

KENWOOD

DNX9980HD

GPS NAVIGATION SYSTEM INSTRUCTION MANUAL

Kenwood Corporation

Before reading this manual, click the button below to check the latest edition and the modified pages.

Check the latest edition



Take the time to read through this instruction manual.

Familiarity with installation and operation procedures will help you obtain the best performance from your new GPS Navigation System.

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your Kenwood dealer for information or service on the product.

Model DNX9980HD Serial number _____

US Residents Only

Register Online

Register your Kenwood product at www.Kenwoodusa.com

Precautions	4
Notes	5
How to read this manual	10
Functions of the buttons on the front panel	12

Basic Operation	14
How to Display Top Menu Screen	14
Customization of Top Menu Screen	15
How to play media	15
How to Display the Source Control Screen	16
Operation on the Playback Screen of Visual Sources	17
How to Display the Navigation Screen	18
Picture in Picture function	18
Secondary window function	19

Watching DVD/Video CD	20
Playback Screen	20
Easy Control Screen	20
Source Control Screen	21
DVD-VIDEO Disc Menu	22
Video CD Zoom Control	23

Music CD/ Audio File Listening & Video File/ Picture File Watching	24
Source Control Screen	24
Link search (Audio File in USB)	25
List Search	26
Album Favorite List (USB)	27
Playback Screen (Video file, Picture file)	28
Easy Control Screen (Video file, Picture file)	28
Picture Control (USB)	29
Movie Menu Control (Disc)	29

iPod Control	30
Playback Screen	30
Easy Control Screen	30
Source Control Screen	31
iPod List	32
Link search (Music file)	32
Album Favorite List	33

Initial Setup	96
----------------------	-----------

Pandora Control	34
Source Control Screen	34
Station List	34
HD Radio™ Listening	36
Source Control Screen	36
Auto Memory	37
Manual Memory	38
Preset Select	38
Information	39
Channel Search	39
Traffic Information	40
Search by Program Type	40
Receive mode	41
iTunes Tagging	41

TV Watching	42
Function During TV Screen	42
Easy Control Screen	42
Source Control Screen	43
Auto Memory	44
Manual Memory	44
Preset Select	45

SIRIUS/XM Control	46
Source Control Screen	46
Category/ Channel Search	47
Channel Memory	47
Preset Select	48
Direct Channel Search	48

Bluetooth Audio Control	49
Before Use	49
Source Control Screen	49

Other Functions	50
External Device Power Supply Control	50
Muting Audio Volume upon Reception of Phone Call	50

Voice Control	51
Voice Control	51

Screen Control	52
Screen Control	52

Hands Free Unit Control	53
Before Use	53
Downloading the Phonebook	53
Receiving a Call	53
During a Call	53
Call Waiting	54
Making a Call	54
Calling by Phonebook	55
Calling by Entering a Phone Number	55
Making a Call Using Call Records	56
Controlling Tone-based Services	56
Setting Up the Hands-Free Phone	57
Phone Number Preset	58
SMS (Short Message Service)	58

Bluetooth Setup	60
Registering Bluetooth Unit	60
Registering Bluetooth Unit PIN Code	61
Bluetooth Unit Connection	62
Bluetooth Hands-Free/Audio Output Setup	62

Audio Control	64
Audio Control Menu	64
Audio Control	64
Equalizer Control	65
Graphic Equalizer Setup	65
Listening Position	66
Zone Control	67
SRS WOW Control	67
Surround Control	68
Speaker Setup	69
Car Type (DTA) Setup	70
Channel Level	71

Remote Controller	90
Battery installation	90
Remote Controller mode switch	90
Common operations (AUD mode)	91
DVD/VCD (DVD mode)	92
Music CD/Audio file/Video file/ Picture file (AUD mode)	93
iPod (AUD mode)	93
HD Radio (AUD mode)	94
Navigation (NAV mode)	94
TV (TV mode)	95

Setup Menu	72
How to Display SETUP Menu Screen	72
DivX Setup	73
Software Information	73
User Interface	74
Language Setting	74
Touch Panel Adjustment	75
Clock and Date Setup	75
Security Setup	76
Monitor Angle Control	76
EXT SW Setup	76
Setup Memory	77
Changing Background image	78
Panel Color Coordinate	79
Screen Control	80
AV Input Setup	80
AV Output Interface Setup	81
Camera Setup	81
Navigation Setup	82
DVD Setup	82
DVD Language Setup	83
DVD Parental Level Setup	84
Disc Setup	84
USB Setup	85
iPod Setup	85
SIRIUS Parental Code Setup	86
SIRIUS Parental Lock Setup	87
SIRIUS Skip Channel Select	88
TV Setup	88

Status bar Indicator items	98
DVD Language Codes	99
Help? Troubleshooting	100
Help? Error	101
Specifications	103

Precautions

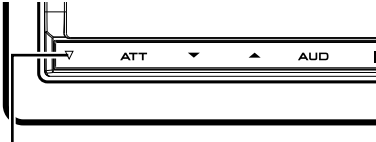
▲WARNING

To prevent injury or fire, take the following precautions:

- Do not watch or fix your eyes on the unit's display when you are driving for any extended period.
- To prevent a short circuit, never put or leave any metallic objects (such as coins or metal tools) inside the unit.

How to reset your unit

- If the unit or the connected unit fails to operate properly, press the Reset button. The unit returns to factory settings when the Reset button is pressed.
- Remove the USB device before pressing the Reset button. Pressing the Reset button with the USB device installed can damage the data contained in the USB device. For how to remove the USB device, see <How to play media> (page 15).
- When the unit is turned on after pressing the Reset button, the Initial SETUP screen is displayed. Refer to <Initial Setup> (page 96).



Reset button

Cleaning the Unit

If the faceplate of this unit is stained, wipe it with a dry soft cloth such as a silicon cloth.

If the faceplate is stained badly, wipe the stain off with a cloth moistened with neutral cleaner, then wipe it again with a clean soft dry cloth.



- Applying spray cleaner directly to the unit may affect its mechanical parts. Wiping the faceplate with a hard cloth or using a volatile liquid such as thinner or alcohol may scratch the surface or erases screened print.

Lens Fogging

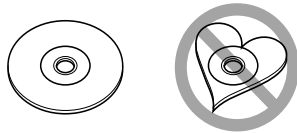
When you turn on the car heater in cold weather, dew or condensation may form on the lens in the disc player of the unit. Called lens fogging, this condensation on the lens may not allow discs to play. In such a situation, remove the disc and wait for the condensation to evaporate. If the unit still does not operate normally after a while, consult your Kenwood dealer.


Handling discs

- Do not touch the recording surface of the disc.
- Do not stick tape etc. on the disc, or use a disc with tape stuck on it.
- Do not use disc type accessories.
- Clean from the center of the disc and move outward.
- When removing discs from this unit, pull them out horizontally.
- If the disc center hole or outside rim has burrs, use the disc only after removing the burrs with a ballpoint pen etc.

Discs that cannot be used

- Discs that are not round cannot be used.



- Discs with coloring on the recording surface or discs that are dirty cannot be used.
- This unit can only play the CDs with  This unit may not correctly play discs which do not have the mark.
- You cannot play a disc that has not been finalized. (For the finalization process refer to your writing software, and your recorder instruction manual.)
- If you try to load a 3-inch-disc with its adapter into the unit, the adapter might separate from the disc and damage the unit.

Precautions on using this unit

- If you experience problems during installation, consult your Kenwood dealer.
- When you purchase optional accessories, check with your Kenwood dealer to make sure that they work with your model and in your area.
- Select a language used to display menus, audio file tags, etc. See <Language Setting> (page 74).
- The Radio Data System feature won't work where the service is not supported by any broadcasting station.

Protecting the monitor

To protect the monitor from damage, do not operate the monitor using a ball point pen or similar tool with the sharp tip.

Notes

List of playable discs

Disc types	Support		Remark
	Standard		
DVD	DVD Video	○	
	DVD Audio	×	
	DVD-VR	×	
	DVD-R	○	MP3/WMA/AAC/MPEG1/MPEG2/DivX Playback
	DVD-RW	○	Multi-border/Multisession/
	DVD+R	○	(Playback depends on authoring conditions)
	DVD+RW	○	Compatible with 8-cm (3 inch) discs
	DVD-R DL (Dual layer)	○	
	DVD+R DL (Double layer)	○	Only video format
DVD-RAM	×		
CD	Music CD	○	CD-TEXT/8-cm (3 inch) discs supported.
	CD-ROM	○	MP3/WMA/AAC/DivX playback
	CD-R	○	Multisession supported
	CD-RW	○	Packet write not supported.
	DTS-CD	○	
	Video CD (VCD)	○	
	Super video CD	×	
	Photo CD	×	
	CD-EXTRA	△	Only music CD session can be played.
	HDCD	×	
CCCD	×		
Others	Dualdisc	×	
	Super audio CD	△	Only CD layer can be played.

○ : Playback is possible.

△ : Playback is partly possible.

× : Playback is impossible.



- When buying DRM enabled contents, check the Registration Code in the <DivX Setup> (page 73). Registration Code changes each time a file with the displayed Registration Code is played to protect against copying.

Use of "DualDisc"

When playing a "DualDisc" on this unit, the surface of the disc that is not played may be scratched while the disc is inserted or ejected. Since the music CD surface does not conform to the CD standard, playback may be impossible.

(A "DualDisc" is a disc with one surface containing DVD standard signals and the other surface containing music CD signals.)

About Audio files

• Playable Audio file

- AAC-LC (.m4a)
- MP3 (.mp3)
- WMA (.wma)
- Linear PCM (WAVE) (.wav) *1



*1 Mass-storage-class USB device only

• If music of normal CD and other playback systems are recorded in the same disc, only the playback system recorded at the first setout is played.

• Acceptable media

CD-R/RW/ROM, DVD±R/RW, mass-storage-class USB device, iPod with KCA-iP302/ KCA-iP102

• Playable disc file format

ISO 9660 Level 1/2, Joliet, Romeo, Long file name.

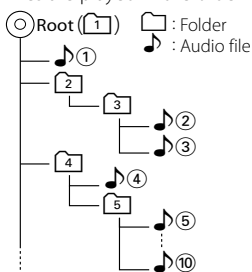
• Playable USB device file system

FAT16, FAT32

Although the audio files are complied with the standards listed above, the play maybe impossible depending on the types or conditions of media or device.

• Playing order of the Audio file

In the example of folder/file tree shown below, the files are played in the order from ① to ⑩.



An online manual about audio files is put on the site, www.kenwood.com/cs/ce/audiofile/. On this online manual, detailed information and notes which are not written in this manual are provided. Make sure to read through the online manual as well.

About Video files

• Acceptable video files

- MPEG1 (.mpg, .mpeg, .m1v)
- MPEG2 (.mpg, .mpeg, .m2v)
- DivX (.divx, .div, .avi) *1
- H.264/MPEG-4 AVC (.mp4, .m4v) *2
- WMV 9 (.wmv, .m2ts) *2



*1 CD-R/RW/ROM, DVD±R/RW only

*2 Mass-storage-class USB device only

• Acceptable media

CD-R/RW/ROM, DVD±R/RW, mass-storage-class USB device, iPod with KCA-iP302

Acceptable discs, disc formats, USB device file system, file and folder names and playing order are the same as those for audio files. See <About Audio files>.

About Picture files

• Acceptable picture files

- JPEG (.jpg, .jpeg)
- PNG (.png)
- BMP (.bmp)

• Acceptable media

Mass-storage-class USB device

Acceptable discs, disc formats, USB device file system, file and folder names and playing order are the same as those for audio files. See <About Audio files>.

About USB device

- In this manual, the word "USB device" is used for a flash memory device and digital audio players can be recognized as mass-storage.
- When the USB device is connected to this unit, it can be charged up provided that this unit is powered.
- Install the USB device in the place where it will not affect driving safely.
- You cannot connect a USB device via a USB hub and Multi Card Reader.
- Take backups of the audio files used with this unit. The files can be erased depending on the operating conditions of the USB device. We shall have no compensation for any damage arising from any erased data.
- No USB device comes with this unit. You need to purchase a commercially available USB device.
- When connecting the USB device, usage of the CA-U1EX (option) is recommended.

- Normal playback is not guaranteed when a cable other than the USB compatible cable is used. Connecting a cable whose total length is longer than 4 m can result in abnormal playback.

iPod/iPhone that can be connected to this unit

Made for

- iPod touch (4th generation)
- iPod touch (3rd generation)
- iPod touch (2nd generation)
- iPod touch (1st generation)
- iPod classic
- iPod with video
- iPod nano (6th generation)
- iPod nano (5th generation)
- iPod nano (4th generation)
- iPod nano (3rd generation)
- iPod nano (2nd generation)
- iPod nano (1st generation)
- iPhone 4
- iPhone 3GS
- iPhone 3G
- iPhone

(As of January 2011)

- Latest compatible list of iPod/iPhone. For details, see: www.kenwood.com/cs/ce/ipod
- You can control an iPod/iPhone from this unit by connecting an iPod/iPhone (commercial product) with Dock connector using an optional accessory iPod connection cable (KCA-iP302/ KCA-iP102). The word "iPod" appearing in this manual indicates the iPod/iPhone connected with the KCA-iP302/ KCA-iP102 (optional accessory).
- By connecting your iPod/iPhone to this unit with an optional accessory iPod connection cable (KCA-iP302/ KCA-iP102), you can supply power to your iPod/iPhone as well as charge it while playing music. However, the power of this unit must be on.



- If you start playback after connecting the iPod, the music that has been played by the iPod is played first. In this case, "Reading" is displayed without displaying a folder name, etc. Changing the browse item will display a correct title, etc.
- When the iPod is connected to this unit, "KENWOOD" or "✓" is displayed on the iPod to indicate that you cannot operate the iPod.

About Pandora

The requirements for listening to the Pandora Internet radio are as follows:

- Use an Apple iPhone or iPod touch running under iOS3 or later.
- The latest Pandora application has been installed in your iPhone.
- Open Apple iTunes App Store and search for "Pandora".
- Pandora Account
- Internet connection by 3G, EDGE, or WiFi.
- iPhone connected to this unit with a KCA-IP302.



- The Pandora service is available only in the U.S.
- Since the Pandora service is used (accessed), the specifications are subject to change without prior notice. Accordingly, compatibility may be impaired or some or all of the services may become unavailable.
- Some of Pandora functions cannot be operated from this unit.

About Satellite Radio tuner

This unit supports Satellite Radio tuners which are released by SIRIUS and XM.

Optional accessories below are necessary for connection.

SIRIUS tuner : Conversion cable CA-SR20V

XM tuner : XM interface Box KCA-XM100V

Refer to the instruction manual of Satellite radio tuner.

TV tuner that can be connected to this unit

Digital TV tuner

- KTC-D***

About the Cell-Phone

This unit conforms to the following Bluetooth specifications:

Version	Bluetooth Standard Ver. 2.1 + EDR
Profile	HFP (Hands Free Profile) OPP (Object Push Profile) PBAP (Phonebook Access Profile) SYNC (Synchronization Profile)

For the cell-phones verified for compatibility, access the following URL:

<http://www.kenwood.com/cs/ce/bt/>



- The units supporting the Bluetooth function have been certified for conformity with the Bluetooth Standard following the procedure prescribed by Bluetooth SIG. However, it may be impossible for such units to communicate with your cell-phone depending on its type.
- HFP is a profile used to make a hands-free call.
- OPP is a profile used to transfer data such as a phone book between units.

About the Bluetooth Audio player

This unit conforms to the following Bluetooth specifications:

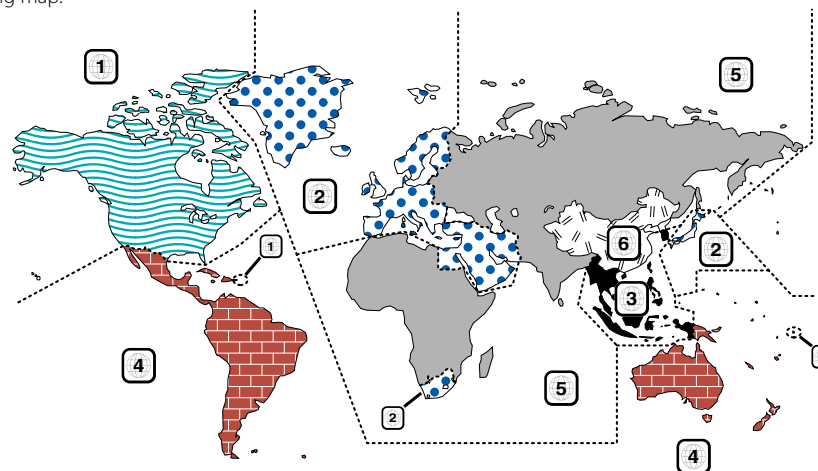
Version	Bluetooth Standard Ver. 2.1 + EDR
Profile	A2DP (Advanced Audio Distribution Profile) AVRCP (Audio/Video Remote Control Profile)



- A2DP is a profile designed to transfer the music from an audio player.
- AVRCP is a profile designed to control playback and selection of music by an audio player.

Region codes in the world

The DVD players are given a region code according to the country or area it is marketed, as shown in the following map.



DVD disc marks

Symbol	Description
	Indicates a region number. The discs with this mark can be played with any DVD player.
	Indicates the number of audio languages recorded. Up to 8 languages can be recorded in a movie. You can select a favorite language.
	Indicates the number of subtitled languages recorded. Up to 32 languages can be recorded.
	If a DVD disc has scenes shot from multiple angles, you can select a favorite angle.
	Indicates the type of screen for the image. The left mark indicates that a wide image picture (16:9) is displayed on a standard TV set screen (4:3) with a black band at both the top and bottom of the screen (letter box).

Operation regulatory marks

With this DVD, some functions of this unit such as the play function may be restricted depending on the location where the DVD is playing. In this case, the following marks will appear on the screen. For more information, refer to the disc manual.



Discs with limited period of use

Do not leave discs with a limited period of use in this unit. If you load an already expired disc, you may not be able to remove it from this unit.

How to read this manual


This manual uses illustrations to explain its operations.

The displays and panels shown in this manual are examples used to provide clear explanations of the operations. For this reason, they may be different from the actual displays or panels used, or some display patterns may be different.

Selecting a screen item

Select and choose an item on the screen. Select the item by touching the button on the screen.

Short Press

Press the button, denoted by .

Change in the screen

With each operation, the screen changes in the order shown here.

▼ : Continues to the next line.
● : Ends here.

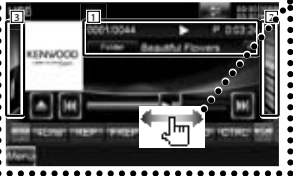
Continue to the next page


The instruction continues to the next page. Make sure to flip the page for the rest of the instruction.

Source Control Screen
Switches to the source control screen to use various playback functions.


1 Display the Source Control Screen
See <How to Display the Source Control Screen> (page 27).

2 Operation on the Source Control screen



Dragging  left or right changes the playing position.


Multi Function




[SEEK] Switches the Seek mode. The mode is switched in the following order each time you touch the button.

Display	Setting
"AUTO1"	Tunes in a station with good reception automatically.
"AUTO2"	Tunes in stations in memory one after another.
"MANU"	Switches to the next frequency manually.


Continue to touch until the memory number appears.

 2 sec.

Next page 













The above operation example with the mark differs from the actual operation.

Drag or Flick operation


Press the button, denoted by . It indicates that you scroll icons or list items left and right by flicking or dragging them and touch to select the desired one. The right mark indicates that they can be scrolled up and down.

Function Icon

Icons representing available functions are shown below.

-  DVD-VIDEO: Function of DVD-VIDEO playback.
-  Video CD: Function of Video CD playback.
-  CD: Function of CD (CD-DA) playback.
-  Audio File: Function of Audio File playback.
-  MPEG: Function of MPEG file playback.
-  DivX: Function of DivX file playback.
-  JPEG: Function of JPEG file playback.
-  Disc: Function of Disc (DVD, CD) media.
-  USB: Function of USB device.
-  FM: Function of FM reception.
-  SIRIUS: Function of SIRIUS source.
-  XM: Function of XM source.

Press 2 seconds or more

Press the button, denoted by , for 2 seconds or more. Indicates to press and hold down the button until operation starts or the screen changes. The left example indicates to press the button for 2 seconds.

Other marks



Important precautions are described to prevent injuries etc.



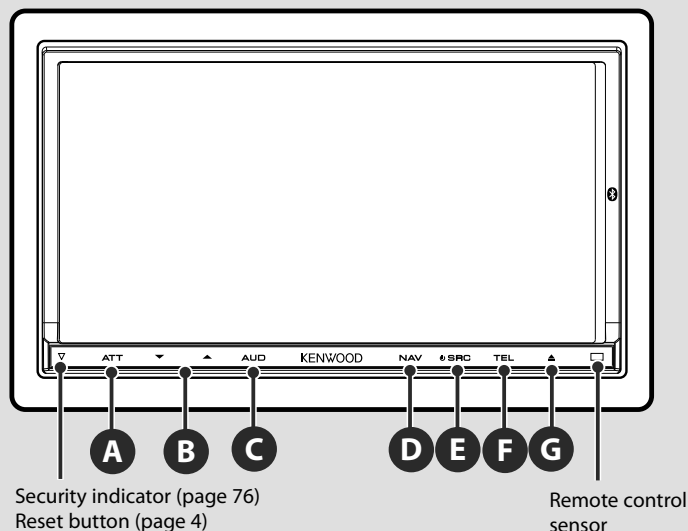
Special instructions, supplementary explanations, limitations, and reference pages are described.



General precautions and reference pages are shown on the item.



The initial value of each setup is shown.



1 sec. : Press for longer than 1 second

- A** Attenuation of the volume On/Off.
1 sec. Store the tag data of the current music from the HD Radio station. (page 41)

- B** Volume adjustment.
Holding down a key turns up the volume in series up to 25. For more than 25, pressing the key turns up the volume one by one.

- C** Displays Graphic Equalizer screen. ^{*1} (page 65)
1 sec. Camera view display On/Off. ^{*2}

- D** Displays the navigation screen.
When the navigation screen has already been displayed, it switches to the navigation screen with Split Screen Control window.
1 sec. While watching the navigation screen
Picture in Picture function On/Off. ^{*3} (page 18)

- E** Turns the power On. ^{*5}
Displays the Source Control screen. (page 16)
In case of visual sources, the playback screen is first displayed and changed to the source control screen by pressing the button again.
1 sec. Turns the power Off.

- F** Displays the Hands Free Control screen.
1 sec. While watching the Source Control screen
Secondary window function On/Off. ^{*4} (page 19)
1 sec. While watching the navigation screen
Displays the Screen Control screen. (page 52)
1 sec. While watching the playback screen of a visual source
Displays the Easy Control screen.

- G** **1 sec.** Opens the panel and ejects the disc.
1 sec. Closes the panel.
3 sec. Opens the panel fully.



- You can adjust the sensitivity of the buttons (touch sensors) on the front panel. See <User Interface> (page 74).
- ^{*1} The display may not switch to Graphic Equalizer screen in some conditions.
- ^{*2} The function of the [AUD] button can be changed to the display off function. See <User Interface> (page 74).
- ^{*3} When the Secondary window function (page 19) is activated, this function is disabled.
- ^{*4} When the Picture in Picture function (page 18) is activated, this function is disabled.
- ^{*5} When the unit is powered off, pressing any one of **D**, **E** and **F** turns it on.

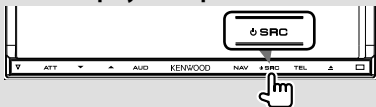
How to Display Top Menu Screen

Top Menu Screen is the entrance to all the functions. You can select sources and various setup menus from this screen.

Top Menu screen



How to display the Top Menu screen



When a video screen is displayed



Touch the [MENU] button on any screen.

The **Top Menu Screen** appears.

Buttons on the Top Menu screen

For how to operate each source or setup, see the following pages.

- [DVD] DVD-VIDEO/ Video CD disc (page 20)
- [CD] CD disc (page 24)
- [FILE] Audio file/ Video file disc (page 24)
- [iPod] iPod (page 30)
- [P] Pandora (page 34)
- [USB] USB (page 24)
- [HD] HD Radio (page 36)
- [SIRIUS] SIRIUS/ XM (page 46)
- [TV] TV (page 42)
- [BT] Bluetooth Audio (page 49)
- [VIDEO] Video
- [STANDBY] Standby
- [*1] Displays Tools screen of navigation.
- [*1] Displays Where To ? screen of navigation.
- [NAV] Switches to the navigation screen.
- [HFM] Switches to the Hands Free Main screen.
- [*1] Displays Navigation Settings screen.
- [SETUP] Displays SETUP Menu screen. (page 72)
- [HFS] Displays Hands Free SETUP screen. (page 60)
- [AC] Displays Audio Control Menu screen. (page 64)
- [EXT] Displays the EXT SW (External Switch) Control screen. (page 50)
- [SKIN] Changes the screen skin each time it is pressed.



- *1 Instruction manual of the Navigation part.
- For Disc media, iPod, and USB, the input is switched to the source as the media or the device is set.

The buttons listed below are common for many screens.

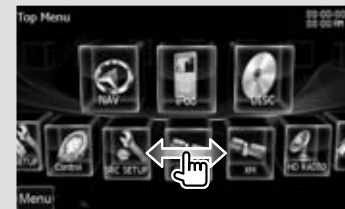
- [MENU] Displays Top Menu screen.
- [COMMON] Opens the common menu bar. The buttons shown below appear.
 - [SOURCE] Displays the currently selected source screen. The button icon to be displayed varies depending on playing source. The above icon display is an example when the source is DVD.
 - [AC] Displays Audio Control Menu screen. (page 64)
 - [SETUP] Displays SETUP Menu screen. (page 72)

- [EXT SW] Displays the EXT SW (External Switch) Control screen. (page 50)
- [CLOSE] Closes the common menu bar.

Customization of Top Menu Screen

Up to 3 sources or setups frequently used on the Top Menu screen can be registered.

1 Display the icon you want to register



Scroll icons left or right by flicking or dragging to display the desired icon.

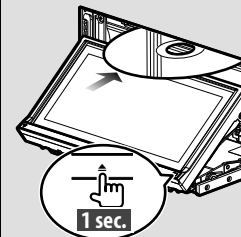
2 Register the icon



Drag the icon to the desired place.

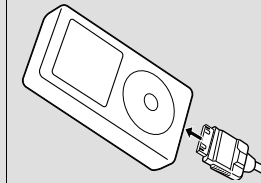
How to play media

Disc media



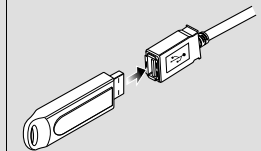
Press the [▲] button for longer than 1 second to open/close the front panel. If a disc is already inserted, it is ejected by press the [▲] button for longer than 1 second.

iPod



To disconnect the iPod, stop the playback by touching the [▲] button on the source control screen, and then disconnect the iPod. See <Source Control Screen> (page 31).

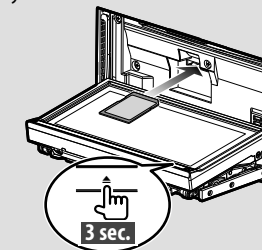
USB device



To disconnect the USB device, touch the [▲] button on the source control screen, and then disconnect the USB device. See <Source Control Screen> (page 24).

SD card

This SD card slot is used to upgrade the Navigation System. For how to upgrade the Navigation System, refer to the instruction manual of the navigation system.



Press the [▲] button for longer than 3 seconds to open the front panel.

Inserting the SD card

Hold the SD card with the label side up and the notched section on the right, and insert it into the slot until it clicks.

Removing the SD card

Push the SD card until it clicks and then remove your finger from the card. The card pops up so that you can pull it out with your fingers.

Press the [▲] button for longer than 1 second to close the front panel.



- The playback starts automatically after loading the media or connecting the device.

How to Display the Source Control Screen

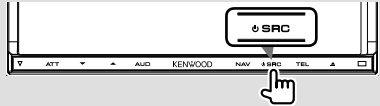
On the Source Control screen you can find all the control buttons for the selected source.

Source Control Screen

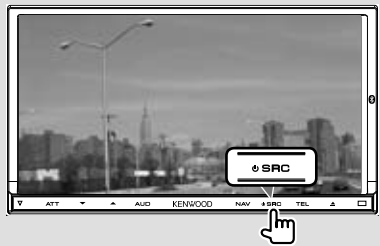


- For how to use each button, see the operation pages of each source.

How to display the Source Control screen

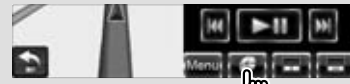


When a video screen is displayed



The **Source Control Screen** appears.

While watching the navigation screen with secondary window



The **Source Control Screen** appears.



- The screen will return to the navigation screen by touching the same part of the Source Control screen.

While watching the Easy Control Screen



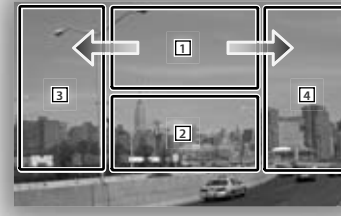
The **Source Control Screen** appears.

Operation on the Playback Screen of Visual Sources

While watching visual sources, basic operation is possible by touching the screen.

The screen has 4 function areas. The function of each area is different depending on the sources. (Some areas are unavailable for some sources.)

Playback screen of a visual source



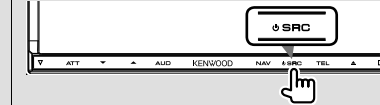
Basic operation of each area

- 1 Displays Menu control screen (DVD-VIDEO source), Picture control buttons (sources with picture files), or Zoom control buttons (Video CD).
Switches TV band.
 - 2 Displays Easy Control Screen. *1
 - 3 Reverse search.
 - 4 Forward search.
- ➡ Fast Forwards when flicked from 1 to 4.
⬅ Fast Backwards when flicked from 1 to 3.



- For the function of each touch control area, see the pages of each source.

How to display the playback screen



The **Playback screen of a visual source** appears.

While watching the Source Control Screen



The **Playback screen of a visual source** appears.

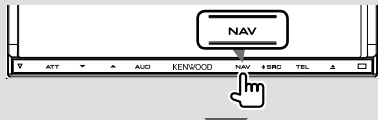
***1 Easy Control Screen**



Buttons on the Easy Control Screen

- [▼] Changes the function as follows by touching the [▼] button.
 - [SCRN] Displays Screen Control screen (page 52).
 - [TEL] Switches to the Hands Free Main screen (page 54).
 - [EXT SW] Switches to the EXT SW Control screen (page 50).
- [◀◀], [▶▶], [◀▶], [▶▶], [■], [▶▶||]
- Buttons for source control. The buttons are different depending on the source. See the operation pages of each source.

How to Display the Navigation Screen



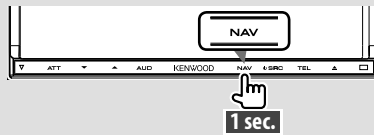
The navigation screen appears.



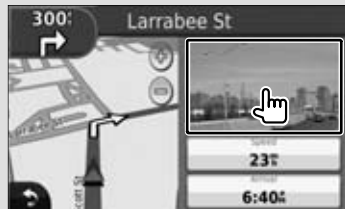
- For how to set up and use the navigation function, see the Navigation Instruction Manual.

Picture in Picture function

Two screens, the navigation screen and source screen, are displayed. When Picture in Picture function is on, touching the source screen switches between the camera image and source image.



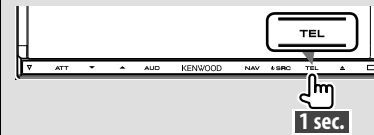
Pressing the button for longer than 1 second while the navigation screen is displayed switches the Picture in Picture function on/off.



The screen switches between visual source's playback screen and camera view screen each time the small window is touched.

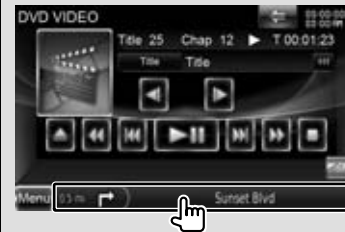
Secondary window function

You can control audio sources while the navigation screen is displayed, and view the navigation information while the source control screen is displayed.



Pressing the button for longer than 1 second while the source control screen is displayed switches the secondary window function on/off.

Source Control screen with navigation window



Displays the navigation screen with Secondary window.

Navigation screen with Information window



Displays the Source Control screen with navigation window.

Navigation screen with Easy Control window



Navigation screen with Split Screen Control window



Buttons on the Secondary window

- [Map Icon] Displays the navigation screen with Information window.
- [Easy Control Icon] Displays the navigation screen with Easy Control window.
- [Split Screen Icon] Displays the navigation screen with Split Screen Control window.
- [Source Icon] Displays the currently selected source screen. The button icon to be displayed varies depending on playing source. The above icon display is an example when the source is DVD.
- [MENU] Displays the Top Menu screen.

Watching DVD/Video CD

You can play DVD/Video CD using various functions.



- Set the remote controller mode switch to "DVD" mode before starting operation, see <Remote Controller mode switch> (page 90).

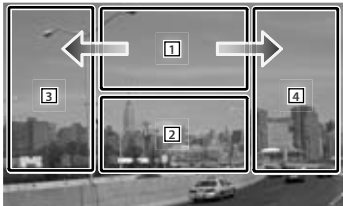
Playback Screen

Basic functions are available even when the playback screen is displayed.

1 Display the Playback Screen

See <Operation on the Playback Screen of Visual Sources> (page 17).

2 Operation on the Playback Screen



- 1 **DVD-VIDEO** Displays the Menu Control 1 Screen or Highlight Control (When DVD Menu) (page 22).

Video CD Displays the Zoom Control Screen (page 23).

Touching this area during fast forwarding or fast backwarding plays a source.

- 2 Displays Easy Control Screen.

Touching this area during fast forwarding or fast backwarding plays a source.

- 3, 4 **DVD-VIDEO** Searches for a chapter.

Video CD Selects a scene (when PBC is On) or a track (when PBC is Off).

➔ Fast Forwards.

➔ Fast Backwards.

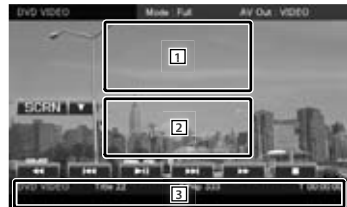
Easy Control Screen

Displays the basic operation buttons on the screen.

1 Display the Easy Control Screen



2 Operation on the Easy Control Screen



- 1, 2 Switches to the Playback Screen.

- 3 Displays the Source Control Screen.

- [<<], [>>] Fast Forwards or Fast Backwards.

Changes the speed (2 times, 3 times, or off) each time the button is touched.

- [<<<], [>>>]

DVD-VIDEO Searches for a chapter.

Video CD Selects a scene (when PBC is On) or a track (when PBC is Off).

- [■] Stops playing.

When touched twice, the disc is played from its beginning when you play it the next time.

- [▶||] Plays or pauses.

Source Control Screen

Switches to the source control screen to use various playback functions.

1 Display the Source Control Screen

See <How to Display the Source Control Screen> (page 16).

2 Operation on the Source Control Screen



- [▶||] Plays or pauses.

- [■] Stops playing.

When touched twice, the disc is played from its beginning when you play it the next time.

- [▲] Ejects a disc.

- [<<], [>>] Fast Forwards or Fast Backwards.

Changes the speed (2 times, 3 times, or off) each time the button is touched.

- [<<<], [>>>]

DVD-VIDEO Searches for a chapter.

Video CD Selects a scene (when PBC is On) or a track (when PBC is Off).

- [<|], [|>] **DVD-VIDEO** Slow Forwards or Backwards.

- [☰] Switches to the playback screen.

- 1 Information display

Volume Label.

"Title" Title Number Display

"Chap" Chapter Number Display

"Scene"/ "Track" Scene/Track Number Display

"▶" Play Mode Display

"T"/ "C"/ "R"/ "P" Play Time Display

Use the [TIME] to change play time display.

- [⏏] When the text is longer, the text display is scrolled by touching it.

Multi Function



- [✕] Closes the multi function bar.

DVD-VIDEO

[TREP] Switches the Repeat Play operations in the following sequence.
Title Repeat, Repeat Off

[CREP] Switches the Repeat Play operations in the following sequence.
Chapter Repeat, Repeat Off

[TIME] Switches the play time display in the following sequence.
Chapter ("C"), Title ("T"), remaining titles ("R")

Video CD

[REP] Switches the Repeat Play operations in the following sequence.

Track Repeat, Repeat Off (Available when the PBC is off)

[TIME] Switches the play time display in the following sequence.
Track ("P"), remaining discs ("R") (Effective only when the PBC function is off)

[PBC] Turns the PBC On or Off. (only when VCD Ver 2.0 is in use)

DVD-VIDEO Disc Menu

Selects an option from the DVD-VIDEO Disc Menu.

1 Display the Playback Screen

See <Operation on the Playback Screen of Visual Sources> (page 17).

2 Display the Menu Control 1 screen



3 Operation on the Menu Control 1 screen



[Menu] Calls the Menu.

[Next] Displays the Menu Control 2 screen.

[◀], [▶], [▲], [▼] Selects a menu option.

[Enter] Enters your menu selection.

[Return] Returns to the previous menu screen.

[Top] Displays the Top Menu.

[Highlight] Highlight Control.

[Exit] Exits the Menu Control 1 screen.

4 Operation on the Highlight Control

Highlight control lets you control DVD Menu by touching the menu button directly on the screen.



- To cancel Highlight Control, press the [TEL] button for longer than 1 second.
- The Highlight Control is cleared automatically after approximately 10 seconds.

5 Operation on the Menu Control 2 screen



[Previous] Displays the Menu Control 1 screen.

[Angle] Switches the picture angle.

[SUB] Switches the subtitle language.

[Audio] Switches the voice language.

[Zoom] Displays the Zoom Control screen.

[Exit] Exits the Menu Control 2 screen.

6 Operation on the Zoom Control screen



[Zoom] Changes the zoom ratio at 4 levels (2 times, 3 times, 4 times, or off) each time you touch.

[◀], [▶], [▲], [▼] Scrolls the screen in the direction you touch.

[Return] Returns to the Menu Control 2 screen.

[Exit] Exits the Zoom Control screen.

Video CD Zoom Control

Displays an enlarged VCD screen.

1 Display the playback screen

See <Operation on the Playback Screen of Visual Sources> (page 17).

2 Display the Zoom Control screen



3 Operation on the Zoom Control screen



[Zoom] Changes the zoom ratio at 2 levels (2 times or off) each time you touch.

[◀], [▶], [▲], [▼] Scrolls the screen in the direction you touch.

[Exit] Exits the Zoom Control screen.

Music CD/ Audio File Listening & Video File/ Picture File Watching

You can recall various control screens during playback of CD, audio file, video file and picture file.



- See <List of playable discs> (page 5) for playable discs.
- See <About Audio files> (page 6), <About Video files> (page 6) or <About Picture files> (page 6) for playable files.

Source Control Screen

Switches to the source control screen to use various playback functions.

1 Display the Source Control Screen

See <How to Display the Source Control Screen> (page 16).

2 Operation on the Source Control screen



[▶||] Plays or pauses.

[◀◀], [▶▶] [CD], [Audio File], [Video File]
Fast Forwards or Fast Backwards.

[◀], [▶] [Audio File], [Video File], [JPEG]
Selects a folder. Selects an album when the Album Favorite List screen is displayed.

[■] [Disc] Stops playing.
When touched twice, the disc is played from its beginning when you play it the next time.

[▲] [Disc] Ejects the disc.
[USB] Removes the USB device.
When "No Device" is shown, the USB device can be removed safely.
If you wish to play it again while the USB device is connected, touch it again.

[◀◀], [▶▶] Selects a track/ file.

[Slideshow] [JPEG] in [USB]

Returns to the picture screen

[2] [Disc] Displays the folder list. See <List Search> (page 26).

[USB] Displays the music list, video list, picture list, folder list or link list. See <List Search> (page 26).

[3] [USB] Displays the album artwork. See <Album Favorite List> (page 27).

[1] Switches to the playback screen.

[1] Information display

[CD] Selects the Disc Text, title or artist.

[Audio File], [Video File], [JPEG]
Selects Folder Name, File Name, Title, Artist Name, Album Name, Year*, Gene*, Track*, or Comment*1. (*1) USB only

"Track" Track Number Display

"#" Folder Number Display

"#" File Number Display

"#### / ####" Total number of file in the folder and the file number display

"▶" Play Mode Display

"P"/ "R" Play Time Display

Use the [TIME] to change play time display.

[◀◀] When the text is longer, the text display is scrolled by touching it.

Slider control [USB]

Use the [CTRL]/ [Slider] to change the control mode.



[▶] Plays.

Dragging [▶] left or right changes the playing position.

Multi Function



[1/2] Switches the multi function display.

[X] Closes the multi function bar.

[CD]

[REP] Repeats the present track.

[RDM] Starts or stops Random Play (to play music in random order). Not available if there are only picture files.

[TIME] Switches the play time display between Track ("P"), and Disc Remaining Time ("R").

[INFO] Displays music information of CD-TEXT being played.

[Audio File] [Video File] [JPEG]

[4Line]/ [2Line] Switches the number of lines displayed in the Information Display.

[REP] Repeats the present file or data.

[FREP] Repeats the music or data of the present folder.

[RDM] Starts or stops Random Play (to play files of the present folder in random order).

[CTRL]/ [Slider] [USB] Switches control mode to button/slider.

[INFO] [Audio File] Displays music information (such as Tag) of Audio file being played.

[Video File], [JPEG] Displays information of file being played.

[Music] [USB] Displays the music list.

[Video] [USB] Displays the video list.

[Picture] [USB] Displays the Thumbnail Viewer.

[Folder] [USB] Displays the folder list.

[Link] [Audio File] in [USB]

Searches for another song of the currently selected artist. See <List Search> (page 26).

Link search (Audio File in USB)

Searches for another song of the currently selected artist.

1 Display the Source Control Screen

See <Source Control Screen> (page 24).

2 Start Link search



3 Select a song



[1] Plays the touched song.

[2] Returns to the Source Control screen.

[◀◀] When the text is longer, the text display is scrolled by touching it.

[CUR] Displays the currently playing folder.

Scrolls to the position of the specified character



Scrolls to the selected character.

List Search

Folder list: Searches folders and Audio/ Video/ Picture files stored in media and devices according to hierarchy.

Play list: Lists and searches music contained in the USB device.

1 Display the Source Control Screen

See <Source Control Screen> (page 24).

2 Start List Search



- Touching 1 displays the previously used music list, video list, picture list, folder list or link list.

3 Select a file

Folder list



- 1 Folder opens when touched, and the files in the folder are played.
 - 2 **USB** Selects the file type to display.
 - 3 Returns to the Source Control screen.
- [◀] When the text is longer, the text display is scrolled by touching it.
- [📁] **ROOT** Moves to the top hierarchy level.
- [📁] **TOP** Moves to the top folder.

[⬆️] **UP** Moves up a hierarchy level.

[📁] **CUR** Displays the currently playing folder/ category.

Music or video list



- 1 Switches to the lower level of the category.
- 2 Returns to the Source Control screen.

[◀] When the text is longer, the text display is scrolled by touching it.

[▶] **ALL** **Audio File** Lists all the music in the selected category.

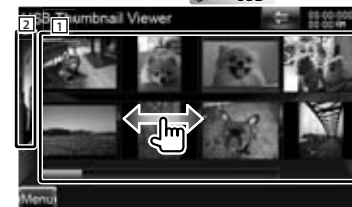
[📁] **TOP** **Audio File** Moves to the top category.

[⬆️] **UP** **Audio File** Moves to the upper level of the category.

[📁] **CUR** Displays the currently playing category/ folder.

[⬅️] Returns to the previous screen.

Thumbnail Viewer



- 1 Touching a thumbnail image displays it in full-screen view.
- 2 Returns to the Source Control screen.

Scrolls to the position of the specified character



Scrolls to the selected character.

Album Favorite List (USB)

You can create an original playlist of your favorite 10 albums by selecting album artworks.

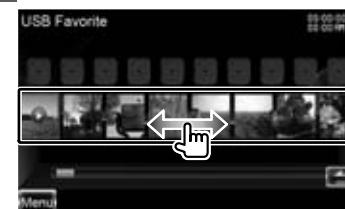
1 Display the Source Control Screen

See <Source Control Screen> (page 24).

2 Display the Favorite List Screen



3 Select an album artwork



Touch desired artwork in the lower line.

[▶] Touching an album artwork twice plays the first song in the album.

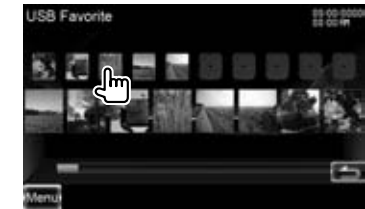
4 Register the album



Selected album is registered to the favorite list.

- To delete the album from the favorite list, touch and drag it to the lower line.
- You can change the playing order of the favorite list by dragging the artwork in the list.

5 Play the album in the Playlist



The favorite list is played to the right starting with the selected album.

- The albums with no photo are not displayed.
- The favorite list mode resumes after disconnecting/connecting the device or turning on/off. File being played, playing time code, favorite list contents, favorite list order, etc. resumes if file configuration of the device is not changed.

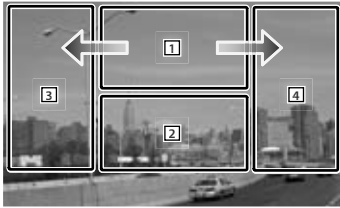
Playback Screen (Video file, Picture file)

Basic functions are available even when the playback screen is displayed.

1 Display the Playback Screen

See <Operation on the Playback Screen of Visual Sources> (page 17).

2 Operation on the Playback Screen



- 1 in Displays the Picture Control Screen (page 29).
 in Displays the Menu Control Screen (page 29).
Touching this area during fast forwarding or fast backwarding plays a source.
- 2 Displays Easy Control Screen.
Touching this area during fast forwarding or fast backwarding plays a source.
- 3, 4 Searches for a file.
 Touching these areas during the slide show of picture files searches for audio files.
→ Fast Forwards.
← Fast Backwards.

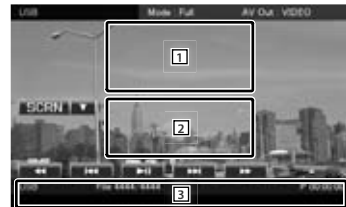
Easy Control Screen (Video file, Picture file)

Displays the basic operation buttons on the screen.

1 Display the Easy Control Screen



2 Operation on the Easy Control Screen



- 1, 2 Switches to the Playback Screen.
Touching this area during fast forwarding or fast backwarding plays a source.
- 3 Displays the Source Control Screen.
[◀◀], [▶▶] Fast Forwards or Fast Backwards.
[◀◀], [▶▶] Searches for a file. During the slide show of picture files, touching the buttons searches the audio file.
- Stops playing.
- [⏸] Plays or pauses.

Picture Control (USB)

Adjusting the picture display.

1 Display the Playback Screen

See <Operation on the Playback Screen of Visual Sources> (page 17).

2 Display the Picture Control Screen



3 Adjust the picture display



- [↑↓] Reverses the picture horizontally.
- [↺] Rotates counter clockwise.
- [↻] Rotates clockwise.
- [Exit] Ends Picture Control.

Movie Menu Control (Disc)

Selects an option from the Movie Menu.

1 Display the playback screen

See <Operation on the Playback Screen of Visual Sources> (page 17).

2 Display the Menu Control screen



3 Operation on the Menu Control screen



- [SUB] Switches the subtitle language.
- [Audio] Switches the voice language.
- [Exit] Exits the Menu Control screen.

iPod Control

You can control and listen to Music(s)/Video(s) in your iPod by connecting an iPod to this unit with KCA-iP302 (optional accessory).

To connect the second iPod, use a KCA-iP102 (optional accessory).

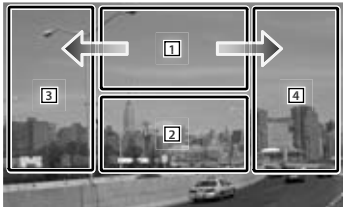
Playback Screen

Basic functions are available even when the playback screen is displayed.

1 Display the Playback Screen

See <Operation on the Playback Screen of Visual Sources> (page 17).

2 Operation on the Playback Screen



1 Not effective

Touching this area during fast forwarding or fast backwarding plays a source.

2 Displays Easy Control Screen.

3, 4 Selects the music/video.

➡ Fast Forwards.

⬅ Fast Backwards.



- Remove all accessories such as headphone before connecting an iPod. You may not be able to control the iPod if you connect it with accessories attached.
- When you connect an iPod to this unit, playback starts from the song you were playing on the iPod itself (Resume Function).
- If the played song is not a video content, "No Video Signal" is displayed on the video screen.

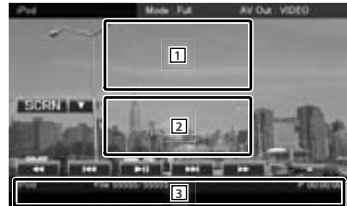
Easy Control Screen

Displays the basic operation buttons on the screen.

1 Display the Easy Control Screen



2 Operation on the Easy Control Screen



1, 2 Switches to the Playback Screen.

3 Displays the Source Control Screen.

[<<<], [>>>] Fast Forwards or Fast Backwards.

[<<<], [>>>] Music/Video Search.

[▶||] Plays or pauses.

Source Control Screen

Switches to the source control screen to use various playback functions.

1 Display the Source Control Screen

See <How to Display the Source Control Screen> (page 16).

2 Operation on the Source Control Screen



[▶||] Plays or pauses.

[<<<], [>>>] Fast Forwards or Fast Backwards.

[<<<], [>>>] Selects Next or Previous Music/Video.

[▶], [◀] Displayed only on the Album Favorite screen to allow you to select an album.

2 Displays the iPod list. See <iPod List> (page 32).

3 Displays the iPod artwork. See <Album Favorite List> (page 33).

[▶] Switches to the playback screen.

1 Information display

Selects the Title, Artist Name, Album Name or iPod Name.

"#### / ####" Total number of music in the iPod and the music number display

"▶" Play Mode Display

"P" Play Time Display

[◀] When the text is longer, the text display is scrolled by touching it.

Slider control Music

Use the [CTRL]/ [Slider] to change the control mode.



[▶] Plays.

Dragging [▶] left or right changes the playing position.

Multi Function



[1/2] Switches the multi function display.

[X] Closes the multi function bar.

[Music] Displays the list of music category.

[Video] Displays the list of video category.

[Link]*1 Searches for another song of the currently selected artist. See <Link search> (page 32).

[REP] Repeats the present file or data.

[RDM]*1 Starts or stops Random play.

[ARDM]*1 Starts or stops Album Random Play (plays randomly from current album).

[CTRL]/ [Slider] Switches control mode to button/slider.

[INFO] Displays the information screen of music/video being played.

[Hand] Allows you to operate iPod with the control of the iPod.

[Device] Switches between the two iPods connected.



*1 Disabled when VIDEO is being played.

• [Hand]

- In the iPod Control by Hand Mode, iPod cannot be controlled from the GUI on this unit.
- This mode is not compatible with music information display.
- iPod can be controlled from the GUI on this unit when used in normal iPod control mode.
- Disabled when two iPods are connected.

iPod List

Lists and searches music/video contained in the iPod.

1 Display the Source Control Screen

See <Source Control Screen> (page 31).

2 Display the iPod List



- Touching 1 displays the previously used music list, video list, or link list.

3 Select music/video



1 Categories and music are listed.

Touch a category name to view its contents. If music title is displayed, the music is played by touching it.

2 Returns to the Source Control screen.

[←] When the text is longer, the text display is scrolled by touching it.

[▶ ALL] Lists all the music in the selected category.

[⬆ TOP] Moves to the top category.

[⬆ UP] Returns to previous category.

[▶ CUR] Displays the currently playing category.

Scrolls to the position of the specified character



Scrolls to the selected character.

Link search (Music file)

Searches for another song of the currently selected artist.

1 Display the Source Control Screen

See <Source Control Screen> (page 31).

2 Start Link search



3 Select a song



1 Plays the touched song.

2 Returns to the Source Control screen.

[←] When the text is longer, the text display is scrolled by touching it.

[⬆ TOP] Moves to the top category.

[⬆ UP] Returns to previous category.

[▶ CUR] Displays the currently playing category.

Scrolls to the position of the specified character



Scrolls to the selected character.

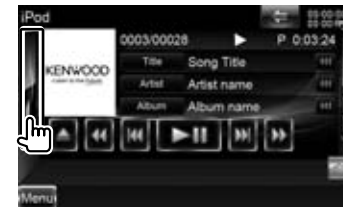
Album Favorite List

You can create an original playlist of your favorite 10 albums by selecting album artworks.

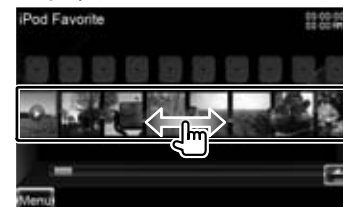
1 Display the Source Control Screen

See <Source Control Screen> (page 31).

2 Display the Favorite List Screen



3 Display the iPod artwork Screen



Touch desired artwork in the lower line.

[▶] Touching an album artwork twice plays the first song in the album.

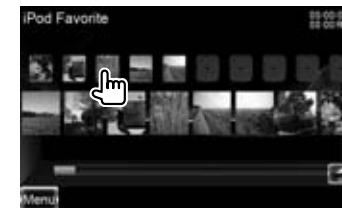
4 Register the album



Selected album is registered to the favorite list.

- To delete the album from the favorite list, touch and drag it to the lower line.
- You can change the playing order of the favorite list by dragging the artwork in the list.

5 Play the album in the Playlist



The favorite list is played to the right starting with the selected album.



- The albums with no photo are not displayed.
- The favorite list mode resumes after disconnecting/connecting the device or turning on/off. File being played, playing time code, favorite list contents, favorite list order, etc. resumes if file configuration of the device is not changed.

Pandora Control

You can control Pandora application on this unit.

To enter Pandora mode, touch [Pandora] icon in the Top Menu screen.



- iPhone connected to this unit with a KCA-IP302 (optional accessory).
- Disabled when two iPods are connected.

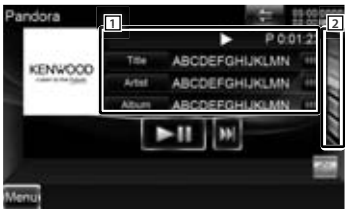
Source Control Screen

Switches to the source control screen to use various playback functions.

1 Display the Source Control Screen

See <How to Display the Source Control Screen> (page 16).

2 Operation on the Source Control Screen



[▶||] Plays or pauses.

[↑] Thumbs up to the current song.

[↓] Thumbs down to the current song and the next song.

[▶▶] Skips a current content.

Disabled when the Pandora's skip limitation is exceeded.

[2] Displays the Pandora Station list. See <Station List> (page 34).

[1] Information display

Song title, Artist Name, Album Name.

"▶" Play Mode Display

"P" Play Time Display

[≡] When the text is longer, the text display is scrolled by touching it.

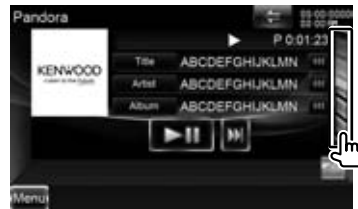
Station List

Select a station you want to listen to from you station list.

1 Display the Source Control Screen

See <Source Control Screen> (page 34).

2 Display the Station List Screen



3 Select a station



[1] Touch the station name in the list.

[2] Returns to the Source Control screen.

Multi Function



[X] Closes the multi function bar.

[Song] Bookmark a song in the current contents.


[Artist] Bookmark an artist in the current contents.

HD Radio™ Listening

Various control screens appear in the HD Radio Source mode.



- Set the remote controller mode switch to "AUD" mode before starting operation, see <Remote Controller mode switch> (page 90).



This HD Radio receiver enables:

PSD

HD2/HD3

Digital Sound

iTunes® Tagging

Artist Experience

- PSD** Program Service Data: 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.
- 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.
- iTunes® Tagging** iTunes® Tagging provides you the opportunity to discover a wide range of content and the means to "tag" that content for later review and purchase from the iTunes® Store.
- 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.

Source Control Screen

Switches to the source control screen to use various functions.

1 Display the Source Control Screen

See <How to Display the Source Control Screen> (page 16).

2 Operation on the Source Control screen



[HD FM] Switches to the HD FM1/2/3 band.

[HD AM] Switches to the HD AM band.

[TI] Turns the Traffic Information function On or Off.

See <Traffic Information> (page 40).

[◀◀], [▶▶] Tunes in a station.

Use the [SEEK] to change the frequency switching.

[CH ▼], [CH ▲] Selects a channel (program).

[2] Display the HD Radio Preset List Screen. See <Preset Select> (page 38).

[1] Information display
Selects the Station name, Title, Artist name, Album Name, or Genre.

"HD FM"/ "HD AM" Band display

"Preset" Preset number

"MHz"/ "kHz" Frequency display

"HD" Channel display

[≡] When the text is longer, the text display is scrolled by touching it.

Multi Function



[1/2] Switches the multi function display.

[X] Closes the multi function bar.

[P1] – [P6] When [P1] to [P6] buttons appear, you can recall the stations on memory.

For memory of broadcasting stations, see <Auto Memory> (page 37) or <Manual Memory> (page 38).

[SEEK] Switches the Seek mode.

The mode is switched in the following order each time you touch the button.

Display	Setting
"AUTO1"	Tunes in a station with good reception automatically.
"AUTO2"	Tunes in stations in memory one after another.
"MANU"	Switches to the next frequency manually.

[AME] Selects the Auto Memory mode.

See <Auto Memory> (page 37).

[RCV] The Receive mode switches in the following order. See <Receive mode> (page 41).

[PTY] Searches station by program type. See <Search by Program Type> (page 40).

[INFO] Displays HD Radio Information screen. See <Information> (page 39).

[CH-List] Display the Channel List Screen. See <Channel Search> (page 39).

Auto Memory

Stores stations with good reception in memory automatically.

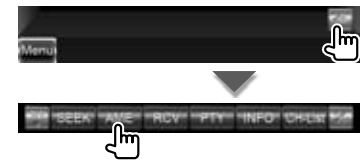
1 Display the Source Control Screen

See <Source Control Screen> (page 36).

2 Select a band you wish to store in memory



3 Select the Auto Memory mode



4 Start Auto Memory



Auto Memory terminates when 6 stations are stored or when all stations are tuned in.



- The operation ends automatically if you do not operate within 10 seconds.

Manual Memory

Stores the current receiving station in memory.

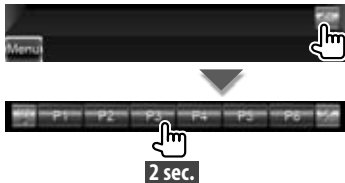
1 Display the Source Control Screen

See <Source Control Screen> (page 36).

2 Select a station you wish to store in memory



3 Store in memory



Continue to touch until the memory number appears.

Preset Select

Lists and selects memorized station.

1 Display the Source Control Screen

See <Source Control Screen> (page 36).

2 Display the HD Radio Preset List Screen



3 Select a station



- 1 Memorized stations are displayed. Touch to tune in.
- 2 Returns to the Source Control screen.

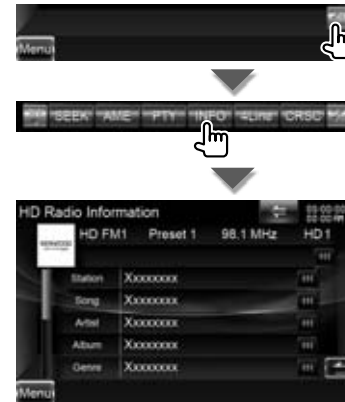
Information

You can display the radio text.

1 Select a station

See <Source Control Screen> (page 36).

2 Display the Information



Station name, Title, Artist name, Album name, Genre, PTY, Comment, Commercial, PS, Radio Text, or Tagging display.
 [] When the text is longer, the text display is scrolled by touching it.

Channel Search

Specifying the selecting a channel.

1 Display the Source Control Screen

See <Source Control Screen> (page 36).

2 Display the Channel List Screen



3 Select a channel



- 1 Selects a channel.
Tunes in the selected channel.
- [Info Change] Changes the display from Song Title, Artist Name, Album Name, to Genre.
- [] Returns to the Source Control screen.

Traffic Information

When a traffic bulletin starts, any source is switched to the traffic information and it is displayed automatically.

1 Display the Source Control Screen

See <Source Control Screen> (page 36).

2 Set the Traffic information mode



When the traffic bulletin starts...

The Traffic Information screen appears automatically.

Traffic Information screen



- It is necessary to have Traffic Information function set to On in order to have the Traffic Information screen appear automatically.
- During reception of traffic information the adjusted volume is automatically remembered, and the next time it switches to traffic information it's automatically the remembered volume.

Search by Program Type

A program is tuned when you set its program type. (Only when receiving the FM broadcast)

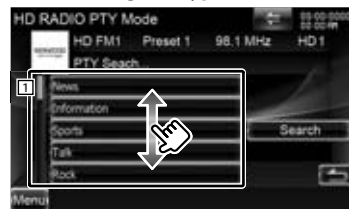
1 Display the Source Control Screen

See <Source Control Screen> (page 36).

2 Enter Program Type Search mode



3 Select a Program Type



1 Program Type is displayed. Touch to select a Program Type.

[Search] Searches for the program type. It is displayed when the Program type is selected.

4 Search a station of the selected Program Type



Receive mode

Sets the radio broadcasts receive mode.

1 Display the Source Control Screen

See <Source Control Screen> (page 36).

2 Display the Receive mode screen



3 Select the receive mode

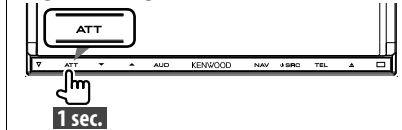


[Receive Mode] The Receive mode switches in the following order.
 "Auto": Automatically tunes to analog broadcast when there is no digital broadcast.
 "Digital": Digital broadcasts only.
 "Analog": Analog broadcasts only.

iTunes Tagging

Using an iTunes Tagging enabled HD Radio receiver you can tag your music. When you hear a song you enjoy on your local HD Radio station, you only have to press the [ATT] button for at least 1 second. The song's information will then be saved on this unit. The saved songs will then show up in a playlist called "Purchased" in iTunes the very next time you sync your iPod to your computer. So then you just need to click and then easily buy and download the song you were tagging directly from the Apple iTunes Music Store.

Registers a tag



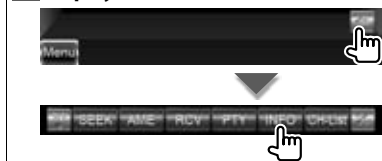
"TAG" will be indicated on the display when song information can be registered.

The memory usage can be checked

1 Display the Source Control Screen

See <Source Control Screen> (page 36).

2 Display the Information Screen



3 The memory usage can be checked



Select the "Tagging Information" display.



- Up to 50 TAGs (song's information) can be registered to this unit. When iPod is connected, the TAG information registered to this unit is transferred to the connected iPod.

TV Watching

Various control screens appear in the TV source mode. You can only operate TV with the optional accessory TV Tuner connected.

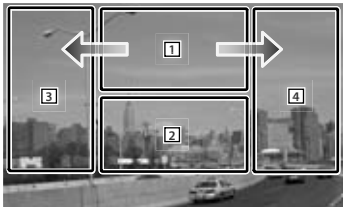
Function During TV Screen

Basic functions are available even when the TV screen is displayed.

1 Display the TV screen

See <Operation on the Playback Screen of Visual Sources> (page 17).

2 Operation on the TV screen



- 1 Switches to TV1 or TV2.
- 2 Displays Easy Control Screen.
- 3, 4 Selects a channel.

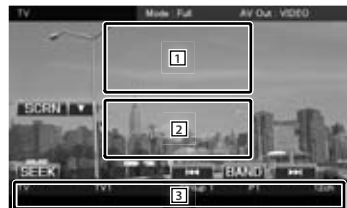
Easy Control Screen

Displays the basic operation buttons on the screen.

1 Display the Easy Control Screen



2 Operation on the Easy Control Screen



- 1, 2 Switches to the TV screen.
- 3 Displays the Source Control Screen.

[BAND] Switches to TV1 or TV2.

[◀▶] Selects a channel.

Use the **[SEEK]** to change the channel tuning sequence.

[SEEK] Switches the Seek mode. (page 43)

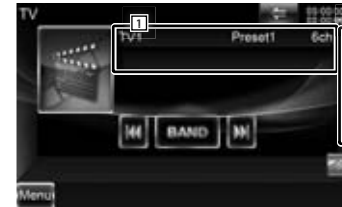
Source Control Screen

Switches to source control screen to use various functions.

1 Display the Source Control Screen

See <How to Display the Source Control Screen> (page 16).

2 Operation on the Source Control Screen



[BAND] Switches to TV1 or TV2.

[◀▶] Select a channel.

Use the **[SEEK]** to change the channel tuning sequence.

2 Display the TV Preset List Screen. See <Preset Select> (page 45).

[TV] Switches to the TV screen.

1 Information display

Channel information display

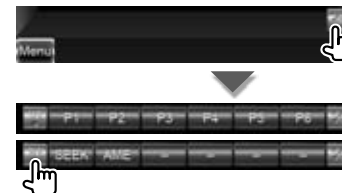
"TV" Band display

"Preset" Memory Number Display

"ch" Channel display

[◀▶] When the text is longer, the text display is scrolled by touching it.

Multi Function



[1/2] Switches the multi function display.

[X] Closes the multi function bar.

[P1] – [P6] When [P1] to [P6] buttons appear, you can recall channels on memory. For memory of broadcasting stations, see <Auto Memory> (page 44) or <Manual Memory> (page 44).

[SEEK] Switches the Seek mode.

The mode is switched in the following order each time you touch the button.

Display	Setting
"AUTO1"	Tunes in a station with good reception automatically.
"AUTO2"	Tunes in stations in memory one after another.
"MANU"	Switches to the next frequency manually.

[AME] Selects the Auto Memory mode.

See <Auto Memory> (page 44).

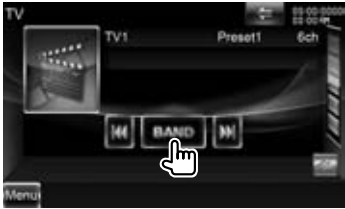
Auto Memory

Stores stations with good reception in memory automatically.

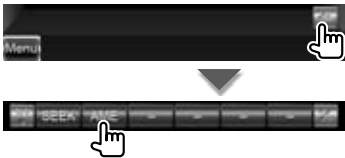
1 Display the Source Control Screen

See <Source Control Screen> (page 43).

2 Select a band you wish to store in memory



3 Select the Auto Memory mode



4 Start Auto Memory



Auto Memory terminates when 6 stations are stored or when all stations are tuned in.



- The operation ends automatically if you do not operate within 10 seconds.

Manual Memory

Stores the current receiving channel in memory.

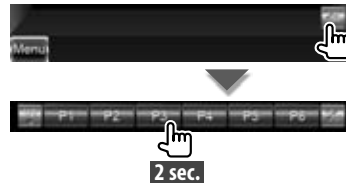
1 Display the Source Control Screen

See <Source Control Screen> (page 43).

2 Select a station you wish to store in memory



3 Store in memory



Continue to touch until the memory number appears.

Preset Select

Lists and selects memorized station.

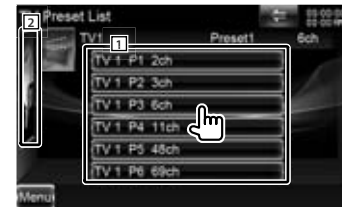
1 Display the Source Control Screen

See <Source Control Screen> (page 43).

2 Start Preset Select



3 Select a station



- Memorized stations are displayed. Touch to tune in.
- Returns to the Source Control screen.
- Switches to the TV screen.

SIRIUS/XM Control

Various control screens appear in the Satellite radio source mode. (Only with the optional accessory Satellite radio connected. To connect the SIRIUS tuner, a conversion cable CA-SR20V (optional accessory) is necessary and to connect the XM tuner, an XM interface Box KCA-XM100V (optional accessory) is necessary.)



This document uses the SIRIUS display as an example.

Source Control Screen

Switches to control screen to use various functions.

1 Display the Source Control Screen

See <How to Display the Source Control Screen> (page 16).

2 Operation on the Source Control screen



[BAND] Switches the band.

[◀▶], [▶▶], [◀◀] Tunes in a station.

Use the [SEEK] to change the frequency switching.

[2] Display the Category List or Channel List Screen. See <Category/ Channel Search> (page 47).

1 Information display

Displays information concerning music being played.

[SIRIUS] Changes the display from Channel Name, Song Title Name, Artist Name, Composer Name, to Category Name.

[XM] Changes the display from Channel Name, Artist Name, Song Title Name, to Category Name.

Displays the ID number when Channel 0 is selected.

[SIRIUS] Displays the SIRIUS ID.

[XM] Displays the RADIO ID.

"SR"/ "XM" Band display

"Preset" Preset number

"ch"/ "CH" Channel display

[▶▶] When the text is longer, the text display is scrolled by touching it.

Multi Function



[1/2] Switches the multi function display.

[X] Closes the multi function bar.

[P1] – [P6] When [P1] to [P6] buttons appear, you can recall the channel on memory. For memory of channel stations, see <Channel Memory> (page 47).

[SEEK] Switches the Seek mode.

The mode is switched in the following order each time you touch the button.

Display	Setting
"SEEK1"	Tunes channels one after the other.
"SEEK2"	Selects channels in memory one after the other.

[DIR] You can tune in by entering the desired channel number. See <Direct Channel Search> (page 48).

[INFO] Displays the program information screen.

[SCN] Starts or stops Channel Scan (that tunes channels one after the other).

[PRE] Lists and selects memorized channel. See <Preset Select> (page 48).

Category/ Channel Search

Specifying the desired category and selecting a channel.

1 Display the Source Control Screen

See <Source Control Screen> (page 46).

2 Display the Category List or Channel List Screen



Touching **[1]** displays the previously used category list, or channel list.

3 Select a category



[1] Selects a category.

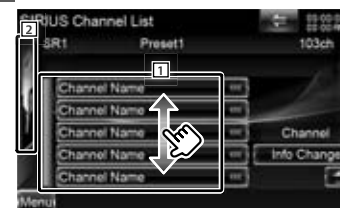
Displays all the channels in the selected category.

[▶▶] When the text is longer, the text display is scrolled by touching it.

[All Channel] Displays all the channels.

[2] Returns to the Source Control screen.

4 Select a channel



[1] Selects a channel.

Tunes in the selected channel.

[Info Change] Switches the sequence of the list.

[SIRIUS] Changes the display from Channel Name, Song Title, Artist Name, Composer Name, to Category Name.

[XM] Changes the display from Channel Name, Artist Name, Song Title, to Category Name.

[▶▶] Display the category list.

[2] Returns to the Source Control screen.

Channel Memory

Stores the current receiving channel in memory.

1 Display the Source Control Screen

See <Source Control Screen> (page 46).

2 Select a channel you wish to store in memory



3 Store in memory



Continue to touch until the memory number appears.

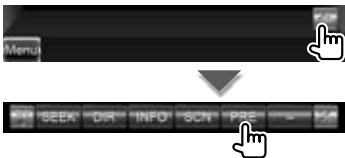
Preset Select

Lists and selects memorized channel.

1 Display the Source Control Screen

See <Source Control Screen> (page 36).

2 Display the SIRIUS Preset List Screen



3 Select a channel



1 Memorized channels are displayed. Touch to tune in.

[↶] Returns to the Source Control screen.

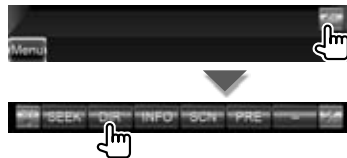
Direct Channel Search

Tuning in by entering the desired channel number.

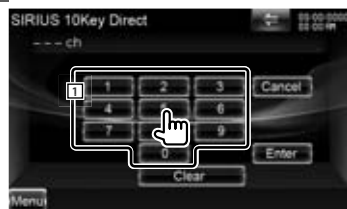
1 Display the Source Control Screen

See <Source Control Screen> (page 46).

2 Start Direct Channel Search



3 Enter the channel number

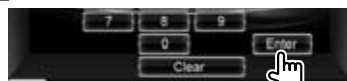


1 Enters the channel number.

[Cancel] Cancels the direct channel search.

[Clear] Clears the channel number.

4 Tune in the channel



• The operation ends automatically if you do not operate within 10 seconds.

Bluetooth Audio Control

You can listen to audio files stored in a Bluetooth audio player or cell-phone.

Before Use

- For details on the Bluetooth Audio player which can be connected, see <About the Bluetooth Audio player> (page 8).
- You need to register your audio player and cell-phone before using it with this unit. For more details, see <Registering Bluetooth Unit> (page 60).
- If you have registered two or more audio players or cell-phones, you need to select one of them. For more details, see <Bluetooth Unit Connection> (page 62).
- Sound output speaker can be set. See <Bluetooth Hands-Free/Audio Output Setup> (page 62).

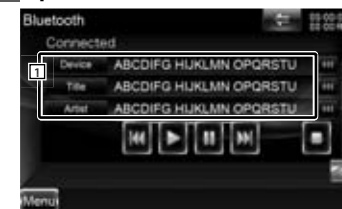
Source Control Screen

Switches to control screen to use various functions.

1 Display the Source Control Screen

See <How to Display the Source Control Screen> (page 16).

2 Operation on the Source Control screen



[▶]*1 Plays.

[■]*1 Stops playing.

[⏸]*1 Pauses.

[◀◀], [▶▶]*1 Selects a file.

1 Information display

Selects Device, Title*2, Artist Name*2, Album Name*2, Genre*2, Composer*2, or Track Number*2.



• *1 If the Bluetooth Audio player does not support AVRCP profile, buttons are not displayed. Operate from the Audio player.

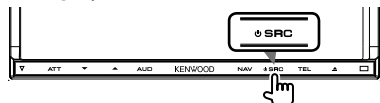
• *2 If the Bluetooth Audio player supports AVRCP1.3 profile, these items can be displayed.

Other Functions

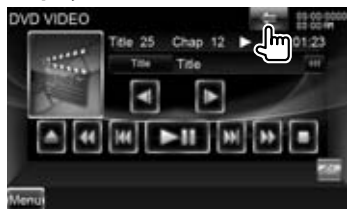
External Device Power Supply Control

Controlling the external device power supply.

1 Display the Source Select Screen



2 Display the EXT SW Control screen



3 Control the external device power supply



You can turn on or off the external device power supply.



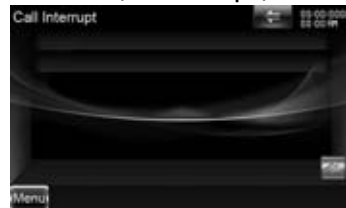
- You must connect a commercially available relay unit in order to use this function.
Connect the external device to be controlled to that relay unit.
- Refer to <EXT SW Setup> (page 76) for information on setting the power on or off specification.

Muting Audio Volume upon Reception of Phone Call

When a telephone call is made or received...

The Phone Call ("Call Interrupt") screen appears, and system is paused.

Phone Call ("Call Interrupt") screen



When the call ends...

Hang up the phone.

The system resumes playing automatically.



- To use the TEL Mute feature, you need to hook up the MUTE wire to your telephone using a commercial telephone accessory. Refer to <INSTALLATION MANUAL>.

Voice Control

The unit is equipped with Advanced Speech Recognition function which allows you to operate it with your voice. The supported languages are US English, UK English, French, German, Dutch, Italian, and Spanish. For information on the voice commands, refer to <Voice command table> (separate volume).

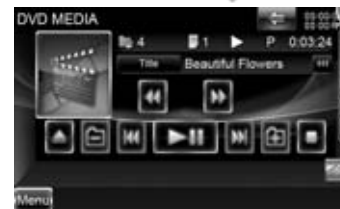


- ASR on the Language Setting screen should be set to "Enabled". See <Language Setting> (page 74).

Voice Control

1 Enter into the Voice control mode

Press the Push-To-Talk switch.



The buttons enclosed in a green square support the voice control.

2 Speak the command

Speak the command. (Ex: Speak "Top Menu")
You will hear a beep.



The screen has changed to the Top Menu screen.
You will hear a beep again.

3 Speak the command

Speak the command. (Ex: Speak "TUNER")
You will hear a beep.



The screen has changed to the Tuner Control screen.
You will hear a beep again.

4 Control the source with voice control

Repeat the same procedure as step 2 or 3.
For information on the voice commands, refer to <Voice command table> (separate volume).

5 End the voice control mode

Press the Push-To-Talk switch.



- The voice control is disabled when is displayed on the upper-right corner of the screen.
- The voice control is canceled when the screen is touched or any of the buttons, except the [VOLUME] button, on the front panel or the remote control unit is pressed.
- The voice control is disabled while talking on the phone with hands-free.
- The voice control is canceled if no operation is continued for a certain period of time.