

CD RDS RECEIVER

Pioneer

English

DEH-X1790UB

Owner's Manual

Table of Contents

Before You Start.....	3
Getting Started.....	3
Radio.....	6
CD/USB/AUX.....	6
Settings	8
FUNCTION settings	8
AUDIO settings.....	8
SYSTEM settings	9
ILLUMINATION settings	9
MIXTRAX settings	9
Connections/Installation	11
Additional Information	13

About this manual:

- In the following instructions, a USB memory or USB audio player are referred to as “USB device”.

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.

⚠ 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.

⚠ CAUTION

- Do not allow this unit to come into contact with moisture and/or 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.

CAUTION

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

CLASS 1 LASER PRODUCT

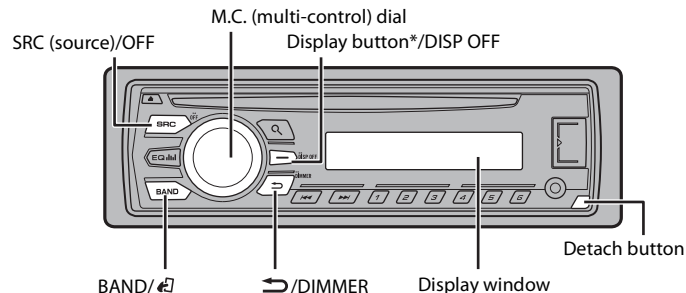
If you experience problems

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

Getting Started

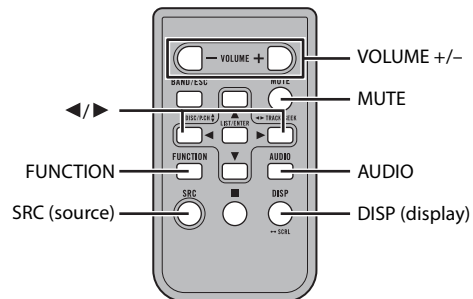
Basic operation

DEH-X1790UB



* This button is referred to as **DISP** in the manual.

Remote Control



Frequently used operations

Purpose	Operation	
	Head Unit	Remote Control
Turn on the power*	Press SRC/OFF to turn on the power. Press and hold SRC/OFF to turn off the power.	Press SRC to turn on the power. Press and hold SRC to turn off the power.
Adjust the volume	Turn the M.C. dial.	Press VOLUME + or - . Press MUTE to mute the unit. Press again to unmute.
Select a source	Press SRC/OFF repeatedly.	Press SRC repeatedly.
Change the display information	Press DISP/DISP OFF repeatedly. Press and hold DISP/DISP OFF to turn off the display information.	Press DISP repeatedly.
Return to the previous display/list	Press ↶/DIMMER .	Press ◀/▶ to select the next/previous folder.
Return to the normal display from the menu	Press BAND/⏪ .	-

* 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.

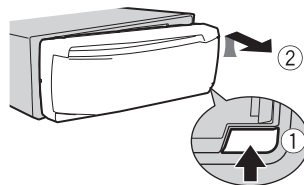
Display indication

Indication	Description
➤	Appears when a lower tier of the menu or folder exists.
Ⓟ	Appears when the Ⓟ button is pressed.
LOC	Appears when the local seek tuning function is set (page 8).
TP	Appears when a traffic program is received.
TA	Appears when traffic announcements are received (page 8).
S.Rtrv	Appears when the sound retriever function is set (page 8).
⌘	Appears when random play is set.
↺	Appears when repeat play is set.

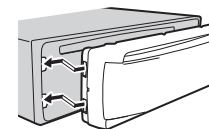
Detaching the front panel

Detach the front panel to prevent theft. Remove any cables and devices attached to the front panel and turn off the unit before detaching it.

Detach



Attach

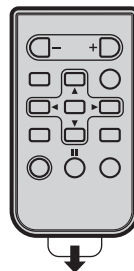


Important

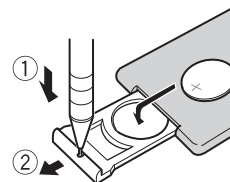
- Avoid subjecting the front panel to excessive shock.
- Keep the front panel out of direct sunlight and high temperatures.
- Always store the detached front panel in a protective case or bag.

Preparing the remote control

Remove the insulation sheet before use.



How to replace the battery



Insert the CR2025 (3 V) battery with the plus (+) and minus (-) poles orientated properly.

WARNING

- Keep the battery out of the reach of children. Should the battery be swallowed, consult a doctor immediately.
- Do not expose the battery or remote control to excessive heat such as direct sunlight or fire.

⚠ CAUTION

- There is a potential danger of explosion if the battery is incorrectly replaced. When replacing the battery, replace it with the same type.
- Do not handle or store the battery with metallic tools or objects.
- If the battery leaks, remove the battery and wipe the remote control completely clean. Then install a new battery.
- When disposing of used batteries, compliance with governmental regulations or environmental institutions' rules that apply in your country/area must be followed that pertain to any special handling needed for disposal.

🔑 Important

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

Setup menu

When you turn the ignition switch to ON after installation, [SET UP :YES] appears in the display.

1 Press the M.C. dial.

The setup menu disappears after 30 seconds of no operation. If you prefer not to set at this time, turn the **M.C.** dial to select [NO], then press to confirm.

2 Turn the M.C. dial to select the options, then press to confirm.

To proceed to the next menu option, you need to confirm your selection.

Menu Item	Description
CLOCK SET	Set the clock.
FM STEP [100], [50]	Select the FM tuning step from 100 kHz or 50 kHz.
MW STEP [10], [9]	Select the MW tuning step from 10 kHz or 9 kHz.

3 [QUIT :YES] appears when all the settings have been made.

To return to the first item of the setup menu, turn the **M.C.** dial to select [QUIT :NO], then press to confirm.

4 Press the M.C. dial to confirm the settings.

NOTES

- You can cancel the menu setting by pressing **SRC/OFF**.
- These settings can be made at any time from the SYSTEM settings (page 9) and INITIAL settings (page 5).

Canceling the demonstration display (DEMO OFF)

- 1 Press the **M.C.** dial to display the main menu.
- 2 Turn the **M.C.** dial to select [SYSTEM], then press to confirm.
- 3 Turn the **M.C.** dial to select [DEMO OFF], then press to confirm.
- 4 Turn the **M.C.** dial to select [YES], then press to confirm.

INITIAL settings

- 1 Press and hold **SRC/OFF** until the unit turns off.
- 2 Press the **M.C.** dial to display the main menu.
- 3 Turn the **M.C.** dial to select [INITIAL], then press to confirm.
- 4 Turn the **M.C.** dial to select an option, then press to confirm.

Menu Item	Description
FM STEP [100], [50]	Select the FM tuning step from 100 kHz or 50 kHz.
MW STEP [10], [9]	Select the MW tuning step from 10 kHz or 9 kHz.
SP-P/O MODE [REAR/SUB.W]	Select when there is a full-range speaker connected to the rear speaker output leads and there is a subwoofer connected to the RCA output.
[SUB.W/SUB.W]	Select when there is a passive subwoofer connected directly to the rear speaker output leads and there is a subwoofer connected to the RCA output.
[REAR/REAR]	Select when there are full-range speakers connected to the rear speaker output leads and RCA output. If there is a full-range speaker connected to the rear speaker output leads, and the RCA output is not used, you may select either [REAR/SUB.W] or [REAR/REAR].
SYSTEM RESET [YES], [CANCEL]	Select [YES] to initialize the unit settings. The unit will be restarted automatically. (Some of the settings may be retained even after resetting the unit.)

Radio

Receiving preset stations

- 1 Press **SRC/OFF** to select [RADIO].
- 2 Press **BAND/** to select the band from [FM1], [FM2], [FM3], [MW], [SW1] or [SW2].
- 3 Press a number button (1/ to 6/).

TIP

The **◀▶** buttons can be also used to select a preset station when [SEEK] is set to [PCH] in the FUNCTION settings (page 8).

Best stations memory (BSM)

The six strongest stations are stored on the number buttons (1/ to 6/).

- 1 After selecting the band, press the **M.C.** dial to display the main menu.
- 2 Turn the **M.C.** dial to select [FUNCTION], then press to confirm.
- 3 Turn the **M.C.** dial to select [BSM], then press to confirm.

To seek a station manually

- 1 After selecting the band, press **◀▶** to select a station.
Press and hold **◀▶** then release to seek an available station. Scanning stops when the unit receives a station. To cancel seek tuning, press **◀▶**.

NOTE

[SEEK] needs to be set to [MAN] in the FUNCTION settings (page 8).

To store stations manually

- 1 While receiving the station you want to store, press and hold one of the number buttons (1/ to 6/) until it stops flashing.

Using PTY functions

The unit searches for a station by PTY (program type) information.

- 1 Press **🔍** during FM reception.

- 2 Turn the **M.C.** dial to select a program type from [NEWS/INFO], [POPULAR], [CLASSICS] or [OTHERS].
- 3 Press the **M.C.** dial.
The unit begins to search for a station. When it is found, its program service name is displayed.

NOTES

- To cancel the search, press the **M.C.** dial.
- The program of some stations may differ from that indicated by the transmitted PTY.
- If no station is broadcasting the type of program you searched for, [NOT FOUND] is displayed for about two seconds and then the tuner returns to the original station.

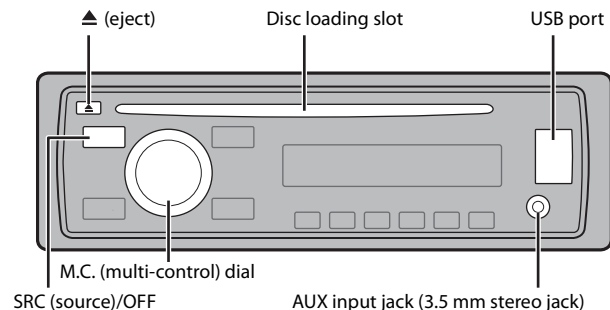
PTY list

For more details about PTY list, visit the following site:
<http://www.pioneer.eu/eur/products/25/121/tech/CarAudio/PTY.html>

CD/USB/AUX

Playing back

Disconnect headphones from the device before connecting it to the unit.



CD

1 Insert a disc into the disc loading slot with the label side up.

To eject a disc, stop playback first then press **▲**.

USB device

1 Open the USB port cover.

2 Plug in the USB device using an appropriate cable.

⚠ CAUTION

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

Before removing the device, stop playback.

MTP connection

A device installed with Android OS 4.0 or later can be connected to the unit via MTP, using the cable supplied with the device. However, depending on the connected device and the numbers of the files in the device, audio files/songs may not be able to be played back via MTP. Note that MTP connection is not compatible with WAV file formats, and cannot be used with the MIXTRAX function.

AUX

1 Insert the stereo mini plug into the AUX input jack.

2 Press **SRC/OFF** to select [AUX] as the source.

NOTE

If [AUX] is set to [OFF] in the SYSTEM settings, [AUX] cannot be selected as a source (page 9).

Operations

You can make various adjustments in the FUNCTION settings (page 8).

Note that the following operations do not work for an AUX device. To operate an AUX device, use the device itself.

Purpose	Operation
Select a folder/album*	Press 1/▲ or 2/▼ .
Select a track/song (chapter)	Press ⏮ or ⏭ .
Fast forward or reverse	Press and hold ⏮ or ⏭ .

Purpose	Operation
Search for a file from a list	<ol style="list-style-type: none"> 1 Press 🔍 to display the list. 2 Turn the M.C. dial to select the desired file (folder) name or category, then press to confirm. 3 Turn the M.C. dial to select the desired file, then press to confirm. Playback starts.
View a list of the files in the selected folder/category*	Press the M.C. dial when a folder/category is selected.
Play a song in the selected folder/category*	Press and hold the M.C. dial when a folder/category is selected.
Repeat play	Press 6/🔄 .
Random play	Press 5/🎲 .
Pause/resume playback	Press 4/PAUSE .
Return to root folder (USB only)*	Press and hold BAND/🏠 .
Switch between compressed audio and CD-DA (CD only)	Press BAND/🔊 .
Change drives in USB device (Devices that support the USB mass storage device class protocol only)	Press BAND/🔊 .

* Compressed audio files only

About MIXTRAX (USB only)

The MIXTRAX function creates a non-stop mix of your music library, accompanied by illumination effects. For details on MIXTRAX settings, see page 9.

NOTES

- This function is not compatible with an Android device connected via MTP.
- When USB is selected as a source and the MIXTRAX function is in use, the sound retriever function is disabled.
- Depending on the file/song, sound effects may not be available.
- Turn the MIXTRAX function off if the illumination effects it produces interfere with driving.

1 Press **3/MIX** to turn MIXTRAX on/off.

Settings

You can adjust various settings in the main menu.

- 1 Press the M.C. dial to display the main menu.
- 2 Turn the M.C. dial to select one of the categories below, then press to confirm.
 - FUNCTION settings (page 8)
 - AUDIO settings (page 8)
 - SYSTEM settings (page 9)
 - ILLUMINATION settings (page 9)
 - MIXTRAX settings (page 9)
- 3 Turn the M.C. dial to select the options, then press to confirm.


FUNCTION settings

The menu items vary according to the source.

Menu Item	Description
BSM RADIO	Store the six strongest stations on the number buttons (1/▲ to 6/↔) automatically.
REGIONAL RADIO [ON], [OFF]	Limit the reception to the specific regional programs when AF (alternative frequencies search) is selected. (Available only when FM band is selected.)
LOCAL RADIO FM: [OFF], [LV1], [LV2], [LV3], [LV4] MW/SW: [OFF], [LV1], [LV2]	Restrict the tuning station according to the signal strength.
TA RADIO [ON], [OFF]	Receive current traffic information if available. (Available only when FM band is selected.)
AF RADIO [ON], [OFF]	Allow the unit to retune to a different frequency providing the same station. (Available only when FM band is selected.)

Menu Item	Description
NEWS RADIO [ON], [OFF]	Interrupt the currently selected source with news programs. (Available only when FM band is selected.)
ALARM RADIO [ON], [OFF]	Interrupt the currently selected source with emergency announcements. Select [OFF] to disable this function.
SEEK RADIO [MAN], [PCH]	Assign ◀◀ or ▶▶ buttons to seek the stations one by one (manual tuning) or select a station from the preset channels.
S.RTRV CD USB [1] (effective for low compression rates), [2] (effective for high compression rates), [OFF]	Enhance compressed audio and restore rich sound. (Not available when USB is selected as a source and the MIXTRAX function is set to on.)

AUDIO settings

Menu Item	Description
FADER*1	Adjust the front and rear speaker balance.
BALANCE	Adjust the left and right speaker balance.
EQ SETTING [SUPER BASS], [POWERFUL], [TODOROKI], [VOCAL], [CUSTOM1], [CUSTOM2], [FLAT]	Select or customize the equalizer curve. [CUSTOM1] can be set separately for each source. However, each of the below combinations are set to the same setting automatically. [CUSTOM2] is a shared setting used for all sources.
Select an equalizer band and level for further customizing. Equalizer band: [80HZ], [250HZ], [800HZ], [2.5KHZ], [8KHZ] Equalizer level: [+6] to [-6]	You can also switch the equalizer by pressing EQ  repeatedly.
LOUDNESS [OFF], [LOW], [MID], [HI]	Compensate for clear sound at low volume.

Menu Item	Description
SUB.W*2 [NOR], [REV], [OFF]	Select the subwoofer phase.
SUB.W CTRL*2*3 Cut-off frequency: [50HZ], [63HZ], [80HZ], [100HZ], [125HZ], [160HZ], [200HZ] Output level: [-24] to [+6] Slope level: [-12], [-24]	Only frequencies lower than those in the selected range are output from the subwoofer.
BASS BOOST [0] to [+6]	Select the bass boost level.
HPF SETTING Cut-off frequency: [OFF], [50HZ], [63HZ], [80HZ], [100HZ], [125HZ], [160HZ], [200HZ] Slope level: [-12], [-24]	Only frequencies higher than the high-pass filter (HPF) cutoff are output from the speakers.
SLA [+4] to [-4]	Adjust the volume level for each source except FM.

*1 Not available when [SUB.W/SUB.W] is selected in [SP-P/O MODE] in the INITIAL settings (page 5).

*2 Not available when [REAR/REAR] is selected in [SP-P/O MODE] in the INITIAL settings (page 5).

*3 Not available when [OFF] is selected in [SUB.W].

SYSTEM settings

You can also access to these menus when the unit is turned off.

Menu Item	Description
CLOCK SET	Set the clock (page 5).
12H/24H [12H], [24H]	Select the time notation.
AUTO PI [ON], [OFF]	Search for a different station with the same programming, even if using a preset station.

Menu Item	Description
AUX [ON], [OFF]	Set to [ON] when using an auxiliary device connected to the unit.
S.REMOTE* [OFF], [PIONEER], [PRESET]	Select [PIONEER] or [PRESET] according to your wired remote control.

* Depending on your car, this function may not work properly. In this case, contact your dealer or an authorized PIONEER Service Station.

ILLUMINATION settings

Menu Item	Description
DIM SETTING [SYNC CLOCK], [MANUAL]	Change the display brightness.
BRIGHTNESS [1] to [10]	Change the display brightness. The available setting ranges differ depending on [DIM SETTING].

MIXTRAX settings

Menu Item	Description
SHORT PLAYBCK/SHORT MODE [1.0 MIN], [1.5 MIN], [2.0 MIN], [2.5 MIN], [3.0 MIN], [OFF]	Select the length of the playback time.
MIX PATTERN [SOUND LEVEL]	Change the MIXTRAX special effects according to the audio level. The mix pattern changes according to the sound level.
[LOW PASS]	The mix pattern changes according to the bass level.
[RANDOM]	The mix pattern changes randomly according to the sound level mode and low pass mode.

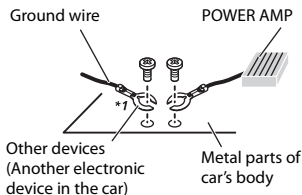
Menu Item	Description
DISPLAY FX/DISP FX [ON], [OFF]	Set the MIXTRAX special effects on/off.
CUT IN FX [ON], [OFF]	Turn the MIXTRAX sound effects on/off while manually changing the tracks.

Connections/Installation

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.



*1 Not 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



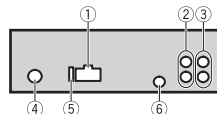
Not ACC position

- 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. 300mA 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.

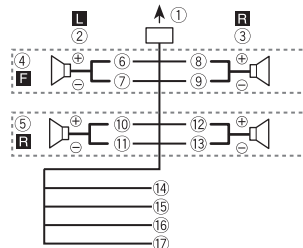
This unit



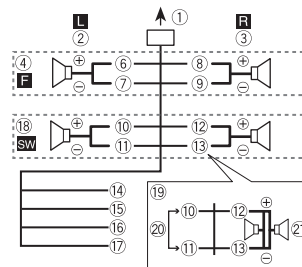
- Power cord input
 - Rear output or subwoofer output
 - Front output
 - Antenna input
 - Fuse (10 A)
 - Wired remote input
- Hard-wired remote control adapter can be connected (sold separately).

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.



- To power cord input
 - Left
 - Right
 - Front speaker
 - Rear speaker
 - White
 - White/black
 - Gray
 - Gray/black
 - Green
 - Green/black
 - Violet
 - Violet/black
 - Black (chassis ground)
- Connect to a clean, paint-free metal location.
- Yellow
- Connect to the constant 12 V supply terminal.
- Red
- Connect to terminal controlled by the ignition switch (12 V DC).
- Blue/white
- Connect to the system control terminal of the power amp or auto-antenna relay control terminal (max. 300 mA 12 V DC).
- Subwoofer (4 Ω)
 - 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.

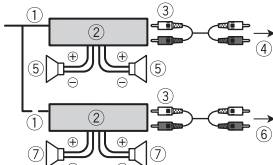
- ⑳ Not used.
- ㉑ Subwoofer (4 Ω) × 2

NOTE

Change the initial menu of this unit. Refer to [SP-P/O MODE] (page 5). The subwoofer output of this unit is monaural.

Power amp (sold separately)

Perform these connections when using the optional amplifier.



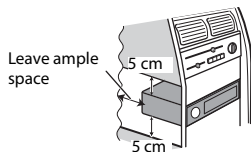
- ① System remote control
Connect to blue/white cable.
- ② Power amp (sold separately)
- ③ Connect with RCA cables (sold separately)
- ④ To front output
- ⑤ Front speaker
- ⑥ To rear output or subwoofer output
- ⑦ Rear speaker or subwoofer

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.

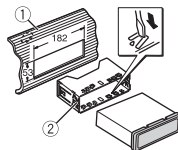


DIN front/rear mount

This unit can be properly installed using either front-mount or rear-mount installation. Use commercially available parts when installing.

DIN Front-mount

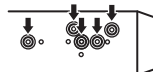
- 1 Insert the mounting sleeve into the dashboard.
For installation in shallow spaces, use the supplied mounting sleeve. If there is enough space, use the mounting sleeve that came with the vehicle.
- 2 Secure the mounting sleeve by using a screwdriver to bend the metal tabs (90°) into place.



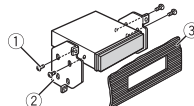
- ① Dashboard
 - ② Mounting sleeve
- Make sure that the unit is installed securely in place. An unstable installation may cause skipping or other malfunctions.

DIN Rear-mount

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



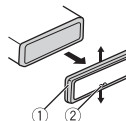
- 2 Tighten two screws on each side.



- ① Truss screw (5 mm × 8 mm)
- ② Mounting bracket
- ③ Dashboard or console

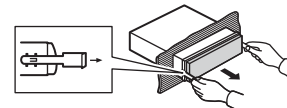
Removing the unit

- 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.



Additional Information

Troubleshooting

The display automatically returns to the normal display.

- No operations have been made for about 30 seconds.
- Perform an operation.

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.

The sound is intermittent.

- 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

Common

AMP ERROR

- This unit fails to operate or the speaker connection is incorrect.
- The protective circuit is activated.
- Check the speaker connection.
- Turn the ignition switch OFF and back to ON again. If the message remains, contact your dealer or an authorized Pioneer Service Station for assistance.

NO XXXX (NO TITLE, for example)

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

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 to 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.

FORMAT READ

- Sometimes there is 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 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 device

FORMAT READ

- Sometimes there is 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

- There are no songs.
- Transfer the audio files to the USB device and connect.
- The connected USB device has security enabled.
- Follow the USB device instructions to disable the security.

SKIPPED

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

PROTECT

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

N/A USB

- The connected USB device is not supported by this unit.
- Disconnect your device and replace it with a compatible USB 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 device consumes more than maximum allowable current.

- Disconnect the USB device and do not use it. Turn the ignition switch OFF and back to ACC or ON. Connect only compliant USB devices.

ERROR-19

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

ERROR-23

- USB device was not formatted properly.
- Format the USB device with FAT12, FAT16 or FAT32.

STOP

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

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 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. Let it rest for about one hour to adjust to a warmer temperature. Also, wipe any damp discs off with a soft cloth.
- When using discs that can be printed on label surfaces, 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 unplayable.
 - 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 hubs are not supported.
- Firmly secure the USB storage device before 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.
 - 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.

Compressed audio compatibility

- Only the first 32 characters can be displayed as a file name (including the file extension) or a folder name.
- The unit may not work properly depending on the application used to encode WMA files.
- There may be a slight delay at the start of the playback of audio files embedded with image data, or audio files stored on a USB device with numerous folder hierarchies.

⚠ CAUTION

- Pioneer cannot guarantee compatibility with all USB mass storage devices, and assumes no responsibility for any loss of data on media players, smartphones, or other devices while using this product.
- Do not leave discs or a USB storage device in any place that is subject to high temperatures.

WMA files

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 compatible

MP3 files

File extension	.mp3
Bit rate	8 kbps to 320 kbps (CBR), VBR

Sampling frequency	8 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	Not compatible
MP3i (MP3 interactive), mp3 PRO	Not compatible

WAV files

- WAV file formats cannot be connected via MTP.

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

Disc

- Regardless of the length of the blank section between the songs from the original recording, compressed audio discs play with a short pause between songs.

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	Compatible
Packet write data transfer	Not compatible

USB device

- There may be a slight delay when starting playback of audio files on a USB storage device with numerous folder hierarchies.

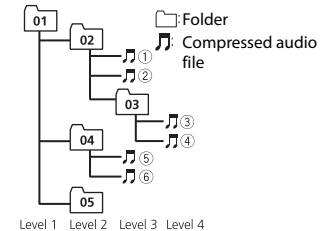
Playable folder hierarchy	Up to eight tiers (A practical hierarchy is less than two tiers.)
Playable folders	Up to 500
Playable files	Up to 15 000
Playback of copyright-protected files	Not compatible
Partitioned USB device	Only the first partition can be played.

Sequence of audio files

The user cannot assign folder numbers and specify playback sequences with this unit. Sequence of audio file depends on the connected device.

Note that the hidden files in a USB device cannot be played back.

Example of a hierarchy



01 to 05: Folder number

① to ⑥: Playback sequence

Copyright and trademark

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.

Android™

Android is a trademark of Google Inc.

MIXTRAX

MIXTRAX is a trademark of the PIONEER CORPORATION.

Specifications

General

Rated power source: 14.4 V DC (allowable voltage range: 12.0 V to 14.4 V DC)

Grounding system: Negative type

Maximum current consumption: 10.0 A

Dimensions (W × H × D):

DIN

Chassis: 178 mm × 50 mm × 165 mm

Nose: 188 mm × 58 mm × 17 mm

D

Chassis: 178 mm × 50 mm × 165 mm

Nose: 170 mm × 46 mm × 17 mm

Weight: 1 kg

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) (IEC-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: 87.5 MHz to 108.0 MHz

Usable sensitivity: 11 dBf (1.0 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 (9 kHz)

530 kHz to 1 640 kHz (10 kHz)

Usable sensitivity: 25 μV (S/N: 20 dB)

Signal-to-noise ratio: 62 dB (IEC-A network)

SW tuner

Frequency range:

2 300 kHz to 7 735 kHz (2 300 kHz to 2

495 kHz, 2 940 kHz to 4 215 kHz, 4 540

kHz to 5 175 kHz, 5 820 kHz to 6 455

kHz, 7 100 kHz to 7 735 kHz)

9 500 kHz to 21 975 kHz (9 500 kHz to

10 135 kHz, 11 580 kHz to 12 215 kHz,

13 570 kHz to 13 870 kHz, 15 100 kHz

to 15 735 kHz, 17 500 kHz to 17 985

kHz, 18 015 kHz to 18 135 kHz, 21 340

kHz to 21 975 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.

Visit our website

<http://pioneer.jp/group/index-e.html>

We offer the latest information about PIONEER CORPORATION on our website.

PIONEER CORPORATION

1-1, Shin-ogura, Saiwai-ku, Kawasaki-shi,
Kanagawa 212-0031, JAPAN

PIONEER ELECTRONICS (USA) INC.

P.O. Box 1540, Long Beach, California 90801-1540, U.S.A.
TEL: (800) 421-1404

PIONEER ELECTRONICS OF CANADA, INC.

340 Ferrier Street, Unit 2, Markham, Ontario L3R 2Z5, Canada
TEL: 1-877-283-5901
TEL: 905-479-4411

PIONEER EUROPE NV

Haven 1087, Keetberglaan 1, B-9120 Melsele, Belgium/Belgique
TEL: (0) 3/570.05.11

PIONEER ELECTRONICS ASIACENTRE PTE. LTD.

253 Alexandra Road, #04-01, Singapore 159936
TEL: 65-6472-7555

PIONEER ELECTRONICS AUSTRALIA PTY. LTD.

5 Arco Lane, Heatherton, Victoria, 3202 Australia
TEL: (03) 9586-6300

PIONEER ELECTRONICS DE MEXICO, S.A. de C.V.

Bldv.Manuel Avila Camacho 138 10 piso
Col.Lomas de Chapultepec, Mexico, D.F. 11000
TEL: 55-9178-4270

先鋒股份有限公司

台北市內湖區瑞光路407號8樓
電話：886-(0) 2-2657-3588

先鋒電子(香港)有限公司

香港九龍長沙灣道909號5樓
電話：852-2848-6488