■ FUNCTION

1. General

The main functions of navigation with AV system are listed below.

Function	Outline
Navigation System	Through the use of the Global Positioning System (GPS) and map data which is stored on a HDD, the navigation system analyzes the position of the vehicle and indicates the position on the map that is displayed on the screen. In addition, it is possible to use the system to register memory points and navigate to a destination.
Audio/Video System	Serves as the display and controls for the following: ● Radio Operation ● CD player operation ● DVD player operation ● Bluetooth-compatible portable player operation ● USB memory operation ● iPod operation ● Portable audio player operation
Hands-free System	When a Bluetooth-compatible cellular telephone is registered to the multi-display, the driver can make and receive calls or talk hands-free on the cellular telephone by operating the switches on the screen/steering pad.
Monitor System	Displays a view of the area behind the vehicle that is captured by the television camera mounted on the back door when the shift lever is moved to R.

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Function		Outline
Others	Maintenance Information	Can be used to inform the driver of the inspection or replacement timing for the following items based on the Global Positioning System (GPS) information and distance driven. ● Engine oil: Replace engine oil ● Oil filter: Replace engine oil filter ● Rotation: Rotate tires ● Tires: Replace tires ● Battery: Replace battery ● Brake pad: Replace brake pads ● Wipers: Replace wiper blades ● Coolant: Replace engine coolant ● Brake oil: Replace brake fluid ● Trans. fluid: Replace ATF ● Service: Scheduled maintenance ● Air filter: Replace air filter ● Personal: New information items can be created separately from the provided items
	Language Select	The language of the on-screen buttons, pop-up messages and the voice guidance can be changed. ● English and Arabic are available.
	Beep Setting	The beep sound can be turned off.
	Screen Setting	● This enables the opening or screen off images to be changed to one copied from a USB memory device. ● This enables automatic return to the navigation screen from the audio screen.
	Keyboard Layout	The keyboard layout can be changed.
	Delete Personal Data	The following personal data can be deleted or returned to their default settings: ● Address book ● Areas to avoid ● Previous points ● Route guidance ● Route trace ● Phonebook data ● Call history data ● Speed dial data ● Bluetooth phone data ● Bluetooth device data ● Phone sound settings ● Phone display settings ● Bluetooth setting ● Message settings ● Sound setting ● Audio setting ● Bluetooth audio setting
	Screen Adjustment	The brightness or contrast of the screen can be adjusted to suit the brightness of the surroundings.

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Function	Outline
Diagnosis	This menu contains the following items: ● Failure Diagnosis – System Check – HDD Check – Diagnosis Recorder ● Function Check/Setting – Panel & Steering Switch – Touch Switch – Color Bar – GPS & Vehicle Sensors – Vehicle Signal – HF Voice Quality Setting ● Service Information – Program Update – Version Information

2. Navigation Screen

The navigation computer calculates the present position and direction of travel, then determines a route and calculates the driving distance based on the following information sources:

- Map data in the HDD
- Global Positioning System (GPS) satellites
- Built-in gyro sensor
- Vehicle speed signal
- Reverse signal

The functions of the navigation screen display are shown below.

Item		Function
Map Display	Linear Touch Scroll	Enables smooth scrolling by connecting the touch points on the screen.
	Map Color Change	Depending on the position of the light control switch, the screen changes to day mode or night mode.
	Taillight-interlocked Map Color Change	Changes the color of the map screen that is displayed when the taillights are turned on.
	North Up/Heading Up	● If North Up is selected, regardless of the direction of vehicle travel, north is always up. ● If Heading Up is selected, the direction of vehicle travel is always up.
	Multi-step Scale Display	Changes the map scale in 14 steps.
	Direct Scale Change	Directly selects and displays the map scale.
	Street Name Indication on Scrolled Map	Displays the street name and city name even when the map screen is being scrolled.
	Stepless Scale Display	Changes the scale of the map from the basic 14 steps to an even finer range of scales.
	Road Number Sign Board Display	Displays the road number on the map.
	Point of Interest Display	Displays selected types of points of interest as marks on the map.
	Compass Mode Screen	Displays the direction of travel and detailed data of the present location.
	Route Guidance Demonstration	Demonstrates the route guidance to the destination.
	Route Trace	It is possible to store up to the last 124 miles (200 km) of a traveled route and retrace the route on the display.

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Item			Function
Destination Search	Preset Destination Memory Search		Sets a pre-registered point as a destination point while driving.
	Address Search		A destination can be set in 2 ways: ● Information can be entered in the order of: city name, street name and house number. ● Information can be entered in the order of: street address, house number, street name and city name.
	Point of Interest Search	Name/ Category/ Phone No.	A destination can be set in 3 ways: ● The name of a POI can be entered and then searched for from City or Category. ● A POI category can be selected and a point of interest searched for near the present location, along the current route, near the city center or near the destination. ● The phone number of a point of interest can be entered to search for it.
	Previous Destination Search		Stores the coordinates, names, and date of up to 100 locations that have been set as destinations in the past.
	Address Book (Memory Point) Search		Sets a destination from the registered Address Book (Memory Point).
	Emergency Search		Performs a specific search for police stations hospitals dealers, and fire stations.
	Intersection Search		By specifying 2 streets, the point at which they intersect is set as the destination point.
	Highway Entrance or Exit Search		Searches for the destination by the name of the street that connects to a highway entrance or exit.
	Map Search		A destination can be set by scrolling the cursor on the map.
	Coordinate Search		A destination can be input by entering its coordinates.
Route Search	Multiple Destination Setting		Sets multiple destinations. It can also rearrange the sequence of the destinations.
	Multiple Route Search		Searches for multiple routes.
	Search Condition Designation		Searches for the quick, alternate, and short routes.
	Detour Search		Changes the route to detour around a section of the route.
	Regulated Road Consideration		Performs searches which consider regulated roads.
	Avoidance Area		Searches for a route that avoids a designated area.
	Adjacent Road Search		Searches for a route adjacent to the current road.
	Avoid Traffic Search		Automatically changes to another route to avoid heavy congestion.
	National Border Conscious Search		Searches for routes that do not cross the border.

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Item		Function
Guidance	Voice Guidance	Provides voice guidance about the distance and the direction of travel to a destination point based on road conditions and vehicle speed.
	Next Turn Guidance	Provides guidance about the distance to the next turn and indicates the direction of the turn using an arrow.
	Highway Mode Display	Displays the distance to the next junction and exit, or POIs in the vicinity of the highway exit.
	Highway Direction of Travel Display	Displays the direction of travel to take on the highway.
	Highway Shield Icon Display	Highway shield icons will be displayed on the 3D guidance screen.
	Intersection Zoom-in Display	Zooms in the image when approaching an intersection.
	Turn List Display	Displays a turn list on the right side of the 2-screen display.
	Arrow (Turn-by-Turn) Display	Displays the direction of the next turn and the distance to the turn on the right side of the 2-screen display.
	Distance-to-destination Display	Displays the distance from the present location to the destination.
	Estimated Arrival Time Display	Displays estimated arrival time.

3. Information Screen

The functions of the information screen display are listed below.

Item	Outline
Map Data	● Displays the map version and navigation unit ID information. ● Displays the map area that is recorded in the HDD.

4. Setup Screen

The settings for the function of the multi-display are available from the setup screen.

Item	Function
Display Settings	● Map Menu and Camera screen adjustment ● Depending on the position of the headlight switch, the screen changes to day or night mode.
General Settings	● Time zones and the on/off setting of daylight saving time can be changed. ● The language can be selected. ● The beep sound can be turned off. ● The color of the screen buttons can be changed. ● Automatic return from the audio screen to the map screen after audio operation can be changed. ● Registered information (personal data) can be cleared.
Voice Settings	● The voice guidance volume can be adjusted or switched off. ● Voice guidance during route guidance can be set. ● Voice guidance while using the audio system can be set.
Navigation Settings	The Navigation Settings can be used to: ● Set detailed navigation settings such as: – Average cruising speed – Displayed POI icon categories – Buttons displayed on the map screen when “OFF” is selected – Manual adjustment of the current vehicle position mark – Display of pop-up messages – Traffic notification
Phone Settings	● Phone sound settings can be changed: – Call Volume – Ring Tone Volume – Ring Tone ● Phonebook settings can be changed: – Manage Contacts – Manage Speed Dials – Delete Call History ● Phone display settings can be changed: – Change the incoming call display – Display of the automatic phonebook transfer completion message (For PBAP compatible models) – Display of the automatic call history transfer completion message (For PBAP compatible models) – Display of images during calls (For PBAP compatible models) – Orientation of images displayed during calls (For PBAP compatible models)

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Item	Function
Bluetooth Settings	● Bluetooth device registration settings can be changed: – Register a Bluetooth device – Delete the Bluetooth device – Edit the Bluetooth device ● Bluetooth devices can be selected. ● Bluetooth device settings can be changed: – Automatic connection to a Bluetooth device – Changed to a desired Bluetooth device name – Edited the Bluetooth device passcode
Audio Settings	● Display cover art when a song stored in an iPod is being played

5. Diagnosis

For details on the procedure required to enter the Service Menu screen, refer to the Repair Manual.