DMH-W3050NEX
DMH-W3000NEX
DMH-2000NEX

RDS AV RECEIVER

HD Radio®
Key Features:

Program Info

HD2/HD3

Digital Sound

Artist Experience

(((SiriusXM®)))
R E A D Y

Operation Manual

Important (Serial number)

The serial number is located on the bottom of this unit. For your own security and convenience, be sure to record this number on the Limited Warranty sheet. Please visit pioneerelectronics.com/warranty to download the warranty sheet, or you can receive a copy by calling 1-800-421-1404 or writing to Customer Support, Pioneer Electronics (USA) Inc., P.O. Box 1720, Long Beach, California 90801 USA.

pioneerelectronics.com/warranty

Contents

Thank you for buying this Pioneer product.
Please read through these instructions so you will know how to operate your model properly. After you have finished reading the instructions, keep this document in a safe place for future reference.

English

🔄 **Important**

The screen shown in the examples may differ from actual screens, which may be changed without notice for performance and function improvements.

English

Precaution

Important safety information

⚠ WARNING

- Do not attempt to install or service this product by yourself. Installation or servicing of this product by persons without training and experience in electronic equipment and automotive accessories may be dangerous and could expose you to the risk of electric shock, injury or other hazards.
- Do not allow this product to come into contact with liquids. Electrical shock could result. Also, damage to the product, smoke, and overheating could result from contact with liquids.
- If liquid or foreign matter should get inside this product, park your vehicle in a safe place, turn the ignition switch off (ACC OFF) immediately and consult your dealer or the nearest authorized Pioneer Service Station. Do not use this product in this condition because doing so may result in a fire, electric shock, or other failure.
- If you notice smoke, a strange noise or odor from this product, or any other abnormal signs on the LCD screen, turn off the power immediately and consult your dealer or the nearest authorized Pioneer Service Station. Using this product in this condition may result in permanent damage to the system.
- Do not disassemble or modify this product, as there are high-voltage components inside which may cause an electric shock. Be sure to consult your dealer or the nearest authorized Pioneer Service Station for internal inspection, adjustments or repairs.

Before using this product, be sure to read and fully understand the following safety information:

- Do not operate this product, any applications, or the rear view camera option (if purchased) if doing so will divert your attention in any way from the safe operation of your vehicle. Always observe safe driving rules and follow all existing traffic regulations. If you experience difficulty in operating this product, pull over, park your vehicle in a safe location and apply the parking brake before making the necessary adjustments.
- Never set the volume of this product so high that you cannot hear outside traffic and emergency vehicles.
- To promote safety, certain functions are disabled unless the vehicle is stopped and the parking brake is applied.
- Keep this manual handy as a reference for operating procedures and safety information.
- Do not install this product where it may (i) obstruct the driver's vision, (ii) impair the performance of any of the vehicle's operating systems or safety features, including air bags or hazard lamp buttons or (iii) impair the driver's ability to safely operate the vehicle.
- Please remember to fasten 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.

- Never use headphones while driving.
- Rear visibility systems (backup cameras) are required in certain new vehicles sold in the U.S. and Canada. U.S. regulations began according to a two year phase-in on May 1, 2016, and both the U.S. and Canada require that all such vehicles manufactured on or after May 1, 2018 have rear visibility systems. **Owners of vehicles equipped with compliant rear visibility systems should not install or use this product in a way that alters or disables that system's compliance with applicable regulations.** If you are unsure whether your vehicle has a rear visibility system subject to the U.S. or Canadian regulations, please contact the vehicle manufacturer or dealer.

  If your vehicle has a compliant backup camera that displays the backup view through the factory receiver, do not use the Pioneer receiver unless it is connected to and displays the same view as the factory backup camera. Connection to the factory backup camera will require an adaptor, sold separately. Not all vehicles may be able to connect. Please check with a qualified professional installer for installation options specific to your vehicle.

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 product is not for use with a video image that is visible to the driver.**
- In some countries the viewing of video image on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed.

If you attempt to watch video image while driving, the warning **"Viewing of front seat video source while driving is strictly prohibited."** will appear on the screen. To watch video image on this display, stop the vehicle in a safe place and apply the parking brake. Please keep the brake pedal pushed down before releasing the parking brake.

To avoid battery exhaustion

Be sure to run the vehicle engine while using this product. Using this product without running the engine can drain the battery.

⚠ **WARNING**

Do not install this product in a vehicle that does not have an ACC wire or circuitry available.

Rear view camera

With an optional rear view camera, you are able to use this product as an aid to keep an eye on trailers, or back 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 mode is to use this product as an aid to keep an eye on the trailers, or while backing up. Do not use this function for entertainment purposes.

Handling the USB connector

⚠ CAUTION

- To prevent data loss and damage to the storage device, never remove it from this product while data is being transferred.
- Pioneer cannot guarantee compatibility with all USB mass storage devices and assumes no responsibility for any loss of data on media players, iPhone, smartphone, or other devices while using this product.
- It may not be recognized properly by this product if a USB device that had been incorrectly disconnected from the computer is connected.

Failure to operate

After-sales service for Pioneer products

Please contact the dealer or distributor from which you purchased the product for after-sales service (including warranty conditions) or any other information. In case the necessary information is not available, please contact the companies listed below.
Please do not ship your product to the companies at the addresses listed below for repair without making advance contact.
–USA&CANADA
  Pioneer Electronics (USA) Inc.
  SERVICE SUPPORT DIVISION
  P.O. Box 1720, Long Beach, CA 90801-1720, U.S.A.
  800-421-1404
For warranty information, please see the Limited Warranty sheet.
For the Limited Warranty sheet, please see Important (Serial number) on the cover of this manual.

Visit our website

Visit us at the following site:
https://www.pioneerelectronics.com/PUSA/
https://www.pioneerelectronics.ca/POCEN/

1 Register your product.

2 Receive updates on the latest products and technologies.

3 Download owner's manuals, order product catalogs, research new products, and much more.

4 Receive notices of software upgrades and software updates.

Protecting the LCD panel and screen

- Do not expose the LCD screen to direct sunlight when this product is not used. This may result in LCD screen malfunction due to the resulting high temperatures.
- When using a cellular phone, keep the antenna of the cellular phone away from the LCD screen to prevent disruption of the video in the form of spots, colored stripes, etc.
- To protect the LCD screen from damage, be sure to touch the touch panel keys only with your finger and do so gently.

Notes on internal memory

- The information will be erased by disconnecting the yellow lead from the battery (or removing the battery itself).
- Some of the settings and recorded contents will not be reset.
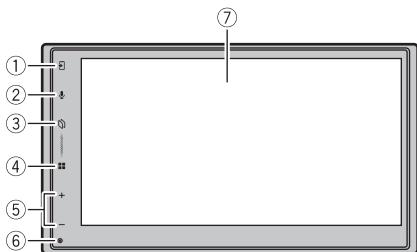
About this manual

This manual uses diagrams of actual screens to describe operations. However, the screens on some units may not match those shown in this manual depending on the model used.

Meanings of symbols used in this manual

****NEX	This indicates model names that are supported by the described operations.
👆	This indicates to touch the appropriate soft key on the touch screen.
👆	This indicates to touch and hold the appropriate soft key on the touch screen.

Parts and controls

Main unit

①	🔁	Touch to display the Apple CarPlay phone screen when Apple CarPlay is activated. Touch to display the phone menu screen when Android Auto or hands-free phoning is activated. Touch to start the searching screen when the device is not connected. Touch to go to the device select screen when the device is already connected. **TIP** If there is no connected device, the illumination color of this button differs from the color of other buttons.
②	🎤	Touch to activate the voice recognition mode.*1 Touch and hold to display the device search or select screen.*2
③	◊	Touch to display the application screen.*3
④	⠿	Touch to display the home menu screen. Touch and hold to power off. To power back on, touch any button. **TIP** If you power the unit off, you can turn off almost all functions.
⑤	VOL (+/-)	Touch to adjust the volume.
⑥	RESET	Press to reset the microprocessor (page 11).
⑦	LCD screen	

*1 This function is available when Apple CarPlay or Android Auto is activated, or an iPhone is connected to this product via Bluetooth.
*2 This function is not available when Apple CarPlay or Android Auto is activated.
*3 This function is available only when Apple CarPlay or Android Auto is activated.

Basic operation

Starting up the unit

1 **Start the engine to boot up the system.**

NOTE
From the second time on, the screen shown will differ depending on the previous conditions.

2 **Select the language.**

3 **Touch** → **.**

4 **Select the speaker mode.**

[Standard Mode]
4-speaker system with front and rear speakers, or a 6-speaker system with front and rear speakers and subwoofers.

[Network Mode]
3-way system with a high range speaker, middle range speaker and subwoofer (low range speaker) for reproduction of high, middle and low frequencies (bands).

NOTE
Once the speaker mode is set, the setting cannot be changed unless this product is restored to the default settings (page 68).

⚠ WARNING

Do not use the unit in Standard Mode when a speaker system for 3-way Network Mode is connected to the unit. This may cause damage to the speakers.

5 **Touch [OK].**
Initial Legal Disclaimer screen appears.

6 **Touch [OK].**
The message for the Bluetooth connection appears.

7 **Turn on the Bluetooth function on your device to connect your device to this product via Bluetooth.**
Follow the on-screen instructions to finish the initial setup.

TIPS
- Select [Skip] to finish the initial setup without connecting the Bluetooth device. You can make the Bluetooth connection later (page 18).
- Connecting the Bluetooth device during the initial setup process is recommended to easily start using hands-free phoning, Apple CarPlay, or Android Auto wirelessly.

Resetting the microprocessor

⚠ CAUTION

- Pressing the RESET button restarts this product. In that case, some of the settings and recorded contents are reset to the factory settings.
  - Do not perform this operation when a device is connected to this product.
- The microprocessor must be reset under the following conditions:
  - If this product fails to operate properly.
  - If there appears to be problems with the operation of the system.

1 Press RESET with a pen tip or other pointed tools.

Settings and recorded contents are reset to the factory settings.

Using the touch panel

You can operate this product by touching the keys on the screen directly with your fingers.
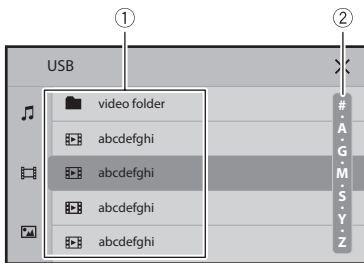
NOTE

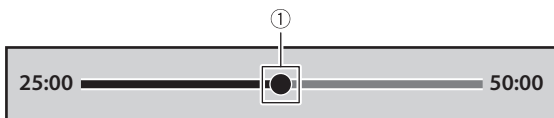To protect the LCD screen from damage, be sure to touch the screen only with your finger gently.

Common touch panel keys

⮌: Returns to the previous screen.
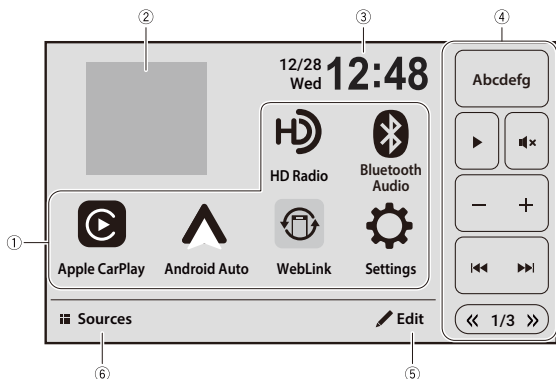☒: Close the screen.

Operating list screens

①	**Touching an item on the list allows you to narrow down the options and proceed to the next operation.**
②	**Appears when items cannot be displayed on a single page.** Drag the side bar or the initial search bar to view any hidden items.

Operating the time bar

①	**You can change the playback point by dragging the key.**

Home menu screen

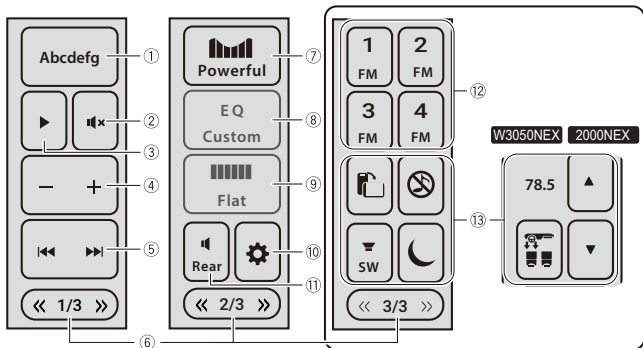| ①	**Favorite source/application area**
	Touch to see the selected source/application.
②	**Album art**
	The artwork of the audio currently being played is displayed.
	NOTE
	The artwork may not be displayed depending on some audio sources.
③	**Current time**
	Touch to set the clock display (page 66).
④	**Shortcuts**
	Functions frequently used are preset (page 15).
⑤	**Edit**
	• Changing the home menu screen layout (page 16).
	• Rearranging the displayed icons in the favorite source/application area (page 17).
⑥	**Sources**
	Touch to display all sources/applications.

TIP

[Reconnect] is displayed on the home menu screen only when the Wi-Fi connection (Wireless Apple CarPlay or Android Auto) has failed or been disconnected automatically (page 68).

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Shortcuts

Shortcuts enable you to easily operate frequently used functions on the home menu screen.

①	Touch to display the operation screen of each AV source.
②	Touch to mute. Touch again to cancel mute.
③	Touch to switch between playback and pause.
④	Touch to adjust the volume.
⑤	Touch to skip files forward or backward.
⑥	Touch to display the next or previous page of the shortcuts.
⑦	Touch to set the equalizer curve to "Powerful" (page 62).
⑧	Touch to set the equalizer curve to "Custom" (page 62).

⑨		Touch to set the equalizer curve to "Flat" (page 62).
⑩		Touch to display the setting screen.
⑪		Touch to turn the rear speaker output on or off.
⑫		Touch to recall the preset channel stored to a key from memory.
⑬		Touch to adjust the climate setting of iDatalink or various settings such as WebLink® Cast, Source OFF, Subwoofer on/off, or Dimmer on/off.

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TIP

The climate setting is available when the climate function of iDatalink is activated.

Customizing the home menu screen

NOTES
- This function is available only when you stop your vehicle in a safe place and apply the parking brake.
- The [Apple CarPlay] icon, the [Android Auto] icon and the [Settings] icon cannot be removed from the favorite source/application area.
- The [Android Auto] icon may not be displayed on the home menu screen depending on the Phone Connectivity Settings (page 65).

Adding the source icons to the favorite source/application area

1 **Touch [Edit].**

2 **Touch [Add].**

3 **Touch the icon you want to add to the favorite source/application area.**
   When you finish adding, touch ☒.

   TIPS
   - The clock and the artwork can also be set to be shown or hidden.
   - If the area is full, remove unneeded icons, the clock, or the artwork first.

4 **Touch [Done].**

Removing the displayed icons from the favorite source/application area

1 **Touch [Edit].**

2 **Touch [Delete].**

3 **Touch the icon you want to remove from the favorite source/application area.**

When you finish removing, touch [Done].

TIP

The clock and the artwork can also be removed from the favorite source/application area.

4 **Touch [Done].**

Rearranging the icons in the favorite source/application area

1 **Touch [Edit].**

2 **Drag the icon to the desired position.**

TIP

The clock and the artwork cannot be moved.

3 **Touch [Done].**

Bluetooth®

Bluetooth connection

1 **Turn on the Bluetooth function on the device.**

2 **Display the connected Bluetooth device list screen on the device.**

3 **Touch** ▦ **.**

4 **Touch** ⚙ **then [Bluetooth Settings].**

5 **Touch [Search].**
The unit starts to search for available devices, then displays them in the device list.
To search for available devices again, touch 🔍 .

6 **Touch a desired device on the screen.**

TIPS
- If you touch ⓘ , the device name and address of the Bluetooth device on this product are displayed.
- A pop-up message may appear if another device is already connected to the unit. Touch [OK] on the message.

7 **Touch [Yes] to pair with the device.**

8 **Perform the pairing operation by operating the device.**
After the device is successfully registered, a Bluetooth connection is established by the system. Once the connection is established, the device name is displayed on the list.

TIP
You can register up to five Bluetooth devices on this product.

W3050NEX W3000NEX
TIPS
- Once an Apple CarPlay or Android Auto compatible device is connected via Bluetooth, the device may be automatically connected with Wireless Apple CarPlay or Android Auto at the timing of Bluetooth reconnection such as by turning the ignition switch to on (ACC ON).
- Two cellular phones can be connected to this product at the same time.
- If you try to connect an unconnected cellular phone while two cellular phones are already connected, the first one of the two connected cellular phones will be disconnected and the unconnected cellular phone will be connected instead.

NOTES

- If five devices are already paired, the message confirming whether to delete the registered device is displayed. If you want to delete the device, touch [Agree]. If you want to delete other device, touch [Go To DeviceList] and delete the devices manually.
- If your device supports SSP (Secure Simple Pairing), a six-digit number appears on the display of this product. Make sure that the six-digit number matches the one that is displayed on the mobile device before touching [Yes] to pair the device.

Bluetooth Settings

1 Touch [▦].

2 Touch [⚙] then [Bluetooth Settings].

⚠ CAUTION

Never turn this product off and disconnect the device while the Bluetooth setting operation is being processed.

Menu Item	Description
[Connection] [On] [Off]	Setting Bluetooth function activation. **TIP** Activate to connect the last connected Bluetooth device automatically.
[Auto Answer]	(page 22)
[Search]	Search for available devices.
[Bluetooth Memory Clear]	Touch [OK] to clear the Bluetooth memory.
[Bluetooth Paired Device List]	Display the paired device list. Touch 🗑 to delete registered device. Touch 🔱 to activate/deactivate hands-free phoning or Bluetooth audio.
[Bluetooth Device Info]	Displaying the device name of this product.

Hands-free phoning

To use this function, you need to connect your cellular phone to this product via Bluetooth in advance (page 18).

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NOTES

- You can connect one of the registered devices to this product. In cases where the registered device is equipped with a phone function, a total of two devices can be connected at the same time when using the phone function. If two of the five registered devices are already connected, the first one of

the two connected devices will be disconnected when you connect the remaining third device to use the audio function.
• The icon for the cellular phone currently being used is displayed on the phone menu screen. If you connect two cellular phones to this product at the same time, you can switch between the cellular phones using the switch devices key. The contents of the phone menu are memorized for each connected cellular phone (page 20).

⚠ CAUTION

For your safety, avoid talking on the phone as much as possible while driving.

Making a phone call

1 Touch [≡].

2 Touch [Sources].

3 Touch [📞].

The phone menu screen appears.

> **TIP**
> You can also start this function by touching the [🔄] button.

4 Touch one of the call icons on the phone menu screen.

📶 Abcdefg	**The following items are displayed.** • Name of the current cellular phone • Reception status of the current cellular phone • Battery status of the current cellular phone W3050NEX W3000NEX • List number of the current cellular phone **TIP** If you connect two cellular phones to this product at the same time, you can switch between the cellular phones using this key.
2000NEX 🔄	**Synchronizes the contacts on this product's phone book with the contacts on your phone manually.**
📇	**Using phone book** Select a contact from the phone book. Touch the desired name on the list then select the phone number. **TIP** The contacts on your phone will be automatically transferred to this product.
📞	**Using call history** Make a phone call from the received call [📞], dialed call [📞], or missed call [📞].
⊞	**Direct phone number input** Touch the number keys to enter the phone number then touch [📞] to make a call.

► **To end the call**

1 Touch ⌢.

Receiving a phone call

1 Touch 📞 to answer the call.
Touch ⌢ to end the call.

TIPS
- Touch 📞 while getting a call waiting, switch to the talking person.
- Touch ⌢ while getting a call waiting to reject the call.

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NOTE
When two phones are connected at the same time, if an incoming call is received on the second phone while you are talking on the first phone, the dial confirmation screen for the second phone will be displayed.

Voice recognition function (for iPhone)

By connecting your iPhone to this product, you can use the voice recognition function (Siri Eyes Free Mode) on this product.

NOTE
When an iPhone is used, Siri Eyes Free Mode is available with this product.

1 Touch ▤.

2 Touch [Sources].

3 Touch 📞.
The phone menu screen appears.

4 Touch 🎤.

TIP
You can also launch the voice recognition function by touching the 🎤 button (page 9).

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TIPS
- If two cellular phones are automatically connected to this product with the Bluetooth device auto connect function, the voice recognition function (Siri Eyes Free Mode) will be set on the first phone.
- If you want to use the voice recognition function (Siri Eyes Free Mode) on another connected iPhone, touch 🎤² with numbered to the other iPhone. The iPhone that you switch to will be set as the current device.

Phone settings

1 Touch [■].

2 Touch [⚙] then [Bluetooth Settings].

Menu Item	Description
[Auto Answer] [On] [Off]	Activate to answer an incoming call automatically.

Adjusting the other party's listening volume

This product can be adjusted to the other party's listening volume.

1 Touch [🎤 Vol] to switch between the three volume levels.

Notes for hands-free phoning

▶General notes

- Connection to all cellular phones featuring Bluetooth wireless technology is not guaranteed.
- The line-of-sight distance between this product and your cellular phone must be 10 meters or less when sending and receiving voice and data via Bluetooth technology.
- With some cellular phones, the ring sound may not be output from the speakers.
- If private mode is selected on the cellular phone, hands-free phoning may be disabled.

▶Registration and connection

- Cellular phone operations vary depending on the type of cellular phone. Refer to the instruction manual that came with your cellular phone for detailed instructions.
- When phone book transfer does not work, disconnect your phone and then perform pairing again from your phone to this product.

▶Making and receiving calls

- You may hear a noise in the following situations:
  – When you answer the phone using the button on the phone.
  – When the person on the other end of the line hangs up the phone.
- If the person on the other end of the line cannot hear the conversation due to an echo, decrease the volume level for hands-free phoning.
- With some cellular phones, even after you press the accept button on the cellular phone when a call comes in, hands-free phoning may not be performed.
- The registered name will appear if the phone number is already registered in the phone book. When multiple names are registered for the same phone number, the names are displayed in the same order as in the phone book.

► **The received call and dialed number histories**

You cannot make a call to the entry of an unknown user (no phone number) in the received call history.

► **Phone book transfers**

- If there are more than 1 000 phone book entries on your cellular phone, not all entries may download completely.
- Depending on the phone, this product may not display the phone book correctly.
- If the phone book in the phone contains image data, the phone book may not be transferred correctly.
- Depending on the cellular phone, phone book transfer may not be available.

Bluetooth audio

Before using the Bluetooth audio player, register and connect the device to this product (page 18).

NOTES
- Depending on the Bluetooth audio player connected to this product, the available operations with this product may be limited to the following two levels:
  – A2DP (Advanced Audio Distribution Profile): Only playing back songs on your audio player is possible.
  – A2DP and AVRCP (Audio/Video Remote Control Profile): Playing back, pausing, selecting songs, etc., are possible.
- Depending on the Bluetooth device connected to this product, the available operations with this product may be limited or differ from the descriptions in this manual.
- While you are listening to songs on your Bluetooth device, refrain from operating the phone function as much as possible. If you try operating, the signal may cause noise for song playback.
- When you are talking on the Bluetooth device connected to this product via Bluetooth, it may pause playback.

1 Touch [▮▮].

2 Touch **[Bluetooth Audio].**

The Bluetooth audio playback screen appears.

TIP
If [Bluetooth Audio] is not available, try the following:
- Pull out the USB cable from the cellular phone.
- Confirm whether Bluetooth audio is activated.

Bluetooth	6/10 Sun **12:48** ⚙
Abcdefghijk	
Abcdefghi	
Abcdef	
25:00 ———●——— 50:00	
◄◄ ❚❚ ►►❘ ⟳ ⤭	

►	❚❚	**Switches between playback and pause.**
◄◄	►►❘	**Skips files forward or backward.**
⟳	⟳ⓘ	**Sets a repeat play range.**
⤭		**Plays files in random order.**

Wi-Fi®

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By connecting your Wi-Fi certified mobile device to this product via Wi-Fi connection, you can use Apple CarPlay or Android Auto wirelessly.

Wi-Fi connection

See the following chapters for the procedure on how to make a Wi-Fi connection for each application.
- Apple CarPlay (page 38)
- Android Auto (page 41)

Wi-Fi Settings

1 Touch [⊞].

2 Touch [⚙].

3 Touch [Wi-Fi Settings].

Menu Item	Description
[Wi-Fi] [On] [Off]	Switches Wi-Fi connection on or off.
[Device Information]	Displays the network name and MAC address of this product.
[Password]	Displays a Wi-Fi connection password.
[Password reset]	Touch to reset the Wi-Fi connection password.

AV source

Supported AV source

You can play or use the following sources with this product.
• HD Radio™ Technology/Radio (page 27)
The following sources can be played back or used by connecting an auxiliary device.
• Apple CarPlay (page 38)
• Android Auto (page 41)
• WebLink®(page 35)
• Bluetooth Audio (page 23)
• SiriusXM Satellite Radio (page 44)
• USB (page 31)
• AUX (page 48)
• Car Sources (iDatalink) (page 50)
• Car Features (iDatalink) (page 50)
• Camera View (page 49)

Selecting a source

1 Touch ▦ .

2 Touch [Sources].

3 Touch the source icon.

TIP

You can display the hidden source icons by swiping left on the screen.

NOTES

• When you select [Source OFF], the AV source is turned off.
• When you select [Display OFF], the display is turned off. Touch anywhere on the screen to turn it back on.
• When you select [Power OFF], almost all functions are turned off. Touch any button to power back on.

HD Radio™ Technology/ Radio

HD Radio Technology
`W3050NEX` `2000NEX`

Radio
`W3000NEX`

About HD Radio stations

HD Radio stations offer high quality audio and data services. HD Radio stations are brought to you by your local FM or AM stations.
HD Radio stations feature the following:
• High quality audio
• FM multicasting
• Data service

```
AM band
    ├── Analog AM
    │
    ├── Analog AM ── Digital AM
    ┊


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

■ : Main channel
┈ : Sub channel

Digital Sound

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

Program Info

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

HD2/HD3

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

Artist Experience

Visual information related to content being played on your HD Radio receiver, such as Album Art, historical photographs, still art from live broadcasts, among other related content.

Starting procedure

1 Touch ▦ .

2 **Touch [HD Radio] or [Radio].**
The HD Radio or Radio screen appears.

Basic operation

HD Radio, Radio screen

W3050NEX 2000NEX ①	**HD Radio indicator and signal type indicator**
1 ||||| 6 XX.XX XX.XX	**Recalls the preset channel stored to a key from memory.**
	Stores the current broadcast frequency to a key.
FM1	**Selects the FM1, FM2, FM3, AM1 or AM2 band.**
BSM	**Performs BSM (best stations memory) function (page 29).**
◄ ►	**Manual tuning**
|◄ ►|	**Seek tuning** Skips to the nearest station from the current frequency.
W3050NEX 2000NEX ⓘ	**Switches the text display between the main channel and sub channels.**

Storing the strongest broadcast frequencies (BSM)

The BSM (best stations memory) function automatically stores the six strongest broadcast frequencies under the preset channel keys [1] to [6].

NOTES

• Storing broadcast frequencies with BSM may replace those you have already saved.
• Previously stored broadcast frequencies may remain stored if the number of frequencies stored has not reached the limit.

1 Touch ⌈ᴮˢᴹ⌉ to begin search.

While the message is displayed, the six strongest broadcast frequencies will be stored under the preset channel keys in the order of their signal strength.

Radio settings

1 Touch ⌈ ▦ ⌉.

2 Touch ⌈ ⚙ ⌉.

3 Touch [System Settings].

4 Touch [Radio settings].

The menu items vary according to the source.

Menu Item	Description
W3050NEX 2000NEX **[Blending]** [On] [Off]	Switches to the analog broadcast of the same frequency level automatically when reception of a digital broadcast becomes weak. Select [Off] to receive only an analog signal.
W3050NEX 2000NEX **[Seek]**	Select the method of seek tuning.
[Seek All]	Seeks stations from both analog and digital broadcasting.
[Seek HD]	Only seeks stations from digital broadcasting.
[Local] [On] [Off]	Local seek tuning allows you to only tune into radio stations with sufficiently strong signals.

USB

Plugging/unplugging a USB storage device

You can play compressed audio, compressed video, or still image files stored in an external storage device.

Plugging a USB storage device

1 Pull out the plug from the USB port of the USB cable.

2 Plug a USB storage device into the USB cable.

NOTES
- This product may not achieve optimum performance with some USB storage devices.
- Connection via a USB hub is not possible.
- A USB cable is required for connection.

①	**USB cable**
②	**USB storage device**

Unplugging a USB storage device

1 Pull out the USB storage device from the USB cable.

NOTES
- Check that no data is being accessed before pulling out the USB storage device.
- Turn off (ACC OFF) the ignition switch before unplugging the USB storage device.

Starting procedure

1 Plug the USB storage device into the USB cable.

TIP

You can also start this source by touching [USB] on the source screen.

Basic operation

Audio source

USB

6/10
Sun **12:48** ⚙

Abcdefghijk

Abcdefghi

Abcdef

99/99

25:00 ———————●——————— 50:00

|◄◄   ❙❙   ►►| ⟲   ⤮

► ❙❙	Switches between playback and pause.
|◄◄ ►►|	Skips files forward or backward.
	Performs fast forward or fast reverse.
⟲ ⟳ ⟲	Sets a repeat play range for all files/the current folder/the current file.
⤮	Switches between random and normal file playback order.
☰	**Selects a file from the list.** Touch a file on the list to playback. **TIPS** • Touching a folder on the list shows its contents. You can play a file on the list by touching it. • You can switch the following media file types. – ♫ : Compressed audio files – ☐ : Compressed video files – ☐ : Image files

⚠ CAUTION

For safety reasons, video images cannot be viewed while your vehicle is in motion. To view video images, stop in a safe place and apply the parking brake.

```
USB                        6/10  12:48   ⚙
                           Sun

    Abcdefghijk                        ☰
    ROOT
    99/99

    25:00 ━━━━━━●━━━━━━ 50:00

    ◄◄      ❚❚      ►►|      ⟲        ⊡
                                     Full
```

► ❚❚		**Switches between playback and pause.**
◄◄ ►►|	✋	**Skips files forward or backward.**
	👆	**Performs fast forward or fast reverse.**
⟲ ⟲₁ ⟲		**Sets a repeat play range for all files/the current folder/the current file.**
⊡		**Sets the screen mode for the video image (page 67).**

☰		**Selects a file from the list.**
		Touch a file on the list to playback.
		
		TIPS
		• Touching a folder on the list shows its contents. You can play a file on the list by touching it.
		• You can switch the following media file types.
		  – 🎵: Compressed audio files
		  – 🎞: Compressed video files
		  – 🖼: Image files

TIP

You can hide the touch panel keys by touching the screen. To display the keys again, touch anywhere on the screen.

▶	❙❙	**Switches between playback and pause.**
⏮	⏭	**Skips files forward or backward.**
🔄		**Rotates the displayed picture 90° counterclockwise.**
🔁	🔁	**Sets a repeat play range for all files/the current folder/the current file.**
🔁		
⬚		**Sets the screen mode for the still image (page 67).**
☰		**Selects a file from the list.** Touch a file on the list to playback.

TIPS
- Touching a folder on the list shows its contents. You can play a file on the list by touching it.
- You can switch the following media file types.
  – 🎵: Compressed audio files
  – 🎬: Compressed video files
  – 🖼: Image files
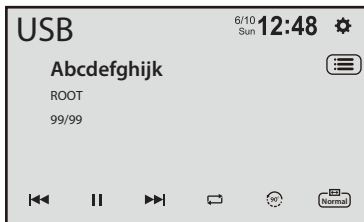
TIP
You can hide the touch panel keys by touching the screen. To display the keys again, touch anywhere on the screen.

WebLink®

You can operate WebLink® compatible applications with finger gestures such as tapping, dragging, scrolling, or flicking on the screen of this product.

NOTES
- The supported finger gestures may vary depending on the WebLink® compatible application.
- To use WebLink®, you must first install the WebLink® Host app on the iPhone or smartphone. For details about the WebLink® Host app, visit the following site: https://helloweblink.com/
- Be sure to read Using app-based connected content (page 77) before you perform this operation.
- Copyright protected files such as DRM cannot be played.

⚠ WARNING

Certain uses of the iPhone or smartphone may not be legal while driving in your jurisdiction, so you must be aware of and obey any such restrictions. If in doubt as to a particular function, only perform it while the car is parked. No feature should be used unless it is safe to do so under the driving conditions you are experiencing.

Using WebLink®

Important

- Pioneer is not responsible for content or functions accessed via WebLink®, which are the responsibility of the application and content providers.
- Availability of non-Pioneer content and services, including apps and connectivity, may change or discontinue without notice.
- When using WebLink® with the Pioneer product, available content and functions will be limited while driving.
- WebLink® allows access to applications other than those listed, subject to limitations while driving.

Starting procedure

For iPhone users

System requirement
For the latest OS support information, please visit HelloWebLink.com.

1 **Unlock your iPhone and connect it to this product via USB.**

   TIP
   A screen other than WebLink® may appear after the USB connection.

2 **Touch** ▤ .

3 **Touch [WebLink].**

NOTE

For USB connection, refer to the Installation Manual.

For smartphone (Android™) users

System requirement

For the latest OS support information, please visit HelloWebLink.com.

NOTE

The video playback capability depends on the connected Android device.

1 Unlock your smartphone and connect it to this product via USB.

> **TIP**
>
> A screen other than WebLink® may appear after the USB connection.

2 Touch [■].

3 Touch [WebLink].

NOTES

- For USB connection, refer to the Installation Manual.
- Make sure that file transfer mode for USB connection is enabled on your smartphone if WebLink® does not start automatically.

Basic operation

Touch the desired application icon after the WebLink® app is launched. The desired application is launched, and the application operation screen appears.

▦	**Displays the main menu of the WebLink® source screen.**

TIPS

- If you connect your device to this product while a WebLink® compatible application is already running, the application operation screen will appear on this product.
- When the volume of WebLink® is low, adjust the volume on your device. If you increase the volume on this product, the volume of the AV source may be too high when you switch to other AV sources.
- Check the Bluetooth connection between the mobile device and this unit if there is no sound output from this unit (page 18).
- If the WebLink® app is launched, the Bluetooth audio connection will switch to the device used for launching.

W3050NEX   W3000NEX

TIP

If you start WebLink®, the Bluetooth connection with the cellular phone will be established. The first one of the two already connected cellular phones will be disconnected and the other cellular phone used for WebLink® will be connected via Bluetooth instead.

2000NEX

TIP

If you start WebLink®, the Bluetooth connection with the cellular phone will be established. The cellular phone already connected will be disconnected and the other cellular phone used for WebLink® will be connected via Bluetooth instead.

Using WebLink® Cast

You can project your iPhone or smartphone screen onto the screen of this product and operate the projected screen with finger gestures.

NOTE

The supported finger gestures may vary depending on the WebLink® Cast compatible application.

1 Start WebLink®.

2 Touch 📱 .

Follow the instructions on the display when the message appears on your connected iPhone or smartphone.

TIP

You can also start WebLink® Cast by touching 📱 from the shortcuts (page 15).

W3050NEX 2000NEX

TIP

📱 is displayed on the shortcuts only when the optional iDatalink adaptor is not connected.

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Apple CarPlay

You can operate iPhone applications with finger gestures such as tapping, dragging, scrolling, or flicking on the screen of this product.

Compatible iPhone models
For details about compatibility of iPhone models, refer to the following website.
https://www.apple.com/ios/carplay

NOTE
The compatible finger gestures vary depending on the application for the iPhone.

⚠ WARNING

Certain uses of the iPhone may not be legal while driving in your jurisdiction, so you must be aware of and obey any such restrictions. If in doubt as to a particular function, only perform it while the car is parked. No feature should be used unless it is safe to do so under the driving conditions you are experiencing.

Using Apple CarPlay

↻ Important

Apple CarPlay may not be available in your country or region.
For details about Apple CarPlay, visit the following site:
https://www.apple.com/ios/carplay
- The content and functionality of the supported applications are the responsibility of the App providers.
- In Apple CarPlay, usage is limited while driving, with availability of functions and content determined by the App providers.
- Apple CarPlay allows access to applications other than those listed that are subject to limitations while driving.
- PIONEER IS NOT RESPONSIBLE AND DISCLAIMS LIABILITY FOR THIRD PARTY (NON-PIONEER) APPS AND CONTENT, INCLUDING WITHOUT LIMITATION ANY INACCURACIES OR INCOMPLETE INFORMATION.
- Before using Apple CarPlay, make sure the GPS antenna and speed cable are properly connected and installed, and the unit angle is properly set. For details, refer to the Installation Manual.

Setting the driving position

To achieve optimum usability of Apple CarPlay, set the driving position setting correctly according to the vehicle. The setting will be applied the next time an Apple CarPlay compatible device is connected to this product.

1 Touch ▮▮ .

2 Touch ⚙ .

3 Touch [System Settings].

4 Touch [Driving Position].
[**Left**]
Select for a left-hand drive vehicle.
[**Right**]
Select for a right-hand drive vehicle.

Starting procedure

Wired connection

1 Connect an Apple CarPlay compatible device to this product via USB.
The application screen appears.

TIP

You can start this source by touching [≡] then touching [Apple CarPlay] if a screen other than Apple CarPlay appears after the USB connection.

Wireless connection

W3050NEX W3000NEX

Before using Apple CarPlay wirelessly, perform the following:
- Attach the GPS antenna to this product.
- Turn on Apple CarPlay in the setting menu of your iPhone.

1 Turn on the Wi-Fi function and the Bluetooth function on the device.

2 Display the Bluetooth setting menu on the device.

3 Touch [≡].

4 Touch [Sources].

5 Touch [📱].

6 Touch [Yes] to start searching.

TIP

Touch [🔍] if another device is already connected to the unit.

7 Touch a desired device on the screen.

TIP

A pop-up message may appear if another device is already connected to the unit. Touch [OK] on the message.

8 **Touch [Yes] to pair with the device.**

9 **Perform the pairing operation by operating the device.**

10 **Touch [Yes] to activate the Apple CarPlay function.**

Follow the on-screen instructions on the device to start the application.

TIPS

• When the USB connection with the other device has been made, the message that shows that the new device is available will appear. If you want to switch from the current device to the new one for use in the application, touch the pop-up message.

• You can use the Siri function by touching the ⬇ button once Apple CarPlay is activated.

NOTES

• For details on USB connection, refer to the Installation Manual.

• If five devices are already paired, the message confirming whether to delete the registered device is displayed. If you want to delete the device, touch [Agree]. If you want to delete other device, touch [Go To DeviceList] and delete the devices manually.

• If an Apple CarPlay compatible device has been connected and another screen is displayed, touch [Apple CarPlay] on the home menu screen to display the application screen.

• Hands-free phoning via Bluetooth wireless technology is not available while Apple CarPlay is on. If Apple CarPlay is turned on during a call on a cellular phone other than an Apple CarPlay compatible device, the Bluetooth connection will be terminated after the call ends.

• The Bluetooth connection will be terminated automatically if Apple CarPlay is turned on.

Android Auto™

You can operate Android applications with finger gestures such as tapping, dragging, scrolling, or flicking on the screen of this product.

Compatible Android devices
For details about compatibility of Android models, refer to the following website.
https://support.google.com/androidauto
Compatible Android phone and compatible active data plan required.

NOTE

The compatible finger gestures vary depending on the application for the smartphone.

⚠ WARNING

Certain uses of the smartphone may not be legal while driving in your jurisdiction, so you must be aware of and obey any such restrictions. If in doubt as to a particular function, only perform it while the car is parked. No feature should be used unless it is safe to do so under the driving conditions you are experiencing.

Using Android Auto

◆ **Important**
Android Auto may not be available in your country or region.
For details about Android Auto, please refer to the Google support site:
https://support.google.com/androidauto
- The content and functionality of the supported applications are the responsibility of the App providers.
- In Android Auto, usage is limited while driving, with availability of functions and content determined by the App providers.
- Android Auto allows access to applications other than those listed that are subject to limitations while driving.
- PIONEER IS NOT RESPONSIBLE AND DISCLAIMS LIABILITY FOR THIRD PARTY (NON-PIONEER) APPS AND CONTENT, INCLUDING WITHOUT LIMITATION ANY INACCURACIES OR INCOMPLETE INFORMATION.
- Before using Android Auto, make sure the GPS antenna and speed cable are properly connected and installed, and the unit angle is properly set. For details, refer to the Installation Manual.

Setting the driving position

To achieve optimum usability of Android Auto, set the driving position setting correctly according to the vehicle. The setting will be applied the next time an Android Auto compatible device is connected to this product.

1 Touch ▦ .

2 Touch 🔧 .

3 Touch [**System Settings**].

4 Touch [**Driving Position**].

[**Left**]
Select for a left-hand drive vehicle.

[**Right**]
Select for a right-hand drive vehicle.

Starting procedure

Wired connection

1 **Connect an Android Auto compatible device to this product via USB.**
The application screen appears.

TIP
You can start this source by touching ▣ then touching [Android Auto] if a screen other than Android Auto appears after the USB connection.

Wireless connection

W3050NEX W3000NEX

1 **Turn on the Wi-Fi function and the Bluetooth function on the device.**

2 **Display the connected Bluetooth devices list screen on the device.**

3 **Touch ▤ .**

4 **Touch [Sources].**

5 **Touch ▯ .**

6 **Touch [Yes] to start searching.**

TIP
Touch 🔍 if another device is already connected to the unit.

7 **Touch a desired device on the screen.**

TIP
A pop-up message may appear if another device is already connected to the unit. Touch [OK] on the message.

8 **Touch [Yes] to pair with the device.**

9 Perform the pairing operation by operating the device.

10 Touch [Start] to start Android Auto.

The unit configures the connection then starts the application.

TIP

You can use the voice recognition function by touching the 🔽 button once Android Auto is activated.

NOTES

- For details on USB connection, refer to the Installation Manual.
- If five devices are already paired, the message confirming whether to delete the registered device is displayed. If you want to delete the device, touch [Agree]. If you want to delete other device, touch [Go To DeviceList] and delete the devices manually.
- If Android Auto is turned on during a call on a cellular phone other than the Android Auto compatible device, the Bluetooth connection will switch to the Android Auto compatible device after the call.

W3050NEX W3000NEX

NOTES

- The Bluetooth connection for the phone function with a device other than the device used for Android Auto will be terminated automatically if Android Auto is turned on.
- The Bluetooth audio connection with the device used for Android Auto will be terminated automatically if Android Auto is turned on.

2000NEX

NOTES

- The Bluetooth connection for the phone function with a device other than the device used for Android Auto will be terminated automatically if Android Auto is turned on.
- If the Android Auto phone function does not work properly, confirm whether hands-free phoning via Bluetooth is activated in the paired device list (page 19).
- The Bluetooth audio connection will be terminated automatically if Android Auto is turned on.

English

SiriusXM® Satellite Radio

SiriusXM is where moments happen. The widest, deepest variety of music, ad-free. More games, more sports, more coverage than anywhere. The most extensive entertainment, complete news coverage and every kind of comedy. Listen in your car, on your phone, online and at home. A SiriusXM Vehicle Tuner and subscription are required. For more information, visit www.siriusxm.com

Subscribing to the SiriusXM Satellite Radio service

1 Touch ▦ .

2 Touch **[Sources].**

3 Touch **[SiriusXM].**

You should be able to tune in to Channel 1. If you cannot get Channel 1, ensure that your SiriusXM Connect Vehicle Tuner is installed correctly.

4 **Switch to Channel 0 and check the Radio ID.**

The SiriusXM Radio ID can be found by tuning in to Channel 0. In addition, the Radio ID is located on the bottom of the SiriusXM Connect Vehicle Tuner and its packaging. You will need this number to activate your subscription.

NOTE

The SiriusXM Radio ID does not include the letters I, O, S, or F.

5 **Activate the service either online or by phone.**

TIP

In the USA, you can activate online or by calling SiriusXM Listener Care:
- Visit www.siriusxm.com/activatenow
- Call SiriusXM Listener Care at
  1-866-635-2349

For Canadian Subscriptions, please contact:
- Visit www.siriusxm.ca/activate
- Call SiriusXM Customer Care at
  1-888-539-7474

NOTES
- The SiriusXM satellites will send an activation message to your tuner. When the tuner has received the message, [Subscription Updated Press Enter to Continue] is displayed.
- The activation process usually takes 10 to 15 minutes, but it may take up to an hour. Do not turn off this product while the activation message is displayed.

Listening to SiriusXM

1 Touch [■].

2 Touch **[Sources]**.

3 Touch **[SiriusXM].**

Basic operation

TIP

[RADIO ID] is displayed when Channel 0 is selected.

Current channel display (Live broadcast mode)

SXM1	**Selects a band.**	
	There are 3 bands. You can store 6 channels per band for a total of 18 presets.	
Tune	**Tunes a channel directly.**	
1 Pre1 ... 6 Pre6	👆	**Recalls the preset channel stored to a key from the memory.**
	👆	**Stores the current channel to a key.**
◄ ►	👆	**Performs channel number up/down.**
	👆	**Performs fast channel number up/down.**

≣	**Selects a channel from the list.**
	Scroll through the list of all channels then touch the desired channel to tune to that channel.
	TIP
	When 🔀 is selected, the channel list will be shown according to different categories.
	Touch ◀ or ▶ to select other Category.
	NOTES
	• The types of categories available depend on the types of channels available.
	• It may take time to display the channel list depending on the SiriusXM reception condition.

Parental Control

The Parental Control feature allows you to limit access to any SiriusXM channels, including those with mature content. When enabled, the Parental Control feature requires you to enter a passcode to tune to the locked channels.
For details, see [Parental Control] in SiriusXM settings (page 46).

SiriusXM settings

1 Touch ⊞ .

2 Touch ⚙ .

3 Touch [System Settings].

4 Touch [SiriusXM settings].

The menu items vary depending on whether SiriusXM is selected as the source.

Menu Item	Description
[Change Passcode]	Edit the passcode.
	1 Enter the current passcode and then touch [OK].
	2 Enter the new passcode and then touch [OK].
	3 Enter the confirm passcode and then touch [OK].
[Parental Control]	Enter the current passcode then touch [OK] to set this function (the default passcode is 0000).
	• To lock the channel, touch the appropriate channel.
	🔒 appears and the channel is locked.
	TIP
	When you touch the locked channel, the channel is unlocked.

Menu Item	Description
[Clear Locked All]	Touch the switch, enter the current passcode then touch [OK], all locked channels are unlocked.
[Version]	Displaying the firmware version and the model number, etc.

AUX

You can display the video image output by the device connected to video input.

⚠ CAUTION

For safety reasons, video images cannot be viewed while your vehicle is in motion. To view video images, stop in a safe place and apply the parking brake.

NOTE

A Mini-jack AV cable (sold separately) is required for connection. For details, refer to the Installation Manual.

Starting procedure

1 Touch [▦].

2 Touch **[Sources]**.

3 Touch **[AUX]**.

The AUX screen appears.

TIPS

- You can hide the touch panel keys by touching the screen. To display the keys again, touch anywhere on the screen.
- You can set the screen mode for the video image (page 67).

Camera View

You can display the video image output by the device connected to video or camera input. For details, refer to the Installation Manual.

Starting procedure

1. **Touch [■].**
2. **Touch [Sources] then swipe left on the screen.**
3. **Touch [Camera View] for connected camera view.**
   The video image is displayed on the screen.

iDatalink®

W3050NEX 2000NEX

Using iDatalink

You can access the satellite radio source provided for the vehicle. The vehicle information and many OEM systems such as steering wheel controls, warning chimes, driver safety systems, and etc. can be displayed on this product by connecting the optional iDatalink adaptor. It is also possible to add visual screens such as gauges, vehicle information, climate control, and parking assist. However, an extra interface module is required to access these features.

NOTE

Since the type of module varies depending on the vehicle model, search for your vehicle via the following URL to determine which features are available for each module. Remember to select the correct radio model for accurate results.
https://www.idatalinkmaestro.com/en

⚙ Important

- For details about vehicle models that are compatible with the iDatalink adaptor, refer to the information on our website.
- After installing the iDatalink adaptor, be sure to check that it operates properly.
- Functions and displays vary depending on the vehicle model. For details on the functions available for each model, refer to the information on our website.
- For troubleshooting information about iDatalink functions, visit the following website:
  https://www.idatalinkmaestro.com/en/support/faq

Limitations

- The data is transmitted to this product from your vehicle system via the connected iDatalink adaptor. Therefore, the actual data contents displayed on your product may differ from the contents on the screen described in this manual.
- When information on your vehicle or on the devices in your vehicle is sent from the iDatalink Maestro® module, a screen notifying you of such information may pop up.

TIP

The operating buttons, text information, etc. overlaid on the camera view screen may not appear immediately after turning on the ignition switch.

Activating iDatalink Maestro

Before using and/or connecting the iDatalink Maestro adaptor, you will need to first flash the Maestro RR module with the appropriate vehicle and head unit firmware.

1 **Find the device number (12 alphanumeric characters) on the label on the packaging of this product or on the product itself.**

2 **Access the following website and follow the on-screen instructions to configure the desired firmware.**
https://www.idatalinkmaestro.com/en

3 **Install the vehicle/head unit-specific firmware on your iDatalink Maestro module.**

4 **Connect this product to the iDatalink Maestro and install this product to the vehicle.**
The iDatalink function will be active.

NOTES
- For details on installing the firmware, refer to iDatalink Maestro website.
- For details on connecting this product to iDatalink Maestro, refer to the Installation Manual.
- You can also check the device number (serial number) on the [System Information] screen of this product (page 58).

Starting procedure

1 **Connect the iDatalink Maestro adaptor to this product.**
For details, refer to the Installation Manual.

2 **Touch** ▦ **.**

3 **Touch [Sources].**

4 **Touch [Car Sources] or [Car Features].**
The menu screen you touched appears.

TIP
You can display the hidden source icons by swiping left on the screen.

NOTE
The iDatalink function is available only when the input signal is received by the iDatalink Maestro adaptor.

Using the functions on [Car Sources]

[Car Sources] is operated almost the same way as the built-in AV sources on this product is operated. For details on the operation, refer to the following relevant pages.
- Operating via USB (page 31)
- Operating via SiriusXM (page 44)

- Operating via Bluetooth audio (page 23)
- Operating via Hands-free phone (page 19)

Using the functions on [Car Features]

You can check and use the following screens after selecting [Car Features] in the starting procedure. Touch one of the icons on the left side of the screen to change a feature.

(gauge icon)	**Displays the Gauges screen.**
(vehicle icon)	**Displays the Vehicle Information screen.**
(climate icon)	**Displays the Climate screen.**
(parking icon)	**Displays the Parking Assist screen.**
(radar icon)	**Displays the Speed Radar Detector screen.**

Gauges screen

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Vehicle Information screen

Climate screen

Parking Assist screen

Speed Radar Detector screen

Displaying obstacle detection information

⚠ CAUTION

This function is intended solely to assist the driver's vision. It does not detect all dangers and obstacles and is not a substitute for your attentiveness, judgement, and care while parking your vehicle.

NOTE

This function is only available for vehicles equipped with a parking sensor system.

iDatalink settings

1 Touch ⊞.

2 Touch ⚙.

3 Touch [System Settings].

4 Touch [OEM Settings] or [OEM Volume Settings].
The setting screen for iDatalink appears.

Menu Item	Description
[OEM Settings]	Setting for iDatalink function when the iDatalink adaptor is connected to the unit.
[OEM Volume Settings]	Setting for iDatalink function volume when the iDatalink adaptor is connected to the unit.

Settings

You can adjust various settings in the main menu.

Displaying the setting screen

1 Touch ▮▮ .

2 Touch ⚙ .

3 **Touch one of the following categories, then select the options.**
System Settings (page 55)
Display Settings (page 59)
Audio & EQ Settings (page 60)
Wi-Fi Settings (page 25)
Bluetooth Settings (page 19)
Camera settings (page 63)
Phone Connectivity Settings (page 65)

System Settings

Menu Item	Description
[Choose Language]	Select the system language. **NOTES** • If the embedded language and the selected language setting are not the same, the text information may not display properly. • Some characters may not be displayed properly.
[Date & Time]	Setting or adjusting the following time and clock display. • Date display format: day-month-year, month-day-year, or year-month-day • Time display format: [12hour] or [24hour] • UTC (Universal Time Coordinated) time zone difference: UTC-12.00h to UTC+14.00h • Day-light saving time: [On] or [Off]
[Beep Tone] [On] [Off]	Set off to disable the beep sound when the button is touched or the screen is touched.

Menu Item	Description
[Demo Mode] [On] [Off]	Setting the demo mode.
[Driving Position] [Right] [Left]	Setting the driving position. • Apple CarPlay (page 38) • Android Auto (page 41) **NOTE** The position of the shortcuts on the home menu screen depends on the driving position setting (page 15).
[SiriusXM settings]	(page 44)
[Radio settings]	(page 30)
[ACC ON settings] [Previous Source] [Power Off]	Setting the condition of the power off mode on the next startup. • [Previous Source]: The last used source screen will be shown after turning on the ignition switch (ACC ON). • [Power Off]: The power off mode will be kept after turning on the ignition switch (ACC ON).
[Dimmer Settings]	**NOTE** This setting is available only when you stop your vehicle in a safe place and apply the parking brake.
[Dimmer Trigger]	Setting the dimmer brightness. • [Auto]: Switches the dimmer to on or off automatically according to your vehicle's headlight turning on or off. • [Manual]: Switches the dimmer to on or off manually.
[Day/Night]	Setting the dimmer duration by day or night. You can use this function when [Dimmer Trigger] is set to [Manual].

English

Menu Item	Description
[Picture Adjustment]	You can adjust the picture for each source, rear view camera. To adjust following menu, touch ◀, ▶, ▲, ▼ to adjust. ⚠ **CAUTION** 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. **NOTES** • The adjustment settings of [Dimmer] for when your vehicle's headlights are off (daytime) and on (nighttime) are stored separately. • The value of [Dimmer] is switched automatically depending on the setting of [Dimmer Settings]. • The picture adjustment may not be available with some rear view cameras. • The setting contents can be memorized separately.
[Brightness] [-10] to [+10]	Adjust the black intensity.
[Contrast] [-10] to [+10]	Adjust the contrast.
[Color] [-10] to [+10]	Adjust the color saturation.
[Hue] [-10] to [+10]	Adjust the tone of color (which color is emphasized, red, or green).
[Dimmer] [0] to [+8]	Adjust the brightness of the display.
[Temperature] [-3] to [+3]	Adjust the color temperature, resulting in a better white balance.
[Factory Reset]	Touch [OK] to restore the settings to the default settings. ⚠ **CAUTION** Do not turn off the engine while restoring the settings. **NOTES** • This setting is available only when you stop your vehicle in a safe place and apply the parking brake. • The source is turned off and the Bluetooth connection is disconnected before the process starts. • Before starting the restore process, disconnect any device that is connected to the USB port. Otherwise, some settings may not be restored correctly.

Menu Item	Description
[Connection Status]	Check that the leads are properly connected between this product and vehicle.
[GPS Antenna]	Displays the connection status of the GPS antenna ([OK] or [NOK]) and the reception sensitivity. **NOTE** If reception is poor, change the installation position of the GPS antenna.
[Positioning Status]	Displays the positioning status (3D positioning, 2D positioning, or no positioning), the number of satellites used for positioning (orange), and the number of satellites that have received signals (yellow). If signals from more than six satellites are received, the current location can be measured.
[Installation]	Indicates whether the inertial navigation is successfully learned. If the learning is successful, [OK] will appear. If the learning is not successful or due to failure after the learning is successful, [NOK] will appear. **NOTE** If this product is not firmly fixed into place or the speed pulse wire is not connected or properly connected, [NOK] is displayed due to the learning failure.
[Speed Pulse]	The speed pulse value detected by this product is shown. **NOTE** Check that the speed pulse wire is properly connected if [0] is still displayed while driving.
[Back Signal]	When the shift lever is shifted to "R" (reverse position), the signal switches to [High] or [Low]. The signal displayed varies depending on the vehicle.
[System Information]	Displaying the firmware version.

Menu Item	Description
[Firmware Update]	Updating the firmware version.
	⚠ **CAUTION**
	• The USB storage device for updating must contain only the correct update file.
	• Never turn this product off, disconnect the USB storage device while the firmware is being updated.
	• You can only update the firmware when the vehicle is stopped and the parking brake is engaged.
	1 Download the firmware update files into your computer.
	2 Connect a blank (formatted) USB storage device to your computer then locate the correct update file and copy it onto the USB storage device.
	3 Connect the USB storage device to this product (page 31).
	4 Display the [System Settings] screen (page 55).
	5 Touch [Firmware Update]. New firmware version information is displayed.
	6 Touch [Update]. Follow the on-screen instructions to finish updating the firmware.
	NOTES
	• This product will restart automatically after the firmware update is completed if the update is successful.
	• If an error message appears on the screen, touch the display and perform the above steps again.
W3050NEX 2000NEX **[OEM Settings]**	(page 54)
W3050NEX 2000NEX **[OEM Volume Settings]**	(page 54)
[License]	Displaying the open-source license.

Display Settings

Menu Item	Description
[Illumination]	Select an illumination color from the preset list.
[Background]	Touch the wallpaper from the preset items in this product or original pictures via the external device and touch [Apply].

Menu Item	Description
Preset Display	Select the desired preset background display. You can set your favorite screen from the connected USB device by touching and sliding the bottom of screen to the right.
🔍	Select the background display image of the connected USB storage device. **1 Connect the USB storage device to this product (page 31).** **2 Touch 🔍.** **3 Select the desired image.**
▣ (custom)	Displays the background display image imported from the USB storage device.
Off (off)	Hides the background display.
[Splash screen] [Import] [Restore]	Select [Import] to change the image on the opening screen to the one imported from the connected USB device. Select [Restore] to restore the default image. **NOTES** • The image files that can be imported are as follows: – Format: BMP and JPEG – Data size: 6 MB or less (for both BMP and JPEG) – Image size (W×H): 800 × 480 pixels • Make sure that the image file is located within the root (top) folder of the USB device. • If multiple image files are stored on the USB device, the desired image file may not be imported from the USB device. Store only one desired image file on the USB device.

Audio & EQ Settings

Menu Item	Description
[Fader/Balance]	Touch ▲ or ▼ to adjust the front/rear speaker balance. Set [Front] and [Rear] to [0] when using a dual speaker system. Touch ◀ or ▶ to adjust the left/right speaker balance. **TIP** You can also set the value by dragging the point on the displayed table. **NOTE** This function is available when [Standard Mode] is selected as the speaker mode.

Menu Item	Description
[Loudness] [Off] [Low] [Mid] [High]	Compensates for deficiencies in the low-frequency and high-frequency ranges at low volume.
[Speaker Level] **Listening Position*1*2** [Off] [Front Left] [Front Right] [Front] [All] **Standard Mode*3** [Front Left] [Front Right] [Rear Left] [Rear Right] [Subwoofer] **Network Mode*3** [High Left] [High Right] [Mid Left] [Mid Right] [Subwoofer] **Speaker output level** [-24] to [10]	Adjust the speaker output level of the listening position. **1 Touch 〈 or 〉 to select the listening position then select the output speaker.** **2 Touch 〈 or 〉 to adjust the selected speaker output level.** ■ NOTE You can adjust the subwoofer output level if the [Subwoofer] setting is set to [On].
[Listening Position]*1 [Off] [Front-L] [Front-R] [Front] [All]	Select a listening position that you want to make as the center of sound effects.
[Balance]	Touch ◀ or ▶ to adjust the left/right balance. ■ NOTE This function is available when [Network Mode] is selected as the speaker mode.
[Time Alignment] [TA On] [TA Off] **Listening Position*1*2** [Off] [Front Left] [Front Right] [Front] [All] **Standard Mode*3*4** [Front Left] [Front Right] [Rear Left] [Rear Right] [Subwoofer] **Network Mode*3*4** [High Left] [High Right] [Mid Left] [Mid Right] [Subwoofer] **Distance** [0] to [210]	Select or customize the time alignment settings to reflect the distance between the listener's position and each speaker. You need to measure the distance between the head of the listener and each speaker unit. **1 Touch 〈 or 〉 to select the listening position then select the alignment speaker.** **2 Touch 〈 or 〉 to input the distance between the selected speaker and listening position.** **TIP** If you touch [TA On], the time alignment is turned off mandatorily. ■ NOTE This function is available only when the listening position setting is set to [Front Left] or [Front Right].

Menu Item	Description
[EQ] [Super Bass] [Powerful] [Natural] [Vocal] [Flat] [Custom]	Select or customize the equalizer curve. Select a curve that you want to use as the basis of customizing then touch the frequency that you want to adjust. **TIP** If you make adjustments when the [Super Bass], [Powerful], [Natural], [Vocal], or [Flat] curve is selected, the equalizer curve settings will be changed to [Custom] mandatorily.
[Subwoofer] [On] [Off]	Select enable or disable rear subwoofer output from this product.
[Crossover]*5	Select a speaker unit (filter) to adjust the HPF or LPF cutoff frequency and the slope for each speaker unit. • [LPF]/[HPF]: Switches the [LPF]/[HPF] setting to [On] or [Off]. • [Phase]: Switches the subwoofer phase between normal and reverse position. **TIP** You can also adjust the [High] and [Mid] phase in [Network Mode].
[Bass Boost] [0] to [6]	Adjust the bass boost level. **NOTE** This function is available when [Standard Mode] is selected as the speaker mode.
[Mute Level]	If an interruption caused by an audio signal occurs while Apple CarPlay or Android Auto is being used, select mute or attenuate the volume of the AV source and iPhone/smartphone application.
[ATT]	The volume becomes 10 dB lower than the current volume.
[Mute]	The volume becomes 0.
[Off]	The volume does not change.
[Subwoofer Settings]*5	Select the subwoofer phase. **NOTE** [Subwoofer Settings] is available only when [Subwoofer] is [On].

*1 [All] is not available when [Network Mode] is selected as the speaker mode.

*2 If you change the listening position setting, the set values for all speakers will change in conjunction with this setting.

*3 To use this function, the vehicle's acoustics must be measured in advance.

*4 This function is available only when the listening position setting is set to [Front Left] or [Front Right].

*5 This function is not available when adjusting the High speaker in [Network Mode].

Camera settings

A separately sold rear view camera is required for utilizing the rear view camera function. (For details, consult your dealer.)

English

► **Rear view camera**

This product features a function that automatically switches to the full-screen image of the rear view camera installed on your vehicle when the shift lever is in the REVERSE (R) position.
Camera View mode also allows you to check what is behind you while driving.

TIP

The parking assist guidelines can be displayed temporarily on the rear view camera screen by touching the icon at the top left of the screen. When you reverse the gear and display the rear view camera screen immediately after turning on the ignition switch, it takes approximately 10 seconds to be available for the icon. The guidelines can be adjusted. For details on how to adjust the guidelines, see [Parking Assist Guide Adjust] (page 64).

► **Camera for Camera View mode**

Camera View can be displayed at all times. Note that with this setting, the camera image is not resized to fit, and that a portion of what is seen by the camera is not viewable.
To display the camera image, touch [Camera View] on the source screen (page 49).

NOTE

To set the rear view camera as the camera for Camera View mode, activate [Back-up Camera Input] (page 63).

⚠ **CAUTION**

Pioneer recommends the use of a camera which outputs mirror reversed images, otherwise the screen image may appear reversed.
• Immediately verify whether the display changes to the rear view camera image when the shift lever is moved to REVERSE (R) from another position.

Menu Item	Description
[Back-up Camera Input] [On] [Off]	Setting rear view camera activation.
[Back-up Camera view] [Normal] [Reverse]	Select the way the screen image of a camera appears.

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Menu Item	Description
[Parking Assist Guide Adjust]	**1 Adjusting the guidelines by dragging or touching △/ ▽/◀/▶ on the screen.** **2 Touch [OK] to finish the settings.** **TIP** Touch [Reset] to reset the settings. `W3050NEX` `2000NEX` This setting may not be available according to the connected camera if the iDatalink adaptor is connected to the unit. ⚠ **CAUTION** • When adjusting the guidelines, park the vehicle in a safe place and apply the parking brake; this setting is available only when the vehicle is parked with the parking brake applied. • Turn the vehicle off before getting out to place the markings. • The range projected by the rear view camera is limited. Also, the vehicle width and distance guidelines displayed on the rear view camera image may differ from the actual vehicle width and distance. (The guidelines are straight lines.) • The image quality may deteriorate depending on the usage environment, such as at night or in dark surroundings. **NOTES** • Use painter's tape or similar tape to place markings as shown below before setting up the guidelines. • Adjust the guidelines so that they overlay the tape markings as closely as possible. • Install the rear view camera as near the center of the vehicle as possible, and do not install it too low. Otherwise, the guideline comes on the edge of the screen, preventing the guideline from being adjusted.
[Picture Adjustment]	(page 57)

Phone Connectivity Settings

Menu Item	Description
[Android Auto] [On] [Off]	Setting Android Auto activation. **NOTE** The [Android Auto] icon may not be displayed on the home menu screen depending on the Phone Connectivity Settings.

Other functions

Setting the clock display

You can set the time format, time zone, daylight saving, and the date format. However, the time and date are automatically adjusted by the GPS antenna and cannot be adjusted by the user.

1 Touch the current time on the screen.

2 Set the following items in the settings.
- The date display format:
  [d/m/y] (day-month-year), [m/d/y] (month-day-year), or [y/m/d] (year-month-day)
- The time display format:
  [12hour] or [24hour]
- The UTC (Universal Time Coordinated) time zone difference:
  UTC-12.00h to UTC+14.00h
- Day-light saving time:
  [On] or [Off]

You can also configure these items in [Date & Time] (page 55).

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Changing the widescreen mode

You can set the screen mode for the AV screen and image files.

1 **Touch the screen display mode key.**

①	**Screen display mode key**

2 **Touch the desired mode.**

[Full]	Displays images across the entire screen. **NOTE** Some images may not be displayed across the entire screen.
[Zoom]	Displays images by enlarging them vertically.
[Normal]	Displays images without changing the ratio.
[Trimming]	An image is displayed across the entire screen with the horizontal-to-vertical ratio left as-is. If the screen ratio differs from the image, the image may be displayed partly cut off either at the top/bottom or sides. **NOTE** [Trimming] is for image files only.

TIPS
- Different settings can be stored for each video source.
- When a video is viewed in the widescreen mode with a setting that does not match its original aspect ratio, it may appear different.
- The video image will appear coarser when viewed in [Zoom] mode.

NOTES
- Image files can be set to either [Normal] or [Trimming] in the widescreen mode.
- Depending on the software version of this unit, this function may vary.

About the reconnection function

You can reconnect the iPhone or smartphone by touching [Reconnect] on the home menu screen.

TIPS

- [Reconnect] is displayed on the home menu screen only when the Wi-Fi connection (Wireless Apple CarPlay or Android Auto) has failed or been disconnected automatically.
- If you touch [Reconnect], the message confirming whether to restart this product appears on the display. Touch [Yes] to restart this product.

Restoring this product to the default settings

You can restore settings or recorded content to the default settings from [Factory Reset] in the [System Settings] menu (page 57).

Appendix

Troubleshooting

If you have problems operating this product, refer to this section. The most common problems are listed below, along with likely causes and solutions. If a solution to your problem cannot be found here, contact your dealer or the nearest authorized Pioneer service facility.

Common problems

A black screen is displayed, and operation is not possible using the touch panel keys.
→ Power off mode is on.
  – Touch any button on this product to release the mode.

Bluetooth operation does not work.
→ The power failed for the Bluetooth module of this product.
  – Turn the ignition switch to OFF and then to ON. If the error message is still displayed after performing the above action, please contact your dealer or an authorized Pioneer Service Station.

Problems with the AV screen

The screen is covered by a caution message and the video cannot be shown.
→ The parking brake lead is not connected or the parking brake is not applied.
  – Connect the parking brake lead correctly, and apply the parking brake.
→ The speed sensor detects that the vehicle is moving.
  – Park your vehicle in a safe place and apply the parking brake.

The audio or video skips.
→ This product is not firmly secured.
  – Secure this product firmly.

No sounds are produced. The volume level will not rise.
→ Cables are not connected correctly.
  – Connect the cables correctly.

iPhone cannot be operated.
→ The iPhone is frozen.
  – Reconnect the iPhone with the USB interface cable for iPhone.
  – Update the iPhone software version.
→ An error has occurred.
  – Reconnect the iPhone with the USB interface cable for iPhone.
  – Park your vehicle in a safe place, and then turn off the ignition switch (ACC OFF). Subsequently, turn the ignition switch to on (ACC ON) again.
  – Update the iPhone software version.
→ Cables are not connected correctly.
  – Connect the cables correctly.

Sound from the iPhone cannot be heard.
→ The audio output direction may switch automatically when the Bluetooth and USB connections are used at the same time.
  – Use the iPhone to change the audio output direction.

No back camera image when the vehicle is in reverse.
→ The back camera input setting on the receiver is set to Off.
  – Change the back camera setting to On in the settings menu. (Refer to the System Settings section of this manual to adjust.)

→ The camera input may be loose or not connected.
– Check the connection and make sure the male end of the camera is connected to the brown input on the back of the receiver. (Refer to the installation manual.)
→ The reverse lead on the receiver may not be connected to the proper wire at the reverse lamp.
– Check the connection and make sure that the violet/white lead of the receiver is connected to the lead whose voltage changes when the shift lever is put in reverse. (Refer to the installation manual.)

A black screen is displayed when the vehicle is in reverse, with no camera installed.
→ Back camera input is set to On.
– Turn the setting to Off in the settings menu. (Refer to the System Settings section of this manual to adjust.)

Problems with the phone screen

Dialing is impossible because the touch panel keys for dialing are inactive.
→ Your phone is out of range for service.
– Retry after re-entering the range for service.
→ The connection between the cellular phone and this product cannot be established.
– Perform the connection process.

Problems with Application screen

A black screen is displayed.
→ While operating an application, the application was ended on the smartphone side.

– Touch ▦ to display the home menu screen.
→ The smartphone OS may be awaiting screen operation.
– Stop the vehicle in a safe place and check the screen on the smartphone.

The screen is displayed, but operation does not work at all.
→ An error has occurred.
– Park your vehicle in a safe place, and then turn off the ignition switch (ACC OFF). Subsequently, turn the ignition switch to on (ACC ON) again.

The smartphone was not charged.
→ Charging stopped because the temperature of the smartphone rose due to prolonged use of the smartphone during charging.
– Disconnect the smartphone from the cable, and wait until the smartphone cools down.
→ More battery power was consumed than was gained from charging.
– This problem may be resolved by stopping any unnecessary services on the smartphone.

Error messages

When problems occur with this product, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, record the error message and contact your dealer or your nearest Pioneer service center.

SiriusXM Satellite Radio

Check Antenna
→ The antenna connection is incorrect.

– Check the antenna connection. If the message fails to disappear even after the engine is switched off/on, contact your dealer or the nearest authorized Pioneer service center for assistance.

Check Tuner
→ The SiriusXM Connect Vehicle Tuner connection is incorrect.
  – Check the tuner connection and battery voltage. If the message fails to disappear even after the engine is switched off/on, contact your dealer or the nearest authorized Pioneer service center for assistance.

No Signal
→ The SiriusXM Connect Vehicle Tuner is having difficulty receiving the SiriusXM satellite signal.
  – Verify that your vehicle is outdoors with a clear view of the southern sky.
  – Verify that the SiriusXM magnetic mount antenna is mounted on a metal surface on the outside of the vehicle.
  – Move the SiriusXM antenna away from any obstructions.

Channel Not Available
→ The channel that you have requested is not a valid SiriusXM channel.
  – Visit www.siriusxm.com for more information about the SiriusXM channel lineup.

Subscription Updated Press Enter to Continue
→ This product has detected a change in your SiriusXM subscription status.
  – Touch [Enter] to clear the message. In the U.S.A., visit www.siriusxm.com or call 1-866-635-2349 if you have questions about your subscription. In Canada, visit www.siriusxm.ca or call 1-888-539-7474 if you have questions about your subscription.

Channel Not Subscribed Call SiriusXM to Subscribe
→ The channel that you have requested is not included in your SiriusXM subscription package.
  – Check the content of your SiriusXM subscription package.
    In the U.S.A., visit www.siriusxm.com or call 1-866-635-2349 if you have questions about your subscription package or would like to subscribe to this channel. In Canada, visit www.siriusxm.ca or call 1-888-539-7474.

Channel Locked Please Enter the Lock Code
→ Locked by the radio Parental Control feature.
  – Release the channel lock.

Incorrect Pass Code entered
→ The pass code is incorrect.
  – Enter the correct pass code.

USB storage device

Unsupport USB device
→ The connected USB device is not supported by this product.
  – Check the supported USB formats (page 81).

Unsupport USB hub device
→ The connected USB hub is not supported by this product.
  – Directly connect the USB storage device to this product.

This content cannot be played.
→ There is no playable file in the USB storage device.
  – Check that the files in the USB storage device are compatible with this product.

→ This type of file is not supported on this product.
  – Select a file that can be played.
→ Security for the connected USB storage device is enabled.
  – Follow the USB storage device instructions to disable security.
→ This product cannot recognize the connected USB storage device.
  – Disconnect the device and replace it with another USB storage device.

Audio Format not supported
→ This type of file is not supported on this product.
  – Select a file that can be played.

No Data
→ There is no playable file in the USB storage device.
  – Check that the files in the USB storage device are compatible with this product.
→ Security for the connected USB storage device is enabled.
  – Follow the USB storage device instructions to disable security.

Apple CarPlay

Connection failed.
→ Communication failed and the system is trying to connect.
→ Wait for a while. Then, perform the actions below if the error message is still displayed.
  – Restart the iPhone.
  – Disconnect the cable from the iPhone, and then connect the iPhone again after a few seconds.
  – Turn the ignition switch to OFF and then to ON.

Please attach the GPS antenna in order to use Apple CarPlay over Wireless.
→ This unit cannot properly detect the GPS signal from the GPS antenna.
  – Check the GPS antenna installation and connection. For details about the connection and installation, refer to the Installation Manual.

Android Auto

• **Connect a USB cable to get started.**
• **Your phone does not support wireless, check your phone.**
→ The connected device is not compatible with Android Auto.
  – Check if the device is compatible with Android Auto (page 41).
→ Android Auto app is not installed on the device.
  – Install the Android Auto app on the device.

Connection failed. Please check your phone to confirm connection.
→ Wi-Fi connection failed and Android Auto app did not start.
  – Check if the Wi-Fi function on the device is turned on.

Android Auto has disconnected.
→ Wi-Fi function on the device or the unit is turned off.
  – Turn on the Wi-Fi function on the device and the unit when you use Android Auto (page 25).

To use Android Auto, please stop your car and follow the instructions on your phone
→ The default settings are displayed on the screen of the Android Auto compatible device or images are not output from the Android Auto compatible device.

– Park your vehicle in a safe place, and follow the instructions displayed on the screen. If the error message is still displayed after performing on-screen instructions, please reconnect the device.

Camera View & AUX

No Video Signal
→ There is no video signal input.
  – Confirm whether the connection with the unit is established and there is an output from the external device.

Bluetooth

Handsfree device is not connected
→ The phone's Bluetooth HFP is not connected and cannot make calls.
  – Make a Bluetooth connection (page 18).

Phone book access is not authorized
→ The Bluetooth PBAP of the cellular phone is not connected and the phone book cannot be downloaded.
  – Make a PBAP connection. You need to operate your phone and allow the unit to access the contact information on your phone. When the related information pops up on your phone, follow the pop-up message.

Others

Caution! USB Overcurrent
→ Overcurrent is detected.
  – Check the USB connection. Perform one of the following operations to fix the situation.
  – Turn off the ignition switch (ACC OFF) and then turn the ignition switch to on (ACC ON) again.

– Power the unit off and then power it on again.
– Disconnect the (+) battery cable and then connect it again.

Caution! AMP Overload
→ An amplifier overload is detected.
  – Check the amp connection. Perform one of the following operations to fix the situation.
  – Turn off the ignition switch (ACC OFF). After 9 seconds or more, turn the ignition switch to on (ACC ON) again.
  – Disconnect the (+) battery cable and then connect it again.

Detailed information for playable media

Compatibility

Common notes about the USB storage device
• Do not leave the USB storage device in any location with high temperatures.
• Depending on the kind of the USB storage device you use, this product may not recognize the storage device or files may not be played back properly.
• The text information of some audio and video files may not be correctly displayed.
• File extensions must be used properly.
• There may be a slight delay when starting playback of files on a USB storage device with complex folder hierarchies.
• Operations may vary depending on the kind of USB storage device.
• It may not be possible to play some music files from USB because of file characteristics, file format, recorded application, playback environment, storage conditions, and so on.

USB storage device compatibility

- For details about USB storage device compatibility with this product, refer to Specifications (page 80).
- Protocol: bulk
- You cannot connect a USB storage device to this product via a USB hub.
- Partitioned USB storage device is not compatible with this product.
- 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 gas pedal.
- There may be a slight delay when starting playback of audio files encoded with image data.
- Some USB storage devices connected to this product may generate noise on the radio.
- Do not connect anything other than the USB storage device.

Handling guidelines and supplemental information

- Copyright protected files cannot be played back.

Media compatibility chart

General

- Maximum playback time of audio file stored on a USB storage device: 7.5 h (450 minutes)

USB storage device

CODEC FORMAT	MP3, WMA, WAV, AAC, FLAC, AVI, MPEG-PS, MP4, 3GP, MKV, MOV, ASF, FLV, M4V, MPEG-TS

MP3 compatibility

- Ver. 2.x of ID3 tag is prioritized when both Ver. 1.x and Ver. 2.x exist.

- This product is not compatible with the following: MP3i (MP3 interactive), mp3 PRO, m3u playlist

SAMPLING FREQUENCY	8 kHz to 48 kHz
TRANSMISSION RATE	CBR (8 kbps to 320 kbps)/VBR
ID3 TAG	ver.1.0/1.1/2.2/2.3/2.4

WMA compatibility

- This product is not compatible with the following: Windows Media™ Audio 9.2 Professional, Lossless, Voice

SAMPLING FREQUENCY	8 kHz to 48 kHz
TRANSMISSION RATE	CBR (8 kbps to 320 kbps)/VBR

WAV compatibility

- The sampling frequency shown in the display may be rounded.

SAMPLING FREQUENCY	16 kHz to 192 kHz
QUANTIZATION BIT RATE	8 bit, 16 bit

AAC compatibility

- This product plays back AAC files encoded by iTunes.

SAMPLING FREQUENCY	8 kHz to 96 kHz
TRANSMISSION RATE	CBR (16 kbps to 320 kbps)

FLAC compatibility

SAMPLING FREQUENCY	8 kHz to 192 kHz
QUANTIZATION BIT RATE	8 bit, 16 bit, 24 bit

Video files compatibility

- Files may not be played back properly depending on the environment in which the file was created or on the contents of the file.
- This product is not compatible with packet write data transfer.

- This product can recognize up to 255 characters, beginning with the first character, including extension for the file and folder name. Depending on the display area, this product may try to display them with a reduced font size. However, the maximum number of the characters that you can display varies according to the width of each character, and of the display area.
- Folder selection sequence or other operations may be altered, depending on the encoding or writing software.
- Regardless of the length of blank section between the songs of original recording, compressed audio files play with a short pause between songs.
- Files may not be able to be played back depending on the bit rate.
- The maximum resolution depends on the compatible video codec.

H.264 video decoding format
Base Line Profile, Main Profile, High Profile

Maximum resolution	$1\,920 \times 1\,080$
Maximum frame rate	30 fps

H.263 video decoding format
Base Line Profile 0/3

Maximum resolution	$1\,920 \times 1\,080$
Maximum frame rate	30 fps

VC-1 video decoding format
Simple Profile, Main Profile, Advanced Profile

Maximum resolution	$1\,920 \times 1\,080$
Maximum frame rate	30 fps

MPEG-4 video decoding format
Simple Profile, Advanced Simple Profile

Maximum resolution	$1\,920 \times 1\,080$
Maximum frame rate	30 fps

MPEG-1, 2 video decoding format
Main Profile

Maximum resolution	$1\,920 \times 1\,080$
Maximum frame rate	30 fps

Example of a hierarchy

NOTE

This product assigns folder numbers. The user cannot assign folder numbers.

Bluetooth

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Wi-Fi

Wi-Fi® is a registered trademark of Wi-Fi Alliance®.

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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FLAC

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AAC

AAC is short for Advanced Audio Coding and refers to an audio compression technology standard used with MPEG-2 and MPEG-4. Several applications can be used to encode AAC files, but file formats and extensions differ depending on the application which is used to encode. This unit plays back AAC files encoded by iTunes.

WebLink®

WebLink® is a registered trademark of Abalta Technologies, Inc.

WebLink® Cast

WebLink® Cast is a trademark of Abalta Technologies, Inc.

Android, Android Auto

Android and Android Auto are trademarks of Google LLC.

Detailed information regarding connected iPhone devices

- Pioneer accepts no responsibility for data lost from an iPhone, even if that data is lost while using this product. Please back up your iPhone data regularly.
- Do not leave the iPhone in direct sunlight for extended amounts of time. Extended exposure to direct sunlight can result in iPhone malfunction due to the resulting high temperature.
- Do not leave the iPhone in any location 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 gas pedal.
- For details, refer to the iPhone manuals.

Apple CarPlay, iPhone, iTunes, Lightning, QuickTime, Siri

Please note that the use of this accessory with an Apple product may affect wireless performance.
Apple CarPlay, iPhone, iTunes, Lightning, QuickTime, and Siri are trademarks of Apple Inc., registered in the U.S. and other countries and regions.
Works with Siri through the microphone.

Compatible iPhone models

- iPhone 14 Pro Max
- iPhone 14 Pro
- iPhone 14 Plus
- iPhone 14
- iPhone SE (3rd generation)
- iPhone 13 Pro Max
- iPhone 13 Pro
- iPhone 13
- iPhone 13 mini
- iPhone 12 Pro Max
- iPhone 12 Pro
- iPhone 12
- iPhone 12 mini
- iPhone SE (2nd generation)
- iPhone 11 Pro Max
- iPhone 11 Pro
- iPhone 11
- iPhone XS Max
- iPhone XS
- iPhone XR
- iPhone X
- iPhone 8 Plus
- iPhone 8

Depending on the iPhone models, it may not be compatible with some AV sources. For details about iPhone compatibility with this product, refer to the information on our website.

LTE™

LTE is a trademark of ETSI.

iDatalink

iDatalink, Maestro and iData are registered trademarks of Automotive Data Solutions Inc.

Using app-based connected content

⚙ **Important**

Requirements to access app-based connected content services using this product:

- Latest version of the Pioneer compatible connected content application(s) for the smartphone, available from the service provider, downloaded to your smartphone.
- A current account with the content service provider.
- Smartphone Data Plan.
  Note: if the Data Plan for your smartphone does not provide for unlimited data usage, additional charges from your carrier may apply for accessing app-based connected content via 3G, EDGE and/or LTE (4G) networks.
- Connection to the Internet via 3G, EDGE, LTE (4G) or Wi-Fi network.
- Optional Pioneer adapter cable connecting your iPhone to this product.

Limitations:
- Access to app-based connected content will depend on the availability of cellular and/or Wi-Fi network coverage for the purpose of allowing your smartphone to connect to the Internet.
- Service availability may be geographically limited to the region. Consult the connected content service provider for additional information.
- Ability of this product to access connected content is subject to change without notice and could be affected by any of the following: compatibility issues with future firmware versions of smartphone; compatibility issues with future versions of the connected content application(s) for the smartphone; changes to or discontinuation of the connected Content application(s) or service by its provider.
- Pioneer is not liable for any issues that may arise from incorrect or flawed app-based content.
- The content and functionality of the supported applications are the responsibility of the App providers.

- In WebLink®, Apple CarPlay and Android Auto, functionality through the product is limited while driving, with available functions determined by the App providers.
- Availability of WebLink®, Apple CarPlay and Android Auto functionalities is determined by the App provider, and not determined by Pioneer.
- WebLink®, Apple CarPlay and Android Auto allow access to applications other than those listed (subject to limitations while driving), but the extent to which content can be used is determined by the App providers.

Notice regarding video viewing

Remember that use of this system for commercial or public viewing purposes may constitute an infringement on the author's rights as protected by the Copyright Law.

Using the LCD screen correctly

Handling the LCD screen

- When the LCD screen is subjected to direct sunlight for a long period of time, it will become very hot, resulting in possible damage to the LCD screen. When not using this product, avoid exposing it to direct sunlight as much as possible.
- The LCD screen should be used within the temperature ranges shown in Specifications on page 80.
- Do not use the LCD screen at temperatures higher or lower than the

operating temperature range, because the LCD screen may not operate normally and could be damaged.
- The LCD screen is exposed in order to increase its visibility within the vehicle. Please do not press strongly on it as this may damage it.
- Do not push the LCD screen with excessive force as this may scratch it.
- Never touch the LCD screen with anything besides your finger when operating the touch panel functions. The LCD screen can scratch easily.

Liquid crystal display (LCD) screen

- If the LCD screen is near the vent of an air conditioner, make sure that air from the air conditioner is not blowing on it. Heat from the heater may break the LCD screen, and cool air from the cooler may cause moisture to form inside this product, resulting in possible damage.
- 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.
- The LCD screen will be difficult to see if it is exposed to direct sunlight.
- When using a cellular phone, keep the antenna of the cellular phone away from the LCD screen to prevent disruption of the video in the form of disturbances such as spots or colored stripes.

Maintaining the LCD screen

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

LED (light-emitting diode) backlight

A light emitting diode is used inside the display to illuminate the LCD screen.
- At low temperatures, using the LED backlight may increase image lag and degrade the image quality because of the characteristics of the LCD screen. Image quality will improve with an increase in temperature.
- 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 dimmer and the image will no longer be visible. In that case, please consult your dealer or the nearest authorized Pioneer Service Station.

English

Specifications

General

Rated 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):
  Chassis (D):
    178 mm × 100 mm × 125 mm (7 in. × 3-7/8 in. × 4-7/8 in.)
  Nose:
    171 mm × 97 mm × 2 mm (6-3/4 in. × 3-7/8 in. × 1/8 in.)
Weight:
  0.9 kg (2.0 lbs)

Display

Screen size/aspect ratio:
  6.8 inch wide/16:9 (effective display area: 151.8 mm × 79.68 mm) (6 in. × 3-1/8 in.)
Pixels:
  800 (Width) × 480 (Height) × 3 (RGB)
Display method:
  TFT Active matrix driving
Color system:
  PAL/NTSC/PAL-M/PAL-N/SECAM compatible
Temperature range:
  -10 ˚C to +60 ˚C (+14 ˚F to +140 ˚F)

Audio

Maximum power output:
  50 W × 4
Continuous power output:
  22 W × 4 (50 Hz to 15 kHz, 5 % THD, 4 Ω LOAD, Both Channels Driven)
Load impedance:
  4 Ω
Preout output level (max): 4.0 V
Equalizer (13-Band Graphic 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 (2 dB/step)
<Standard Mode>
HPF: ON/OFF>
  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
LPF (Subwoofer): ON/OFF
  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
  Phase: Normal/Reverse
Time alignment:
  0 to 210 inch (0.6 inch/step)
Speaker level:
  +10 dB to -24 dB (1 dB/step)
<Network Mode>
HPF (High):
  Frequency:
    1.25 kHz/1.6 kHz/2 kHz/2.5 kHz/3.15 kHz/4 kHz/5 kHz/6.3 kHz/8 kHz/10 kHz/12.5 kHz
  Slope:
    -6 dB/oct, -12 dB/oct, -18 dB/oct, -24 dB/oct
Phase (High): Normal/Reverse
HPF (Mid): ON/OFF
  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
LPF (Mid): ON/OFF
  Frequency:
    1.25 kHz/1.6 kHz/2 kHz/2.5 kHz/3.15 kHz/4 kHz/5 kHz/6.3 kHz/8 kHz/10 kHz/12.5 kHz
  Slope:
    -6 dB/oct, -12 dB/oct, -18 dB/oct, -24 dB/oct
Phase (Mid): Normal/Reverse
LPF (Subwoofer): ON/OFF
  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
Phase (Subwoofer): Normal/Reverse
Time alignment:
  0 to 210 inch (0.6 inch/step)
Speaker level:
  +10 dB to -24 dB (1 dB/step)

USB

USB standard spec:
  USB 1.1, USB 2.0 full speed, USB 2.0 high speed
Max current supply: 1.5 A

USB Class:
   MSC (Mass Storage Class)
File system: FAT16, FAT32, NTFS
<USB audio>
MP3 decoding format:
   MPEG-1 & 2 & 2.5 Audio Layer 3
WMA decoding format:
   Ver. 7, 8, 9, 9.1, 9.2 (2 ch audio)
   (Windows Media™ Player)
AAC decoding format:
   MPEG-4 AAC (iTunes encoded only) (Ver. 12.5 and earlier)
FLAC decoding format (MSC Mode only):
   Ver. 1.3.0
   Sampling frequency:
      8 kHz to 192 kHz
WAV signal format (MSC Mode only):
   Linear PCM
   Sampling frequency:
      16 kHz to 192 kHz
<USB image>
JPEG decoding format (MSC Mode only):
   .jpeg, .jpg
   Pixel Sampling: 4:2:2, 4:2:0
   Decode Size:
      MAX: 5 000 (H) × 5 000 (W)
      (Maximum file size: 6 MB)
      (Minimum file size: 10 KB)
PNG decoding format (MSC Mode only):
   .png
   Decode Size:
      MAX: 576 (H) × 720 (W)
BMP decoding format (MSC Mode only):
   .bmp
   Decode Size:
      MAX: 936 (H) × 1 920 (W)

<USB video>

○ : Supported   — : Not supported

Playable video format (container)		AVI	MP4	QuickTime (MOV)	WMV	MKV	FLV	MPEG1-PS MPEG2-PS	TS Stream
EXTENSION		.avi	mp4/.m4v	.mov	.wmv	.mkv	.flv	.mpg/ .mpeg	.ts/.m2ts/ .mts
Video codec	H.264	○	○	○	—	○	○	—	○
	H.263	○	○	○	—	—	○	—	—
	WMV9 (VC-1)	○	—	—	○	○	—	—	○
	MPEG-4	○	○	○	—	○	—	—	○
	MPEG-2	○	○	○	—	○	—	○	○
	MPEG-1	○	—	—	—	○	—	○	○
Audio codec	WMA	○	—	—	○	○	—	—	—
	MP3	○	○	○	—	○	○	○	○
	AAC	○	○	○	—	○	○	○	○
	FLAC	○	—	—	○	○	—	—	—
	LPCM	○	○	○	—	○	○	○	○

Bluetooth

Version:

W3050NEX W3000NEX
Bluetooth 5.3 certified

2000NEX
Bluetooth 5.0 certified

Output power:
+4 dBm Max. (Power class 2)
Bluetooth Low Energy output power:
+4 dBm Max.
Frequency band(s):
2 402.0 MHz to 2 480.0 MHz
Bluetooth profiles:
HFP (Hands Free Profile) 1.8
PBAP (Phone Book Access Profile) 1.2.3
A2DP (Advanced Audio Distribution Profile) 1.4
AVRCP (Audio/Video Remote Control Profile) 1.6.2
AVCTP (Audio/Video Control Transport Protocol) 1.4
AVDTP (Audio/Video Distribution Transport Protocol) 1.3
GAVDP (Generic Audio/Video Distribution Profile) 1.3
IOP (Interoperability Test Specification)

W3050NEX W3000NEX
RFCOMM (RFCOMM with TS 07.10) 1.2

English

FM tuner

Frequency range:
 87.9 MHz to 107.9 MHz
Usable sensitivity:
 12 dBf (1.1 μV/75 Ω, mono, S/N: 30 dB)
Signal-to-noise ratio:

 `W3050NEX` `2000NEX`
 50 dB (digital broadcasting) (IHF-A network)
 50 dB (analog broadcasting) (IHF-A network)

 `W3000NEX`
 50 dB (IHF-A network)

AM tuner

Frequency range:
 530 kHz to 1 710 kHz
Usable sensitivity:
 28 μV (S/N: 20 dB)
Signal-to-noise ratio:

 `W3050NEX` `2000NEX`
 45 dB (digital broadcasting) (IHF-A network)
 45 dB (analog broadcasting) (IHF-A network)

 `W3000NEX`
 45 dB (IHF-A network)

Wi-Fi

 `W3050NEX` `W3000NEX`
Version:
 IEEE 802.11 a/n/ac (5 GHz)
Frequency channel:
 149, 151, 155 ch (5 GHz)
Security:
 WPA2 (Personal), WPA3 (Personal)
Output power:
 +13.0 dBm Max (5 GHz)

GPS

GNSS receiver
 System:
  GPS L1C/Ac, SBAS L1C/A, GLONASS L1OF, Galileo E1B/C
  SPS (Standard Positioning Service)
 Reception system:
  64 channel Multi-channel reception system
 Reception frequency:
  1 575.42 MHz/1 602 MHz

Sensitivity:
   -140 dBm (typ)
Frequency:
   Approx. once per second
GPS antenna
  Antenna:
   Micro strip flat antenna/right-handed helical polarization
  Antenna cable:
   3.55 m (11 ft. 7in.)
  Dimensions (W × H × D):
   47 mm × 16.2 mm × 55 mm (1-7/8 in. × 5/8 in. × 2-1/8 in.)
  Weight:
   104.0 g (0.23 lbs)

NOTE
Specifications and design are subject to possible modifications without notice due to improvements.

Register your product at

https://www.pioneerelectronics.com/PUSA/

in Canada **https://www.pioneerelectronics.ca/POCEN/**