Take the time to read through this instruction manual. Familiarity with installation and operation procedures will help you obtain the best performance from your new MD-receiver.

For your records
Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your KENWOOD dealer for information or service on the product.
Model: KMD-X91  Serial number: 

© PRINTED IN JAPAN  B64-1406-00 (K) (MC)
99/12 11 10 9 8 7 6 5 4 3


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### Warning

**Dear Customer:**

Selecting fine audio equipment such as the unit purchased is only the start of your musical enjoyment. It's time to consider how you can maximize the enjoyment your equipment offers. This manual and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound be loud and clear without annoying blaring or distortion.

Sound can be deceiving. Over time your "normal" level adapts to higher volumes of sound. So what you consider "normal" can actually be loud and harmful to your hearing.

Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:
- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it and clearly, and without distortion.

Once you have established a comfortable level:
- Set the dial and leave it there.

Taking a minute to do this now will help to avoid damage or loss in the future. After all, we want to be listening for a lifetime.
Dear Customer:

Selecting fine audio equipment such as the unit you’ve just purchased is only the start of your musical enjoyment. Now it’s time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association’s Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion — and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing “comfort level” adapts to higher volumes of sound. So what sounds “normal” can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

**To establish a safe level:**
- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

**Once you have established a comfortable sound level:**
- Set the dial and leave it there.

Taking a minute to do this now will help prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

---

**We Want You Listening For A Lifetime**

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association’s Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

**Decibel Level Example**

- **30** Quiet library, soft whispers
- **40** Living room, refrigerator, bedroom away from traffic
- **50** Light traffic, normal conversation, quiet office
- **60** Air conditioner at 20 feet, sewing machine
- **70** Vacuum cleaner, hair dryer, noisy restaurant
- **80** Average city traffic, garbage disposals, alarm clock at two feet

**THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE**

- **90** Subway, motorcycle, truck traffic, lawn mower
- **100** Garbage truck, chain saw, pneumatic drill
- **120** Rock band concert in front of speakers, thunderclap
- **140** Gunshot blast, jet plane
- **180** Rocket launching pad

Information courtesy of the Deafness Research Foundation.
**Warning**

**CAUTION**
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

KENWOOD CORPORATION
2567/3, SHIBAWA-CHO,
KACHIDOKUJI-
SHI
TOKYO, JAPAN

KENWOOD CORP. CERTIFIES THIS EQUIPMENT
COMPLIES WITH FCC REGULATIONS NO. 21 CER
1040 10, CHAPTER 1 SUBCHAPTER J

Location: Bottom Panel

**FCC WARNING**
This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

**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 contains radio communications, if it is not installed and used in accordance with the instructions. 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.

**NOTE**
This Class B digital apparatus complies with Canadian ICES-003

---

**Safety precautions**

**WARNING**
To prevent injury or fire, take the following precautions:
- Insert the unit all the way in until it is fully locked in place. Otherwise it may fall out of place when jolted.
- When extending the ignition, battery, or ground wires, make sure to use automotive-grade wires or other wires with a 0.75mm (AWG18) or more to prevent wire deterioration and damage to the wire coating.
- To prevent a short circuit, never put or leave any metallic objects (such as coins or metal tools) inside the unit.
- If the unit starts to emit smoke or strange smells, turn off the power immediately and consult your Kenwood dealer.
- Make sure not to get your fingers caught between the faceplate and the unit.
- Be careful not to drop the unit or subject it to strong shock. The unit may break or crack because it contains glass parts.
Safety precautions

⚠️ WARNING ⚠️
To prevent injury or fire, take the following precautions:

- Insert the unit all the way in until it is fully locked in place. Otherwise it may fall out of place when jolted.
- When extending the ignition, battery, or ground wires, make sure to use automotive-grade wires or other wires with a 0.75mm² (AWG18) or more to prevent wire deterioration and damage to the wire coating.
- To prevent a short circuit, never put or leave any metallic objects (such as coins or metal tools) inside the unit.
- If the unit starts to emit smoke or strange smells, turn off the power immediately and consult your Kenwood dealer.
- Make sure not to get your fingers caught between the faceplate and the unit.
- Be careful not to drop the unit or subject it to strong shock. The unit may break or crack because it contains glass parts.

⚠️ CAUTION ⚠️
To prevent damage to the machine, take the following precautions:

- Make sure to ground the unit to a negative 12V DC power supply.
- Do not open the top or bottom covers of the unit.
- Do not install the unit in a spot exposed to direct sunlight or excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.
- Do not subject the faceplate to excessive shock, as it is a piece of precision equipment.
- When replacing a fuse, only use a new one with the prescribed rating. Using a fuse with the wrong rating may cause your unit to malfunction.
- To prevent a short circuit when replacing a fuse, first disconnect the wiring harness.
- Do not place any object between the faceplate and the unit.
- Do not use your own screws. Use only the screws provided. If you use the wrong screws, you could damage the unit.

**IMPORTANT INFORMATION**

You cannot connect the unit directly to the following CD automatic changers. If you want to use older changers with the unit, follow the directions below according to the type of changer you own:

- **KDC-C200 / KDC-C300 / KDC-C400**
  Use the extension cable and the control box attached to the CD changer, and the optional CA-DS100 converter cord.

- **KDC-C301 / KDC-C600 / KDC-C800 / KDC-C601 / KDC-C401**
  Use the extension cable attached to the CD changer, and the optional CA-DS100 converter cord.

- **KDC-C100 / KDC-C302 / C205 / C705 / non-Kenwood CD changers**
  Cannot be used with this model.

⚠️ CAUTION ⚠️
You can damage both your unit and the CD changer if you connect them incorrectly.
Safety precautions

**NOTE**
- If you experience problems during installation, consult your Kenwood dealer.
- If the unit fails to operate properly, press the RESET button. When the faceplate is not visible, slide the manual open switch (as illustrated on p. 8) for as many times as you have preset to make the faceplate control appear. The unit returns to factory settings when the RESET button is pressed. If the unit still fails to operate properly after the RESET button has been pressed, contact your local KENWOOD dealer for assistance.
- Press the reset button if the CD auto changer is first controlled and operated incorrectly. The original operating condition will return.

**Lens Fogging**
In cold climates, there may be a period after you turn on your vehicle's heater when the lens that guides the laser beam used in your MD player fogs up. If this happens, you cannot play MDs. Take out discs and the fogging will disappear. If it does not return to normal, after several hours, contact your Kenwood dealer.

**Handling Mini discs**
- The MD shutter is designed so that it cannot be opened. If forced open, the cartridge will be damaged and use of the MD will no longer be possible. If the shutter has been opened due to some cause, be careful not to touch the recording portion with a finger. Doing so will cause the sound to skip.

![Diagram of a Mini disc](image)

**Cleaning the Unit**
If the front panel gets dirty, turn off the power and wipe the panel with a dry silicon cloth or soft cloth.

**CAUTION**
Do not wipe the panel with a hard cloth or a cloth dampened by volatile solvents such as paint thinner and alcohol. They can scratch the surface of the panel and/or cause the indicator letters to peel off.

- Do not use an MD that has a peeling label.
- Use of an MD that has a loose or peeling label may cause problems, such as the label coming off, inside the player and the resultant inability to eject the MD.
- Wipe away dirt or dust from the cartridge surface with a dry cloth before use. Using an oil-soaked cartridge in particular may result in the disc not loading or being unable to eject it. (At time of cleaning, be careful not to open the shutter.)
- Do not leave the MD in the unit for a prolonged period. The ejected MD should be placed in an MD case for storage.
- Do not leave the MD in a place exposed to direct sunlight (such as on a dashboard) or in other places that attain high temperatures. The MD cartridge will become misshapen and will no longer be usable.
- MDs designed for use with data cannot be used. Please use MDs designed for music.
- Do not use lens cleaners. Doing so will lead to breakdown.
**Basic operations**

**Power**

You can help prevent theft of the unit by reversing the faceplate so that the control panel cannot be seen, hiding the unit, and shutting off the audio.

**Power ON/OFF:**

- When you turn your vehicle's ignition on, the unit's power will also turn on, with the faceplate reversing to show the control panel.
- When you turn your vehicle's ignition off, the faceplate will reverse to hide the control panel, and the unit's power will turn off.

**NOTE**

- When the moving faceplate is hit by an object, it will stop and return to its original state. Remove the object and repeat the action.
- The status of the Security Code Function (if any) is displayed whenever the power is switched on: "CODE ON" (Security Code has been registered) or "CODE OFF" (Security Code has not been registered).

**CAUTION** Using the Unit in Vehicles with Covered Consoles

- Make sure the console is uncovered while the faceplate is reversed.
- Do not exert any excess force on the movable parts of the unit, including the faceplate, as it can cause failure in the unit's mechanism.

**Hiding the unit with the ignition turned on (forced closing):**

- Press the SRC button for at least one second. The faceplate will reverse, hiding the unit. The unit will turn off.

**NOTE**

- When the closing faceplate is hit by an object, the unit will turn off without the faceplate closing all the way. Remove the object and press the SRC button to turn the unit back on, then turn it off again to hide it properly.
- While the control panel is moving, pressing the buttons will not have any effect. Do not try to press the buttons or the control panel as the faceplate is moving, as excessive force may damage the unit.
- During the forced closing of the unit, having the unit left closed while the ignition is turned on, the faceplate will not open no matter how often the ignition is turned on or off, unless "Manual Open Switch" at the rear of the faceplate is pressed in order to open it. You can prevent tampering of the unit when letting someone else drive your car by keeping it closed this way.

**To cancel the forced closing of unit and open control panel:**

- Slide the Manual open switch, as illustrated below, for as many times as you have preset in the "Manual Open Switch Setting" (Open SW#1) in the menu.

**NOTE**

- When you set the Manual Open Switch setting to 2 or 3, slide the manual open switch successively. If you do not slide the switch successively, this cannot be verified correctly.

---

**Menu System**

To accommodate a greater number of functions, a menu system has been employed for making settings. Press the MENU button to enter the menu mode and then display the function to make the setting. Details on each setting are explained separately in the corresponding function page.

1. Press the MENU button for at least one second.

----

"MENU" is displayed when the menu mode is entered. The function that you can adjust is indicated with the settings displayed.

2. **Selecting function to set**

   Press the button to search through the functions. Press the button to search through the functions backward.

   Example: If you want to switch the setting of the external amplifier control function from off to through the functions until you see "AMP" in the display.

3. **Changing setting for currently displayed function**

   Press the AM/FM button. The setting will change for each function.

   Example: When the setting of the external amplifier control function is selected, press the button to change the setting from off to on.

4. **Ending the menu mode**

   Press the MENU button. The selection includes:

   - Touch Sensor Tone (Beep ON / OFF)
   - Time Adjust
   - Manual (Clock Adj.)
   - Automatic Time Adjust
   - SYNC OFF / ON
   - Security mode (Security)
   - Illumination (Color Green / Amber)
   - Dimmer adjustment
   - Dimmer (Dimmer ON / OFF)
   - Graphic Display (Graphic ON / OFF)
   - Mask (BLK MASK OFF / ON)
   - Dual zone system
   - OFF / ON
   - External Amplifier Control (AMP +6 AMP BASS +12)
"MENU" is displayed when the menu mode is entered.
The function that you can adjust is indicated with the current
settings displayed.

2 Selecting function to set
Press the button to search through the functions until you
see the one you want to adjust in the display.
Press the button to search through the functions
backward.
Example: If you want to switch the setting of the external
amplifier control function from off to high, first search
through the functions until you see "AMP BASS Flat"
in the display.

AMP BASS
Flat

3 Changing setting for currently displayed function
Press either the AM or FM button.
The setting will change for each function.
Example: The setting of the external amplifier control function
will switch from off to low.
Pressing the button again switches the setting to
high, and "AMP BASS +12" is displayed.

AMP BASS -> AMP BASS
+6 -> +12

4 Ending the menu mode
Press the MENU button.
The selection includes:
- Touch Sensor Tune (Beep ON / OFF)
- Time Adjustment
- Manual Switching
- Automatic Time Adjustment
- Sync OFF / ON
- Security mode (Security)
- Selectable Illumination (Color Green / Amber)
- Dimmer Level
- Dimmer Brightness
- Dimmer (Dimmer ON / OFF)
- Switching Graphic Display (Graphic ON / OFF)
- Back Mask (BLK MASK OFF / ON)
- Dual zone system* (Zone 2
OFF / ON)
- External Amplifier Control (AMP BASS Flat / +6)
Basic operations

Switching Modes:
- Each time you press the SRC (Source) button, the mode
  switches as follows:
  - Tuner mode
  - MD mode
  - External disc control mode
  - AUX mode

**NOTE**
- The mode switches from any mode which
  cannot be used.
- The external disc control mode will differ depending on the unit
  that is connected.
- The AUX mode is available only when the changer / AUX
  switching adapter (KCA-S210A or CA-C1AX) or CD changer
  (KD-CPS92 or KD-CX92) is connected to the unit.
- When the AUX mode is being used, the AUX Mode will replace the
  External Disc Control Mode.

Attenuator

This function allows you to turn down the volume quickly.

**Turning Attenuator On/Off:**
- Press the ATT button to switch the attenuator on and off.
  When the attenuator is off, the volume returns to the original
  level.

**NOTE**
- Turning the volume all the way down deactivates the attenuator
  function.

Tuner features

Tuning

You can choose from three tuning modes: automatic, manual, station seek, and manual. The "AUTO 1" indicator lights when auto seek tuning is selected, and the "AUTO" indicator lights when preset station seek tuning is selected.

Selecting Tuning Mode:
- Press the AUTO button.
  Each time you press the AUTO button, the mode
  switches as follows:
  - Auto 1 (Auto Seek Tuning)
  - Auto 2 (Preset Station Seek Tuning)
  - Manual (Manual Tuning)

**Tuning:**
1. Press the SRC (source) button repeatedly to select tuning mode. "TUNER" is displayed when the tuner mode is selected.
2. Press either the FM or AM button to select the desired band.
   Each time you press the FM button, the band switches between the FM1, FM2, and FM3 (which are used for preset stations).
   Press the AM button to select the AM band.
3. **Auto Seek Tuning**
   - Press the AUTO button to seek higher frequency.
   - Press the SEEK button to seek lower frequency.
   - Press station seek tuning
   - Press the SEEK button to move to the next preset station (the one with the next highest number), and to move to the last preset station (i.e., the one with the lowest number).
   - Manual Tuning
   - Press the AUTO button to increase the frequency.
   - Press the SEEK button to decrease the frequency.

**NOTE**
- The ST indicator lights up when stereo broadcast.
**Tuning**

You can choose from three tuning modes: auto seek, preset station seek, and manual. The "AUTO 1" indicator lights up when auto seek tuning is selected, and the "AUTO 2" indicator lights up when preset station seek tuning is selected.

**Selecting Tuning Mode:**
Press the AUTO button. Each time you press the AUTO button, the mode switches as follows:

- Auto 1 (Auto Seek Tuning)
- Auto 2 (Preset Station Seek Tuning)
- Manual (Manual Tuning)

**Tuning:**

1. Press the SRC (source) button repeatedly to select the tuning mode. "TUNER" is displayed when the tuning mode has been selected.

2. Press either the FM or AM button to select the band. Each time you press the FM button, the band switches between the FM1, FM2 and FM3 which are used for groups of preset stations. Press the AM button to select the AM band.

3. **Auto Seek Tuning**
   - Press the button to seek higher frequencies.
   - Press the button to seek lower frequencies.
   - Press the button to move to the next preset station (i.e., the one with the next highest number), and the button to move to the last preset station (i.e., the one with the next lowest number).
   - Manual Tuning
   - Press the button to increase the frequency by one step.
   - Press the button to decrease the frequency by one step.

**NOTE**
The ST indicator lights up when stereo broadcasts are being received.

**Station Preset Memory**

Store the frequency of a station. You can then recall that station with a single touch of a button.

1. Select the band/station that you want to have stored.

2. Press the button (one to six) that you want to use for the station, for at least two seconds. The button number blinks once in the display to indicate that the data has been stored.

**Recalling a Preset Station:**
Press the preset station button (one to six) for the desired station. The number of the recalled station is displayed.

**NOTE**
You can store six stations in each of the FM1, FM2, FM3, and AM bands.
Tuner features

**Auto Memory Entry**
You can automatically store all the receivable frequencies in the band currently being listened to, and then recall them with the touch of a button later. This function is especially useful when you are travelling and do not know what stations are available. Up to six frequencies can be stored this way.

1. Select the band for auto memory entry
2. Press the AME button for at least two seconds to start auto memory entry.
   The numbers of the preset station buttons are shown in order. When all the stations in a certain band are stored in the preset memory, the auto memory entry stops. The tuner then plays the last station received.

**Recalling a Preset Station:**
Press the preset station button (#1-6) for the desired station. The number of the recalled station is displayed.

**Clean Reception System Circuit (CRSC)**
Temporarily have reception switched from stereo to mono to reduce multi-path noise when listening to the FM station. The factory default for this function is ON.

**Turning CRSC On/Off:**
1. Press the MNU button for at least one second. "MENU" is displayed and the menu mode is turned on.
2. Keep pressing the button until the Clean Reception System Circuit 'function appears in the display.
   Press the button to search in the other direction.
   The function setting is indicated by "CRSC ON" or "CRSC OFF" in the display, indicating that the CRSC is on or off, respectively.
3. **Switching settings**
   Press either the AM or FM button.
   The display and setting will change.
4. Press the MENU button to end the menu mode.

---

**Station Name Preset (SNPS)**
You can assign names to radio stations with the Station Preset Memory. Up to 32 FM stations and 16 AM stations can be assigned names.

1. Adjust the frequency to the station whose name you want to enter.
2. Press the NME button for at least two seconds. "NAME SET" is displayed once the station preset mode is entered.
   The cursor will blink in the position where letters are entered.
3. Press either the or button to move the cursor to the desired position.
   The button moves the cursor to the left, and the button to the right.
   You can also move the cursor left or right by pressing the or buttons, respectively, on the remote.
4. Each time the button is pressed, the characters to be entered change as listed below.
   Press the FM or AM button to display the desired character.
   Characters that can be displayed are as follows:
   - Alphabet (upper case): A ~ Z
   - Alphabet (lower case): a ~ z
   - Numerals and symbols: 0 - 9, @, *, +, -, /, \, <, >, |
   - Special characters: $, %, &,

**NOTE**
Strong electrical fields (such as from power lines) may cause unstable sound quality when CRSC is turned on. In such a situation, turn it off.

**Station Name Preset Play (SNPP)**
You can search for the station for any station if it has been preset using Station Name Preset.

1. Press the ONP button on the remote.
   "SNPP" will be displayed once the station name mode is entered.
   The names of the stations stored in the band order are displayed in the following order: for five stations:
   - FM1 ➔ FM2 ➔ FM3 ➔ AM ➔

   Each time you press the button, the station switches in the forward direction.

**NOTE**
You can enter up to 8 characters for each name.

---
5 Continue steps 3 and 4 until all the characters are chosen for the name.

**NOTE**
You can enter up to 3 characters for each name.

6 **Assigning Names**
Press the NAME button on the unit or the OK button on the remote.
The name of the station is stored in memory, and the Station Name Preset mode ends.
Also, if you make no input for 10 seconds, the name will be stored up to the point that you have entered, and the mode ends.

**NOTE**
- You can assign names to up to 32 FM stations and 16 AM stations.
- All the station names will be erased if you press the RESET button.
- If you want to change the name of a station, first display the name of the station (following steps 1 and 2 above), then change the letter(s) that you want by following steps 3 and 4.

---

**Station Name Preset Play (SNPP)** *(Function of Remote)*

You can search for the station for any station if its name has been preset using Station Name Preset.

1 Press the DNPP button on the remote.
   "SNPP" will be displayed once the station name preset play mode is entered.
   The names of the stations stored in the band currently listened to are displayed in the following order for five seconds each:
   ![Diagram](https://example.com/diagram)

Each time you press the button, the station display switches in the forward direction.
Tuner features

Switching Display for Tuner

You can change the display used when listening to the radio.

Changing the Display:
Each time you press the DISP button, the display changes as follows:

- Station frequency
- Station name
- Program Service name during RBDS station reception
- Radio text during RBDS station reception

NOTE
When receiving an RBDS station to which a name has been preset with Station Name Preset, switching to the program service name/RBDS name display will result in the program service name being displayed with priority.

Clock display

Turning clock display On/Off:
Each time you press the CLK button, the display switches between the clock and Band/PreSet stat or number display.

NOTE
The indicator lights when the clock is displayed.

RBDS features

RBDS (Radio Broadcast Data System)

RBDS is a service used by radio stations to transmit outside normal radio broadcast signals.

When an RBDS station is received, you can immediately determine what kind of data is being transmitted by looking at the program service name, which appears in the display.

The indicator turns on when an RBDS station is received.

Alarm

When an emergency transmission (announcing the emergency) is made, the current function will be interrupted and the emergency warning will be received under the following conditions during tuner reception, or when the Traffic Information function is turned on.

Traffic Information Function

You can listen to traffic information. If you are listening to tapes or disc, they will continue playing until a traffic broadcast.

Turning TI function On/Off:
1. Press the MENU button for at least one second. "MENU" is displayed and the menu mode is turned on.
2. Keep pressing the button until the Traffic or function appears in the display. Press the button to switch the other option. The function setting is indicated by "TI ON" or "TI OFF" in the display, indicating that the TI function is on or off.
3. Switching settings
Press either the AM or FM button. The display and setting will change. When the function is on, the TI indicator turns on.
RBDS (Radio Broadcast Data System)

RBDS is a service used by radio stations to transmit data outside normal radio broadcast signals. When an RBDS station is received, you can immediately find out what kind of data is being transmitted by looking at the program service name, which appears in the display after the frequency.

The RBDS indicator turns on when an RBDS station is being received.

Alarm

When an emergency transmission (announcing disasters, etc.) is made, the current function will be interrupted to allow the warning to be received under the following conditions: during tuner reception, or when the Traffic Information function is turned on.

Traffic Information Function

You can listen to traffic information. If you are listening to tapes or discs, they will continue playing until a traffic bulletin is broadcast.

Turning TI function On/Off:

1. Press the MENU button for at least one second. ‘MENU’ is displayed and the menu mode is turned on.
2. Keep pressing the ► button until the Traffic Information function appears in the display.
   Press the ◄ button to search in the other direction.
   The function setting is indicated by ‘TI ON’ or ‘TI OFF’ in the display, indicating that the TI function is on or off, respectively.
3. Switching settings
   Press either the AM or FM button.
   The display and setting will change.
   When the function is on, the TI indicator is turned on. When
**RBDS features**

**Program Type (PTY) Function**

Conduct auto seek tuning only on those stations with selected kinds of programs.

1. Press the  PTY button.
   “PTY” is displayed once the program type selection mode is entered.

**NOTE**

You cannot use this function while the traffic information function is turned on.

2. Select the type of program to be received.

   - Press either the FM or AM button repeatedly to select the type of program you want to listen to.
   - The selection includes:
     - News
     - Classical
     - Top 40
     - Soft Rock
     - Oldies
     - Pop
     - Country
     - Religious
     - Religious Talk
     - Personal

   *You can select the type of program directly by pressing a preset button. The buttons are factory-set to the following type of programs:
   1. Music
   2. Speech
   3. News
   4. Sports
   5. Classical
   6. Jazz*

   **NOTE**

   Changing the Preset Button Settings for Program Type

   After selecting the type of program to be stored in a certain preset button, press that button for at least two seconds. The previously stored data for that button is erased and the new program type is stored.

3. Seeking the Selected Program Type

   Press the  or  button to make a seek of frequencies with your selected type of program.

   The display blinks and the seek starts.

   If your selected type of program is found, the name or the frequency of the station is displayed and the station is tuned into.

   “PTY” disappears from the display after about 30 seconds.

   If you make no key input in 30 seconds, the PTY selection mode will turn off automatically.

   **NOTE**

   If no program can be found, “NO PTY” is displayed.

   You want to set another type of program, repeat steps 2 and 3 above.

Switching to Other Stations with the Same Type of Program:

When “PTY” is blinking in the display, perform auto seek tuning.

The tuner scans for another station with the same type of program.

Canceling Program Type Function During Its Operation:

Press the  PTY button.

Confirning Program Type:

Press the DISP button.

The program type of the station currently tuned in will be displayed for five seconds. During that time, “” will blink in the display.

**NOTE**

If you tune to frequencies for which no program type has been stored, “NO ENTRY” will be displayed.

To register a non-RBDS station as a program type:

1. Tune your radio to the non-RBDS station that you want to register as the program type.

   **WARNING**

   To prevent accidents, drivers should not look at their display on the road.

   **NOTE**

   If the RBDS station currently tuned to is transmitted while the Radio Text Display mode is turned on, the text will not appear in the display. While awaiting reception, “” will be displayed.

   **NOTE**

   You can store up to 48 stations.

   If you try to store a 49th station, the frequency and name will appear alternately in the display.

   In that case, press the FM/AM button to change to the station that you want to erase, and then press the PTY button again for at least two seconds. The newly entered name will be stored.
New type of program:

If the station will be tuned and the seek starts.

1. If a type of program is found, the name of the
   station is displayed and the station is tuned
   in the display for about 30 seconds.
2. If no type of program is found, the PTY selection
   is automatically.

3. If no type is found, "NO PTY" is displayed.

4. For another type of program, repeat steps 2 and
   3.

5. Press the M/AM button to change the display in a
   station that you want to erase, and then press the DISP button
   again for at least two seconds. The newly entered station will
   then be stored.

6. Press the [PTY] button to end the program type selection
   mode.

Radio Text

You can display textual information being transmitted by RBDS
stations.

Turning on Radio Text Display Mode:

Pressing the DISP button switches the display as follows.

- Station frequency
- Program Service name
- Radio text
- Program Type
- PTY button
- Auto

NOTE

If the RBDS station currently tuned to is transmitting no text
while the Radio Text Display mode is turned on, "NO TEXT" will
appear in the display. While awaiting reception, "WAITING" will be
displayed.

WARNING

To prevent accidents, drivers should not look at the display while
on the road.

To scroll automatically:

Press the DISP button to display the Radio Text. The display of
the text will be scrolled repeatedly.

Manual/Automatic scroll switching:

1. Press the MENU button for at least one second.
   "MENU" is displayed and the menu mode is turned on.

2. Keep pressing the [DISP] button until the Text scroll function
   appears in the display.
   Pressing the [DISP] button results in the functions being switched
   in the reverse order.
   The text scroll function is displayed with "Scroll Menu" or "Scroll
Auto".
   "Scroll Menu" (Manual scrolling)
   "Scroll Auto" (Automatic scrolling)

3. Switching settings

   Press OFF the AM or M button.
   The display and setting will change.

4. Press the MENU button to end the menu mode.

To scroll manually:

1. Press the DISP button to display the Radio Text.
2. Pressing the DISP button for at least one second results in one
   scrolling display of the text.

NOTE

The setting of the text scroll function is in common with Text
Scroll for disc control.
MD/External disc control features

- When a unit equipped with an O-N switch is to be connected, please also see the instruction manual of this unit.
- Set the O-N switch to "N." "N"-operation will be set.
- When a unit that is not equipped with an O-N switch, or the changer switching unit "KCA-S200" is connected, "O"-operation will be set.

**"N"-operation:**
- The disc title and track title of the CD text can be displayed.
- The disc name will be displayed when the name has been registered to any connected unit with the Presetting Disc Names function, or when the playing unit contains a disc to which the disc title has been recorded.

**"O"-operation:**
- CD text cannot be displayed.
- Regardless of the control unit, the characters that can be registered with the Presetting Disc Names function are "A-Z 0-9 / , . : ; _ K L M ".
- If no disc name is registered to the playing unit with the Presetting Disc Names function.

**NOTE:**
The CD text, Presetting Disc Names, and Disc Name Preset Play functions may not be operational depending on the unit.

---

**Pausing and Restarting MD Play:**
Press the ▶ button to make the disc pause.
Press the same button again to start play again.

**Eject:**
Press the [EJECT] button. The faceplate will go off and the MD will be ejected.
Press the [EJECT] button to show the control panel.

**CAUTION**
Do not attempt to insert an MD into the slot if any other MD is already there.

**NOTE:**
- The sound will be temporarily muted while the faceplate is moving.
- The only buttons that will work during the eject operation are the [EJECT], SRC and ATT buttons, as well as the control button.

---

**Playing Other Disc mode**
This function permits the connection of optional discs other than the loaded MD (or other unit).

**Playing Discs:**
Press the SRC button repeatedly to select a disc control mode.
The disc will start playing.

**NOTE:**
The external disc control mode will differ, depending on what is connected.
- Mode Display Examples:
  - "CD", when a CD player is connected
  - "DISC", when a disc changer is connected
  - "DISC-1", "DISC-2", etc., when two disc changers are connected

**Pausing and Restarting Disc Play:**
Press the ▶ button to make the disc pause.
Press the same button again to start play again.
Pausing and Restarting MD Play:
- Press the ▶ button to make the disc pause.
- Press the same button again to start play again.

Eject:
- Press the (EJECT) button. The facia plate will slide to eject the MD.
- Press the (EJECT) button to show the control panel.

CAUTION
Do not attempt to insert an MD into the slot if another one is already there.

NOTE
- The sound will be temporarily muted while the facia plate is moving.
- The only buttons that will work during the eject state are the (EJECT), SRC and ATT buttons, as well as the volume control button.

Playing Other Disc mode
This function permits the connection of optional players and the playing of discs other than the loaded MD (in the current unit).

Playing Discs:
- Press the SRC (source) button repeatedly to select the external disc control mode.
- The disc will start playing.

NOTE
- The external disc control mode will differ, depending on the unit that is connected.

Mode Display Examples
- "CD"...when a CD player is connected
- "DISC"...when a disc changer is connected
- "DISC-1", "DISC-2"...when two disc changers are connected

Pausing and Restarting Disc Play:
- Press the ▶ button to make the disc pause.
- Press the same button again to start play again.

NOTE
- When one disc has finished playing its last track, the next disc in the changer will start playing. When the last disc in the changer has finished, the player will return to the first disc and start playing it.
- Disc #10 is displayed as "0".

Switching Display for Discs
Switch the display that appears while discs are playing.

Switching Display for Discs:
Each time you press the DISP button, the display during disc play switches as follows:

Track Time
Disc name (DNPE)
Disc title (Units featuring CD text/MD only)
Track title (Units featuring CD text/MD only)

NOTE
- You can give names to discs through the preset disc name function (see p. 24).
- Due to the unit's display, some characters may not be displayable.
- Depending on the type of characters of the CD Text, some characters may not be displayable.
**MD/External disc control features**

### Clock display

**Switching Display:**
Each time you press the CLK button, the display switches as follows:
- Mode display / Change/disc number
- Track time
- Track number
- Clock

**NOTE:** The indicator lights while the clock is displayed.

### Track Search

Search forward or backward through the tracks on the disc until you reach the one that you want to listen to.

**Making a Reverse Track Search:**
Press the button to display the desired track number.
Press once to search back to the beginning of the current track, twice to search back to the beginning of the previous track, and so forth.
Play starts at the beginning of the displayed track number.

**NOTE:** (For disc changers)
Pressing the button while listening to track 1 will only search back to the beginning of that track. The reverse search is not "recycled" to the last track on the disc.

**Making a Forward Track Search:**
Press the button to display the desired track number.
Press once to fast forward to the next track, twice to fast forward to the track after that, and so forth.
Play starts at the beginning of the displayed track number.

**NOTE:** (For disc changers)
You cannot make a forward track search when listening to the last track on a disc.

### Fast Forwarding and Reversing Disc Play

**Fast Forwarding Disc Play:**
Hold down on the button.
Release your finger to play the disc at that point.

**Reversing Disc Play:**
Hold down on the button.
Release your finger to play the disc at the point.

**NOTE:** You cannot use reverse play between tracks depending on the model being connected. Instead, the reverse play function is canceled when it reaches the beginning of a track at which point normal play will automatically resume.

### Disc Search

Search forward or backward through the discs in a disc changer.

**Making a Reverse Disc Search:**
Press the DISC- button to display the desired disc number.
Each time the button is pressed, the displayed disc number decreases by one.
Play starts at the beginning of the displayed disc.

**Making a Forward Disc Search:**
Press the DISC- button to display the desired disc number.
Each time the button is pressed, the displayed disc number increases by one.
Play starts at the beginning of the displayed disc.

**NOTE:** Play starts at the beginning of the displayed disc.

"LOAD" is displayed when discs are being exchanged.

### Track / Disc Repeat

Repeat playing the track or the disc currently being played.

**Turning Repeat Play On/Off:**
Press the REP button to switch repeat track/disc on/off as follows:
- Track Repeat ON
- Disc Repeat ON/Off (function of disc changers)
- Track/Disc Repeat OFF

"REP ON/REP OFF" is displayed and the track and disc change the display when track repeat is on.
"DREP ON" is displayed and the disc number by the display when disc repeat is on.

**NOTE:** Repeat play is canceled when you stop playing the disc.
Track Search:
- Button to display the desired track number.
- Search back to the beginning of the current track, 1 back to the beginning of the previous track, and 2 back to the beginning of the displayed track number.
- Button while listening to track 1 will only search forward to the next track, twice to fast forward after that, and so forth.
- The beginning of the displayed track number.
- A forward track search when listening to the last track on the disc.

Track / Disc Repeat:
- Repeat playing the track or the disc currently being listened to.
- Turning Repeat Play On/Off:
  - Press the REP button to switch repeat track/disc play on and off as follows:
    - Track Repeat ON
    - Disc Repeat ON (Function of disc changers)
    - Track/Disc Repeat: OFF

Track Scan:
- Successively play the beginning of each track on a disc until you find the track that you want to listen to.

Starting the Track Scan:
- Press the SCAN button. 'Scan ON/TSCN ON' is displayed and the track number being listened to will be played in order.
- The track number currently being heard is displayed in the display.

Stopping to Listen to the Track Being Scanned:
- Press the REW or SCAN button again to stop the scan and keep listening to the track normally.

NOTE:
- The track scan function is cancelled when you stop playing a disc.
- The track scan function only scans each track on a disc once.

Disc Scan (Function of disc changers):
- Successively play the beginning of each disc on a changer until you find the one that you want to listen to.

Starting the Disc Scan:
- Press the DSCN button. 'DSCN ON' is displayed and the disc number currently being heard is displayed in the display.

Stopping to Listen to the Disc Being Scanned:
- Press the II or DSCN button again to stop the scan and keep listening to the disc normally.

NOTE:
- The disc scan function is cancelled when you stop playing a disc.
- The disc scan function only scans each disc on the changer once.
- 'LOAD' is displayed when discs are being exchanged on the disc changer.
**MD/External disc control features**

**Random Play**
Play all the tracks on the current disc in random order.

1. Press the RDM button to switch random play on and off. "RDM ON" is displayed when random play is turned on.
   The track number will change over and over in the display as the next track is being selected.
   When the track has been selected, play will begin.
   The selected track number blinks in the display as it is being played.

2. To change the track being heard, press the ▶ button.
   Another disc/track will be selected and played.

**Note**

- When all the tracks on a certain disc have been played using random play, the next disc on the changer will start playing using the same function.

**Magazine Random Play** (Function of disc changers)

Play the tracks on all the discs in the disc changer in random order.

1. Press the MRDM button to switch magazine random play on and off. "MRDM ON" is displayed when magazine random play is turned on.
   The disc and track numbers will change over and over in the display as the next track is being selected.
   When the disc/track has been selected, play will begin.
   The selected and track number blinks in the display as it is being played.

**Note**

- This function is not available with the following models: KDC-C200/C300/C400/C301/C401.

**Text / Title Scroll**

This function permits the text to be scrolled and the entire text to be displayed. Switching between manual scrolling and automatic scrolling is permitted. The factory default is automatic scrolling.

**To scroll automatically**
Press the DISP button to display the disc title or the track title. The display of the track title will be scrolled repeatedly.

**Manual/Automatic scroll switching**

1. Press the MENU button for at least one second. "HOLD" is displayed and the menu mode is turned on.
2. Keep pressing the ▶ button until the Text / Title scroll function appears in the display.
   Pressing the ▶ button switches the function between "Scroll Auto" or "Manual scroll.

**Switching settings**

1. Press either the AM or FM button.
   The display and setting will change.
2. Press the MENU button to end the menu mode.

**To scroll manually**

1. Press the DISP button to display the disc title or the track title.
2. Pressing the DISP button for at least one second results in one scrolling display of the titles.

**Note**

- The setting of the text / title scroll function is in the Radio Text Scroll of the RBDS mode.
- Only one is with a CD text feature permit title display.

**Disc Name Preset Play (DNPP)**

If you have preset the name of a disc that you wish to select in the disc changer, you can look for it by name while playing it.

1. Press the DNPP button on the remote.
   "DNPP" will appear in the display, and the disc changer mode is entered.
   The preset name(s) of the disc in the changer which you are currently listening are successively displayed for five seconds each.
   In any of the units that are connected, discs that have a name preset will display "NO NAME".

**Note**

- This function can only be used in disc changers manufactured or sold as of 1997. Also note that the disc changer can only provide a display unless the disc names are made by the unit that is playing.
- Discs in the changer that have never been played will appear as "NO DISC" when the disc name is displayed. When you cannot identify a disc because of the display after inserting a disc from or a similar function to display the disc name, note that the "NO DISC" will be displayed when a disc is loaded.

**Rapid display (forward / reverse)**

- Press the DISC+ or DSC- button.
  Pressing the DSC+ button will rapidly display names/disc titles in reverse order.
  Pressing the DSC- button will rapidly display names/disc titles in order.
The function of the text/title scroll function is in common with Radio Text Scroll of the RBDS mode.

- Only units with a CD text feature permit title display.

**Disc Name Preset Play (DNPP)**

Function of remote with DNPP button (See page 33)

If you have preset the name of a disc that you want to listen to in the disc changer, you can look for it by name and start playing it.

1. Press the DNPP button on the remote.
   - "DNPP" will appear in the display, and the disc name preset play mode is entered.
   - The preset names/disc titles of the disc in the disc changer to which you are currently listening are successively displayed for five seconds each.
   - In any of the units that are connected, discs that have not been disc name preset will display "NO NAME".

**NOTE**

- This function can only be used in disc changers that were manufactured or sold after 1997.
- Note that some units cannot provide a display unless the disc name preset has been made by the unit that is playing.
- Discs in the disc changer that have never been played before will appear as "NO ACCESS" when the disc names are displayed.
- When you cannot identify a disc because of the "NO ACCESS" display after inserting a disc magazine, try playing it using the disc scan or a similar function to display the disc name.
- Note that "NO DISC" will be displayed when a disc has not been loaded.

**Rapid display (forward/reverse):**

- Press the DISC+ or DISC- button.
- Pressing the DISC+ button will rapidly display the preset names/disc titles in order.

Pressing the DISC- button will rapidly display the preset names/disc titles in reverse order.

2. **When the name appears for the disc you want to play**
   - Press the OK button.
   - The disc whose name is displayed will be recalled, and the disc name preset play (DNPP) mode will end.

**To cancel DNPP mode:**

- Press the DNPP button.
- The disc name preset play (DNPP) mode will be canceled.
### MD/External disc control features

#### Presetting Disc Names

<table>
<thead>
<tr>
<th>Function of disc changers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Store the names of discs to be displayed when played.</strong></td>
</tr>
</tbody>
</table>

1. **Play the disc whose name you want to preset.**

   - **NOTE**
     - This function is not available for disc changers that do not feature the Disc Name Preset function.
     - This procedure is not to be used to store the disc and track titles for MDs that you record.

2. **Press the NAMEL button for at least two seconds.**

   - "NAMEL SET" is displayed and the disc name preset mode is entered.
   - The cursor blinks in the position where a character input can be made.

3. **Press either the ‹ or › button to move the cursor to the desired position.**

   - The ‹ button moves the cursor to the left, and the › button to the right.
   - You can also move the cursor left or right by pressing the TRACK- or TRACK+ buttons, respectively, on the remote control.

4. **Press the ‹ button.**

   - The characters to be entered change as listed below.

   - **Press the ‹ button to display the desired character.**

   - Characters that can be displayed are as follows:
     - Alphabet (upper case): A - Z
     - Alphabet (lower case): a - z
     - Numerals and symbols: 0 - 9 @ ™ © & _ - . / \ < > [ ]
     - Special characters: $ ＄ @ ™ © © & " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " " 

   - **NOTE**
     - You can enter up to 8 characters for each name.

5. **Press either the NAMEL button on the main unit or the OK button on the remote control.**

   - The disc name is stored and the disc name preset mode is canceled.
   - If you make no entry in a 10-second period, the name will be stored with the characters input so far.

   - **NOTE**
     - The number of characters and discs whose names can be stored will differ depending on the disc changer that is connected. Please see your disc changer manual for details.
     - Discs are identified by their total length and number of tracks. If another disc happens to have the same specifications as one that you have already stored a name for, the name will be displayed for it, too.
     - If you want to change the name of a disc, repeat steps 1 and 2 to display the name, and then repeat steps 3 and 4 to input the changes.

6. **Pressing the reset button does not erase the disc names stored in a disc changer.**

#### Other features

- Spectrum Analyzer/
- Character/
- Graphic display
Other features

Switching Graphic Display
This function permits the graphic display to be switched to one that is linked with the volume level value or to display various modes. The initial setting is ON (displaying various modes).

Turning the Graphic Display On/Off:
1. Press the MENU button for at least one second. "MENU" is displayed and the menu mode is turned on.
2. Keep pressing the button until the Switching Graphic Display function appears in the display. Press the button to search in the other direction. The function setting is indicated by "Graphic ON" or "Graphic OFF" in the display, indicating that the graphic display is on or off, respectively. "Graphic ON" if the graphic display works; "Graphic OFF" if the graphic display does not work.

3. Switching settings
Press either the AM or FM button. The display and setting will change.

4. Press the MENU button to end the menu mode.

NOTE
When making audio adjustments, even when this function is on, the display will be linked to the audio adjustment value, not the display of the various modes.
### Other features

#### Audio Control Setting

Adjust various parameters of sound quality.

1. Press the AUD button to enter the control mode.
2. Press either the FM or AM button. Each time the button is pressed, the adjustment mode will change as follows:
   - Pressing the FM button advances the display, and pressing the AM button reverses it.
   - **Bass** (NF Phase* (only when being switched))
   - **Treble** (NF Low-pass filter* (only when being switched))
   - **Balance** (Rear High-pass filter)
   - **Fader** (Front High-pass filter)
   - **NF Level* (only when being switched)

**NOTE**: Source tone memory

Each source (CD, FM, AM and disc changer) has its own memory in which to store the bass, treble and NF level settings. The settings made for a particular source are recalled automatically whenever you use that source (for example, FM mode uses the tone settings made for FM, AM or AM, etc.).

3. Press the button. Look at the table to adjust the mode being displayed.

<table>
<thead>
<tr>
<th>Adjustment (Display)</th>
<th>Operation of Audio control button</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bass (&quot;Bas&quot;)</td>
<td>Button</td>
</tr>
<tr>
<td>Treble(&quot;Tre&quot;)</td>
<td>Button</td>
</tr>
<tr>
<td>Balance(&quot;Bal&quot;)</td>
<td>Button</td>
</tr>
<tr>
<td>Fader (&quot;Fad&quot;)</td>
<td>Button</td>
</tr>
<tr>
<td>Non-Fading Preout Level (&quot;NF&quot;)</td>
<td>Button</td>
</tr>
<tr>
<td>High-pass filter for front output (&quot;Front&quot;)</td>
<td>Button</td>
</tr>
<tr>
<td>High-pass filter for rear output (&quot;Rear&quot;)</td>
<td>Button</td>
</tr>
<tr>
<td>Low-pass filter for Non-fading output (&quot;N-FAD&quot;)</td>
<td>Button</td>
</tr>
<tr>
<td>Phase for Non-fading output (&quot;Phase&quot;)</td>
<td>Button</td>
</tr>
</tbody>
</table>

4. Press the AUD button to end the control mode.

**NOTE**: Setting the high-pass filter

You can separately set the high-pass filter for front and rear output, including preouts. The factory default settings for front output and rear output are "Through".

---

### Switching Spectrum Analyzer Display

This function permits switching of the spectrum display.

- **Switching the Spectrum Analyzer Display**:
  - Each time you press the AUD button for at least 1 second, the display switches as follows:
    - Spectrum analyzer 1
    - Spectrum analyzer 2
    - Character

**NOTE**: This function cannot be operated while the Black on.

### Dimmer

You can dim the display.

**NOTE**: The dimmer function is not available for units if the cable is not connected.

- **Turning Dimmer On/Off**:
  1. Press the MENU button for at least one second. If "MENU" is displayed, the menu mode is turned off.
  2. Keep pressing the button until the Dimmer appears in the display.

The function setting is indicated by "Dimmer On/Off" in the display, indicating that the current display is dimmer.
### Operation of Audio control button

<table>
<thead>
<tr>
<th>Button</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;&lt;</td>
<td>Bass decreased</td>
</tr>
<tr>
<td>&lt;&lt;</td>
<td>Treble decreased</td>
</tr>
<tr>
<td>&lt;&lt;</td>
<td>Left channel emphasized</td>
</tr>
<tr>
<td>&lt;&lt;</td>
<td>Front channel emphasized</td>
</tr>
<tr>
<td>&lt;&lt;</td>
<td>Non-fading sound emphasized</td>
</tr>
<tr>
<td>&gt;&gt;</td>
<td>Bass increased</td>
</tr>
<tr>
<td>&gt;&gt;</td>
<td>Treble increased</td>
</tr>
<tr>
<td>&gt;&gt;</td>
<td>Right channel emphasized</td>
</tr>
<tr>
<td>&gt;&gt;</td>
<td>Front channel emphasized</td>
</tr>
<tr>
<td>&gt;&gt;</td>
<td>Non-fading sound emphasized</td>
</tr>
</tbody>
</table>

You can select the frequency to be cut, as follows:
- 40Hz • 60Hz • 80Hz • 100Hz • 120Hz • 150Hz • 180Hz • 220Hz

You can select the phase for non-fading output, as follows:
- Normal (0°) • Reverse (180°)

- Button to end the control mode
- The high-pass filter
- The remanent filter for front and rear high-pass
- Settings for front output and rear output are set simultaneously.

### Switching Spectrum Analyzer Display

This function permits switching of the spectrum analyzer display.

#### Switching the Spectrum Analyzer Display:
Each time you press the CLK button for at least one second, the display switches as follows:

- **Spectrum analyzer 1**
- **Spectrum analyzer 2**
- **Character**

**Note:**
This function cannot be operated while the Back Mask function is on.

### Dimmer

You can dim the display.

**Note:**
The dimmer function is not available if the dimmer wire is not connected.

#### Turning Dimmer On/Off:
1. Press the MENU button for at least one second. The display switches to the menu mode.

2. Keep pressing the &gt;&gt; button until the Dimmer function appears in the display. Press this &lt;&lt; button to search in the other direction. The function setting is indicated by 'Dimmer ON' or 'Dimmer OFF' in the display, indicating that the current dimmer setting is on or off.

### Switching settings

- **Press either the AM button or FM button.**
- The display and setting will change.

### Non-fading preout

**Turning non-fading output On/Off:**
- Press the NF button for at least one second to set the function ON or OFF.
- 'NF ON' is displayed when the non-fading output is set ON.
Other features

Touch Sensor Tone
This function produces a beep sound that accompanies button operation. It can be switched on or off.

Switching the Beep On/Off:
1. Press the MENU button for at least one second. 'MFNU' is displayed and the menu mode is turned on.
2. Keep pressing the button until the Touch Sensor Tone function appears in the display.
   Press the button to search in the other direction. The function setting is indicated by 'Beep ON' or 'Beep OFF' in the display, indicating that the current beep setting is on or off, respectively.
3. Switching settings
   Press either the AM or FM button. The display and setting will change.
4. Press the MENU button to end the menu mode.

NOTE
The beep sound is not output from the product jacks.

Automatic Dimmer Function
The display dims when the car's lights are turned on.

NOTE
The dimmer function is not available for units if the dimmer wire is not connected.

Adjusting Time
You can adjust the time manually. Also, with the automatic time adjustment function set at ON, you can set the clock time automatically according to time data sent from RBDS stations (after receiving RBDS signals for several minutes). The factory default is manual time adjustment.

Adjusting Time Manually:
1. Press the MENU button for at least one second. 'MFNU' is displayed and the menu mode is turned on.
2. Keep pressing the button until the 'Clock Adj' appears in the display.
3. Press the button to search in the other direction. Press the button to search in the other direction.
4. Press either the AM or FM button for at least two seconds to enter the Time Adjustment mode. The time display will blink.
5. Adjusting the hours
   Press the FM button to advance the hours, or press the AM button to make the hours go back.
6. Adjusting the minutes
   Press the \ button to advance the minutes, or press the \ button to make the minutes go back.
7. Press the MENU button to end the menu mode.

NOTE
Manual adjustment is effective only when the automatic adjustment is off.

Turning Automatic Time Adjustment On/Off:
1. Press the MENU button for at least one second. 'MFNU' is displayed and the menu mode is turned on.
2. Keep pressing the button until the Automatic Time Adjustment function appears in the display.
3. Switching settings
   Press either the AM or FM button. The display and setting will change.
4. Press the MENU button to end the menu mode.

NOTE
Firmly slide the switch until it clicks.
Do not apply excessive force to the faceplate unit or 2.

Faceplate Angle Adjustment
You can adjust the faceplate angle for easy viewing.

Adjusting faceplate angle:
Press the \ (EJECT) button to make the faceplate angle, and then adjust the faceplate angle using the angle switch. Adjustment may be made from 0 to 2.

Manual Open Switch Setting
By sliding the Manual Open Switch during forced operation, you can open the control panel. Follow the directions.
minutes.
The clock will adjust automatically to the local time.

**NOTE**
The clock will not adjust automatically if the RBDS station tuned to is not transmitting time data. In such a case, try another RBDS station.

---

**Faceplate Angle Adjustment**
You can adjust the faceplate angle for easy viewing.

**Adjusting faceplate angle:**
Press the [EJECT] button to make the faceplate slide open, and then adjust the faceplate angle using the angle adjustment switch.
Adjustment may be made from 0 to 2.

![Faceplate Angle Adjustment Diagram]

**NOTE**
- Firmly slide the switch until it clicks.
- Do not apply excessive force to the faceplate under settings 1 or 2.

---

**Manual Open Switch Setting**
By sliding the Manual Open Switch during forced closing, you can open the control panel. Follow the directions below to preset the number of times that this switch needs to be slid in order to open the panel.

**To preset the number of times to slide the Manual Open Switch:**

1. Press the MENU button for at least one second. 'MENU' is displayed and the menu mode is turned on.
2. Keep pressing the ➡️ button until the Manual Open Switch Setting function appears in the display. Press the ➡️ button to search in the other direction. The function setting is indicated by 'Open SW #‘ in the display, indicating that the Manual Open Switch Setting mode is on.
3. **Switching settings**
   - Press either the AM or FM button. Press the TV button to change the setting number of times higher, and press the AM button to change it lower. Settings may be made from 1 to 3.
4. Press the MENU button to end the menu mode.

**NOTE**
The ' # ' display in the Manual Open Switch Setting mode will differ depending on the setting. The initial setting value is 1.
Other features

Security Code

When the battery is removed from the unit's power switch, you cannot turn on the unit again unless the preset security code is input. This function helps prevent theft.

NOTE

You must follow steps 1 to 8 to be able to use the Security Code function. Turning off the power during the procedure will deactivate the security code setting.

Once the security code function has been activated, 'Security' disappears from the MENU system. Note that it will no longer be possible to cancel this function afterwards.

1. Select the four digits to use in your security code.

NOTE

The four-digit security code is very important, as you will need it to turn the unit on again when it is not operating. Choose the number carefully and do not forget it even if you write it down and keep it separately in a safe place.

2. Press the MENU button for at least one second. "MEN" is displayed and the menu mode is turned on.

3. Keep pressing the ► button until the "Security" appears in the display.

Press the ◀ button to search in the other direction.

4. Press either the AM or FM button for at least two seconds. "ENTER" will appear in the display for one second, indicating the code setting mode has been entered. When "CODE" appears in the display, you can start inputting the code.

5. Press the preset button and enter the security code that you have selected in step 1.

Example: Use "3510" as the security code.

<table>
<thead>
<tr>
<th>Step</th>
<th>Button to press</th>
<th># Times pressed</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>#1</td>
<td>4</td>
<td>&quot;3&quot;</td>
</tr>
<tr>
<td>2</td>
<td>#2</td>
<td>6</td>
<td>&quot;5&quot;</td>
</tr>
<tr>
<td>3</td>
<td>#3</td>
<td>2</td>
<td>&quot;1&quot;</td>
</tr>
<tr>
<td>4</td>
<td>#4</td>
<td>1</td>
<td>&quot;0&quot;</td>
</tr>
</tbody>
</table>

6. Press the DISP button for at least three seconds. The security code will be set.

"RF ENTER" will appear in the display for one second, asking you to enter the code once again for confirmation. When "CODE" appears in the display, you can start inputting the code.

7. Press the PRESET button and input the security code again.

8. Press the DISP button again for at least three seconds. "APPROVED" will appear in the display, with the security code function running on. From this point on, if the unit is disconnected from the battery, the security code must be entered the first time that the unit's power is turned on.

If "ENTER" and "CODE" appear in the display, asking you to input the code.

NOTE

If you input an incorrect security code, the display asks you once more to input the correct one. Follow the procedure in step 7 above.

If you press the RESET button or remove the battery:

The first time you turn the unit on again, "CODE" will appear in the display, asking you to input the security code. Repeat steps 7 and 8 above, and input the security code.

You can start operating the unit again when "APPROVED" appears in the display.

If you enter the incorrect code, the power will turn off. Enter the correct code to turn the unit on.

Dual Zone System

The following operation allows separate sound control of the front and rear speakers. The system can be switched on or off when the AUX mode is turned on.

Turning the Dual zone system On/Off:

1. Press the MENU button for at least one second. "MEN" is displayed and the menu mode is turned on.

2. Keep pressing the ► button until the Dual zone function appears in the display.

Press the ◀ button to search in the other direction.

The menu setting is indicated by "ZONE 2 ON OFF" in the display, indicating that the Dual zone function is on or off, respectively.


Press either the AM or FM button.

The display and setting will change.

4. Press the MENU button to end the menu mode.

NOTE

- You must purchase the optional KCA 5210A/CA CP582/5DC0X82 device before you can use this function.
- You can choose to send the AUX input through and the unit's tuner or MD source through the front channel.
- The BASS, TREBLE, and balance adjustments do not affect the rear channel.
- When the Dual zone system is turned on, the BAS and TREBLE controls cannot be used.
- When you set the Dual zone system to on while the AUX input is switched on, the sound of the non-active channel will not be outputted.

Black Mask

This function allows you to turn off the lower part of the display if there is too much information in the current display.
### Dual Zone System

The following operation allows separate sound sources to control the output of the front and rear speakers. The Dual zone system can only be switched on or off when the source is set to the AUX mode.

**Turning the Dual Zone System On/Off:**

1. Press the MENU button for at least one second. 'MENU' is displayed and the menu mode is turned on.
2. Keep pressing the [ ] button until the Dual zone system function appears in the display.
   - Press the [ ] button to search in the other direction.
   - The function setting is indicated by ‘Zone 1 ON’ or ‘Zone 2 OFF’ in the display, indicating that the Dual zone system function is on or off, respectively.
3. **Switching settings**
   - Press either the AM or FM button.
   - The display and setting will change.
4. Press the MENU button to end the menu mode.

**NOTE**

- You must purchase the optional KCA-S210A/CA-C1AX/KDC-CP82/KDC-CX82 device before you can use this function.
- You can choose to send the AUX input through the front channel, and the unit's tuner or MD source through the front channel.
- The Bass, Treble, and Loudness adjustments do not affect the rear channel.
- When the Dual zone system is turned on, the External disc control features cannot be used.
- When you set the Dual zone system to on, while the non-fading preset is switched on, the sound of the non-fading preset does not be outputted.

### Turning the Black Mask On/Off:

1. Press the MENU button for at least one second. 'MENU' is displayed and the menu mode is turned on.
2. Keep pressing the [ ] button until the Black Mask function appears in the display. Pressing the [ ] button results in the function being switched in the reverse order.
   - The function setting is indicated by 'BLK MASK OFF' in the display, indicating that the Black mask is on or off, respectively.
   - 'BLK MASK OFF' (The display will turn on by using only the part for after display)
   - 'BLK MASK ON' (The display will turn on by using only the whole part of the display)
3. **Switching settings**
   - Press either the AM or FM button.
   - The display and setting will change.
4. Press the MENU button to end the menu mode.

### Black Mask

This function allows you to turn off the lower part of the display if there is too much information in the display.
**Other features**

**Dimmer level adjustment**
You can adjust the Dimmer level of the unit separately when your car's light switch has been turned on or off.

1. **To adjust the Dimmer level:**
   - Press the MENU button for at least one second.
   - "MFNU" is displayed and the menu mode is turned on.

2. Keep pressing the button until the Dimmer level adjustment function appears in the display.
   - Press the button to switch in the other direction.
   - The function setting is indicated by "Bright," in the display, indicating that the Dimmer level adjustment mode is on.

3. **Switching settings**
   - Press either the AM or FM button.
   - Press the FM button to change the setting values higher, and press the AM button to change them lower. Settings may be made from 0 to 10.

4. Press the MENU button to end the menu mode.

**External Amp Control**
Adjust the bass boost level of the external amplifier using the main unit.

1. **Switching the bass boost level:**
   - Press the MFNU button for at least one second.
   - "MFNU" is displayed and the menu mode is turned on.

2. Keep pressing the button until the "AMP BASS" function appears in the display.
   - Press the button to switch in the other direction.
   - The function setting is indicated by "AMP BASS -6," "AMP BASS +12," or "AMP BASS +12" in the display, indicating that the external amplifier bass boost level is flat, +6dB, or +12dB, respectively.

3. **Switching settings**
   - Press either the AM or FM button.
   - The display and setting will change.

4. Press the MENU button to end the menu mode.

**Selectable Illumination**
You can switch the color of the button illumination between green and amber.

1. **To switch the color of the button illumination:**
   - Press the MENU button for at least one second.
   - "MFNU" is displayed and the menu mode is turned on.

2. Keep pressing the button until the Selectable Illumination function appears in the display.
   - Press the button to switch in the other direction.
   - The function setting is indicated by "Color Green" or "Color Amber" in the display, indicating that the current color is green or amber, respectively.

3. **Switching settings**
   - Press either the AM button or FM button.
   - The display and setting will change.

4. Press the MFNU button to end the menu mode.
Basic Operations of remote

NOTE
The supplied remote control unit is in its storage case.

CAUTION
Do not set the remote on hot places such as above the dashboard.

Loading and Replacing the Batteries
Use two "AAA" size batteries.
Slide the cover while pressing downwards to remove it as illustrated.
Insert the batteries with the + and − poles aligned properly, following the illustration inside the case.

WARNING
Store unused batteries out of the reach of children. Contact a doctor immediately if the battery is accidentally swallowed.

NOTE
- The provided batteries are intended for use in operation checking, and their service life may be short.
- When the remote controllable distance becomes short, replace both of the batteries with new ones.

A portion of the operations may not be possible, depending on the unit that is connected.
Basic Operations of remote

**Basic operations**

- **VOLUME buttons**
  Press the + button to turn the volume up.
  Press the - button to turn the volume down.

- **SRC button**
  Each time you press the SRC button, the mode switches as follows:
  - Tuner mode
  - MD mode
  - External disc control mode
  - AUX mode

**NOTE**

- The mode switches to the next mode from any mode which cannot be used.
- The external disc control mode will differ depending on the unit that is connected.
- The AUX mode is available only when the changer / AUX switching adapter (KICA S21OA or CA-C1AX) or CD changer (KDC-CPS82 or KDC-CX62) is connected to this unit.
- During the AUX mode, "AUX" will show in the display. When the CA-C1AX is not in use, the AUX Mode will replace the External Disc Control Mode.

- **ATT button**
  Turns down the volume quickly. To return the volume to its original level, press the button again. Turning the volume all the way down also cancels attenuation.

- **TUNER features**
  - ***TUNE*** buttons
    Press the + button to make decreasing seeks using the preset tuning mode.

**MD/External disc control features**

- **FOCUS buttons**
  - Press the - button to search through the tracks backward.
  - Press the + button to search through the tracks forward.
  - Use to move the cursor while entering disc name.

- **DISC buttons (for disc changers)**
  - Press the DISC- button to search through the discs backward.
  - Press the DISC+ button to search through the discs forward.
  - Select numbers and symbols while entering disc name.

- **SOURCE button**
  - When a disc is playing, this button pauses the play.
  - Press the same button again to start play again.
  - Selects the type of characters at the time of entering the disc name.

- **OK button**
  - During disc name input, stores the already input data in memory.

- **DNPP button**
  - Enters and cancels the Disc Name Preset Play mode.
  - Ends the input mode.
  - Selects disc during the disc name preset play mode.
button to make increasing seek using the preset cursor left or right during station name input.

button to select the AM band.

button to select and switch between FM1, FM2.

same input, selects digits and symbols.

same input, stores the already input data in

same preset play mode, selects station.

selects the station name preset play mode.

has the Program Type Selection (PTY) mode.

the number of characters at the time of entering the station

disc control features

button to search through the tracks backward.
button to search through the tracks forward.
button to enter the disc name.

for disc changers:
- button to search through the discs backward.
+ button to search through the discs forward.
and symbols while entering disc name.

playing, this button pauses the play.
button again to start play again.

the number of characters at the time of entering the disc name.

input, stores the already input data in memory.

and ends the input mode.
Selects disc during the disc name preset play mode.

- DNPP button
Enters and cancels the Disc Name Preset Play mode.
**Accessories**

<table>
<thead>
<tr>
<th>External view</th>
<th>Number of items</th>
<th>External view</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

**Installation Procedure**

1. To prevent a short circuit, remove the key from the ignition and disconnect the battery.
2. Make the proper input and output wire connections for each unit.
3. Connect the speaker wires of the wiring harness.
4. Connect the wiring harness wires in the following order: ground, battery, ignition.
5. Connect the wiring harness connector to the unit.
6. Install the unit in your car.
7. Reconnect the battery.
8. Slide the Manual open switch for as many times as you have preset in the Manual Open Switch Setting in the menu (see p. 29) to make the faceplate control panel appear. Then press the Reset button.

**WARNING**

If you connect the ignition wire to the battery wire (yellow) to the car chassis (ground), you may cause a short circuit that in turn may start a fire. Always connect those wires to the power source running through the fuse box.

**CAUTION**

- If your car's ignition does not have ACC position, connect the ignition wire to a power source that can be turned on and off with the ignition key. If you connect the ignition wire to a power source with a constant voltage supply, such as battery wires, the battery may die.
- If the console has a lid, make sure to install the unit so that the faceplate will not hit the lid when closing and opening.
- If the fuse blows, first make sure the wires aren't touching to cause a short circuit, then replace the old fuse with one with the same rating.
- Do not let the unconnected wires or terminals touch metal or anything else in the car. Preventing a short circuit, do not remove the caps on the ends of the unconnected wires or the terminals.
- Connect the speaker wires correctly to the terminals to which they correspond. The unit may be damaged or fail to work if you reverse the + and - wires or ground them to any metal part of the car.
- After the unit is installed, check whether the brake lamps, blinkers, wipers, etc., on the car are working properly.
- Insulate the unconnected wires with vinyl tape or similar material.
- Some decks require conversion cords for connection. See the section on "Safety Precautions" for details.
- Mount the unit so that the mounting angle is 30° or less.

**Connecting Wires to Terminals**

- Rear right output: Rear left output: Rear left speaker (etc.)
- Front left speaker (etc.): Rear right speaker (etc.)
- FM/AM antenna: Left right antenna

- When using the optional power supply: Connect to the accessory power source. 
- To EXT AMP CONN. terminal of the amp: short the terminal to the control terminal of the control amplifier.

- Depending on which antenna you are using, connect either to the control terminal of the control amplifier or to the output terminal for the booster amplifier of the roof-type antenna.

- To car ignition control switch
Connecting Wires to Terminals

**WARNING**
If you connect the ignition wire (red) and the battery wire (yellow) to the car's chassis (ground), you may cause a short circuit that in turn may start a fire. Always connect these wires to the power source running through the fuse box.

**CAUTION**
Separate this box from the unit and the antenna cable. If they are too close, the input to the receiver may reduce. Please use the blank cover accessory (M-11) around this box.

---

**NOTE**
Do not connect the DC changer control input to the unit and the antenna cable. If they are too close, the input to the receiver may reduce. Please use the blank cover accessory (M-11) around this box.

---

**CAUTION**
When using the optional power amplifier, connect to the power control terminal. To the EXT. AMP. CONN. terminal of the amplifier, as shown in the wiring diagram, and connect to the speaker terminal of the amplifier. Connecting to the power control terminal of the amplifier (Blue/White), as shown in the wiring diagram, and connect to the speaker terminal of the amplifier.

---

**NOTE**
Do not connect the DC changer control input to the unit and the antenna cable. If they are too close, the input to the receiver may reduce. Please use the blank cover accessory (M-11) around this box.

---

**CAUTION**
When using the optional power amplifier, connect to the power control terminal. To the EXT. AMP. CONN. terminal of the amplifier, as shown in the wiring diagram, and connect to the speaker terminal of the amplifier. Connecting to the power control terminal of the amplifier (Blue/White), as shown in the wiring diagram, and connect to the speaker terminal of the amplifier.

---

**NOTE**
Do not connect the DC changer control input to the unit and the antenna cable. If they are too close, the input to the receiver may reduce. Please use the blank cover accessory (M-11) around this box.

---

**CAUTION**
When using the optional power amplifier, connect to the power control terminal. To the EXT. AMP. CONN. terminal of the amplifier, as shown in the wiring diagram, and connect to the speaker terminal of the amplifier. Connecting to the power control terminal of the amplifier (Blue/White), as shown in the wiring diagram, and connect to the speaker terminal of the amplifier.

---

**NOTE**
Do not connect the DC changer control input to the unit and the antenna cable. If they are too close, the input to the receiver may reduce. Please use the blank cover accessory (M-11) around this box.
Installation (non-Japanese cars)

Installation (non-Japanese cars)

NOTE
Make sure that the unit is installed securely in place. If the unit is unstable it may malfunction (for example, the sound may skip).

CAUTION
To attach this unit, make sure the front of the control panel faces you and fit it into the mounting sleeve by pressing the four corners of the hard rubber frame at the same time. Do not apply strong pressure to other sections than the corners; otherwise, troubles such as the impossibility of opening or closing the panel may result.

Removing the Unit

Removing the hard rubber frame
Insert the removal tool into the indentations in the frame, and pull it gently until the lock is released.
Removing the Unit

Removing the hard rubber frame
insert the removal tool into the indentations in the hard rubber frame, and pull it gently until the lock is released.

NOTE
If the unit is removed while the faceplate is closed, use the removal tool with the left and right reversed, as illustrated.

1. Make the faceplate control panel appear.
2. Refer to the section "Removing the hard rubber frame" and then remove the hard rubber frame.
3. Remove the hex head machine screw with washer (M4x8) on the back panel.
4. Insert the removal tool deeply, as illustrated, with the L on the left and the R on the right.
5. Push upward the both tool, as shown, and pull the unit toward you until it is halfway out. The unit may drop if you pull it out completely.
6. Pull the unit all the way out with your hands, being careful not to drop it.
Installation (Japanese-cars)

Installing Radio Bracket in Japanese-made Cars (J-Cars)

On the factory-installed radio bracket, flatten all the tabs or holes that are not flush (except those used for screws), using a hammer or similar utensil.

Once you have affixed the factory-installed radio bracket with the screws, use a standard-tipped screwdriver (not Phillips) or similar utensil to pry the tabs of the J-Car bracket to make them fit into the holes in the factory-installed radio bracket (depending on the car make).

Troubleshooting Guide

What might seem to be a malfunction in your calling service, first check the following table:

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>PROBLEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>The power does not turn on.</td>
<td>The fuse has blown.</td>
</tr>
<tr>
<td>No sound can be heard, or the volume is low.</td>
<td>The attenuator is turned too high.</td>
</tr>
<tr>
<td>The sound quality is poor or distorted.</td>
<td>One of the speakers of the car is not connected.</td>
</tr>
<tr>
<td>Radios reception is poor.</td>
<td>The car antenna is not connected.</td>
</tr>
<tr>
<td>The memory is erased when the ignition is turned off.</td>
<td>The battery wire terminals are loose.</td>
</tr>
<tr>
<td>MD made cannot be set.</td>
<td>The faceplate was ejected.</td>
</tr>
<tr>
<td>The MD cannot be inserted.</td>
<td>The disc is already in.</td>
</tr>
<tr>
<td>The MD does not load.</td>
<td>The insertion of an MD is upside-down.</td>
</tr>
<tr>
<td>The MD loads but soon comes out again.</td>
<td>Nothing is recorded.</td>
</tr>
</tbody>
</table>
# Troubleshooting Guide

What might seem to be a malfunction in your unit may just be the result of slight misoperation or miswiring. Before calling service, first check the following table for possible problems.

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>The power does not turn on</td>
<td>The fuse has blown.</td>
<td>After checking for short circuits in the wires, replace the fuse with one with the same rating.</td>
</tr>
<tr>
<td>No sound can be heard, or the volume is low</td>
<td>Attenuator is turned on</td>
<td>Turn off Attenuator.</td>
</tr>
<tr>
<td></td>
<td>The volume and balance settings are set all the way to the side.</td>
<td>Reset the volume and balance settings.</td>
</tr>
<tr>
<td></td>
<td>The input/output wires or wiring harness are connected incorrectly.</td>
<td>Reconnect the input/output wires or the wiring harnesses correctly. See the section on Connecting Wires to Terminals.</td>
</tr>
<tr>
<td>Nothing happens when the buttons are pressed</td>
<td>The computer chip in the unit is not functioning normally.</td>
<td>Press the reset button on the unit (see p. 6).</td>
</tr>
<tr>
<td>The sound quality is poor or distorted</td>
<td>One or more speaker wires are being pinched by a screw in the car.</td>
<td>Check the speaker wiring.</td>
</tr>
<tr>
<td></td>
<td>The speakers are not wired correctly.</td>
<td>Reconnect the speaker wires so that each output terminal is connected to a different speaker.</td>
</tr>
<tr>
<td>Radio reception is poor</td>
<td>The car antenna is not extended.</td>
<td>Put the antenna out all the way.</td>
</tr>
<tr>
<td></td>
<td>The antenna control wire is not connected.</td>
<td>Connect the wire correctly, referring to the section on Connecting Wires to Terminals.</td>
</tr>
<tr>
<td>The memory is erased when the ignition is turned off</td>
<td>The battery wire has not been connected to the proper terminal.</td>
<td>Connect the wire correctly, referring to the section on Connecting Wires to Terminals.</td>
</tr>
<tr>
<td></td>
<td>The ignition and battery wire are incorrectly connected.</td>
<td>Connect the wire correctly, referring to the section on Connecting Wires to Terminals.</td>
</tr>
<tr>
<td>VFD mode cannot be set</td>
<td>The faceplate was closed while the VFD was being ejected.</td>
<td>Press the eject button and reinsert the VFD.</td>
</tr>
<tr>
<td>The VFD cannot be inserted</td>
<td>There is already an MD loaded.</td>
<td>Eject the currently loaded MD and then load the new one.</td>
</tr>
<tr>
<td>The MD does not load</td>
<td>The inserted orientation of the MD is incorrect or the MD is upside down.</td>
<td>Insert the VFD in the proper orientation.</td>
</tr>
<tr>
<td>The MD reads but soon overrides</td>
<td>Nothing is recorded on the MD.</td>
<td>Switch the MD for one that is recorded.</td>
</tr>
</tbody>
</table>
## Troubleshooting Guide

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>The sound skips.</td>
<td>The mounting angle exceeds 30°.</td>
<td>Adjust to an angle of less than 30°.</td>
</tr>
<tr>
<td></td>
<td>The mounting is unstable.</td>
<td>Anchor the unit securely. When the sound skips at the same point even when the car is stopped, the problem lies with the MD.</td>
</tr>
<tr>
<td>There is noise during playback.</td>
<td>The MD is sound with dust or dirt.</td>
<td>If another MD is played back and there is no problem, then the problem is due to the sound quality of the MD. Insert the CD.</td>
</tr>
<tr>
<td>A track will not play.</td>
<td>Random play has been selected.</td>
<td>Turn off random play.</td>
</tr>
<tr>
<td>The façade does not open or close.</td>
<td>The ambient temperature is too low.</td>
<td>Warm up your car.</td>
</tr>
</tbody>
</table>

## External disc control mode

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>The disc control mode cannot be selected.</td>
<td>No cable has been connected to the disc changer input terminal on the unit.</td>
<td>Connect the cable to the disc changer input terminal on the unit.</td>
</tr>
<tr>
<td>The specified disc does not play, but another one plays instead.</td>
<td>The specified CD is not the correct one.</td>
<td>Clean the CD.</td>
</tr>
<tr>
<td></td>
<td>The CD is upside down.</td>
<td>Insert the CD with the labeled side up.</td>
</tr>
<tr>
<td></td>
<td>The disc is loaded in a different slot from that specified.</td>
<td>Eject the disc magazine and check the number of the specified disc.</td>
</tr>
<tr>
<td></td>
<td>The disc is severely scratched.</td>
<td>Try another disc instead.</td>
</tr>
<tr>
<td>The sound skips.</td>
<td>Something is touching the disc changer.</td>
<td>Remove whatever is touching it.</td>
</tr>
<tr>
<td></td>
<td>The CD is scratched or dirty.</td>
<td>If skipping happens at the same point when the car is stopped, something with the CD is wrong. Clean the CD.</td>
</tr>
<tr>
<td>The display shows that the changer is being played, but no sound is heard.</td>
<td>The computer in the unit is performing normally.</td>
<td>Press the reset button on the unit (See p. 6).</td>
</tr>
<tr>
<td>The specified track will not play.</td>
<td>Random play or magazine random play has been selected.</td>
<td>Turn off random play or magazine random play.</td>
</tr>
</tbody>
</table>

If the following situations, consult your nearest service center:

- Even though the disc changer is connected, the Disc Changer Mode is not on, with 'AUX' showing in the display during the Changer Mode.
- Even though no device (e.g., KCA-5210A, CA-12XX, KDC-EPS82 or KDC-CX822) is connected, the AUX Mode is entered when switching modes.

The following messages are displayed when actions are taken:

- **EJECT**
  - No disc magazine has been loaded into the unit.
  - Load the disc magazine properly.
  - No CD in the unit.
  - Insert the CD.

- **NO DISC**
  - No disc has been loaded in the disc magazine.
  - Load a disc into the disc magazine.

- **E-04**
  - No disc has been loaded in the disc magazine.
  - Load a disc into the disc magazine.
  - The CD is dirty. The CD is upside down. Clean the CD and load it correctly.

- **BLANK**
  - Nothing has been recorded on the MD.
  - The next MD will automatically be played.

- **NO TRACK**
  - No tracks are recorded on the MD.
  - The next MD will automatically be played.

- **NO PANEL**
  - The faceplate of the slave unit being played is missing.
  - Replace the faceplate.

- **E-77**
  - The unit is malfunctioning.
  - Press the reset button on the unit.

- **E-99**
  - Something is wrong with the disc magazine.
  - Check the disc magazine.

- **HOLD**
  - The protective circuit in the unit active.
  - All operation.
  - Cool down the unit by opening the window, etc., and the disc will start playing again.

- **LINE**
  - Nothing has been recorded to the MD.
  - Switch this MD to one that has been.
  - The MD player section is not operating. Reinstall the MD. If the MD cannot be played, please switch off the power and check the MD.
SOLUTION

Set to an angle of less than 30°.

Secure the unit securely. When the sound skips at the same point even when the car is stopped, the problem is with the MD.

If another MD is played back and there is no problem, then the problem is due to the sound quality of the MD itself.

OFF random play.

Turn up your car.

---

The following messages are displayed when certain problems are occurring in your system. Take the recommended actions.

**EJECT**
- No disc magazine has been loaded in the changer. The disc magazine is not completely loaded.
  - Load the disc magazine properly.
  - Insert the CD.

**NO DISC**
- No disc has been loaded in the disc magazine.
  - Load a disc into the disc magazine.

**E 04**
- No disc has been loaded in the disc magazine.
  - Load a disc into the disc magazine.
  - The CD is quite dirty. The CD is upside-down. The CD is scratched a lot.
  - Clean the CD and load it correctly.

**BLANK**
- Nothing has been recorded on the MD.
  - The next MD will automatically be played.

**NO TRACK**
- No tracks are recorded on the MD, although it has a title.
  - The next MD will automatically be played.

**NO PANEL**
- The facia plate of the slave unit being connected to this unit has been removed.
  - Replace it.

**E 77**
- The unit is malfunctioning for some reason.
  - Press the reset button on the unit. If the "E 00" code does not disappear, consult your nearest service center.

**F 90**
- Something is wrong with the disc magazine. Or the unit is malfunctioning for some reason.
  - Check the disc magazine. And then press the reset button on the unit. If the "E 00" code does not disappear, consult your nearest service center.

**HOLD**
- The protective circuit in the unit activates when the temperature inside the automatic disc changer exceeds 60°C (140°F), stopping all operation.
  - Cool down the unit by opening the windows or turning on the air conditioner. As the temperature falls below 60°C (140°F), the disc will start playing again.

**- IN -**
- Nothing has been recorded on the MD you are trying to play.
  - Switch this MD for one that has been recorded.
  - The MD player section is not operating properly.
  - Reinsert the MD. If the MD cannot be ejected or the display continues to flash even when the MD has been properly reinserted, please switch off the power and consult your nearest service center.
Specifications

Specifications subject to change without notice.

**FM tuner section**
- Frequency range (200 kHz space) ........... 87.9 MHz - 107.9 MHz
- Usable sensitivity (S/N = 30dB) ........... 9.3 dB (10.8 µV/75 Ω)
- Quoting Sensitivity (S/N = 50dB) ......... 15.2 dB (1.6 µV/75 Ω)
- Frequency response (+3 dB) .................. 30 Hz - 15 kHz
- Signal to Noise ratio (MONO) ............... 70 dB
- Selectivity at 400 kHz ...................... ≥ 80 dB
- Stereo separation (1 kHz) ................... ≥ 40 dB

**AM tuner section**
- Frequency range (10 kHz space) .......... 530 kHz - 1700 kHz
- Usable sensitivity (S/N = 20dB) .......... 28 dB (25 µV)

**MD player section**
- Laser diode .................................... GeAlAs (λ=780 nm)
- Digital filter (D/A) ............................ 8 Times Over Sampling
- D/A Converter .................................. 1 Bit
- Spindle speed .................................. 400 - 900 rpm (CLV)
- Wow & Flutter .................................. Below Measurable Limit
- Frequency response (+1 dB) ............... 20 Hz - 20 kHz
- Total harmonic distortion (1 kHz) ........ 0.01 %
- Signal to Noise ratio ......................... 90 dB (1 kHz)
- Dynamic range ................................ 90 dB
- Channel separation ......................... ≥ 80 dB

**Audio section**
- Maximum output power ....................... 44 W x 4
- Full bandwidth power (less than 1% THD) .. 22 W x 4
- Tone action
  - Bass: ....................................... 100 Hz ± 10 dB
  - Treble: .................................... 10 kHz ± 10 dB
- Preout level / Load ......................... 4000 mV/10 kΩ (during CD play)
- Preout impedance ......................... 80Ω

**General**
- Operating voltage ......................... 14.4 V (11 - 16 V allowable)
- Current consumption ....................... 10 A
- Installation size (W x H x D) ............ 182 x 53 x 162 mm
- Weight ......................................... 4.2 lbs (1.9 kg)