

CD RDS RECEIVER

Operation Manual

DEH-2220UB
DEH-2200UBB
DEH-2200UB

Visit www.pioneer.co.uk (or www.pioneer.eu)
to register your product

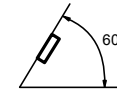
Pioneer

ENGLISH

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Important

- Check all connections and systems before final installation.
- Do not use unauthorized parts as this may cause malfunctions.
- Consult your dealer if installation requires drilling of holes or other modifications to the vehicle.
- Do not install this unit where:
 - it may interfere with operation of the vehicle.
 - it may cause injury to a passenger as a result of a sudden stop.
- The semiconductor laser will be damaged if it overheats. Install this unit away from hot places such as near the heater outlet.
- Optimum performance is obtained when the unit is installed at an angle of less than 60°.



DIN front/rear mount

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

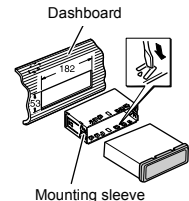
- Use commercially available parts when installing.

DIN Front-mount

1. Insert the mounting sleeve into the dashboard.

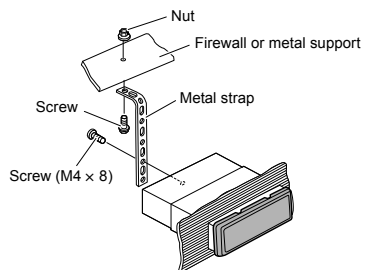
For installation in shallow spaces, use the supplied mounting sleeve. If there is enough space, use the mounting sleeve that came with the vehicle.

2. Secure the mounting sleeve by using a screwdriver to bend the metal tabs (90°) into place.



Installation

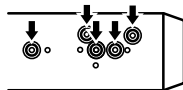
3. Install the unit as illustrated.



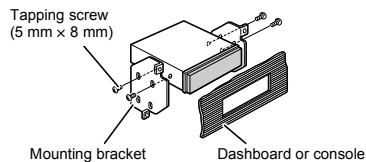
- Make sure that the unit is installed securely in place. An unstable installation may cause skipping or other malfunctions.

DIN Rear-mount

1. Determine the appropriate position where the holes on the bracket and the side of the unit match.

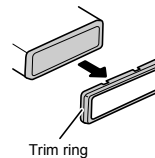


2. Tighten two screws on each side.

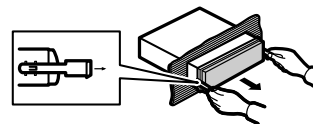


Removing the unit

1. Extend top and bottom of the trim ring outwards to remove the trim ring. (When reattaching the trim ring, point the side with the groove down.)

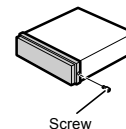


- Releasing the front panel allows easier access to the trim ring.
2. Insert the supplied extraction keys into both sides of the unit until they click into place.
 3. Pull the unit out of the dashboard.

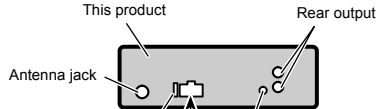
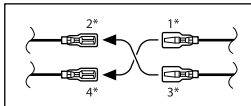


Fastening the front panel

If you do not plan to detach the front panel, the front panel can be fastened with the supplied screw.



Note
Depending on the kind of vehicle, the function of 2* and 4* may be different. In this case, be sure to connect 1* to 4* and 3* to 2*.



Wired remote input
Hard-wired remote control adaptor can be connected (sold separately).

Connect leads of the same color to each other.

Yellow (2*) Back-up (or accessory)
Yellow (1*) Connect to the constant 12 V supply terminal.

Red (4*) Accessory (or back-up)
Red (3*) Connect to terminal controlled by ignition switch (12 V DC).

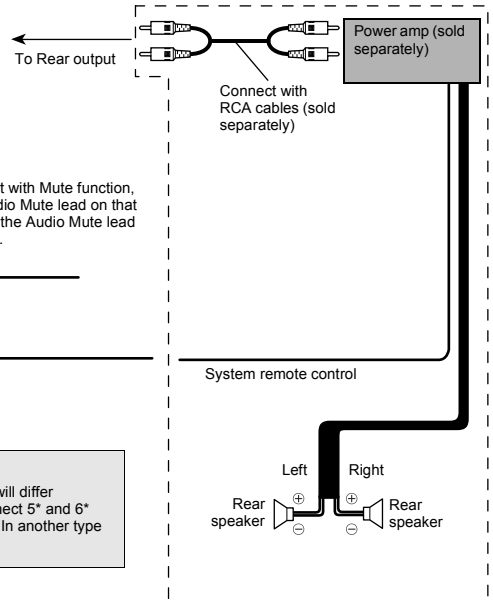
Black (chassis ground)
Connect to a clean, paint-free metal location.

Blue/white
Connect to system control terminal of the power amp (max. 300 mA 12 V DC).

Blue/white (6*)
Connect to auto-antenna relay control terminal (max. 300 mA 12 V DC).

Blue/white (5*)
The pin position of the ISO connector will differ depending on the type of vehicle. Connect 5* and 6* when Pin 5 is an antenna control type. In another type of vehicle, never connect 5* and 6*.

Yellow/black
If you use an equipment with Mute function, wire this lead to the Audio Mute lead on that equipment. If not, keep the Audio Mute lead free of any connections.



Perform these connections when using the optional amplifier.

ISO connector
In some vehicles, the ISO connector may be divided into two. In this case, be sure to connect to both connectors.

- Speaker leads**
- White: Front left ⊕
 - White/black: Front left ⊖
 - Gray: Front right ⊕
 - Gray/black: Front right ⊖
 - Green: Rear left ⊕
 - Green/black: Rear left ⊖
 - Violet: Rear right ⊕
 - Violet/black: Rear right ⊖

Connections

Important

- When installing this unit in a vehicle without an ACC (accessory) position on the ignition switch, failure to connect the red cable to the terminal that detects operation of the ignition key may result in battery drain.



ACC position



No ACC position

- Use of this unit in conditions other than the following could result in fire or malfunction.
 - Vehicles with a 12-volt battery and negative grounding.
 - Speakers with 50 W (output value) and 4 ohm to 8 ohm (impedance value).
- To prevent a short-circuit, overheating or malfunction, be sure to follow the directions below.
 - Disconnect the negative terminal of the battery before installation.
 - Secure the wiring with cable clamps or adhesive tape. Wrap adhesive tape around wiring that comes into contact with metal parts to protect the wiring.
 - Place all cables away from moving parts, such as the gear shift and seat rails.
 - Place all cables away from hot places, such as near the heater outlet.
 - Do not connect the yellow cable to the battery by passing it through the hole to the engine compartment.
 - Cover any disconnected cable connectors with insulating tape.
 - Do not shorten any cables.
 - Never cut the insulation of the power cable of this unit in order to share the power with other devices. The current capacity of the cable is limited.
 - Use a fuse of the rating prescribed.
 - Never wire the negative speaker cable directly to ground.
 - Never band together negative cables of multiple speakers.
- When this unit is on, control signals are sent through the blue/white cable. Connect this cable to the system remote control of an external power amp or the vehicle's auto-antenna relay control terminal (max. 300 mA 12 V DC). If the vehicle is equipped with a glass antenna, connect it to the antenna booster power supply terminal.
- Never connect the blue/white cable to the power terminal of an external power amp. Also, never connect it to the power terminal of the auto antenna. Doing so may result in battery drain or a malfunction.
- The black cable is ground. Ground cables for this unit and other equipment (especially, high-current products such as power amps) must be wired separately. If they are not, an accidental detachment may result in a fire or malfunction.

Before You Start

Thank you for purchasing this PIONEER product

To ensure proper use, please read through this manual before using this product. It is especially important that you read and observe **WARNINGS** and **CAUTIONS** in this manual.

Please keep the manual in a safe and accessible place for future reference.



If you want to dispose this product, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery and recycling.

Private households in the member states of the EU, in Switzerland and Norway may return their used electronic products free of charge to designated collection facilities or to a retailer (if you purchase a similar new one).

For countries not mentioned above, please contact your local authorities for the correct method of disposal.

By doing so you will ensure that your disposed product undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health.

In case of trouble

Should this unit fail to operate properly, please contact your dealer or nearest authorized PIONEER Service Station.

About this unit

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

⚠ CAUTION

- Do not allow this unit to come into contact with liquids. Electrical shock could result. Also, damage to this unit, smoke, and overheating could result from contact with liquids.
- "CLASS 1 LASER PRODUCT"
This product contains a laser diode of higher class than 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.
- The Pioneer CarStereo-Pass is for use only in Germany.
- Always keep the volume low enough to hear outside sounds.
- Avoid exposure to moisture.
- If the battery is disconnected or discharged, any preset memory will be erased.

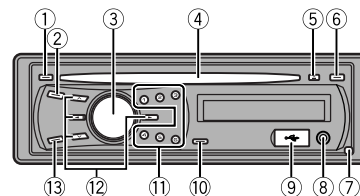
Sound muting

Sound is muted automatically when:

- A call is made or received using a cell phone connected to this unit.
- Voice guidance is output from a connected Pioneer navigation unit.

The sound is turned off, **MUTE** is displayed and no audio adjustments, except volume control, are possible. Operation returns to normal when the phone connection or the voice guidance is ended.

Head unit



Part	Part
① DISP/↔/SCRL	⑧ AUX input jack (3.5 mm stereo jack)
② SRC/OFF	⑨ USB port
③ MULTI-CONTROL (M.C.)	⑩ 🔍 (list)
④ Disc loading slot	⑪ 1 to 6
⑤ ▲ (eject)	⑫ ▲/▼/◀/▶
⑥ TA/AF	⑬ BAND/ESC
⑦ Detach button	

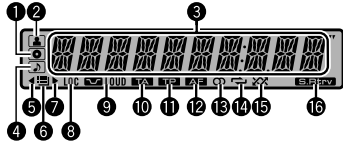
⚠ CAUTION

Use an optional Pioneer USB cable (CD-U50E) to connect the USB audio player/USB memory to the USB port. Since the USB audio player/USB memory is projected forward from the unit, it is dangerous to connect directly.

Do not use the unauthorized product.

Operating this unit

Display indication



Indicator	State
1	The disc (album) name is displayed.
2	The disc (track) artist name is displayed.
3 Main display section	<ul style="list-style-type: none">Tuner: band and frequencyRDS: program service name, PTY information and other literal informationBuilt-in CD player and USB: elapsed playback time and text information
4	The track (song) name is displayed. A playable audio file has been selected while operating the list.
5	An upper tier of folder or menu exists.
6	The list function is operated.
7	A lower tier of folder or menu exists.
8 LOC	The local seek tuning is on.
9	The loudness is on.
10	TA function is on.
11	A TP station is tuned in.
12	AF (alternative frequencies search) function is on.
13	The selected frequency is being broadcasted in stereo.
14	Track or folder repeat is on.
15	Random play is on.
16	The sound retriever function is on. (sound retriever)

Basic Operations

Important

- Handle gently when removing or attaching the front panel.
- Avoid subjecting the front panel to excessive shock.
- Keep the front panel out of direct sunlight and high temperatures.
- Remove any cables and devices attached to this unit before detaching the front panel to avoid damage to the device or vehicle interior.

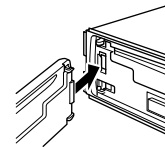
Removing the front panel to protect your unit from theft

1. Press the detach button to release the front panel.
2. Grab the front panel and remove.
3. Put the front panel into the provided protective case for safe keeping.

Re-attaching the front panel

1. Slide the front panel to the left until it clicks.

Front panel and the head unit are connected on the left side. Make sure that the front panel has been properly connected to the head unit.



2. Press the right side of the front panel until it is firmly seated.

If you can't attach the front panel to the head unit successfully, try again. However, forcing the front panel into place may result in damage.

Turning the unit on

- Press SRC/OFF to turn the unit on.

Turning the unit off

- Press SRC/OFF and hold until the unit turns off.

Selecting a source

- Press SRC/OFF to cycle between:
TUNER (tuner) – CD (built-in CD player) – USB (USB) – AUX (AUX)

Adjusting the volume

- Turn M.C. to adjust volume.

Note

- When this unit's blue/white lead is connected to the vehicle's auto-antenna relay control terminal, the vehicle's antenna extends when this unit's source is turned on. To retract the antenna, turn the source off.

Menu operations identical for function settings/audio adjustments/initial settings/lists

Returning to the previous display

Returning to the previous list (the folder one level higher)

- Press DISP/↵/SCRL.

Returning to the main menu

Returning to the top tier of list

- Press and hold DISP/↵/SCRL.

Returning to the ordinary display

Canceling the initial setting menu

- Press BAND/ESC.

Returning to the ordinary display from the list

- Press BAND/ESC or Q.

Tuner

Basic Operations

Selecting a band

- Press BAND/ESC until the desired band (F1, F2 for FM or MW/LW) is displayed.

Manual tuning (step by step)

- Press ◀ or ▶.

Seeking

- Press and hold ◀ or ▶, and then release.

You can cancel seek tuning by briefly pressing ◀ or ▶.

While pressing and holding ◀ or ▶, you can skip stations. Seek tuning starts as soon as you release ◀ or ▶.

Note

- This unit's AF (alternative frequencies search) function can be turned on and off. AF should be off for normal tuning operation (refer to page 9).

Storing and recalling stations

You can easily store up to six stations for each band as presets.

- **When you find a station that you want to store in memory, press one of the preset tuning buttons (1 to 6) and hold until the preset number stops flashing.** Stored radio station frequency can be recalled by pressing the preset tuning button.
 - You can also recall stored radio stations by pressing ▲ or ▼ during the frequency display.

Switching the RDS display

RDS (radio data system) contains digital information that helps search for the radio stations.

- Press DISP/↵/SCRL.
Program service name – PTY information – Frequency
 - PTY information and the frequency appear on the display for eight seconds.

Operating this unit

PTY list

NEWS (News), **AFFAIRS** (Current affairs), **INFO** (Information), **SPORT** (Sports), **WEATHER** (Weather), **FINANCE** (Finance), **POP MUS** (Popular music), **ROCK MUS** (Rock music), **EASY MUS** (Easy listening), **OTH MUS** (Other music), **JAZZ** (Jazz), **COUNTRY** (Country music), **NAT MUS** (National music), **OLDIES** (Oldies music), **FOLK MUS** (Folk music), **L. CLASS** (Light classical), **CLASSIC** (Classical), **EDUCATE** (Education), **DRAMA** (Drama), **CULTURE** (Culture), **SCIENCE** (Science), **VARIED** (Varied), **CHILDREN** (Children's), **SOCIAL** (Social affairs), **RELIGION** (Religion), **PHONE IN** (Phone in), **TOURING** (Travel), **LEISURE** (Leisure), **DOCUMENT** (Documentaries)

Selecting alternative frequencies

When the tuner cannot get a good reception, the unit automatically searches for a different station in the same network.

- Press and hold **TA/AF** to turn **AF** on or off.

Using PI Seek

If the tuner cannot find a suitable station, or reception status deteriorates, the unit automatically searches for a different station with the same programming. During the search, **PI SEEK** is displayed and sound is muted.

Using Auto PI Seek for preset stations

When preset stations cannot be recalled, the unit can be set to perform PI Seek during preset recall.

- The default setting for Auto PI Seek is off. Refer to "AUTO-PI (auto PI seek)" on page 13.

Receiving traffic announcements

TA (traffic announcement standby) lets you receive traffic announcements automatically, regardless of the source you are listening to.

1. **Tune in a TP or enhanced other network's TP station.**
2. **Press TA/AF to turn traffic announcement standby on or off.**
3. **Use M.C. to adjust the TA volume when a traffic announcement begins.**

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

4. **Press TA/AF while a traffic announcement is being received to cancel the announcement.**

The tuner returns to the original source but remains in the standby mode until **TA/AF** is pressed again.

Function settings

1. **Press M.C. to display the main menu.**
2. **Turn M.C. to change the menu option and press to select FUNCTION.**
3. **Turn M.C. to select the function.**

After selecting, perform the following procedures to set the function.

BSM (best stations memory)

BSM (best stations memory) automatically stores the six strongest stations in the order of their signal strength.

- **Press M.C. to turn BSM on.**

To cancel, press M.C. again.

REGION (regional)

When AF is used, the regional function limits the selection of stations broadcasting regional programs.

- **Press M.C. to turn the regional function on or off.**

LOCAL (local seek tuning)

Local seek tuning lets you tune in only those radio stations with sufficiently strong signals for good reception.

1. **Press M.C. to display the setting mode.**
2. **Turn M.C. to select the desired setting.**
FM: **OFF – LEVEL 1 – LEVEL 2 – LEVEL 3 – LEVEL 4**
MW/LW: **OFF – LEVEL 1 – LEVEL 2**

Larger setting number is higher level. The highest level setting allows reception of only the strongest stations, while lower settings let you receive progressively weaker stations.

3. **Press M.C. to confirm the selection.**

TA (traffic announcement standby)

- **Press M.C. to turn traffic announcement standby on or off.**

AF (alternative frequencies search)

- **Press M.C. to turn AF on or off.**

Notes

- If MW/LW band is selected, only **BSM** or **LOCAL** is available.
- Operation is complete even if the menu is cancelled before being confirmed.

CD/CD-R/CD-RW and USB storage devices

Basic Operations

Playing a CD/CD-R/CD-RW

1. Insert the disc, label side up, into the disc loading slot.
2. If a disc has already been inserted, press SRC/OFF to select the built-in CD player.

Ejecting a CD/CD-R/CD-RW

- Press **▲**.

Playing songs on a USB storage device

- Open the USB connector cover and plug in the USB storage device using a USB cable.

Stop playing a USB storage device

- You may disconnect the USB storage device at anytime.

Selecting a folder

- Press **▲** or **▼**.

Selecting a track

- Press **◀** or **▶**.

Fast forwarding or reversing

- Press and hold **◀** or **▶**.

Returning to root folder

- Press and hold **BAND/ESC**.

Switching between compressed audio and CD-DA

- Press **BAND/ESC**.

Notes

- When playing compressed audio, there is no sound during fast forward or reverse.
- USB portable audio players that can be charged via USB will be recharged when plugged in and the ignition switch is set to ACC or ON.
- Disconnect USB storage device from unit when not in use.
- If plug and play is on and a USB storage device is present, depending on the type of device, the source may switch to **USB** automatically when you turn on the engine. Please change plug and play setting as necessary. Refer to "USB (plug and play)" on page 13.

Displaying text information

Selecting the desired text information

- Press **DISP/↔/SCRL**.

CD TEXT discs: Play time – disc title – disc artist name – track title – track artist name

WMA/MP3: Play time – folder name – file name – track title – artist name – album title – comment – bit rate – folder and track numbers

WAV: Play time – folder name – file name – sampling frequency – folder and track numbers

Scrolling the text information to the left

- Press and hold **DISP/↔/SCRL**.

Notes

- Incompatible text stored with the audio file may not be displayed or may be displayed incorrectly.
- Depending on the version of iTunes used to write MP3 files onto a disc, comment information may be incorrectly displayed.
- When playing back VBR (variable bit rate)-recorded WMA files, the average bit rate value is displayed.
- When playing back VBR (variable bit rate)-recorded MP3 files, **VBR** is displayed instead of bit rate value.

Selecting and playing files/tracks from the name list

1. Press **Q** to switch to the file/track name list mode.
2. Use **M.C.** to select the desired file name (or folder name).

Changing file or folder name

- Turn **M.C.**

Playing

- When a file or track is selected, press **M.C.**

Seeing a list of files (or folders) in the selected folder

- When a folder is selected, press **M.C.**

Playing a song in the selected folder

- When a folder is selected, press and hold **M.C.**

Note

- Track title list will display the list of track titles on a CD TEXT disc.

Operating this unit

Advanced operations using special buttons

Selecting a repeat play range

- Press 6/↔ to cycle between the following:

CD/CD-R/CD-RW

- DISC – Repeat all tracks
- TRACK – Repeat the current track
- FOLDER – Repeat the current folder

USB audio player/USB memory

- TRACK – Repeat the current file
- FOLDER – Repeat the current folder
- ALL – Repeat all files

Playing tracks in random order

- Press 5/⌘ to turn random play on or off.

Tracks in a selected repeat range are played in random order.

Pausing playback

- Press 2/PAUSE to pause or resume.

Enhancing compressed audio and restoring rich sound (sound retriever)

- Press 1/S.Rtrv to cycle between:

OFF (off) – 1 – 2

1 is effective for low compression rates, and 2 is effective for high compression rates.

Function settings

1. Press M.C. to display the main menu.
2. Turn M.C. to change the menu option and press to select FUNCTION.
3. Turn M.C. to select the function.

After selecting, perform the following procedures to set the function.

REPEAT (repeat play)

1. Press M.C. to display the setting mode.
2. Turn M.C. to select a repeat play range.

For details, refer to "Selecting a repeat play range" on page 11.

3. Press M.C. to confirm the selection.

RANDOM (random play)

- Press M.C. to turn random play on or off.

PAUSE (pause)

- Press M.C. to pause or resume.

S.RTRV (sound retriever)

Automatically enhances compressed audio and restores rich sound.

1. Press M.C. to display the setting mode.
2. Turn M.C. to select the desired setting.

For details, refer to "Enhancing compressed audio and restoring rich sound (sound retriever)" on page 11.

3. Press M.C. to confirm the selection.

Note

- Operation is complete even if the menu is cancelled before being confirmed.

Audio Adjustments

1. Press **M.C.** to display the main menu.
2. Turn **M.C.** to change the menu option and press to select **AUDIO**.
3. Turn **M.C.** to select the audio function.

After selecting, perform the following procedures to set the audio function.

FAD/BAL (fader/balance adjustment)

You can change the fader/balance setting.

1. Press **M.C.** to display the setting mode.
2. Press **M.C.** to cycle between fader and balance.
3. Turn **M.C.** to adjust speaker balance.

Adjustment range (front/rear): **F15** to **R15**

Adjustment range (left/right): **L15** to **R15**

FR 0 is the proper setting when only two speakers are used.

EQUALIZER (equalizer recall)

There are six stored settings **DYNAMIC** (dynamic), **VOCAL** (vocal), **NATURAL** (natural), **CUSTOM** (custom), **FLAT** (flat) and **POWERFUL** (powerful).

- When **FLAT** is selected no adjustments are made to the sound.

1. Press **M.C.** to display the setting mode.
2. Turn **M.C.** to select the equalizer.

DYNAMIC – VOCAL – NATURAL – CUSTOM – FLAT – POWERFUL

3. Press **M.C.** to confirm the selection.

TONE CTRL (equalizer adjustment)

You can adjust the bass/mid/treble level.

- Adjusted equalizer curve settings are stored in **CUSTOM**.

1. Press **M.C.** to display the setting mode.
2. Press **M.C.** to select **BASS** (bass)/**MID** (mid)/**TREBLE** (treble).
3. Turn **M.C.** to adjust the level.

Adjustment range: **+6** to **-6**

LOUDNESS (loudness)

Loudness compensates for deficiencies in the low- and high-frequency ranges at low volume.

1. Press **M.C.** to display the setting mode.
2. Turn **M.C.** to select the desired setting.
OFF (off) – **LOW**(low) – **HIGH** (high)
3. Press **M.C.** to confirm the selection.

SLA (source level adjustment)

SLA (Source level adjustment) lets you adjust the volume level of each source to prevent radical changes in volume when switching between sources.

- Settings are based on the FM volume level, which remains unchanged.
Before adjusting source levels, compare the FM volume level with the level of the source you wish to adjust.
- The MW/LW volume level can also be adjusted with source level adjustments.

1. Press **M.C.** to display the setting mode.
2. Turn **M.C.** to adjust the source volume.

Adjustment range: **+4** to **-4**

3. Press **M.C.** to confirm the selection.

Notes

- When selecting FM as the source, you cannot switch to **SLA**.
- Operation is complete even if the menu is cancelled before being confirmed.

Initial Settings

Important

Power save mode is cancelled if the vehicle battery is disconnected and will need to be turned back on once the battery is reconnected. When power save is off, depending on connection methods, the unit may continue to draw power from the battery if your vehicle's ignition switch doesn't have an ACC (accessory position).

1. Press **SRC/OFF** and hold until the unit turns off.
2. Press **SRC/OFF** and hold until **FM STEP** appears in the display.
3. Turn **M.C.** to select the initial setting.

After selecting, perform the following procedures to set the initial setting.

Operating this unit

FM STEP (FM tuning step)

Normally the FM tuning step employed by seek tuning is 50 kHz. When AF or TA is on, the tuning step automatically changes to 100 kHz. It may be preferable to set the tuning step to 50 kHz when AF is on.

- The tuning step remains at 50 kHz during manual tuning.

1. Press **M.C.** to display the setting mode.
2. Turn **M.C.** to select the **FM tuning step**.
50 KHZ (50 kHz) – **100 KHZ** (100 kHz)
3. Press **M.C.** to confirm the selection.

AUTO-PI (auto PI seek)

The unit can automatically search for a different station with the same programming, even during preset recall.

- Press **M.C.** to turn **Auto PI seek on or off**.

AUX (auxiliary input)

Activate this setting when using auxiliary device connected to this unit.

- Press **M.C.** to turn **AUX on or off**.

USB (plug and play)

This setting allows you to switch your source to **USB** automatically.

- Press **M.C.** to turn the **plug and play on or off**.
ON – When USB storage device is connected, the source is automatically switched to USB. If you disconnect your USB storage device, this unit's source is turned off.
OFF – When USB storage device is connected, the source is not switched to USB automatically. Please change the source to USB manually.

TITLE (multi language)

This unit can display the text information of a compressed audio file even if they are embedded in a Western European or Russian language.

- If the embedded language and the selected language setting are not the same, text information may not be displayed properly.
- Some characters may not be displayed properly.

1. Press **M.C.** to display the setting mode.
2. Turn **M.C.** to select the desired setting.
EUROPEAN (European) – **RUSSIAN** (Russian)
3. Press **M.C.** to confirm the selection.

PW SAVE (power saving)

Switching this function on enables you to reduce the consumption of battery power.

- Turning on the source is the only operation allowed when this function is on.
- Press **M.C.** to turn the **power save on or off**.

Note

- Operation is complete even if the menu is cancelled before being confirmed.

Using the AUX source

1. Insert the stereo mini plug into the **AUX input jack**.
2. Press **SRC/OFF** to select **AUX** as the source.

Note

- AUX cannot be selected unless the auxiliary setting is turned on. For more details, refer to "AUX (auxiliary input)" on page 13.

Troubleshooting

Symptom	Cause	Action
The display automatically returns to the ordinary display.	You did not perform any operation within about 30 seconds.	Perform operation again.
The repeat play range changes unexpectedly.	Depending on the repeat play range, the selected range may change when selecting another folder or track, or when fast forwarding/ reversing.	Select the repeat play range again.
A subfolder is not played back.	Subfolders cannot be played when FOLDER (folder repeat) is selected.	Select another repeat play range.
NO XXXX appears when a display is changed (e.g., NO TITLE).	No text information embedded	Switch the display or play another track/file.
The unit is malfunctioning. There is interference.	You are using a device, such as a cell phone, that transmits electromagnetic waves near the unit.	Move electrical devices that may be causing the interference away from the unit.

Error messages

When you contact your dealer or your nearest Pioneer Service Center, be sure to note the error message.

Built-in CD Player

Message	Cause	Action
ERROR-11, 12, 17, 30	Dirty disc	Clean disc.
	Scratched disc	Replace disc.
ERROR-10, 11, 12, 15, 17, 30, A0	Electrical or mechanical	Turn the ignition switch OFF and back ON, or switch to a different source, then back to the CD player.
ERROR-15	The inserted disc is blank	Replace disc.
ERROR-22, 23	Unsupported CD format	Replace disc.

Built-in CD Player

Message	Cause	Action
FRMT READ	There is sometimes a delay between the start of playback and when you start to hear any sound	Wait until the message disappears and you hear sound.
NO AUDIO	The inserted disc does not contain any playable files	Replace disc.
SKIPPED	The inserted disc contains DRM protected WMA files	Replace disc.
PROTECT	All the files on the inserted disc are embedded with DRM	Replace disc.

USB storage device

Message	Cause	Action
NO DEVICE	When plug and play is off, no USB storage device is connected.	<ul style="list-style-type: none"> • Turn the plug and play on. • Connect a compatible USB storage device.
FRMT READ	There is sometimes a delay between the start of playback and when you start to hear any sound	Wait until the message disappears and you hear sound.
NO AUDIO	No songs	Transfer the audio files to the USB storage device and connect.
	The connected USB storage device has security enabled	Follow the USB storage device instructions to disable the security.
SKIPPED	The connected USB storage device contains WMA files embedded with Windows Media™ DRM 9/10	Play an audio file not embedded with Windows Media DRM 9/10.
PROTECT	All the files in the USB storage device are embedded with Windows Media DRM 9/10	Transfer audio files not embedded with Windows Media DRM 9/10 to the USB storage device and connect.
N/A USB	The USB storage device connected to is not supported by this unit.	Connect a USB Mass Storage Class compliant device.
CHECK USB	The USB connector or USB cable has short-circuited.	Check that the USB connector or USB cable is not caught in something or damaged.
	The connected USB storage device consumes more than 500 mA (maximum allowable current).	Disconnect the USB storage device and do not use it. Turn the ignition switch to OFF, then to ACC or ON and then connect only compliant USB storage devices.

Additional Information

Message	Cause	Action
ERROR-18	Not compatible USB device	Disconnect your device and replace it with a compatible USB storage device.
ERROR-19	Communication failure	Perform one of the following operations. – Turn the ignition switch OFF and back ON. – Disconnect or eject the USB storage device. – Change to a different source. Then, return to the USB source.
ERROR-23	USB storage device is not formatted with FAT16 or FAT32	USB storage device should be formatted with FAT16 or FAT32.

Handling guideline

Discs and player

- Use only discs featuring either of following two logos.



- Use 12-cm disc. Do not use 8-cm disc or an adapter for 8-cm disc.
- Use only conventional, fully circular discs. Do not use shaped discs.



- Do not insert anything other than a CD into the CD loading slot.
- Do not use cracked, chipped, warped, or otherwise damaged discs as they may damage the player.

- Unfinalized CD-R/CD-RW disc playback is not possible.
- Do not touch the recorded surface of the discs.
- Store discs in their cases when not in use.
- Avoid leaving discs in excessively hot environments including under direct sunlight.
- Do not attach labels, write on or apply chemicals to the surface of the discs.
- To clean a CD, wipe the disc with a soft cloth outward from the center.
- Condensation may temporarily impair the player's performance. Leave it to adjust to the warmer temperature for about one hour. Also, wipe any damp discs with a soft cloth.
- Playback of discs may not be possible because of disc characteristics, disc format, recorded application, playback environment, storage conditions, and so on.
- Road shocks may interrupt disc playback.
- Read the precautions for discs before using them.

USB storage device

- Address any questions you have about your USB storage device to the manufacturer of the device.
- Connections via a USB hub are not supported.
- Do not connect anything other than a USB storage device.
- Do not leave the USB storage device in any place with high temperatures.
- Firmly secure the USB storage device when driving. Do not let the USB storage device fall onto the floor, where it may become jammed under the brake or accelerator pedal.
- Depending on the USB storage device, the following problems may occur.
 - Operations may vary.
 - This unit may not recognize the storage device.
 - The file may not be played back properly.
 - The device may generate noise in the radio.

DualDiscs

DualDiscs are two-sided discs that have a recordable CD for audio on one side and a recordable DVD for video on the other.

Since the CD side of DualDiscs is not physically compatible with the general CD standard, it may not be possible to play the CD side with this unit.

Frequent loading and ejecting of a DualDisc may result in scratches on the disc. Serious scratches can lead to playback problems on this unit. In some cases, a DualDisc may become stuck in the disc loading slot and will not eject. To prevent this, we recommend you refrain from using DualDisc with this unit.

Please refer to the information from the disc manufacturer for more detailed information about DualDiscs.

Compressed audio compatibility (disc, USB)**WMA**

- File extension: .wma
- Bit rate: 48 kbps to 320 kbps (CBR), 48 kbps to 384 kbps (VBR)
- Sampling frequency: 32 kHz, 44.1 kHz, 48 kHz
- Windows Media Audio Professional, Lossless, Voice/DRM Stream/Stream with video: No

MP3

- File extension: .mp3
- Bit rate: 8 kbps to 320 kbps
- Sampling frequency: 16 kHz to 48 kHz (32 kHz, 44.1 kHz, 48 kHz for emphasis)
- Compatible ID3 tag version: 1.0, 1.1, 2.2, 2.3, 2.4 (ID3 tag Version 2.x is given priority over Version 1.x.)
- M3u playlist: No
- MP3i (MP3 interactive), mp3 PRO: No

WAV

- File extension: .wav
- Quantization bits: 8 and 16 (LPCM), 4 (MS ADPCM)
- Sampling frequency: 16 kHz to 48 kHz (LPCM), 22.05 kHz and 44.1 kHz (MS ADPCM)

Supplemental information

- Only the first 32 characters can be displayed as a file name (including the file extension) or a folder name.
- Russian text to be displayed on this unit should be encoded with the following character sets:
 - Unicode (UTF-8, UTF-16)
 - Character sets other than Unicode that are used in a Windows environment and are set to Russian in the multi-language setting
- This unit may not operate correctly depending on the application used to encode WMA files.
- There may be a slight delay when starting playback of audio files embedded with image data.

Disc

- Playable folder hierarchy: up to eight tiers (A practical hierarchy is less than two tiers.)
- Playable folders: up to 99
- Playable files: up to 999
- File system: ISO 9660 Level 1 and 2, Romeo, Joliet
- Multi-session playback: Yes
- Packet write data transfer: No
- Regardless of the length of blank section between the songs of the original recording, compressed audio discs play with a short pause between songs.

Additional Information

USB storage device

- Playable folder hierarchy: up to eight tiers (A practical hierarchy is less than two tiers.)
- Playable folders: up to 500
- Playable files: up to 15 000
- Playback of copyright protected files: No
- Partitioned USB storage device: Only the first partition can be played.
- There may be a slight delay when starting playback of audio files on a USB storage device with numerous folder hierarchies.

⚠ CAUTION

Pioneer accepts no responsibility for data lost on the USB storage device even if that data is lost while using this unit.

Sequence of audio files

The user cannot assign folder numbers and specify playback sequences with this unit.

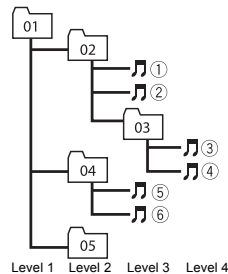
Example of a hierarchy

□: Folder

🎵: Compressed audio file

01 to 05: Folder number

① to ⑥: Playback sequence



Disc

Folder selection sequence or other operation may differ depending on the encoding or writing software.

USB storage device

Playback sequence is the same as recorded sequence in the USB storage device.

To specify the playback sequence, the following method is recommended.

- 1 Create the file name including numbers that specify the playback sequence (e.g., 001xxx.mp3 and 099yyy.mp3).
- 2 Put those files into a folder.
- 3 Save the folder containing files on the USB storage device.

However, depending on the system environment, you cannot specify the playback sequence.

For USB portable audio players, the sequence is different and depends on the player.

Russian character chart

D	C	D	C	D	C	D	C
А	A	Б	Б	В	В	Г	Г
Д	Д	Е	Е, Ё	Ж	Ж	З	З
И	И, Й	К	К	Л	Л	М	М
Н	Н	О	О	П	П	Р	Р
С	С	Т	Т	У	У	Ф	Ф
Х	Х	Ц	Ц	Ч	Ч	Ш, Щ	Ш, Щ
'	Ъ	Ы	Ы	Ь	Ь	Э	Э
Ю	Ю	Я	Я				

D: Display C: Character

Copyright and trademark

iTunes

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MP3

Supply of this product only conveys a license for private, non-commercial use and does not convey a license nor imply any right to use this product in any commercial (i.e. revenue-generating) real time broadcasting (terrestrial, satellite, cable and/or any other media), broadcasting/streaming via internet, intranets and/or other networks or in other electronic content distribution systems, such as pay-audio or audio-on-demand applications. An independent license for such use is required. For details, please visit <http://www.mp3licensing.com>.

WMA



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Specifications

General

Power source 14.4 V DC
 (10.8 V to 15.1 V allowable)
 Grounding system Negative type
 Maximum current consumption 10.0 A
 Dimensions (W x H x D):
 DIN
 Chassis 178 mm x 50 mm x 165 mm
 Nose 188 mm x 58 mm x 24 mm
 D
 Chassis 178 mm x 50 mm x 165 mm
 Nose 170 mm x 48 mm x 24 mm
 Weight 1.3 kg

Audio

Maximum power output 50 W x 4
 Continuous power output 22 W x 4
 (50 Hz to 15 000 Hz,
 5 % THD, 4 Ω load,
 both channels driven)
 Load impedance 4 Ω (4 Ω to 8 Ω allowable)
 Preout maximum output level 2.0 V
 Tone controls:
 Bass
 Frequency 100 Hz
 Gain ±12 dB
 Mid
 Frequency 1 kHz
 Gain ±12 dB
 Treble
 Frequency 10 kHz
 Gain ±12 dB

CD player

System Compact disc audio system
 Usable discs Compact disc
 Signal-to-noise ratio 94 dB (1 kHz)
 (IEC-A network)
 Number of channels 2 (stereo)

WMA decoding format Ver. 7, 7.1, 8, 9,
 10, 11 (2ch audio)
 (Windows Media Player)
 MP3 decoding format MPEG-1 & 2
 Audio Layer 3
 WAV signal format Linear PCM
 & MS ADPCM
 (Non-compressed)

USB

USB standard specification USB 2.0
 full speed
 Maximum current supply 500 mA
 Minimum memory capacity 256 MB
 USB Class MSC (Mass Storage Class)
 File system FAT16, FAT32
 WMA decoding format Ver. 7, 7.1, 8, 9,
 10, 11 (2ch audio)
 (Windows Media Player)
 MP3 decoding format MPEG-1 & 2
 Audio Layer 3
 WAV signal format Linear PCM
 & MS ADPCM
 (Non-compressed)

FM tuner

Frequency range 87.5 MHz to 108.0 MHz
 Usable sensitivity 11 dBf (0.7 μV/75 Ω,
 mono, S/N: 30 dB)
 Signal-to-noise ratio 72 dB (IEC-A network)

MW tuner

Frequency range 531 kHz to 1 602 kHz
 Usable sensitivity 25 μV (S/N: 20 dB)
 Signal-to-noise ratio 62 dB (IEC-A network)

LW tuner

Frequency range 153 kHz to 281 kHz
 Usable sensitivity 28 μV (S/N: 20 dB)
 Signal-to-noise ratio 62 dB (IEC-A network)

Note

- Specifications and the design are subject to modifications without notice.

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