



DIGITAL MEDIA RECEIVER
RÉCEPTEUR NUMÉRIQUE MULTIMÉDIA
RICEVITORE MULTIMEDIALE DIGITALE
RECEPTOR DE MEDIOS DIGITALES
DIGITALER MEDIA RECEIVER
DIGITALE MEDIA-RECEIVER

MVH-S420BT

MVH-S42BT

MVH-S320BT

Operation Manual
Mode d'emploi
Manuale d'istruzioni
Manual de instrucciones
Bedienungsanleitung
Bedieningshandleiding



English

Français

Italiano

Español

Deutsch

Nederlands

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About this manual:

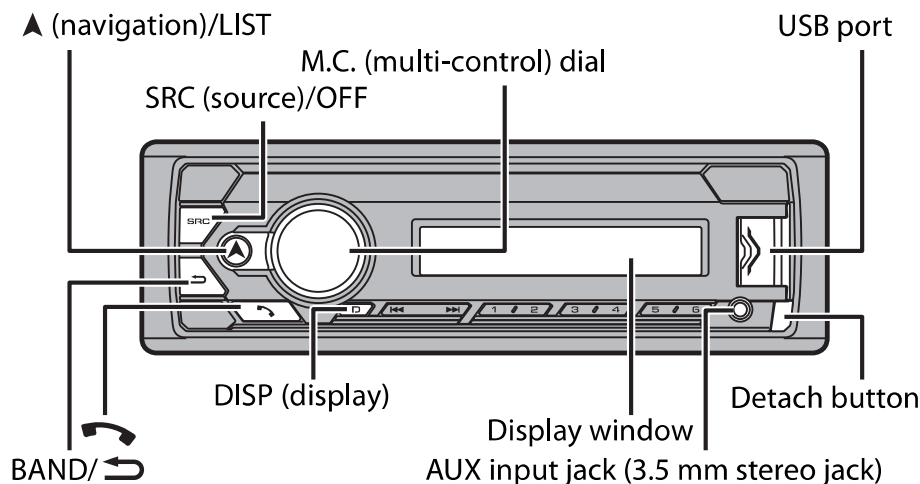
- In the following instructions, a USB memory or USB audio player are referred to as "USB device".

Getting Started

Basic operation

MVH-S420BT/S42BT/S320BT

English







Frequently used operations

Purpose	Operation
Turn on the power*	Press SRC/OFF to turn on the power. Press and hold SRC/OFF to turn off the power.
Adjust the volume	Turn the M.C. dial.
Select a source	Press SRC/OFF repeatedly.
Change the display information	Press DISP repeatedly.
Return to the previous display/list	Press BAND/↶ .
Return to the normal display from the menu	Press and hold BAND/↶ .
Change the display brightness	Press and hold BAND/↶ .
Answering a call	Press any button.
Ending a call	Press ↶ .

* When this unit's blue/white lead is connected to the vehicle's auto-antenna relay control terminal, the vehicle's antenna extends when this unit's source is turned on. To retract the antenna, turn the source off.

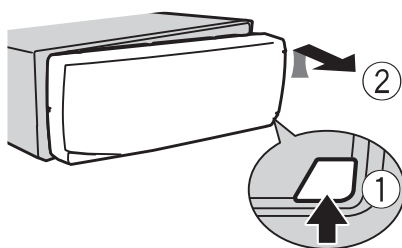
Display indication

Indication	Description
	Appears when a lower tier of the menu or folder exists.
TP	Appears when a traffic program is received.
BASS	Appears when the BASS function is activated.
	Appears when random/shuffle play is set (except when BT AUDIO is selected as the source).
	Appears when repeat play is set (except when BT AUDIO is selected as the source).
	Appears when a Bluetooth connection is made (page 10).
APP	Appears when a Pioneer Smart Sync connection is made (page 16).

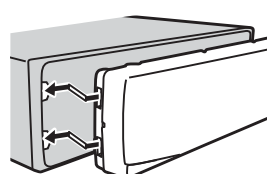
Detaching the front panel

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

Detach



Attach



Important

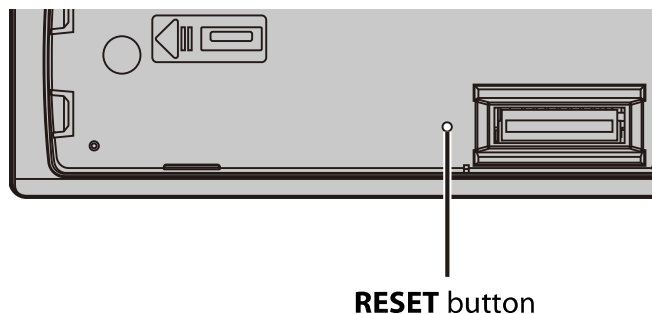
- Avoid subjecting the front panel to excessive shock.
- Keep the front panel out of direct sunlight and high temperatures.
- Always store the detached front panel in a protective case or bag.

Resetting the microprocessor

The microprocessor must be reset in the following situations:

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

- 1** Remove the front panel (page 4).
- 2** Press the **RESET** button with a pointed instrument longer than 8 mm.



Setup menu

When you turn the ignition switch to ON after installation, the setup menu appears in the display.

- 1 Turn the **M.C.** dial to select the options, then press to confirm.**
To proceed to the next menu option, you need to confirm your selection.

Menu Item	Description
LANGUAGE [ENG](English), [PYC](Russian), [TUR](Turkish), [FRA](French), [DEU](German)	Select the language to display the text information from a compressed audio file.
CLOCK SET	Set the clock. 1 Turn the M.C. dial to adjust the hour, then press to confirm. The indicator moves to the minute setting automatically. 2 Turn the M.C. dial to adjust the minute, then press to confirm.
FM STEP [100], [50]	Select the FM tuning step from 100 kHz or 50 kHz.

- 2 [QUIT :YES] appears.**
To return to the first item of the setup menu, turn the **M.C.** dial to select [QUIT :NO], then press to confirm.
- 3 Press the **M.C.** dial to confirm the settings.**

NOTE

These settings can be made at any time from the SYSTEM settings (page 26) and INITIAL settings (page 6).

Canceling the demonstration display (DEMO OFF)

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

INITIAL settings

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




Menu Item	Description
FM STEP [100], [50]	Select the FM tuning step from 100 kHz or 50 kHz.
SP-P/O MODE [REAR/SUB.W]	Select when there is a full-range speaker connected to the rear speaker output leads and there is a subwoofer connected to the RCA output.
[SUB.W/SUB.W]	Select when there is a passive subwoofer connected directly to the rear speaker output leads and there is a subwoofer connected to the RCA output.
[REAR/REAR]	Select when there are full-range speakers connected to the rear speaker output leads and RCA output. If there is a full-range speaker connected to the rear speaker output leads, and the RCA output is not used, you may select either [REAR/SUB.W] or [REAR/REAR].
SYSTEM UPDATE [SYSTEM INFO], [S/W UPDATE]	Select [SYSTEM INFO] to confirm the latest system information on the unit. Select [S/W UPDATE] to update the unit to the latest software and initialize the unit settings. For details on the latest software and updating, visit our website.
SYSTEM RESET [YES], [NO]	Select [YES] to initialize the unit settings. The unit will be restarted automatically.

Radio



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

English


Receiving preset stations

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

TIP







The /  buttons can be also used to select a preset station when [SEEK] is set to [PCH] in the FUNCTION settings (page 23).

Best stations memory (BSM)

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

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

To seek a station manually

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

NOTE

[SEEK] needs to be set to [MAN] in the FUNCTION settings (page 23).

To store stations manually

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

Using PTY functions

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

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

NOTES

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

USB/iPhone®/AUX

(iPhone source is not available when [USB MTP] is set to [ON] in the SYSTEM settings (page 27).)

NOTE

iPhone function is not available for MVH-S320BT.

Playing back

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

USB devices (including Android™)/iPhone

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

NOTE

To automatically switch to USB source when a USB device/iPhone is connected to the unit, set [USB AUTO] to [ON] in the SYSTEM settings (page 28).

⚠ CAUTION

Use a USB cable (sold separately) to connect the USB device as any device connected directly to the unit will protrude out from the unit, which could be dangerous.

Before removing the device, stop playback.

AOA connections

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

NOTE

If you use an AOA connection, [APP CONTROL] needs to be set to [WIRED] (page 27) and [USB MTP] needs to be set to [OFF] (page 27) in the SYSTEM settings.

MTP connection

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

NOTE

If you use an MTP connection, [USB MTP] needs to be set to [ON] in the SYSTEM settings (page 27).

AUX

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

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

NOTE




If [AUX] is set to [OFF] in the SYSTEM settings, [AUX IN] cannot be selected as a source (page 27).

Operations

You can make various adjustments in the FUNCTION settings (page 22) (except for AUX IN/USB source).

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

Purpose	Operation
Select a folder*1	Press 1/▲ or 2/▼ .
Select a track/song (chapter)	Press ⏮ or ⏭ .
Fast forward or reverse*2	Press and hold ⏮ or ⏭ .
Search for a file from a list (USB only)	1 Press and hold ▲ to display the list. 2 Turn the M.C. dial to select the desired file (folder) name or category, then press to confirm. 3 Turn the M.C. dial to select the desired file, then press to confirm. Playback starts.

Purpose	Operation
View a list of the files in the selected folder/category*1	Press the M.C. dial when a folder/category is selected.
Play a song in the selected folder/category*1	Press and hold the M.C. dial when a folder/category is selected.
Repeat play	Press 6 /  .
Random/shuffle play	Press 5 /  .
Pause/resume playback	Press 4 / PAUSE .
Sound retriever*1	Press 3 / S.Rtrv. [1]: Effective for low compression rates [2]: Effective for high compression rates
Return to root folder (USB only)*1	Press and hold 1 /  .

*1 Compressed audio files only

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

Bluetooth

Bluetooth connection

Important

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

TIP


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

1 Turn on the Bluetooth function of the device.

If you make a Bluetooth connection from the device, proceed to step 4.

2 Press to display the [ADD DEVICE] setting.

The unit starts to search for available devices, then displays them in the device list.

- To cancel searching, press the **M.C.** dial.
- If the desired device is not in the list, select [RE-SEARCH].
- If there is no device available, [NOT FOUND] appears in the display.
- If there is already a connected device, the phone menu appears by pressing .

3 Turn the **M.C.** dial to select a device from the device list, then press to confirm.

Press and hold the **M.C.** dial to switch the displayed device information between the Bluetooth device address and device name.

If you make a Bluetooth connection from the unit, proceed to step 5.

- 4** Select the unit name shown in the device display.
- 5** Make sure the same 6-digit number appears on this unit and the device, then select [YES] if the 6-digit numbers displayed on this unit and the device are the same.



Bluetooth telephone

First, make a Bluetooth connection with the Bluetooth telephone (page 10). Up to two Bluetooth telephones can be connected simultaneously.

Important

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

To make a phone call

- 1** Press  to display the phone menu.
When two phones are connected, a phone name appears first then a phone menu will display. To switch to another phone, press  again.
- 2** Turn the **M.C.** dial to select [RECENTS] or [PHONE BOOK], then press to confirm.
If you select [PHONE BOOK], proceed to step 4.
- 3** Turn the **M.C.** dial to select [MISSED], [DIALLED] or [RECEIVED], then press to confirm.
- 4** Turn the **M.C.** dial to select a name or phone number, then press to confirm.
The phone call starts.





To answer an incoming call

- 1** Press any button when a call is received.



TIP

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



Basic operations

Purpose	Operation
End a call	Press  .
Reject an incoming call	Press and hold  when a call is received.
Switch between the current caller and a caller on hold	Press the M.C. dial.
Cancel a caller on hold	Press and hold  .
Adjust the volume of the caller's voice (When private mode is on, this function is not available.)	Turn the M.C. dial during the call.
Turn the private mode on or off	Press BAND/  during the call.

To preset phone numbers

- 1 Select a phone number from a phone book or call history.
- 2 Press and hold one of the number buttons (1/  to 6/ .

The contact is stored in the selected preset number.

To make a call using a preset number, press one of the number buttons (1/  to 6/ ) , then press the **M.C.** dial, while the phone menu is displayed.

Voice recognition

(iPhone function is not available for MVH-S320BT.)

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


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

To exit the voice recognition mode, press **BAND/** .

NOTE



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

TIP

When a Pioneer Smart Sync connection is made (page 16), you can also use the voice recognition function from Pioneer Smart Sync installed on your iPhone/Android device by pressing and holding . For details on the voice recognition features, see the application's help section.

Phone menu

- 1 Press  to display the phone menu.

Menu Item	Description
RECENTS	Display the missed call history.
[MISSED]	
[DIALLED]	Display the dialed call history.
[RECEIVED]	Display the received call history.
PHONE BOOK	Display the contacts in your phone.
PRESET 1-6	Recall the preset phone numbers. You can also recall the preset phone numbers by pressing one of the number buttons (1/  to 6/ ).
A.ANSR*	Select [ON] to answer an incoming call automatically.
[ON], [OFF]	
PB INVT	Invert the order of names in the phone book (name view).
DEVICELIST	Display the list of paired Bluetooth devices. "*" appears on the device name when the Bluetooth connection is established. When no device is selected in the device list, this function is not available.
DEL DEVICE	Delete the device information.
[DELETE YES], [DELETE NO]	
ADD DEVICE	Register a new device.
DEV. INFO	Switch the device information on the display between the device name and Bluetooth device address.

* If two phones are connected, this function does not work on incoming calls that are received while one of the phones is being used for a call.

Bluetooth audio

Important

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

1 Make a Bluetooth connection with the Bluetooth audio player.

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

3 Press **BAND/↶** to start playback.

NOTE

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

TIP

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

Basic operations

You can make various adjustments in the FUNCTION settings (page 22).

Purpose	Operation
Fast forward or reverse	Press and hold ⏮ or ⏭ .
Select a track	Press ⏮ or ⏭ .
Repeat play*	Press 6/↶ .
Random play*	Press 5/⚡ .
Pause/resume playback	Press 4/PAUSE .
Search for a file from a list	<ol style="list-style-type: none"> 1 Press and hold ▲ to display a list. 2 Turn the M.C. dial to select the desired folder name, then press to confirm. 3 Turn the M.C. dial to select the desired file, then press to confirm. Playback starts.

* Depending on the connected device, these operations may not be available.

Spotify®

(Not available when [USB MTP] is set to [ON] in the SYSTEM settings (page 27).)

NOTE

iPhone connection is not available for MVH-S320BT.

Spotify is a music streaming distribution service not affiliated with Pioneer. More information is available at <http://www.spotify.com>.

The Spotify application is available for compatible smartphones, please visit <https://support.spotify.com/> for the latest compatibility information.

To enjoy Spotify as you drive, first download the Spotify app to your iPhone or Android device. You can download it on the iTunes® App Store® or Google Play™. Choose a free account or a paid Premium account, either in the app or at spotify.com. A Premium account gives you more features, like offline listening.

Important

- This product incorporates Spotify software which is subject to 3rd party licenses found here: www.spotify.com/connect/third-party-licenses.
- For information on the countries and regions where Spotify can be used, take a look at <https://spotify.com/us/select-your-country/>.

Listening to Spotify

Update the firmware of the Spotify application to the latest version before use.

- 1 Connect this unit with the mobile device.**
 - iPhone via USB (page 8)
 - iPhone/Android device via Bluetooth (page 10)
- 2 Press SRC/OFF to select [SPOTIFY].**
- 3 Press and hold 1/∧ to display [APP CONTROL].**
- 4 Turn the M.C. dial to select one of the below.**
 - Select [WIRED] for the USB connection.
 - Select [BLUETOOTH] for the Bluetooth connection.
- 5 Press SRC/OFF to select [SPOTIFY].**
- 6 Launch the Spotify application on the mobile device and start playback.**

NOTE

When you connect a mobile device other than an iPhone/Android device, it may not operate correctly depending on your mobile device.

Basic operations

You can make various adjustments in the FUNCTION settings (page 22).

NOTE

The available operations may vary according to the type of contents (track/album/artist/playlist/radio) you want to play.

Purpose	Operation
Skip a track	Press ◀◀ or ▶▶.

Purpose	Operation
Search for a track from a list	<ol style="list-style-type: none"> 1 Press and hold ▲ to display the list. 2 Turn the M.C. dial to select the desired category, then press to confirm. 3 Turn the M.C. dial to select the desired file, then press to confirm. Playback starts.
Pause/resume playback	Press 4/PAUSE .
Thumbs Up (Only for radio)	Press 1/▲ .
Thumbs Down (Only for radio)	Press 2/▼ .
Random play (Only for track/album/artist/playlist)	Press 5/🎲 .
Repeat play (Only for track/album/artist/playlist)	Press 6/🔄 .
Start a radio channel based on the song currently being played.	<ol style="list-style-type: none"> 1 Press and hold 5/🎲 to start a radio. 2 Press the M.C. dial. <ul style="list-style-type: none"> • This function may not be available depending on the selected song.

NOTE

Some functions of Spotify may not be operated from the unit.

Using Pioneer Smart Sync/APP

NOTE

iPhone connection is not available for MVH-S320BT.

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

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

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

NOTE

The APP source is not available when a Pioneer Smart Sync connection is not made or [USB MTP] is set to [ON] in the SYSTEM settings (page 27).

WARNING

- Functions operated with a smartphone are merely tools available to the driver. The driver shall observe safe and sensible driving behavior under all circumstances.

- Do not attempt to operate the application while driving. Make sure to pull off the road and park your vehicle in a safe location before attempting to use the controls on the application.

For iPhone users

This function is compatible with iOS 10.3 or later.

You can download Pioneer Smart Sync on iTunes App Store.

**For Android device users**

For Bluetooth connections, this function is compatible with devices that have Android OS 5.0 or later installed.

For USB connections, this function is compatible with a phone that runs Android 5.0 or later up to 7.1.2 and also supports AOA (Android Open Accessory) 2.0. However, the compatibility depends on the smartphone.

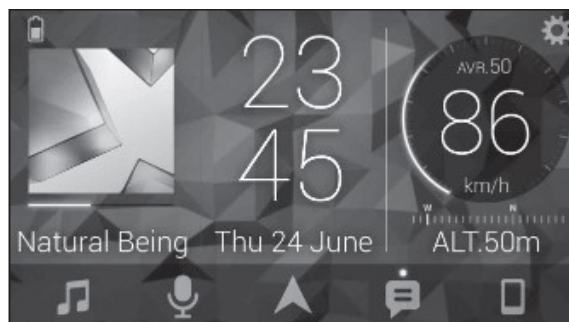
You can download Pioneer Smart Sync on Google Play.

**NOTE**

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

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

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

Image (example):**Examples:**

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

Extending the functions of the unit by using the application

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

Menu Item (example)	Description
Using a navigation application	You can specify and start the navigation application installed on your device.
Message reading	You can read messages received from the apps installed on your device.
31 Band EQ setting	You can select an equalizer band from the 31-band graphic equalizer (13-band for not using the Pioneer Smart Sync connection).
Super "Todoroki" Sound	You can boost the bass level more dynamically than when not using the Pioneer Smart Sync connection.
Easy Sound Fit	You can perform the time alignment setting easily by selecting your vehicle type.

NOTES

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

TIP

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



Making a connection with Pioneer Smart Sync

- 1** Press the **M.C.** dial to display the main menu.
- 2** Turn the **M.C.** dial to select [SYSTEM], then press to confirm.
- 3** Turn the **M.C.** dial to select [APP CONTROL], then press to confirm.
- 4** Turn the **M.C.** dial to select one of the below.
 - Select [WIRED] for the USB connection.
 - Select [BLUETOOTH] for the Bluetooth connection.
- 5** Turn the **M.C.** dial to select [AUTO APP CONN], then press to confirm.
- 6** Turn the **M.C.** dial to select [ON], then press to confirm.
- 7** Connect this unit with the mobile device.
 - iPhone/Android device via USB (page 8)
 - iPhone/Android device via Bluetooth (page 10)Pioneer Smart Sync on the device starts automatically.

NOTE

Regardless of whether the [AUTO APP CONN] setting is set to [ON] or [OFF], you can also perform the following to start Pioneer Smart Sync.

- For devices other than the USB-connected Android device, press **SRC/OFF** to select any source and press and hold the **M.C.** dial.
- For iPhone, launch Pioneer Smart Sync on the mobile device.

NOTES

- When you connect a mobile device other than an iPhone/Android device, it may not operate correctly depending on your mobile device.
- If Pioneer Smart Sync has not been installed on your iPhone/Android device yet, a message that prompts you to install the application will appear on your iPhone/Android device (except for the Android device connected via Bluetooth). Select [OFF] in [AUTO APP CONN] to clear the message (page 27).

Listening to music on your device

- 1** Press **SRC/OFF** to select [APP].

Using the Karaoke Function

WARNING

- A driver should never sing with a microphone while driving. Doing so may result in an accident.
- Do not carelessly leave a microphone for preventing an accident.

CAUTION

It is extremely dangerous to allow the microphone lead to become wound around the steering column, brake pedal or shift lever, which may cause an accident. Be sure to install the microphone in such a way that it will not obstruct driving.

NOTES

- Use a commercially available dynamic mic and not the supplied microphone.
- This function is not available when the selected source is the following.
 - RADIO
 - AUX IN

- 1** Insert the stereo mini plug of your microphone into the AUX input jack.
- 2** Press the **M.C.** dial to display the main menu.
- 3** Turn the **M.C.** dial to select **[MICROPHONE]**.
- 4** Press the **M.C.** dial to select **[ON]**.
When the karaoke mode is activated, the volume on the unit is muted. Adjust the microphone volume on the **[MIC VOL]** setting.

To adjust the microphone volume

- 1** Press the **M.C.** dial to display the main menu.
- 2** Turn the **M.C.** dial to select **[MICROPHONE]**, then press to confirm.
- 3** Turn the **M.C.** dial to select **[MIC VOL]**.
- 4** Turn the **M.C.** dial to adjust the volume level.

NOTE

If howling occurs when using the microphone, keep the microphone away from the speaker or lower the microphone volume.

To reduce the level of the vocals in a song

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

NOTE

Depending on the recording condition of songs, the level of vocals may not be reduced effectively.

Audio Adjustments

You can also make various adjustments in the AUDIO settings (page 23).

Adjusting the cut-off frequency value and the slope value

You can adjust the cut-off frequency value and the slope value of each speaker. The following speakers can be adjusted.

[FRONT], [REAR], [SUBWOOFER]

NOTE

[SUBWOOFER] can only be selected when [ON] is selected in [SUBWOOFER] (page 24).

- 1** Press the **M.C.** dial to display the main menu.
- 2** Turn the **M.C.** dial to select [AUDIO], then press to confirm.
- 3** Turn the **M.C.** dial to select [CROSSOVER], then press to confirm.
- 4** Turn the **M.C.** dial to select the speaker unit (filter) to be adjusted, then press to confirm.
- 5** Turn the **M.C.** dial to select [HPF] or [LPF] according to the speaker unit (filter), then press to confirm.
- 6** Turn the **M.C.** dial to select an appropriate cut-off frequency for the speaker unit (filter) selected in step 4, then press to confirm.
[25HZ] to [250HZ]
- 7** Turn the **M.C.** dial to select an appropriate slope for the speaker unit (filter) selected in step 4.
[-6] to [-24] (if you choose [FRONT] or [REAR])
[-6] to [-36] (if you choose [SUBWOOFER])

Settings

You can adjust various settings in the main menu.

- 1** Press the **M.C.** dial to display the main menu.
- 2** Turn the **M.C.** dial to select one of the categories below, then press to confirm.
 - FUNCTION settings (page 22)
 - AUDIO settings (page 23)
 - SYSTEM settings (page 26)
 - ILLUMINATION settings (page 29)
 - MICROPHONE settings (page 29)
- 3** Turn the **M.C.** dial to select the options, then press to confirm.

NOTE

iPhone-related menu items in the following tables are not available for MVH-S320BT.

FUNCTION settings

The menu items vary according to the source.

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

Menu Item	Description
NEWS RADIO [ON], [OFF]	Interrupt the currently selected source with news programs. (Available only when FM band is selected.)
SEEK RADIO [MAN], [PCH]	Assign ◀◀ or ▶▶ buttons to seek the stations one by one (manual tuning) or select a station from the preset channels.
SAVE SPOTIFY	Store the information about the song currently being played to your music list on Spotify.
UNSAVE SPOTIFY	Remove the song information stored in [SAVE].
SEL DEVICE iPhone BT AUDIO SPOTIFY	Connect a Bluetooth device in the list.
PLAY BT AUDIO	Start playback.
STOP BT AUDIO	Stop playback.

AUDIO settings

NOTE

[CHK APP SETTG.] may be displayed when the setting is performed from Pioneer Smart Sync.

Menu Item	Description
EQ SETTING	
<p>[SUPER BASS], [POWERFUL], [DYNAMIC], [NATURAL], [VOCAL], [VIVID], [SET BY APP]*, [CUSTOM1], [CUSTOM2], [FLAT]</p> <p>* [SET BY APP] is displayed when the preset equalizer curve that is not available in the unit has been set from Pioneer Smart Sync.</p> <p>Select an equalizer band and level for further customising.</p> <p>Equalizer band: [50HZ] to [12.5kHz]</p> <p>Equalizer level: [-6] to [+6]</p>	<p>Select or customise the equalizer curve.</p> <ul style="list-style-type: none"> When you select a setting other than [CUSTOM1], [CUSTOM2] and [SET BY APP], you can also customise the equalizer curve by pressing and holding the M.C. dial, then store the customised equalizer curve in [CUSTOM1].
FADER*1	Adjust the front and rear speaker balance.
BALANCE	Adjust the left and right speaker balance.
SUBWOOFER*2	
[ON], [OFF]	Set to [ON] when using a subwoofer speaker.
SUBWOOFER	
[NOR], [REV]	Select the subwoofer phase.
SPEAKER LEVEL	
<p>Types of speaker: [FRONT L], [FRONT R], [REAR L], [REAR R], [SUBWOOFER]</p> <p>Output level: [-24] to [10]</p>	<p>Select a speaker unit (filter) and adjust the output level.</p> <ul style="list-style-type: none"> Each value you have adjusted changes when you change the [POSITION] setting (page 24).
CROSSOVER	<p>Select a speaker unit (filter) to adjust the HPF or LPF cut-off frequency and the slope for each speaker unit.</p> <p>For details on the [CROSSOVER] setting, see page 21.</p>
POSITION	
[OFF], [FRONT LEFT] (front seat left), [FRONT RIGHT] (front seat right), [FRONT] (front seats), [ALL]	Select a listening position to adjust the speakers' output levels automatically and add a delay time that corresponds to the number and locations of occupied seats.

Menu Item	Description
TIME ALGNMNT	
[INITIAL], [OFF], [CUSTOM]	Select or customise the time alignment settings to reflect the distance between the listener's position and each speaker.
Select a type of speaker and adjust the speaker distance for further customising in [CUSTOM]. Types of speaker: [FRONT L], [FRONT R], [REAR L], [REAR R], [SUBWOOFER] Speaker distance (cm): [350] to [0.0]	<ul style="list-style-type: none"> • Select [INITIAL] to initialize the setting value. • Select [OFF] to reset all setting values to 0. • The [CUSTOM] setting is available when [FRONT LEFT] or [FRONT RIGHT] is selected in [POSITION] (page 24). • The [CUSTOM] setting is not available when [OFF] is selected in [SUBWOOFER] (page 24).
SAVE SETTINGS	
[YES], [NO]	Save to later recall the following sound settings at their current values: [CROSSOVER], [SPEAKER LEVEL], [EQ SETTING], [POSITION], [TIME ALGNMNT], [D.BASS], [SUBWOOFER].
	<ul style="list-style-type: none"> • The settings that can be saved differ when a Pioneer Smart Sync connection is made.
LOAD SETTINGS	
	Load the sound settings, when you have already performed [SAVE SETTINGS].
D.BASS	
[OFF], [LOW], [HI]	Boost the bass level dynamically to offer an effect as if a subwoofer was added to the system.
LOUDNESS	
[OFF], [LOW], [MID], [HI]	Compensate for clear sound at low volume.
SLA	
[+4] to [-4]	<p>Adjust the volume level for each source except FM.</p> <p>Each of the below combinations are set to the same setting automatically.</p> <ul style="list-style-type: none"> • When making a USB connection, set USB, iPhone, APP, and SPOTIFY. • When making a Bluetooth connection, set BT AUDIO, iPhone, APP, and SPOTIFY.

Menu Item	Description
S.RTRV	
[1] (effective for low compression rates), [2] (effective for high compression rates), [OFF]	Enhance compressed audio and restore rich sound. • This setting is not available when [OFF] is selected in [VOCAL] in the MICROPHONE settings (page 29).

*1 Not available when [SUB.W/SUB.W] is selected in [SP-P/O MODE] in the INITIAL settings (page 6).

*2 Not available when [REAR/REAR] is selected in [SP-P/O MODE] in the INITIAL settings (page 6).

SYSTEM settings

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

Menu Item	Description
LANGUAGE	
[ENG](English), [PYC](Russian), [TUR](Turkish), [FRA](French), [DEU](German)	Select the language to display the text information from a compressed audio file.
CLOCK SET	
[12H], [24H]	Set the clock (page 5). • This setting is not available when a Pioneer Smart Sync connection is made.
SCROLL SET	
[ONCE], [LOOP], [OFF]	Select the way to scroll the text in the display window.
BEEP TONE	
[ON], [OFF]	A beep can be heard when any button is pushed. Select [OFF] to disable this function.
INFO DISPLAY	
[SOURCE/SPEANA], [CLOCK/SPEANA], [SRC/LIVE FX], [CLOCK/LIVE FX], [SOURCE], [SPEANA], [OFF]	Display the item on the sub information display. • When [SOURCE/SPEANA] or [CLOCK/SPEANA] is selected, display the antenna instead of the speana on the radio source.
AUTO PI	
[ON], [OFF]	Search for a different station with the same programming, even if using a preset station.

Menu Item	Description
AUX [ON], [OFF]	Set to [ON] when using an auxiliary device connected to the unit. <ul style="list-style-type: none"> This setting is not available when [ON] is selected in [MICROPHONE] in the MICROPHONE settings (page 29).
BT AUDIO [ON], [OFF]	Set the Bluetooth signal on/off.
SPOTIFY [ON], [OFF]	Set to [ON] when using the Spotify function.
PW SAVE* [ON], [OFF]	Reduce the battery power consumption. Turning on the source is the only operation allowed when this function is on.
BT MEM CLEAR [YES], [NO]	Clear the Bluetooth device data (device list, PIN code, call history, phone book, preset phone numbers) stored in the unit. [CLEARED] appears when data is successfully deleted.
APP CONTROL [WIRED], [BLUETOOTH]	Select the appropriate connection method according to your device. See page 28 for details on the connections for each device.
USB MTP [ON], [OFF]	Set to [ON] when using the MTP connection. The following sources are not available when the setting is set to [ON]. <ul style="list-style-type: none"> APP, SPOTIFY, iPhone, and USB (AOA)
AUTO APP CONN [ON], [OFF]	Select [ON] to automatically launch Pioneer Smart Sync when the iPhone/Android device is connected to the unit.

Menu Item	Description
USB AUTO	
[ON], [OFF]	Select [ON] to automatically switch to USB source when a USB device/iPhone is connected to the unit. Select [OFF] when a USB device/iPhone is being connected to the unit just for charging.

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

Information on the connections for each device

The available sources differ depending on the setting value.

Please set [APP CONTROL] according to the table for the source you want to use.

For details on Pioneer Smart Sync connection, see page 16.

NOTE

iPhone-related menu items in the following tables are not available for MVH-S320BT.

When Pioneer Smart Sync connection is NOT performed

Setting Value	Device	Available source(s)
[WIRED]	iPhone	iPhone, SPOTIFY
	Android	USB (AOA)
[BLUETOOTH]	iPhone	iPhone, SPOTIFY
	Android	SPOTIFY

When Pioneer Smart Sync connection is performed

Setting Value	Device	Available source(s)
[WIRED]	iPhone	APP, SPOTIFY
	Android	APP
[BLUETOOTH]	iPhone	APP, SPOTIFY
	Android	APP, SPOTIFY

ILLUMINATION settings

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

MICROPHONE settings

Menu Item	Description
MICROPHONE	
[ON], [OFF]	Set to [ON] when using the karaoke function.
MIC VOL	Adjust the microphone volume.
VOCAL	
[ON], [OFF]	Set to [OFF] when reducing the level of the vocals in a song.

Additional Information

Troubleshooting

The display automatically returns to the normal display.

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

The repeat play range changes unexpectedly.

- Depending on the repeat play range, the selected range may change when another folder or track is being selected or during fast forwarding/reversing.
 - Select the repeat play range again.

A subfolder is not played back.

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

The sound is intermittent.

- You are using a device, such as a cellular phone, that may cause audible interference.
 - Move electrical devices that may be causing the interference away from the unit.

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

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

- Make a Bluetooth connection between the unit and the cellular phone again.

Error messages

Common

AMP ERROR

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

NO XXXX (NO TITLE, for example)

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

USB device/iPhone

FORMAT READ

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

NO AUDIO

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

SKIPPED

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

PROTECT

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

N/A USB

- The connected USB device is not supported by this unit.
 - Disconnect your device and replace it with a compatible USB device.

HUB ERROR

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

CHECK USB

- The USB connector or USB cable has short-circuited.
 - Check that the USB connector or USB cable is not caught in something or damaged.
- The connected USB device consumes more than maximum allowable current.
 - Disconnect the USB device and do not use it. Turn the ignition switch OFF and back to ACC or ON. Connect only compliant USB devices.

ERROR-19

- Communication failed.
 - Perform one of the following operations, then return to the USB source.
 - Disconnect the USB device.
 - Change to a different source.
- iPhone failure.
 - Disconnect the cable from the iPhone. Once the iPhone's main menu is displayed, reconnect the iPhone and reset it.

ERROR-23

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

ERROR-16

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


STOP

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


NO BT DEVICE GO TO BT MENU TO REGISTER

- No Bluetooth device found.
 - Connect the unit and iPhone via Bluetooth (page 10).

CONN. FAILED PRESS BAND KEY TO RETRY

- Bluetooth connection with iPhone failed.
 - Press **BAND/**  to make a connection again.

DISCONNECTED PRESS BAND KEY TO RETRY

- Bluetooth connection lost.
 - Press **BAND/**  to make a connection again.

Bluetooth device**ERROR-10**

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

APP

CONNECT APP

- Pioneer Smart Sync connection is not made.
- Make a connection with Pioneer Smart Sync (page 16).

Spotify


NOT FOUND

- The Spotify application has not started running yet.
- Start up the Spotify application.


NO BT DEVICE GO TO BT MENU TO REGISTER

- No Bluetooth device found.
- Connect the unit and the device via Bluetooth (page 10).


CONN. FAILED PRESS BAND KEY TO RETRY

- Bluetooth connection failed.
- Press **BAND**/  to make a connection again.

CHECK APP PRESS BAND KEY TO RETRY

- Connection to the Spotify application failed.
- Press **BAND**/  to make a connection again.

DISCONNECTED PRESS BAND KEY TO RETRY

- Bluetooth connection lost.
- Press **BAND**/  to make a connection again.

CHECK APP

- An unknown error (including communication error) has occurred.
- Follow the instructions that appear on the screen.

Handling guidelines

USB storage device

- Connections via USB hubs are not supported.
- Firmly secure the USB storage device before driving. Do not let the USB storage device fall onto the floor, where it may become jammed under the brake or accelerator pedal.
- Depending on the USB storage device, the following problems may occur.
 - Operations may vary.
 - The storage device may not be recognized.
 - Files may not be played back properly.
 - The device may cause audible interference when you are listening to the radio.

iPhone

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

Compressed audio compatibility

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

USB device with numerous folder hierarchies.

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

⚠ CAUTION

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

WMA files

File extension	.wma
Bit rate	48 kbps to 320 kbps (CBR), 48 kbps to 384 kbps (VBR)
Sampling frequency	32 kHz, 44.1 kHz, 48 kHz
Windows Media™ Audio Professional, Lossless, Voice/DRM Stream/Stream with video	Not compatible

MP3 files

File extension	.mp3
Bit rate	8 kbps to 320 kbps (CBR), VBR
Sampling frequency	8 kHz to 48 kHz (32 kHz, 44.1 kHz, 48 kHz for emphasis)
Compatible ID3 tag version	1.0, 1.1, 2.2, 2.3, 2.4 (ID3 tag Version 2.x is given priority over Version 1.x.)
M3u playlist	Not compatible

MP3i (MP3 interactive), mp3 PRO	Not compatible
---------------------------------	----------------

WAV files

- WAV file formats cannot be connected via MTP.

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

AAC files (MVH-S420BT/S42BT only)

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

FLAC files

- FLAC file formats cannot be connected via MTP.
- FLAC files may not be playable, depending on the encoder.

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

USB device

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

Playable folder hierarchy	Up to eight tiers (A practical hierarchy is less than two tiers.)
Playable folders	Up to 1 500
Playable files	Up to 15 000
Playback of copyright-protected files	Not compatible
Partitioned USB device	Only the first partition can be played.

iPhone compatibility

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

- iPhone XR
- iPhone XS Max
- iPhone XS
- iPhone X
- iPhone 8
- iPhone 8 Plus
- iPhone 7
- iPhone 7 Plus
- iPhone SE
- iPhone 6s
- iPhone 6s Plus
- iPhone 6
- iPhone 6 Plus
- iPhone 5s

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

⚠ CAUTION

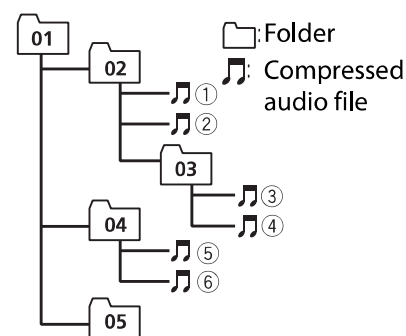
Pioneer accepts no responsibility for data lost on the iPhone, even if that data is lost while this unit is used.

Sequence of audio files

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

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

Example of a hierarchy



Level 1 Level 2 Level 3 Level 4

01 to 05: Folder number

① to ⑥: Playback sequence

Russian character chart

D: C	D: C	D: C
А: A	Б: B	В: B
Г: Г	Д: Д	Е: E, Ё
Ж: Ж	З: З	И: И, Ы
К: K	Л: Л	М: M
Н: H	О: O	П: П
Р: P	С: C	Т: T
У: U	Ф: Ф	Х: X
Ц: Ц	Ч: Ч	Ш: Ш, Щ
Ъ: Ъ	Ы: Ы	Ь: Ъ
Э: Э	Ю: Ю	Я: Я

D: Display C: Character

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MP3

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Specifications

General

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

Grounding system: Negative type

Maximum current consumption: 10.0 A

Dimensions (W × H × D):

DIN

Chassis: 178 mm × 50 mm × 97 mm

Nose: 188 mm × 58 mm × 17 mm

D

Chassis: 178 mm × 50 mm × 97 mm

Nose: 170 mm × 46 mm × 17 mm

Weight: 0.5 kg

Audio

Maximum power output:

- 50 W × 4 ch/4 Ω (for no subwoofer)
- 50 W × 2 ch/4 Ω + 70 W × 1 ch/2 Ω (for subwoofer)

Continuous power output:

22 W × 4 (50 Hz to 15 000 Hz, 5 %

THD, 4 Ω load, both channels driven)

Load impedance: 4 Ω (4 Ω to 8 Ω (2 Ω for 1 ch) allowable)

Preout maximum output level: 2.0 V

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)

High pass filter:

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

Subwoofer/Low pass filter:

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

Speaker level:

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

Time alignment:

0 cm to 350 cm (2.5 cm/Step)

USB

USB standard specification: USB 2.0 full speed

Maximum current supply: 1.5 A

USB Protocol:

MSC (Mass Storage Class)
 MTP (Media Transfer Protocol)
 AOA (Android Open Accessory) 2.0

File system: FAT12, FAT16, FAT32

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

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

AAC decoding format: MPEG-4 AAC (iTunes encoded only) (Ver. 10.6 and earlier) (M4VH-S420BT/S42BT only)

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

WAV signal format: Linear PCM (Non-compressed)

FM tuner

Frequency range: 87.5 MHz to 108.0 MHz
 Usable sensitivity: 11 dBf (1.0 μ V/75 Ω , mono, S/N: 30 dB)
 Signal-to-noise ratio: 65 dB (IEC-A network)

MW tuner

Frequency range: 531 kHz to 1 602 kHz
 Usable sensitivity: 25 μ V (S/N: 20 dB)
 Signal-to-noise ratio: 60 dB (IEC-A network)

LW tuner

Frequency range: 153 kHz to 281 kHz
 Usable sensitivity: 28 μ V (S/N: 20 dB)
 Signal-to-noise ratio: 60 dB (IEC-A network)

Bluetooth

Version: Bluetooth 4.0 certified

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

BLE (Bluetooth Low Energy) Version: 4.0 certified

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

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

Bluetooth profiles:

GAP (Generic Access Profile)
 SDAP (Service Discovery Application Profile)
 HFP (Hands Free Profile) 1.6
 PBAP (Phone Book Access Profile)
 A2DP (Advanced Audio Distribution Profile)
 AVRCP (Audio/Video Remote Control Profile) 1.5
 SPP (Serial Port Profile) 1.1

NOTE

Specifications and the design are subject to modifications without notice.