

Pioneer

English

AVH-3850DVD

DVD AV RECEIVER

Owner's Manual



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Precaution

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.

IMPORTANT SAFEGUARDS

Please read all of these instructions regarding your display and retain them for future reference.

1. Do not install the display where it may (i) obstruct the driver's vision, (ii) impair the performance of any of the vehicle's operating systems or safety features or (iii) impair the driver's ability to safely operate the vehicle.
2. Do not operate this display if doing so in any way will divert your attention from the safe operation of your vehicle. Always observe safe driving rules and follow all existing traffic regulations. If you experience difficulty in operating the system or reading the display, park your vehicle in a safe location and make necessary adjustments.
3. Please remember to wear your seat belt at all times while operating your vehicle. If you are ever in an accident, your injuries can be considerably more severe if your seat belt is not properly buckled.
4. Never use headphones while driving.
5. To promote safety, certain functions are disabled unless the parking brake is on, and the vehicle is not in motion.
6. Never set the volume of your display so high that you cannot hear outside traffic and emergency vehicles.

⚠ WARNING

Do not attempt to install or service your display by yourself. Installation or servicing of the display 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 or other hazards.

To ensure safe driving

⚠ WARNING

- LIGHT GREEN LEAD AT POWER CONNECTOR IS DESIGNED TO DETECT PARKED STATUS AND MUST BE CONNECTED TO THE POWER SUPPLY SIDE OF THE PARKING BRAKE SWITCH. IMPROPER CONNECTION OR USE OF THIS LEAD MAY VIOLATE APPLICABLE LAW AND MAY RESULT IN SERIOUS INJURY OR DAMAGE.

- To avoid the risk of damage and injury and the potential violation of applicable laws, this unit is not for use with video that is visible to the driver.
- To avoid the risk of accident and the potential violation of applicable laws, no viewing of front seat video should ever occur while the vehicle is being driven.
- In some countries or states the viewing of images on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed and this unit's video features should not be used.

When you attempt to watch a video image while driving, the warning "Viewing of front seat video source while driving is strictly prohibited." will appear on the front display. To watch a video image on the front display, park your vehicle in a safe place and apply the parking brake.

When using a display connected to rear monitor output

The rear monitor output on this unit (REAR MONITOR OUTPUT) is used to connect a rear display that allows passengers in the rear seats to watch videos.

⚠ WARNING

Never install the rear display in a location where the driver can watch videos while driving.

When using the rear view camera

With an optional rear view camera, this unit can be used as an aid to keep an eye on trailers, or when backing into a tight parking spot.

⚠ WARNING

- SCREEN IMAGE MAY APPEAR REVERSED.
- USE INPUT ONLY FOR REVERSE OR MIRROR IMAGE REAR VIEW CAMERA. OTHER USE MAY RESULT IN INJURY OR DAMAGE.

⚠ CAUTION

- The rear view camera function is to be used as an aid to keep an eye on trailers, or while backing up. Do not use for entertainment purposes.
- Please note that the edges of the rear view camera images may differ slightly according to whether full screen images are displayed when backing up, and whether the images are used for checking the rear when the vehicle is moving forward.

To avoid battery exhaustion

Keep the vehicle engine running when using this unit to avoid draining the battery power.

- When no power is supplied to this unit, such as when the vehicle battery is being replaced, the microcomputer of this unit returns to its initial condition. We recommend that you transcribe the audio adjustment data.

⚠ WARNING

Do not use with vehicles that do not feature an ACC position.

About this unit

CAUTION: USE OF CONTROLS OR ADJUSTMENTS 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

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

CLASS 1 LASER PRODUCT

⚠ CAUTION

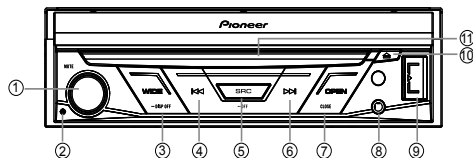
- Do not allow this unit to come into contact with liquids. Electrical shock could result.
- Also, damage to this unit, smoke, and overheating could result from contact with liquids.
- Keep this manual handy for future reference.
- Always keep the volume low enough to hear outside sounds.
- Avoid exposure to moisture.
- If the battery is disconnected or discharged, any preset memory will be erased.





DVD video disc region numbers

Only DVD video discs with compatible region numbers can be played on this player. You can find the region number of the player on the bottom of this unit and in this manual.

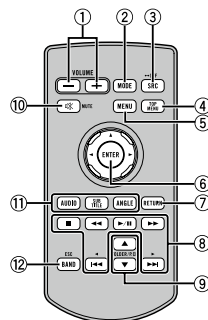
Basic operation

Head Unit



Part	Operation
① ROTARY	<ul style="list-style-type: none"> • Turn to adjust the volume. • Press to mute on/off.
② RESET	<ul style="list-style-type: none"> • Reset the unit
③ WIDE	<ul style="list-style-type: none"> • Change display mode (press) • Display off (press and hold)
④ 	<ul style="list-style-type: none"> • Radio: Preset down/up (press)
⑤ 	<ul style="list-style-type: none"> • Auto search down (press and hold) • Disc (when disc inserted): Chapter down/up (press)
⑥	<ul style="list-style-type: none"> • Fast reverse / forward (press and hold) • USB (when USB connected): The function same to the DISC.
⑤ SRC	<ul style="list-style-type: none"> • Press the button to return the source menu • Press and hold SRC button to be OFF
⑦ OPEN /CLOSE	<ul style="list-style-type: none"> • Open/close the LCD panel • By pressing and holding the key, the unit becomes LCD panel angle adjustment mode.
⑧ AUX input jack (3.5mm stereo /video jack)	Use to connect an auxiliary device.
⑨ 	Slip the cover of the USB connector to the right. Insert a USB device into the USB slot.
⑩ 	Eject button
⑪ Disc loading slot	

Remote control



- ① **+/- (VOLUME)**
- ② **MODE**
No use in this model.
- ③ **SRC/OFF**
 - Select playing mode: Radio / Disc (when disc inserted)/USB (when USB connected) / AUX / AV / Camera View
 - Press and hold SRC button to be OFF.
- ④ **TOP MENU**
Press to return to the top menu during DVD playback.
- ⑤ **MENU**
Press to display the DVD menu during DVD playback.
- ⑥ **Thumb pad**
Use to select a menu on the DVD menu.
- ⑦ **RETURN**
Press to display the PBC (playback control) menu during PBC playback.
- ⑧ **▶/||**
Press to pause or resume playback.
 ◀◀
Press to perform fast reverse.
Press to change the fast reverse speed.
 ▶▶
Press to perform fast forward.
Press to change the fast forward speed.



Press to return to the previous track (chapter).



Press to go to the next track (chapter).



Press to stop playback.

If you resume playback, playback will start from the point where you stopped.

Touch the key again to stop playback completely.

⑨ FOLDER/P.CH

Press to select the next or previous disc or folder.

Press to recall radio station frequencies assigned to preset tuning keys.

⑩ MUTE

Press to mute. Press again to unmute.

⑪ AUDIO

Press to change the audio language during DVD playback.

Press to switch audio output for Divx/MPEG-4.

SUBTITLE

Press to change the subtitle language during DVD/Divx/MPEG-4 playback.

ANGLE

Press to change the viewing angle during DVD playback.

⑫ BAND/ESC

Press to select the tuner band when tuner is selected as a source.

► 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.

Basic operation

Use and care of the remote control

Using the remote control

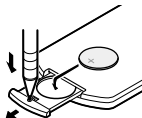
Point the remote control in the direction of the front panel to operate.

When using for the first time, pull out the film protruding from the tray.

Replacing the battery

Slide the tray on the back of the remote control out and insert the battery with the plus (+) and minus (-) poles aligned properly.

- When using for the first time, pull out the film protruding from the tray.



⚠ 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

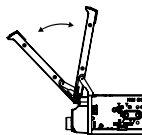
- Use one CR2025 (3 V) lithium battery.
- Remove the battery if the remote control is not used for a month or longer.
- There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type.
- Do not handle the battery with metallic tools.
- Do not store 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.

Adjusting the LCD panel angle

⚠ CAUTION

Keep hands and fingers clear of the unit when opening, closing, or adjusting the display. Be especially cautious of children's hands and fingers.

Press and hold the **OPEN/CLOSE** button until display the [↙] / [↘] icon on the screen, touch them to adjust the LCD panel angle position.



Important

- When adjusting the LCD panel angle, be sure to press and hold **OPEN/CLOSE** button. Forcibly adjusting the LCD panel by hand may damage it.



- As the set angle is saved, the LCD panel will automatically be adjusted to the same position the next time the LCD panel is opened.

Inserting/ejecting/connecting media

Insert a disc

1. Insert a disc into the disc loading slot.
2. Disc can be inserted without opening LCD panel.
3. The unit will change to disc mode automatically.


Notes:

- Please confirm whether there is a disc in the unit before you insert another one.
- The unit will exit current playing source and enter DVD mode when one disc is inserted.
- The following format disc will be support: CD-R, CD-RW, DVD-R, DVD+R, DVD-RW, DVD+RW .

⚠ CAUTION

Do not insert anything other than a disc into the disc-loading slot.

Ejecting a disc

Press the  button on the front panel to eject the disc.

Plugging and unplugging a USB storage device

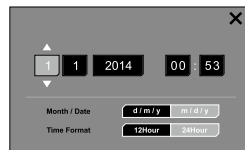
- This product may not achieve optimum performance with some USB storage devices.
 - Connection via a USB hub is not possible.
1. Slip the USB cover from left to right.
 2. Plug in the USB storage device using an appropriate cable.
 - Check that no data is being accessed before pulling out the USB storage device.

Basic operation

How to Use the screens

Press **SRC** button to display Top menu screen.

Time and date setting screen



Switching to clock adjustment display.

Select the Month or Date.

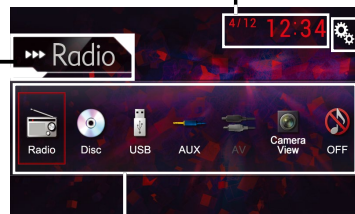
- Touch ▲ or ▼ to set the correct time.

Select the time format.

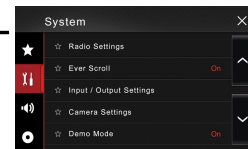
- Touch 12Hour or 24Hour to set the correct time.
- Touch [X] on the upper right of the screen to exit.

Top menu screen

Current Source display



Setting menu screen



- Touch [X] on the upper right of the screen to exit. Refer to System settings on page 14.

AV source list screen



Selecting a source using the touch panel keys

Touch the source icon and then touch the desired source name.

- Radio-radio
- Disc-Built-in DVD player
- USB-USB
- AUX-AUX
- AV-AV input
- Camera View-Camera View

AV operation screen

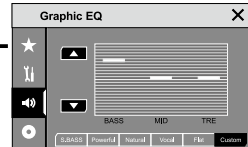


Selecting a favorite source.

When the source icon is not displayed, it can be displayed by pressing the source key.

- Touch [S] to turn the source off.

EQ setup screen



- Touch [X] on the upper right of the screen to exit. Refer to Audio settings on page 15.

Select radio as playing source

Touch [Radio] on the source menu to the radio mode.



Select one radio band

Press the BAND button on the remote control or touch the [FM1] / [AM] icon on the user interface to select one radio band among FM1, FM2, FM3, and AM.

Tune

Auto tuning

Press and hold the ◀▶ button on the remote control or touch and hold the [◀] / [▶] icon on the user interface to seek a higher / lower station.

To stop searching, repeat the operation above or press other keys having radio functions.

Note:

When a station is received, searching stops and the station is played.

Manual tuning

During manual tuning, the frequency will be changed in steps. Press the ◀▶ button on the remote control or touch the [◀] / [▶] icon on the user interface to tune in a higher / lower station.

Preset station

The unit has 4 bands, such as FM1, FM2, FM3 and AM, and each band can store 6 stations; hence the unit can store 24 stations in total.

Storing the strongest stations

BSM (best stations memory) automatically stores the six strongest stations in the order of their signal strength. Storing broadcast frequencies with BSM may replace broadcast frequencies you have saved using the preset tuning keys.

1. Touch [BSM].
2. Touch [BSM] to begin a search.
The six strongest broadcast frequencies will be stored under preset tuning keys in order of their signal strength.
- To cancel the storage process, touch any key on the screen.

Manual store

1. Tune to a station.
2. Touch and hold one of the channels 1 to 6 to save the selected band.

Search Stations Automatically

1. Touch [BSM] to search and store stations.
2. The unit will scan play the preset stations automatically.
3. To cancel, touch any key on the user interface.

Recalling a station

1. Select a band (if needed).
2. Touch an on-screen preset button to select the corresponding stored station.

Displays the preset channel list

If you touch the [BSM] to display the preset channel list.

Local/Distance

Select Local to receive only stations with extremely strong signal.

1. Touch [Local/Distance] in Radio settings menu of System setup.
- How to enter Radio Setting, please refer to the System setting page 14.
2. Touch [Local/Distance] to switch "Local" or "Distance"(default).

Setting the FM tuning step

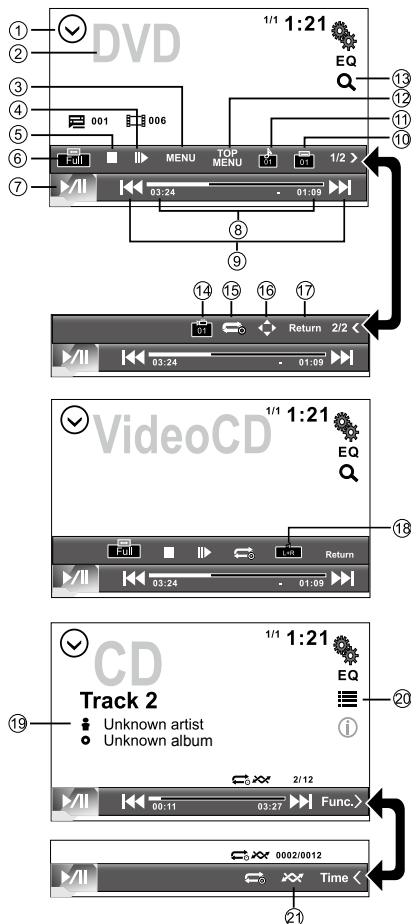
You can switch the seek tuning step for FM band.

- The tuning step remains at 50 kHz during manual tuning.
1. Touch [FM Step] in Radio settings menu of System setup to select the FM tuning step.
 - How to enter Radio Setting, please refer to the System setting page 14.
 2. Touching FM step will switch the FM tuning step between 50 kHz and 100 kHz(default). The selected FM tuning step will appear.

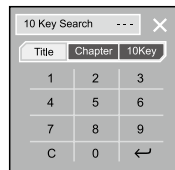
Setting the AM tuning step

You can switch the seek tuning step for AM band.

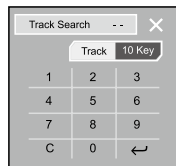
1. Touch [AM Step] in Radio settings menu of System setup to select the AM tuning step.
- How to enter Radio Setting, please refer to the System setting page 14.
2. Touching AM Step will switch the AM tuning step between 9 kHz (default) and 10 kHz. The selected AM tuning step will appear in the display.
When the setting is changed, the frequency and preset channels are initialized.



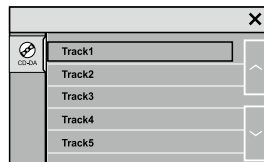
DVD title/chapter select



VCD track select



CD track select



①	Return the source menu key Returning to the source menu during DVD playback.
②	Current disc type
③	MENU key (DVD) Displaying the DVD menu during DVD playback.

Frame-by-frame playback key (DVD/VCD)

To return to normal playback, touch [▶/||].

④ Slow-motion playback key (DVD/VCD)

1. Touch and hold down the [||] to start the slow motion playback.
2. Each time you touch [||] it changes the speed in six steps in the following order: x1/2 x1/3 x1/4 x1/5 x1/6 x1/7.

⑤ Stop playback entirely (DVD/VCD)

1. During playback, touch [■] once to stop the playback and the relevant location on the disc is saved, touch [▶/||] to resume the playback from the saved disc location.
2. Touch [■] twice to cease the playback. Touch [▶/||] to start the playback from the very beginning the Title page of the DVD or the first track of VCD / CD.

⑥ Changing the wide-screen mode (DVD/VCD)

Selecting the appropriate screen ratio for the playback video.

Touch [Full] to select the [Full] / [Normal].

Touch the desired wide mode setting.

FULL (full screen)

The 4:3 picture is enlarged in the horizontal direction only, granting viewers a 4:3 TV picture (normal picture) without any omissions.








NORMAL (normal)

The 4:3 picture is displayed as is, granting viewers no sense of disparity as the proportions are the same as that of the normal picture.

Notes:

- You cannot operate this function while driving.
- When a video is viewed in a wide screen mode that does not match its original aspect ratio, it may appear different.
- Remember that using the wide mode feature of this system for commercial or public viewing purposes may constitute an infringement on the author's rights protected by the Copyright Law.

⑦	Playback/Pause 1. When a disc is inserted, display shows "Format read". For MP3/WMA or disc with mixed files, reading time may exceed 1 minute. 2. While audio/photo/video files playback, list menu will appear on the display. The list menu and operations are the same with USB playback. <ul style="list-style-type: none"> During playback, press [▶/] to pause playback. The sound will be muted. Display shows "PAUSE". Press [▶/] again to continue playback. To resume normal play, repeat the operation.
⑧	Elapsed time/Remaining time of the track.
⑨	Touch [◀◀] / [▶▶], you can also skip track/chapters forward or backward. Fast forward/backward during playback Touch [◀◀] / [▶▶] for more than 2 seconds repeatedly to select X2, X4, X8, X20. <ul style="list-style-type: none"> During the fast forward or backward operation, touch [▶/] briefly to playback again. During the fast forward or backward operation, the volume will be muted.
⑩	Subtitle select (DVD/VCD) Open/Close the title language. Touch [01] to select the subtitle language.
⑪	Audio select (DVD/VCD) Touch [01] to select audio language.
⑫	Top Menu key (DVD) Returning to the top menu during DVD playback.
⑬	Goto (DVD/VCD) For DVD, you can select [Title], [Chapter], [10key]. For VCD, you can select [Track], [10key] (PBC only). <ol style="list-style-type: none"> Touch [Q]. Touch the item to select the search function. Touch [0] to [9] to input the desired number. <ul style="list-style-type: none"> To cancel an input number, touch [C]. Touch [←] to start playback from the number you registered.
⑭	Angle adjustment (DVD)

⑮	Repeat During playback, press icon on the screen to select repeat playback, as below: DVD  : Repeat all  : Repeat title  : Repeat chapter VCD  : Repeat all  : Repeat one CD  : Repeat all  : Repeat Single
⑯	Operating the DVD menu using touch panel keys (DVD) If items on the DVD menu appear, the touch panel keys may overlay them. If so, select an item using those touch panel keys. [↶]: Touch to return the playback menu. [↷]: Start playback from the selected menu item. [Key]: Touch to return the DVD playback menu. Touch [▲] / [▼] / [◀] / [▶] to select the upper / lower / left / right menu item. <ul style="list-style-type: none"> If the touch panel keys for DVD menu selection disappear, touch anywhere on the screen, and then touch [◀▶]. The touch panel keys are displayed. If you touch [↶], the touch panel keys disappear and touch [◀▶] is displayed.
⑰	Return key (DVD/VCD with PBC) Returns to the specified point and begins playback from there. Note: <ul style="list-style-type: none"> The specified point differs depending on the disc.

⑱	Audio output select (DVD/VCD) Touch [L+R] to select audio channel to listen (Left, Right, Mix, L+R).
⑲	Title/Chapter display information (DVD) Track display information (VCD/CD)
⑳	Enter to the track list (CD) Touch [≡] Press [▲] / [▼] to skip to the previous/next track.
㉑	Random track playback (CD) During playback, touch [∞] to select random on and display the icon.

Notes:

- After ejecting the disc, the unit reverts to other mode automatically.
- If the disc is not removed from the unit within 10 seconds, the disc will be reloaded to prevent accidental damage.

Compressed files



Notes:

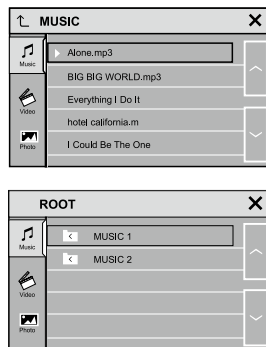
- If there are audio files supported in the disc/USB stick, the system will enter the audio files menu automatically.
- If there are no audio files, but there are video files supported in the disc/USB stick, the system will enter the video files menu automatically.
- If there are no audio or video files, but there are picture files supported in the disc/USB stick, the system will enter the picture files menu automatically.
- If there are no above audio/video/picture files supported in the disc/USB stick, the icon will turn gray on the left list menu of screen.
- Not all kinds of USB devices are compatible with the unit.
- Disconnect USB storage devices from the unit when not in use.
- It will take several minutes when playing external storage devices that contain a mixture of various media file types.
- Do not use unauthorized products.

Selecting file category

During playback, touch [] to enter the list menu of file category (Music, Video, Photo), touch it to select.

Selecting a folder

Touch [] to enter the folder list (if there are folders in the disc/USB storage device), touch it to select.

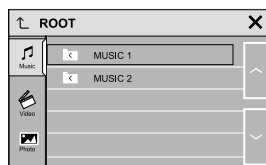


Selecting file

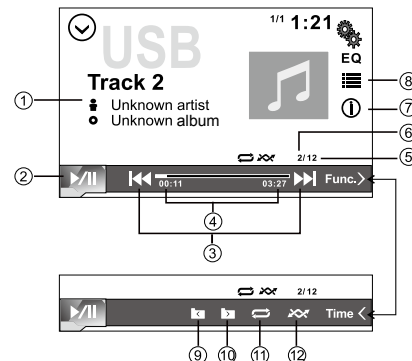
In file list menu, touch [] or [] on screen to select file type, touch it and the unit will load the file and start playback.

Selecting a file of other folder

- If there are more than 1 folder in the USB storage device, a folder icon appears upon the file's names.
- Touch the folder name to select and touch again to show all the files.



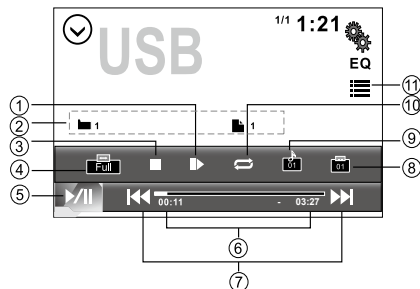
Playing audio files



- Playback information (artist name/ album name/ folder name/track name)
- Playback/Pause
- Previous/next file
- Fast forward/backward during playback
- Elapsed time/Remaining time of the file
- The amount of the file
- The current track of playback
- Touch to display the other playback information
- Enter to the playback list
- Touch [] / [] to select the last / next folder
- Repeat (the function same to the CD)
- Repeat file
- Repeat folder
- Repeat all
- Random

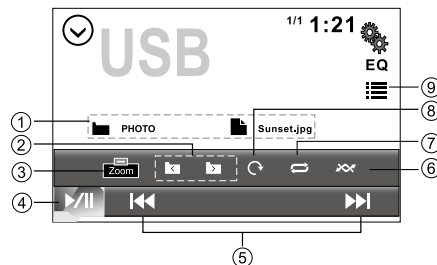
Compressed files

Playing video files



- ① Slow-motion playback key (the function same to the DVD)
- ② Track information
- ③ Stop playback entirely
- ④ Changing the wide-screen mode (the function same to the DVD)
- ⑤ Playback/pause
- ⑥ Elapsed time/Remaining time of the file
- ⑦ Previous/next file
- ⑧ Touch [01] to select the subtitle language to show, if the video file has multiple language subtitles.
- ⑨ Touch [01] to select audio language to listen if the DVD has multiple audio languages.
- ⑩ Repeat
 - ⏮: Repeat one
 - ⏮: Repeat folder
 - ⏮: Repeat all
- ⑪ Enter to the playback list

Playing photo files



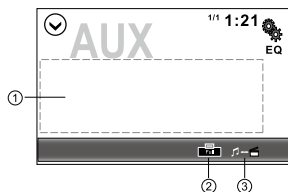
- ① Track information
- ② Previous/next folder
- ③ Zoom
- ④ Playback/pause
- ⑤ Previous/next file
- ⑥ Random
- ⑦ Repeat
 - ⏮: Repeat one
 - ⏮: Repeat folder
 - ⏮: Repeat all
- ⑧ Rotation
 - Rotates the displayed photo 90° clockwise.
- ⑨ Enter to playback list

Other source

AUX source

You can connect an external audio/video device to the unit.

- Connect the external audio/video device to the **AUX input jack**.
- Turn on the AV input setting. Refer to the System setting page 14.

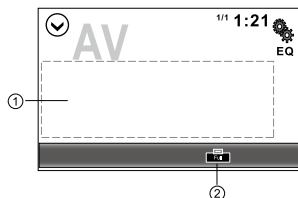


- ① Hides the touch panel keys. Touch anywhere on the screen to display the touch panel keys again.
- ② Changes the wide screen model.
- ③ Switch the operation screen.

AV source

You can connect an external audio/video device to the unit.

- Connect the external audio/video device to the **VIDEO INPUT/AUDIO INPUT**.
- Turn on the AV input setting. Refer to the System setting page 14.




- ① Hides the touch panel keys. Touch anywhere on the screen to display the touch panel keys again.
- ② Changes the wide screen model.

Camera

This unit is "camera ready". Before accessing any camera features, you must purchase and install a rear video camera. Once the rear camera is connected and operating properly, the CAMERA source mode will become active. Refer to "System settings" on page 14. The playing source will change to "CAMERA" mode automatically when you reverse your car.

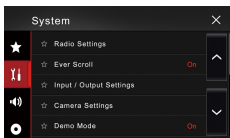
Settings

Setting menu

On the source menu, touch [] to enter setting menu.




The unit could not enter the setting menu when the system is busy, such as loading disc or USB.

1. Touch and select the category.
2. Touch to select the desired.
- Touch to select the upper category.





Favorites settings

Registering your favorite menu items in shortcuts allows you to quickly jump to the registered menu screen by a simple touch on the "Favorites" screen.

1. Touch [] that you want to add to the favorite menu, and the icon change to [].
2. To cancel the registration, touch [] in the menu column again.



System settings

1. Touch [], if necessary.
2. Touch to highlight a setting.
3. Touch to display/select an option.
4. Touch [] on the upper right of the screen to exit.

Radio settings	Refer to Radio on page 8.		
Ever Scroll	On	When it is set to "On", recorded text information scrolls continuously in the display. Set to "Off" if you prefer the information to scroll just once.	
	Off (default)		
Input/ Output Settings	AV Input	On	Displays the video image output by the connected external device.
		Off (default)	
	AUX Input	On (default)	
		Off	
Camera Settings	Back Camera Input	On	Select Back Camera Input On or Off.
		Off (default)	
	Camera Polarity	Battery(default)	Select Camera Polarity Battery/ Ground.
		Ground	
Demo Mode	On (default)	Select Demo On or Off.	
	Off		
System Language	You can select the system language from English/Spanish[Español]/ Portuguese[Português]/Russian[Русский].		
Restore Settings	You can select the All Settings/System Settings/ Audio settings/Video settings to reset.		
Beep Tone	On (default)	Select beep sound On or Off.	
	Off		
Touch Panel Calibration	Refer to "Touch Panel Calibration" on page 14.		
Dimmer Settings	Dimmer Trigger	Auto (default)	You can set Auto/Manual/ Time if you need.
		Manual	
	Day/Night	Day (default)	Select Day or Night.
		Night	
Picture Adjustment	Dimmer Duration	Refer to "Dimmer Duration" on page 14.	
	Brightness	Adjusts the black intensity.	
	Contrast	Adjusts the contrast.	
Steering Wheel Control	Saturation	Adjusts the color saturation.	
	Refer to "Steering Wheel Control" on page 15.		

Note:

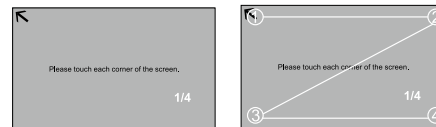
For safety reasons, you cannot use some of these functions while your vehicle is in motion. To enable these functions, you must stop in a safe place and apply the parking brake.




Touch Panel Calibration

Calibrate the touch panel screen.

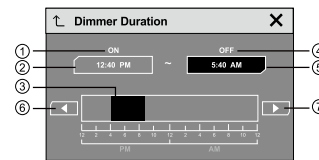
When the touch operation is not sensitive or valid, you should calibrate the touch panel screen using the calibration setting function.

Adjust the response positions of the touch panel as follows:



1. Press the [Touch Panel Calibration] option on the setting menu to enter.
2. Press and hold the corner of [] for 2 seconds, the [] will move automatically.
3. Aim at corner of [], follow the path as shown in the figure. Once steps 1/4-4/4 are complete the system will automatically exit calibrating mode.

Dimmer Duration



- ① ON: Dimmer Begins
- ② Begins" time.
- ⑤ When "12 hours" is selected in Time setting menu, AM/ PM appears. Otherwise "24 hours" is selected, AM/PM doesn't appears.
- ③ Users touch this area to adjust the time.
- ④ OFF: Dimmer Ends
- ⑥ Time can be adjusted by this button.
- ⑦ Time can be adjusted by this button.

Settings

Steering Wheel Control

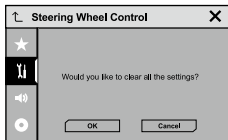
1. Touch [Steering Wheel Control], the SWC menu will display.



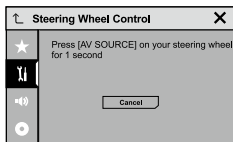
2. There are 9 default keys, and you can also set the function that you want.

Setting step as below:

1. Touch [Clear] to reset the default keys, and display as below:



2. Touch any key the current function key turns bright.
3. The function menu is displayed, as below:
AV Source / Mute / Play/Pause / Stop / Previous / Next / Volume Up / Volume Down / Band
4. Select one function key that you want.
- For example press [AV Source] on the function menu.
5. Display below picture and according to the prompt operate.



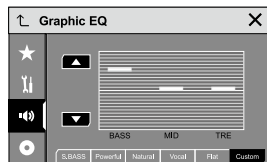
6. Press each individual steering wheel control button for each corresponding function.
7. When success, the current interface return to the previous menu automatically.
8. If you don't select, touch [Cancel] to cancel.
9. The other keys setting operation same to the [AV Source] key.
10. Once the final steering wheel control button is programmed, the functions are saved and the programming will end.

Adjust Audio settings

1. Touch [Speaker Icon].
2. Touch to highlight a setting.
3. Touch to display/select an option.
4. Touch [X] on the upper right of the screen to exit.

Fader/ Balance	▲ (Front speaker)	Adjust fader/ balance value from 0 to 12.	
	▼ (Rear speaker)		
	◀ (Left speaker)		
	▶ (Right speaker)		
Graphic EQ	Refer to "Graphic EQ" on page 15.		
Loudness	Off (default)	Select low frequency boost only or high and low frequency boost.	
	Low		
	High		
Subwoofer	Subwoofer	On (default)	Select subwoofer On or Off.
		Off	
	Level	Adjust level value from -24 to +6.	
	Frequency	80 Hz (default)	Select a crossover frequency to set a cutoff frequency for the subwoofer's LPF (low-pass filter).
		120 Hz	
		160 Hz	
Source Level Adjuster	Refer to "Source Level Adjuster" on page 15.		
DRC	On (default)	Set the DRC (Dynamic Range Control) On or off.	
	Off		

Graphic EQ



Select Preset Equalizer

1. Enter the EQ setup mode
Touch the [Graphic EQ] in Audio setting menu and the EQ setup interface will display on the screen.
2. Touch [▲] / [▼] to adjust the level of [BASS] / [MID] / [TRE].

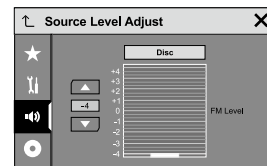
Select EQ mode

Touch the desired EQ selection: [S.BASS] / [Powerful] / [Natural] / [Vocal] / [Flat] / [Custom], and the EQ mode will change.

Notes:

- The EQ mode will change to 'Custom' automatically when you adjust the frequency value in all modes besides 'Custom'.
- The value of Sub is independent of EQ mode and can be adjusted separately.

Source Level Adjuster



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

Touch [▲] / [▼] to increases / decreases the source volume.

Notes:

- If you directly touch the area where the cursor can be moved, the Source Level Adjuster setting will be changed to the value of the touched point.
- The scope of adjustment: -4 to +4.
- Settings are based on the FM tuner volume level, which remains unchanged.
- This function is not available when the FM tuner is selected as the AV source.

Adjust Video Settings

1. Touch [Video Icon].
2. Touch to highlight a setting.
3. Touch to display/select an option.
4. Touch [X] on the upper right of the screen to exit.

Settings

DVD/ Divx Setup	Subtitle Language	Select DVD subtitle/audio/menu language. Options available depending on DVD disc.	
	Audio Language		
	Menu Language		
	Multi Angle	On (default)	Turns the multi-angle setting on or off, only for CD/Video CD/ DVD model.
		Off	
	TV Aspect	16:9 (default)	Displays the wide screen image (16:9) as it is (initial setting).
		Letter Box	Makes the image in the shape of a letterbox with black bands on the top and bottom of the screen.
		Pan Scan	Cuts the image short on the right and left sides of the screen.
	Parental	Refer to "Setting parental lock" on page 16.	
	DivX® VOD	Refer to the "Displaying the DivX® VOD registration code" or "Displaying the deregistration code" on page 16.	
Time Per Photo Slide	5 sec	Select the time to switch to JPEG image.	
	10 sec (default)		
	15 sec		
	manual	JPEG images can be switched manually.	

Setting parental lock

1. Touch [0] to [9] to input a four-digit code number and touch [↵] to enter.
2. Touch any number between [1] to [8] to select the desired level.
 - **8:**
Enables playback of the entire disc.
 - **7 to 2:**
Enables playback of discs for children and non-adult oriented discs.
 - **1:**
Enables only playback of discs for children.

3. Touch [↵] set the parental lock level while the input number is displayed.

Notes:

- We recommend that you keep a record of your code number in case you forget it.
- The parental lock level is recorder on the disc. You can confirm it by looking at the disc package, the included literature or the disc itself. You cannot use parental lock with discs that do not feature a recorded parental lock level.
- With some discs, parental lock operates to skip certain scenes only, after which normal playback resumes. For details, refer to the disc's instructions.

Displaying the DivX® VOD registration code

In order to play DivX VOD (video on demand) contents on this unit, the unit must first be registered with a DivX VOD contents provider. For registration, generate a DivX VOD registration code and submit it to your provider.

- Keep a record of the code as you will need it when you register your unit to the DivX VOD provider.
1. In Video settings menu, touch [DivX®VOD] to display the Registration code.
 2. Touch [OK].

Displaying the deregistration code

If your device is already registered, deregister it by entering the deregistration code.

1. In Video settings menu, touch [DivX® VOD] to display the Deregistration code.
2. The deregistration is complete.

Connection/Installation

Connecting the unit

⚠ WARNING

- To avoid the risk of accident and the potential violation of applicable laws, no viewing of front seat video should ever occur while the vehicle is being driven.
- In some countries or states the viewing of images on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed.

⚠ WARNING

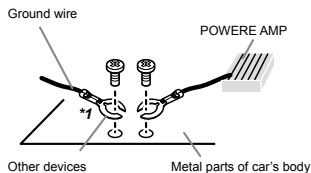
LIGHT GREEN PARKED AT POWER CONNECTOR IS DESIGNED TO DETECT PARKED STATUS AND MUST BE CONNECTED TO THE POWER SUPPLY SIDE OF THE PARKING BRAKE SWITCH. IMPROPER CONNECTION OR USE OF THIS LEAD MAY VIOLATE APPLICABLE LAW AND MAY RESULT IN SERIOUS INJURY OR DAMAGE.

⚠ CAUTION

- PIONEER does not recommend that you install or service your display unit yourself. Installing or servicing the product may expose you to risk of electric shock or other hazards. Refer all installation and servicing of your display unit to authorized Pioneer service personnel.
- Secure all wiring with cable clamps or electrical tape. Do not allow any bare wiring to remain exposed.
- Do not drill a hole into the engine compartment to connect the yellow cable of the display unit to the vehicle battery. Engine vibration may eventually cause the insulation to fail at the point where the wire passes from the passenger compartment into the engine compartment. Take extra care in securing the wire at this point.
- It is extremely dangerous to allow the microphone lead to become wound around the steering column or gearstick. Be sure to install the unit in such a way that it will not obstruct driving.
- Make sure that cables will not interfere with moving parts of the vehicle, such as the gearshift, parking brake or seat sliding mechanism.
- Do not shorten any cables. If you do, the protection circuit may fail to work properly.

⚠ 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.



*No supplied for this unit.

► Important

- This unit cannot be installed in a vehicle without ACC (accessory) position on the ignition switch.



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 gear shift and seat rails.
 - Place all cables away from hot places, such as near the heater outlet.
 - Do not connect the yellow cable to the battery by passing it through the hole to the engine compartment.
 - Cover any disconnected cable connectors with insulating tape.
 - Do not shorten any cables.
 - Never cut the insulation of the power cable of this unit in order to share the power with other devices. The current capacity of the cable is limited.
 - Use a fuse of the rating prescribed.
 - Never wire the negative speaker cable directly to ground.

— Never band together negative cables of multiple speakers.

- When this unit is on, control signals are sent through the blue/white cable. Connect this cable to the system remote control of an external power amp or the vehicle's auto-antenna relay control terminal (max. 300 mA 12 V DC). If the vehicle is equipped with a glass antenna, connect it to the antenna booster power supply terminal.
- Never connect the blue/white cable to the power terminal of an external power amp.

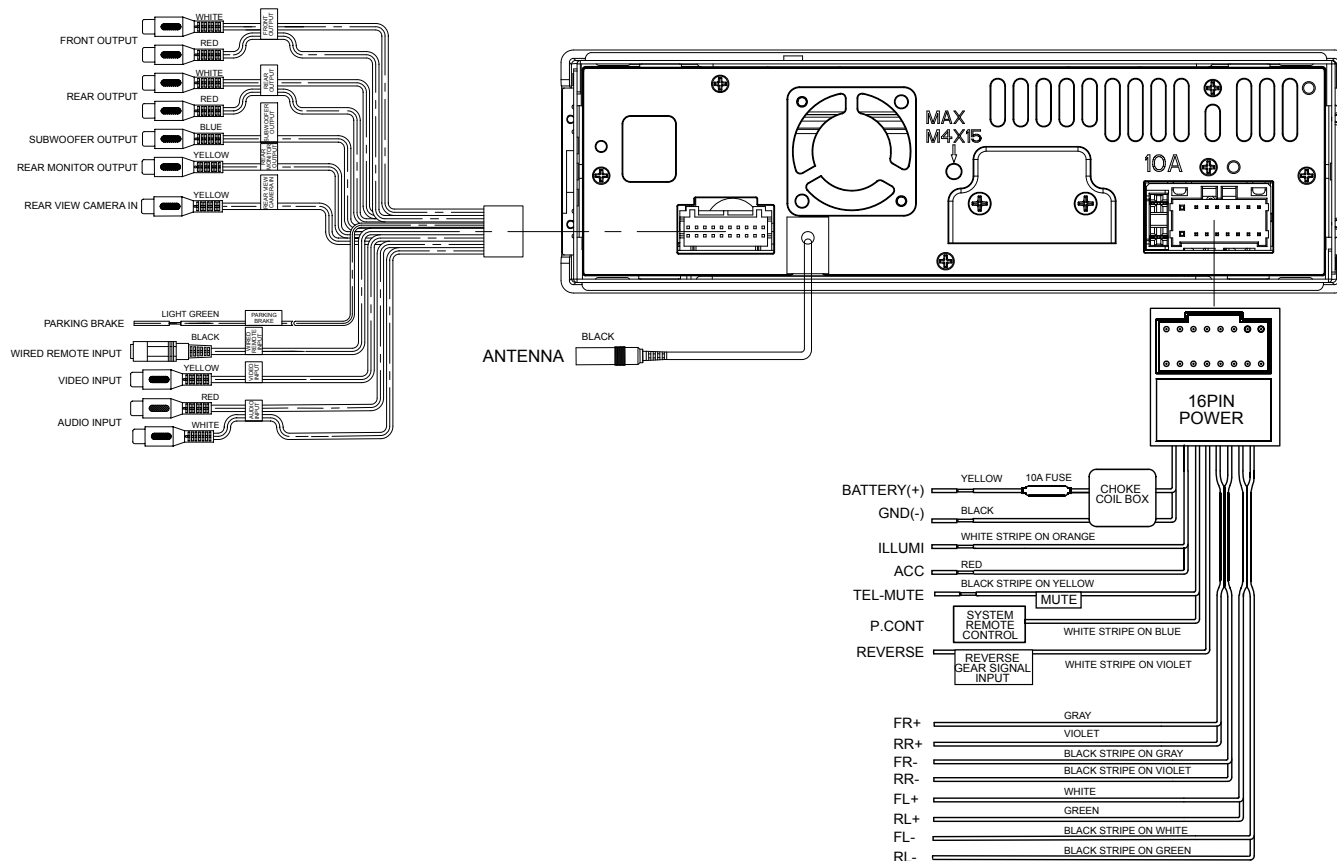
Also, never connect it to the power terminal of the auto antenna. Doing so may result in battery drain or a malfunction.

Notes of connection

- This unit is designed to be used in a vehicle with a 12-volt battery and negative grounding. Before installing this unit to a recreational vehicle, a bus, or a truck, make sure the battery voltage is appropriate for this unit to be used, otherwise, install a transformer by professional to convert the output voltage to 12V.
- Replacing a new fuse with 10A rating when the old one is broken, using no fuse or fuse with improper rating may cause damage to this unit or even fires. If a proper fuse is installed and electrical problems still occur, please contact with any professional car shops for inquiry.
- DO NOT connect other equipments with the car battery to avoid battery overheating.
- Please make sure all the wiring connections & the cables of the speakers are well-insulated. Otherwise, this unit may be damaged by short circuit.

Connection/Installation

Wiring diagram



Connection/Installation

Control Cables

Auto Brightness Control

To avoid the display being too bright at night time, if the headlight cable is connected to ILLUMI, turning on the headlight will dim the backlight of the TFT LCD and vice versa.

Telephone Mute

If the MUTE cable is connected to a car phone, other audio outputs mute when one call is received by the car phone.

Reverse Driving

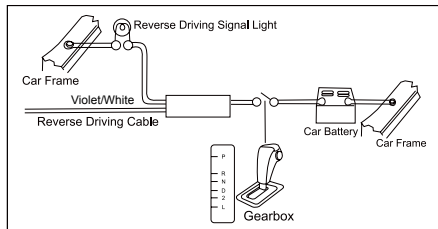
If a rear view camera is connected with the unit, the playing source switches to CAMERA automatically when you start reverse driving.

As the reverse driving is done, the playing source switches to the previous.

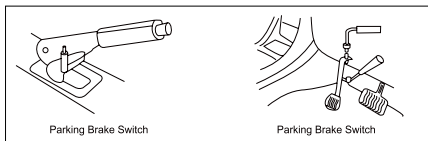
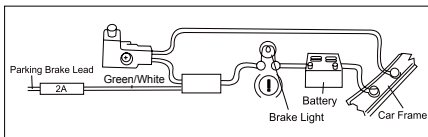
Parking Brake

1. If "PARKING BRAKE" cable is connected to hand brake switch, video display on the TFT monitor will be controlled by this function. Parking cable function ceases when the playing source is CAMERA.
2. The monitor displays the black screen with warning information to prevent the driver watching video contents during driving, but the passengers at the rear seat can watch video contents normally.

Reverse Driving Cable Connections



Parking Brake Cable Connections

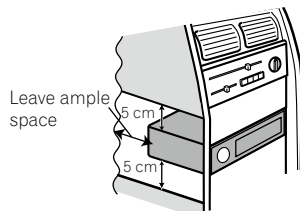


Connection/Installation

Installation

Notes of installation

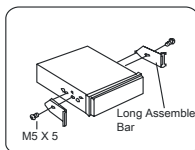
- Before installation, please make sure proper connections are conducted and the unit operates normally. Improper connection may result in damage to the unit.
- Use only accessories designed and manufactured for this unit and other unauthorized accessories may result in damage to the unit.
- Before installation, please fasten all power cables.
- DO NOT install the unit in the place where close to hot area to prevent damage to electrical components such as the laser head.
- Install the unit horizontally. Installing the unit more than 30 degree vertically may result in worse performance.
- DO NOT block the cooling fan exit to ensure sufficient heating dissipation of this unit, or it may result in damage to this unit.



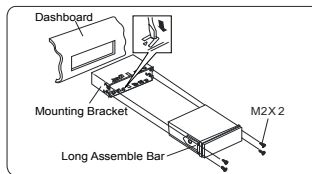
Unit Installation

Method A

1. Insert mounting bracket into dash board, choose appropriate mounting tab according to the gap width, bending the mounting tab outwards with a screwdriver to fix the mounting bracket in place.
2. Use 2 pieces of M5x5 cone shaped screw to fix two assemble bars on both sides of the unit. (see picture 1)



(Picture 1)



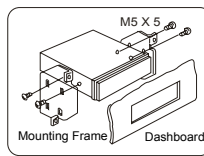
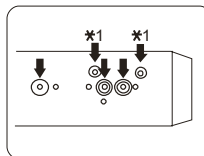
(Picture 2)

3. Insert the unit into the bracket, and use 4 pieces of M2x2 screw to lock the assemble bars and the mounting bracket in position.

Note:

According to the depth of the opening, use different position of M5 screw holes on the unit accordingly. If the opening is too shallow, the monitor may be extended out 10mm from the dashboard.

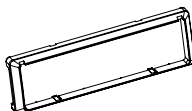
Method B



1. Insert this unit directly to the opening of the dashboard.
2. Place M4x3, M5x5 cylindrical screw or M5x5 cone shaped screw through the holes of the mounting frame located inside the opening to holes of the unit and fasten the screws to left & right.

Trim Ring installation

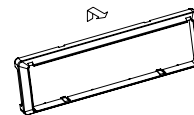
Attach the trim ring around the front panel with two indentions on one side facing upwards



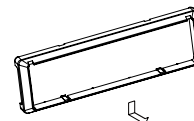
Uninstall

Disassemble trim ring

1. Push the trim ring upward and pull out the upper part.

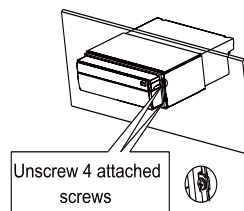


2. Push the trim ring downward and pull out the lower part.



Disassemble the unit

1. Unscrew the 4 pieces M2x2 screws.
2. Use a screwdriver to bend straight the bended mounting tab and tip out the unit from the mounting bracket.



3. Pull out the unit from the mounting bracket with both hands.

Troubleshooting

Common

Symptom	Cause	Action
The power will not turn on. The unit will not operate.	Leads and connectors are incorrectly connected.	Confirm once more that all connections are correct.
	The fuse is blown.	Rectify the cause and then replace the fuse. Be sure to install a fuse with the same rating.
	Noise and/or other factors are causing the built-in microprocessor to operate incorrectly.	Press RESET .
Operation with the remote control is not possible. The unit does not operate correctly even when the appropriate remote control buttons are pressed.	Battery power is low.	Load a new battery.
There is no sound. The volume level will not rise.	Cables are not connected correctly.	Connect the cables correctly.
The aspect ratio is incorrect and the image is stretched.	The aspect ratio setting is incorrect for the display.	Select the appropriate setting for your display.
There is no image displayed.	The parking brake cable is not connected.	Connect the parking brake cable, and apply the parking brake.
The image displayed stops (pauses) and the unit cannot be operated.	The data could no longer be read during playback.	Stop playback once, and start playback again.
There is no sound. The volume level is low.	The volume level is low.	Adjust the volume level.

The sound and video skip.	The unit is not firmly secured.	Firmly secure the unit.
Sub-folders cannot be played back.	Folder repeat play has been selected.	Select the repeat range again.
The repeat range changes automatically.	Another folder was selected during repeat play.	Select the repeat range again.
	Track search or fast forward/reverse was performed during file repeat play.	Select the repeat range again.

Format read	Disc or storage device is being read.	Please wait, it may take several minutes for some disc or storage device.
-------------	---------------------------------------	---

Error messages

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

Message	Cause	Action
Bad Disc	Disc is dirty.	Clean disc with soft cloth.
	Disc is upside down.	Insert disc with label side up.
Unsupported Video	The video resolution exceeds 720X576.	Change to a supported file.
Unsupported format	File format is not compatible with this unit.	Change to a supported file.
File Error	File format is not compatible with this unit.	Change to a supported file.
Disc region incorrect	Disc format is not compatible with this unit.	Change another disc.
Amplifier Error!	Unit fails to operate or speaker connection is incorrect; 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.

Handling guidelines

Discs and player

Use discs featuring any of the following logos.



Use 12-cm discs. Do not use 8-cm discs or an adapter for 8-cm discs.

Use only conventional, fully circular discs. Do not use shaped discs.



Do not insert anything other than a DVD-R/RW or CD-R/RW into the disc loading slot.

Do not use cracked, chipped, warped, or otherwise damaged discs as they may damage the player.

Unfinalized CD-R/RW discs cannot be played back.

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 disc, 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.

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

Road shocks may interrupt disc playback.

Certain functions may not be available for some DVD video discs.

It may not be possible to play back some DVD video discs.

It is not possible to play back DVD-RAM discs.

This unit is not compatible with discs recorded in AVCHD (Advanced Video Codec High Definition) format. Do not insert AVCHD discs as you may not be able to eject the disc.

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.

DVD-R/RW discs

Unfinalized DVD-R/RW discs which have been recorded in the Video format (video mode) cannot be played back.

Playback of DVD-R/RW discs may not be possible, due to disc characteristics, scratches or dirt on the disc, or dirt, condensation, etc. on the lens of this unit.

Depending on the application settings and the environment, playback of discs recorded on a personal computer may not be possible. (For details, contact the manufacturer of the application.)

CD-R/RW discs

When CD-R/RW discs are used, playback is possible only for discs which have been finalized.

Playback of CD-R/RW discs recorded on a music CD recorder or a personal computer may not be possible due to disc characteristics, scratches or dirt on the disc, or dirt, condensation, etc., on the lens of this unit.

Depending on the application settings and the environment, playback of discs recorded on a personal computer may not be possible. (For details, contact the manufacturer of the application.)

Playback of CD-R/RW discs may become impossible in case of direct exposure to sunlight, high temperatures, or the storage conditions in the vehicle.

Titles and other text information recorded on a CD-R/RW discs may not be displayed by this unit (in the case of audio data (CD-DA)).

DualDisc

DualDiscs are two-sided discs that have a recordable CD for audio on one side and a recordable DVD for video on the other. Playback of the DVD side is possible with this unit.

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

Frequent loading and ejecting of a DualDisc may result in scratches on the disc.

Serious scratches can lead to playback problems on this unit. In some cases, a DualDisc may become stuck in the disc loading slot and will not eject.

To prevent this, we recommend you refrain from using DualDisc with this unit.

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

USB storage device

- Address any questions you have about your external storage device (USB) to the manufacturer of the device.
- Do not leave the external storage device (USB) in places with high temperatures.
- Depending on the external storage device (USB), the following problems may occur.
 - Operations may vary.
 - The storage device may not be recognized.
 - Files may not be played back properly.
- Connections via USB hub are not supported.
- Do not connect anything other than a USB storage device.
- Firmly secure the USB storage device when driving. Do not

let the USB storage device fall onto the floor, where it may become jammed under the brake or accelerator pedal.

- Firmly secure the USB storage device when driving. Do not let the USB storage device fall onto the floor, where it may become jammed under the brake or accelerator pedal.
- Depending on the USB storage device, the device may cause noise to occur in the radio.
 - The device may generate noise in the radio.
- This unit can play back files in the USB portable audio player/USB memory that is USB Mass Storage Class. However, copyright protected files that are stored in the USB devices cannot be played back.
- You cannot connect a USB portable audio player/USB memory to this unit via USB hub.
- Partitioned USB memory is not compatible with this unit.
- Depending on the kind of USB portable audio player/USB memory you use, the device may not be recognized or audio files may not be played back properly.
- Do not leave the USB portable audio player/USB memory in direct sunlight for extended amounts of time. Doing so may cause the device to malfunction from the extreme rise in temperature.
- Up to 300 folders and 2 000 files can be recognized.

CAUTION

Pioneer cannot guarantee compatibility with all USB mass storage devices and assumes no responsibility for any loss of data on media players, smart phones, or other devices while using this product.

- There may be a slight delay at the start of playback of audio files embedded with image data or audio files stored on a USB storage device that has numerous folder hierarchies.

JPEG picture files

JPEG is short for Joint Photographic Experts Group and refers to a still image compression technology standard.

There is no progressive JPEG compatibility.

Important

- When naming a JPEG image file, add the corresponding filename extension (.jpg, .jpeg, .jpe or .jif).
- This unit plays back files with these filename extensions (.jpg, .jpeg, .jpe or .jif) as a JPEG image file. To prevent malfunctions, do not use these extensions for files other than JPEG image files.

CAUTION

Pioneer accepts no responsibility for data lost on the USB memory/USB portable audio player even if that data is lost while using this unit.

DivX video files

Depending on the composition of the file information, such as the number of audio streams or file size, there may be a slight delay when playing back discs.

Some special operations may be prohibited due to the composition of the DivX files.

Only DivX files downloaded from a DivX partner site are guarantee for proper operation. Unauthorized DivX files may not operate properly.

DRM rental files cannot be operated until playback is started.

Recommended file size: 2 GB or less with a transmission rate of 2 Mbps or less.

The ID code of this unit must be registered to a DivX VOD provider in order to playback DivX VOD files. For information on ID codes, refer to Displaying the DivX® VOD registration code in this manual.

For more details about DivX, visit the following site:
<http://www.divx.com/>

MPEG-1/MPEG-2/MPEG-4 video files

Elapsed playback time may not be displayed correctly.

Compressed audio compatibility (disc, USB)

WMA

File extension: .wma

Bit rate: 16 kbps to 320 kbps (CBR), VBR

Sampling frequency: 8 kHz to 48 kHz

Windows Media™ Audio Professional, Lossless, Voice/DRM Stream/Stream with video: Not compatible

MP3

File extension: .mp3

Bit rate: 16 kbps to 320 kbps (CBR), VBR

Sampling frequency: 8 kHz to 48 kHz

Compatible ID3 tag version: 1.0, 1.1, 2.2, 2.3 (ID3 tag Version 2.x is given priority over Version 1.x.)

M3u playlist: Not compatible

MP3i (MP3 interactive), mp3 PRO: Not compatible

DivX compatibility

Compatible format: DivX video format implemented in relation to DivX standards.

File extensions: .avi or .divx

DivX Ultra format: Not compatible

DivX HD format: Not compatible

DivX files without video data: Not compatible

DivX plus: Not compatible

Compatible audio codec: MP2, MP3, Dolby Digital

LPCM: Compatible

Bit rate: 16 kbps to 320 kbps (CBR), VBR

Sampling frequency: 8 kHz to 48 kHz

Compatible external subtitle file extension: .srt

MPEG-1/MPEG-2/MPEG-4 video

File extensions: .mpg or .mpeg (MPEG-1/MPEG-2), .avi (MPEG-4)

Compatible audio codec: MP2 (MPEG-1/MPEG-2), MP2, MP3, Dolby Digital

LPCM: Not compatible

Bit rate: 16 kbps to 320 kbps (CBR), VBR

Sampling frequency: 8 kHz to 48 kHz

Appendix

	Version	Bitrate	Input Sample rate	Output Sample rate
MPEG	V1/L1	32k--448k	32K, 44.1K, 48K	32K, 44.1K, 48K
	V1/L2	32k--192k(single channel), 64K, 96K->384K (2 channel)	32K, 44.1K, 48K	
	V2/L2	8k--192k(single channel), 32K, 48K->640K (multi channel)	22.05K(LSF), 32K, 44.1K, 48K	

Supplemental information

Some characters in a file name (including the file extension) or a folder name may not be displayed.

This unit may not work properly depending on the application used to encode WMA files.

There may be a slight delay at the start of playback of audio files embedded with image data or audio files stored on a USB storage device that has numerous folder hierarchies.

Disc

File system: ISO 9660 Level 1 and 2, Romeo, Joliet, UDF 1.02 (DVD-R/RW)

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

External storage device (USB)

Playable folders: up to 300

Playable files: up to 2 000

Playable of copyright-protected files: Not compatible

Partitioned external storage device (USB): Only the first playable partition can be played.

There is no compatibility for Multi Media Cards (MMC).

⚠ CAUTION

- Pioneer accepts no responsibility for data lost on the USB memory/USB portable audio player even if that data is lost while using this unit.
- Pioneer cannot guarantee compatibility with all USB mass storage devices and assumes no responsibility for any loss of data on media players, smart phones, or other devices while using this product.
- Do not leave the discs/external storage device (USB) or iPod in places with high temperatures.

Sequence of audio files

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

Disc

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

External storage device (USB)

The playback sequence is the same as the recorded sequence in the external storage device (USB).

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

- ① Create a file name that includes numbers that specify the playback sequence (e.g., 01xxx and 099yyy).
- ② Put those files into a folder.
- ③ Save the folder that contains the files to the external storage device (USB).

However, depending on the system environment, you may not be able to specify the playback sequence.

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

Using the display correctly

⚠ CAUTION

- If liquid or foreign matter should get inside this unit, turn off the power immediately and consult your dealer or the nearest authorized PIONEER Service Station. Do not use the unit in this condition because doing so may result in fire, electric shock, or other failure.
- If you notice smoke, a strange noise or smell, or any other abnormal signs from the display, turn off the power immediately and consult your dealer or the nearest authorized PIONEER Service Station. Using this unit in this condition may result in permanent damage to the system.
- Do not disassemble or modify this unit, as there are high-voltage components inside which may cause electric shock. Be sure to consult your dealer or the nearest authorized PIONEER Service Station for internal inspection, adjustments, or repairs.

Handling the display

- Never touch the screen with anything besides your finger when operating the touch panel function. The screen can scratch easily.
- When the display is subjected to direct sunlight for a long period of time, it will become very hot resulting in possible damage to the LCD screen. You should avoid exposing the display unit to direct sunlight as much as possible.
- The display should be used within the temperature range of -20°C to +60°C.
- At temperatures higher or lower than this operating temperature range, the display may not operate normally.
- The LCD screen is exposed in order to increase its visibility within the vehicle. Do not press it strongly on it as this may damage it.

Liquid crystal display (LCD) screen

- Heat from the heater may damage the LCD screen, and cool air from the cooler may cause moisture to form inside the display resulting in possible damage. Also, if the display is cooled down by the cooler, the screen may become dark, or the life span of the small fluorescent tube used inside the display may be shortened.
- Small black dots or white dots (bright dots) may appear on the LCD screen. These are due to the characteristics of the LCD screen and do not indicate a malfunction.
- When using a cellular phone, keep the antenna away from the display to prevent disruption of the video image by the appearance of spots, colored stripes, etc.

Keeping the display in good condition

- When removing dust from the screen or cleaning the display, first turn the system power off, then wipe with a soft dry cloth.
- When wiping the screen, take care not to scratch. Do not use harsh or abrasive chemical cleaners.

LED (light-emitting diode) backlight


- At low temperatures, using the LED backlight may increase image lag and degrade the image quality due to the characteristics of the LCD screen. Image quality will improve with an increase in temperature.
- To protect the LED backlight, the display will darken in the following environments:
 - In the direct sunlight

- Near the heater vent
- The product lifetime of the LED backlight is more than 10 000 hours. However, it may decrease if used in high temperatures.
- If the LED backlight reaches the end of its product lifetime, the screen will become dark and the image will no longer be projected. In such cases, please consult your dealer or the nearest authorized PIONEER Service Station.

Copyright and trademark

This item incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. Reverse engineering and disassembly are prohibited.

DVD video

 is a trademark of DVD Format/Logo Licensing Corporation.

MP3

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

WMA

Windows Media is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

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DivX®

DivX®, DivX Certified® and associated logos are trademarks of DivX, LLC and are used under license.

This DivX Certified® device has passed rigorous testing to ensure it plays DivX® video.

To play purchased DivX movies, first register your device at vod.divx.com. Find your registration code in the DivX VOD section of your device setup menu.

Dolby Digital

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

Specifications

General

Rated power source	14.4 V DC (allowable voltage range: 10.8 V to 15.1 V DC)
Preout maximum output level	2 V
Maximum current consumption	10.0 A
Dimensions (W × H × D):	
Chassis	178 mm x 50 mm x 158 mm
Nose	188 mm x 58 mm x 35.5 mm
Weight	2.0 kg

Display

Screen size/aspect ratio	7 inch wide/16:9 (effective display area: 154.08*85.92 mm)
Pixels	800*480
Durable temperature range (power off)	-20 °C to + 60 °C

DVD Player

System	DVD video, Video CD, CD, WMA, MP3, DivX, JPEG, AAC, MPEG4
Usable disc	DVD video, Video CD, CD, CD-R/RW, DVD±R/RW DL
Region number	4 for Latin America models 2 for Middle East Asian models
Frequency response	20 Hz to 20 kHz (with DVD, at sampling frequency 96 kHz)
Signal-to-noise ratio	75 dB (1 kHz) (IEC-A network) (RCA level)
Output level:	
Video	1.0 Vp-p/75 Ω (±0.2 V)
Number of channels	2 (stereo)
MP3 decoding format	MPEG-1 & 2 Audio Layer 3
WMA decoding format	Ver. 7, 8, 9 (CBR, VBR) (Support 353 format)
AAC decoding format	Support AAC LC (2ch)
MPEG video decoding format	MPEG-1/MPEG-2/MPEG-4 video
DivX decoding format	Home Theater Ver. 3, 4, 5, 6 (.avi, .divx)
DVD video output	NTSC

Audio

Maximum power output	50 W × 4
Continuous power output	22 W × 4 (50 Hz to 15 000 Hz, 10 %THD, 4 Ω load, both channels driven)
Load impedance	4 Ω (4 Ω to 8 Ω (2 Ω for 1 ch) allowable)
Preout maximum output level	2 V
Equalizer	3-Band Parametric Equalizer
Gain	-12 dB to + 12 dB

Subwoofer (mono):

Frequency	80 Hz/120 Hz/160 Hz
Gain	-79 dB to 0 dB

USB

USB standard specification	USB 1.1, USB 2.0 high speed
Maximum current supply	500 mA
File system	FAT 16, FAT 32

FM tuner

Frequency range	87.5 MHz to 108.0 MHz
Usable sensitivity	15 dBuV (S/N: 30 dB)

AM tuner

Frequency range	531 kHz to 1 602 kHz (9 kHz) 530 kHz to 1 640 kHz (10 kHz)
Usable sensitivity	30 dBuV (S/N: 20 dB)

Note:

Specifications and the design are subject to modifications without notice.

Visit us on the World Wide Web at

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

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