

# KENWOOD

**DPX-4020/MH4**  
**DPX-4020/PH4**

DOUBLE DIN SIZED CD/CASSETTE RECEIVER  
**INSTRUCTION MANUAL**

KENWOOD CORPORATION



© B64-2501-00/00 (MW)

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## 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<sup>2</sup> (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.
- Do not apply excessive force to the open faceplate or place objects on it. Doing so will cause damage or breakdown.

### **IMPORTANT INFORMATION**

**About the disc changer to be connected:**

To connect a disc changer having the "O-N" switch to this unit, set the "O-N" switch to "N".

When you connect a model with no "O-N" switch, the converter cord CA-DS100 available as an option may be required. For details, consult your Kenwood dealer.

If a model with no "O-N" switch is connected, some unavailable functions and information that cannot be displayed are generated, such as the DNPS, Magazine random play, and CD Text display. Note that none of the KDC-C100, KDC-C302, C205, C705, and non-Kenwood CD changers can be connected.

### **▲CAUTION**

**You can damage both your unit and the CD changer if you connect them incorrectly.**

**The marking of products using lasers  
(Except for some areas)**

**CLASS 1  
LASER PRODUCT**

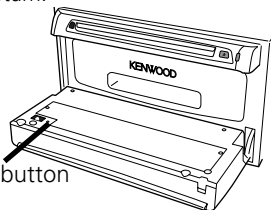
The label is attached to the chassis/case and says that the component uses laser beams that have been classified as Class 1. It means that the unit is utilizing laser beams that are of a weaker class. There is no danger of hazardous radiation outside the unit.

*Manufactured under license from Dolby Laboratories.  
"Dolby" and the double-D symbol are trademarks of Dolby Laboratories.*

## Safety precautions

### NOTE

- If you experience problems during installation, consult your Kenwood dealer.
- If the unit fails to operate properly, press the RESET button. 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 disc auto changer is first controlled and operates incorrectly. The original operating condition will return.



Reset button

- The illustrations of the display and the panel appearing in this manual are examples used to explain more clearly how the controls are used. Therefore, what appears on the display in the illustrations may differ from what appears on the display on the actual equipment, and some of the illustrations on the display may represent something impossible in actual operation.
- The functions that can be used and the information that can be displayed will differ depending on the external disc players being connected.

### Cleaning the Unit

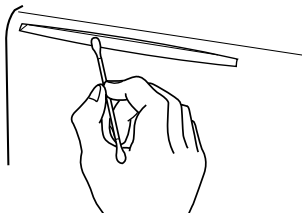
If the faceplate of this unit is stained, wipe it with a dry soft cloth such as a silicon cloth. If the faceplate is stained badly, wipe the stain off with a cloth moistened with neutral cleaner, then wipe neutral detergent off.

### CAUTION

Applying spray cleaner directly to the unit may affect its mechanical parts. Wiping the faceplate with a hard cloth or using a volatile liquid such as thinner or alcohol may scratch the surface or erases characters.

### Cleaning the CD Slot

As dust tends to accumulate in the CD slot, clean it every once in a while. Your CDs can get scratched if you put them in a dusty CD slot.



### Lens Fogging

Right after you turn on the car heater in cold weather, dew or condensation may form on the lens in the CD player of the unit. Called lens fogging, CDs may be impossible to play. In such a situation, remove the disc and wait for the condensation to evaporate. If the unit still does not operate normally after a while, consult your Kenwood dealer.

### Cleaning the Tape Head

After you have listened to many cassettes over a long period of time, magnetic powder from the tapes and dust accumulates on the tape head, causing noise and a deterioration in sound quality. Clean the tape head using a cleaning tape or cleaning kit designed for use in car audio systems.

### Handling Cassette Tapes

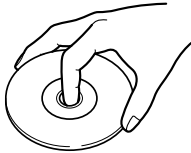
- Do not play a cassette whose tape has gone slack. In such a case, wind it tight using a pencil or the like in one of the spools. Playing slack cassette tapes can result in the tape tangling around the capstan and/or pinch rollers, causing trouble.
- Do not play a deformed cassette or one whose label is starting to come off, as it can cause the unit to malfunction.
- Do not leave tapes in hot places, such as on dashboards and other spots exposed to direct sunlight, or near heater outlets. They can deform the cassette.
- Avoid using extremely long cassette tapes, such as 100-minute-long tapes. Such tapes are very thin, and can tangle easily around the pinch rollers or other parts inside the unit, causing unit failure.
- Remove a cassette tape from the unit when not listening to it for a while. If you leave a tape in the unit too long, it may stick to the tape head and cause unit malfunction.

## Handling Compact discs

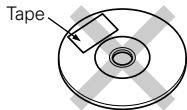
**Playing a CD that is dirty, scratched or warped can cause the sound to skip and the unit to operate incorrectly, resulting in worsened sound quality. Take the following precautions to prevent your CDs from getting scratched or damaged.**

### Handling CDs

- Do not touch the recorded side of the CD (the side opposite the label) when holding it.



- The reflective film on a CD-R or a CD-RW is more fragile than that on an ordinary music CD, and may peel off if scratched. Fingerprints on a CD-R or CD-RW are also more likely to cause skipping when the disc is played. For these reasons, handle the disc very carefully. Detailed handling instructions will appear on the CD-R or CD-RW package: read this information carefully before using the disc.
- Do not stick tape on either side of the CD.

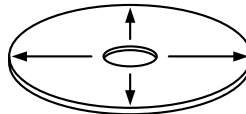


### Storing CDs

- Do not store CDs in areas exposed to direct sunlight (such as a car seat or the dashboard) or other hot places. A CD-R or CD-RW is more susceptible than a music CD to damage from high temperatures and humidity, and in some cases, may become unusable if left in the car for long periods of time.
- Remove CDs from the unit when not listening to them for a while, and put them back in their cases. Do not pile up CDs that are removed from their cases or prop them against something.

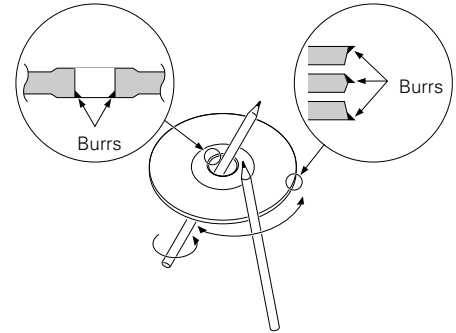
### Cleaning CDs

If a CD has gotten dirty, wipe it off gently using a commercially available cleaning cloth or a soft cotton cloth, starting from the center of the disc and moving outward. Do not clean CDs with conventional record cleaners, anti-static formulas, or chemicals such as paint thinner or benzene.



### Checking New CDs for Burrs

When playing a new CD for the first time, check that there are not any burrs stuck to the perimeter of the disc or in the central hole. CDs with burrs stuck on them may not load properly or may skip while playing. Remove burrs using a ballpoint pen or a similar utensil.



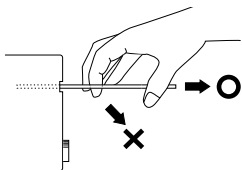
## Handling Compact discs

### Do Not Load CD Accessories

Do not use commercially available CD accessories that can be loaded into the CD slot, such as stabilizers, protective sheets, or CD cleaning discs, since they can cause the unit to malfunction.

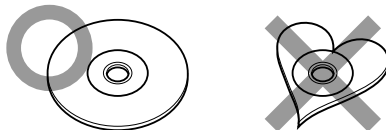
### Removing the CD

Only remove the CD from the machine in a horizontal direction, holding it flat. You may damage the surface of the CD if you try pulling it down as it ejects.



### Do Not Use Special Shape CDs

- Be sure to use round shape CDs only for this unit and do not use any special shape CDs. Use of special shape CDs may cause the unit to malfunction.



- Be sure to use CDs with disc mark



only for this unit.

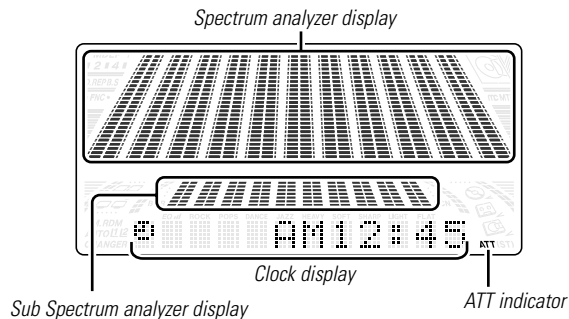
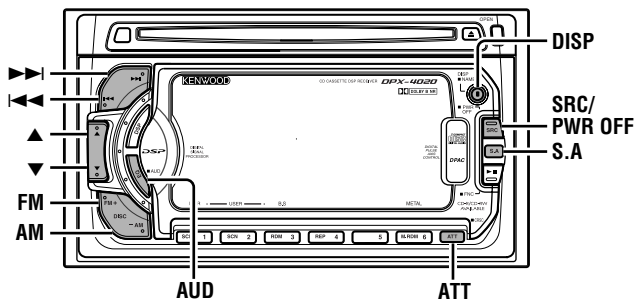
- CD-Rs and CD-RWs which have not undergone finalization processing cannot be played. (For more information on finalization processing, refer to the manual for your CD-R/CD-RW writing software or CD-R/CD-RW recorder.) Additionally, depending on the recording status, it may prove impossible to play certain CDs recorded on CD-R or CD-RW.

### Do Not Use CDs with Sticker on the Labeled Side

Do not use the CD with the label sticker stuck on it.

Using such a CD may cause the CD to be deformed and the sticker to peel off, resulting in malfunction of the unit.

## General features



### Power

#### Turning on the power:

Press the SRC (source) button.

#### NOTE

Turn the power on before carrying out the following procedures.

#### Turning off the power:

Press the PWR OFF button for at least one second.

### Volume

#### Increasing Volume:

Press the ▲ button to turn up the volume.

#### Decreasing Volume:

Press the ▼ button to turn down the volume.

### 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 on, the ATT indicator blinks.

When the attenuator is off, the volume returns to the original level.

#### NOTE

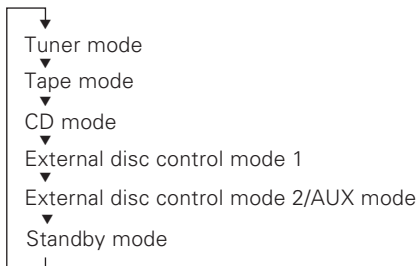
Turning the volume up, or turning it all the way down deactivates the attenuator function.

## General features

### Switching Modes

#### Switching Modes:

Each time you press the SRC (source) button, the mode switches as follows:



#### Selecting standby mode:

Press the SRC button repeatedly and switch to "ALL OFF". When "ALL OFF" is displayed, the standby mode is activated. The standby mode turns all functions off while leaving the power to the unit on. Use this mode when you want to have the display illuminated but don't want to listen to anything.

#### 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.
- To enable the selection of External disc control mode 2/AUX mode, you should connect optional switching adapter KCA-S210A (which allows you to select both External disc control mode 2 and AUX mode) or CD changer (KDC-CPS87, KDC-CX87, KDC-CPS85, KDC-CX85, KDC-CPS82 or KDC-CX82) or switching adapter CA-C1AX (which allows you to select AUX mode only).

### Audio Control Setting

Adjust various parameters of sound quality.

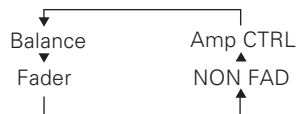
1 Press the AUD button for at least one second to enter the control mode.

#### 2 Selecting mode

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.



#### 3 Adjust each mode

Press the ◀◀/▶▶ button.

Look at the table to adjust the mode being displayed.

Adjustment mode (Display)	Operation of Audio control button	
	◀◀ button	▶▶ button
Balance ("Balance")	Left channel emphasized.	Right channel emphasized.
Fader ("Fader")	Rear channel increased.	Front channel increased.
Non-Fading ("NON FAD")	The non-fading output off.	The non-fading output on.
External Amp Control ("Amp CTRL")	"Off" : Bass boost level is flat. (Default setting) "1" : Bass boost level is low (+6dB). "2" : Bass boost level is high (+12dB).	

4 Press the AUD to end the control mode.

#### NOTE

- Non-Fading :  
This mode is available only when the non-fading output function is set to on.
- External Amp Control :  
As of December 2000, the power amplifiers controllable by the main unit are as follows:  
KAC-X501F/PS501F/X401M/PS401M/X301T/PS301T/X201T/

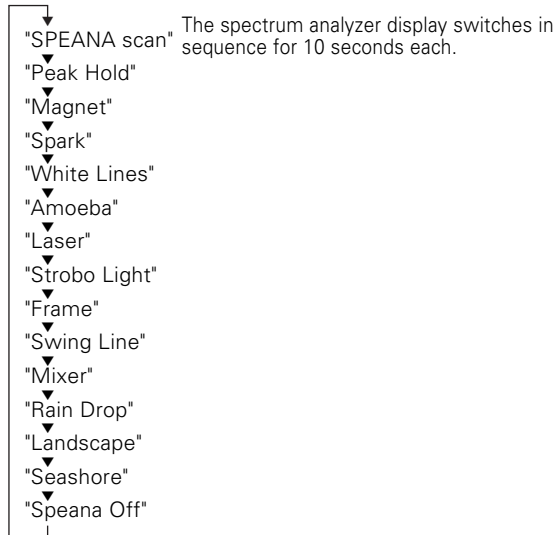


## Spectrum Analyzer Display Selection

You can select the display to enjoy sounds with eyes.

### Switching the Spectrum Analyzer Display:

- 1 Press the S.A button.  
"SPEANA mode" is displayed once the analyzer mode is entered.
- 2 Each time you press the S.A button, the analyzer display switches as follows;



- 3 Press the S.A button for at least one second to end the analyzer mode.

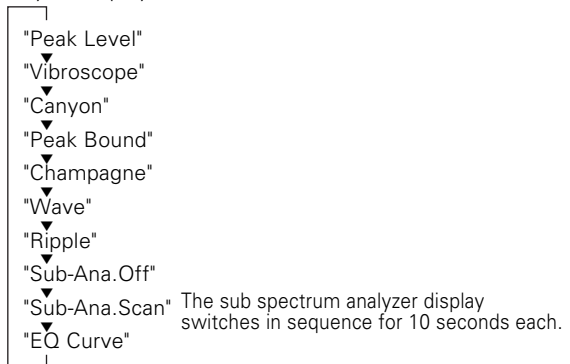
### NOTE

If you make no button operation for 10 seconds, the analyzer mode is automatically canceled.

## Sub Spectrum Analyzer Display Selection

### Switching the Sub Spectrum Analyzer Display:

Press the S.A button for at least one second to the sub analyzer display switches as follows;



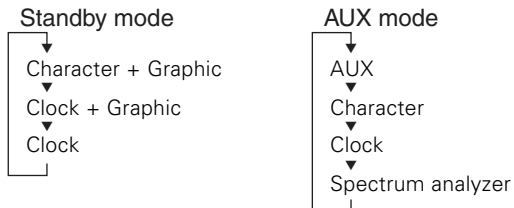
## General features

### Switching Display

You can switch the display during the standby mode and AUX mode as mentioned below.

#### Changing the Display:

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

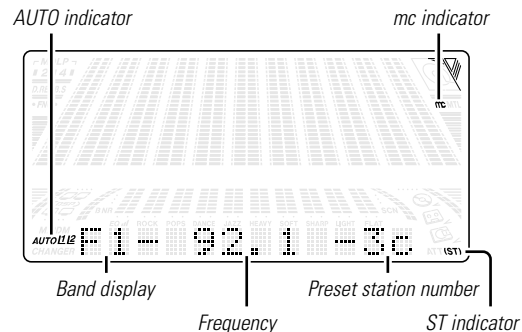
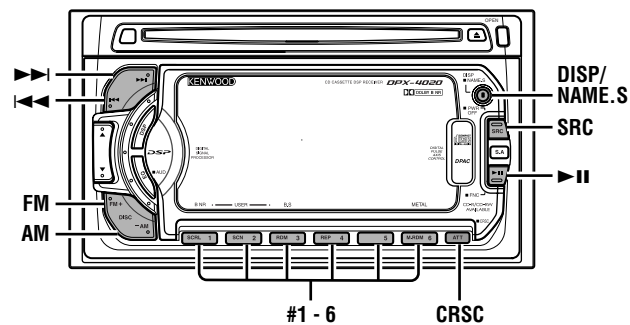


### Adjusting Time

Adjust the time.

- 1 When the clock is not displayed, first press the DISP button to display the clock.
- 2 Press the DISP button for at least one second to enter the clock adjustment mode.
- 3
  - Adjusting the hours  
Press the FM button to advance the hours, or press the AM button to make the hours go back.
  - Adjusting the minutes  
Press the ►► button to advance the minutes, or press the ◀◀ button to make the minutes go back.
- 4 Press the DISP button to end the clock adjustment mode.

## Tuner features



## Tuning

- 1 Press the SRC (source) button repeatedly to select the tuner mode. "TUNER" is displayed when the tuner 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. 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.
  - Preset station seek tuning  
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).

### NOTE

If the frequencies stored at the preset numbers receive stations which were not originally memorized when traveling long distances, the preset number is not displayed. In such cases, pressing the ◀◀/►► button to use preset station seek will receive channel 1.

- Manual Tuning  
Press the ►► button to increase the frequency by one step.  
Press the ◀◀ button to decrease the frequency by one step.

### NOTE

- Please see the function set system about selecting tuning mode. (page 27)
- 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 (#1-6) 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 (#1-6) 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.

## 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:

Press the CRSC button for at least one second to turn the function on/off. "CRSC On" is displayed when CRSC is on. The mc indicator lights up when CRSC is off.

### 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.

## Tuner features

### Frequency Step Setting

Switch the frequency step used in seeks. The factory defaults are 50 kHz for FM and 9 kHz for AM.

- 1 Turn the power off.
- 2 Hold down buttons #1 and #5, then turn the power back on. The frequency step settings will be changed to 200 kHz for FM and 10 kHz for AM.

#### NOTE

When you change the frequency step settings, all memory contents will be erased.

#### Returning Frequency Step Settings to Original Values:

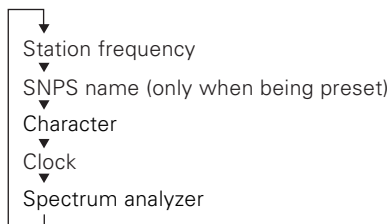
Repeat steps 1 and 2 above.

### 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 Name Preset (SNPS)

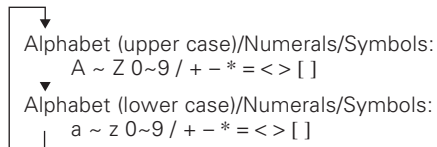
You can assign names to radio stations with the Station Preset Memory. Up to 30 stations can be assigned names.

- 1 Adjust the frequency to the station whose name you want to enter.

#### NOTE

This function cannot be available during the clock display.

- 2 Press the NAME.S button for at least two seconds. "Name Set" is displayed once the station name 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.
- 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.



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

#### NOTE

You can enter up to eight characters for each name.

#### 6 Assigning Names

Press the NAME.S button.

The name of the station is stored in memory, and the Station Name Preset mode ends.

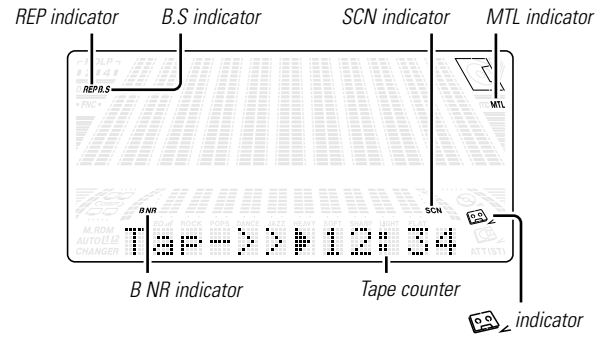
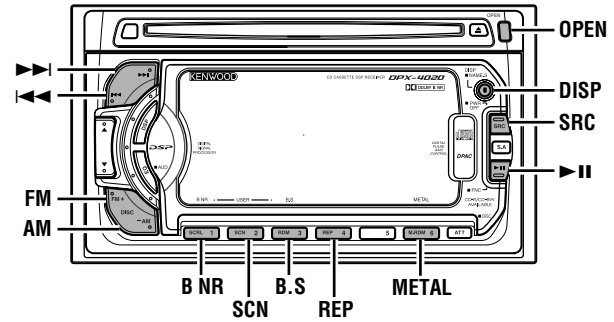
Also, if you make no input for 10 seconds, the name will be stored up to the point that you have entered, and the mode

ends.

**NOTE**

- You can assign names to up to 30 FM/AM stations in all. If you try to enter more than that, the station name stored the earliest will be the first one erased.
- When this device is disconnected from the battery SNPS is erased.
- 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.

## Cassette player features




## Cassette player features

### Playing Cassette Tapes

#### Loading and Playing Cassettes:

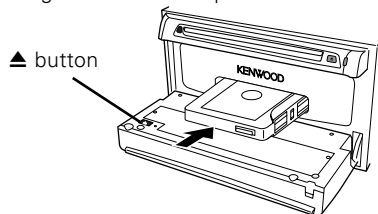
A press of the OPEN button results in the faceplate dropping open to the front, thereby exposing the cassette insertion slot. Holding the cassette with the tape exposed to the right, insert it in the slot. The tape will start playing.

Push back on the right side of the faceplate with your hand until it locks.

The  indicator lights up when a cassette has been loaded.

#### ▲CAUTION

When inserting a cassette make sure the cassette has been completely drawn in before pushing back the faceplate. Failing to do so might deform the tape.



#### Playing Cassettes Already Loaded:

Press the SRC (Source) button repeatedly to select the tape mode.

"TAPE" is displayed when the tape mode has been selected. The tape will start playing.

#### Listening to the other side:

Press the ►|| button.

Tape play switches to the other side.

#### Ejecting Cassettes:

Press the OPEN button and drop open the faceplate.

Press the ▲ button located near the cassette insertion slot.

The tape stops playing and the cassette ejects.

Push back on the right side of the faceplate with your hand until it locks.

#### ▲CAUTION

- When the faceplate has been dropped open, it might interfere

with the shift lever or something else. If this happens, pay attention to safety and move the shift lever or take an appropriate action, then operate the unit.

- Do not apply excessive force to the open faceplate or place objects on it. Doing so will cause damage or breakdown.
- Do not use the unit with the faceplate in the open condition. Doing so will cause breakdown.

#### NOTE

Remove a cassette from the unit when not listening to it for a while. If you leave it in the unit too long, the tape may stick to the tape head and cause the unit to malfunction.

### Fast Forwarding and Rewinding Cassette Tapes

#### Fast Forwarding Tapes:

Press the FM button.

#### Rewinding Tapes:

Press the AM button.

#### Canceling:

Press the ►|| button.

Normal tape play will begin.

### Using Dolby B Noise Reduction

Listen to tapes recorded using Dolby B NR.

#### Turning Dolby B Noise Reduction On/Off:

Press the B NR button to switch Dolby B NR on and off.

The B NR indicator lights up when it is turned on.

### Switching Tape Types

Select type of tape being played.

#### Switching Tape Types:

Press the METAL (Metal) button to switch the metal tape indicator on and off and to select the tape type.

Turn the MTL indicator off for normal tape (Type I) playback.  
Turn the MTL indicator on for the following tape types:

CrO<sub>2</sub> (Type II) FeCr (Type III) Metal (Type IV)

Selecting the wrong tape type may cause sound quality to suffer.

## Using Direct Program Search System (DPSS)

Skip forward or backward to other tracks during playback.

### **Skipping to Beginning of Current Track or to Previous Tracks**

#### **(Rewind DPSS):**

Press the **I◀◀** button.

Press once to rewind to the beginning of the current track, twice to rewind to the beginning of the previous track, and so forth.

You can skip up to nine tracks.

Playback is continued after the tape is rewound by the indicated number of tracks.

### **Skipping to Later Tracks (Fast Forward DPSS):**

Press the **▶▶I** button.

Press once to fast forward to the next track, twice to fast forward to the track after that, and so forth.

You can skip up to nine tracks.

Playback is continued after the tape is fast forwarded by the indicated number of tracks.

#### **NOTE**

- During the first five seconds of each track, the previous track is considered the "current" track. If you press the **I◀◀** button during that period, the tape rewinds to the beginning of the previous track and not the one you are listening to.
- The DPSS function "knows" where a track begins by detecting the blank space preceding it (the space between tracks). However, when the blank space lasts for less than four seconds or contains noise, DPSS may not operate correctly. Furthermore, quiet intervals within a song are detected as "blank spaces" if they last for four seconds or more.

### **Canceling DPSS While It Is Operating:**

Press the **▶||** button.

## Blank Skip

Automatically fast forward to the beginning of the next track when long blank spaces (10 seconds or more) are detected, continuing tape playback.

### **Turning Blank Skip On/Off:**

Press the B.S button to switch blank skip on and off.

The B.S indicator lights up when blank skip is turned on.

#### **NOTE**

- If the blank space contains much noise, the blank skip function may not work right.
- Sections recorded at low levels may trigger the blank skip function if they last for 10 seconds or more.

## Index Scan

Successively plays the first few seconds of each track on the tape.

### **Turning Index Scan On/Off:**

Press the SCN button to switch index scan on/off.

The SCN indicator lights up when index scan is turned on.

### **Stopping to Listen to the Track Being Scanned:**

Press either the SCN or **▶||** button.

Playback begins as usual.

#### **NOTE**

- Index scan is canceled when the tape stops.
- Index scan "knows" where a track begins by detecting the blank space preceding it (the space between tracks). However, when the blank space lasts for less than four seconds or contains noise, this function may not operate correctly. Furthermore, sections that are recorded at low levels may trigger the function if they last for four seconds or more.

## Cassette player features

### Music Repeat

Repeatedly plays the track currently being listened to.

#### Turning Music Repeat On/Off:

Press the REP button to switch music repeat on/off.  
The REP indicator lights up when music repeat is turned on.

#### Canceling Music Repeat:

Press either the REP or ►|| button.

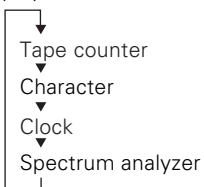
#### NOTE

Music repeat "knows" where a track begins by detecting the blank space preceding it (the space between tracks). However, when the blank space lasts for less than four seconds or contains noise, this function may not operate correctly. Furthermore, sections that are recorded at low levels may trigger the function if they last for four seconds or more.

## Switching Display for Cassette Tapes

### Switching the Tape display :

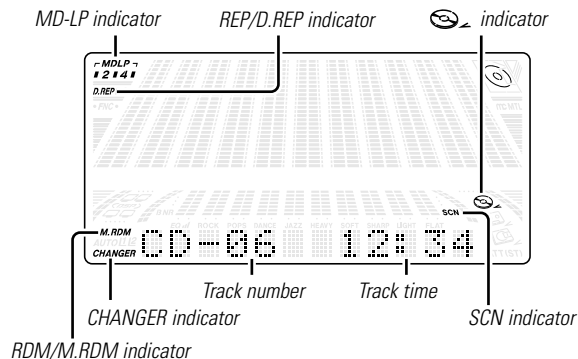
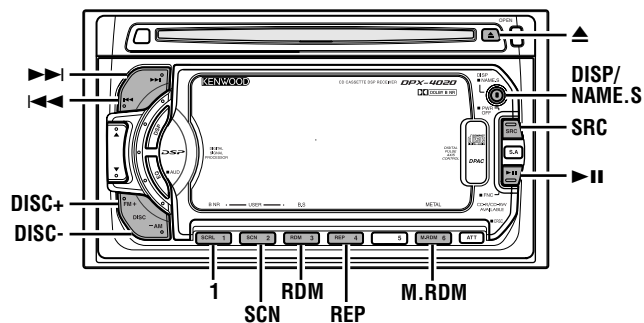
Each time you press the DISP button, the display during tape play switches as follows:



#### NOTE

The tape counter is not exact, but only represents an approximation of the elapsed time.

## CD/External disc control features





## Playing CDs


### Playing CDs:

If no CDs are inserted, insert one in the slot with the label facing up.


If a CD is already inserted, press the SRC button repeatedly to select the CD mode.

"CD" is displayed when the CD mode has been selected.

The CD will start playing.

The  indicator lights up when a CD has been inserted.

### Pausing and Restarting CD Play:

Press the  button to make the disc pause.

Press the same button again to start play again.

### Stopping and Ejecting CDs:

Press the  button.

The CD stops playing and ejects from the slot.

#### ▲CAUTION

Do not attempt to insert a CD into the slot if another one is already there.

#### NOTE

When you load a CD and eject it right away, the next time you try to insert the CD may not load. In such a situation, take the CD out for a moment and then reinsert it.

## Playing Other Disc mode

This function permits the connection of optional players and the playing of discs other than the loaded CD (in the current unit).

### Playing Discs:

Press the SRC 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-CH"/"MD-CH"/"DISC-CH"...when a disc changer is connected
- "CD-CH1", "CD-CH2"/"MD-CH1", "MD-CH2"/"DISC-CH1", "DISC-CH2"...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.
- **Concerning the display during MD play**  
If the playtime goes beyond a 100 minutes, the last 2 digits of playtime are displayed.  
If the MD-LP recording format is "LP2" the  indicator light is ON, if it's "LP4" the  indicator light is ON.


## 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.

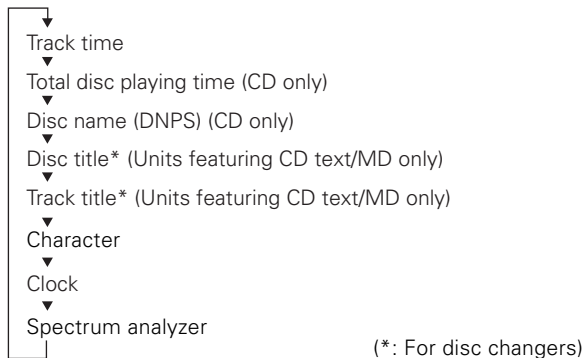
## CD/External disc control features

### 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:



#### NOTE

- You can give names to discs through the presetting disc name function (page 20).  
Note that depending on the unit, display may not be possible.
- If you try to display the name of a disc that does not have one, "No Name" is displayed instead.
- When an attempt is made to display the title of a disc for which a disc title/track title has not been recorded, the CD will display "No Text", and an MD changer will display "No Title".
- Depending on the type of characters of the CD text, some characters may not be 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.

### Disc Search

(Function of disc changers)

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**

"Load" is displayed when discs are being exchanged on the disc changer.

**Track Repeat**

Repeat playing the track currently being listened to.

**Turning Repeat Play On/Off:**

Press the REP button to switch repeat play on and off.  
The REP indicator lights up when repeat play is turned on.

**NOTE**

Repeat play is canceled when you eject the disc.

**Disc Repeat**

*(Function of disc changers)*

Repeat playing the disc currently being listened to.

**Turning Disc Repeat Play On/Off:**

Press the REP button for at least one second to switch disc repeat play on and off.  
The D.REP indicator lights up when disc repeat play is turned on.

**NOTE**

Repeat play is canceled when you eject the disc.

**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 SCN button. The SCN indicator lights up and the first 10 seconds of each track will be played, in order.  
The track number currently being heard blinks in the display.

**Stopping to Listen to the Track Being Scanned:**

Press the ►|| or SCN button again to stop the scan and keep on listening to a track normally.

**NOTE**

- The track scan function is canceled when you eject the disc.
- The track scan function only scans each track on a disc once.

**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.  
The RDM indicator lights up 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.

**NOTE**

*(For disc changers)*

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.

- 2 To change the track being heard, press the ►►| button.  
Another track will be selected and played.

**NOTE**

Random play is canceled when you eject the disc.

## CD/External disc control features

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

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

- 1 Press the M.RDM button to switch magazine random play on and off.  
The M.RDM indicator lights up 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.
- 2 To change the track being heard, press the ►►I button.  
Another disc/track will be selected and played.

#### NOTE

- Magazine random play is canceled when you eject the disc.
- The time needed for random selection depends on the number of discs loaded in the disc magazine.

### Text / Title Scroll

This function permits the text to be scrolled and the entire text to be displayed. The scrolling method differs depending on the setting of scrolling in the menu.

#### To scroll automatically:

Press the DISP button to display the disc title or the track title.  
The display of the text will be scrolled repeatedly.

#### To scroll manually:

- 1 Press the DISP button to display the disc title or the track title.
- 2 Press the 1 button.  
The display of the text will be scrolled once.

#### NOTE

- Please see the function set system (page 27) about switching between manual scrolling and automatic scrolling.
- Only units with a CD text feature permit title display.

### Presetting Disc Names (DNPS)

Store the names of discs to be displayed when played.

- 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.
  - The disc name preset function cannot be used when a clock is displayed.
  - Disc Name Preset can't be done in MD or AUX.
- 2 Press the NAME.S button for at least two seconds.  
"Name Set" is displayed and the disc name preset mode is entered.  
The cursor blinks in the position where character input can be made.
  - 3 Press either the ◀◀ or ►►I button to move the cursor to the desired position.  
The ◀◀ button moves the cursor to the left, and the ►►I button to the right.
  - 4 Each press of the ►II button results in the type of characters that are to be entered changing between alphabet and numerals/symbols.  
Press the DISC+ or DISC- button to display the desired character.  
Characters that can be displayed are as follows.

Alphabet (upper case)/Numerals/Symbols:

A ~ Z 0~9 / + - \* = < > [ ]

Alphabet (lower case)/Numerals/Symbols:

a ~ z 0~9 / + - \* = < > [ ]

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

#### NOTE

You can enter up to 8 characters for each name.

- 6 Press either the NAME.S button.

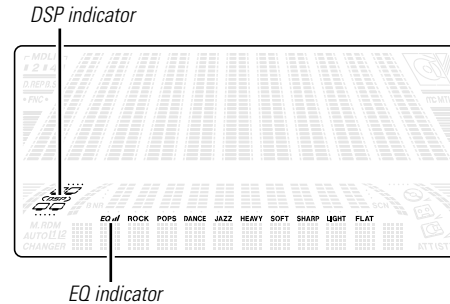
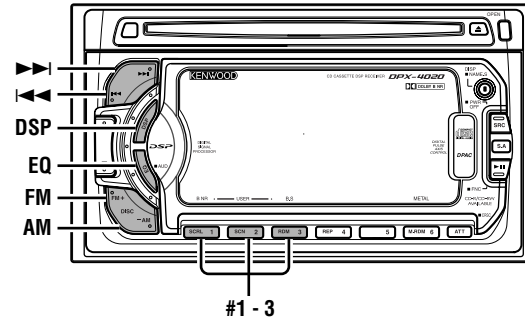
## DSP/Equalizer control features

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 discs whose names can be stored will differ depending on the disc changer that is connected. Please see your disc changer manual for details.  
Up to 10 CDs can be registered with this unit.
- 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.
- When this device is disconnected from the battery the internal CD DNPS is erased.
- Each source (CD, CD-CH1, CD-CH2) has its own memory in which to store the disc names.  
Discs that have been disc name preset with the CD player will not have their disc name displayed when played on a CD changer.



## DSP/Equalizer control features

### DSP (Digital Signal Processor)

A DSP is a device which uses digital control to correct the audio signal and produce sound effects that can compensate for the small passenger compartment of a vehicle.

#### Turning the DSP On:

Press the DSP button.

"DSP mode" is displayed and the DSP indicator lights up once the DSP is turned on.

#### Turning the DSP Off:

Press the DSP button for at least one second.

### Sound Field Control

This function reproduces many different virtual sound fields such as of a concert hall within a vehicle.

#### Switching the Sound Field Control:

Each time you press the DSP button, the sound field control switches as follows;

→ "Bypass" ▶ "Stadium" ▶ "Concert" ▶ "Club Disco" —  
"Listening" ◀ "Church" ◀

#### NOTE

If you make no button operation for 10 seconds, the DSP control mode is automatically canceled.

### Equalizer Easy Mode

There are 2 equalizer modes, "EASY" and "PRO". The "EASY" mode is selected from the preset equalizer cover, and you can choose the power of sound quality effect.

#### NOTE

Please see the function set system settings about equalizer mode. (page 25)

- 1 Press the EQ button.  
"EQ mode EASY" is displayed once the equalizer easy mode is

entered.

#### 2 Switching the Preset Equalizer:

Each time you press the EQ button, the preset equalizer switches as follows;

→ "Rock" ▶ "Pops" ▶ "Dance" ▶ "Jazz" ▶ "Heavy" ▶ "Soft" —  
"Flat" ◀ "Light" ◀ "Sharp" ◀

#### 3 Equalizer Level Adjusting:

Each time you press the FM or AM button, the equalizer effects switch as follows;

"Low" ▶ "Mid" ▶ "High"

#### NOTE

- This adjustment cannot be made when the Preset Equalizer Selection is set to "Flat".
  - The default setting is "Mid".
- 4 Press the EQ button for at least one second to end the equalizer easy mode.

#### NOTE

If you make no button operation for 10 seconds, the equalizer easy mode is automatically canceled.

### Equalizer Pro Mode

There are 2 equalizer modes, "EASY" and "PRO". If the "PRO" mode is selected from the preset equalizer cover, you can also adjust each setting item.

#### NOTE

Please see the function set system settings about equalizer mode. (page 25)

- 1 Press the EQ button.  
"EQ mode PRO" is displayed once the equalizer pro mode is entered.
- 2 **Switching the Preset Equalizer:**  
Each time you press the EQ button, the preset equalizer

switches as follows; (see the equalizer easy mode)

### 3 **Selecting mode**

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.

### 4 **Adjust each mode**

Press the ◀◀/▶▶ button.

Look at the table to adjust the mode being displayed.

Adjustment mode (Display)	Operation of control button	
	◀◀ button	▶▶ button
Bass Center Frequency ("Bass Frq.")	Adjust the center frequency of the bass. "60" / "70" / "80" / "100" (Only when the bass quality factor is set to 1.00, 1.25 or 1.50) / "150" (Only when the bass quality factor is set to 2.00) Hz.	
Bass Level ("Bass LV")	Adjust the bass level. "-12" – "+12"	
Bass Quality Factor ("Bass Q")	Adjust the Bass quality factor. "1.0" / "1.25" / "1.5" / "2.0"	
Bass Extend ("Bass EXT")	Switch the Bass Extend mode on/off. "ON" / "OFF" (When the bass extend mode is set to on, low frequency response is extended by 20%.)	
Middle Center Frequency ("Mid Frq.")	Adjust the center frequency of the middle. "0.5" / "1.0" / "1.5" / "2.0" kHz.	
Middle Level ("Mid LV")	Adjust the middle level. "-12" – "+12"	
Middle Quality Factor ("Mid Q")	Adjust the middle quality factor. "1.0" / "2.0"	
Treble Center Frequency ("Tre Frq.")	Adjust the center frequency of the treble. "10.0" / "12.5" / "15.0" / "17.5" kHz.	
Treble Level ("Tre LV")	Adjust the treble level. "-12" – "+12"	

### 5 • **Equalizer Preset Memory:**

Press the button (#1-3) that you want to use for the Equalizer curve for at least two seconds.

"EQ Memory#" is displayed, indicating that the Equalizer curve is stored in the selected button.

#### • **Recalling a Equalizer you stored:**

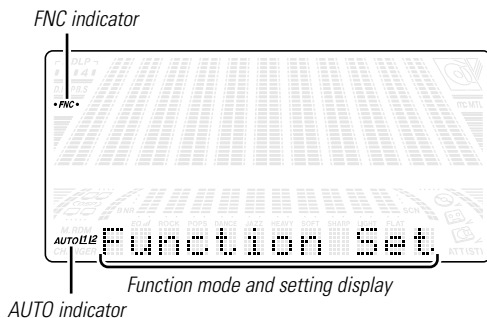
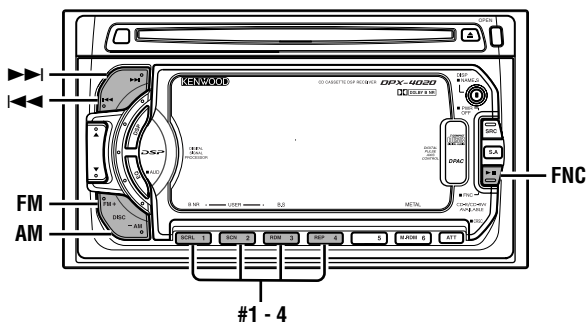
Press the preset button (#1-3) for the desired Equalizer curve.

### 6 Press the EQ button for at least one second to end the equalizer pro mode.

#### **NOTE**

- If you make no button operation for 10 seconds, the equalizer pro mode is automatically canceled.
- When each setting item is adjusted "User" is displayed. In this condition Equalizer Preset Memory is not used.

## Function Set System



### Function Set System

To accommodate a greater number of functions, a function set system has been employed for making settings. Press the FNC button to enter the function set mode and then display the function to make the setting.

- 1 Select the mode that you want to make the setting of the function.
- 2 Press the FNC button for at least one second. "Function Set" is displayed when the function set mode is entered. The function that you can adjust is indicated with the current settings displayed.
- 3 **Selecting function to set**  
Press the FM button to search through the functions until you see the one you want to adjust in the display. Press the AM button to search through the functions backward. Function items change in the order of features that follow in the function set system.  
Example: If you want to switch the setting of the touch sensor tone function from on to off, first search through the functions until you see "BEEP On" in the display.
- 4 **Changing setting for currently displayed function**  
Press either the ◀◀ or ▶▶ button. The setting will change for each function.  
Example: The setting of the touch sensor tone will switch from on to off, and "BEEP Off" is displayed.
- 5 **Ending the function set mode**  
Press the FNC button.

#### NOTE

- Make sure to end the function set mode when finished.
- To use the auto memory function, press either the ◀◀ or ▶▶ button for at least two seconds.
- To use the EQ mode function, press either the ◀◀ or ▶▶ button for at least two seconds.



## Function items in Standby mode:

### Dimmer Level Adjustment

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

#### Display and setting:

"DIM STEP 1" – "DIM STEP 13"

#### NOTE

This function is available when the dimmer wire is connected and the light switch of your car is turned on.

### Touch Sensor Tone

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

#### Display and setting:

"BEEP On" : Beep setting is on.

"BEEP Off" : Beep setting is off.

#### NOTE

The beep sound is not output from the preout jacks.

### Switching preout

Switch the preout between the rear and non-fading. The factory default is rear preout.

#### Display and setting:

"Preout Rear" : Rear preout

"Preout N-F" : Non-fading preout

### Opening Display

If this function is set to on, the opening display appears when the power is turned on.

#### Display and setting:

"Opening On" : Opening display function is on.

"Opening Off" : Opening display function is off.

### Equalizer Mode

Select 1 of 2 equalizer modes, the preset "EASY" mode, or the "PRO" mode where the individual items can be adjusted.

#### Display and setting:

- 1 Select the display "EQ mode" during the selecting function in the function set system.
- 2 Press either the ◀◀ or ▶▶ button for at least two seconds to turn the function.  
"EQ mode EASY" : Equalizer Easy mode.  
"EQ mode PRO" : Equalizer Pro mode.

## Function Set System

### 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 9 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, "CODE STBY" disappears from the function set system. Note that it will no longer be possible to cancel this function afterwards.

- 1 Press the SRC button repeatedly to select the standby mode. "ALL OFF" is displayed when the standby mode is selected.
- 2 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 the code security function is on. Choose the number carefully and do not forget it (write it down and keep it separately in a safe place).

- 3 Press the FNC button for at least one second. "Function Set" is displayed and the function set mode is turned on.
- 4 Keep pressing the FM button until the "CODE STBY" appears in the display. Press the AM button to search in the other direction.
- 5 Press either the S.A button for at least two seconds. "CODE WRITE" 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.
- 6 Press the preset button and enter the security code that you have selected in step 2.  
Example: Use "3510" as the security code.

Step	Button to press	# Times pressed	Display
1	#1	4	"3"
2	#2	6	"5"
3	#3	2	"1"
4	#4	1	"0"

- 7 Press the S.A button.  
The security code will be set. "CODE \*\*\*\* 1" 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.
- 8 Press the Preset button and input the security code again.
- 9 Press the S.A button again.  
"CODE WRITE" will appear in the display, with the security code function turning 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. "CODE" will appear in the display, asking you to input the code.

#### NOTE

If you input an incorrect security code, the code setting mode will be canceled automatically. Follow the steps from 5 to 9 above again.

#### **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 8 and 9 above, and input the security code. You can start operating the unit again when "CODE OK!" appears in the display.

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

## Function items in Tuner mode:

### Selecting Tuning Mode

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 when preset station seek tuning is selected.

#### **Display and setting:**

"Auto1 Seek" : Auto seek tuning mode

"Auto2 Seek" : Preset station seek tuning mode

"Manual Seek" : Manual tuning mode

### 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.

#### **Display and setting:**

- 1 Select the display "AME Ready" during the selecting function in the function set system.
- 2 Press either the ◀◀ or ▶▶ button for at least two seconds to start auto memory function.  
The numbers of the preset station buttons showed 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.

#### **Canceling Auto Memory Entry During Its Operation:**

Press the ◀◀ / ▶▶ button while auto memory entry is taking place to stop the process.

#### **Recalling a Preset Station:**

Press the preset station button (#1-6) for the desired station. The number of the recalled station is displayed.

## Function items in External disc control mode:

### Text Scroll

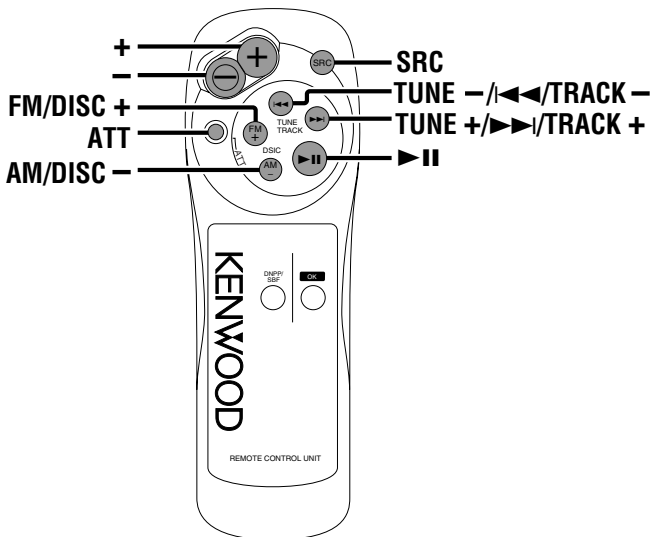
This function permits the CD text, MD title to be scrolled and the entire text to be displayed. Switching between manual scrolling and automatic scrolling is permitted. The factory default is automatic scrolling.

#### **Display and setting:**

"AT. SCRL On" : Automatic scrolling

"AT. SCRL Off" : Manual scrolling

## Basic Operations of remote



### ▲CAUTION

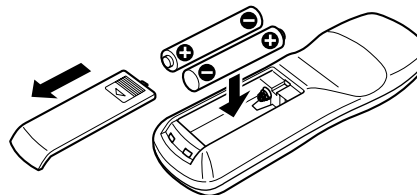
Do not set the remote on hot places such as above the dashboard.

### 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

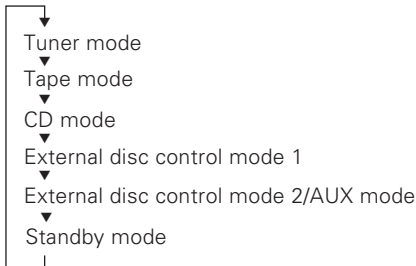
Store unused batteries out of the reach of children. Contact a doctor immediately if the battery is accidentally swallowed.

### 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

- **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:



#### 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.
- To enable the selection of External disc control mode 2/AUX mode, you should connect optional switching adapter KCA-S210A (which allows you to select both External disc control mode 2 and AUX mode) or CD changer (KDC-CPS87, KDC-CX87, KDC-CPS85, KDC-CX85, KDC-CPS82 or KDC-CX82) or switching adapter CA-C1AX (which allows you to select AUX mode only).
- **ATT button**  
Turns down the volume quickly. To return the volume to its original level, press the button again. Turning the volume up, or turning it all the way down deactivates the attenuator function.

### Tuner features

- **◀◀/▶▶ (TUNE) buttons**  
Press the ◀◀ button to make decreasing seeks (using the preset tuning mode).  
Press the ▶▶ button to make increasing seeks (using the preset tuning mode).  
Use to move the cursor left or right during station name input.
- **AM/FM buttons**  
Press the AM button to select the AM band.

Press the FM button to select and switch between FM1, FM2, and FM3 bands.

During station name input, selects digits and symbols.

- **▶|| button**  
Selects the type of characters at the time of entering the station name.

### Cassette player features

- **◀◀/▶▶ buttons**  
Press the ◀◀ button to start play again at the beginning of the current track.  
Press the ▶▶ button to start play at the beginning of the next track.
- **AM button**  
Rewinds the tape.
- **FM button**  
Fast forwards the tape.
- **▶|| button**  
Plays the reverse side of the tape. When pressed during fast forward and rewind, this button stops the tape and starts playing it.




### CD/External disc control features

- **◀◀/▶▶ 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.
- **▶|| 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.

## Accessories

### External view

..... Number of items


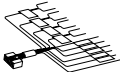
- |   |   |                    |
|---|---|--------------------|
| ① |  | (M5×6mm)<br>.....6 |
| ② |  | (M4×8mm)<br>.....1 |
| ③ |  | .....1             |

#### ▲CAUTION

The use of any accessories except for those provided might result in damage to the unit. Make sure only to use the accessories shipped with the unit, as shown above.

### External view

..... Number of items

- |   |   |                    |
|---|---|--------------------|
| ④ |  | (M5×7mm)<br>.....6 |
| ⑤ |  | .....1             |

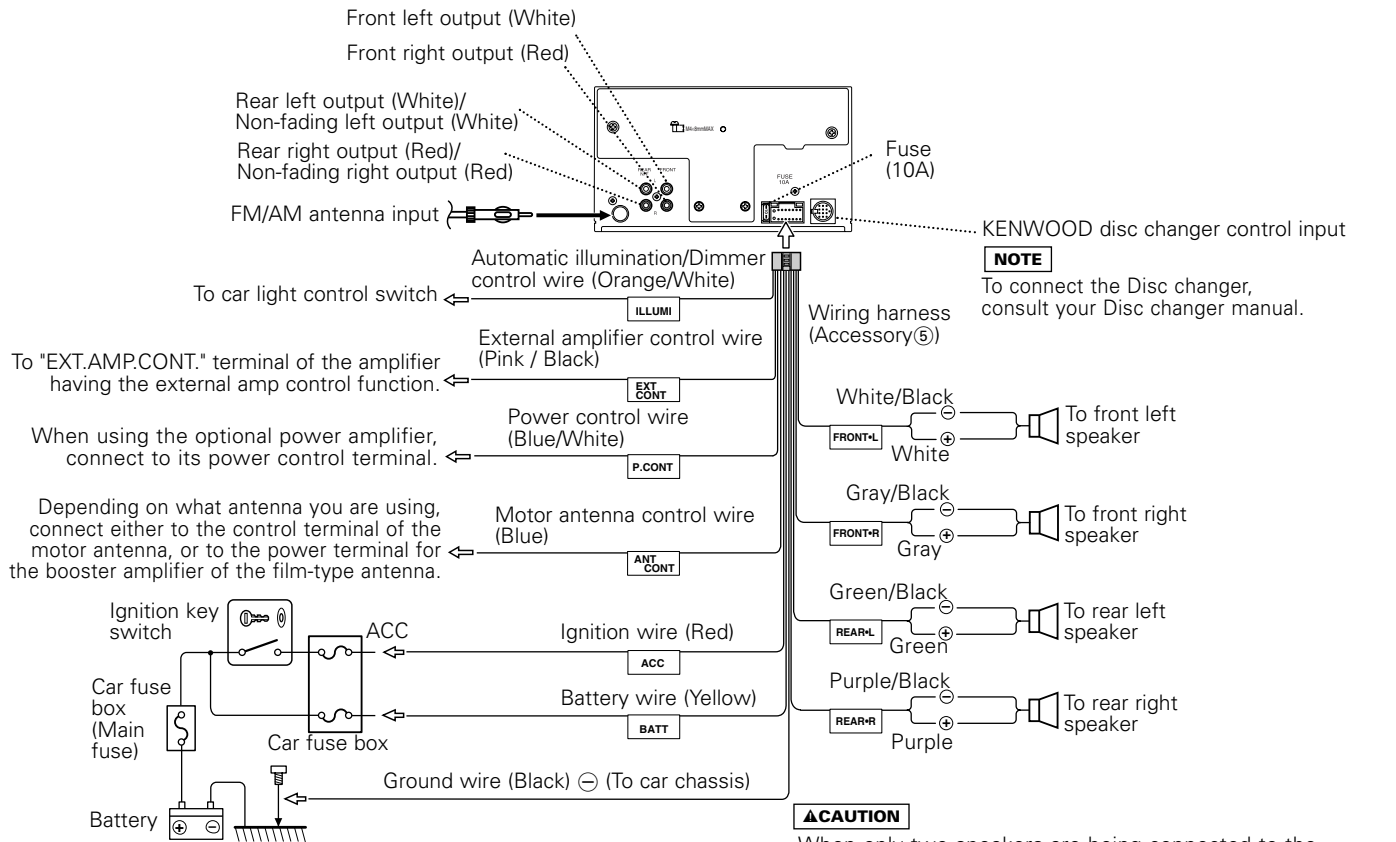
## Installation Procedure

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. Press the reset button.

#### ▲CAUTION

- If your car's ignition does not have an ACC position, connect the ignition wires 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, as with 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 unconnected wires or terminals touch metal on the car or anything else conducting electricity. To prevent a short circuit, do not remove the caps on the ends of the unconnected wires or the terminals.
- Insulate unconnected wires with vinyl tape or other similar material.
- Connect the speaker wires correctly to the terminals to which they correspond. The unit may be damaged or fail to work if you share the ⊖ wires or ground them to any metal part in the car.
- After the unit is installed, check whether the brake lamps, blinkers, wipers, etc. on the car are working properly.
- Some disc changers need 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



**NOTE**

To connect the Disc changer, consult your Disc changer manual.

**CAUTION**

When only two speakers are being connected to the system, connect the connectors either to both the front output terminals or to both the rear output terminals (do not mix front and rear). For example, if you connect the ⊕ connector of the left speaker to a front output terminal, do not connect the ⊖ connector to a rear output terminal.

**WARNING**

If you connect the ignition wire (red) and 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.

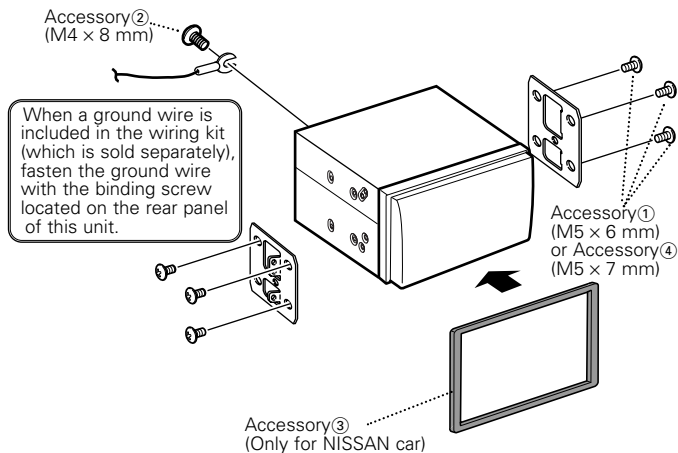
## Installation

### ▲ CAUTION

When performing a check of the CD operation prior to installation, place this unit in a horizontal position and perform a loading/eject of the CD.

### ■ Installation

Install onto the car bracket using the supplied screws (M5 × 6 mm, M5 × 7 mm). The holes of the car bracket to use will differ depending on the car model.





## 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.**

PROBLEM	POSSIBLE CAUSE	SOLUTION
The power does not turn on.	The fuse has blown.	After checking for short circuits in the wires, replace the fuse with one with the same rating.
No sound can be heard, or the volume is low.	Attenuator is turned on.	Turn off Attenuator.
	The fader or balance settings are set all the way to one side.	Reset the fader or balance settings.
	The input/output wires or wiring harness are connected incorrectly.	Reconnect the input/output wires or the wiring harness correctly. See the section on "Connecting Wires to Terminals".
	The cassette tape is bad.	Try playing another cassette tape. If works fine, the first tape was bad.
The tape does not go in. / No sound can be heard even though the tape display is made.	The car ignition was turned off during tape eject; or the tape was pulled out during loading, switching the mode to tape mode even though no tape is in.	Press the Eject button.
Nothing happens when the buttons are pressed.	The computer chip in the unit is not functioning normally.	Press the reset button on the unit (see p. 4).
The sound quality is poor or distorted.	The tape head is dirty.	Clean the tape head, referring to the section on "Cleaning the tape head" (see p. 4).
	One of the speaker wires is being pinched by a screw in the car.	Check the speaker wiring.
	The speakers are not wired correctly.	Reconnect the speaker wires so that each output terminal is connected to a different speaker.
Radio reception is poor.	The car antenna is not extended.	Pull the antenna out all the way.
	The antenna control wire is not connected.	Connect the wire correctly, referring to the section on "Connecting Wires to Terminals".
The memory is erased when the ignition is turned off.	The battery wire has not been connected to the proper terminal.	Connect the wire correctly, referring to the section on "Connecting Wires to Terminals".
	The ignition and battery wire are incorrectly connected.	Connect the wire correctly, referring to the section on "Connecting Wires to Terminals".
A CD ejects as soon as it is loaded.	The CD is upside-down.	Load the CD with the labeled side up.
	The CD is quite dirty.	Clean the CD, referring to the section on "Cleaning CDs" (see p. 5).
The sound skips on a CD.	The CD is scratched or dirty.	Clean the CD, referring to the section on "Cleaning CDs" (see p. 5).

## Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	SOLUTION
A track will not play.	Random play has been selected.	Turn off random play.
The DSP effects are imperceptible.	You are using a two-speaker system.	Use a front/rear four-speaker system.
	The front and rear output are reversed.	Connect the wire correctly, referring to the section on "Connecting Wires to Terminals".
	The ⊕ and ⊖ of speakers are reversed.	Connect the wire correctly, referring to the section on "Connecting Wires to Terminals".
	The fader or balance settings are set all the way to one side.	Reset the fader or balance settings.



### Disc Control Mode

The disc control mode cannot be selected.	No cable has been connected to the disc changer input terminal on the unit.	Connect the cable to the disc changer input terminal on the unit.
The specified disc does not play, but another one plays instead.	The specified CD is quite dirty.	Clean the CD.
	The CD is upside-down.	Load the CD with the labeled side up.
	The disc is loaded in a different slot from that specified.	Eject the disc magazine and check the number for the specified disc.
The sound skips.	The disc is severely scratched.	Try another disc instead.
	Something is touching the disc changer.	Remove whatever is touching it.
	The CD is scratched or dirty.	If skipping happens at the same place when the car is stopped, something with the CD is wrong. Clean the CD.
The display shows that the changer is being played, but no sound can be heard.	The computer chip in the unit is not functioning normally.	Press the reset button on the unit (see p. 4).
The specified track will not play.	Random play or magazine random play has been selected.	Turn off random play or magazine random play.
Track repeat, disc repeat, track scan, disc scan, random play, and magazine random play start by themselves.	The setting is not cancelled.	The settings for these functions remain on until the setting to off or the disc ejected, even if the power is turned off or the source changed.
Cannot play CD-R or CD-RW	Finalization processing is not being conducted for CD-R/CD-RW.	Conduct finalization processing with CD recorder.
	A non-compatible CD changer is being used to play the CD-R/CD-RW.	Use a CD changer compatible with CD-R/CD-RW to play.

### 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 (KCA-S210A, CA-C1AX, KDC-CPS87, KDC-CX87, KDC-CPS85, KDC-CX-85, KDC-CPS82 or KDC-CX82) is connected, the AUX Mode is entered when switching modes.

**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.
No Disc	No disc has been loaded in the disc magazine. ⇒ Load a disc into the disc magazine.
Error 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.
No Track	No tracks are recorded on the MD, although it has a title.
Error 77	The unit is malfunctioning for some reason. ⇒ Press the reset button on the unit. If the "Error 77" code does not disappear, consult your nearest service center.
Error 99	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 "Error 99" 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.
No Text	An attempt was made to display the track/disc title of the CD during play, but the CD has no texts.
No Title	An attempt was made to display the track/disc title of the MD disc during play, but the MD has no titles.
No Name	<ul style="list-style-type: none"><li>• An attempt was made to display the name of the station being received but it was not set in memory.</li><li>• An attempt was made to display the name of the disc being played but it was not set in memory.</li><li>• An attempt was made to display the station name/disc name after the battery had been removed for a long period.</li></ul>
	The tape player is malfunctioning. ⇒ Eject the tape and try inserting it again. Contact the Kenwood dealer if this indicator continues blinking or the tape cannot be ejected.
	The CD player is malfunctioning. ⇒ Eject the CD and try inserting it again. Contact the Kenwood dealer if this indicator continues blinking or the CD cannot be ejected.

## Specifications

Specifications subject to change without notice.

### FM tuner section

Frequency range (50 kHz space)	87.5 MHz – 108.0 MHz
(200 kHz space)	87.9 MHz – 107.9 MHz
Usable sensitivity (S/N = 30dB)	9.3dBf (0.8 $\mu$ V/75 $\Omega$ )
Quieting Sensitivity (S/N = 50dB)	15.2dBf (1.6 $\mu$ V/75 $\Omega$ )
Frequency response ( $\pm$ 3.0 dB)	30 Hz – 15 kHz
Signal to Noise ratio (MONO)	70 dB
Selectivity ( $\pm$ 400 kHz)	$\geq$ 80 dB
Stereo separation (1 kHz)	40 dB

### AM tuner section

Frequency range (9 kHz space)	531 kHz – 1611 kHz
(10 kHz space)	530 kHz – 1700 kHz
Usable sensitivity (S/N = 20dB)	28 dB $\mu$ (25 $\mu$ V)

### Cassette player section

Tape speed	4.76 cm/sec.
Wow & Flutter (WRMS)	0.08 %
Frequency response (70 $\mu$ s)	25 Hz – 22 kHz ( $\pm$ 3 dB)
Separation (1 kHz)	40 dB
Signal to Noise ratio	
(Dolby NR OFF)	60 dB
(Dolby B NR ON)	68 dB

### CD player section

Laser diode	GaAlAs ( $\lambda=780$ nm)
Digital filter (D/A)	8 Times Over Sampling
D/A Converter	1 Bit
Spindle speed	500 – 200 rpm (CLV)
Wow & Flutter	Below Measurable Limit
Frequency response ( $\pm$ 1 dB)	10 Hz – 20 kHz
Total harmonic distortion (1 kHz)	0.01 %
Signal to Noise ratio	93 dB (1 kHz)
Dynamic range	93 dB
Channel separation	85 dB

### Audio section

Maximum output power	47 W $\times$ 4
Full bandwidth power (at less than 1% THD)	22 W $\times$ 4
Preout level / Load	1500mV/10k $\Omega$
Preout impedance	$\leq$ 600 $\Omega$

### General

Operating voltage	14.4 V (11 – 16 V allowable)
Current consumption	10.0 A at Rated power
Installation size (W $\times$ H $\times$ D)	178 $\times$ 100 $\times$ 155 mm
	7 $\times$ 3-15/16 $\times$ 6-1/8 in.
Weight	2.7 kg (5.9 LBS)