High power CD player with RDS tuner

Operation Manual

DEH-2330R DEH-2300R DEH-2300RB DEH-1330R DEH-1300R



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Head Unit



About This Product

 This product complies with the EMC Directives (89/336/EEC, 92/31/EEC) and CE Marking Directive (93/68/EEC).

The tuner frequencies on this product are allocated for use in Western Europe, Asia, the Middle East, Africa and Oceania. Use in other areas may result in improper reception. The RDS function operates only in areas with FM stations broadcasting RDS signals.

About This Manual

This product features a number of sophisticated functions ensuring superior reception and operation. All are designed for the easiest possible use, but many are not self-explanatory. This operation manual is intended to help you benefit fully from their potential and to maximize your listening enjoyment.

We recommend that you familiarize yourself with the functions and their operation by reading through the manual before you use this product. It is especially important that you read and observe the "Precaution" on the next page and in other sections.

Precaution

• A "CLASS 1 LASER PRODUCT" label is affixed to the bottom of the player.



- The Pioneer CarStereo-Pass is for use only in Germany.
- Keep this manual handy as a reference for operating procedures and precautions.
- Always keep the volume low enough for outside sounds to be audible.
- Protect this product from moisture.
- If the battery is disconnected, the preset memory will be erased and must be reprogrammed.

In Case of Trouble

Should this product fail to operate properly, contact your dealer or nearest authorized Pioneer Service Station.

Basic Operation

To Listen to Music

The following explains the initial operations required before you can listen to music.

Note:

• Loading a disc in this product. (Refer to page 7.)

1. Select the desired source (e.g. Tuner).



Each press changes the Source ...

Each press of the SOURCE button selects the desired source in the following order: Built-in CD player \rightarrow Tuner

Note:

- When no disc is set in this product, built-in CD player source will not change.
- When this product's blue/white lead is connected to the car's Auto-antenna relay control terminal, the car's Auto-antenna extends when this product's source is switched ON. To retract the antenna, switch the source OFF.

2. Raise or lower the volume.



3. Turn the source OFF.





Hold for 1 second

Basic Operation of Tuner

This product's AF function can be switched ON and OFF. AF should be switched OFF for normal tuning operations. (Refer to page 10.)

Manual and Seek Tuning -

 You can select the tuning method by changing the length of time you press the \triangleleft button.

Manual Tuning (step by step)	0.5 seconds or less
Seek Tuning	0.5 seconds or more

Note:

- If you continue pressing the button for longer than 0.5 seconds, you can skip broadcast stations. Seek Tuning starts as soon as you release the button.
- Stereo indicator "O" lights when a stereo station is selected.



→ MW/LW

Preset station recall	2 seconds or less
Broadcast station preset memory	2 seconds or more

Note:

- Up to 12 FM stations (6 in F1 (FM1) and F2 (FM2)) and 6 MW/LW stations can be stored in memory.
- You can also use the \blacktriangle or \checkmark buttons to recall broadcast stations memorized in buttons 1 through 6.

Basic Operation

Basic Operation of Built-in CD Player

Note: **CD Loading Slot** Note: (Refer to page 5.) • The built-in CD player plays one standard 12 cm or 8 cm (single) CD at a time. Do not use an adapter when playing 8 cm CD. · Don't insert any materials except for CD into CD loading slot. **Play Time Indicator** Track Number Indicator 0224 (1)2 30 04 5 SRC 1

Track Search and Fast Forward/Reverse

 You can select between Track Search or Fast Forward/Reverse by pressing the \triangleleft button for a different length of time.

Track Search	0.5 seconds or less
Fast Forward/Reverse	Continue pressing

Note:

- If a disc cannot be inserted fully or playback fails, make sure the recorded side is down. Push the EJECT button and check the disc for damage before reinserting it.
- If a disc is inserted with the recorded side up, it will be ejected automatically after a few moments.
- If the built-in CD player cannot operate properly, an error message (such as "ERROR-14") appears on the display. Refer to "Built-in CD Player's Error Message" on page 27.

Eject

- · The CD function can be turned ON/OFF with the disc remaining in this product.
- · A disc left partially inserted after ejection may incur damage or fall out.

Tuner Operation

Local Seek Tuning

This function selects only stations with especially strong signals.

• Switch the Local ON/OFF with the LOCAL/BSM button.



Best Stations Memory (BSM)

The BSM function stores stations in memory automatically.

• Press the LOCAL/BSM button for 2 seconds to switch BSM ON.

The stations with the strongest signals will be stored under buttons 1-6 and in order of their signal strength.



• To cancel the process, press the LOCAL/BSM button before memorization is complete.

What is RDS?

RDS (Radio Data System) is a system for transmitting data along with FM programs. This data, which is inaudible, provides a variety of features such as: program service name, program type display, traffic announcement standby, automatic tuning and program type tuning, intended to aid radio listeners in tuning to a desired station.

Note:

- RDS service may not be provided by all stations.
- RDS functions, like AF (Alternative frequencies search) and TA (Traffic Announcement standby), are only active when your radio is tuned to RDS stations.

Program Service Name Display

With this function, the names of networks/stations providing RDS services replace the frequency on the display a few seconds after they are tuned in.

• When you want to know PTY Information or the frequency of the current station, change the display.



Hold for 2 seconds

Each press of the EQ button for 2 seconds selects the display in the following order: Program Service Name \rightarrow PTY Information \rightarrow Frequency

Note:

• After switching displays, if you do not perform an operation within 8 seconds, the Program Service Name is automatically displayed.

PTY Information

PTY (Program Type ID code) information for the currently tuned station appears on the display for 8 seconds. The information is correlated with the list in the section "PTY Function" on page 14.

Note:

- If a PTY code of zero is received from a station, "NONE" will be displayed. This indicates that the station has not defined its program contents.
- If the signal is too weak for this product to pick up the PTY code, "NO PTY" will be displayed.

■ Frequency

The frequency of the current station appears on the display.

AF Function

The AF (Alternative Frequencies search) function is used to search for other frequencies in the same network as the currently tuned station. It automatically returns the receiver to another frequency in the network which is broadcasting a stronger signal when there are problems with reception of the currently tuned station or better reception is possible on a different frequency.

Note:

- AF tunes the receiver only to RDS stations when you use Seek tuning or BSM Auto Memory with the "AF" indicator ON.
- When you recall a preset station, the tuner may update the preset station with a new frequency from the station's AF list. (This is only available when using presets on the FM1 band.) No preset number appears on the display if the RDS data for the station received differs from that for the originally stored station.
- Sound may be temporarily interrupted by another program during an AF frequency search.
- When the tuner is tuned to a non-RDS station, the "AF" indicator flashes.
- AF can be switched ON or OFF independently for each FM band.

Activating/Deactivating the AF Function

AF is set to ON by default.

• Turn AF to OFF.



Hold for 2 seconds

"AF" disappears

To turn AF back ON, repeat the preceding operation.

PI Seek Function

The tuner searches for another frequency broadcasting the same programming. "PI SEEK" appears on the display and the radio volume is muted during a PI Seek. The muting is discontinued after completion of the PI Seek, whether or not the PI Seek has succeeded. If the PI Seek is unsuccessful, the tuner returns to the previous frequency.

PI Seek

If the tuner fails to locate a suitable alternative frequency or if the broadcasting signal is too weak for proper reception, the PI Seek will automatically start.

Auto PI Seek (for preset station)

When preset stations cannot be recalled, as when traveling long distances, this product can be set to perform PI Seek also during preset recall. The default setting for Auto PI Seek is OFF.

Note:

· Refer to "Initial Setting" for details on how to switch Auto PI Seek ON/OFF.

Regional Function

When AF is used to retune the tuner automatically, REG (regional) limits the selection to stations broadcasting regional programs.

Note:

- Regional programming and regional networks are organized differently depending on the country (i.e., they may change according to the hour, state or broadcast area).
- The preset number may disappear on the display if the tuner tunes in a regional station which differs from the originally set station.
- · REG can be switched ON or OFF independently for each FM band.

Activating/Deactivating the REG Function

The REG function is set to ON by default.

• Turn REG to OFF.



Hold for 2 seconds

To turn REG back ON, repeat the preceding operation.

TA Function

The TA (Traffic Announcement standby) function lets you receive traffic announcements automatically, no matter what source you are listening to. The TA function can be activated for either a TP station (a station that broadcasts traffic information) or an EON TP station (a station carrying information which cross-references TP stations).

Activating/Deactivating the TA Function

1. Tune in a TP or EON TP station.

The "TP" indicator lights when the tuner is tuned to a TP station or an EON TP station.

2. Activate the TA function.



The "TA" indicator lights, indicating that the tuner is waiting for traffic announcements. Repeat the preceding operation when no traffic announcement is being received to deactivate the TA function.

Note:

- The system switches back to the original source following traffic announcement reception.
- The TA function can be activated from sources other than tuner if the tuner was last set to the FM band but not if it was last set to the MW/LW band.
- If the tuner was last set to FM, turning on the TA function lets you operate other tuning functions while listening to sources other than tuner.
- Only TP or EON TP stations are tuned in during the Seek Tuning mode when the "TA" indicator is ON.
- Only TP or EON TP stations are stored by BSM when the "TA" indicator is ON.

Canceling Traffic Announcements

• Press the TA button while a traffic announcement is being received to cancel the announcement and return to the original source.



The announcement is canceled but the tuner remains in the TA mode until the TA button is pressed again.

Adjusting the TA Volume

When a traffic announcement begins, the volume adjusts automatically to a preset level to enable you to hear the announcement clearly.

• Set the volume by adjusting it during reception of a traffic announcement.



The newly set volume is stored in memory and recalled for subsequent traffic announcements.

TP Alarm Function

About 30 seconds after the "TP" indicator is extinguished due to a weak signal, a 5 second beep sounds to remind you to select another TP or EON TP station.

• If you are listening to the tuner, tune in another TP station or EON TP station.

In sources other than tuner, the tuner automatically seeks out the TP station with the strongest signal in the current area 10 (or 30)* seconds after "TP" disappears from the display.

* Time taken before Seek begins.

TA function ON	10 seconds
TA, AF functions ON	30 seconds

PTY Function

The PTY function enables you to select stations by the type of programming they broadcast (PTY Search). It also provides automatic tuning to emergency broadcasts (PTY Alarm).

Note:

- · PTY code program types are as follows:
- 1. NEWS: News.
- 2. AFFAIRS: Current affairs.
- 3. INFO: General information and advice.
- SPORT: Sports programs.
- 5. EDUCATE: Educational programs.
- DRAMA: All radio plays and serials.
- 7. CULTURE: Programs concerned with any aspect of national or regional culture.
- 8. SCIENCE: Programs about nature, science and technology.
- 9. VARIED: Light entertainment programs.
- 10. POP MUS: Popular music.
- 11. ROCK MUS: Contemporary modern music.
- 12. EASY MUS: Easy listening music.
- 13. L. CLASS: Light classical music.
- 14. CLASSIC: Serious classical music.
- 15. OTH MUS: Other types of music, which can't be categorized.
- 16. WEATHER: Weather reports/Meteorological information.
- 17. FINANCE: Stock market reports, commerce, trading etc.
- 18. CHILDREN: Children's programs.
- 19. SOCIAL: Social affairs programs.
- 20. RELIGION: Religion affairs programs or services.
- 21. PHONE IN: Phone in based programs.
- 22. TOURING: Travel programs, not for announcements about traffic problem.
- 23. LEISURE: Programs about hobbies and recreational activities.
- 24. JAZZ: Jazz music based programs.
- 25. COUNTRY: Country music based programs.
- 26. NAT MUS: National music based programs.
- 27. OLDIES: Oldies music, 'Golden age' based programs.
- 28. FOLK MUS: Folk music based programs.
- 29. DOCUMENT: Documentary programs.

PTY Search Setting Function

1. Enter the PTY Search setting mode.



The name of a program type appears on the display for 5 seconds.

Note:

- "CURRENT" sets desired PTY to the program type of the current station (only for RDS stations broadcasting PTY information).
- 2. Select one of the PTYs.



3. When the desired programming type appears on the display, return to the normal display.



PTY Search Function

• Initiate a PTY search.



The tuner searches for a station broadcasting the desired PTY.

Note:

- The program of some stations may differ from that indicated by the transmitted PTY.
- If no station broadcasting the selected programming type is found, "NOTFOUND" is displayed for about 2 seconds, and the tuner returns to the original station.

PTY Alarm

PTY Alarm is a special PTY code for announcements regarding emergencies such as natural disasters. When the tuner receives the radio alarm code, "ALARM" appears on the display and the volume adjusts to the TA volume. When the station stops broadcasting the emergency announcement, the system returns to the previous source.



Note:

• The system switches back to the original source following emergency announcement reception.

Canceling Emergency Announcements

• Press the TA button during emergency announcement reception to cancel the announcement and return to the previous source.



Using the Built-in CD Player

Repeat Play

Repeat Play plays the same track repeatedly.

• Switch the Repeat Play ON/OFF with the button 5.



Note:

• If you perform Track Search or Fast Forward/Reverse, Repeat Play is automatically canceled.

Random Play

Random Play plays the tracks on a disc in random order for variety.

• Switch the Random Play ON/OFF with the button 4.



Scan Play

Scan Play plays the first 10 seconds or so of each track on a disc in succession.

- 1. Switch the Scan Play ON with the button 3.
- 2. When you find the desired track, cancel the Scan Play with the button 3.



Note:

• Scan Play is canceled automatically after all the tracks on a disc have been scanned.

Pause

Pause pauses the currently playing track.

• Switch the Pause ON/OFF with the button 6.



ENGLISH

Audio Adjustment

Selecting the Equalizer Curve

You can switch between Equalizer curves.

• Press the EQ button to select the desired Equalizer curve.



Equalizer curve

POWERFUL (powerful) \rightarrow NATURAL (natural) \rightarrow VOCAL (vocal) \rightarrow CUSTOM (custom) \rightarrow EQ FLAT (flat) \rightarrow SPR-BASS (super bass)

Note:

• "CUSTOM" stores an equalizer curve you have made adjustments to. (Refer to "Equalizer Curve Adjustment" on page 20.)

Entering the Audio Menu

With this Menu, you can adjust the sound quality.

Note:

• After entering the Audio Menu, if you do not perform an operation within about 30 seconds, the Audio Menu is automatically canceled.

1. Select the desired mode in the Audio Menu.



Each press changes the Mode ...

2. Operate a mode.

3. Cancel the Audio Menu.



Audio Menu Functions

The Audio Menu features the following functions.

Balance Adjustment (FAD)

This function allows you to select a Fader/Balance setting that provides ideal listening conditions in all occupied seats.

1. Press the AUDIO button and select the Fader/Balance mode (FAD) in the Audio Menu.

Adjust front/rear speaker balance with the ▲/▼ buttons.
 "FAD F15" – "FAD R15" is dis-

played as it moves from front to rear.

3. Adjust left/right speaker balance with the ◀/► buttons.

"BAL L9" – "BAL R9" is displayed as it moves from left to right.

FAI

F

1

Note:

• "FAD 0" is the proper setting when 2 speakers are in use.

Equalizer Curve Adjustment (EQ-L/EQ-M/EQ-H)

You can adjust the currently selected equalizer curve settings as desired. Adjusted equalizer curve settings are memorized in "CUSTOM".

- **1.** Press the AUDIO button and select the Equalizer mode (EQ-L/EQ-M/EQ-H) in the Audio Menu.
- 2. Select the band you want to adjust with the ◄/► buttons.
 EQ-L (low) ↔ EQ-M (mid)
 ↔ EQ-H (high)
- 3. Boost or attenuate the selected band with the ▲/▼ buttons.

The display shows "+6" – "-6".





Note:

• If you make adjustments when a curve other than "CUSTOM" is selected, the newly adjusted curve will replace the previous adjusted curve. Then a new curve with "CUSTOM" appears on the display while selecting the equalizer curve. (Refer to page 18.)

Loudness Adjustment (LOUD)

The Loudness function compensates for deficiencies in the low and high sound ranges at low volume. You can select a desired Loudness level.

- 1. Press the AUDIO button and select the Loudness mode (LOUD) in the Audio Menu.
- Switch the Loudness function ON/OFF with the ▲/▼ buttons.
- 3. Select the desired level with the ◄/► buttons.

 $LOW (low) \leftrightarrow MID (mid) \\ \leftrightarrow HI (high)$



Front Image Enhancer Function (FIE)

The F.I.E. (Front Image Enhancer) function is a simple method of enhancing front imaging by cutting mid- and high-range frequency output from the rear speakers, limiting their output to low-range frequencies. You can select the frequency you want to cut.

Precaution:

- When the F.I.E. function is deactivated, the rear speakers output sound of all frequencies, not just bass sounds. Reduce the volume before disengaging F.I.E. to prevent a sudden increase in volume.
- 1. Press the AUDIO button and select the F.I.E. mode (FIE) in the Audio Menu.
- Switch the F.I.E. function ON/OFF with the ▲/▼ buttons.



3. Select the desired frequency with the *◄/►* buttons.

 $100 \leftrightarrow 160 \leftrightarrow 250 (Hz)$



Note:

- After switching the F.I.E. function ON, select the Fader/Balance mode in the Audio Menu, and adjust front and rear speaker volume levels until they are balanced.
- Switch the F.I.E. function OFF when using a 2-speaker system.

Source Level Adjustment (SLA)

The SLA (Source Level Adjustment) function prevents radical leaps in volume level when switching between sources. Settings are based on the FM volume, which remains unchanged.

- 1. Compare the FM volume with the volume of the other source. (e.g. Built-in CD player)
- 2. Press the AUDIO button and select the SLA mode (SLA) in the Audio Menu.
- 3. Increase or decrease the level with the ▲/▼ buttons.

The display shows "+4" – "-4".



Note:

- Since the FM volume is the control, SLA is not possible in the FM modes.
- The MW/LW volume level, which is different from the FM base setting volume level, can also be adjusted similar to sources other than tuner.

Detaching and Replacing the Front Panel

Theft Protection

The front panel of the head unit is detachable to discourage theft.

Detaching the Front Panel

- 1. Eject the front panel.
- 2. To remove the front panel, pull its right-hand side toward you.

Take care not to grip it tightly or drop it.

3. Use the protective case provided to store/carry the detached front panel.

Replacing the Front Panel

• Replace the front panel by clipping it into place.

Precaution:

- Never use force or grip the display tightly when removing or replacing the front panel.
- Avoid subjecting the front panel to excessive shocks.
- Keep the front panel out of direct sunlight and high temperatures.











Initial Setting

Entering the Initial Setting Menu

With this menu, you can perform initial settings for this product.

- 1. Switch the source OFF.
- 2. Enter the Initial Setting Menu.



Hold for 2 seconds

3. Select a desired mode.



Each press changes the Mode ...

4. Operate a mode.

5. Cancel the Initial Setting Menu.



Note:

• Holding down the AUDIO button for 2 seconds also cancels the Initial Setting Menu.

Initial Setting Menu Functions

The Initial Setting Menu features the following functions.

Changing the FM Tuning Step (STEP)

Normally set at 50 kHz during Seek tuning in the FM mode, the tuning step changes to 100 kHz when the AF or TA mode is activated. It may be preferable to set tuning step to 50 kHz in the AF mode.

- 1. Press the AUDIO button and select the FM Tuning Step mode (STEP) in the Initial Setting Menu.
- 2. Select the desired tuning step with the *◄/►* buttons.



Note:

- The tuning step remains set at 50 kHz during Manual tuning.
- The tuning step returns to 100 kHz if the battery is temporarily disconnected.

Switching the Auto PI Seek (A-PI)

During Preset Station PI Seek operation, you can switch the Auto PI Seek function ON/OFF. (Refer to "PI Seek Function" on page 11.)

- 1. Press the AUDIO button and select the Auto PI Seek mode (A-PI) in the Initial Setting Menu.
- Switch the Auto PI Seek ON/OFF with the ▲/▼ buttons.



Other Functions

Cellular Telephone Muting

Sound from this system is muted automatically when a call is made or received using a cellular telephone connected to this product.

• The sound is turned off, "MUTE" is displayed and no audio adjustment is possible. Operation returns to normal when the phone connection is ended.



CD Player and Care

Precaution

- Play only CDs bearing the Compact Disc Digital Audio mark.
- This product is designed for use with conventional, fully circular CDs only. Use of shaped CDs are not recommended for this product.
- Check all CDs before playing and discard cracked, scratched or warped discs.
- Normal playback of CD-R discs other than those recorded with a music CD recorder may not be possible.
- Playback of music CD-R discs, even those recorded with a music CD recorder, may not be possible with this product due to disc characteristics or scratches or dirt on the disc. Dirt or condensation on the lens inside this product may also prevent playback.
- Titles and other text information recorded on a CD-R disc may not be displayed by this product.
- Read the precautions with the CD-R discs before using.
- Wipe dirty or damp discs outward from the center with a soft cloth.
- Avoid touching the recorded (iridescent) surface when handling discs.
- Store discs in their cases when not in use.
- Keep discs out of direct sunlight and high temperatures.
- Do not affix labels or apply chemicals to discs.
- Condensation may collect inside the player when using the heater in cold weather, interfering with playback. Turn it off for an hour or so and wipe damp discs with a soft cloth.
- Road shocks may interrupt CD playback.





Built-in CD Player's Error Message

When problems occur with CD playback, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, contact your dealer or your nearest PIONEER Service Center.

Message	Possible cause	Recommended action
ERROR- 11, 12, 17, 30	Dirty disc.	Clean the disc.
ERROR- 11, 12, 17, 30	Scratched disc.	Replace the disc.
ERROR- 14	Unrecorded CD.	Check the disc.
ERROR- 10, 11, 12, 14, 17, 30, A0	Electrical or mechanical problem.	Turn the ignition ON and OFF, or switch to a different source, then back to the CD player.
HEAT	CD player overheating.	Discontinue play until the machine temperature drops.

Specifications

General

Power source 14.4 V DC (10.8 - 15.1 V allowable)
Grounding system Negative type
Max. current consumption 10.0 A
Dimensions
(mounting size) 178 (W) × 50 (H) × 159 (D) mm
(front face)
Weight 1.4 kg

Amplifier

Maximum power output
(DEH-2330R, DEH-2300R, DEH-2300RB)
(DEH-1330R, DEH-1300R) 45 W × 4

Continuous power output

(DEH-2330R, DEH-2300R, DEH-2300RB)

	27 W × 4
(DEH-1330R, DEH-1300R)	25 W × 4
(DIN45324	+B = 14.4 V

Load impedance
Preout maximum output
level/output impedance 2.2 V/1 kΩ
Equalizer (3-Band Equalizer)
(Low) Level: ±12 dB
(Mid) Level: ±12 dB
(High) Level: ±12 dB
Loudness contour
(Low) +3.5 dB (100 Hz), +3 dB (10 kHz)
(Mid) +10 dB (100 Hz), +6.5 dB (10 kHz)
(High) +11 dB (100 Hz), +11 dB (10 kHz)
(volume: -30 dB)

CD player

System	Compact disc audio system
Usable discs	Compact disc
Signal format	Sampling frequency: 44.1 kHz
	Number of quantization bits: 16; linear
Frequency characte	ristics 5 – 20,000 Hz (±1 dB)
Signal-to-noise rati	o 94 dB (1 kHz) (IEC-A network)
Dynamic range	
Number of channel	s

FM tuner

Frequency range	
Usable sensitivity	
	$0.8 \ \mu V/75 \ \Omega$, mono, S/N: 30 dB)
50 dB quieting sensitivity	15 dBf (1.5 μ V/75 Ω , mono)
Signal-to-noise ratio	
Distortion	0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response	30 – 15,000 Hz (±3 dB)
Stereo separation	40 dB (at 65 dBf, 1 kHz)

MW tuner

Frequency range .	531 – 1,602 kHz (9 kHz)
Usable sensitivity	
Selectivity	

LW tuner

Frequency range	153 – 281 kHz
Usable sensitivity	30 µV (S/N: 20 dB)
Selectivity	50 dB (±9 kHz)

Note:

• Specifications and the design are subject to possible modification without notice due to improvements.

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