

XOMAX

2 Din Car RDS/FM/AM Radio, MP3 Player
with USB Inputs

Model No.:XM-2R421



USER'S MANUAL

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PRECAUTIONS

Precautions & Warnings

- To reduce the risk of fire, electric shock, and interference, do not attempt to repair this unit yourself. Refer all service to a qualified technician.
- Some MP3/WMA files may not be playable.
- Keep the volume at a reasonable level to avoid distracted driving. High volume levels may make it difficult to concentrate on traffic and road conditions while driving.
- If the car has been in direct sunlight for an extended period, you may need to reduce the temperature inside the car before turning on and using the unit.
- If the battery is disconnected, discharged, or changed, the preset memory of the unit will be lost and require reprogramming.
- The unit is designed to be installed in a level, horizontal position. For optimal performance, avoid installing the unit at an angle.
- Never use excessive force when removing or attaching the faceplate. Do not tightly grip the display and buttons to avoid damage.

Lithium Battery Cell Warnings

- Cell leakage may cause damage to the remote control
- Do not throw cells into air as this may cause an explosion.
- Keep battery cells out of reach of children.

Drives and connections

Never place any foreign objects into the openings of the car radio (disc compartment, USB jack, AUX IN connection). Otherwise you might damage the slots and connections.

Others Warnings

Do not switch on the car radio for long periods of time when the motor is switched off. This could cause the car battery to discharge and the vehicle can no longer be started.

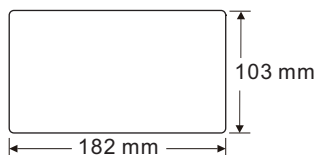
INSTALLATION

Installation Procedures

First complete the electrical connections and then check for correctness.

Installation Opening

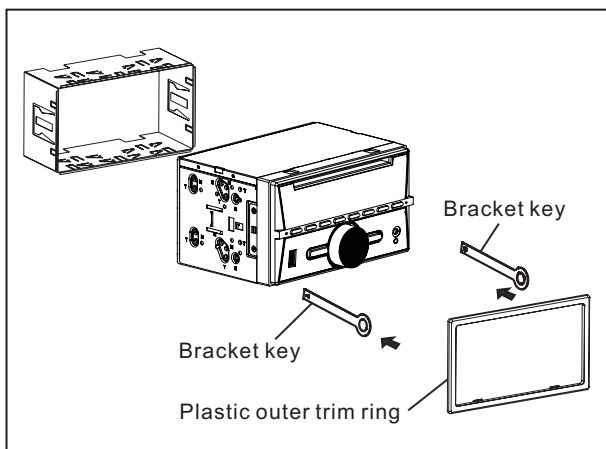
This unit can be installed in any dashboard Having an opening as shown the right figure.



To Install the Car Radio

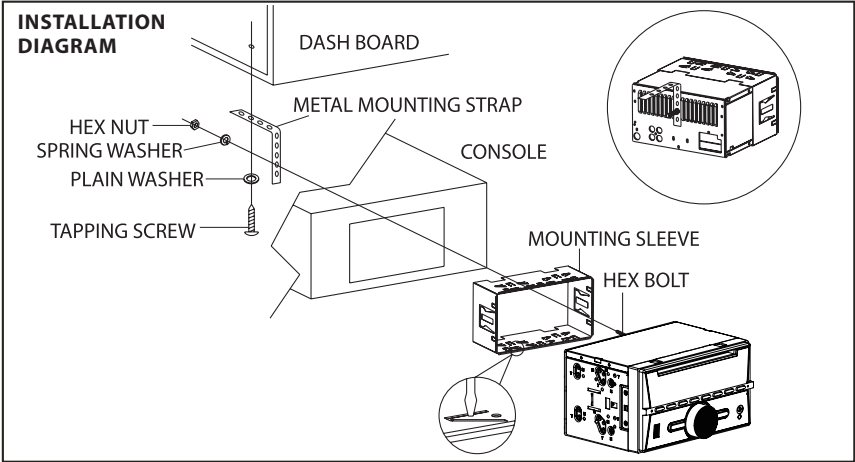
Be sure you test all connections first, and then follow these steps to install this unit.

1. Make sure the ignition is turned off, and then disconnect the cable from the vehicle battery's negative (-) terminal.
2. Disconnect the wire harness and the antenna.
3. Lift the left or right top corner of the plastic outer trim ring then pull it out to remove it.
4. Insert the two bracket keys into the left and right side of the chassis, as shown the below figure to separate the chassis from the housing.



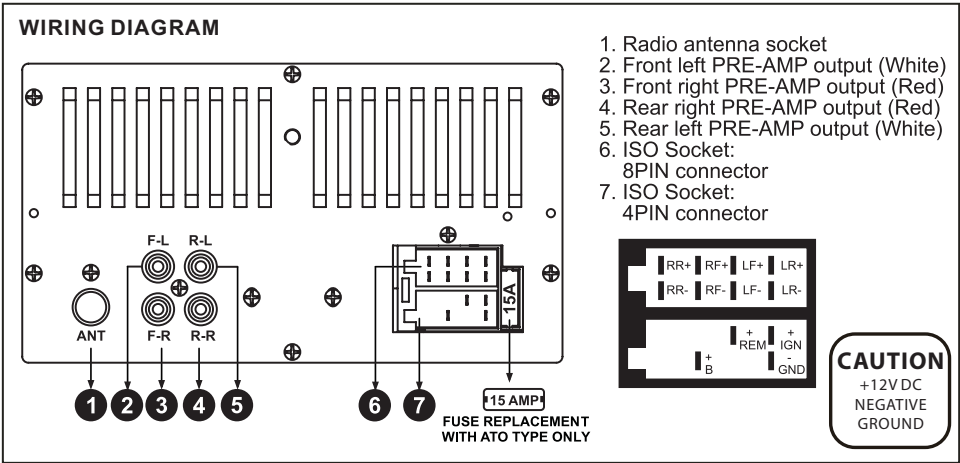
5. Insert mounting sleeve into the dashboard and bend the mounting tabs out with a screw-driver. Make sure that the lock lever is flush with the mounting sleeve and is not projecting beyond.
6. Insert car radio into the mounting sleeve.
7. Use a metal strap to secure the rear part of the chassis using the hardware indicated.
8. Make wiring connections, as illustrated in the "Wiring Diagram."
9. Install the plastic outer trim ring.

INSTALLATION(CONT.)



- Only use speakers with 4 ohms impedance.
- The maximum current of the auto antenna is 200mA.

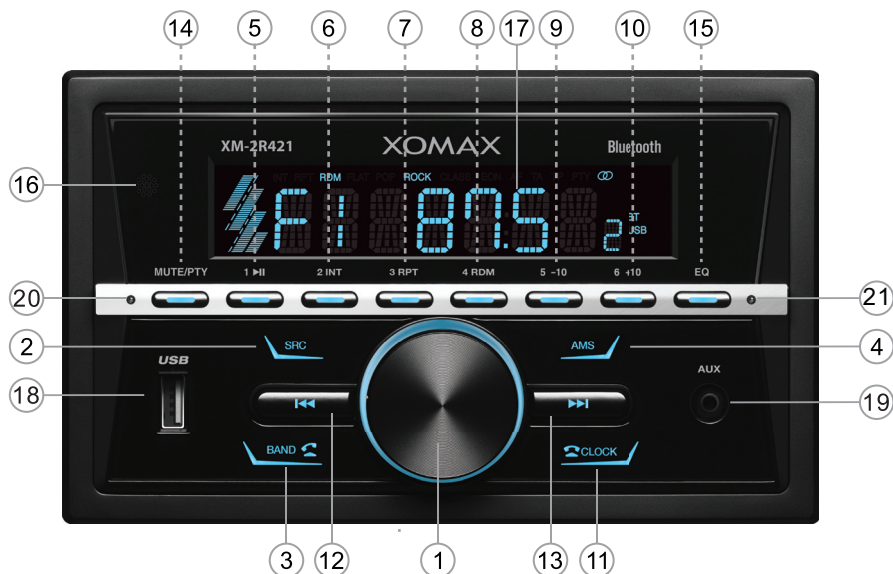
Wiring Connections



Removal of the Main Unit

1. Remove the metal strap from the main unit.
2. Remove the plastic trim out from the main unit.
3. Insert a bracket key into the left and right side of the main unit and draw the unit out of the mounting sleeve.

CONTROL PANEL BUTTON LOCATIONS



1. (power)/Volume knob and SEL (select/menu) button
2. SRC (source) button
3. BAND (band) button, (answer call) button
4. AMS (automatic store / preset station scan, automatic music search) button
5. (pause/play), Preset station 1 button
6. INT (intro), Preset station 2 button
7. RPT (repeat), Preset station 3 button
8. RDM (random), Preset station 4 button
9. -10 (previous 10 tracks), Preset station 5 button
10. +10 (next 10 tracks), Preset station 6 button
11. CLOCK (clock setting) button, (end call) button
12. (tune down, seek down, previous, fast reverse) button
13. (tune up, seek up, next track, fast forward) button
14. MUTE button, PTY (Program Type) button
15. EQ (Equalizer)
16. IR remote sensor
17. LCD Display
18. USB Port
19. AUX IN (auxiliary input) jack
20. Hands-free Microphone
21. Reset button

GENERAL OPERATION

Turn Unit On/Off

- Press any button on the front panel or remote control to turn on the unit.
- Press and hold the power button (VOL knob) or POWER() button on the remote control to turn the unit off.

Adjust Volume (VOL)

Rotate the **VOL** knob on the front panel or press the **VOL+ ▲** / **VOL- ▼** button on the remote control to increase or decrease the volume level.

Adjust Menu Options (SEL)

- Press the **SEL** button on the front panel or press the **SEL** button on the remote control repeatedly to cycle through the following adjustable audio functions: BASS, TREBLE, BALANCE, FADER, EQ FLAT/POP/ROCK/CLASS/OFF, LOUD ON/OFF, DX/LOC, STEREO/Mono, CLOCK 24/12, AUTO/BLUE/RED/CYAN/GREEN/PURPLE/YELLOW/WHITE, AF ON/OFF, TA ON/OFF, TA VOL(Volume level), EON ON/OFF and REG ON/OFF.
- Rotate the **VOL** knob on the front panel or press the **VOL+ ▲** / **VOL- ▼** button on the remote control to adjust the selected item.

- BASS/TREBLE: -7, -6, ~, -1, 00, +1, ~, +6, +7

- BALANCE: L7, L6, ~, L1, 00, R1, ~, R6, R7

- FADER: R7, R6, ~, R1, 00, F1, ~, F6, F7

- EQ(Equalizer) Setting: OFF, CLASS, ROCK, POP, FLAT

- Loudness: LOUD ON/OFF

- DX/LOCAL: Enables or disables the local broadcast mode (LOCAL).

- Stereo/Mono: Switches between MONO and STEREO reception mode for radio frequencies.

- CLOCK 24/12:

This unit is equipped with two types of clock display formats, 24 and 12 hours.

Rotate the volume knob to choose 24 hours format or 12 hours format.

- 7 color-changing illumination in buttons: This car radio device is equipped 7 color-changing illumination in buttons. The illumination color can be preset Blue, Red, Cyan, Green, Purple, Yellow, White or AUTO (color automatically change one by one).

- AF ON/OFF: Enables or disables the alternative frequency search mode (AF). This function is used for maintaining a program being listened to during a trip if its frequency changes.

- TA ON/OFF: Enables or disables the TA function (traffic information).

When this function is enabled, the tuner will periodically scan received frequencies and play any traffic information message that may be broadcast.

- TA VOL(traffic announcement volume): This function allows you to define the minimum volume for the traffic announcements. The adjustable range is 0~43. The defaulted value is 26. Rotate the VOL knob to adjust the volume of the traffic announcements.

- REG ON/OFF: Enables or disables the the region mode.

Some broadcasting stations change their program from normal broadcasting to regional broadcasting for a certain time period. When region is on, the current listening program remains unchanged. When region is off, it allows the reception moved to the regional station.

- EON ON/OFF: Enables or disables the EON (Enhanced other network).

GENERAL OPERATION (CONT.)

Set the Clock (CLOCK)

1. To display clock time, press the **CLOCK** button.
2. To set clock time, press and hold the **CLOCK** button and the hour will flash.
3. Press the **⏮** or **⏭** button on the front panel or on the remote control to adjust the hour.
4. Press the **CLOCK** button and the minutes will flash.
5. Press the **⏮** or **⏭** button on the front panel or on the remote control to adjust the minute.

Change the Source (SRC)

Press the **SRC** button to switch between RADIO, BT(Bluetooth), DISC(with a CD/MP3 disc inside the disc slot), USB(with USB device inserted) and AUX-IN(auxiliary input) modes.

Mute on/off

In power on mode, briefly press the **MUTE** button to toggle mute on or off. The muted state will be also released when the volume knob is used.

Preset EQ (Equalizer)

Press the **EQ** button on the front panel to toggle between EQ OFF, CLASS, ROCK, POP, FLAT.

USB port

The USB port of this car radio is designed for media playback from flash memory devices and charging for iPhone / android mobile phone. The charging current consumption is 1 ampere.

Hands-free Microphone

To receive your voice when you calling by using this bluetooth handsfree system.

Aux input connector

The 3.5mm auxiliary input stereo connection is designed for deiveces with 3.5mm line-out or headphone output.

Reset System (Reset)

The RESET button is used to reset all parameters to factory default settings.

This function may be used when the LCD does not display normally or sound is distorted, or when any of controls are disabled. To reset your system, use a thin object with a pointed end to depress the **RESET** button.

RADIO OPERATION

Change Bands (BAND)

Press the **BAND** button to switch between the FM1, FM2, FM3, AM1 and AM2. Each band stores up to six preset stations.

Manual Tuning (◀◀ / ▶▶)

Press and hold the ▶▶ or ◀◀ button on the front panel or on the remote control to enter manual tuning mode. In manual tuning mode, press the ▶▶ or ◀◀ button to move the radio frequency number up or down one step.

Auto Seek Tuning (◀◀ / ▶▶)

In standby mode or while not in manual tuning mode, quickly press the ▶▶ or ◀◀ button to move to the next/previous available station automatically.

To Store / Recall Preset Stations

The radio can be stored 6 preset stations for each band (FM1, FM2, FM3, AM1, AM2) for a total of 30 preset stations.

To memorize a station:

- Turn the radio on and select the desired band and station.
- Select a station by ▶▶ or ◀◀ button.
- Press and hold the desired preset button (numbered 1-6 on the face of the radio) for more than 2 seconds to save the station to that preset number.

- To recall a preset station:

- Select the desired band.
- Briefly press a preset button (numbered 1-6) to recall the corresponding preset station.

Automatic Store station/ Preset station scan (AMS)

Press and hold the **AMS** button for more than 2 seconds to select six strong stations and store them in the current band. The radio will automatically scan the current frequency and enter the six strongest stations into the preset memory positions for that band.

Briefly press the **AMS** button on the remote control to recall each preset station that saved in the memories in each band.

STEREO/MONO

FM station is received in stereo mode. However, if the signal is weak or reception is not as good as you would like, switching to MONO mode usually improves the overall sound quality. Press the **ST** button on the remote control to choose FM STEREO or MONO audio effect.

LOCAL/DX

In urban areas, most stations are strong enough and "LOCALON" mode should be selected.

Switch to LOCALOFF mode to search for stations with weaker signals.

Press the **SEL** button to access the LOCAL/DX item and to choose local or distant reception mode.

Using the PTY seach function

The PTY function allows you to search for a particular program type.

Press and hold the **PTY/MUTE** button on panel or press the PTY button on the remote control to choose PTY OFF, MUSIC group, SPEECH group. "NEWS"(speech) or "POP M"(music) will be appear on the LCD display.

When PTY group is on, pressing one of 6 numbered (1~6) buttons can select one of typed program.

When you select the speech/ music pty group, the numbered (1~6) buttons are shared as follows RDS station programs:

RADIO OPERATION

Numeric key	Speech PTY Group	Music PTY Group
1	NEWS, AFFAIRS, INFO	POP M, ROCK M
2	SPORT, EDUCATE, DRAMA	EASY M, LIGHT M
3	CULTURE, SCIENCE, VARIED	CLASSICS, OTHER M
4	WEATHER, FINANCE, CHILDREN	JAZZ, COUNTRY
5	SOCIAL, RELIGION, PHONE IN	NATION(national), OLDIES
6	TRAVEL, LEISURE, DOCUMENT	FOLK M

When you select a program type, the tuner will search for a station broadcasting this type of program. The tuner will stop searching if it finds the relevant program type. If the radio does not find a station broadcasting the type of program selected, the text "NO PTY " be shown on the LCD display and return back to the previous station.

AF ON/OFF

Press the AF button on the remote control to enables or disables the alternative frequency search mode (AF). This function is used for maintaining a program being listened to during a trip if its frequency changes.

TA ON/OFF

Press the TA button on the remote control to enables or disables the TA function (traffic information). When this function is enabled, the tuner will periodically scan received frequencies and play any traffic information message that may be broadcast.

USB OPERATION

To insert USB

- To play files in a USB device, insert the USB storage device into the USB port. Playback will begin automatically.

Eject USB

- To eject a USB device, press the **⏏** button to stop playback, then remove the USB device.

Play/Pause

Press the **⏮** (play/pause) button to pause or resume playback.

Next/Previous Track

- To play the next track, press the **⏭** button.
- To play the previous track, press the **⏮** button.

Fast Forward/Backward

- To fast forward, press and hold the **⏭** button.
- To fast backward, press and hold the **⏮** button.

Introduction Scan

Press the **INT** button to play the first 10 seconds of each track, press again to stop the introduction scan, and play the current track.

Repeating the same track

Press the **RPT** button to toggle between RPT ALL (Play all track), RPT FLR (Continuously repeats all tracks in current folder) and RPT ONE (Continuously repeats current track).

Playing all tracks in random

Press the **RDM** button to play all tracks in random order, press again to cancel this function.

Track/Folder Navigation

- During USB mode, press the **5/-10** button to go backward 10 tracks. Press the **6/+10** button to jump forward 10 tracks.
- During USB, press and hold the **5/-10** button to go back the previous folder. Press and hold the **6/+10** button to go to the next folder. You can repeat this function depending on the number and level of folders.
- These buttons have no this function if the USB device has no folders.

Select the track or file for playback in MP3 format

- a) Press the **AMS** button to enter track search mode. The "TRK0000" will appear on the display.
- b) Turn the volume control to select the "first number". Then press the **⏮** button to move the "first number" to the left and enter the next number.
- c) When the desired track number appears, confirm your selection by pressing **SEL** button.

AUXILIARY INPUT OPERATION

This car radio is equipped an external auxiliary input jack (3.5mm) on the front panel, it is compatible with audio output from an MP3 music player. If you have plugged such a player into the AUX IN jack with a audio cable.

Press the **SRC** button to switch to the AUX input mode, then you can listen to music from external devices.

BLUETOOTH OPERATION

Pair and Connect

Prior to using the Bluetooth device as a handsfree system for a Bluetooth-enabled mobile phone for the first time, you must pair and connect the two devices as follows:

1. In any mode, prior to pairing and connecting, the BT logo in the LCD indicating that no device is connected. To begin pairing, enable BT mode on your mobile phone.
2. When the phone finds the car audio system, the XM-2R421 name will be displayed.
3. Choose the XM-2R421 from the device list to pair and connect with the car audio systems. Upon confirming, the BT logo will stop flashing.
4. When pairing is complete, the mobile phone audio will automatically transfer to the car audio system whenever a call is made or received, or when the mobile phone plays music.

Make a Call

- To make a call, dial the call directly from the paired mobile phone.
- To make a call with this bluetooth handsfree system:
 - a) When linking up the Bluetooth-enabled mobile phone to this bluetooth handsfree system, press the  button to access the dial telephone number mode, then press the "0~9", *, and # button on remote control to input the telephone number, and the entered number will be shown on the LCD.
 - b) If a number has been incorrectly inputted, press the **DEL** button or  button to delete it.
 - c) Press the  button to make outgoing call.

Redial Last Dialed Number

Press and hold the  button on the control panel to redial the last dialed phone number.

Answer a Call

- When the mobile phone is called, the incoming telephone number displays in the LCD.
- To receive the call, press the  button on the control panel.

Reject a Call

To reject the call, press the  button on the control panel.

End a Call

To end an active call, press the  button.

Switch Audio Between Car Audio and mobile Phone

During a call, press the **VOL** knob/button to switch the audio source from the car audio system back to your mobile phone.

Adjust Talk Volume

- During a call, use **VOL** knob or **VOL+** ▲/**VOL-** ▼ button to adjust the volume level.
- Use the **MUTE** button to mute sound.

Audio Streaming (A2DP)

1. Press the **SRC** button to enter BT mode and display media in the LCD display.
2. When a mobile device is paired, music played through that device will automatically be heard through the car audio system.
3. Press the  or  button to play the next or previous on the mobile phone.
4. Press the  button to pause or resume music playback.

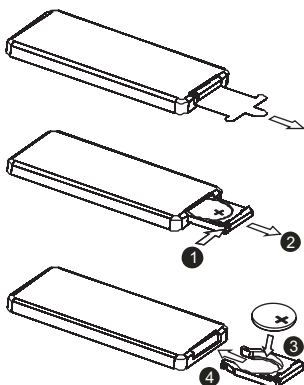
REMOTE CONTROL

Remove Insulating Sheet

The remote control comes with an insulating sheet attached to the underside of the remote control, as illustrated on the right. The remote control will not work until the insulating sheet is removed.

Replace Lithium Battery Cell

1. When the lithium cell battery becomes weak, replace it as illustrated on the right.
2. Press and hold the movable block in the direction indicated by arrow 1. At the same time, pull the cell holder out of the remote control in the direction indicated by arrow 2.
3. Replace the old cell with a new one, making sure the (+) polarity is facing upward.
4. Re-insert the cell holder into the remote control.



- Cell leakage may cause damage to the remote control.
- Do not throw cells into fire as this may cause an explosion.
- Keep battery cells out of reach of children.

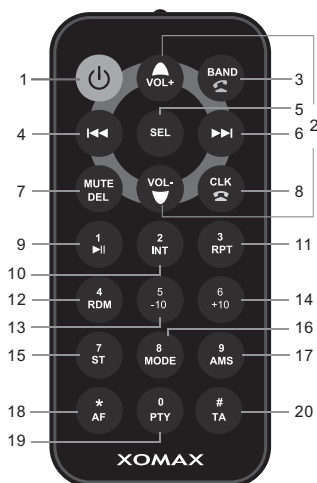
Remote Control Operation

Position the emitting window of the remote control toward the sensor window of the unit.

- The operation angle for front panel remote control reception is about 30 degrees.
- The distance between the emitting window of the remote control and the sensor window of the unit should remain less than 5 meters.

Button Names and Locations

1. (Power on/off) button
2. VOL+/VOL- (volume increase/decrease) button
3. Band button, (answer call) button
4. Tune down, seek down; Track down, fast reverse
5. SEL (selection) button
6. button: tune up, seek up; Track up, fast forward
7. Mute button, DEL (Delete) button
8. CLK (clock setting) button, (end call) button
9. button, preset station 1 button, keypad 1
10. INT (intro) button, preset station 2 button, keypad 2
11. RPT (repeat) button, preset station 3 button, keypad 3
12. RDM (random), preset station 4 button, keypad 4
13. -10 (previous 10 tracks), preset station 5 button, keypad 5
14. +10 (next 10 tracks), preset station 6 button, keypad 6
15. ST (stereo) button, keypad 7
16. MODE button, keypad 8
17. AMS (automatic music search) button, keypad 9
18. AF (list of alternative frequency) button, keypad *
19. PTY (program type) button, keypad 0
20. TA (traffic announcement) button, keypad #



Note: When using the remote control for the first time, you must pull out the protective plastic tab from the battery compartment found on the back of the remote control.

SPECIFICATIONS

General

Chassis Dimensions.....	178(W) x 125(D) x 100(H) mm
Power Supply Requirement	DC 12V
Current Consumption	15A (max.)
Maximum Power Output	60W x 4CH

Radio

FM

Frequency Range.....	87.5 - 108.0 MHz (50KHz/Step)
Usable Sensitivity	30 dBu
I.F. Frequency	10.7 MHz

AM

Frequency Range.....	522 - 1620 KHz(9KHz/Step)
Usable Sensitivity	20 dBu
I.F. Frequency	450 KHz

USB

Usable Audio Formats	MP3/WMA
Max. Supported Volume.....	64G
USB Port Type.....	2.0
USB Charging.....	5V/1A
Pre-amp Output	Front ,Rear
Frequency Response	20 Hz - 20 KHz
S/N Ratio	60dB

BT

Bluetooth Version.....	3.0
BT Profile supports	A2DP, AVRCP, HFP
Frequency Range	2402-2480 GHz

TROUBLESHOOTING

If you suspect something is wrong, immediately switch power off.

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 store where you purchased it. Never try to repair the unit by yourself because it is dangerous to do so.

General

1) Car's engine switch is not on.

- Turn you car's key to ACC or ON.

2) Cable is not correctly connected.

- Check the connection.

3) Fuse is burnt.

- Replace fuse.

4) Volume is in mute or minimum.

- Check volume or mute on/off, adjust volume to a desired level.

5) The operation keys do not work.

- The built-in micro computer is not working properly due to noise.

Press the RESET button to restore the program to zero.

Radio

1) Much noise in broadcasts.

- Station or signal is too weak. Select other stations of stronger signal level.

2) The antenna cable is not connected.

- Insert the antenna cable firmly into the antenna socket of this car radio.

3) Preset station is reset.

- Battery cable is not correctly connected. Connect the battery cable to the terminal that is always live.

USB

1) USB is connecting but no sound

- USB connection is not good. Take it out and insert again.
- USB is damaged or no music file inside. Change to another USB, or record music inside it.