

Pioneer

SMARTPHONE RECEIVER

English

SPH-20DAB

Operation Manual



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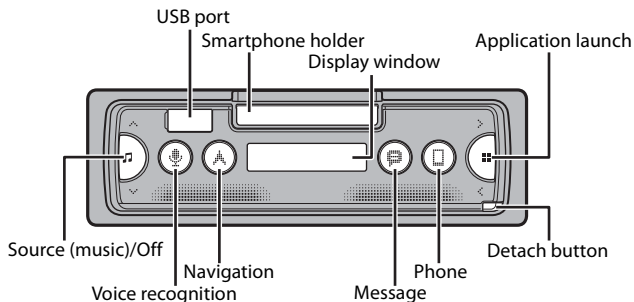
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About this manual:

- In the following instructions, a USB memory or USB audio player are referred to as "USB device".
- When an iPhone is connected to the unit, the source name on the unit appears as [iPod]. Please note that this unit supports only iPhones (iPhone 5s or later) regardless of the source name (page 30).

Getting Started

Basic operation



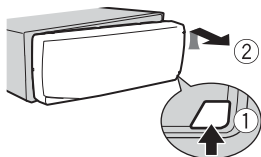
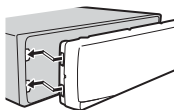
Frequently used operations

Purpose	Operation
Turn on the power*	Press to turn on the power. Press and hold to turn off the power.
Adjust the volume	Press .
Select a source	Press repeatedly.
Return to the previous display/list	Press .
Return to the normal display from the menu	Press and hold .
Answering a call	Press any button.
Ending a call	Press .

* 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.

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**

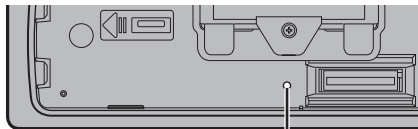
- Avoid subjecting the front panel to excessive shock.
- Keep the front panel out of direct sunlight and high temperatures.
- Always store the detached front panel in a protective case or bag.

Resetting the microprocessor

The microprocessor must be reset in the following situations:

- Before using this unit for the first time after installation
- If the unit fails to operate properly
- When strange or incorrect messages appear on the display

- 1** Remove the front panel (page 3).
- 2** Press the **RESET** button with a pointed instrument longer than 8 mm.



RESET button

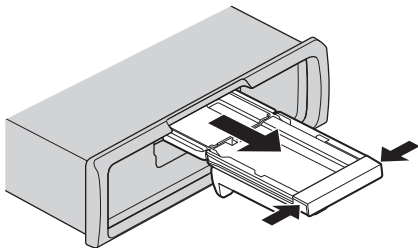
Operating the smartphone holder**WARNING**

- Detach the smartphone from the holder while driving under bad road conditions since the smartphone may fall from the holder.
- Do not leave the smartphone attached onto the holder.
- Do not use the holder if you experience difficulty when attaching the smartphone onto the holder.
- Do not operate the holder or smartphone while driving.
- Be careful not to get your hands and fingers caught in the moving parts while operating the holder.

- Do not attach the smartphone to the holder in a location where it may drop on the driver's feet.
- Do not set the holder near the air conditioner vent.
- Make sure that nothing affects the operation of the air bags or vehicle operating systems, safety feature or hazard lamps.
- PIONEER IS NOT RESPONSIBLE AND DISCLAIMS LIABILITY FOR ANY DAMAGES CAUSED THROUGH USE OF THE PRODUCT OR VEHICLE.

Removing the smartphone holder

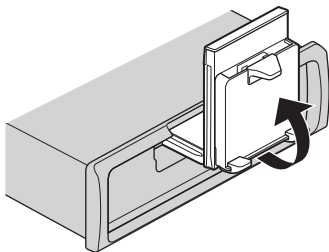
- 1 Detach the front panel (page 3).
- 2 Pull out the holder by holding the anti slip portion on the edge of the holder until the holder is completely visible.



⚠ CAUTION

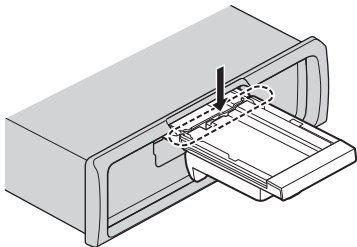
Never pull up the holder until the holder is completely visible.

- 3 Pull up the holder vertically.



⚠ CAUTION

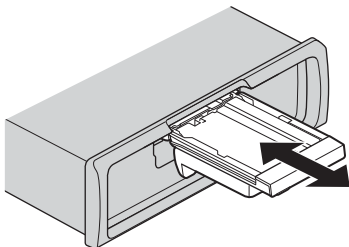
Make sure that the line can be seen when the holder is pulled up vertically.



4 Attach the front panel to the unit (page 3).

Adjusting the smartphone holder horizontally

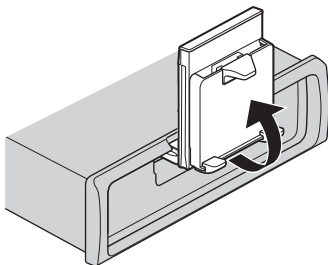
1 Slide the holder while the holder is in a horizontal position.



NOTE

Detach the smartphone from the device while adjusting the holder.

2 Pull up the holder.



Attaching the smartphone to the holder

⚠ CAUTION

- Depending on the shape of the smartphone, smartphone case or cover, it may not be attachable to the holder.
- Be careful not to pinch your fingers in the holder.

Compatible smartphone size

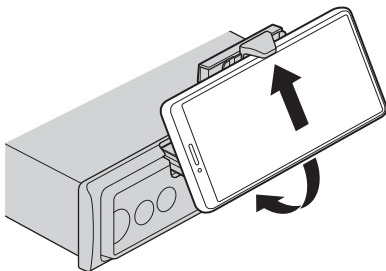
H: 58 mm - 170 mm

W: 58 mm - 87 mm

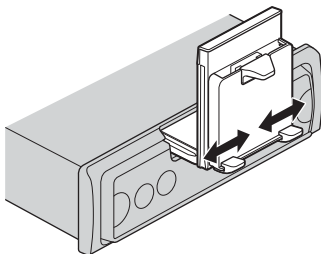
D: 4 mm - 10 mm

Weight: under 0.25 kg

- 1** Hook the smartphone on the upper arm and then push it into the lower arm.



- 2** Slide the lower arms position to avoid hitting the lower arm and smartphone buttons against each other.

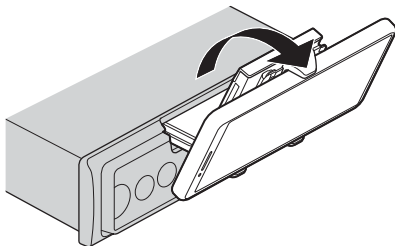


NOTES

- Make sure that the smartphone is held properly on the holder.
- When the smartphone buttons come in contact with the upper or lower arms, adjust the smartphone's position or turn the smartphone upside down.

Adjusting the smartphone holder

Adjusting the holder angle



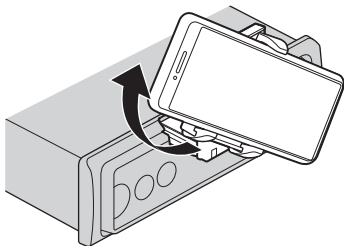
The holder angle range:
Downward 45° to upward 100°

⚠ WARNING

Do not set the holder where it may (i) interfere with vehicle panels or switches or (ii) impair the driver's performance.

Turning the smartphone holder from a horizontal to a vertical position

- 1 Rotate the smartphone holder 90° clockwise.

**⚠ CAUTION**

Be careful not to drop the smartphone when the smartphone is attached to the holder while rotating.

Turning the smartphone holder from a vertical to a horizontal position

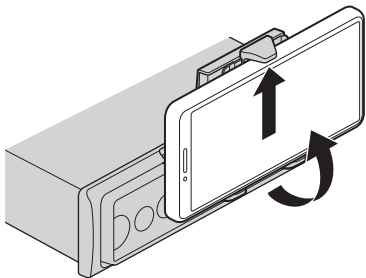
- 1 Rotate the smartphone holder 90° anticlockwise.

⚠ CAUTION

Be careful not to drop the smartphone when the smartphone is attached to the holder while rotating.

Detaching the smartphone from the holder

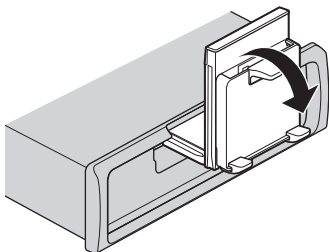
- 1 Pull out the smartphone while pushing up the upper arm with the smartphone.

**⚠ CAUTION**

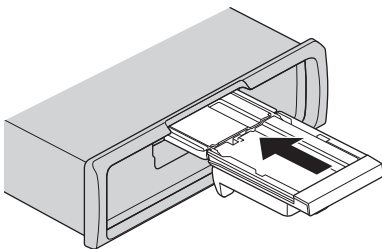
- Be careful not to drop the smartphone.
- Do not use the holder when the smartphone is detached.

Storing the smartphone holder

- 1 Detach the front panel (page 3).
- 2 Fold the holder horizontally.









- 3 Push the holder completely into the unit.



- 4 Attach the front panel to the unit (page 3).

INITIAL settings




- 1 Press and hold  until the unit turns off.
- 2 Press and hold  to display the main menu.
- 3 Press  to select [INITIAL], then press  to confirm.
- 4 Press  to select an option, then press  to confirm.

Menu Item	Description
FM STEP [100KHZ], [50KHZ]	Select the FM tuning step from 100 kHz or 50 kHz.
SP-P/O [FUL/SUB]	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/SUB]	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.
[FUL/FUL]	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 [FUL/SUB] or [FUL/FUL].
UPDATE [S/W VER], [START]	Select [S/W VER] to confirm the latest system information on the unit. Select [START] to update the unit to the latest software and initialize the unit settings. For details on the latest software and updating, visit our website.
ANT SET [Y]	Supply power to a DAB antenna. Select this when using the optional DAB antenna (AN-DAB1, sold separately) with the unit.
[N]	No power is supplied to a DAB antenna. Select this when using a passive antenna with no booster.
RESET [YES], [NO]	Select [YES] to initialize the unit settings. The unit will be restarted automatically.

Digital Audio Broadcasting (DAB)

To receive DAB signals, connect a DAB antenna (AN-DAB1) (sold separately) to the unit.

Seeking a service component/station

- 1 Press  to select [DAB].
[UPDATING] appears on the display and the service list is updated only when the initial settings are being configured.
- 2 Press  to select the band from [D1], [D2] or [D3].
- 3 Press  to select a service component/station.

NOTE

Press and hold </> then release to seek an available service. Scanning stops when the unit receives a service.

Radio

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

Receiving preset stations

- 1 Press to select [RADIO].
- 2 Press to select the band from [FM1], [FM2], [FM3], [MW] or [LW].
- 3 Press < or >.

TIP

The </> buttons can be also used to select a preset station when [SEEK] is set to [PCH] in the FUNCTION settings (page 22).

Best stations memory (BSM)

The six strongest stations are stored then select the channel by pressing </>.

- 1 After selecting the band, press and hold to display the main menu.
- 2 Press > to select [FUNCTION], then press to confirm.
- 3 Press > 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 [MANUAL] in the FUNCTION settings (page 22).

To store stations manually

This function is only available on Pioneer Smart Sync (page 17). For details, see the application's help section.

Using PTY functions

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

- 1 Press and hold **■** during FM reception.
- 2 Press **>** to select [FUNCTION], then press **■** to confirm.
- 3 Press **>** to select [PTY], then press **■** to confirm.
- 4 Press **>** to select a program type from [NEWS/INF], [POPULAR], [CLASSICS] or [OTHERS].
- 5 Press **■**.
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 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, [NOTFOUND] is displayed for about two seconds and then the tuner returns to the original station.

USB/iPhone

Playing back

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

USB devices (including Android™)/iPhone

- 1 Open the USB port cover.
- 2 Plug in the USB device/iPhone using an appropriate cable.

NOTES

- To automatically switch to USB source when a USB device/iPhone is connected to the unit, set [USB AUT] to [Y] in the SYSTEM settings (page 25).
- To use iPhone source, [APP CTL] needs to be switched to the appropriate settings (page 25).

⚠ CAUTION

Use a USB cable (sold separately) 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.

AOA connections

A device running Android OS 4.1 or later installed and also supports AOA (Android Open Accessory) 2.0 can be connected to the unit via AOA, using the cable supplied with the device.

NOTE

If you use an AOA connection, [APP CTL] needs to be set to [WIRED] in the SYSTEM settings (page 25).

Operations

You can make various adjustments in Pioneer Smart Sync (page 17).

Purpose	Operation
Select a folder*1	Press ■ .
Select a track/song (chapter)	Press < or > .
Fast forward or reverse*2	Press and hold < or > .

*1 Compressed audio files only

*2 When you use the fast forward or reverse function while playing a VBR file, the playback time may be not correct.

Bluetooth®

Bluetooth connection

🔔 Important

If ten or more Bluetooth devices (e.g. a phone and separate audio player) are connected, they may not work properly.

TIP



The next connection to the unit is performed automatically if the Bluetooth device has been connected previously in the following steps.

- 1 Turn on the Bluetooth function of the device.
- 2 Select the unit name shown in the device display.

- 3 Make sure the same 6-digit number appears on this unit and the device, then select [Y] if the 6-digit numbers displayed on this unit and the device are the same.

Bluetooth reconnection

Once the Bluetooth connection is established with the device, you can connect the device from the unit.

- 1 Turn on the Bluetooth function of the device.
- 2 Press .
[DEV LIST] appears.
- 3 Press > to select the device.
- 4 Press  to confirm.

Bluetooth telephone

First, make a Bluetooth connection with the Bluetooth telephone (page 14). Up to two Bluetooth telephones can be connected simultaneously.

Important

- Leaving the unit on standby to connect to your phone via Bluetooth while the engine is not running can drain the vehicle's battery.
- Be sure to park your vehicle in a safe place and apply the parking brake before operation.

To make a phone call

This function is only available on Pioneer Smart Sync (page 17). For details, see the application's help section.


To answer an incoming call




- 1 Press any button when a call is received.

TIP

When two phones are connected to the unit via Bluetooth and there is an incoming call while one phone is being used for a call, a message will appear on the display. To answer that incoming call, you need to end the existing call.

Basic operations


Purpose	Operation
End a call	Press  .

Purpose	Operation
Reject an incoming call	Press and hold  when a call is received.
Adjust the volume of the caller's voice (When private mode is on, this function is not available.)	Press  or  during the call.

Voice recognition

This function is only available when an iPhone/Android device equipped with voice recognition is connected to the unit via Bluetooth.

1 Press  then talk into the microphone to input voice commands.

To exit the voice recognition mode, press and hold .

NOTE

For details on the voice recognition features, refer to the manual supplied with your device.

Bluetooth audio

Important

- Depending on the Bluetooth audio player connected to this unit, the available operations will be limited to the following two levels:
 - A2DP (Advanced Audio Distribution Profile) can only play back songs on your audio player.
 - AVRCP (Audio/Video Remote Control Profile) can perform functions such as playback, pause, select song, etc.
- The sound of the Bluetooth audio player will be muted when the phone is in use.
- When the Bluetooth audio player is in use, you cannot connect to a Bluetooth telephone automatically.
- Depending on the type of Bluetooth audio player you have connected to this unit, operation and information displayed may vary based on availability and functionality.

1 Make a Bluetooth connection with the Bluetooth audio player.

2 Press  to select [BT AUDIO] as the source.

3 Start playback on the Bluetooth audio player.

NOTE

You must reconnect the Bluetooth connection when the source is switched or the unit is turned off.

TIP

When more than two and up to five devices are registered to the unit via Bluetooth, you can switch the Bluetooth device by playing back songs on the device. By doing so, playing back a song from the Bluetooth device of each passenger is easily available. However, depending on the usage conditions, multiple connections may not be available and the audio files/songs may not be able to be played back properly.

Basic operations

You can make various adjustments in Pioneer Smart Sync (page 17).

Purpose	Operation
Fast forward or reverse	Press and hold < or >.
Select a track	Press < or >.

Using Pioneer Smart Sync/APP

Pioneer Smart Sync is the application that intelligently brings your maps, messages, and music together in the vehicle.

You can operate the unit from Pioneer Smart Sync installed on an iPhone/Android device. In some cases, you can control aspects of the application, such as source selection, pause, etc., by using the unit.

For details on what operations are available on the application, see the application's help section.

NOTE

The APP source is not available when a Pioneer Smart Sync connection is not made.

WARNING

- Do not attempt to operate the application 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 application.
- Functions operated with a smartphone are merely tools available to the driver. The driver shall observe safe and sensible driving behaviour under all circumstances.

For iPhone users

This function is compatible with iOS 10.3 or later.

You can download Pioneer Smart Sync on iTunes App Store.



For Android device users

This function is compatible with devices that have Android OS 5.0 or later installed.

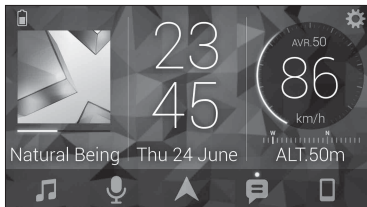
You can download Pioneer Smart Sync on Google Play Store.

**NOTE**

Some Android devices connected via AOA 2.0 may not work properly or emit sounds due to their own software design, regardless of the OS version.

What kind of function does the application have?**Promoting the use of the unit**

The interface of the unit can be evolved by using your iPhone/Android device.

Image (example):**Examples:**

- Selecting a source of the unit
- Listening to the music on your iPhone/Android device
- Controlling the sound field intuitively and setting the illumination colour
- Controlling your connected Bluetooth device

Extending the functions of the unit by using the application

The following functions, which are unavailable on the unit alone, are available by making a Pioneer Smart Sync connection.

Menu Item (example)	Description
Using a navigation application	You can specify and start the navigation application installed on your device.
Message reading	You can read messages received from the apps installed on your device.

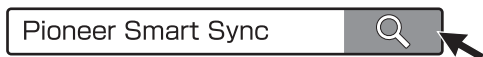
Menu Item (example)	Description
31 Band EQ setting	You can select an equalizer band from the 31-band graphic equalizer.
Super "Todoroki" Sound	You can boost the bass level more dynamically than when not using the Pioneer Smart Sync connection.
Easy Sound Fit	You can perform the time alignment setting easily by selecting your vehicle type.
Theme setting	You can set the wall paper and the theme colour at once.

NOTES

- Some functions may be restricted depending on the connection conditions with the application.
- The 31 Band EQ setting is converted into 13 bands when a music source from this product is engaged.

TIP

It is recommended to enter the search term "Pioneer Smart Sync" in the search field to search for the application.



Making a connection with Pioneer Smart Sync

1 Connect this unit with the mobile device via Bluetooth.

- iPhone/Android device via Bluetooth (page 14)
Pioneer Smart Sync on the iPhone/Android device starts automatically.

NOTE


[APP CTL] needs to be set to [BT] in the SYSTEM settings to connect to the Pioneer Smart Sync automatically (page 25).

Pioneer Smart Sync connection via wired connection


You can also make the Pioneer Smart Sync connection via USB connection.

- 1 Press and hold **⏏** to display the main menu.
- 2 Press **>** to select [SYSTEM], then press **⏏** to confirm.
- 3 Press **>** to select [APP CTL], then press **⏏** to confirm.
- 4 Press **>** to select [WIRED], then press **⏏** to confirm.
Pioneer Smart Sync on the iPhone/Android device starts automatically.

NOTES

- If Pioneer Smart Sync has not been installed on your iPhone/Android device yet, a message that prompts you to install the application will appear on your iPhone/Android device.
- When you connect a mobile device other than an iPhone/Android device, it may not operate correctly depending on your mobile device.
- To connect to the Pioneer Smart Sync manually, press and hold .

Listening to music on your device

- 1 Press  to select [APP].

Parking Sensor

A separately sold parking sensor (e.g. ND-PS1) is required to utilize the parking sensor function which includes features indicates the distance from objects by sound and unit display colours.

Sensor functions**NOTE**

The parking sensor function is only available when the gear shift is in the REVERSE (R) position and [SENSOR] is set to [Y] in the P.SENSOR settings (page 26).

Distance to the objective	Unit display colour and warning sound
More than 160 cm	Green with no sound
160 cm to 90 cm	Yellow with a slow intermittent beep sound
90 cm to 40 cm	Orange with an intermittent beep sound
Less than 40 cm	Red with a continuous beep sound

TIP

- The shortest distance in the detected distance range is applied on the unit's indicator.
- The left/right illumination on the unit shows the distance between the two sensors on the left/right sides and the object.
- The colour of the illumination displays the shorter distance of one of the two sensors.

Settings

You can adjust various settings in the main menu.

NOTE

The setting operation from this unit is not available when Pioneer Smart Sync is connected.

- 1** Press and hold **⏏** to display the main menu.
- 2** Press **>** to select one of the categories below, then press **⏏** to confirm.
 - FUNCTION settings (page 21)
 - AUDIO settings (page 23)
 - SYSTEM settings (page 24)
 - ILLUMINATION settings (page 26)
 - P.SENSOR settings (page 26)
- 3** Press **>** to select the options, then press **⏏** to confirm.

FUNCTION settings

The menu items vary according to the source.

Menu Item	Description
FOLLOW DAB [Y], [N]	Search for another ensemble that supports the same service component/station with better reception. If no alternative service component/station can be found or reception remains poor, the unit will automatically switch to an identical FM broadcast.
S.LINK*1*2 DAB [Y], [N]	If the reception of the service component/station being received becomes poor, the unit will automatically switch to a station with a similar broadcast.
FMSOUND RADIO [TALK], [STANDARD], [MUSIC]	Match the sound quality level with the broadcast signal conditions of the FM band signal. (Available only when FM band is selected.)
BSM RADIO	Store the six strongest stations automatically.
REGION RADIO [Y], [N]	Limit the reception to the specific regional programs when AF (alternative frequencies search) is selected. (Available only when FM band is selected.)

Menu Item	Description
LOCAL <input type="button" value="RADIO"/> FM: [OFF], [LEVEL1], [LEVEL2], [LEVEL3], [LEVEL4] MW/LW: [OFF], [LEVEL1], [LEVEL2]	Restrict the tuning station according to the signal strength.
TA SET <input type="button" value="DAB"/> <input type="button" value="RADIO"/> [DAB+RDS]	Receive current traffic information for DAB and RDS (DAB has priority) if available.
[RDS ONLY]	Receive current traffic information for only RDS if available.
[TA OFF]	Disables this function.
AF <input type="button" value="RADIO"/> [Y], [N]	Allow the unit to retune to a different frequency providing the same station. (Available only when FM band is selected.)
NEWS <input type="button" value="RADIO"/> [Y], [N]	Interrupt the currently selected source with news programs. (Available only when FM band is selected.)
SEEK <input type="button" value="RADIO"/> [MANUAL], [P.CH]	Assign < or > buttons to seek the stations one by one (manual tuning) or select a station from the preset channels.
PTY <input type="button" value="RADIO"/> [NEWS/INF], [POPULAR], [CLASSICS], [OTHERS]	Searches for a station by PTY (program type) information (page 13).
SEL DEV <input type="button" value="iPhone"/> <input type="button" value="BT AUDIO"/>	Connect a Bluetooth device in the list.

*1 Only available in areas where [S.LINK] function is supported.

*2 Not available when [FOLLOW] function is turned off.

AUDIO settings

Menu Item	Description
EQ	
[SUPERBAS], [POWERFUL], [NATURAL], [VOCAL], [APP EQ]*, [CUSTOM1], [CUSTOM2], [FLAT], [VIVID], [DYNAMIC] * [APP EQ] is displayed when the preset equalizer curve that is not available in the unit has been set from Pioneer Smart Sync.	Select the preset equalizer curve. • You can only customise the equalizer curve by Pioneer Smart Sync (page 17).
FADER*1	
	Adjust the front and rear speaker balance. • You can adjust the fader by pressing < or >.
BALANCE	
	Adjust the left and right speaker balance. • You can adjust the balance by pressing < or >.
SUB.W*2	
[Y], [N]	Set to [Y] when using a subwoofer speaker.
D.BASS	
[OFF], [LOW], [HIGH]	Boost the bass level dynamically to offer an effect as if a subwoofer was added to the system.
LOUDNES	
[OFF], [LOW], [MID], [HIGH]	Compensate for clear sound at low volume.
SLA	
[+4] to [-4]	Adjust the volume level for each source except FM. Each of the below combinations are set to the same setting automatically. • When making a USB connection, set USB, iPhone and APP. • When making a Bluetooth connection, set BT AUDIO, iPhone and APP.

Menu Item	Description
S.RTRV	
[1] (effective for low compression rates), [2] (effective for high compression rates), [OFF]	Enhance compressed audio and restore rich sound.

*1 Not available when [SUB/SUB] is selected in [SP-P/O] in the INITIAL settings (page 11).

*2 Not available when [FUL/FUL] is selected in [SP-P/O] in the INITIAL settings (page 11).

SYSTEM settings

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

Menu Item	Description
LANG	
[ENGLISH], [РУССКИЙ]	Select the language to display the text information from a compressed audio file.
CLOCK	
[12H], [24H]	Set the clock. • This setting is not available when a Pioneer Smart Sync connection is made.
BEEP	
[Y], [N]	A beep can be heard when any button is pushed. Select [N] to disable this function.
AUTO PI	
[Y], [N]	Search for a different station with the same programming, even if using a preset station.
PW SAVE*	
[Y], [N]	Reduce the battery power consumption. Turning on the source is the only operation allowed when this function is on.
BT CLR	
[YES], [NO]	Clear the Bluetooth device data (device list, PIN code, call history, phone book, preset phone numbers) stored in the unit. [CLEARED] appears when data is successfully deleted.

Menu Item	Description
APP CTL [BT], [WIRED]	Select the appropriate connection method according to your device. See page 25 for details on the connections for each device.
USB AUT [Y], [N]	Select [Y] to automatically switch to USB source when a USB device/iPhone is connected to the unit. Select [N] when a USB device/iPhone is being connected to the unit just for charging.
DISP OFF [Y], [N]	Set to off the screen display and all key's illumination.
ATT/MUT [MUTE], [ATT]	Select mute or attenuate the volume when the volume key is pressed and held.
DEV INF	Displaying the device information.

* [PW SAVE] is canceled if the vehicle battery is disconnected and will need to be turned back on once the battery is reconnected. When [PW SAVE] is off, depending on connection methods, the unit may continue to draw power from the battery if your vehicle's ignition does not have an ACC (accessory) position.

Information on the connections for each device

The available sources differ depending on the setting value.
Please set [APP CTL] according to the table for the source you want to use.
For details on Pioneer Smart Sync connection, see page 17.

When Pioneer Smart Sync connection is NOT performed

Setting Value	Device	Available source(s)
[WIRED]	iPhone	iPhone
	Android	USB (AOA)
[BT]	iPhone	iPhone
	Android	-

When Pioneer Smart Sync connection is performed

Setting Value	Device	Available source(s)
[WIRED]	iPhone	APP
	Android	APP
[BT]	iPhone	APP
	Android	APP

ILLUMINATION settings

Menu Item	Description
COLOUR	
	Select colour of the unit from 12 preset colours or [SCAN].
	<ul style="list-style-type: none"> • [SCAN]: Cycle through a variety of colors automatically.
DIMMER	
[SNC ILM], [SNC CLK], [OFF]	Select the way to change the display brightness.
BRT	
[1] to [10]	Change the display brightness. The available setting ranges differ depending on [DIMMER].

P.SENSOR settings

This setting functions by connecting the parking sensor (sold separately).

Menu Item	Description
SENSOR	
[Y], [N]	Select the parking sensor function on or off.
VOLUME	
	Adjust the parking sensor warning volume.
OUTPUT	
[L+R], [LEFT], [RIGHT]	Select the output of parking sensor warning sound.
REVGEAR	
[BATTERY], [GROUND]	Select the polarity of the connected reverse gear's lead.

Additional Information

Troubleshooting

The display automatically returns to the normal display.

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

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.

The sound from the Bluetooth audio source is not played back.

- There is a call in progress on a Bluetooth-connected cellular phone.
 - The sound will be played back when the call is terminated.
- A Bluetooth-connected cellular phone is currently being operated.
 - Stop using the cellular phone.
- The connection between the unit and the cellular phone is not established correctly after a call made by a Bluetooth-connected cellular phone.
 - Make a Bluetooth connection between the unit and the cellular phone again.

Error messages

Common

AMP ERR

- 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.

DAB tuner

ERROR

- The antenna connection is incorrect.
 - Check the antenna 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.

USB device/iPhone

READING

- 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.

HUB ERR

- The USB device connected via a USB hub is not supported by this unit.
 - Connect the USB device directly to this unit using a USB cable.

CHECKUSB

- 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.
 - Disconnect the USB device.
 - Change to a different source.
- iPhone failure.
 - Disconnect the cable from the iPhone. Once the iPhone's main menu is displayed, reconnect the iPhone and reset it.

ERROR-23

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

ERROR-16

- The iPhone firmware version is old.
 - Update the iPhone version.
- iPhone failure.
 - Disconnect the cable from the iPhone. Once the iPhone's main menu is displayed, reconnect the iPhone and reset it.

STOP

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

NO DEV

- No Bluetooth device found.
 - Connect the unit and iPhone via Bluetooth (page 14).

CN FAIL

- Bluetooth connection with iPhone failed.
 - Make a connection again on the mobile device.

DISCNCT

- Bluetooth connection lost.
 - Make a connection again on the mobile device.

Bluetooth device

ERROR-10

- The power failed for the Bluetooth module of the unit.
 - Turn the ignition switch OFF and back to ACC or ON.

APP

CNCT APP

- Pioneer Smart Sync connection is not made.
 - Make a connection with Pioneer Smart Sync (page 17).

Handling guidelines

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.

iPhone

- Do not leave the iPhone in places with high temperatures.
- Firmly secure the iPhone when driving. Do not let the iPhone fall onto the floor, where it may become jammed under the brake or accelerator pedal.
- Incompatible text saved on the iPhone will not be displayed by the unit.

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.

- Russian text to be displayed on this unit should be encoded in one of the following character sets:
 - Unicode (UTF-8, UTF-16)
 - A character set other than Unicode that is used in a Windows environment and is set to Russian in the multi-language setting

⚠ 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 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

File extension	.wav
Quantization bits	8 and 16 (LPCM)
Sampling frequency	16 kHz to 48 kHz (LPCM)

AAC files

Compatible format	AAC encoded by iTunes
File extension	.m4a
Sampling frequency	11.025 kHz to 48 kHz
Stereo Bit Rate	16 kbps to 320 kbps, VBR
Apple Lossless	Not compatible
AAC file bought from the iTunes Store (.m4p file extension)	Not compatible

FLAC files

- FLAC files may not be playable, depending on the encoder.

File extension	.flac, .fla
Sampling frequency	8/11.025/12/16/22.05/24/32/44.1/48/96 kHz
Quantization bit rate	8/16/24 bit
Channel mode	1/2 ch

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 1 500
Playable files	Up to 15 000

Playback of copyright-protected files	Not compatible
Partitioned USB device	Only the first partition can be played.

iPhone compatibility

This unit supports only the following iPhone models. Older versions may not be supported.

- iPhone X
- iPhone 8
- iPhone 8 Plus
- iPhone 7
- iPhone 7 Plus
- iPhone SE
- iPhone 6s
- iPhone 6s Plus
- iPhone 6
- iPhone 6 Plus
- iPhone 5s
- Operations may vary depending on the generation and/or software version of the iPhone.
- Users of iPhone with the Lightning Connector should use the Lightning to USB Cable (supplied with iPhone).
- Refer to the iPhone manuals for information about the file/format compatibility.
- Audiobook, Podcast: Compatible

CAUTION

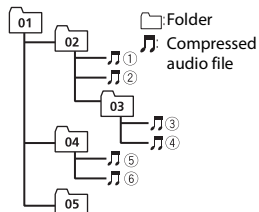
Pioneer accepts no responsibility for data lost on the iPhone, even if that data is lost while this unit is used.

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



Level 1 Level 2 Level 3 Level 4

01 to 05: Folder number

① to ⑥: Playback sequence

Russian character chart

D: C	D: C	D: C
А: A	Б: B	В: B
Г: G	Д: D	Е: E, Ё
Ж: Zh	З: Z	И: I, Й
К: K	Л: L	М: M
Н: N	О: O	П: P
Р: R	С: S	Т: T
У: U	Ф: F	Х: X
Ц: C	Ч: Ch	Ш: Sh, Щ
Ъ: ь	Ы: Y	Ь: ь
Э: E	Ю: Yu	Я: Ya

D: Display **C:** Character

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MP3

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Specifications

General

Power source: 14.4 V DC (10.8 V to 15.1 V allowable)

Grounding system: Negative type

Maximum current consumption: 10.0 A

Dimensions (W × H × D):

DIN

Chassis: 178 mm × 50 mm × 165 mm

Nose: 188 mm × 58 mm × 16 mm

D

Chassis: 178 mm × 50 mm × 165 mm

Nose: 170 mm × 46 mm × 16 mm

Weight: 0.9 kg

Audio

Maximum power output:

- 50 W × 4 ch/4 Ω (for no subwoofer)

- 50 W × 2 ch/4 Ω + 70 W × 1 ch/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 (2 Ω for 1
ch) allowable)

Preout maximum output level: 2.0 V

Built in equalizer:

Frequency: 50 Hz/80 Hz/125 Hz/200
Hz/315 Hz/500 Hz/800 Hz/1.25 kHz/2
kHz/3.15 kHz/5 kHz/8 kHz/12.5 kHz
Gain: ±12 dB

High pass filter:

Frequency: 25 Hz/31.5 Hz/40 Hz/50
Hz/63 Hz/80 Hz/100 Hz/125 Hz/160
Hz/200 Hz/250 Hz
Slope: -6 dB/oct, -12 dB/oct, -18 dB/
oct, -24 dB/oct, OFF

Subwoofer/Low pass filter:

Frequency: 25 Hz/31.5 Hz/40 Hz/50
Hz/63 Hz/80 Hz/100 Hz/125 Hz/160
Hz/200 Hz/250 Hz
Slope: -6 dB/oct, -12 dB/oct, -18 dB/
oct, -24 dB/oct, -30 dB/oct, -36 dB/
oct, OFF

Phase: Normal/Reverse

Speaker level:

+10 dB to -24 dB (1 dB step)

Time alignment:

0 cm to 350 cm (2.5 cm/Step)

USB

USB standard specification: USB 2.0 full
speed

Maximum current supply: 1.5 A

USB Protocol:

MSC (Mass Storage Class)
AOA (Android Open Accessory) 2.0

File system: FAT12, FAT16, FAT32

MP3 decoding format: MPEG-1 & 2 Audio
Layer 3

WMA decoding format: Ver. 7, 8, 9, 9.1, 9.2
(2 ch audio)

AAC decoding format: MPEG-4 AAC (iTunes
encoded only) (Ver. 10.6 and earlier)

FLAC decoding format: v1.2.1 (Free
Lossless Audio Codec)

WAV signal format: Linear PCM (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: 65 dB (IEC-A network)

MW tuner

Frequency range: 531 kHz to 1 602 kHz

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

Signal-to-noise ratio: 60 dB (IEC-A network)

LW tuner

Frequency range: 153 kHz to 281 kHz

Usable sensitivity: 28 μV (S/N: 20 dB)

Signal-to-noise ratio: 60 dB (IEC-A network)

DAB tuner

Frequency range (Band III): 174.928 MHz to
239.200 MHz (5 A to 13 F)

Frequency range (L Band): 1 452.960 MHz
to 1 490.624 MHz (LA to LW)

Usable sensitivity (Band III): -100 dBm

Usable sensitivity (L Band): -100 dBm

Signal-to-noise ratio: 85 dB

Bluetooth

Version: Bluetooth 4.0 certified

Output power: +4 dBm Max (Power class 2)

BLE (Bluetooth Low Energy) Version: 4.0
certified

BLE (Bluetooth Low Energy) Output power:
+3 dBm Maximum

Frequency band(s): 2 400 MHz to 2 483.5
MHz

Bluetooth profiles:

GAP (Generic Access Profile)

SDAP (Service Discovery Application
Profile)

HFP (Hands Free Profile) 1.6

PBAP (Phone Book Access Profile)

A2DP (Advanced Audio Distribution Profile)
AVRCP (Audio/Video Remote Control Profile) 1.5
SPP (Serial Port Profile) 1.1

NOTE

Specifications and the design are subject to modifications without notice.

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