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CDE-7831E

FM/AM Compact Disc Receiver

OWNER'S MANUAL

Please read this manual to maximize your enjoyment of the outstanding performance and feature capabilities of the equipment, then retain the manual for future reference.





Precaution Warning



DO NOT DISASSEMBLE OR ALTER

Attempts to disassemble or alter may lead to an accident, fire and/or electric shock.



KEEP SMALL ARTICLES OUT OF THE REACH OF CHILDREN

Store small articles (batteries, screws, etc.) in places not accessible to children. If swallowed, consult a physician immediately.



USE THE CORRECT AMPERE RATING WHEN REPLACING FUSES

Replace fuses only with fuses of the same ampere rating. Failure to do so may result in a fire and/or damage to the vehicle.



HALT USE IMMEDIATELY IF A PROB-LEM APPEARS

When problems appear, stop using the system immediately and contact the dealer from whom you purchased the equipment. Some problems which may warrant immediate attention include a lack of sound, noxious odors or smoke being emitted from the unit, or foreign objects dropped inside the unit.



DO NOT OPERATE THE REMOTE CONTROL WHILE DRIVING

Do not change settings while driving. If operation requiring a prolonged view of the display is required, stop the vehicle in a safe location before attempting operation.

Precaution Caution



DO NOT RAISE THE VOLUME EXCESSIVELY

Keep the volume at a level where you can still hear outside noises while driving. Driving while unable to hear outside sounds could cause an accident.



DO NOT USE THIS EQUIPMENT OUTSIDE THE VEHICLE

Do not use this equipment for purposes other than those listed for a vehicle. Failure to do so may result in an electric shock or an injury.



KEEP FOREIGN OBJECTS OUT OF THE CD COMPARTMENT SLOT

Keep any foreign objects, including fingers, out of the CD compartment slot.



STOP THE VEHICLE BEFORE CARRY-ING OUT ANY OPERATION THAT COULD INTERFERE WITH YOUR DRIVING

If loading or unloading a CD interferes with your driving, stop the vehicle in a safe location before attempting operation.



DO NOT REPLACE THE BATTERY WITH ONE NOT SPECIFIED. INSERT WITH THE CORRECT BATTERY POLARITY

Do not replace with other than specified battery. When inserting the battery, be sure to observe proper polarity (+ and –) as instructed. Battery rupture or chemical leakage can cause an injury or equipment malfunction.

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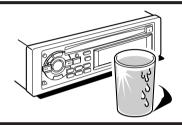


Precautions



Thermal Protection Circuit

Be sure the temperature inside the vehicle is between $+60^{\circ}$ C ($+140^{\circ}$ F) and -10° C ($+14^{\circ}$ F) before attempting to play a disc. If the temperature is over $+60^{\circ}$ C ($+140^{\circ}$ F), the protection circuit functions to stop the CD player, and "--H" is displayed.



Moisture Condensation

You may notice the CD playback sound wavering due to condensation. If this happens, remove the disc from the player and wait about an hour for the moisture to evaporate.



Damaged Disc

Do not attempt to play cracked, warped, or damaged discs. Playing a bad disc could severely damage the playback mechanism.



Never Attempt the Following

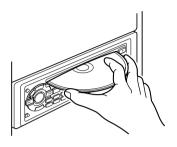
Do not grip or pull out the disc while it is being pulled back into the player by the automatic reloading mechanism.

Do not attempt to insert a disc into the unit when the unit power is off.

Maintenance

If you have problems, do not attempt to repair the unit yourself. Return it to your Alpine dealer or the nearest Alpine Service Station for servicing.

Precautions

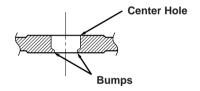


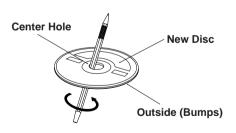
Inserting Discs

Your player accepts only one disc at a time for playback. Do not attempt to load more than one disc.

Make sure the label side is facing up when you insert the disc. Your player will automatically eject any disc that is inserted incorrectly. If the player continues to eject a correctly inserted disc, push the Reset switch (located behind the detachable front panel) with a pointed object such as a ball-point pen.

Playing a disc while driving on a very bumpy road may result in skips, but this will not scratch the disc or damage the player.

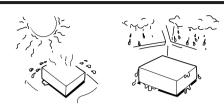




New Discs

As a protective measure to prevent the CD from jamming, the CD player will automatically eject discs with irregular surfaces or inserted incorrectly. When a new disc is inserted into the player and ejected after initial loading, using your finger, feel around the inside of the centre hole and outside edge of the disc. If you feel any small bumps or irregularities, this could inhibit proper loading of the disc. To remove the bumps, rub the inside edge of the hole and outside edge of the disc with a ball-point pen or other such instrument, then insert the disc again.

Precautions



Installation Location

Make sure the CDE-7831E will not be installed in a location subjected to:

- Direct sun and heat
- High humidity and water
- Excessive dust
- Excessive vibrations

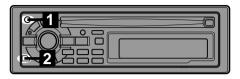






Handling the Detachable Front Panel

- Do not expose to rain or water.
- Do not drop or apply shock.



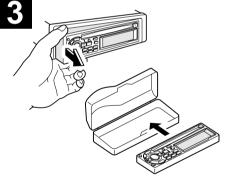
Detaching the Front Panel



Press the PWR button to turn off the power.



Press the release button until the front panel pops out.



Grasp the left side of the front panel and pull it out.

Note: To protect the front panel, place it in the supplied carrying case.

Attaching the Front Panel





- First, insert the right side of the front panel into the main unit. Align the 2 small holes on the front panel with the 2 projections on the main unit.
- 2. Push the left side of the front panel until it locks firmly into the main unit.

Note: Before attaching the front panel, make sure that there is no dirt or dust on the connector terminals and no foreign object between the front panel and the main unit

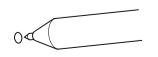


Basic Operation



Initial System Start-Up





When operating the unit for the first time after installation or after the vehicle's battery has been disconnected and reconnected, set the volume level to its minimum, then remove the detachable front panel. Press the Reset switch with a ball-point pen or any other pointed object.



Basic Operation



Automatic Setup (A.S.U.)

This convenient feature sets up the unit automatically after installation.





Press the PWR (POWER) button to turn on the unit.

Note: When the ignition key is turned on then the power is turned on immediately after installation or resetting, the A.S.U. function is activated automatically.





Press and hold the A.S.U. (Automatic Setup) button for at least 3 seconds to activate the A.S.U. mode.

"ASU" blinks in the display.

The unit automatically performs the following operations.

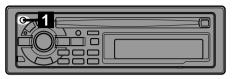
- 1. Activates Auto Memory mode.
- Gradually sets the Bass, Treble, Balance and Fader controls to their center positions.
- 3. Gradually increases the volume to the position 12 in the display.
- 4. Turns the Loudness and BBE on.
- 5. Ends the A.S.U. mode.







Basic Operation



Turning Power On and Off

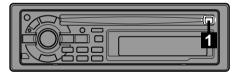
1



Press the PWR button to turn on the unit.

Note: The unit can be turned on by pressing any other button except the eject ≜ and CLK buttons.

The volume level gradually increases to the previous level you were listening to before the unit was turned off. Press the PWR button again to turn off the unit.



N.F.P. On and Off

The Subwoofer Output is an adjustable, nonfading output. It does not utilize a low pass filter, so, use an external filter and amp or amp with integrated filter to connect to this output. Then, turn on the N.F.P. to drive your subwoofer.

1

Press and hold the Eject button for at least 3 seconds.

With each press, N.F.P. is toggled On or Off.





Notes:

- Initial mode is N.F.P. OFF."
- Leave the "N.F.P. OFF" as long as the Subwoofer output is not being used.



Basic Operation English



Turning Loudness On/Off

Loudness introduces a special low- and high-frequency emphasis at low listening levels. This compensates for the ear's decreased sensitivity to bass and treble sound.









Press and hold the AUDIO CONTROL button for at least **2** seconds to activate or deactivate the loudness mode.



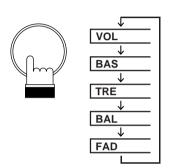


Basic Operation



Adjusting Volume/Bass/Treble/ Balance/Fader

1



Press the AUDIO CONTROL button repeatedly to choose the desired mode.

Note: If the AUDIO CONTROL knob is not rotated within 5 seconds after selecting the BASS, TREBLE, BALANCE, or FADER modes, the control returns to the VOLUME mode.

2



Rotate the AUDIO CONTROL knob until the desired sound is obtained in each mode.

Note: The BASS and TREBLE settings for each source (FM, AM and CD) are automatically memorized. These settings remain until you manually change them.



Basic OperationEnglish



Selecting BBE Mode

The BBE (Barcus Berry Electronics) processor installed in this unit is designed to correct the phase distortion inherent in most loudspeaker designs. Ensuring the phase integrity of the signal driving the speakers improves the accurate reproduction of the sound. When used in conjunction with the equalizer and sound field effects, optimum sound space enhancement can take place.



1



Press the BBE button to turn on or off the BBE mode. The BBE level is preset to "BBE +5" at the factory.

Note: The BBE processor is most effective when used in conjunction with the other surround effects.

2



To change to a desired BBE level, press and hold the BBE button for at least **2** seconds to activate the BBE setting mode.

3



Rotate the AUDIO CONTROL knob clockwise or countercloekwise to choose the desired level upward or downward respectively. Each rotation changes the level by one step.

The initial setting is +5 and you can select in 6 steps (from +1 to +6).

4

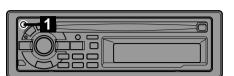


Press the BBE button to deactivate the BBE setting mode.

Note: The BBE level setting is automatically memorized. The setting remains until you manually change it.



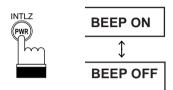
Basic Operation English



Sound Guide Function

This function will give audible feedback with varying tones depending upon the button pressed.



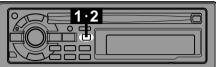


Press and hold the PWR button for more than 3 seconds. Each press toggles between the BEEP ON and BEEP OFF modes. The initial setting is the BEEP ON mode.





Basic Operation



Demonstration

In the Demonstration (DEMO) mode, the unit scans each source; tuner and CD player.



Press and hold the DEMO button for at least 3 seconds to activate the DEMO mode.

"DEMO" blinks in the display.

The unit automatically performs the following scanning operation.

- The unit goes into the Tuner mode and scans the preset radio stations by playing the first 10 seconds of each preset station in the FM1, FM2 and AM bands.
- Then the unit goes into the CD mode and scans the selections on the loaded CD by playing the first 10 seconds of each selection starting with the first selection.
- 3. The unit continues scanning of the sources as described in 1 to 3 above.





DEMO

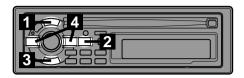
To end the DEMO mode, press the DEMO button.

"DEMO" disappears from the display.

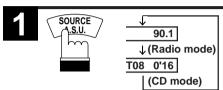




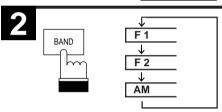




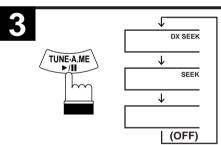
Manual Tuning



Press the SOURCE button to select the radio mode.

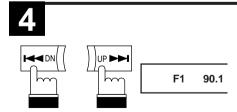


Press the BAND button repeatedly until the desired radio band is displayed.



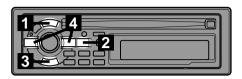
Press the TUNE button repeatedly until "DX SEEK" and "SEEK" disappears from the display.

Note: The initial mode is DX SEEK.

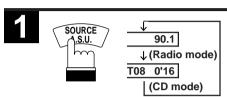


Press the DN or UP button to move downward or upward one step respectively until the desired station frequency is displayed.

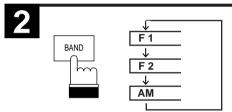
Radio Operation English



Automatic Seek Tuning

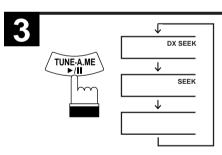


Press the SOURCE button to select the radio mode.

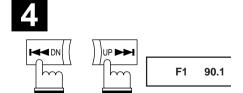


Press the BAND button repeatedly until the desired radio band is displayed.





Press the TUNE button to illuminate the DX and SEEK indicators in the display. With the DX mode activated, both strong and weak stations will be tuned in the Auto-Seek operation. Press again to return to the local mode. The DX indicator will turn off and the SEEK indicator will remain illuminated. Now, only strong stations will be tuned.



Press the DN or UP button to automatically seek a station downward or upward respectively.

The unit will stop at the next station it finds. Press the same button again to seek next station.







Mono/Stereo Switching

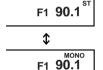
1



Press the "F" button. The function indicator on the button will turn off.

2





"ST" indicator appears when a stereo station is tuned in.

Press the MONO button to switch from stereo to monaural FM reception. This will help in reducing the noise of weak FM Stereo broadcasts. In the monaural mode, the MONO indicator appears. Press the MONO button again to return to the stereo mode.

3



Press the "F" button to activate the normal mode. The function indicator will illuminate.

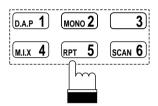






Manual Storing of Station Presets





- Select the radio band and tune in a desired radio station you wish to store in the preset memory.
- Make sure that the Function indicator illuminates, and press and hold any one of the preset buttons (1 through 6) for at least
 seconds until the station frequency on the display blinks.
- 3. Press the preset button into which you wish to store the station while the frequency display is blinking (within 5 seconds).

 The display stops blinking once the station has been memorized. The display shows the band, preset No. with a triangle (臺) and station frequency memorized.
- 4. Repeat the procedure to store up to 5 other stations onto the same band. To use this procedure for other bands, simply select the band desired and repeat the procedure.

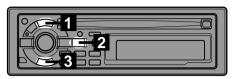
(((\psi_s)))

A total of 24 stations can be stored in the preset memory (6 stations for each band; FM1, FM2, AM and D.A.P.).

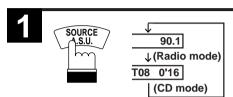
Note: If you store a station in a preset memory which already has a station, the current station will be cleared and replaced with the new station.



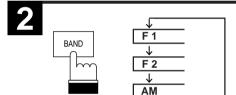




Automatic Memory of Station Presets



Press the SOURCE button to select the radio mode.



Press the BAND button repeatedly until the desired radio band is displayed.





Press and hold the A. ME button for at least 2 seconds. The frequency on the display continues to change while the automatic memory is in progress.

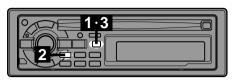
The tuner will automatically seek and store 6 strong stations in the selected band in order of signal strength.

When the automatic memory has been completed, the tuner goes to the station stored in the preset location No. 1.

Note: If no stations are stored, the tuner will return to the original station you were listening to before the auto memory procedure began.



Radio Operation English



Storing into Direct Access Preset (D.A.P.) Band

A combination of radio stations from any band, AM and FM (up to 6 stations) can be manually preset onto the D.A.P. band.





Press the "F" button. The function indicator will turn off.

2



Press the D.A.P. button until the D.A.P. indicator appears.

Press the BAND button to select FM or AM. The selected band will be displayed. To memorize stations onto the D.A.P. band, follow the steps for the automatic or Manual Storing of Station Presets section above.

Note: This function can be used together with the Automatic Memory Preset.

To cancel the D.A.P. mode, press the D.A.P. button. The D.A.P. indicator will turn off.

3

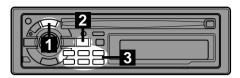


Press the "F" button to activate the normal mode. The function indicator will illuminate.

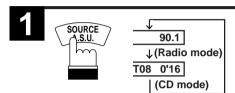




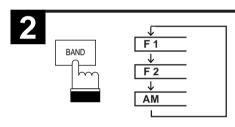
Radio Operation English



Tuning to Preset Stations



Press the SOURCE button to select the radio mode.

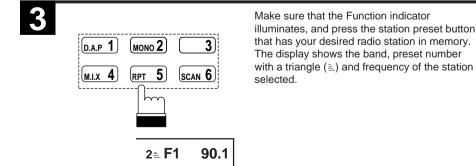


Press the BAND button repeatedly until the desired band is displayed.



To select the D.A.P. band, press the F button then the D.A.P. button.

The D.A.P. indicator will appear in the display.

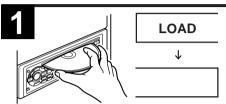








Inserting/Ejecting Disc



Insert a CD half way into the slot with the label side facing up. The player automatically draws the disc into the disc compartment.

The Disc indicator appears to show that a CD is loaded.

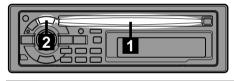
Note: Three-inch (8cm) CD's cannot be used.

2



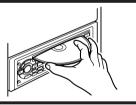
EJECT

Press the eject ≜ button when you want to eject the CD.



Normal Play and Pause

1



Insert a CD. The CD player begins playback from the first track on the disc. The display shows the track number and elapsed time of the track being played. When the last track is played back the player returns to the first track and begins playback from that point.

2



90.1 ↓ (Radio mode) 108 0'16 ↓ (CD mode) If a CD is already loaded in the CD player, press the SOURCE button to select the CD mode:



Press the TUNE A. ME ►/II button to place the player in the Pause mode during the play mode. To resume playback, press the TUNE A. ME ►/II button again.

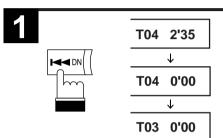








Music Sensor (Skip)



Momentarily press the DN I◀◀ button once to return to the beginning of the current track. If you wish to access a track further back, repeatedly press until you reach the desired track. (The example shows the Music Sensor operation starting from track No. 4.)



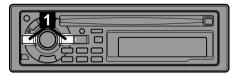
T04 2'35

↓

T05 0'00

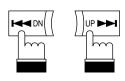
Press the UP >> button once to advance to the beginning of the next track. If you wish to access a track further ahead, press repeatedly until the desired track is reached.

Note: The music sensor feature is functional in the play or pause mode.



Fast Forward and Backward





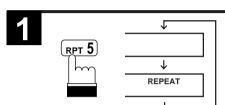
Press and hold the DN I◀◀ or UP ▶►I button to quickly move backward or forward until you reach the desired section of the track.





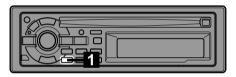


Repeat Play

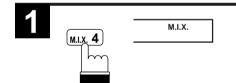


Press the RPT button to play back repeatedly the track being played. The REPEAT indicator appears and the track will be played repeatedly.

Press the RPT button again to deactivate the repeat play.



M.I.X. (Random Play)



Press the M.I.X. button in the play or pause mode. The M.I.X. indicator will illuminate and the tracks on the disc will be played back in a random sequence. After all the tracks on the disc have been played back once, the player will begin a new random sequence play until the M.I.X. mode is canceled.

To cancel M.I.X. play, press the M.I.X. button again.

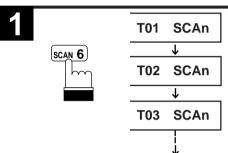








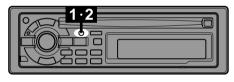
Scanning Programs



Press the SCAN button to activate the Scan mode. The first 10 seconds of each track will be played back in succession.

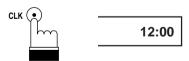
To stop the Scan, press the SCAN button to deactivate the Scan mode.

Clock Operation



Displaying Time

1



Press the CLK (Clock) button to display the time. The unit displays the clock time.

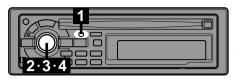
Note: Selecting any tuner or CD function while in the clock mode will interrupt the time display momentarily. The function selected will be displayed for about 5 seconds before the time returns to the display. The time will be displayed even with power to the head unit turned off, as long as the ignition key is on.

2



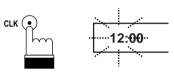
Press the CLK (Clock) button to turn off the time and show other functions.

Clock Operation



Setting Time

1



Press and hold the CLK (Clock) button for at least **3** seconds until the time indication blinks.

2





Example: To adjust to 9:35.

Rotate the Audio Control knob to adjust the hours while the time indication is blinking.

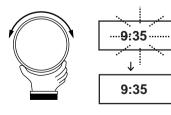
3



After the hour has been adjusted, press the Audio Control button within 5 seconds or while the hour indication is blinking.

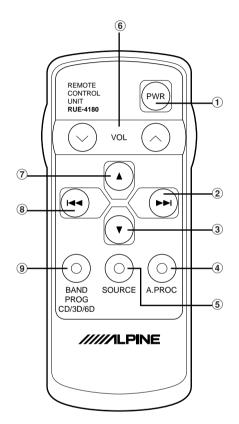


4



Rotate the Audio Control knob to adjust the minutes while the time indication is blinking. The time is automatically set. Five seconds after the adjustment, the time indication will stop blinking.

Remote Control



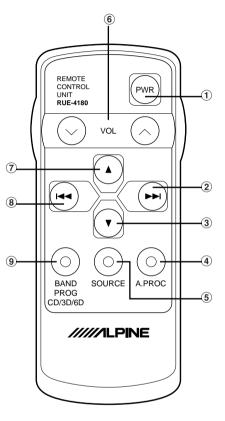
Controls

- Power Switch
 Press the switch to turn the power on/off.
- ② Button Radio mode: SEEK (UP) Button CD mode: Press the button to advance to the beginning of the next track.
- ③ Button Radio mode: Pressing the button will select, in descending order, stations programmed into the radio's presets as shown below.

$$\rightarrow$$
 6 \rightarrow 5 \cdots 1 \rightarrow

- A.PROC Button
 For the CDE-7831E, this button has no effect.
- 5 Audio Select Button Press to select the audio source.
- ⑥ Volume Adjustment Buttons To increase the volume level: Press the ⊘ button To decrease the volume level: Press the ⊘ button





7 O Button

Radio mode: Pressing the button will select, in ascending order, stations programmed into the radio's presets as shown below.

$$\rightarrow$$
 1 \rightarrow 2 \cdots 6 \neg

8 🕞 Button

Radio mode: SEEK (DN) Button
CD mode: Press the button to go back to
the beginning of the current track.

Band/Program Button
 Radio mode: BAND Button

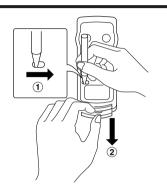
Press the button, and the band will change as shown below.

$$\rightarrow$$
 F1 \rightarrow F2 \rightarrow AM $-$

Remote Control

Battery Replacement

Applicable battery: Use one CR2025 or equivalent.



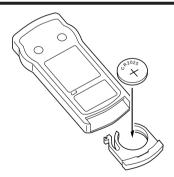
Opening the battery case

Place the remote upside down on a flat, level surface.

Looking at the back of the remote, grasp the battery holder at the bottom of the unit between your forefinger and thumb. Insert a pointed object into the left side of the elongated hole.

Slide the pointed object to the right (as indicated by the arrow) while at the same time pulling on the battery holder.

2 Pull the rear cover out with your thumb at the same time.



Replacing the battery

Put the battery in the case with the (+) indication upward as shown in the illustration.



Closing the case

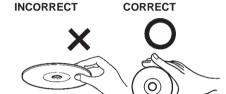
Push the battery holder back into the remote until a click is heard.

Disc Care



Correct Handling

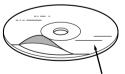
Do not drop the disc while handling. Hold the disc so you will not leave fingerprints on the surface. Do not affix tape, paper, or gummed labels to the disc. Do not write on the disc.



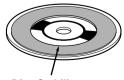
Disc Cleaning

Fingerprints, dust, or soil on the surface of the disc could cause the CD player to skip. For routine cleaning, wipe the playing surface with a clean, soft cloth from the centre of the disc to the outer edge. If the surface is heavily soiled, dampen a clean soft cloth in a solution of mild neutral detergent before cleaning the disc.





Transparent Sheet



Disc Stabilizer

Disc Accessories

There are various accessories available on the market for protecting the disc surface and improving sound quality. However, most of them will influence the thickness and/or diameter of the disc. Using such accessories can cause the disc to be out of standard specifications and may create operational problems. We recommend not using these accessories on discs played in Alpine CD players.

In Case of Difficulty

If you encounter a problem, please review the items in the following checklist. This guide will help you isolate the problem if the unit is at fault. Otherwise, make sure the rest of your system is properly connected or consult your authorized Alpine dealer.

Initial Turn-on After Installation

Symptom	Cause and Solution
No function or display.	 Car's ignition is off. If connected following instructions, the unit will not operate with the car's ignition off.
	Improper power lead connections. Check power lead connections.
	Blown fuse. Check the fuse on the battery lead of the unit; replace with the proper value if necessary.
	 Internal micro-computer malfunctioned due to interference noise etc. Press the Reset button with a ball-point pen or other pointed article.

In Case of Difficulty

Radio Mode		
Symptom	Cause and Solution	
Unable to receive stations.	 No antenna or open connection in cable. Make sure the antenna is properly connected; replace the antenna or cable if necessary. 	
Unable to tune stations in the seek mode.	 You are in a weak signal area. Make sure the tuner is in the DX mode. If the area you are in is a primary signal area, the antenna may not be grounded and connected properly. Check your antenna connections; make sure the antenna is properly grounded at its mounting location. The antenna may not be the proper length. Make sure the antenna is fully extended; if broken, replace the antenna with a new one. 	
Broadcast is noisy.	 The antenna is not the proper length. Extend the antenna fully; replace it if it is broken. The antenna is poorly grounded. Make sure the antenna is grounded properly at its mounting location. 	

In Case of Difficulty

CD Mode

Symptom	Cause and Solution
CD not functioning.	 Out of operating temperature range +50°C (+120°F) for CD. Allow the car's interior (or trunk) temperature to cool.
CD playback sound is wavering.	 Moisture condensation in the CD Module. Allow enough time for the condensation to evaporate (about 1 hour).
CD insertion not possible.	 The CD is already in the CD player. Eject the CD and remove it. The CD is being improperly inserted. Make sure the CD is being inserted following instructions in the Owner's Manual.
Unable to fast forward or backward.	The CD has been damaged. Eject the CD and discard it; using a damaged CD in your unit can cause damage to the mechanism.
Sound skips due to vibration.	 Improper mounting. Securely re-mount the unit. Disc is very dirty. Clean the disc. Disc has scratches. Change the disc.
Sound skips without vibration.	Dirty or scratched disc. Clean the disc; damaged discs should be replaced.

Specifications

FM TUNER SECTION

FM TUNER SECTION		
Tuning Range	87.5 – 108.0 MHz	
Mono Usable Sensitivity	9.3 dBf (0.8 μV/75 ohms)	
50 dB Quieting Sensitivity	13.5 dBf (1.3 μV/75 ohms)	
Alternate Channel Selectivity	80 dB	
Signal-to-Noise Ratio	65 dB	
Stereo Separation	35 dB	
Capture Ratio	2.0 dB	
AM TUNER SECTION		
Tuning Range	531 – 1,602 kHz	
Usable Sensitivity		
(* IEC Standard)		

Specifications

CD SECTION

CD SECTION		
Frequency Response	5 – 20,000 Hz (±1 dB)	
Wow & Flutter (% WRMS)	Below measurable limits	
Total Harmonic Distortion	0.008% (at 1 kHz)	
Dynamic Range	95 dB (at 1 kHz)	
Signal-to-Noise Ratio	95 dB	
Channel Separation	85 dB (at 1 kHz)	
REMOTE CONTROL		
Battery Type	CR2025 battery	
Battery Quantity	1	
Dimensions (W \times H \times D)		
Weight (without battery)	17 gr (0.6 oz)	

Specifications

GENERAL

Power Requirement		
Maximum Power Output*	35 W×4	
Output Voltage	1000 mV/10 k ohms	
Maximum Pre-Output Voltage		
Bass	±15 dB at 30 Hz	
Treble	±10 dB at 10 kHz	
Weight	1.7 kg (4 lbs. 12 oz)	
CHASSIS SIZE		
Width	178 mm (7")	
Height	50 mm (2")	

NOSEPIECE SIZE

Width	170 mm (6–3/4")
Height	46 mm (1-13/16")
Depth	18 mm (11/16")

Note: Due to continuous product improvement, specifications and design are subject to change without notice.

*Under maximum operating voltage and input signal, into 4 ohms.