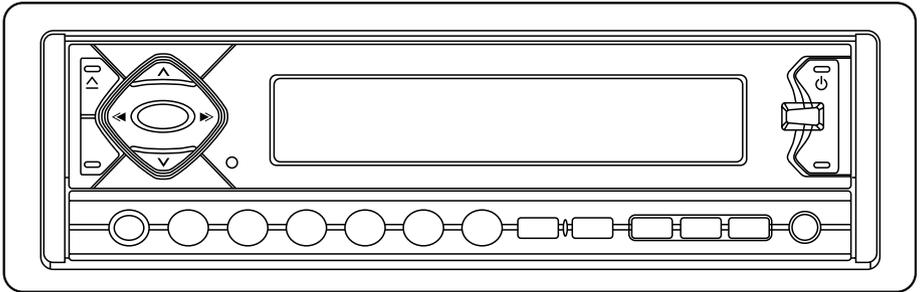


# **OWNER'S MANUAL**

## **Mobile Audio System**

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- **PLL Synthesizer Stereo Radio**
- **Digital Compact Disc Player**
- **Automatically Memory Storing**
- **Hiding Panel**
- **Preset Equalization**
- **Auxiliary Input Function**
- **Remote Control**

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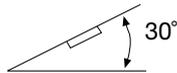
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# INSTALLATION

## Notes:

- Choose the mounting location where the unit will not interfere with the normal driving function of the driver.
- Before finally installing the unit, connect the wiring temporarily and make sure it is all connected up properly and the unit and the system work properly.
- Use only the parts included with the unit to ensure proper installation. The use of unauthorized parts can cause malfunctions.
- Consult with your nearest dealer if installation requires the drilling of holes or other modifications of the vehicle.
- Install the unit where it does not get in the driver's way and cannot injure the passenger if there is a sudden stop, like an emergency stop.
- If installation angle exceeds 30° from horizontal, the unit might not give its optimum performance.



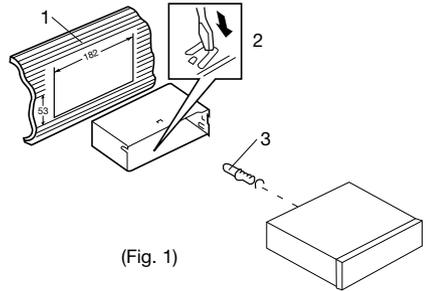
- Avoid installing the unit where it would be subject to high temperature, such as from direct sunlight, or from hot air, from the heater, or where it would be subject to dust, dirt or excessive vibration.

## DIN FRONT/REAR-MOUNT

This unit can be properly installed either from "Front" (conventional DIN Front-mount) or "Rear" (DIN Rear-mount installation, utilizing threaded screw holes at the sides of the unit chassis). For details, refer to the following illustrated installation methods.

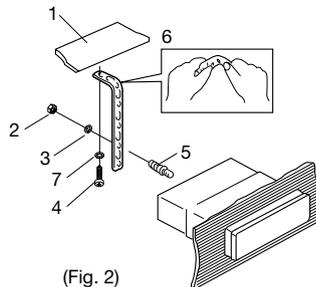
## DIN FRONT-MOUNT (Method A)

### Installing the unit



(Fig. 1)

1. Dashboard
2. Holder  
After inserting the holder into the dashboard, select the appropriate tab according to the thickness of the dashboard material and bend them inwards to secure the holder in place.
3. Screw

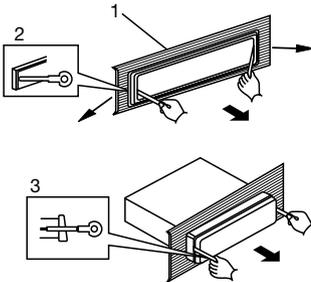


(Fig. 2)

1. Dashboard
2. Nut (5mm)
3. Spring washer
4. Screw (5 x 25mm)
5. Screw
6. Strap  
Be sure to use the strap to secure the back of the unit in place. The strap can be bent by hand to the desired angle.
7. Plain washer

# INSTALLATION

## Removing the unit



1. Frame

2. Release Frame Key

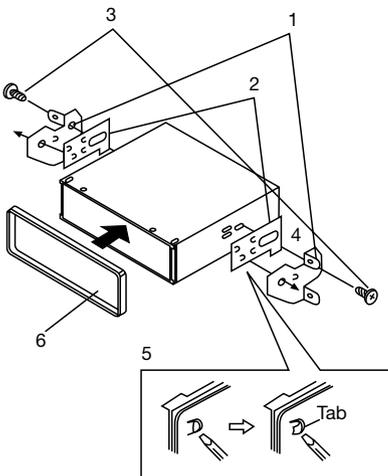
Insert the release frame key into the groove at the right side of the frame, then pry out to remove the frame. (You can also use the key to remove the frame from the left side.)

3. Release Unit Key

After releasing the frame, insert the release unit keys supplied with the accessory into the grooves at both sides of the unit as shown in figure until they click. Pulling the keys makes it possible to remove the unit from the dashboard.

1. Factory-installed radio bracket
2. Car radio mounting bracket
3. Screw
4. After aligning the car radio mounting bracket with the factory-installed radio bracket, tighten the screws (M5x4mm) at 2 places on each side.
5. When fixing factory-installed radio bracket with the screws, use a standard-tipped screwdriver to pry the tabs of the car radio mounting bracket to make them fit into the holes in the factory-installed radio bracket.
6. Movable panel frame

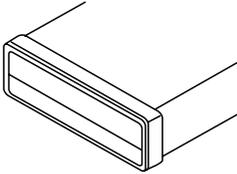
## DIN REAR-MOUNT (Method B)



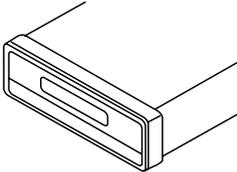
# USING THE FRONT PANEL

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1. When open the car lock (ACC ON), the panel of the unit will change from State 1 to State 2 (see below), the hidden panel will turn up.

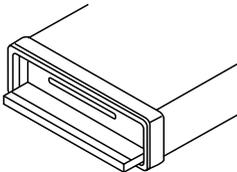


State 1



State 2

2. Press  $\phi$  (power) button to turn on the unit. Then press  $\triangle$  (eject) button, the panel will turn down to horizontal position (see State 3).

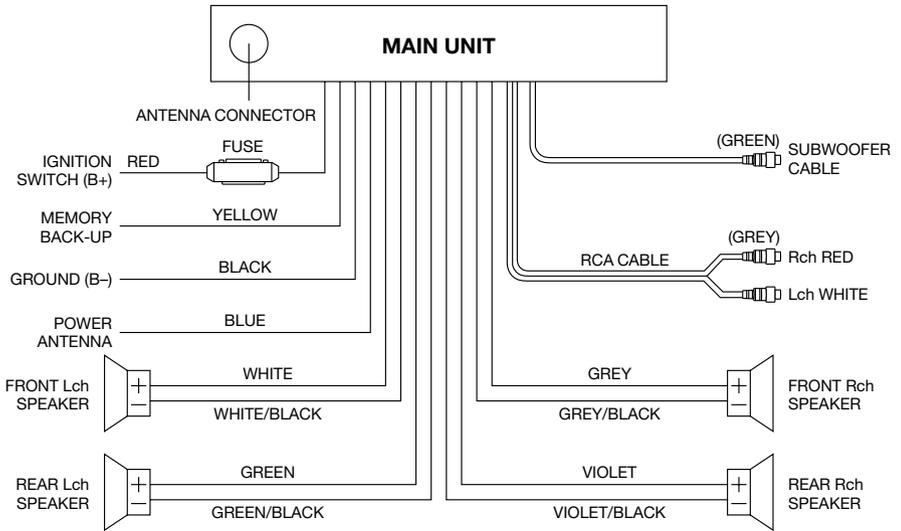


State 3

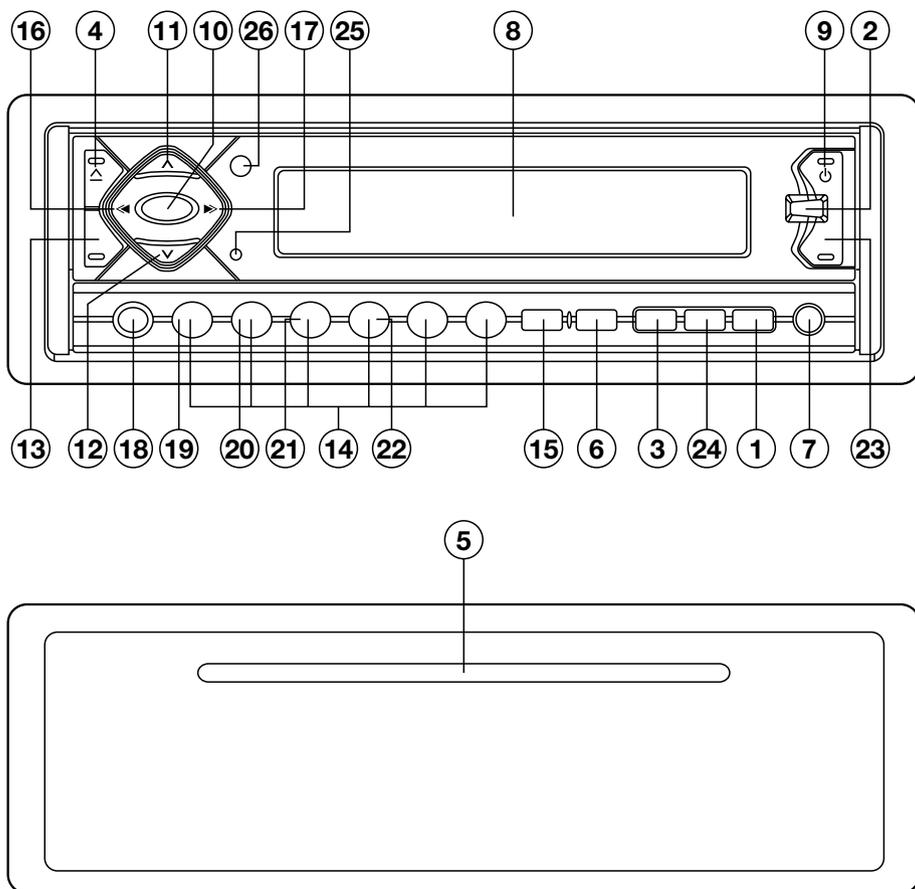
3. Then insert a disc in the disc slot, the panel will automatically turn up to State 2. Press  $\triangle$  (eject) button again, the panel will turn down to eject the disc. If you don't insert a disc in again, the panel will automatically turn up about 10 seconds. If you don't want to wait, press  $\triangle$  (eject) button, the panel will also turn up.

4. When lock the key (ACC OFF), the front panel will change from State 2 to State 1.

# WIRING CONNECTION



# OPERATION



## GENERAL OPERATION

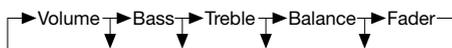
### • ON/OFF

When the hiding panel turns up (in State 2), press  $\phi$  button (9) to turn on the unit. When system is on, press  $\phi$  button (9) to turn off the unit.

### • SOUND ADJUSTMENT

Press **SEL** button (10) to select the desired adjustment mode. The adjustment mode will change in

the following order:



By pressing volume up  $\wedge$  button (11) or volume down  $\vee$  button (12), it is possible to adjust the desired sound quality.

### • LOUDNESS

Press **LOU/BND** button (13) for several seconds to increase bass output and display will show "LOUD". Press it again for several seconds to release this function.

# OPERATION

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- **SET THE CLOCK**

Press the **DSP** button (15), and the clock is shown on the display. Then hold down the button until the clock flashes. Then press the **MANU/SKIP** ►► button (17) to change hours or **MANU/SKIP** ◀◀ button (16) to change minutes.

- **SELECT MODE**

Press **MOD** button (6) to choose desired listening mode. (e.g. radio mode to CD mode to AUX IN mode)

- **MUTE**

Press **MUT** button (2) to silence the receiver. Press it again to release the mode.

- **LIQUID CRYSTAL DISPLAY**

Exhibit current frequency and activated functions on the display (8).

- **EQUALIZATION**

Press **EQ** button (23) to turn on equalization function and to select desired audio mode. There are five kinds of mode as below:

► FLAT —► CLASSIC —► POP M —► ROCK M —► DSP OFF ◀

- **AUXILIARY INPUT**

The unit can be connected to a portable audio player through the **AUX IN** jack (7).

- **REMOTE SENSOR**

Point the remote control handset to the remote sensor **IR** (26). Press the function keys on the handset to control the system.

- **RESET**

**RESET** button (25) must be activated with either a ball point pen or thin metal object. **RESET** button (25) is to be activated for the following reasons:

- Initial installation of the unit when all wiring is completed.
- All the function buttons do not operate.
- Error symbol on the display.

**Note:** If press **RESET** button (25), the unit can't work yet, please use a cotton swab soaked in isopropyl alcohol to clean the socket on the back of the front panel.

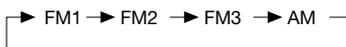
# OPERATION

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## RADIO OPERATION

### • BAND SELECTION

At tuner mode, press **LOU/BND** button (13) shortly to select the desired band. The reception band will change in the following order:



### • STATION SELECTION

Press **MANU/SKIP** ◀ button (16) or **MANU/SKIP** ▶ button (17) shortly to activate automatic seek function. Press for several seconds until “MANUAL” appeared on the display, the manual tuning mode is selected. If both buttons have not pressed for several seconds, they will return to seek tuning mode and “AUTO” appeared on the display.

### • LOCAL/DISTANCE

Press **LOC** button (3) to select between local and distant stations. Local setting for reception of strong station, and a distant setting for reception of weaker stations.

### • MONO/STEREO

Press **MON** button (1) to select mono or stereo mode. You can sometimes improve reception of distant stations by selecting mono operation.

### • SCAN

Press **SCN** button (24) to set function to scan mode, which scanning to higher frequency station with receivable signal and keep on each station for several seconds.

### • AUTOMATICALLY MEMORY STORING & PROGRAM SCANNING

- Automatic Memory Storing  
Press **AMS** button (18) for several seconds, the radio searches from the current frequency and checks the signal strength level until one cycle search is finished. And then 6 strongest stations are stored into the corresponding preset number button.
- Program Scanning  
Press **AMS** button (18) shortly to scan the preset station. When the field strength level is more than the threshold level of stop level, the radio is holding at that preset number for several seconds with releasing mute, then searches again.

### • STATION STORING

Press any one of the preset buttons (14) (M1 to M6) to select a station which had been stored in the memory. Press this button for several seconds, current station is stored into the number button.

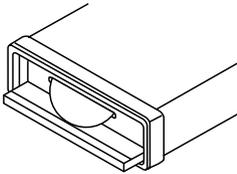
# OPERATION

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## CD OPERATION

- **CD OPEN/CLOSE/EJECT**

When the front panel is in State 2 and the unit is on, press  $\Delta$  (eject) button (4), the panel will change into State 3 and display the disc slot (5). Then insert a disc into the slot, the panel will automatically turn up. Press  $\Delta$  (eject) button (4) again to eject the disc. And after about 10 seconds, the panel will turn up.



- **SELECT TRACKS**

Press **MANU/SKIP**  $\blacktriangleleft$  button (16) or **MANU/SKIP**  $\blacktriangleright$  button (17) to move to the previous track or the following track. Track number shows on display. Hold **MANU/SKIP**  $\blacktriangleleft$  button (16) or **MANU/SKIP**  $\blacktriangleright$  button (17) to fast reverse or fast forward. CD play starts from when you release the button.

- **PAUSE PLAYING**

Press **PAU** button (19) to pause CD player. Press it again to resume play.

- **REPEAT THE SAME TRACK**

Press **RPT** button (21) to continuously repeat the same track. Press it again to stop repeat.

- **PREVIEW ALL TRACKS**

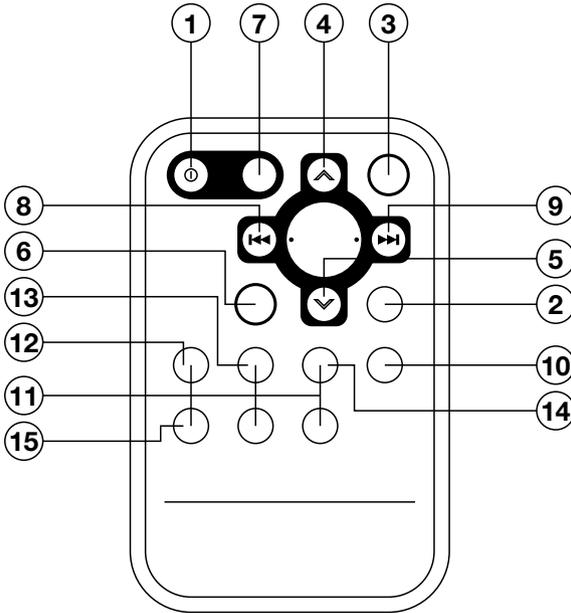
Press **SCN** button (20) to play first several seconds of each track on the current disc. Press again to stop intro and listen to track.

- **PLAY ALL TRACKS IN RANDOM**

Press **SHF** button (22) to play all tracks on CD in random order. Press again to cancel the function.

# OPERATION

## REMOTE CONTROL HANDSET



## FUNCTION KEYS & CONTROL

- |                 |  |
|-----------------|--|
| 1. PWR          | = Power ON/OFF Button  |
| 2. DSP (0)      | = Display Button (., -, +, 0)                                      |
| 3. SEL          | = Select Button (Character Shift Right)                            |
| 4. VOL ▲        | = Volume Up Button [Charater Select (A, B~8,9,0)]                  |
| 5. VOL ▼        | = Volume Down Button [Charater Select (A, B~8,9,0)]                |
| 6. BND (ENTER)  | = Band Select Button (Enter Button)                                |
| 7. MOD (7)      | = Mode Button (S, T, U, 7)   |
| 8. TUNE/SEEK ◀◀ | = Tune/Seek Down Button (V, W, X, 8)                               |
| 9. TUNE/SEEK ▶▶ | = Tune/Seek Up Button (Y, Z, SPACE, 9)                             |
| 10. AMS (MP3)   | = Automatic Storing & Program Scanning Button (Mode Select Button) |
| 11. M1 - M6     | = Preset Buttons (A~R, 1~6)  |
| 12. PAU         | = Pause Button (A, B, C, 1)  |
| 13. SCN         | = Scanning Button (D, E, F, 2)                                     |
| 14. RPT         | = Repeat Button (G, H, I, 3)                                       |
| 15. SHF         | = Shuffle Button (J, K, L, 4)                                      |

# OPERATION

## MP3 OPERATION (FOR WITH MP3 OPERATION VERSION ONLY)

During MP3 operation, these buttons serve the followings:

1. "Searching track directly" in Digital Audio CD.
2. "Searching File Name" in Digital Audio CD.
3. "Searching File or directory" by file directory structure in Digital Audio CD.

**AMS** button is assigned as Digital Audio Mode selection button in single CDP mode. When pressed, it is activated as selecting each mode of Digital Audio. "Searching track directly" → "Searching File Name" → "Searching File or directory"

- Press **AMS(MP3)** button for one time. It enters into "Searching track directly" in Digital Audio CD. The unit searches the track selected by following buttons: **M1-M6, MOD(7), MANU/SKIP DOWN (8), MANU/SKIP UP(9), DSP(0)**.
- Press **AMS(MP3)** button for two times. It enters into "Searching File Name" in Digital Audio CD. The unit searches files and directories which have the same character which is inputted by the user. The unit shows these sorted files and directories by all the buttons listed on the Table 1 below. The selected file can be played by pushing **LOU/BND(ENTER)** button.
- Press **AMS(MP3)** button for three times. It enters into "Searching File or directory" by file directory structure in Digital Audio CD. The unit searches files or directory in file directory structure by **MANU/SKIP UP/DOWN** buttons. The selected file can be played by pushing **LOU/BND(ENTER)** button.

- Press **DSP** button, **ID3 TAG** is displayed by this key if available, supported TAG is **Songname, Artist, Album, Year, Comments**. If not available, there is displayed bellows some words in LCD **Unknown Songname, Unknown Artist, No Album Title, Unknown Year, No Comments** also if not available **ID3 TAG, NO ID3 TAG** is displayed after Comments is displayed, File name is displayed during pass some intervals or pressed key. **(FOR WITH MP3 ID3 FUNCTION VERSION ONLY)**

KEY Assigned IN Searching mode (Table 1)

AMS	Mode Select
LOU/BND	ENTER
M1	A, B, C, 1
M2	D, E, F, 2
M3	G, H, I, 3
M4	J, K, L, 4
M5	M, N, O, 5/10 TRACK DOWN
M6	P, Q, R, 6/10 TRACK UP
MOD	S, T, U, 7
MANU/SKIP DOWN	V, W, X, 8
MANU/SKIP UP	Y, Z, SPACE, 9
SEL	CHARACTER SHIFT RIGHT
DSP	_, -, +, 0
VOLUME UP/DOWN	CHARACTER SELECT (A, B.....8, 9, 0)

M5 and M6 is assigned as 10 TRACK when Normal play and Searching File or directory.

# OPERATION

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## Note:

### A. Notes on discs:

- Attempting to use non-standard shape discs (e.g. square, start, heart) may damage the unit. Be sure to use round shape CD discs only for this unit.
- Do not stick paper or tape etc., onto the label side or the recording side of any discs, as it may cause a malfunction.
- Dirt, dust, scratches and warping discs will cause misoperation.

### B. Notes on CD-Rs (recordable CDs)/CD-RWs (rewritable CDs):

- Be sure to use discs with following marks only for the unit to play:



- The unit cannot play a CD-R and CD-RW that is not finalized. (Please refer to the manual of your CD-R/CD-RW recorder or CD-R/CD-RW software for more information on finalization process).

- Depending on the recording status, conditions of the disc and the equipment used for the recording, some CD-Rs/CD-RWs may not be played on this unit. (See \*)

\* To have more reliable play back, please see following recommendations:

- Use CD-RWs with speed 1x to 4x and write with speed 1x to 2x.
- Use CD-Rs with speed 1x to 8x and write with speed 1x to 2x.
- Do not play a CD-RW which has been written for more than 5 times.

### C. Notes on MP3 files (MP3 Version Only):

- The disc must be in the ISO9660 level 1 or level 2 format, or Joliet or Romeo in the expansion format.
- When naming a MP3 file, be sure the file name extension is “.MP3”.

- For a non-MP3 file, even though the file name extension is “.MP3”, the unit cannot recognize it.

### D. Notes on multi session disc:

- If the first track of the first session is audio CD data, then the unit will play only the audio CD data.
- When the first track of the first session is not audio CD data, but MP3 file is in the disc, then only MP3 files will be played back and other data (including CD data) is skipped.
- For recording status other than above 2 situations, the unit may not play properly. Be sure to avoid this case.

# SPECIFICATION

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## GENERAL

Power Supply Requirements	: DC 12 Volts, Negative Ground
Chassis Dimensions	: 178 (W) x 165 (D) x 50 (H)
Tone Controls	
- Bass (at 100 Hz)	: $\pm 10$ dB
- Treble (at 10 KHz)	: $\pm 10$ dB
Maximum Output Power	: 4 x 60 Watts
Current Drain	: 15 Ampere (max.)

## CD PLAYER

Signal to Noise Ratio	: More than 55 dB
Channel Separation	: More than 50 dB
Frequency Response	: 20 Hz - 20 KHz

## RADIO

### FM

Frequency Coverage	: 87.5 to 107.9 MHz
IF	: 10.7 MHz
Sensitivity (S/N = 30 dB)	: 3 $\mu$ V
Stereo Separation	: > 30 dB

### AM

Frequency Coverage	: 530 to 1710 KHz
IF	: 450 KHz
Sensitivity (S/N = 20 dB)	: 32 dBu

# TROUBLE SHOOTING

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Before going through the check list, check wiring connection. If any of the problems persist after check list has been made, consult your nearest service dealer.

Symptom	Cause	Solution
No power.	The car ignition switch is not on.	If the power supply is properly connected to the car accessory circuits, but the engine is not moving, switch the ignition key to "ACC".
	The fuse is blown.	Replace the fuse.
Disc cannot be loaded or ejected.	Presence of CD disc inside the player.	Remove the disc in the player, then put a new one.

[www.pyleaudio.com](http://www.pyleaudio.com)