CD RDS RECEIVER

Pioneer

HD) Radio®
This HD Radio receiver enables:
PSD
HD2/HD3
Digital Sound

Made for
iPod iPhone

DEH-X5600HD
DEH-X56HD

Owner's Manual

Important (Serial number)

The serial number is located on the bottom of this unit. For your own security and convenience, be sure to record this number on the enclosed warranty card.

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 **WARN-ING**s and **CAUTION**s in this manual. *Please keep the manual in a safe and accessible place for future reference.*

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The Safety of Your Ears is in Your Hands

Get the most out of your equipment by playing it at a safe level—a level that lets the sound come through clearly without annoying blaring or distortion and, most importantly, without affecting your sensitive hearing. Sound can be deceiving. Over time, your hearing "comfort level" adapts to higher volumes of sound, so what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

ESTABLISH A SAFE LEVEL:
- Set your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, without distortion.
- Once you have established a comfortable sound level, set the dial and leave it there.

BE SURE TO OBSERVE THE FOLLOWING GUIDELINES:
- Do not turn up the volume so high that you can't hear what's around you.
- Use caution or temporarily discontinue use in potentially hazardous situations.
- Do not use headphones while operating a motorized vehicle; the use of headphones may create a traffic hazard and is illegal in many areas.

About this unit

The tuner frequencies on this unit are allocated for use in North America. Use in other areas may result in poor reception.

⚠ **WARNING**
- **Do not attempt to install or service this product by yourself. Installation or servicing of this product by persons without training and experience in electronic equipment and automotive accessories may be dangerous and could expose you to the risk of electric shock, injury or other hazards.**
- Do not attempt to operate the unit while driving. Make sure to pull off the road and park your vehicle in a safe location before attempting to use the controls on the device.

- Handling the cord on this product or cords associated with accessories sold with the product may expose you to chemicals listed on proposition 65 known to the State of California and other governmental entities to cause cancer and birth defect or other reproductive harm. *Wash hands after handling.*

CAUTION:
USE OF CONTROL OR ADJUSTMENT OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
CAUTION:
THE USE OF OPTICAL INSTRUMENTS WITH THIS PRODUCT WILL INCREASE EYE HAZARD.

⚠ **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.
- Always keep the volume low enough to hear outside sounds.
- Avoid exposure to moisture.

CAUTION
This product is a class 1 laser product classified under the Safety of laser products, IEC 60825-1:2007.

CLASS 1 LASER PRODUCT

Before you start

Using this unit

After-sales service for Pioneer products

Please contact the dealer or distributor from where you purchased this unit for after-sales service (including warranty conditions) or any other information. In case the necessary information is not available, please contact the companies listed below:
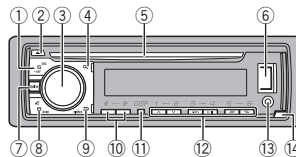Please do not ship your unit to the companies at the addresses listed below for repair without advance contact.

If you experience problems

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

Head unit

①	**SRC/OFF**
②	▲ (eject)
③	**MULTI-CONTROL** (**M.C.**)
④	🔍 (list)
⑤	Disc loading slot
⑥	USB port
⑦	**MIX** (MIXTRAX)
⑧	**BAND/⏏** (iPod control)
⑨	⏎ (back)/**DIMMER** (dimmer)
⑩	◄/►
⑪	**DISP**
⑫	**1/∧** to **6/⇄**
⑬	AUX input jack (3.5 mm stereo jack)
⑭	Detach button

⚠ CAUTION

Use an optional Pioneer USB cable (CD-U50E) to connect the USB storage device as any device connected directly to the unit will protrude out from the unit, which could be dangerous.

Remote control
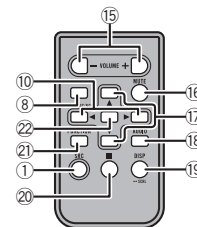
⑮	**VOLUME** Press to increase or decrease volume.
⑯	**MUTE** Press to mute. Press again to unmute.
⑰	**▲/▼** Press to recall preset stations. Press to select the next/previous folder.
⑱	**AUDIO** Press to select an audio function.
⑲	**DISP/SCRL** Press to select different displays. Press and hold to turn dimmer on or off.
⑳	**II** Press to pause or resume playback.
㉑	**FUNCTION** Press to select functions.
㉒	**LIST/ENTER** Press to display the list depending on the source. While in the operating menu, press to control functions.

Display indication
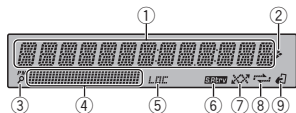
Main information section
① • Tuner: band and frequency
   • CD player, USB storage device and iPod: elapsed playback time and text information

② 🎵
   Appears when a lower tier of folder or menu exists.

③ 🔍 (list)

④ Sub information section

⑤ **LOC** (local seek tuning)

⑥ **S.Rtrv** (sound retriever)

⑦ ✕✕ (random/shuffle)

⑧ ⇄ (repeat)

⑨ 📱 (iPod control)
   This unit's iPod function is operated from your iPod.

Set up menu

1   After installation of this unit, turn the ignition switch to ON.
SET UP appears.

2   Turn M.C. to switch to YES.
■ If you do not use the unit for 30 seconds, the set up menu will not be displayed.
■ If you prefer not to set up at this time, turn **M.C.** to switch to **NO**.

3   Press M.C. to select.

4   Complete the procedure outlined below to set the menu.
To proceed to the next menu option, you need to confirm your selection.

CLOCK SET (setting the clock)

1 Turn **M.C.** to adjust hour.
2 Press **M.C.** to select minute.
3 Turn **M.C.** to adjust minute.
4 Press **M.C.** to confirm the selection.
   QUIT appears.

5   To finish your settings, turn M.C. to select YES.
■ If you prefer to change your setting again, turn **M.C.** to switch to **NO**.

6   Press M.C. to select.

Notes
• You can set up the menu options from the system menu. For details about the settings, refer to *System menu* on page 11.
• You can cancel set up menu by pressing **SRC/OFF**.

Basic operations

⊙ Important
• Handle the front panel with care when removing or attaching it.
• Avoid subjecting the front panel to excessive shock.
• Keep the front panel out of direct sunlight and high temperatures.
• To avoid damaging the device or vehicle interior, remove any cables and devices attached to the front panel before detaching it.
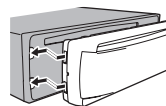
Removing the front panel
1 Press the detach button to release the front panel.
2 Push the front panel upward (I) and then pull it toward (II) you.

3 Always store the detached front panel in a protective case or bag.

Re-attaching the front panel
1 Slide the front panel to the left.

2 Press the right side of the front panel until it is firmly seated.
   Forcing the front panel into place may result in damage to the front panel or head unit.

Turning the unit on
1 Press **SRC/OFF** to turn the unit on.

Turning the unit off
1 Press and hold **SRC/OFF** until the unit turns off.

Selecting a source
1 Press **SRC/OFF** to cycle between:
   HD RADIO—CD—USB/iPod—PANDORA—APP (application)—**AUX**
   • **USB MTP** displays while the MTP connection is in use.

Adjusting the volume
1 Turn **M.C.** to adjust the 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.
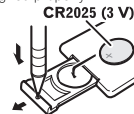
Use and care of the remote control

Using the remote control
1 Point the remote control in the direction of the front panel to operate.
   When using for the first time, pull out the film protruding from the tray.

Replacing the battery
1 Slide the tray out on the back of the remote control.
2 Insert the battery with the plus (+) and minus (–) poles aligned properly.
   CR2025 (3 V)

⚠ WARNING
• Keep the battery out of the reach of children. Should the battery be swallowed, consult a doctor immediately.
• Batteries (battery pack or batteries installed) must not be exposed to excessive heat such as sunshine, fire or the like.

⚠ CAUTION
• Remove the battery if the remote control is not used for a month or longer.

- There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type.
- Do not handle the battery with metallic tools.
- Do not store the battery with metallic objects.
- If the battery leaks, wipe the remote control completely clean and install a new battery.
- When disposing of used batteries, comply with governmental regulations or environmental public institutions' rules that apply in your country/area.
- "Perchlorate Material – special handling may apply.

Important

- Do not store the remote control in high temperatures or direct sunlight.
- The remote control may not function properly in direct sunlight.
- Do not let the remote control fall onto the floor, where it may become jammed under the brake or accelerator pedal.

Frequently used menu operations

Returning to the previous display
Returning to the previous list (the folder one level higher)
1 Press ⏎/**DIMMER**.

Returning to the ordinary display
Canceling the main menu
1 Press **BAND/**⏏.

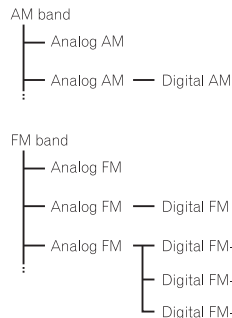Returning to the ordinary display from the list
1 Press **BAND/**⏏.

HD Radio

About HD Radio™ stations

HD Radio™ stations offer high-quality audio and data services. HD Radio stations are brought to you by local FM/AM stations.
HD Radio stations feature the following:
- High quality audio
- FM multicasting
- Data services

```
AM band
  ┌─ Analog AM
  │
  └─ Analog AM ── Digital AM

FM band
  ┌─ Analog FM
  │
  ├─ Analog FM ── Digital FM
  │
  └─ Analog FM ─┬─ Digital FM-1ch
                │
                ├─ Digital FM-2ch
                │
                └─ Digital FM-3ch
```

PSD

Program Service Data: Contributes to the superior user experience of HD Radio Technology. Presents song name, artist, station IDs, HD2/HD3 Channel Guide, and other relevant data streams.

HD2/HD3

Adjacent to traditional main stations are extra local FM channels. These HD2/HD3 Channels provide new, original music as well as deep cuts into traditional genre.

Digital Sound

Digital, CD-quality sound. HD Radio Technology enables local radio stations to broadcast a clean digital signal. AM sounds like today's FM and FM sounds like a CD.

HD Radio™ Technology

HD Radio Technology manufactured under license from iBiquity Digital Corporation. U.S. and Foreign Patents. HD Radio™ and the HD, HD Radio, and "Arc" logos are proprietary trademarks of iBiquity Digital Corp.
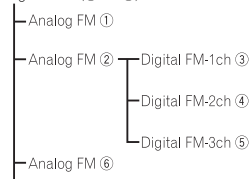
Basic operations

Selecting a band
1 Press **BAND/**⏏ until the desired band (**FM1**, **FM2**, **FM3** for FM or **AM**) is displayed.

Manual tuning (step by step)
1 Press ◄ or ►.
- When an analog station is received, tuning down operation is conducted within the analog broadcasting. (⑥ → ②)
- If a digital broadcast is not yet received, tuning-up operation tunes in the next analog station. (② → ⑥)

```
  ┌─ Analog FM ①
  │
  ├─ Analog FM ② ─┬─ Digital FM-1ch ③
  │               │
  │               ├─ Digital FM-2ch ④
  │               │
  │               └─ Digital FM-3ch ⑤
  │
  └─ Analog FM ⑥
```

Seeking
1 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 ►.

Storing and recalling stations for each band

Using preset tuning buttons

1 To store: Press and hold down one of the preset tuning buttons (1/∧ to 6/↻) until the number stops flashing.

2 To recall: Press one of the preset tuning buttons (1/∧ to 6/↻).

Switching the display

Selecting the desired text information
1 Press **DISP** to cycle between the following:
Analog Radio station
- **FREQUENCY** (program service name or frequency)
- **TRACK INFO** (song title/artist name)
- **CLOCK** (source name and clock)
HD Radio station
- **FREQUENCY** (call sign or frequency)
- **TRACK INFO** (song title/artist name/album title/genre)
- **CLOCK** (source name and clock)

Notes
- If the program service name cannot be acquired in **FREQUENCY**, the broadcast frequency is displayed instead. If the program service name is detected, the program service name will be displayed.
- If the call sign cannot be acquired in **FREQUENCY**, the broadcast frequency is displayed instead. If the call sign is detected, the call sign will be displayed.
- Depending on the band, text information can be changed.
- Text information items that can be changed depend on the area.

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.
Once selected, the following functions can be adjusted.

BSM (best stations memory)

BSM (best stations memory) automatically stores the six strongest stations in the order of their signal strength.
1 Press **M.C.** to turn BSM on.
To cancel, press **M.C.** again.

LOCAL (local seek tuning)

Local seek tuning allows you to tune in to only those radio stations with sufficiently strong signals for good reception.
1 Press **M.C.** to select the desired setting.
FM: **OFF**—**LV1**—**LV2**—**LV3**—**LV4**
AM: **OFF**—**LV1**—**LV2**
The highest level setting allows reception of only the strongest stations, while lower levels allow the reception of weaker stations.

HD SEEK (seek mode)

Seek tuning setting can be changed between digital station seek (**ON**) and all station seek (**OFF**) depending on the reception status.
1 Press **M.C.** to select your favorite setting.
OFF—**ON**

BLEND (reception mode)

If a digital broadcast reception condition gets poor, this unit automatically switches to the analog broadcast of the same frequency level. If this function is set to on, the tuner switches between digital broadcast and analog broadcast automatically. If this function is off, reception will be conducted within an analog broadcast.
1 Press **M.C.** to turn this function on or off.

Note
If **HD SEEK** is set to **ON** and **BLEND** is set to off, the tuner cannot receive broadcasts. In this case, the seek mode or reception mode is changed automatically as follows:
• When **HD SEEK** is set to **ON**, if you switch **BLEND** from on to off, **HD SEEK** is changed to **OFF**.
• When **BLEND** is set to off, if you switch **HD SEEK** from **OFF** to **ON**, **BLEND** is changed to on.

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

MTP connection

MTP-compatible Android devices (running Android OS 4.0 or higher) can be connected by MTP connection using the USB source. To connect an Android device, use the cable that came with the device.

Notes
• This function is not compatible with MIXTRAX.
• This function is not compatible with WAV.

Basic operations

Playing a CD/CD-R/CD-RW
1 Insert the disc into the disc loading slot with the label side up.

Ejecting a CD/CD-R/CD-RW
1 Press ⏏.

Playing songs on a USB storage device
1 Open the USB port cover.
2 Plug in the USB storage device using a USB cable.

Stopping playback of files on a USB storage device
1 You may disconnect the USB storage device at any time.

Selecting a folder
1 Press **1/∧** or **2/∨**.

Selecting a track
1 Press ◄ or ►.

Fast forwarding or reversing
1 Press and hold ◄ or ►.
• When playing compressed audio, there is no sound during fast forward or reverse.

Returning to root folder
1 Press and hold **BAND/⏏**.

Switching between compressed audio and CD-DA
1 Press **BAND/⏏**.

Switching between playback memory devices
You can switch between playback memory devices on USB storage devices with more than one Mass Storage Device-compatible memory device.
1 Press **BAND/⏏**.
• You can switch between up to 32 different memory devices.

Note
Disconnect USB storage devices from the unit when not in use.

Operations using the MIXTRAX button

Turning MIXTRAX on or off
You can use this function when **USB** is selected as the source.
You cannot use this function with **USB MTP**.
1 Press **MIX** to turn MIXTRAX on or off.
• For more details about MIXTRAX, refer to *About MIXTRAX* on page 12.
• When MIXTRAX is in use, the sound retriever function is disabled.

Switching the display

Selecting the desired text information
1 Press **DISP** to cycle between the following:
CD-DA
• **ELAPSED TIME** (track number and playback time)
• **CLOCK** (source name and clock)
• **SPEANA** (spectrum analyzer)
CD-TEXT
• **TRACK INFO** (track title/track artist/disc title)
• **ELAPSED TIME** (track number and playback time)
• **CLOCK** (source name and clock)
• **SPEANA** (spectrum analyzer)
MP3/WMA/WAV
• **TRACK INFO** (track title/artist name/album title)
• **FILE INFO** (file name/folder name)
• **ELAPSED TIME** (track number and playback time)
• **CLOCK** (source name and clock)
• **SPEANA** (spectrum analyzer)

Selecting and playing files/tracks from the name list

1   Press 🔍 to switch to the file/track name list mode.

2   Use M.C. to select the desired file name (or folder name).

Selecting a file or folder
1 Turn **M.C.**

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

Viewing a list of the files (or folders) in the selected folder
1 When a folder is selected, press **M.C.**

Playing a song in the selected folder
1 When a folder is selected, press and hold **M.C.**

Operations using special buttons

Selecting a repeat play range

1 Press **6/🔁** to cycle between the following:
CD/CD-R/CD-RW
  • **ALL** – Repeat all tracks
  • **ONE** – Repeat the current track
  • **FLD** – Repeat the current folder
USB storage device
  • **ALL** – Repeat all files
  • **ONE** – Repeat the current file
  • **FLD** – Repeat the current folder

Playing tracks in random order
1 Press **5/✖✖** to turn random play on or off. Tracks in a selected repeat range are played in random order. • To change songs during random play, press ▶ to switch to the next track. Pressing ◀ restarts playback of the current track from the beginning of the song.

Pausing playback
1 Press **4/PAUSE** to pause or resume.

Enhancing compressed audio and restoring rich sound (sound retriever)

1 Press **3/S.Rtrv** to cycle between:
  1—2—OFF (off)
  1 is effective for low compression rates, and **2** is effective for high compression rates.
• Key operation is disabled when MIXTRAX is on.

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.
Once selected, the function below can be adjusted.
  • **S.RTRV** is not available when MIXTRAX is turned on.

S.RTRV (sound retriever)

Automatically enhances compressed audio and restores rich sound.
1 Press **M.C.** to select the desired setting. For details, refer to *Enhancing compressed audio and restoring rich sound (sound retriever)* on page 7.

iPod
Basic operations

Playing songs on an iPod
1 Open the USB port cover. 2 Connect an iPod to USB input. Playback is performed automatically.

Selecting a song (chapter)
1 Press ◀ or ▶.

Selecting an album
1 Press **1/∧** or **2/∨**.

Fast forwarding or reversing
1 Press and hold ◀ or ▶.

Notes
• The iPod cannot be turned on or off when the control mode is set to **CONTROL AUDIO**.
• Disconnect headphones from the iPod before connecting it to this unit.
• The iPod will turn off about two minutes after the ignition is switched off.

Operations using the MIXTRAX button

Turning MIXTRAX on or off
1 Press **MIX** to turn MIXTRAX on or off. • For more details about MIXTRAX, refer to *About MIXTRAX* on page 12.

Switching the display

Selecting the desired text information

1 Press **DISP** to cycle between the following:
  • **TRACK INFO** (track title/artist name/album title)
  • **ELAPSED TIME** (track number and playback time)
  • **CLOCK** (source name and clock)
  • **SPEANA** (spectrum analyzer)

Browsing for a song

1   Press 🔍 to switch to the top menu of list search.

2   Use M.C. to select a category/song.

Changing the name of the song or category
1 Turn **M.C.**   Playlists—artists—albums—songs—podcasts—genres—composers—audiobooks

Playing
1 When a song is selected, press **M.C.**

Viewing a list of songs in the selected category
1 When a category is selected, press **M.C.**

Playing a song in the selected category
1 When a category is selected, press and hold **M.C.**

Searching the list by alphabet
1 When a list for the selected category is displayed, press 🔍 to switch to alphabet search mode.   • You also can switch to alphabet search mode by turning **M.C.** twice. 2 Turn **M.C.** to select a letter. 3 Press **M.C.** to display the alphabetical list. • To cancel searching, press ⮌/**DIMMER**.

Notes
• You can play playlists created with the computer application (MusicSphere). The application will be available on our website.
• Playlists that you created with the computer application (MusicSphere) are displayed in abbreviated form.

3   Start up the application on the iPhone and initiate playback.

Basic operations

Playing tracks
For details, refer to *Starting procedure for iPhone users* on page 8.

Skipping tracks
1 Press ►.

Switching the display

Selecting the desired text information
1 Press **DISP** to cycle between the following:
• **TRACK INFO** (station name/track title/artist name/album title)
• **ELAPSED TIME** (playback time)
• **CLOCK** (source name and clock)
• **SPEANA** (spectrum analyzer)

Note
Depending on the station, text information can be changed.

Selecting and playing the Shuffle/station list

The display shown on this unit may not be the same as that shown on the connected device.

1   Press ⌕ (list) to switch to the Shuffle/station list mode.

2   Use M.C. to select the Shuffle or desired station.

Changing the sort order
1 Press ⌕ (list).
• **ABC** – You can sort the items in the list alphabetically
• **DATE** – You can sort the items in the list in order of the dates on which the items were created

Changing Shuffle or stations
1 Turn **M.C.**

Playing
1 When Shuffle or the station is selected, press **M.C.**

Deleting stations
1 When station is selected, press and hold **M.C.** **DELETE YES** appears. To cancel, press ⏎/**DIMMER**. You will return to the previous level.
2 Press **M.C.** The station will be deleted.

Operations using special buttons

Pausing playback
1 Press **4/PAUSE** to pause or resume.

Enhancing compressed audio and restoring rich sound (sound retriever)
1 Press **3/S.Rtrv** to cycle between:
1—**2**—**OFF** (off)
1 is effective for low compression rates, and **2** is effective for high compression rates.

Giving a Thumbs Down
1 Press **2/∨** to give a "Thumbs Down" for the track currently playing and to skip to the next track.

Giving a Thumbs Up
1 Press **1/∧** to give a "Thumbs Up" for the track currently playing.

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.
Once selected, the following functions can be adjusted.

BOOKMARK (bookmark)

1 Press **M.C.** to store track information.

NEW STATION (new station)

A new station will be created from the information for the artist or track of the station currently being played.
1 Press **M.C.** to display the setting mode.
2 Turn **M.C.** to select the desired setting.
   FROM TRACK (from track)—**FROM ARTIST** (from artist)
3 Press **M.C.**
   A new station is created.
• You can also create a new station from a track by pressing and holding down **5/✕✕**.
• You can also create a new station from an artist by pressing and holding down **6/⇄**.

S.RTRV (sound retriever)

1 Press **M.C.** to select the desired setting.
   For details, refer to *Enhancing compressed audio and restoring rich sound (sound retriever)* on page 9.

Using connected device applications

You can use this unit to perform streaming playback of and control tracks in iPhone applications or just for streaming playback.

⚠ Important
Use of third party apps may involve or require the provision of personally identifiable information, whether through the creation of a user account or otherwise, and for certain applications, the provision of geolocation data. ALL THIRD PARTY APPS ARE THE SOLE RESPONSIBILITY OF THE PROVIDERS, INCLUDING WITHOUT LIMITATION COLLECTION AND SECURITY OF USER DATA AND PRIVACY PRACTICES. BY ACCESSING THIRD PARTY APPS, YOU AGREE TO REVIEW THE TERMS OF SERVICE AND PRIVACY POLICIES OF THE PROVIDERS. IF YOU DO NOT AGREE WITH THE TERMS OR POLICIES OF ANY PROVIDER OR DO NOT CONSENT TO THE USE OF GEOLOCATION DATA WHERE APPLICABLE, DO NOT USE THAT THIRD PARTY APP.

Information for compatibility of connected devices

The following is the detailed information regarding the terminals required to use the application for iPhone on this unit.

For iPhone users
• This function is compatible with iPhone and iPod touch.
• The device has iOS 5.0 or higher.

Notes
• Please check our website for a list of supported iPhone applications for this unit.
• Pioneer is not liable for any issues that may arise from incorrect or flawed app-based content.
• The content and functionality of the supported applications are the responsibility of the App providers.

Starting procedure for iPhone users

1   Connect an iPhone to USB input.

2   Switch the source to APP.

3   Start up the application on the iPhone and initiate playback.

Basic operations

Selecting a track
1 Press ◄ or ►.
Fast forwarding or reversing
1 Press and hold ◄ or ►.
Pausing playback
1 Press **BAND/**◄ to pause or resume.

Switching the display

Selecting the desired text information
1 Press **DISP** to cycle between the following: • **TRACK INFO** (track title/artist name/album title) • **APP NAME** (application name) • **ELAPSED TIME** (playback time) • **CLOCK** (source name and clock) • **SPEANA** (spectrum analyzer)

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.
Once selected, the following functions can be adjusted.

PAUSE (pause)

1 Press **M.C.** to pause or resume.

S.RTRV (sound retriever)

1 Press **M.C.** to select the desired setting.
1—2—OFF (off)
1 is effective for low compression rates, and **2** is effective for high compression rates.

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.
Once selected, the following audio functions can be adjusted.
• **FADER** is not available when **SUB.W/SUB.W** is selected in **SP-P/O MODE**. For details, refer to **SP-P/O MODE** (*rear output and preout setting*) on page 12.
• **SUB.W** and **SUB.W CTRL** are not available when **REAR/REAR** is selected in **SP-P/O MODE**. For details, refer to **SP-P/O MODE** (*rear output and preout setting*) on page 12.
• **SUB.W CTRL** is not available when **SUB.W** is selected in **OFF**. For details, refer to **SUB.W** (*subwoofer on/off setting*) on page 10.
• **SLA** is not available when FM is selected as the source.

FADER (fader adjustment)

1 Press **M.C.** to display the setting mode.
2 Turn **M.C.** to adjust the front/rear speaker balance.

BALANCE (balance adjustment)

1 Press **M.C.** to display the setting mode.
2 Turn **M.C.** to adjust the left/right speaker balance.

EQ SETTING (equalizer recall)

1 Press **M.C.** to display the setting mode.
2 Turn **M.C.** to select the equalizer.
POWERFUL—NATURAL—VOCAL—CUS-TOM1—CUSTOM2—FLAT—SUPER BASS
The equalizer band and equalizer level can be customized when **CUSTOM1** or **CUSTOM2** is selected.
If selecting **CUSTOM1** or **CUSTOM2**, complete the procedures outlined below. If selecting other options, press **M.C.** to return to the previous display.
• **CUSTOM1** can be set separately for each source. However, **USB**, **iPod**, **PANDORA** and **APP** are all set to the same setting automatically.
• **CUSTOM2** is a shared setting used in common for all sources.
3 Press **M.C.** to display the setting mode.
4 Press **M.C.** to cycle between the following:
Equalizer band—Equalizer level
5 Turn **M.C.** to select the desired setting.
Equalizer band: **80HZ—250HZ—800HZ—2.5KHZ—8KHZ**
Equalizer level: **+6** to **–6**

LOUDNESS (loudness)

Loudness compensates for deficiencies in the low-frequency and high-frequency ranges at low volume.
1 Press **M.C.** to select the desired setting.
OFF (off)—**LOW** (low)—**MID** (mid)—**HI** (high)

SUB.W (subwoofer on/off setting)

This unit is equipped with a subwoofer output which can be turned on or off.
1 Press **M.C.** to select the desired setting.
NOR (normal phase)—**REV** (reverse phase)—**OFF** (subwoofer off)

SUB.W CTRL (subwoofer adjustment)

Only frequencies lower than those in the selected range are outputted from the subwoofer.
1 Press **M.C.** to display the setting mode.
2 Press **M.C.** to cycle between the following:
Cut-off frequency—Output level—Slope level
Rates that can be adjusted will flash.
3 Turn **M.C.** to select the desired setting.
Cut-off frequency: **50HZ—63HZ—80HZ—100HZ—125HZ—160HZ—200HZ**
Output level: **–24** to **+6**
Slope level: **–12**— **–24**

BASS BOOST (bass boost)

1 Press **M.C.** to display the setting mode.
2 Turn **M.C.** to select a desired level.
0 to **+6** is displayed as the level is increased or decreased.

HPF SETTING (high pass filter adjustment)

Use this function when wanting to listen only to high-frequency sounds. Only frequencies higher than the high-pass filter (HPF) cutoff are output from the speakers.
1 Press **M.C.** to display the setting mode.
2 Press **M.C.** to cycle between the following:
Cut-off frequency—Slope level
3 Turn **M.C.** to select the desired setting.
Cut-off frequency: **OFF—50HZ—63HZ—80HZ—100HZ—125HZ—160HZ—200HZ**
Slope level: **–12**— **–24**

SLA (source level adjustment)

This function prevents the volume from changing too dramatically when the source switches.
- Settings are based on the FM volume level, which remains unchanged.
- The AM volume level can also be adjusted with this function.
- **USB**, **iPod**, **PANDORA** and **APP** are all set to the same setting automatically.
① Press **M.C.** to display the setting mode.
② Turn **M.C.** to adjust the source volume.
 Adjustment range: **+4** to **–4**

System menu

1 Press M.C. to display the main menu.

2 Turn M.C. to change the menu option and press to select SYSTEM.

3 Turn M.C. to select the system menu function.
Once selected, the following system menu functions can be adjusted.

CLOCK SET (setting the clock)

① Press **M.C.** to display the setting mode.
② Press **M.C.** to select the segment of the clock display you wish to set.
 Hour—Minute
③ Turn **M.C.** to adjust the clock.

12H/24H (time notation)

① Press **M.C.** to select the desired setting.
 12H (12-hour clock)—**24H** (24-hour clock)

INFO DISPLAY (sub information)

The type of text information displayed in the sub information section can be toggled.
① Press **M.C.** to display the setting mode.
② Turn **M.C.** to select the desired setting.
 SPEANA—**LEVEL METER**—**SOURCE**—**CLOCK**—**OFF**
- The signal bar indicator displays for **SPEANA** or **LEVEL METER** when the source is set to **HD RADIO**.

AUX (auxiliary input)

Activate this setting when using an auxiliary device connected to this unit.
① Press **M.C.** to turn **AUX** on or off.

DIMMER (dimmer)

① Press **M.C.** to turn the dimmer on or off.
- You can also change the dimmer setting by pressing and holding ⏏/**DIMMER**.

BRIGHTNESS (brightness adjustment)

You can use this setting to adjust the display brightness.
The range of settings available for **BRIGHTNESS** will vary depending on whether **DIMMER** is on or off. For details, refer to **DIMMER** (dimmer) on page 11.
① Press **M.C.** to display the setting mode.
② Turn **M.C.** to select the desired setting.
 DIMMER on: **1** to **4**
 DIMMER off: **1** to **5**

Selecting the illumination color

Illumination function menu

1 Press M.C. to display the main menu.

2 Turn M.C. to display ILLUMI and press to select.

3 Turn M.C. to select the illumination function.
Once selected, the following audio functions can be adjusted.

KEY COLOR (key section color setting)

You can select desired colors for the keys of this unit.
① Press **M.C.** to display the setting mode.
② Turn **M.C.** to select the illumination color.
- Preset colors (ranging from **WHITE** to **BLUE**)
- **SCAN** (cycle through a variety of colors automatically)
- **CUSTOM** (customized illumination color)

DISP COLOR (display section color setting)

You can select the desired colors for the display of this unit.
① Press **M.C.** to display the setting mode.
② Turn **M.C.** to select the illumination color.
- Preset colors (ranging from **WHITE** to **BLUE**)
- **SCAN** (cycle through a variety of colors automatically)
- **CUSTOM** (customized illumination color)

BOTH COLOR (key and display color setting)

You can select the desired colors for the keys and display of this unit.
① Press **M.C.** to display the setting mode.
② Turn **M.C.** to select the illumination color.
- Preset colors (ranging from **WHITE** to **BLUE**)
- **SCAN** (cycle through a variety of colors automatically)

ILLUMI FX (illumination effect mode)

In this mode, an illumination effect can be seen on the display at certain times such as when the ACC power is turned on/off or a CD is inserted/ejected.
① Press **M.C.** to turn **ILLUMI FX** on or off.
- The illumination effect will activate when the ACC power is turned on/off regardless of whether the **ILLUMI FX** setting is on or off.

Note
When **CUSTOM** is selected, the customized color saved is selected.

Customizing the illumination color
You can create custom illumination colors for both **KEY COLOR** and **DISP COLOR**.

1 Press M.C. to display the main menu.

2 Turn M.C. to display ILLUMI and press to select.

3 Turn M.C. to display KEY COLOR or DISP COLOR. Press to select.

4 Press M.C. and hold until the customizing illumination color setting appears in the display.

5 Press M.C. to select the primary color.
R (red)—**G** (green)—**B** (blue)

6 Turn M.C. to adjust the brightness level.
Adjustment range: **0** to **60**
- You cannot select a level below **20** for all three of **R** (red), **G** (green), and **B** (blue) at the same time.
- You can also perform the same operation on other colors.

Note
You cannot create a custom illumination color while **SCAN** is selected.

About MIXTRAX

MIXTRAX technology is used to insert a variety of sound effects in between songs, allowing you to experience your music as a nonstop mix complete with visual effects.

Notes
- Depending on the file/song, sound effects may not be available.
- Turn MIXTRAX off if the visual effects it produces have adverse effects on driving. Refer to *Operations using the MIXTRAX button*

MIXTRAX menu

1 Press M.C. to display the main menu.

2 Turn M.C. to change the menu option and press to select MIXTRAX.

3 Turn M.C. to select the MIXTRAX function.
Once selected, the following MIXTRAX functions can be adjusted. The function is enabled when MIXTRAX is on.

SHORT PLAYBCK (short playback mode)

You can select the length of the playback time.
1 Press **M.C.** to display the setting mode.
2 Turn **M.C.** to select the desired setting.
1.0 MIN (1.0 minute)—**1.5 MIN** (1.5 minutes)—**2.0 MIN** (2.0 minutes)—**2.5 MIN** (2.5 minutes)—**3.0 MIN** (3.0 minutes)—**OFF** (off)

FLASH AREA (flash area)

You can select areas for flashing colors.
1 Press **M.C.** to display the setting mode.
2 Turn **M.C.** to select the desired setting.
KEY/DISPLAY (key and display)—**KEY** (key)—**OFF** (off)
- When **OFF** is selected, the color set under **IL-LUMI** is used as the display color.

FLASH PATTERN (flash pattern)

The flashing color and MIXTRAX special effects display change with changes in the sound and bass levels.
1 Press **M.C.** to display the setting mode.
2 Turn **M.C.** to select the desired setting.
- **SOUND LEVEL 1** to **SOUND LEVEL 6** – The flash pattern changes according to the sound level. Select a desired mode.
- **LOW PASS 1** to **LOW PASS 6** – The flash pattern changes according to the bass level. Select a desired mode.
- **RANDOM 1** – The flash pattern changes randomly according to the sound level mode and low pass mode.
- **RANDOM 2** – The flash pattern changes randomly according to the sound level mode.
- **RANDOM 3** – The flash pattern changes randomly according to the low pass mode.

DISPLAY FX (display effect)

The MIXTRAX special effects display can be turned on or off.
1 Press **M.C.** to select the desired setting.
ON (MIXTRAX special effects display)—**OFF** (normal display)

CUT IN FX (manual cut-in effect)

You can turn on or off the MIXTRAX sound effects while manually changing tracks.
1 Press **M.C.** to select the desired setting.
ON (on)—**OFF** (off)

Initial menu

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

2 Press M.C. to display the main menu.

3 Turn M.C. to change the menu option and press to select INITIAL.
Once selected, the initial menu function below can be adjusted.

SP-P/O MODE (rear output and preout setting)

The rear speaker leads output and the RCA output of this unit can be used to connect a full-range speaker or subwoofer. Select a suitable option for your connection.
1 Press **M.C.** to display the setting mode.
2 Turn **M.C.** to select the desired setting.
- **REAR/SUB.W** – Select when there is a full-range speaker connected to the rear speaker leads output and there is a subwoofer connected to the RCA output.
- **SUB.W/SUB.W** – Select when there is a subwoofer connected directly to the rear speaker leads output without any auxiliary amp and there is a subwoofer connected to the RCA output.
- **REAR/REAR** – Select when there is a full-range speaker connected to the rear speaker leads output and the RCA output.
If there is a full-range speaker connected to the rear speaker leads output and the RCA output is not used, you may select either **REAR/SUB.W** or **REAR/REAR**.

System menu

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

2 Press M.C. to display the main menu.

3 Turn M.C. to change the menu option and press to select SYSTEM.

4 Turn M.C. to select the system menu function.

Using an 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 11.

Switching the display

Selecting the desired text information
1 Press **DISP** to cycle between the following:
- Source name
- Source name and clock

If an unwanted display appears

Turn off the unwanted display using the procedures listed below.

1 Press M.C. to display the main menu.

2 Turn M.C. to change the menu option and press to select SYSTEM.

3 Turn M.C. to display DEMO OFF and press to select.

4 Turn M.C. to switch to YES.

5 Press M.C. to select.

Connections

⚠ WARNING

• Use speakers over 50 W (output value) and between 4 Ω to 8 Ω (impedance value). Do not use 1 Ω to 3 Ω speakers for this unit.
• The black cable is ground. When installing this unit or power amp (sold separately), make sure to connect the ground wire first. Ensure that the ground wire is properly connected to metal parts of the car's body. The ground wire of the power amp and the one of this unit or any other device must be connected to the car separately with different screws. If the screw for the ground wire loosens or falls out, it could result in fire, generation of smoke or malfunction.

Ground wire   POWER AMP

*1

Other devices   Metal parts of car's body
(Another electronic
  device in the car)
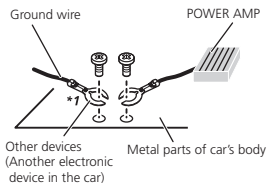
*1 Non supplied for this unit

⚙ 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 this unit with a 12-volt battery and negative grounding only. Failure to do so may result in a fire or malfunction.
• 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 shift lever 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.
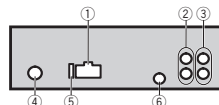
This unit

① Power cord input
② Rear output or subwoofer output
③ Front output
④ Antenna input
⑤ Fuse (10 A)
⑥ Wired remote input
  Hard-wired remote control adapter can be connected (sold separately).

Power cord

Perform these connections when not connecting a rear speaker lead to a subwoofer.
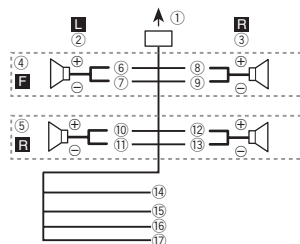
Perform these connections when using a subwoofer without the optional amplifier.
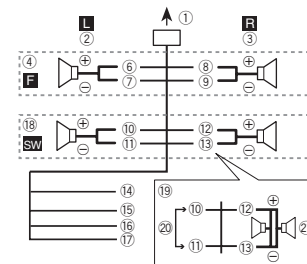
① To power cord input
② Left
③ Right
④ Front speaker
⑤ Rear speaker
⑥ White
⑦ White/black
⑧ Gray
⑨ Gray/black
⑩ Green
⑪ Green/black
⑫ Violet
⑬ Violet/black
⑭ Black (chassis ground)
  Connect to a clean, paint-free metal location.
⑮ Yellow
  Connect to the constant 12 V supply terminal.
⑯ Red
  Connect to terminal controlled by ignition switch (12 V DC).
⑰ Blue/white
  Connect to system control terminal of the power amp or auto-antenna relay control terminal (max. 300 mA 12 V DC).
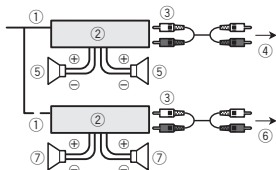⑱ Subwoofer (4 Ω)

⑲ When using a subwoofer of 70 W (2 Ω), be sure to connect the subwoofer to the violet and violet/black leads of this unit. Do not connect anything to the green and green/black leads.
⑳ Not used.
㉑ Subwoofer (4 Ω) × 2

Notes
• When using a two-speaker system, do not connect anything to speaker leads that are not connected to a speaker.
• Change the initial menu of this unit. Refer to **SP-P/O MODE** *(rear output and preout setting)* on page 12.
The subwoofer output of this unit is monaural.

Power amp (sold separately)

Perform these connections when using the optional amplifier.

① System remote control
Connect to Blue/white cable.
② Power amp (sold separately)
③ Connect with RCA cables (sold separately)
④ To Front output
⑤ Front speaker
⑥ To Rear output or subwoofer output
⑦ Rear speaker or subwoofer

Installation

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°.

• When installing, to ensure proper heat dispersal when using this unit, make sure you leave ample space behind the rear panel and wrap any loose cables so they are not blocking the vents.

Leave ample space
5 cm
5 cm
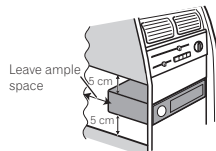
DIN front/rear mount

This unit can be properly installed using either front-mount or rear-mount installation.

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.
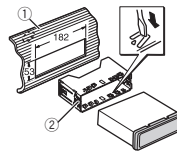
① Dashboard
② Mounting sleeve
■ Make sure that the unit is installed securely in place. An unstable installation may cause skipping or other malfunctions.

DIN Rear-mount

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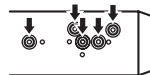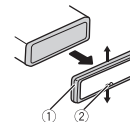

2 Tighten two screws on each side.
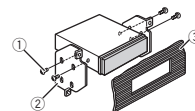
① Screw
② Mounting bracket
③ Dashboard or console
• Use either truss (5 mm × 8 mm) or flush surface (5 mm × 9 mm) screws, depending on the bracket screw holes.
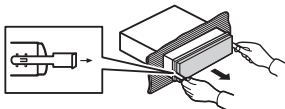
Removing the unit

1 Remove the trim ring.

① Trim ring
② Notched tab
• Releasing the front panel allows easier access to the trim ring.
• When reattaching the trim ring, point the side with the notched tab down.

2 Insert the supplied extraction keys into both sides of the unit until they click into place.
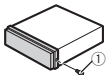
3   Pull the unit out of the dashboard.

Removing and re-attaching the front panel

You can remove the front panel to protect your unit from theft.
For details, refer to *Removing the front panel* and *Re-attaching the front panel* on page 4.

Securing the front panel

The front panel can be secured with the supplied screw.

① Screw

Troubleshooting

Symptoms are written in bold and causes in regular, non-indented text. Regular, indented text is used to indicate actions to be taken.

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 another folder or track is being selected or during fast forwarding/reversing.
    Select the repeat play range again.

A subfolder is not played back.

Subfolders cannot be played when **FLD** (folder repeat) is selected.
    Select another repeat play range.

NO XXXX appears when a display is changed (NO TITLE, for example).

There is no embedded text information.
    Switch the display or play another track/file.

The unit is malfunctioning.
There is interference.

You are using a device, such as a cellular phone, that may cause audible interference.
    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.

Symptoms are written in bold and causes in regular, non-indented text. Regular, indented text is used to indicate actions to be taken.

Common

AMP ERROR

This unit fails to operate or the speaker connection is incorrect; the protective circuit is activated.
    Check the speaker connection. If the message fails to disappear even after the engine is switched off/on, contact your dealer or an authorized Pioneer Service Station for assistance.

CD player

ERROR-07, 11, 12, 17, 30

The disc is dirty.
    Clean the disc.
The disc is scratched.
    Replace the disc.

ERROR-07, 10, 11, 12, 15, 17, 30, A0

There is an electrical or mechanical error.
    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 the disc.

ERROR-23

Unsupported CD format.
    Replace the disc.

Additional information

FORMAT READ

Sometimes there is a delay between the start of play-back 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 the disc.

SKIPPED

The inserted disc contains DRM protected files.
  The protected files are skipped.

PROTECT

All the files on the inserted disc are embedded with DRM.
  Replace the disc.

USB storage device/iPod

FORMAT READ

Sometimes there is a delay between the start of play-back and when you start to hear any sound.
  Wait until the message disappears and you hear sound.

NO AUDIO

There are no songs.
  Transfer the audio files to the USB storage device and connect.

The connected USB storage device has security en-abled.
  Follow the USB storage device instructions to disable the security.

SKIPPED

The connected USB storage device contains DRM protected files.
  The protected files are skipped.

PROTECT

All the files on the connected USB storage device are embedded with DRM.
  Replace the USB storage device.

N/A USB

The connected USB device is not supported by this unit.
  • Connect a USB Mass Storage Class compliant device.
  • Disconnect your device and replace it with a compatible USB storage 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.

CHECK USB

The connected USB storage device consumes more than 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.

CHECK USB

The iPod operates correctly but does not charge.
  Make sure the connection cable for the iPod has not shorted out (e.g., not caught in metal objects). After checking, turn the ignition switch OFF and back ON, or disconnect the iPod and reconnect.

ERROR-19

Communication failed.
  Perform one of the following operations.
  –Turn the ignition switch OFF and back ON.
  –Disconnect the USB storage device.
  –Change to a different source.
  Then, return to the USB source.

iPod failure.
  Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.

ERROR-23

USB storage device was not formatted with FAT12, FAT16 or FAT32.
  USB storage device should be formatted with FAT12, FAT16 or FAT32.

ERROR-16

The iPod firmware version is old.
  Update the iPod version.

iPod failure.
  Disconnect the cable from the iPod. Once the iPod's main menu is displayed, reconnect the iPod and reset it.

STOP

There are no songs in the current list.
  Select a list that contains songs.

NOT FOUND

No related songs.
  Transfer songs to the iPod.

Pandora

ERROR-19

Communication failed.
  Disconnect the cable from the device. Once the device's main menu is displayed, reconnect the device and reset it.

START UP APP

The Pandora application has not started running yet.
  Start up the Pandora application.

INOPERABLE

The operation was disabled.
  Run the same command for another track.

TRY AGAIN

Unable to save thumb rating.
Unable to save BookMark.
Unable to add station.
  Try again later.

MAINTENANCE

Pandora system is undergoing maintenance.
  Try again later.

SKIP LIMIT

Skip limit reached.
  • Do not exceed the skip limit.
  • Due to music licensing restrictions, Pandora limits the total number of skips per hour.

CHECK APP

This version of the Pandora application is not sup-ported.
  Connect a device that has a compatible version of the Pandora application installed.

CHECK DEVICE

Device error message displayed in Pandora applica-tion.
Unable to play music from Pandora.
  Please check your connected device.

NO STATION

No station found.
  Create a station in the Pandora application on your connected device.

NO ACTIVE ST

No station selected.
  Select a station.

Additional information

STATION FULL

A new station cannot be added.
  Delete an old station to open a spot for a new
  one.

CAN.T DELETE

The station could not be deleted.
  Run the same command for another station.

NO NETWORK

The connected device is out of area.
  Connect the connected device to a network.

NO SERVICE

The connected device is out of area.
  Connect the connected device to a network.

CAN.T PLAY

The operation was disabled.
  Run the same command for another station.

Apps

START UP APP

The application has not started running yet.
  Follow the instructions that appear on the
  screen.

Handling guidelines

Discs and player

Use only discs that feature either of the following
two logos.

Use 12-cm discs.

Use only conventional, fully circular discs.

The following types of discs cannot be used with
this unit:
• DualDiscs
• 8-cm discs: Attempts to use such discs with
  an adaptor may cause the unit to malfunction.
• Oddly shaped discs

• Discs other than CDs
• Damaged discs, including discs that are
  cracked, chipped or warped
• CD-R/RW discs that have not been finalized

Do not touch the recorded surface of the discs.

Store discs in their cases when not in use.

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 out-
ward from the center.

Condensation may temporarily impair the player's
performance. Let it rest for about one hour to ad-
just to a warmer temperature. Also, wipe any
damp discs off with a soft cloth.

Playback of discs may not be possible because of
disc characteristics, disc format, recorded applica-
tion, playback environment, storage conditions,
and so on.

Road shocks may interrupt disc playback.

When using discs that can be printed on label sur-
faces, check the instructions and the warnings of
the discs. Depending on the discs, inserting and
ejecting may not be possible. Using such discs
may result in damage to this equipment.

Do not attach commercially available labels or
other materials to the discs.
• The discs may warp making the disc unplay-
  able.
• The labels may come off during playback and
  prevent ejection of the discs, which may result
  in damage to the equipment.

USB storage device

Connections via USB hub are not supported.

Do not connect anything other than a USB stor-
age device.

Firmly secure the USB storage device when driv-
ing. 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 follow-
ing problems may occur.
• Operations may vary.
• The storage device may not be recognized.
• Files may not be played back properly.
• The device may cause audible interference
  when you are listening to the radio.

iPod

Do not leave the iPod in places with high tempera-
tures.

Firmly secure the iPod when driving. Do not let the
iPod fall onto the floor, where it may become
jammed under the brake or accelerator pedal.

About iPod settings
• When an iPod is connected, this unit changes
  the EQ (equalizer) setting of the iPod to off in
  order to optimize the acoustics. When you dis-
  connect the iPod, the EQ returns to the original
  setting.
• You cannot set Repeat to off on the iPod when
  using this unit. Repeat is automatically
  changed to All when the iPod is connected to
  this unit.

Incompatible text saved on the iPod will not be dis-
played by the unit.

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: Not com-
patible

MP3

File extension: .mp3

Bit rate: 8 kbps to 320 kbps (CBR), VBR

Additional information

Copyright and trademark

iTunes

Apple and iTunes are trademarks of Apple Inc., registered in the U.S. and other countries.

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.

WMA

Windows Media is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.
This product includes technology owned by Microsoft Corporation and cannot be used or distributed without a license from Microsoft Licensing, Inc.

iPod & iPhone

iPhone, iPod, iPod classic, iPod nano, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.
Lightning is a trademark of Apple Inc.

"Made for iPod" and "Made for iPhone" mean that an electronic accessory has been designed to connect specifically to iPod or iPhone, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod or iPhone may affect wireless performance.

Android™

Android is a trademark of Google Inc.

Pandora® internet radio

PANDORA, the PANDORA logo, and the Pandora trade dress are trademarks or registered trademarks of Pandora Media, Inc. Used with permission.

MIXTRAX

MIXTRAX is a trademark of the PIONEER CORPORATION.

Additional information

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 × H × D):
DIN
Chassis .... 178 mm × 50 mm × 165 mm
(7 in. × 2 in. × 6-1/2 in.)
Nose .... 188 mm × 58 mm × 15 mm
(7-3/8 in.× 2-1/4 in.× 5/8 in.)
D
Chassis .... 178 mm × 50 mm × 165 mm
(7 in.× 2 in.× 6-1/2 in.)
Nose .... 170 mm × 46 mm × 15 mm
(6-3/4 in.× 1-3/4 in.× 5/8 in.)
Weight .... 1 kg (2.2 lbs)

Audio

Maximum power output ... 50 W × 4
70 W × 1/2 Ω (for subwoofer)
Continuous power output
.... 22 W × 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
Loudness contour .... +10 dB (100 Hz), +6.5 dB (10 kHz) (volume: −30 dB)
Equalizer (5-Band Graphic Equalizer):
Frequency .... 80 Hz/250 Hz/800 Hz/2.5 kHz/8 kHz
Equalization range .... ±12 dB (2 dB step)
Subwoofer (mono):
Frequency .... 50 Hz/63 Hz/80 Hz/100 Hz/125 Hz/160 Hz/200 Hz
Slope .... −12 dB/oct, −24 dB/oct
Gain .... +6 dB to −24 dB
Phase .... Normal/Reverse

CD player

System .... Compact disc audio system
Usable discs .... Compact disc
Signal-to-noise ratio .... 94 dB (1 kHz) (IHF-A network)
Number of channels .... 2 (stereo)
MP3 decoding format ...... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11, 12 (2 ch audio)
(Windows Media Player)

WAV signal format .... Linear PCM & MS ADPCM (Non-compressed)

USB

USB standard specification
.... USB 2.0 full speed
Maximum current supply
.... 1 A
USB Class .... MSC (Mass Storage Class)
File system FAT12, FAT16, FAT32
MP3 decoding format ...... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10, 11, 12 (2 ch audio)
(Windows Media Player)
WAV signal format .... Linear PCM & MS ADPCM (Non-compressed)

FM tuner

Frequency range .... 87.9 MHz to 107.9 MHz
Usable sensitivity .... 9 dBf (0.8 μV/75 Ω, mono, S/N: 30 dB)
Signal-to-noise ratio .... 80 dB (digital broadcasting) (IHF-A network)
Signal-to-noise ratio .... 72 dB (analog broadcasting) (IHF-A network)

AM tuner

Frequency range .... 530 kHz to 1 710 kHz
Usable sensitivity .... 25 μV (S/N: 20 dB)
Signal-to-noise ratio .... 80 dB (digital broadcasting) (IHF-A network)
Signal-to-noise ratio .... 62 dB (analog broadcasting) (IHF-A network)

CEA2006 Specifications

Power output .... 14 W RMS × 4 Channels (4 Ω and $\leq$ 1 % THD+N)
S/N ratio .... 91 dBA (reference: 1 W into 4 Ω)

Note

Specifications and the design are subject to modifications without notice.