. car. To disconnect it, perform the same operation.

6. Installation with the supplied brackets

The suction cups will be inserted into the device.



Stick the suction cups to the glass. To stick the suction cups, it's a good idea to turn on the heater and demist the front glass for a while; if the glass is cold, they won't stick.

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



Important notice:

To achieve good detections, make sure the detector has a clear view. Avoid placing the detector near metal objects; it must be facing forward and completely horizontal to the road. Be careful not to be interfered with by the car's windshield wipers.

7. Screen information



Example: Fine CD/CT level 5, fixed camera 680 m, speed limit 80 km, your speed of

Driving distance is 74 km On-

screen GPS alerts: • When

driving, it will inform you of the actual GPS speed of your vehicle. • When passing a fixed speed camera, it will

inform you of the distance remaining until reaching it with a countdown. • When passing through an area where mobile speed cameras are often placed, it will

indicate a countdown back to zero.

8. Types of GPS warnings

Database alerts: Fixed radars Tunnel

radars Traffic light radars Induction radars Fixed variable speed radars Section control radars (optical)

Seatbelt monitoring cameras and mobile devices Mobile radar statistics Statistics on dangerous spots, curves,

intersections, etc.

Statistics on undetectable mobile radars (Autovelox database only)

Others...





9. Interpretation of the screen, voice and sound of a radar detection (With default factory options).

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



10. Interpretation of the screen, voice and sound when a GPS point is notified (with factory options) default).

EVENT	MONITOR	DETAIL
	№ 380m 124 ^{Km}	Monitor: City3 (sensitivity mode), DB dangerous point icon, driving distance and speed.
DB (Peligros Point) Speed limit information "0"		Sound: When entering the database area, Danger
		point type voice announcement, only once and
		without beep. When passing, it is alert to sound Passing
		Beep only once.
		Monitor: City1 (sensitivity mode),
DB (Fixed Radar)	11 370 80 64 1 64 1 64 1 64 1 64 1 64 1 64 1 64	camera type, distance, speed limit information, driving speed.
its speed is lower than the Speed limit		Sound: When entering the database area, fixed
		radar voice announcement only once and no
		beep until you pass.
		Monitor: City1 (sensitivity mode),
	11 370 80 94 km	camera type, distance, speed limit information (flashing), driving speed.
DB (Fixed Radar)	ш № 370 co 94 h	information (nashing), driving speed.
its speed is greater than the		Sound: Upon entering the database area, Voice
Speed limit	→	Announcement Radar Type fixed only once
		and continues to beep until the speeding is less than the radar speed limit.
		Monitor: City2 (sensitivity mode),
		camera type, section control, distance, speed limit information, average driving speed.
DB (Section Control) your speed is lower than the		anomaton, avoiago anomg opeca.
Speed limit		Sound: When entering the database area, Voice
		Announcement Type of span control only
		once and no beep until you pass.
		Monitor: City2 (sensitivity mode),
		camera type, section control, distance, speed limit information, average driving speed.
DB (Section Control) your speed is greater than the		Sound: When entering the database area, Voice
Speed limit		Announcement Type Section Control only once
		and continues Beep until the average speed limit
		is lower than the road speed limit.



11. Interpretation of the screen, voice and sound in a user point notification (With default factory options).

EVENT	MONITOR	DETAIL	
NORMAL POI	Monitor: After pressing the Save button "Normal POI" => Sensitivity Mode, POI Icon, PO No		
SAVE POI	Sound: When you press the "Normal POI" button, you can hear "Save POI".		
NORMAL POI	Monitor: After pressing the "Normal POI" delete button, => Sensitivity Mode, POI Icon, PO No.		
DELETE POI		Sound: When you press the "Normal POI" button, you can hear "Delete POI".	
	· ·	Monitor: Sensitivity mode, POI icon, driving distance and speed.	
ENTERING POI NORMAL	124m 74 Km	Sonar: When entering the "normal POI" area, double beep and voice alert once and then No beep regardless of current driving speed until passing the point of interest.	
While driving in a normal POI area	≛ 85 ↓ 124m 74 ^{₭₥}	Monitor: "Fine" sign icon, signal strength, POI icon, POI distance, driving speed	
(Detects a Multaradar only in mode Highway)		Sound: While driving in the POI, if you encounter the "Fine" sign, Voice alert and double beep and beep according to the signal strength according to the sensitivity mode setting value.	
WHAT'S HAPPENING?	14:33 29 ^{Km} / _h	Monitor: After passing poi, the display will return to normal driving mode.	
		Sound: When listening to a POI, you may hear a Passing Beep.	



12. Interpretation of the screen, voice and sound when warning of a silence point (With default factory options)

EVENT	MONITOR	DETAIL
POI OF SILENCE RECORD POI	∭ 1 W NO1 Grabado	Monitor: After pressing the Save "Silent POI" button => Sensitivity mode, POI icon, POI No. Sound: When you press the "Mute POI" button, you can hear "Save POI".
POI OF SILENCE DELETE POI	₩ NO1 Borrado	Monitor: After pressing the "Silent POI" delete button => Sensitivity mode, POI icon, POI No. Sound: When you press the "Mute POI" button, you can hear "Delete POI".
ENTERING POI (no DB signal detection and RD at all)	124m 74 ^{km}	Monitor: Sensitivity mode, mute POI icon, driving distance and speed. Sound: When you enter the "" area Mute POI", Double beep and voice alert once and then No beep regardless of current driving speed until passing the point of interest.
While driving in a quiet POI area (Recognizes a sign of Radar Fine)	≛\$5 <u>↓</u> 124m 74 ^{Km}	Monitor: "Fine" icon, signal strength, silent POI icon, distance, and driving speed. Sound: While driving PDI, if encounter "Fine" sign, Voice alert and double beep and No beep according to the sensitivity mode setting value.
WHAT'S HAPPENING?	14:33 29 ^{Km}	Monitor: After passing POI, the display will return to normal driving mode Sound: When passing a POI, you can hear a Passing Beep.



13. Interpretation of the screen when it detects a GPS point and then a radar (With default factory options).

EVENT	MONITOR	DETAIL
While driving in a BD area, if meets the sign of a Multaradar	11 1 370 80 64 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Monitor: (1) "Fine" text display (2) "Fine" signal, intensity of the signal, Camera type, Distance, Speed limit information, Speeding while driving. Sound: Double beep => Voice Multaradar, and Beep according to intensity of the signal.

14. Interpretation of the screen when it detects a Multaradar and then a GPS point (With default factory options).

EVENT	MONITOR	DETAIL
While detecting the signal Multaradar, if it approaches	**************************************	Monitor: short icon fine, intensity of the signal, camera type, distance, speed limit information, driving speed
a GPS point	355 80 64 € 64 € 64 € 64 € 64 € 64 € 64 € 64	Sound: Fine beep => Camera type with voice => Beep still Fine (The signal RD is older than DB)

15. Smart Mode Concept (Recommended), 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 at this speed. In this mode minimizes GPS warnings from nearby areas where you are traveling that should not be visited. triggered because it won't pass through them. False alarms from the antenna are also minimized. detector in cities with high intensity of electrical noise.

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

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

Modes	Highway	City 1	City 2
K Band	OFF	OFF	OFF
Ka Band	ON	ON	OFF
MTR Band	ON	ON	OFF
Band X	Off	OFF	OFF
Laser	ON	ON	ON
GPS alerts	ON	ON	ON
Smart Mode	>41 km/h	21-40 km/h	0-20 km/h



16. Advanced: Programming, handling and menu options.





Volume Adjustment

To turn on and adjust the volume, turn the dial on the side.

Key functions

MUTE (ÿ)

• Short press in detection mode mutes the sound. • Short press in sleep mode activates or deactivates silent mode.



- Short press in "Menu" mode, go to the previous option.
- Long press on the move adds or deletes a user point, if we are passing through an already recorded point is deleted, if the point does not exist it is added.





CITY(ÿ)

• Short press on switches between HIGHWAY/CITY1/CITY2/CITY3/SMART modes, default and recommended SMART mode.



• Short press in "Menu" mode, go to the next option.



• A long press while moving adds or deletes a silent point. If you're passing over an already recorded point, it deletes it; if the point doesn't exist, it adds it. A silent point is an area where you don't want the detector to alert you. For example, an area where you know there's a false alarm.





MUTE (ÿ) + CITY (ÿ) (At the same time)

• A long press on both keys displays the vehicle's battery status.

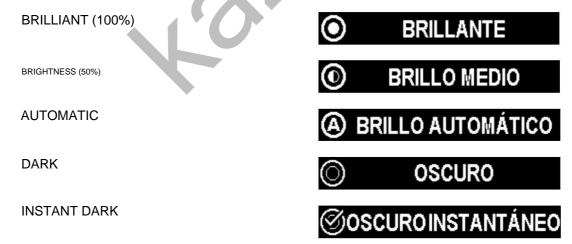


** If the battery charge is lower than 10.5V, it will automatically display "low battery" alert and beep 2 times at 30-second intervals continuously.



MENU

- In "Menu" mode, a long press enters or exits "Menu" mode.
- Within a MENU, short press the MENU key to enter 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 toggles between brightness modes (100 => 50 => Automatic => Dark => Instant dark)



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



• Long press enters or exits "Menu" mode



MUTE (\ddot{y}) + CITY (\ddot{y}) + MENU (At the same time)

• Resets factory settings.



*Note: This does not erase the loaded GPS database; it only resets the options to their original recommended values. This is important to do after a GPS firmware update!

"Menu" Functions (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 On/Off Selection (2) Sound notification setting 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 on/off ** POI Configuration (1) Remove all normal points of interest (2) Delete all silent POIs (3) Delete the last saved POI **Other settings (1) Activation/deactivation of the type of audible alert (2) Automatic control (3) Intelligent control for radar (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 on/off (10) Working style (11) Display settings



"Menu" Functions (Detail)

It is recommended not to change configuration options without knowing what you are doing. Read what you want to change first. If you are unsure, ask support.

If you change options and it doesn't work as you expected, return to the factory settings recommended by the manufacturer.

RADAR SETTINGS



Within a MENU, short press the MENU key to enter the submenu options.

Example: If we're in RADAR SETTINGS under KA, a short press of the menu key will switch us on or off. This applies 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 [[III] On/Off (Default) Ka Band Activated (Default)/Disabled Multaradar CD/CT 📲 🖫 MULTA ON (III) MULTA (III) OFF On (Default)/Off Band X On/Off (Default) Laser On (Default)/Off ON (III) Gatso 3 GATSO 3 GATSO 3 ON (III) On/Off (Default) Gatso 4 GATSO 4 € GATSO 4 (IIII) OFF ON (III) On/Off (Default)

(2) Sound notification setting according to signal level

Default: OFF / values: from 0 (OFF) to Level 6





This option increases or decreases the volume of a radar detection signal depending on its intensity.



(3) Deactivation of the radar according to the established speed.

Default: 30 KM / Value: from 0 (OFF) to 60 (EVERY 10 KM)





With this option, if the selected speed is not exceeded, the radar detector will be deactivated. If set to Off mode, it will always be active.

GPS SETTINGS



Within a MENU, short press the MENU key to enter 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: On Distance control to FIXED

RADAR. Default warning distance: 800M (100 TO 1000 M)



(2) SECTION CONTROL CAMERA On/Off Default: On

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



(3) CAMERA AT TRAFFIC LIGHT OR TRAFFIC SIGNAL Activated/Off Default: Activated

Distance control to CAMERA AT TRAFFIC LIGHT OR TRAFFIC SIGN. Warning distance by Default: 300M (From 100 TO 1000M)



(4) CAMERA CONTROL USE BELT OR MOBILE DEVICES On/Off By default: Activated

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



(5) POSSIBLE HIDDEN RADAR WARNING On/Off Default: On

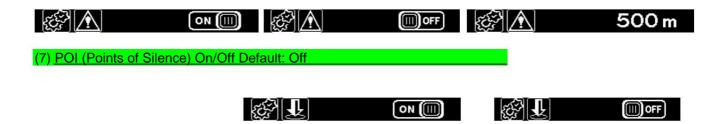
Distance control to WARNING OF POSSIBLE HIDDEN RADAR. Warning distance by default: 800M (FROM 100 TO 1000 M)



(6) ACCIDENT BLACKSPOT WARNING On/Off Default: Off

Distance control to WARNING OF POSSIBLE HIDDEN RADAR. Warning distance by Default: 500M (100 TO 1000M)









POI SETTINGS



(1) Delete all normal POIS (User Points)



(2) Delete all silent POIS



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











(1) Type of audible alert



a) GPS Voice On/Off, default on





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





c) Radar Voice On/Off, default on





d) Radar Beep On/Off, on by default





(2) Automatic sound control



a) Default: 5 Seconds (RANGE: OFF/ 3/5/7/10/15/20/30/45/60 sec)

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) Default: 50% (RANGE: OFF/30/40/50/60/70%.)

If the sound is on and persists beyond the selected time, the volume will be reduced by the selected percentage. If you select Off and the time specified in the previous option elapses, the sound will be muted.







(3) Intelligent Radar Control



a) Smart Sound in Highway Mode

The display is operational and shows the detected radar and signal level, but there is no voice or sound within a driving speed of less than 40 km/h (25 mi). **Default: 0 km/h** (0 to 100 km/h)



b) Smart sound in City mode

The display works, but there is no voice or sound at speeds below 40 km/h (25 mi). **Default: 0 km/h** (0 to 100 km/h)



(4) Intelligent GPS Control



(a) Smart sound in all modes

The display works and shows the warning information, but there is no voice or sound unless you exceed the speed limit set 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 select 20 in this option, the alarm will not go off until you are traveling at 80 km/h.

(5) Cruise control



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

If it is on, a warning voice and a beep will sound if the driving speed exceeds the set speed.







(6) GMT (Home Time Zone) Setting



a) Default: +1 (RANGE: -11 to +11 h)

Set 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: -5 to +5 km/h)

Adds or subtracts the selected amount in km/h to the speed displayed on the screen, useful for adjusting it to the car's speedometer measurement.

(8) Current position



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

(9) Initial greeting when turning on the device



Gives the initial fasten seat belt greeting, default On.

(10) Mode of operation



a) Default: GPS + Radar

Select between three modes, GPS only, radar detector only or both systems at the same time. time.



(11) Setting the language on the screen



a) Default: Spanish

Select between the two display languages





17. False GPS warnings.

Warnings with speed below the road speed

If the GPS warns you about a speed lower than the road you're traveling on, it's because, under certain circumstances, the GPS may be warning you about a service road, a nearby intersection, or a parallel road. Since it doesn't have maps like a navigator, the GPS warns you when you're approaching a point in its database with a specific heading, but it doesn't know whether you're on that exact road or an adjacent one.

Other times, we may be given a warning about a point 500 meters ahead, but if we deviate before arriving, the warning disappears.

Possible mobile radar warnings

The GPS maintains a database with statistics on the locations where mobile speed cameras typically issue fines. Remember that these are statistics and they don't necessarily have to be present when we pass through that point. To detect these speed cameras, the device uses a detector antenna.

Warnings of dangerous points, curves

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

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

Update the database version. In the unlikely event that the notification is still not given, please contact us via www.kazaradares.com to report that the database item is missing.

The GPS did not give me a warning about a fixed radar inside a tunnel.

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

18. False alarms from the detector antenna.

The KAZA's detector antenna is a microwave receiver. To detect radars, this antenna must be very sensitive, as radars transmit very little power. Due to the antenna's high sensitivity, it can detect strong transmissions and sometimes generate false alarms.

There are devices that can confuse the detector antenna:

- Pre-collision systems (PCS) / adaptive cruise control (ACC) systems and radar-based (not optical) **blind spot detection (BSD)** systems on some cars and trucks may produce some false alarms in the MTR band.
- Another radar detector installed in a car. If another vehicle is driving near us with a radar detector, the detector antenna will detect the KA band missed by the other device and give a false alarm. If we are driving in heavy traffic and we



we zoom in and out on this vehicle, it will disappear and the sign will reappear.

This is perhaps the most difficult false alarm to detect, as the detector could be in any of the vehicles around us

Mobile phone repeaters, data radio links. These repeaters broadcast in
frequencies whose harmonics can coincide with 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 multiradar frequency, but occasionally the
harmonic can coincide and produce a false alarm. These types of false alarms tend to occur repeatedly in the
same locations.

Because of this, all radar detectors can give false alarms, and it doesn't necessarily mean they're faulty. If your device gives a false alarm, check to see if any of the above could be occurring before sending it in for service. Sometimes, on an isolated road, a false alarm can occur, leading us to believe it's faulty. However, incredible as it may seem, in isolated areas there are radio links for automatic farm irrigation, air navigation radio links, and other devices.

Important notice:

If you activate the "K" or "X" band in Spain, you will experience significant interference and false alerts. All radars that transmit on the "K" band are fixed, and your GPS will warn you 500 meters in advance. It's recommended to turn it off.

19. Updating the database

To update the device database, you can download periodic updates from the website http://www.kaza.es
It has free and premium updates

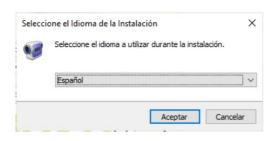
1. https://www.kaza.es/producto/suscripcion-premium-actualaciones-kaza-modelo-dt-480

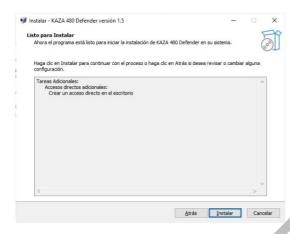


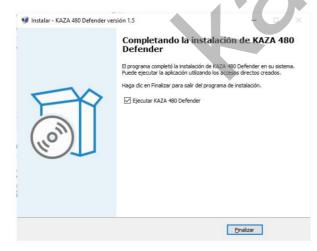


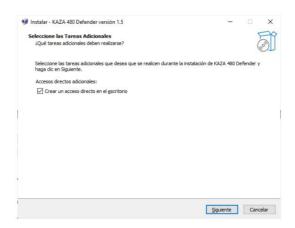
OPTION 1 With the automatic installation program

Run the installation program and follow the wizard:









Let it install the drivers

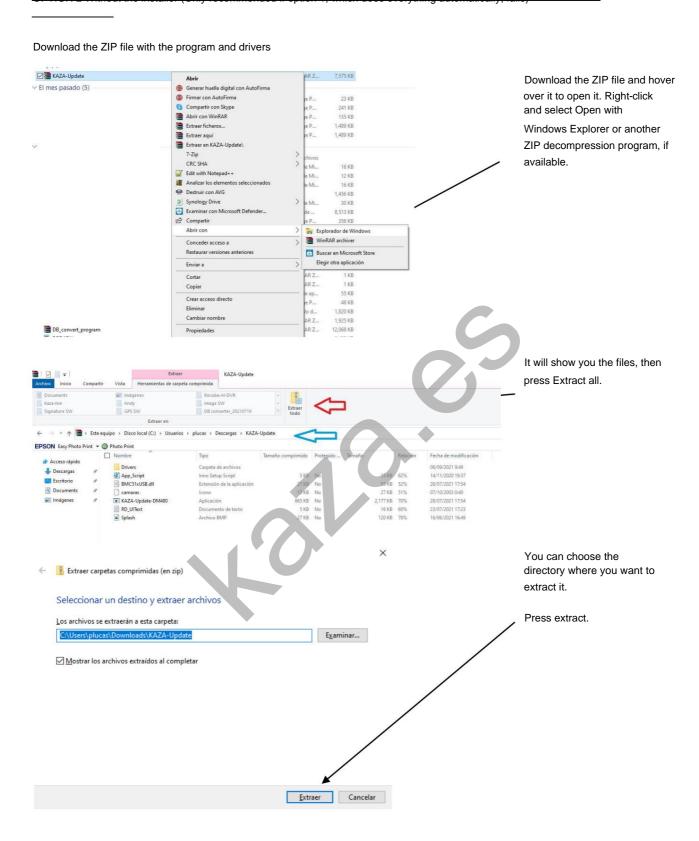


Run the program that you will have on your desktop or in the program bar.

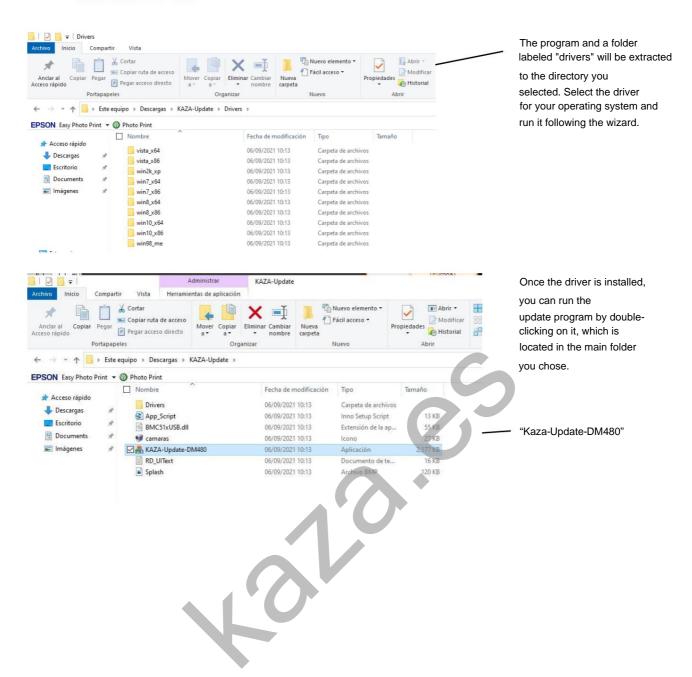




OPTION 2 Without the installer (Only recommended if option 1, which does everything automatically, fails)

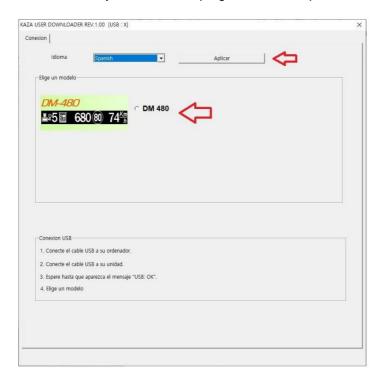








Once installed, you can run the program. Select "Spanish" and click "Apply."



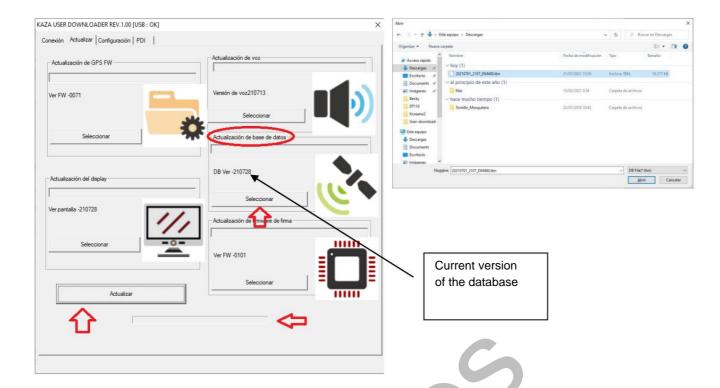
Connect the supplied USB cable to your computer, plug the USB into the drive, wait until OK appears in the bar above, and choose your model.

The following tabs will light up:



Choose the "Update" tab



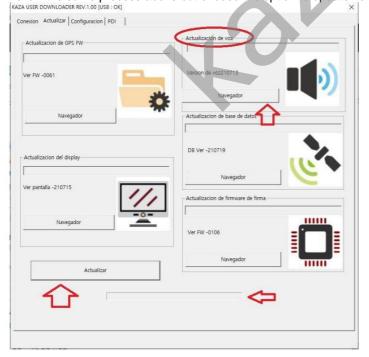


In the option that says database, press the "Select" button and select the database that you downloaded, which will normally be in the downloads folder and whose extension is .tbn.

Finally, click Update and wait for the process to complete.

20. Voice Update

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





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

It's done the same way as the previous steps. Be careful with these updates; don't make mistakes, as they can render your device unusable and won't be covered by the warranty.

22. Configuration tab.

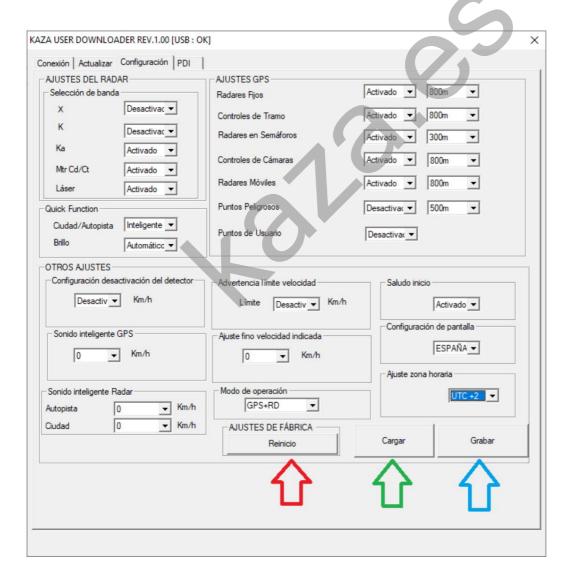
The factory settings supplied with the unit are ideal for standard operation in Spain and Portugal. If you wish to change anything, please read this manual carefully before making any changes.

In this tab you can modify all the settings just like from the device menu in a more convenient way.

The "Reset" button loads all options to factory settings (recommended)

The "Load" button reads the current device configuration and displays it on the screen.

The "Record" button saves the values shown on the screen to the device.





23. POI tab

Here you can view user points, as well as delete any that are in the device's memory.



24. Technical specifications of the KAZA DM 480 DEFENDER II.

Receiver Type Dual

Conversion Super Heterodyne **Detection System** DSP (Digital Signal

Processor)

Operating Frequencies: Ka Band

34.300, 34.700, 35.500 GHz ± 200 MHz K Band 24.050 to

24.250 Ghz X Band 10.475 to 10.575 Ghz Fine Band CD / CT Gatso 3/4 Radar Laser Detection: 800 to 1100

nm Power:

DC12V-15V (from car battery) 230mA

Operating

Temperature: $-10^{\circ} \sim 50^{\circ}$

Storage: -20°~80°



25. Contact information.

KAZA: www.kaza.es Contact

email: consulta@kaza.es // soporte@kaza.es 28260 Galapagar, Madrid

IMPORTANT NOTICE:

KAZA reserves the right to modify this manual and product features without prior notice. Additionally, some of the functions described in this manual may vary depending on the software version installed or optional components purchased.

This device is designed to assist responsible drivers in complying with the regulations of the Highway Code. The user of this device is solely and personally responsible for its use, taking into account the regulations of each country. The manufacturer or its distributor assumes no liability when its use contravenes the legislation in force in the country in which it is used.

