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OWNER'S MANUAL



CT500 DAB

TUNER CT500

Safety Information

Thank you for purchasing this product, please read the manual carefully before operating, and reserve it for future reference.

PRECAUTIONS

- Only in a 12-volt DC negative-ground electrical system.
- Disconnect the vehicle's negative battery terminal while mounting and connecting the unit.
- When replacing the fuse, be sure to use one with an identical amperage rating. Using a fuse with a higher amperage rating may cause serious damage to the unit.
- Make sure that pins or other foreign objects do not get inside the unit, they may cause malfunctions, or create safety hazards such as electrical shock.
- If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.
- Keep the volume at a level at which you can hear outside warning sounds (horns sirens, etc.).

CAUTION

- DO NOT open covers and do not repair by yourself. Ask the dealer or an experienced technician for help.

Specifications

General

Power supply: 12V DC (10.8V-16V)
Maximum power speaker: 4X40W
Suitable speaker impedance: 4 ohm
Fuse spec: 10A
Weight: 0.7kg
Dimensions (WxDxH): 188x116.3x58.5mm

FM Stereo Radio

Frequency range: 76 - 90 Mhz (japan mode)
87.5 - 108 MHz
Signal/noise ratio: 50dB
AUTO Step: 100KHz

AM (MW) Radio

Frequency range: 522-1620KHz
Step: 9KHz

LW Radio(EURO)

Frequency range: 144-288KHz
AUTO Step: 3KHz

BT

Frequency range: 2402-2480MHz
EIRP power: < 10dBm

EXT (AUX)

Jack Stereo 3.5mm ≥ 300mV auxiliary source

DIGITAL RADIO (DAB)

Frequency range: 174.928-239.200 MHz
1452.960-1490.624MHz
Step: 20KHz

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User Safety Code

You need to enter password when power on, the original password is 1111.

BEFORE OPERATION

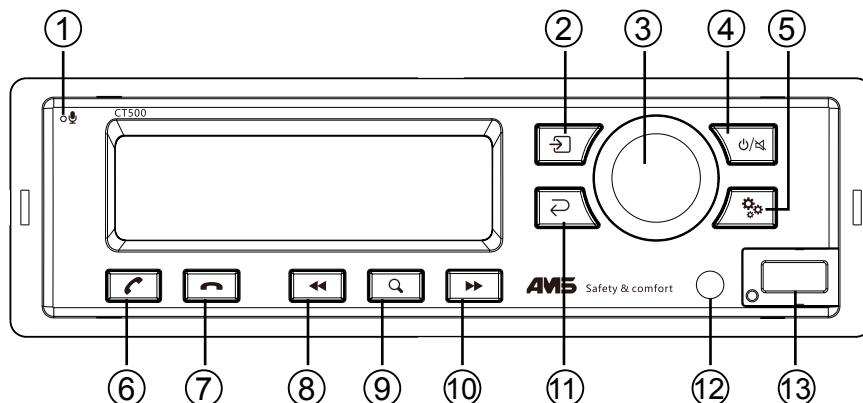
- Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.
- Stop the car before performing any complicated operation.

Note:

1. According to models with different wiring harness to connect the definition of the specific content, please refer to the model label.
2. Specifications and the design are subject to change without notice due to improvements in technology.

Panel Controls

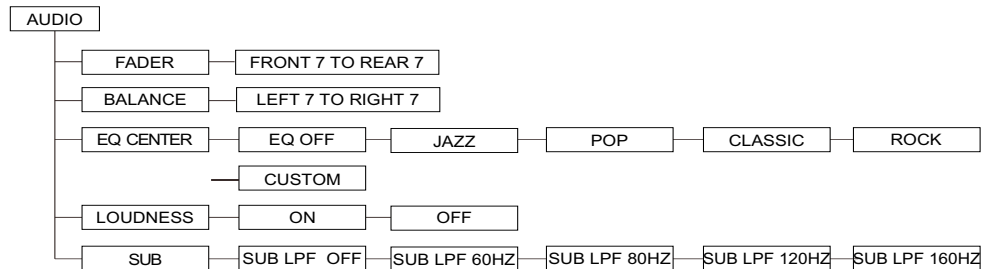
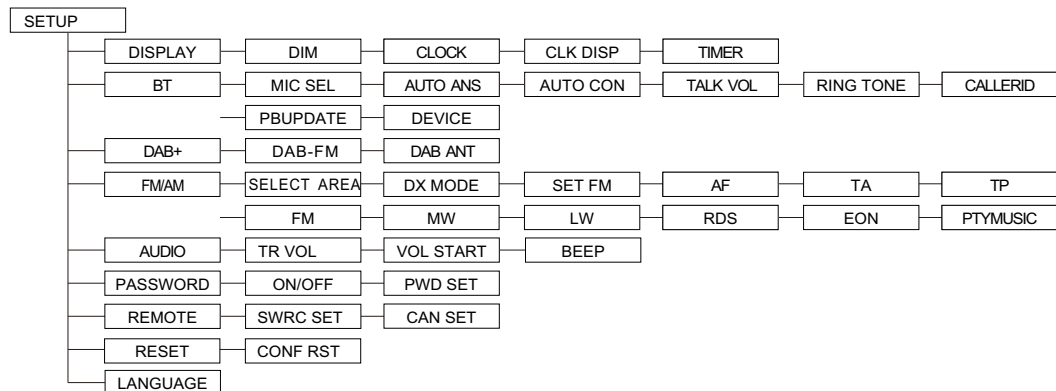
- (1) - Microphone
- (2) - Enter Source menu
- (3) - Radio/DAB mode:
 - Adjust volume (rotate)
 - Select preset station in preset mode (rotate)
 - Tune in manual mode (rotate)
 - Confirm / Switch (press)
- MP3 / BT music mode
 - Adjust volume (rotate)
 - Play/pause (press)
- Other mode
 - Previous/Next option (rotate)
 - Confirm (press)
- (4) - Power on
 - Mute (short press)
 - Power off (long press)
- (5) - Enter Audio menu (short press)
 - Enter Setup menu (long press)
- (6) - Answer/Dial/Call transfer/Hang on (short press)
 - Switch to another Bluetooth device (long press)
- (7) - Hang off/Reject a call (short press)
 - Disconnect the Bluetooth device (long press)
- (8) - Radio mode
 - Automatic search the station from high to low.
 - Hold more than 2 seconds for manual station search.
- MP3 music mode



- Select the previous track
- Browse folder (long press)
- BT music mode
 - Select the previous track
 - Fast backward (long press)
- (9) - Radio mode
 - Select preset stations (short press)
 - Store preset stations (long press)
- MP3 music mode
 - Browse the list (short press)
 - Intro/Random/Repeat play (long press)
- (10) - Radio mode
 - Automatic search the station from low to high.

- Hold more than 2 seconds for manual station search.
- MP3 music mode
 - Select the next track
 - Browse folder (long press)
- BT music mode
 - Select the next track
 - Fast forward (long press)
- (11) - Back to previous menu
 - Exit current menu
- (12) - AUX
- (13) - USB slot

Button Tips



Button Tips

MP3 Playback

Track skip

Press the [◀▶] button to go to the previous or next track.

Folder select

Long press the [◀▶] button to select MP3 folder back/ahead.

Audio setting

Press [⚙️] button, and Rotate the knob to select FADER/BALANCE/EQ/LOUDNESS /SUB function, rotate the knob to adjust.

System setting

On the non time display menu:

1. Press and hold [⚙️] button more than 2 seconds.
 2. Rotate the knob to select [EXPERT CONF YES], and press the knob to enter.
DISPLAY SETUP → BT SETUP → DAB+ SETUP → FM/AM SETUP → AUDIO SETUP → PASSWORD SETUP → REMOTE SETUP → RESET FACTORY → LANGUAGE SETUP
- Wait for 1s and rotate the knob to adjust.

DISPLAY

1. Press and hold [⚙️] button more than 2 seconds.
2. Rotate the knob to select [EXPERT CONF YES], Press the knob to enter.

3. Then press and rotate the knob to set DIM/CLOCK/CLOCK DISP/CT CLOCK/TIMER mode.

Automatic clock setting :

While listening an FM RDS station, transmitter updates automatically time on the radio unit.

12/24 HOUR SET mode

Press the knob to enter 12/24 hour set mode, rotate the knob to select 12 or 24 hour mode.

CT CLOCK ON/OFF

While listening an FM RDS station, transmitter updates automatically the clock on the radio unit.

Timer ON/OFF

Timer ON: when ignition of the machine is off, you can turn the unit on by pressing POWER button, and it can work for about 2 hours

Timer OFF: when ignition of the machine is off, the unit can't work anymore.

Radio Operation

Radio seek automatically

Press the [◀▶] button to auto search the station rewind / forward.

Radio tune by step

Hold [◀▶] button more than 2 seconds, switch to the MANUAL

mode, then short press [◀▶] button to step search the station rewind / forward.

AREA SETTING

AREA setting: Rotate the knob to select EUROPE, AUSTRALIA, JAPAN, USA, LATINR.

DX mode

Rotate the knob to choose tuner sensitivity URBAN or RURAL.

RDS

AF (Alternative Frequency):

When the radio signal strength is weak, enabling the AF function will allow the unit to automatically search another station with the same PI, but with stronger signal strength.

PS (Program Service name): The name of station will be display instead of frequency.

Traffic Announcements

Some RDS FM stations periodically provide traffic information.

TP (Traffic Program Identification)

Broadcasting of traffic information

TA (Traffic Announcements Identification)

Radio announcements on traffic conditions

TA Mode: When TA mode is turned on, the TA indicator will blink.

When traffic announcement is received, the TA indicator will display. The unit will temporarily switch to the tuner mode

Button Tips

(regardless of the current mode) and begin broadcasting the announcement at TA volume level. After the traffic announcement is over, it will return to the previous mode and volume level. When TA is turned on, SEEK, SCAN, AMS function can only be received or saved when traffic program identification (TP) code is received.

PTY function

Press and rotate the knob to select the type of station **INFO-SPORT-EDUCATE-DRAMA-CULTURE-SCIENCE-VARIED-POPM-ROCK M-EASY M-LIGHT M-CLASSICS-OTHER M-WEATHER-FINANCE-CHILDREN-SOCIAL-RELIGION-PHONEIN-TRAVEL-LEISURE-JAZZ-COUNTRY-NATIONM-OLDIES-FOLK-DOCUMENT-TEST-ALARM**
REG on: AF function will implement the regional code (of the PI) and only stations in the current region can be tuned automatically.
REG off: AF function will ignore the regional code(of the PI) and stations in the other regions can also be tuned automatically.

TA VOL mode

Rotate the knob to to adjust TA VOL 10-35.

VOL LAST/ADJ mode

Rotate the knob to select VOL LAST or ADJ mode.

In ADJ mode, rotate the knob to adjust S-VOL 5-30.

BEEP mode

Rotate the knob to select button beep sound on or off.

SWRC function (system wired remote control)

This function allows to control main functions of the radio (VOL-/VOL+ /Source /SEEK+/SEEK-/Tune Memory /BT-OFF hang off) in USB/BT/A2DP/AUX.

To do so, you need a wired remote to connect to the female input 3.5, yellow connector at the back of the radio.

SWRC SET

Activate or deactivate the steering wheel controls

SWRC (RESIST / PWM)

Allows you to select the signal mode of the steering wheel controls:

- > RESIST: chain of resistors
- > PWM: frequency - 100 Hz at 12 Volts

CAN SET

Rotate the knob to choose:
> CAN REMOTE:ON/OFF
> CAN TEST:ON/OFF

> CAN Displayer:ON/OFF

MIC

In Default settings, the MIC SEL is "REAR". The micro cable is connected at the rear of the radio, we advise you not disconnect the micro cable in order to avoid losing it.

On the non time display menu:

1. Press and hold [] button more than 2 seconds.
2. Rotate the knob to select [EXPERT CONF YES], and press the knob to enter.
3. Rotate the knob to select [BT SETUP]
4. Select [MIC SEL] and rotate the knob to select "FRONT".

Language

Language for the user interface of the device.

On the non time display menu:

1. Press and hold [] button more than 2 seconds.
2. Rotate the knob to select [EXPERT CONF YES], and press the knob to enter.
3. Rotate the knob to select [LANGUAGE SETUP], and press the knob to enter.
4. Rotate the knob to choose english, french, german, italian, spanish, dutch.

Bluetooth Functions

Pairing

1. Open the device's BT function,
2. Search bluetooth equipments by your device. Please make sure your device be detectable (through the menu on the device).
3. Select unit "CT500 DAB" to connect. ("1234" by default)

Press [] button more than 2 seconds, and the Bluetooth device will be disconnected (only in A2DP mode or phone use).

AUTO CON mode

Press [] button more than 2 seconds. Press and rotate the knob to display "BT", "AUTO CON", and select on or off. When it is on, it will automatically connect the device.

AUTO ANS

Press [] button more than 2 seconds. Press and rotate the knob to display "BT", "AUTO ANS", and select on or off. When it is ON, the radio will automatically hang on after a ring tone (4/5).

BT mode selecting

Press [] button and rotate the knob to select PHONE 1/2.

Dialing

1. Phone dialing
Use your mobile phone dialing, LCD screen displays dialing information.
2. Unit dialing

Press [] button and rotate the knob to switch PHONE 1/2. Press [] to hang on and "DIAL NO" appears on the LCD, then press the knob to enter dialing mode. Press and rotate the [volume] knob to input dialing numbers, press [] button to dial out.

3. You can search for any call, dialed, missed, or received. As previously for "DIAL NUM" function, select "Dialed", "Missed" or "Received",
 - > Press the knob to enter the selected history.
 - > Turn the knob to scroll through the contacts.
 - > When the contact's name or mobile phone number is displayed, press the [] button to call the mobile phone number of this contact. Press the [] key to end the call.

Voice switch

During the call, Press the [] button to transfer between the unit and your phone.

Hang up/Answer

Press [] button to answer a call,
Press [] button to hang up.

A2DP mode

On A2DP music playing mode, press knob to pause/play.

Press [] to previous or next track.

In AD2P mode, if your phone is paired you can order vocally by "SIRI" or "Google" application to select and give a call.

On some ANDROID versions you can separate phone book and music management in order to connect two Bluetooth devices

1. Standard Setting (one device phone and media)/with your phone you can receive

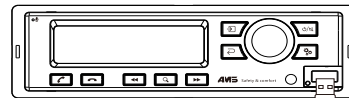
USB Function Summarization

and send a call and listen to your music at your device.

2. Double connection (2 phones connected at the same time)
 - first in BT (receipt and phone call)
 - second in A2DP mode(listen to your music) you can free media connection on the first phone
 - on the phone, enter the Bluetooth setting
 - position yourself on the device
 - go to the setting at this device
 - uncheck the setting "audio parameter Media"
 - close the access parameter CT500 the first device received an transmit call, the second device playing the audio media, to return to standard parametrage, tick the box of the first device having disconnected the second device

Loading/Take out USB equipment

1. Open the USB cap located on the bottom right of the unit, insert a USB device into the connector and the unit will begin to play automatically.
2. To stop playback of USB device, press [] button and rotate the knob to non USB mode and then remove the USB device.



For USB playback: Long press the [] button can switch front/rear USB function.(When front/rear USB is connected)

DAB function

DAB Radio Selection

DAB/DAB+ Provides radio programs in digital sound quality. To access Digital Audio Broadcast (DAB) press the [SRC] button and select DAB

DAB Service SCAN "Synchronising"

If the antenna is not connected, ""No signal"" will be displayed. If the tuner has never been used, ""No service"" will be displayed.

Automatic scan:

The radio will initiate an automatic scan of the DAB transmitters for the first operation, or if the DAB transmitters is lost.

Manual scan:

In DAB mode, if you want to launch a scan, At the same time hold down the "[\boxplus] + [Q]" button for 1 second.

The screen will display the message ""SCAN OK"" and will display the numbers 1 to 100K one after the other (DAB block). At the end of the scan, the screen will display the number of stations received (e.g. FOUND 39 = 39 stations found) and will broadcast the first station.

Tuning a DAB Service

To tune a DAB service push [< / >] to select the next/previous DAB service.

"Tuning" is shown on the Display, Then the station is automatically broadcast

DAB Service List

"To get an overview of receivable DAB

services . Push [SEL] for 2 seconds to open the DAB Service List, Rotate the [VOL] knob to scroll through the list of receivable stations. Push [SEL] to tune a DAB service . "Tuning" is shown on the display, then the station is automatically broadcast "

Recall Stored Favourites

To recall a preset station, briefly press the desired button (1 to 6)

Switching automatic between DAB and FM (DABFMLNK)

When the DAB signal quality drops significantly, it is preferred to switch and listen to the service via FM. Switching between DAB and FM (DABFMLNK) can be disabled via the system settings menu.

Note: If the AF indicator is not displayed, the radio has not found the corresponding station in FM and can not switch from DAB to FM and vice versa

Rural / Urban

Press the [</>] button several times to select RURAL / URBAN. Turn the [volume] button to select the appropriate tuner mode:

RURAL (poor reception) or URBAN (locations near emitters).

BT VOL

Adjusts the level of the AD2P-BT relative to

other sources (from 0 to +7).

DIMMING

This radio allows manual or automatic dimming of the display and key buttons.

Select ""DIMMING"" from the setup menu and select one of the following:

> Select ""OFF"" to deactivate dimming

> Select the ""MANUAL"" attenuation when the radio is not connected to the vehicle ignition pin . The change between day and night mode is done by selecting Settings menu ""DIMDAY"" or ""DIMNIGHT""

> Select the ""AUTO"" attenuation when the radio is correctly connected to the vehicle ignition pin (A6, +12 V lantern or pilot lights), the lighting will change when the parking light is switched on.

Select Manual dimming to adjust Brightness of display and Buttons". Select DIM MAN and change between day mode and night mode by selecting "DIMDAY" or "DIMNIGHT"

> To adjust Night Brightness of the display and buttons select "DIMNIGHT"

> To adjust Day Brightness of the display and buttons select "DIMDAY"

DIM KEY

Select "DIM KEY" and adjust the brightness from the buttons.

DAB function

DIM DISP

Select "DIM KEY" and adjust the brightness from the display

DAB FMLK

Switching automatic between DAB and FM (DABFMLNK). When the DAB signal quality drops significantly, it is preferred to switch and listen to the service via FM.

Switching between DAB and FM (DABFMLNK) can be disabled via the system settings menu.

Note: If the AF indicator is not displayed, the radio has not found the corresponding station in FM and can not switch from DAB to FM and vice versa

DAB ANT

Selection of Active or Passive antenna

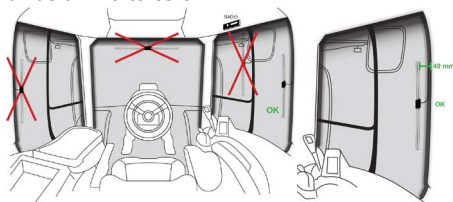
DAB antenna set-up

Position the antenna

- on the windscreen inside the car
- to the right of the driver for safety reasons
- on a fixed surface; avoid moving parts such as doors, windows, etc.
- vertically and half way up the windscreen, out of the driver's field of vision.

A detailed version of the assembly notes is available to download <http://pro.ams->

diffusion.fr/aftersale/



Characteristics

These specifications may be modified without notice.

Frequency band: 170 - 240 MHz (Band III),
1452 - 1492 MHz (Band L), Impedance: 50 Ω
Connector type: SMB Cable length: 2.9m

Other functions

USB functions(flash memory type)

1. USB flash memory 2 in 1 support
2. FAT 12/FAT 16/FAT 32 format supported.
3. USB 1.1 support, USB 2.0 support (For 2.0,speed performance is as USB 1.1)
4. WMA files supported
5. Maximum number of MP3 files FAT 32 format supported is 65535 files. (Maximum number of MP3 files NTFS supported is 1000 files.)
Maximum number of folders is 999.
6. Maximum USB capacity support is 8 GB and best performance with tracks not more than 500, and not exceeding 30 folders.
7. Not all USB devices are compatible with the unit.


AUX mode

When radio is on, press [] button and rotate the knob to display AUX FRONT/REAR. Press the knob to enter.



When the radio is OFF but the contact and the power are ON : If your device detected the Tele-mute signal (ground A2), the device switch ON automatically.

When the signal disappeared, the device switch OFF.

nb: Control the track with the external device

When using AUX mode, only the POWER knob, the [volume] and [] button can be used.

Timer function


If the device is switched on while the ignition is on, it then switches off and on again automatically with the ignition. This is provided that the A7 contact is connected to the terminal 15/30 (après contact ou "ignition key") of the vehicle. If the device is switched on without the ignition by pressing "/🔑", it switches off again after 120 minutes to save the battery. The device can then be switched on again with "/🔑".

Caution: When the radio is switched on, the automatic antenna extends.

Therefore always switch off the device when the situation requires it (e.g. in a station car wash).

You can stop this function in the MENU.

Source Button


Press [] button and rotate the knob to toggle the play modes. Press the knob to enter.

Password entered

Rotate the knob to select the digits, press the knob to confirm.

If the password is incorrect, "ERROR" appears on the display. Please enter the password again. If the user code is lost, contact the After Sales Service.


PWD OFF/ON: Activating/Desactivating the security code.

When the unit is switched on, Press [] button more than 2 seconds and rotate the knob show "PASSWORD OFF/ON". Press and turn the knob to select "ON" or "OFF": the password is activated or deactivated.

When set to "ON", the radio code will be requested, you will have to enter the password after each time you turn the ignition from ACC OFF to ACC ON, or the battery is disconnected (the default password is "1111"). If you only turn off the ignition (+15/30), the code will not be requested.

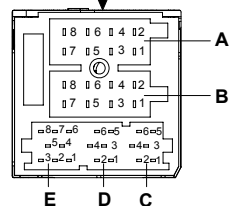
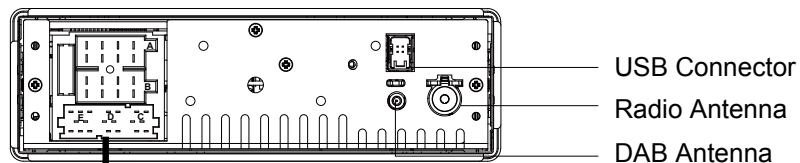
PWD NEW: Create a new password

You can set a new password for the unit:

Press [] button more than 2 seconds and rotate the knob show "PWD SET", rotate and press the knob to enter your old password. If the old password is incorrect, "ERROR" "AGN" appears on the display, please enter the password again.

If the old password is correctly entered, "NEW" is displayed, enter your new password. When "AGN" is displayed, enter your new password again. If "SET OK" is displayed, the code has been updated.

Wiring Diagram



connection step:
First: Insert simultaneously the A&B connector
Second: Insert simultaneously the C&D connector

NO.	NOTE	NO.	NOTE
A1	CAN HIGH	B1	RR+
A2	CAN SHIELD	B2	RR-
A3	CAN LOW	B3	FR+
A4	IGNITION/ACC	B4	FR-
A5	ANTENNA REMOTE	B5	FL+
A6	ILLUMINATION	B6	FL-
A7	BATTERY+	B7	RL+
A8	POWER GROUND	B8	RL-
C1	LINE_OUT_L	D1	MIC+
C2	SWRC_GND	D2	RAUX_R
C3	LINE_OUT_GND	D3	MUTE PHONE(H)
C4	AMPLIFIER REMOTE	D4	RAUX_L
C5	LINE_OUT_R	D5	MIC-
C6	SWRC+	D6	RAUX_GND

FCC STATEMENT

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

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

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

2. any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body

"Made for iPod" and "Made for iPhone" mean that an electronic accessory has been designed to connect specifically to iPod or iPhone, respectively, and has been certified by the developer to meet Apple performance standards.

Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

Please note that the use of this accessory with iPod or iPhone may affect wireless performance.

iPod and iPhone are trademarks of Apple Inc., registered in the U.S. and other countries.

Supported iPod/iPhone devices:

iPhone X
iPhone 8 Plus
iPhone 8
iPhone 7 Plus
iPhone 7
iPhone SE
iPhone 6s Plus
iPhone 6s
iPhone 6 Plus
iPhone 6
iPhone 5s

TROUBLESHOOTING

The following checklist can help you to solve some issues which you may encounter when using the unit. Before consulting it, check the connections and follow the instructions in the user manual. Do not use the unit in abnormal condition, for example without sound, or with smoke or foul smell can cause fire or electric shock, immediately stop using it and call the save where you purchased it.

Issue	Possible cause	Solution
General		
The unit does not switch on.	Car ignition is not on. Cable is not properly connected. Fuse is burnt.	Turn your car key in the ignition. Check cables connection. Replace fuse with a new fuse of the same capacity.
No sound	Volume is set at minimum or the MUTE function is on.	Check the volume or switch the MUTE function off.
The unit or screen does not work normally.	The unit system is unstable.	Please contact our After Sales Service
Tuner mode		
Unable to receive stations.	The antenna is not correctly connected properly.	Please check if the antenna is correctly connected and check adaptors.
Bad quality reception of radio station.	The antenna is not fully extended or it is broken.	Fully extend the antenna and if broken, replace it with a new one.
Preset stations are lost.	- You may have changed reception AREA (USA...) as this changing cancel all your presets stations. - You maybe RESET the unit inadvertently (the unit has turned back to factory settings	- Please turn back to the right AREA. - You need to set again all parameters
USB mode		
Unable to insert USB device	The USB device has been inserted the wrong way round.	Insert it the other way around.
The USB device cannot be read.	NTFS format is not supported. Application files such as ".exe" cannot be read	Check that the file system is in FAT or FAT32 format. Due to different formats, some models of storage devices or MP3 players may not be read. Please make sure that the USB device only contain WMA or MP3 (AAC not compatible)
Microphone		
practical advice : Bluetooth microphone recommendation	Bad quality sound of the microphone	According the location of the radio in your machine, which microphone to use : - If the radio location is in face to the driver, we recommend then to use the front panel microphone. - If the radio location is not face to the driver but on the sides or rear, we highly recommend the use of wired remote microphone (rear connection) and place the microphone face to the driver.



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